Final Report

Martin in Motion

2045 Long Range Transportation Plan

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Adopted October 19, 2020

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Martin Metropolitan Planning Organization (MPO) 2045 Long Range Transportation Plan (LRTP)



2045 Long Range Transportation Plan



October 2020

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In conjunction with

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Martin MPO Board

The voting members of the MPO Policy Board are elected officials who represent the Martin Metropolitan Planning Area (MPA). Below is the membership at the time of plan adoption.



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List of Acronyms

-	
AADTAnnual Average Daily Traffic	
AASHTO American Association of State Highway & Transportation Officials	
ADA Americans with Disabilities Act	
BDBBusiness Development Board	
BEBR Bureau of Economic and Business Research	
BPAC Bicycle/Pedestrian Advisory Committee	
CAC Citizens Advisory Committee	
CEIConstruction Engineering and Inspection	
CDCCenters for Disease Control	
CFPCost Feasible Plan	
CFRCode of Federal Regulations	
CMPCongestion Management Process	
DHSMVDepartment of Highway Safety and Motor Vehicles	
E+CExisting+Committed	
ETDM Efficient Transportation Decision Making	
FASTFixing America's Surface Transportation	
FDOT Florida Department of Transportation	
FEC Florida East Coast	
FHWA Federal Highway Administration	
FTA Federal Transit Administration	
FTP Florida Transportation Plan	
FY Fiscal Year	
GIS Geographic Information Systems	
ICWWIntracoastal Waterway	
LOGTLocal Option Gas Tax	
LOPP List of Project Priorities	
LOSLevel of Service	
LRTPLong Range Transportation Plan	
MOTMaintenance of Traffic	
MPAMetropolitan Planning Area	
MPOMetropolitan Planning Organization	
MPOACMetropolitan Planning Organization Advisory Council	
NHTSANational Highway Traffic Safety Administration	
OAOther Arterials	
PEPreliminary Engineering	

PIPPublic Involvement Plan
PPPPublic Participation Plan
SHSPStrategic Highway Safety Plan
SISStrategic Intermodal System
SOVSingle Occupancy Vehicle
SYFState Fiscal Year
TAC Technical Advisory Committee
TAPTransportation Alternatives Program
TCRPCTreasure Coast Regional Planning Council
TCRPMTreasure Coast Regional Planning Model
TDPTransit Development Plan
TIPTransportation Improvement Program
TMATransportation Management Area (TMA funds are also called SU funds)
TRIPTransportation Regional Incentive Program
UPWPUnified Planning Work Program
VMTVehicles Mile Traveled
V/CVolume-to-Capacity Ratio

1. INTRODUCTION

1.1 Background

The Martin Metropolitan Planning Organization (MPO) was established in 1993 and is governed by an eight (8) voting member Policy Board that serves the Metropolitan Planning Area with a US Census Bureau 2018 estimated population of 160,912. The MPO Policy Board is comprised of elected officials representing unincorporated Martin County (4), the City of Stuart (2), the Town of Sewall's Point (1), and the Village of Indiantown (1). The MPO Board is supported by several advisory committees that include technical staff as well as citizen representatives that review information and make recommendations to the Board. The MPO has signed interlocal agreements with all member governments, which enables it to operate and partner with other local entities.

The Martin MPO is the organization responsible for the planning and programming of federal and state transportation funds for Martin County. The MPO is the primary forum where local governments and citizens voice concerns, identify priorities, and plan for improvements to all modes of transportation – roadway, public transportation, and bicycle and pedestrian facilities.

The Martin MPO carries out the following primary activities using a continuing, cooperative, and comprehensive transportation (3-C) planning process to ensure federal transportation funds are available to support local multimodal projects and priorities.

- Develop and maintain a Long Range Transportation Plan (LRTP), which addresses no less than a 20-year planning horizon.
- Update and approve a Transportation Improvement Program (TIP), which is a fouryear program for highway and transit improvements with the fifth year included for illustrative purposes.
- Develop and adopt a Unified Planning Work Program (UPWP), which identifies the MPO's budget and planning activities to be undertaken in the metropolitan planning area.
- Prepare a Public Participation Plan (PPP), which describes how the MPO involves the public and stakeholder communities in transportation planning process.

1.2 Purpose of LRTP

For urbanized areas exceeding a population of 50,000, the existence of a Metropolitan Planning Organization (MPO) is necessary to meet federal requirements for obtaining and expending federal transportation funds. Specifically, the federal government requires that each urbanized area, as a condition to the receipt of federal capital or operating assistance, have in place a 3-C planning process. This 3-C process must result in plans and programs consistent with the comprehensively planned development of the urbanized area.

Every five years, the MPO is required to review and update the LRTP. The LRTP sets the vision for transportation for all modes of travel throughout the County and influences projects included in the 5-year TIP. The Martin MPO's 2045 LRTP, also known as *Martin in Motion* includes both long-range and short-range strategies/actions that provide for the

development of an integrated multimodal transportation system (including accessible pedestrian walkways and bicycle transportation facilities) to facilitate the safe and efficient movement of people and goods in addressing current and future transportation demand.

After the Martin MPO Policy Board adopts the 2045 LRTP, the final report serves as a living document that would be amended as needed. Further, the Martin MPO will use the adopted 2045 LRTP to update its List of Project Priorities (LOPP) for programming projects in the TIP.

1.3 Federal and State Requirements

Figure 1-1 shows the MPO's 2045 LRTP - *Martin in Motion* plan development process. The cornerstone of this planning process was robust and ongoing public engagement and agency coordination effort including receiving input from the Martin MPO Advisory Committees, MPO Policy Board and the Project Steering Committee.



Figure 1-1: LRTP Development Process

The *Martin in Motion* plan development process is consistent with federal and state requirements and guidance included in the following documents.

- Fixing America's Surface Transportation (FAST) Act Transportation Planning and Programming (23 C.F.R., Part 450, Subpart C)
- Federal Highway Administration (FHWA)/Federal Transit Administration (FTA) Federal Strategies for Implementation Requirements for LRTP Updates for the Florida MPOs, January 10, 2018 (or FHWA 2045 LRTP Expectations Letter, January 2018)
- Revenue Forecasting Guidebook, Florida Department of Transportation, July 3, 2018
- 2045 Revenue Forecast Martin MPO/Martin Metropolitan Area, November 2018, Florida Department of Transportation
- Financial Guidelines for MPO 2045 Long Range Plans, July 13, 2017, Florida MPO Advisory Council (MPOAC).

1.4 Report Organization

This report is organized as described below:

Chapter 1: Introduction – provides a summary on Martin MPO's functions, purpose of the LRTP and federal and state requirements. It also describes report organization as well identifies technical memoranda prepared as part of the planning process to document various technical analysis and public participation.

Chapter 2: Public Involvement – provides an overview of the Public Involvement Plan (PIP) developed specifically for the 2045 LRTP - *Martin in Motion*, discusses various public engagement and outreach activities executed during the planning process as well as efforts to ensure participation from environmental justice population groups and transportation disadvantaged.

Chapter 3: Goals, Objectives, and Performance Measures – includes a vision statement and describes goals, objectives, and performance measures to accomplish the community's transportation vision. In addition, it lists project evaluation criteria and corresponding performances measures. Further, this Chapter demonstrates consistency between the MPO's goals, objectives, and performance measures with the Florida Transportation Plan (FTP) Next 50 Years and national goals identified in the Fixing America's Surface Transportation Act (FAST Act).

Chapter 4: Planning Context – provides a synopsis of existing travel patterns, travel behavior as well as future travel demand, emerging issues, and trends to set the local and regional planning context and inform the Martin MPO's data driven component of the needs assessment.

Chapter 5: Needs Assessment – discusses different components of multimodal needs assessment, identifies projects needed in Martin County over the next 20 to 25 years to enhance mobility, accessibility, and safety for all the users of the transportation system. In addition, this chapter provides a summary of the 2045 Needs Plan and project cost estimation methodology.

Chapter 6: Financial Resources – provides background and context for preparing revenue estimates, describes associated assumptions and methodology to develop future estimate of funds from various local, state, and federal funding programs over the next 20 to 25 years.

Chapter 7: Cost Feasible Plan – discusses project prioritization, identifies projects by different modes or categories that are fully funded through local, state, and federal revenues reasonably expected to be available over the next 20 to 25 years as well as unfunded needs. Further, this chapter includes discussion of key cost feasible plan components, such as equity analysis, environmental mitigation and ETDM, comparative analysis of alternative scenarios and performance measurement.

The following nine technical memoranda provide a detailed documentation of various public involvement activities and technical analyses conducted as part of the LRTP development process.

- Technical Memorandum #1 Public Involvement Plan (PIP)
- Technical Memorandum #2 Data Compilation, Review and Summary
- Technical Memorandum #3 Goals, Objectives, and Performance Measures
- Technical Memorandum #4 Travel Demand Forecasting
- Technical Memorandum #5 Congestion Management Process (CMP) Update

- Technical Memorandum #6 Additional Elements
- Technical Memorandum #7 Needs Assessment
- Technical Memorandum #8 Financial Resources
- Technical Memorandum #9 Cost Feasible Plan

2. PUBLIC INVOLVEMENT

Chapter 2 provides an overview of the Public Involvement Plan (PIP) developed specifically for the 2045 LRTP - *Martin in Motion*, discusses various public engagement and outreach activities executed during the planning process as well as efforts to ensure participation from environmental justice population groups and transportation disadvantaged.

2.1 Public Involvement Plan (PIP)

The Martin MPO maintains a PIP to meet the requirements of state and federal laws by providing opportunities for public involvement and input in the multimodal transportation planning process. At the outset of the planning process, a LRTP specific PIP was developed to assist in providing information, to obtain input from the public and to engage local government, agencies, and public for the Martin MPO 2045 LRTP – *Martin in Motion*. It should be noted that the LRTP PIP utilized information from the MPO's overall PIP and was consistent with it.

The LRTP PIP was integral to the success of the project in that it ensured public participation in each phase of the planning process. The PIP identified community stakeholders, including many in the underserved and low-income communities, transportation disadvantaged, environmental groups, the business community, tourism officials and other interested stakeholders. Further, the plan laid out public involvement goals and summarized public outreach strategies. <u>Appendix A</u> includes the LRTP PIP, which was approved by the MPO Board in June 2019.

2.2 Public Involvement and Outreach Activities

Building on the Martin MPO PIP, the 2045 LRTP PIP outlined the following process to involve the community:

- Engaging stakeholders early and throughout the plan
- Maintaining regular communication with members of the community
- Providing multiple opportunities and methods for the public to participate in the process
- Providing the opportunity for input and comments to help shape the plan

To implement the process, a variety of tools and tactics were used to communicate and engage the stakeholders and residents of Martin County.

2.2.1 Branding

To create a brand early in the project to help identify and separate the 2045 LRTP Project from other initiatives of the Martin MPO, a new logo and slogan – *Martin in Motion* was developed. This logo and slogan were used on all project materials throughout the study and in the final report.



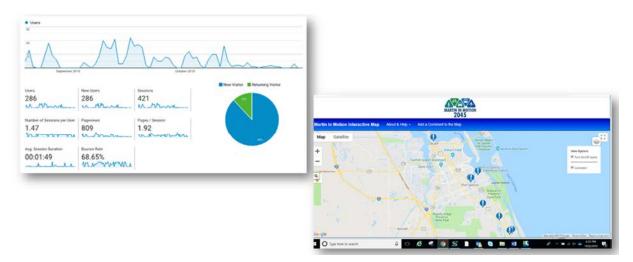
2.2.2 Outreach to Minorities and Traditionally Underrepresented Groups

The outreach for this project included increased efforts to identify and provide the opportunity for involvement among traditionally underserved and underrepresented population groups. To that end, low-income, transportation disadvantaged, the elderly population, minorities, and disabled residents who may be impacted by the multimodal components of the LRTP were included in the public outreach and involvement plan. An initial step was to prepare maps to identify concentration areas for environmental justice population groups and those protected by Title VI residing in Martin County. Further, the various mechanisms included in this section were employed to ensure that minority and traditionally underrepresented communities were included in the planning process.

To ensure full and fair participation, public involvement for the 2045 LRTP process was *proactive* to heighten the public's awareness through project video, *inclusive* by focusing on disenfranchised stakeholders who may be reliant on public transportation (including minority, low-income, disabled, elderly, and youth), and *interactive* by providing a website that included a general comments section, online survey, and a mapping interface to provide location-specific comments.

2.2.3 Project Website

A project specific website (<u>www.martininmotion.com</u>) was developed to distribute information regarding the LRTP and to help receive public feedback. The website was used to spotlight the plan including project schedule, public meetings, project video and latest project information and announcements. The number of visits and time spent on the website was monitored using Google Analytics. Stakeholders were encouraged to submit comments and input through the website. The website was designed using WordPress as the content management software to help make the website easy to update. Furthermore, through Google translator, the entire website could be viewed in Spanish. An interactive map was made available on the website to receive location-specific comments from the public.



2.2.4 Project Video

A 4-to 5-minute, high-impact project video was produced to help inform the public about the 2045 LRTP and provides a call to action to gather involvement and feedback. This promotional and educational video explained the planning process and importance of feedback for transportation planning and opportunities for all residents to get involved. The video was displayed on the project website and distributed through the Martin MPO.

2.2.5 Social Media

Project information was disseminated using the MPO's established social media accounts as well as to help engage the community, promote the opportunity for feedback and provide key project updates and meeting information.

2.2.6 Survey

A survey was conducted to gather public input on transportation needs and desires in the County. A Spanish version of the survey could be provided on the project website on an as-needed basis. In addition, surveys were provided at public meetings, online through the website and distributed at the Treasure Coast Mall. Copies of the survey were also made available in English and Spanish at the public open houses, some of which were conducted in minority and underserved areas.

2.2.7 Public Open House

As shown in **Table 2-1**, public meetings were held in locations convenient to and easily accessible by minority and underserved groups throughout the county at public facilities and places with high potential for drop-in attendance (libraries, malls, and community centers) to engage people who may not have seen the publications, notices, or website information announcing these public meetings. The Martin MPO made translators and interpreters available at public open houses to assist participants whose primary language is Spanish. Telephone calls were made to community leaders in minority areas to ensure that these communities were aware of scheduled meetings and open house sessions. Hard copy surveys in English and Spanish were made available at the open house sessions.

able 2-1: Public Visioning Open Houses							
Meeting	Location	Timeframe					
Public Open House/Visioning Session #1	121 SW Flagler Avenue, Stuart, FL 34994 Stuart City Hall	October 2, 2019					
Public Open House/Visioning Session #2	15200 SW Adams Avenue, Indiantown, FL 34956 Lahti Library	October 3, 2019					
Public Open House/Visioning Session #3	4940 SE Anchor Avenue, Stuart, 34997 Port Salerno Civic Center	October 8, 2019					



Media Notification

The news release and the project flyers were sent to the local ABC, CBS and NBC television stations, radio stations WPSL and WSTU, and to the TCPalm and Palm Beach Post newspapers in mid-September 2019 for the visioning sessions.

Flyers and Press Release

Flyers were prepared in English and Spanish languages for distribution through various channels. Project flyers and a news release were sent to elected officials by the Martin MPO. The Martin MPO coordinated with city/town/village clerks to distribute flyers through their respective channels. The communication news release was distributed by Martin County Office of Communications to all county email addresses on file. The Martin County Chamber of Commerce and Stuart Martin County Board of Realtors sent the flyer to all members. On two occasions, flyers were emailed to all charities, food banks and to multiple religious organizations. Martin County Public



Transportation, MARTY Bus service, posted flyers on the buses. The flyer and news release were posted on the project website, <u>www.MartininMotion.com</u>.

2.2.8 Virtual Public Open House

Two virtual Public Information Open Houses were held Tuesday, June 9, 2020 for the Martin MPO 2045 LRTP Draft Cost Feasible Plan. The open houses were held on the GoToWebinar platform where an individual could participate online or participate inperson in the John F. and Rita Armstrong Wing of the Blake Library, 2351 SE Monterey Road, Stuart, FL 34996. The Library was open to walk-in visitors from 3 p.m. to 5 p.m. The virtual meetings were hosted from 3 p.m. to 4 p.m. and 4 p.m. to 5 p.m. The open houses were held to present the draft Cost Feasible Plan and to answer questions from participants. Participants were also invited to submit written comments by Friday, June 19, 2020.

Project Notification

Because of the COVID-19¹ pandemic, notification was limited to email addresses and printed flyers. Invitation flyers were sent to elected officials, appointed officials, interested stakeholders, area non-profit organizations, charities and everyone who contacted the Martin MPO requesting information. The online and printed project flyers included links to register for one or both webinars. The Martin MPO embedded the online flyer invitation to the Martin County Constant Contact email notification system. The Martin MPO also

¹ Coronavirus disease 2019 (COVID-19) is defined as illness caused by a novel coronavirus now called severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2; formerly called 2019-nCoV), which was first identified amid an outbreak of respiratory illness cases in Wuhan City, Hubei Province, China. It was initially reported to the WHO on December 31, 2019. On January 30, 2020, the WHO declared the COVID-19 outbreak a global health emergency. On March 11, 2020, the WHO declared COVID-19 a global pandemic, its first such designation since declaring H1N1 influenza a pandemic in 2009. (Source: www.cdc.gov)

sent flyers to each of the incorporated municipalities, Indiantown, Jupiter Island, Ocean Breeze, Sewall's Point and Stuart, and requested the flyer be sent via email to community members on the respective municipalities' contact list. Printed flyers were available at Stuart City Hall. Martin County Administrative Offices and other municipal offices were closed due to the COVID-19 pandemic. Also, the meeting notice was available on the project website, www.MartininMotion.com under the Get Involved/Meetings drop down menu as well as the Martin MPO website, www.martinmpo.com.

2.2.9 Stakeholder Interviews and Focus Groups

One-on-one interviews were conducted to seek input and feedback from elected officials to understand their vision for transportation in the County; gather input related to mobility, accessibility, and safety issues; and identify strategic initiatives and project priorities. In addition, presentations were made to several groups, such as Stuart/Martin Chamber of Commerce, Jensen Beach Chamber of Commerce, and Village of Indiantown.



In addition, the *Mobility Bucks* exercise was conducted to gather input on priorities at Martin County Employee Benefits Fair, Martin County District 3 Town Hall meeting, Complete Streets: Access to Transit Study Open House and Martin Citizens Academy and Resource Education Series (CARES) Program.

2.2.10 Project Steering Committee (PSC)

A project specific steering committee called PSC consisting of technical experts from the Martin MPO and its partner agencies was assembled at the project outset. The PSC membership included the following agencies' representatives; Martin MPO, City of Stuart, Martin County Public Works Department, Martin County Growth Management Department, and Florida Department of Transportation, District Four.

The PSC met at major milestones throughout the course of the LRTP development process to discuss, understand and concur on *Martin in Motion* goals and objectives, performance measures, provide feedback and input on technical analysis, financial analysis and ultimately guide the planning process. All the technical components as well as public input received was shared with the PSC in advance of materials being presented to the MPO Advisory Committees and MPO Policy Board.

As shown in **Table 2-2**, input from the MPO Advisory Committees and Policy Board was obtained throughout the planning process at regularly scheduled Martin MPO meetings to update these groups on the progress of the plan. All the MPO meetings were open to the public.

Project Phase	Timeframe	Meeting
Drojaat kiek aff	June 3, 5, 10, 2019	TAC, CAC, BPAC meeting #1
Project kick off	June 17, 2019	Policy Board meeting #1
Public Involvement and Outreach Activities	August 26, 2019	PSC meeting #1
Update	September 4, 9, 2019	Joint CAC/TAC, BPAC meeting #2
	September 16, 2019	Policy Board meeting #2
	November 5, 2019	PSC meeting #2
Goals, Objectives, and Performance Measures	November 18, 2019	Joint CAC/BPAC/TAC meeting #3
	December 9, 2019	Policy Board meeting #3
	March 4, 2020	PSC meeting #3
2045 Needs Plan	April 29, 2020	Joint CAC/BPAC/TAC meeting #4
	May 11, 2020	Policy Board meeting #4
	May 29, 2020	PSC meeting #4
Draft 2045 Cost Feasible Plan (CFP)	June 1, 3, 10, 2020	TAC, CAC, BPAC meeting #5
	June 15, 2020	Policy Board meeting #5
	August 18, 2020	PSC meeting #5
Final 2045 Cost Feasible Plan (CFP)	September 9,14, 2020	Joint CAC/TAC, BPAC meeting #6
	October 19, 2020	Board meeting #6

Table 2-2: Public Meetings and Agency Coordination

All the public input received at the public open houses, through online and in-person surveys, email communications and comment forms are provided in <u>Appendix B</u>. This input was used to develop the vision statement, establish goals and objectives as well as provide the qualitative component of the Needs Assessment.

3. GOALS, OBJECTIVES AND PERFORMANCE MEASURES

Chapter 3 includes a vision statement and describes goals, objectives, and performance measures to accomplish the community's transportation vision. In addition, it lists project evaluation criteria and corresponding performances measures. Further, this Chapter demonstrates consistency between the MPO's goals, objectives, and performance measures with the Florida Transportation Plan (FTP) Next 50 Years and national goals identified in the Fixing America's Surface Transportation Act (FAST Act).

As explained in Chapter 2, a robust public participation process was used to develop the vision statement, goals, objectives, and performance measures for the Martin MPO's 2045 LRTP - *Martin in Motion*. The 2045 LRTP goals, objectives and performance measures were unanimously approved by the MPO Joint Advisory Committee and Policy Board in November 2019 and December 2019 respectively.

3.1 Vision Statement

Based on input received from public involvement and outreach activities, stakeholder interviews and agency coordination and initial technical analyses, the following vision statement was developed for the multimodal transportation system in Martin County.

To create and maintain a safe, efficient and resilient multimodal transportation network to meet mobility and accessibility needs of Martin County's residents and visitors, while preserving the environment, supporting economic growth and enhancing the quality of life.

3.2 Goals and Objectives

The goals and objectives provide a transparent and concise framework at the outset to guide transportation investments through the 2045 LRTP – *Martin in Motion*. The following five goals and 29 objectives focus on outcomes that help accomplish the community's vision for a safe and balanced multimodal transportation network in the County.

Goal #1: Infrastructure Maintenance and Congestion Management

An efficient multimodal transportation system that supports economic growth and enhances the quality of life.

Objectives:

- Prioritize improvements that help maintain existing roadways and bridges.
- Prioritize improvements that maintain or improve acceptable travel performance.
- Improve access to jobs.
- Improve transit access to employment.
- Improve transit access to recreational activities.
- Support improvements to transit service.
- Manage traffic congestion.
- Support improvements to major freight corridors.
- Implement strategies to reduce per capita vehicle miles of travel.

- Prioritize funding to support smaller scale congestion management projects and programs (Transportation System Management and Operations (TSM&O).
- Prioritize funding for projects that improve existing corridors that address multimodal transportation needs with context sensitive designs.
- Support projects that enhance the quality of life.

Goal #2: Safety

A safe multimodal transportation system that meets the needs of all the users.

Objectives:

- Prioritize projects that improve hurricane evacuation needs.
- Prioritize projects and programs that improve safety on corridors with highest number of crashes with fatalities and incapacitating injuries for all modes and users.
- Implement strategies to enhance bicycle and pedestrian safety.
- Reduce transit vehicle crashes and facility-accidents.

Goal #3: Environmental and Equity

Preserve natural environment and promote equity and healthy communities.

Objectives:

- Minimize adverse impacts to the natural environment.
- Reduce on-road mobile source emissions.
- Increase the bicycle facility coverage throughout the planning area.
- Increase the sidewalk coverage on roadways serving concentrations of population and employment in urban areas.
- Implement strategies that increase the miles of shared used path to support the trail network.
- Prioritize improvements that provide non-motorized access to recreational opportunities.
- Minimize adverse impacts to the minority and/or low income populations.
- Improve access to jobs in areas that have high concentration of transportation disadvantaged population groups.

Goal #4: Innovation

A transportation system with an ability to harness changes in the future.

Objectives:

- Identify and support projects that provide synergy or flexibility in accommodating emerging transportation technologies.
- Prioritize projects that improve extreme weather resiliency and/or harden infrastructure against Sea Level Rise (SLR).

Goal #5: Project Streamlining and Delivery

A transportation system that reflects the community's needs and desires.

Objectives:

- Advance projects that the community supports.
- Prioritize projects that can be accelerated through project development process.
- Support projects that are strategically important for Martin County.

3.3 Evaluation Criteria and Performance Measures

Moving Ahead for Progress in the 21st Century Act (MAP-21) and FAST Acts require state DOTs and MPOs to adopt and implement a performance based approach to align planning goals and objectives with investment decisions to improve safety, asset conditions, and system performance. To that end, 63 performance measures corresponding to 32 evaluation criteria and relative to five goals and 29 objectives were developed to assess transportation projects and system performance as well as assist with Congestion Management Process (CMP) Update and scenario planning. Out of 63 performance measures, 29 are required to evaluate transportation system per FAST Act requirements. The performance measures under the FAST Act address highway safety, system performance, bridge and pavement conditions, and transit asset management and safety while the remaining 34 performance measures incorporate factors and criteria that are important to the local community (**Table 3-1**).

Goal	Goal Statement	Objectives	Evaluation Criteria	Performance Measure	Data Source (s)	Potential Application(s)*	
				% of pavements on the Interstate System in GOOD condition. <i>(Higher is better)</i>	Available from FDOT	Rate Projects; System Performance Report	x
		Devement condition	% of pavements on the Interstate System in POOR condition. <i>(Lower is better)</i>	Available from FDOT	Rate Projects; System Performance Report	x	
		Prioritize improvements that help	Pavement condition	% of pavements on the non-Interstate NHS in GOOD condition. (<i>Higher is better</i>)	Available from FDOT	Rate Projects; System Performance Report	x
		maintain existing roadways and bridges.		% of pavements on the non-Interstate NHS in POOR condition. <i>(Lower is better)</i>	Available from FDOT	Rate Projects; System Performance Report	X
			NULS bridge condition	% of NHS bridges by deck area classified as in GOOD condition. (Higher is better)	Available from FDOT	Rate Projects; System Performance Report	Х
			NHS bridge condition	% of NHS bridges by deck area classified as in POOR condition. <i>(Lower is better)</i>	Available from FDOT	Rate Projects; System Performance Report	x
		Prioritize improvements that maintain or improve acceptable travel performance.	Level of service	Vehicle miles of travel operating at or better than adopted level of service standard. (<i>Higher is better</i>)	Martin County LOS Report, TCRPM 5.0	Rate Projects; System Performance Report, Evaluate Scenarios	
				Percent of jobs within 30-minute auto travel time for average household. (<i>Higher is better</i>)	TCRPM 5.0	Rate Projects; Evaluate Scenarios	
		Improve access to jobs.	Job access	Percent of jobs within 30-minute in-vehicle travel time (transit) for average household. (<i>Higher is better</i>)	TCRPM 5.0	Rate Projects; Evaluate Scenarios	
		Improve transit access to		Percent of jobs within a quarter mile of transit stops. (Higher is better)	Marty, SE data, TCRPM 5.0	Rate Projects; Evaluate Scenarios	
Infrastructure Maintenance and Congestion	An efficient multimodal transportation system that	employment.		Percent of population within a quarter mile of transit stops. (Higher is better)	Marty, SE data, TCRPM 5.0	Rate Projects; Evaluate Scenarios	
Management Goal	supports economic growth and enhances the quality of life.	Improve transit access to recreational activities.	Access to recreational amenities.	Number of recreational facilities served by a transit route. (<i>Higher is better</i>)	Marty, Martin County	Rate Projects	
				Changes in frequency or headway. (Lower is better)	Marty, TCRPM 5.0	Rate Projects; Evaluate Scenarios; CMP Update	projectsi System ormance ReportXProjects; System ormance Report, luate ScenariosXProjects; Evaluate ScenariosProjects; Evaluate ScenariosProjects; Evaluate ScenariosProjects; Evaluate ScenariosProjects; Evaluate ScenariosProjects; Evaluate ScenariosProjects; Evaluate ScenariosProjects; Evaluate ScenariosProjects; Evaluate scenariosProjects; Evaluate Projects; Evaluate Brojects; Evaluate projects; System projects; S
			-	Changes in geographic coverage. (Higher is better)	Bus routes, GIS	Rate Projects; Evaluate Scenarios; CMP Update	
				Change in revenue hours of service relative to base year. (<i>Higher is better</i>)	Marty, TCRPM 5.0	Rate Projects; Evaluate Scenarios; CMP Update	
			Transit supply, demand, and cost	Change in revenue miles of service. (Higher is better)	Marty, TCRPM 5.0	Rate Projects; Evaluate Scenarios; CMP Update	
				Ridership (Higher is better)	Marty, TCRPM 5.0	Rate Projects; Evaluate Scenarios; CMP Update	X X X X X X X X X X
		Support improvements to transit service.		Riders per revenue hour. (Higher is better)	Marty, TCRPM 5.0	Rate Projects; Evaluate Scenarios	
				Total annualized capital cost and O&M cost per rider. (Lower is better)	Marty, TCRPM 5.0	Rate Projects; Evaluate Scenarios	
				On-time performance (Mini-bus). <i>(Higher is better)</i>	Marty	Rate Projects; System Performance Report	x
			System reliability	On-time performance (Demand Response). <i>(Higher is better)</i>	Marty	Rate Projects; System Performance Report	x
			System reliability	On-time performance (Cutaway Bus). <i>(Higher is better)</i>	Marty	Rate Projects; System Performance Report	x

Table 3-1: Goals, Objectives and Performance Measures, Martin in Motion

Goal	Goal Statement	Objectives	Evaluation Criteria	Performance Measure	Data Source (s)	Potential Application(s)*	Meets FAST Act PM Rules			
				Missed runs due to major breakdown, as a percentage of total runs by mode (Mini-bus). <i>(Lower is better)</i>	Marty	System Performance Report	х			
			System performance	Missed runs due to major breakdown, as a percentage of total runs by mode (Demand Response). <i>(Lower is better)</i>	Marty	System Performance Report	x			
				Missed runs due to major breakdown, as a percentage of total runs by mode (Cutaway Bus). <i>(Lower is better)</i>	Marty	System Performance Report	х			
		Support improvements to transit		Number of Vehicles out of service for 30 or more days by mode (MB). (Lower is better)	Marty	System Performance Report	Х			
		service.	Maintenance Resources	Number of Vehicles out of service for 30 or more days by mode (DR). (Lower is better)	Marty	System Performance Report	Х			
				Number of Vehicles out of service for 30 or more days by mode (CB). (Lower is better)	Marty	System Performance Report	x			
			Maintain fleet (revenue vehicles)	Age - % of revenue vehicles within a particular asset class (Bus and Cutaway Bus) that have met or exceeded their Useful Life Benchmark (ULB). <i>(Lower is better)</i>	Marty	Rate Projects; System Performance Report	x			
			Maintain equipment (Non- revenue/service automobile)	Age - % of vehicles that have met or exceeded their Useful Life Benchmark (ULB). <i>(Lower is better)</i>	Marty	System Performance Report	х			
Infrastructure Maintenance	An efficient multimodal		Delay	Vehicle hours of delay per capita compared to base year conditions. (Lower is better)	TCRPM 5.0	Rate Projects; Evaluate Scenarios; CMP Update				
and Congestion Management Goal	transportation system that supports economic growth and enhances the quality of life.	oports economic growth and		and ife.	orts economic growth and ances the quality of life.	pports economic growth and nhances the quality of life.	Travel time reliability index on congested corridors on non-NHS facilities. (Lower is better)	Regional Integrated Transportation Information System (RITIS)	Rate Projects, CMP Update	
			Travel time reliability	% of person-miles traveled on the Interstate that are reliable. (Higher is better)	Available from FDOT	Rate Projects; System Performance Report; CMP Update	х			
				% of person-miles traveled on the non-Interstate NHS that are reliable. (<i>Higher is better</i>)	Available from FDOT	Rate Projects; System Performance Report; CMP Update	х			
				Truck Travel Time Reliability Index (TTTRI) on the Interstate. <i>(Lower is better)</i>	Available from FDOT	Rate Projects; System Performance Report; CMP Update	х			
			Vehicle miles traveled	Vehicle miles of travel per capita. (Lower is better)	TCRPM 5.0	Rate Projects; Evaluate Scenarios; CMP Update				
		capita vehicle miles of travel.	Travel demand management	High occupant vehicle (HOV) person trips. (Higher is better)	TCRPM 5.0	Rate Projects; Evaluate Scenarios; CMP Update				
		Prioritize funding to support smaller scale congestion management projects and programs (TSM&O).		Dollars of funding to plan, design, and implement congestion management projects and programs. <i>(Higher is better)</i>	Revenue Forecast, FDOT and Martin MPO	Rate Projects, CMP Update				
		Prioritize funding for projects that improve existing corridors that address multimodal transportation needs with context sensitive designs.	Funding	Percent of major roadways with appropriate bicycle, pedestrian and transit facilties. <i>(Higher is better)</i>	GIS, Martin MPO and FDOT	Rate Projects; Evaluate Scenarios; CMP Update				

Goal	Goal Statement	Objectives	Evaluation Criteria	Performance Measure	Data Source (s)	Potential Application(s)*	Meets FAST Act PM Rules
Infrastructure Maintenance and Congestion Management Goal	An efficient multimodal transportation system that supports economic growth and enhances the quality of life.	Support projects that enhance the quality of life.	Quality of life	Transportation projects that are located in Community Redevelopment Areas (CRAs). (<i>Higher is better</i>)	Martin County, Cities, Village of Indiantown	Rate Projects	
		Prioritize projects that improve hurricane evacuation needs.	Hurricane Evacuation	Centerline miles of roadway on evacuation routes operating at or belter than the adopted level of service. <i>(Higher is better)</i>	Martin County LOS Report, GIS, TCRPM 5.0	Rate Projects	
				Number of fatalities (Lower is better)	Crash Analysis		Х
		Prioritize projects and programs that improve safety on corridors with highest number of crashes with fatal	Fatal and serious injury crashes	Rate of fatalities per 100 million vehicle miles traveled (VMT). (Lower is better)	Reporting System, Signal	Rate Projects: Evaluate	х
		and incapacitating injuries for all		Number of serious injuries. (Lower is better)	Four Analytics, Crash	Scenarios; System	Х
Cofety Cool	A safe multimodal transportation system that	modes and users.		Rate of serious injuries per 100 million vehicle miles traveled (VMT). (Lower is better)	Modification Factors (CMFs) to evaluate project	Update	х
Safety Goal	meets the needs of all the users.	Implement strategies to enhance bicycle and pedestrian safety.	Bicycle and pedestrian crashes	Number of non-motorized fatalities and serious injuries. (Lower is better)	safety		Х
				Number of accidents per 100,000 revenue miles by mode (MB). (Lower is better)	Marty	System Performance Report	х
		Reduce transit vehicle crashes and	Cafetyriak	Number of accidents per 100,000 revenue miles by mode (DR). (Lower is better)	Marty	Application(s)*Act PM RRate ProjectsRate ProjectsRate ProjectsXRate Projects; Evaluate Scenarios; System Performance Report; CMP UpdateXXXXXXXXXXXXXXXXXSystem Performance ReportXSystem Performance ReportX	х
		facility-accidents	Safety risk	Number of accidents per 100,000 revenue miles by mode (CB). (Lower is better)	Marty		х
				Number of facility-accident related accidents to employees or customers. (Lower is better)	Marty		х
		Minimize adverse impacts to the natural environment.	Environmentally sensitive lands	Acres of impacted environmentally sensitive lands, such as, wetlands or significant wildlife habitat or conservation lands. <i>(Lower is better)</i>	GIS, Florida Geographic Data Library (FGDL) and Martin County	Rate Projects	X X X X X X X X X X
		Reduce on-road mobile source emissions	Air pollution and greenhouse gas emissions	Change in pollutants (tonnage) including carbon dioxide/greenhouse gas. (Lower is better)	TCRPM 5.0, FTA		
		Increase the sidewalk coverage on roadways serving concentrations of population and employment in urban areas.	Pedestrian facilities	Miles of pedestrian facilties on the major roadway system in areas with high population and employment density. <i>(Higher is better)</i>	Martin County	Rate Projects; Evaluate Scenarios; CMP Update	
Environmental and Equity	Preserve natural environment and promote equity and	Increase the bicycle facility coverage throughout the planning area.	Bicycle infrastructure	Miles of bicycle facilties on the major roadway system. (Higher is better)	Martin County	Rate Projects; Evaluate Scenarios; CMP Update	Act PM Rules X <
Goal	healthy communities.	Implement strategies that increase the miles of shared used path to support the trail network.	Shared use path	Miles of shared use facility. (Higher is better)	Martin County	Rate Projects; Evaluate Scenarios; CMP Update	
		Prioritize improvements that provide non-motorized access to recreational opportunities.	Bicycle and pedestrian facilities	Percent of major roadways that access recreational opportunities with bicycle and pedestrian facilties. <i>(Higher is better)</i>	Martin County	Rate Projects; Evaluate Scenarios; CMP Update	
		Minimize adverse impacts to the minority and/or low income populations.	Environmental justice	Investment in transportation improvement projects in environmental justice areas compared to the rest of the county. <i>(Higher is better)</i>	Martin MPO, FDOT		

Goal	Goal Statement	Objectives	Evaluation Criteria	Performance Measure	Data Source (s)	Potential Application(s)*	Meets FAST Act PM Rules
Environmental and Equity Goal	Preserve natural environment and promote equity and healthy communities.	Improve access to jobs in areas that have high concentration of transportation disadvantaged population groups.	Environmental justice	Number of jobs within 30 minutes of in-vehicle travel time by public transportation during peak hour. <i>(Higher is better)</i>	TCRPM 5.0	Evaluate Scenarios	
A transportation system Innovation Goal an ability to harness ch in the future.	A transportation system with	Identify and support projects that provide synergy or flexibility in accommodating emerging transportation technologies.	Emerging technologies (ACES)	Funding for projects that have ITS components to advance ACES. (<i>Higher is better</i>)	Martin MPO, FDOT	Rate Projects; Evaluate Scenarios	
		Prioritize projects that improve extreme weather resiliency and/or harden infrastructure against Sea Level Rise (SLR)	Extreme weather resiliency	Transportation improvement projects located in areas prone to inundation due to storm surge, king tides and other extreme weather events including SLR. <i>(Higher is better)</i>	Martin County	Rate Projects; Evaluate Scenarios	
and Delivery reflects the comm		Advance projects that the community supports.		Level of support for improvements in the community. (Higher is better)	Martin MPO, FDOT	Rate Projects	
	A transportation system that reflects the community's needs and desires.	Prioritize projects that can be accelerated through project development process.	Community support	Right of way availability and/or cost. (Lower is better)	Martin County, FDOT	Rate Projects	
		Support projects that are strategically important for Martin County.	High impact transportation projects	Funding allocation for strategic transportation improvement projects. <i>(Higher is better)</i>	Martin MPO	Rate Projects; Evaluate Scenarios	

*Notes:

§ Performance measures for evaluating alternative planning scenarios and preparing a System Performance Report will be applied at system level or countywide.

§ To rate and prioritize transportation improvements, candidate projects will be evaluated using project level performance measures based on future year data/metrics.

§ Data from previous years or recent past will be used to develop performance measures for CMP Update and System Performance Report.

§ All the performance measures may not need to be operationalized for project prioritization.

§ Appropriate performances measures will be applied across various modes.

§ Some of the performance measures will be qualitative while others quantitative.

§ Key Performance Measures (KPMs) included in the System Performance Report to be tracked on an annual basis.

As demonstrated in **Table 3-2**, the 2045 LRTP – *Martin in Motion's* goals and objectives and performance measures are consistent with the FTP Next 50 Years goals as well as FAST Act. Further, *Martin in Motion's* goals and objectives are consistent with the County Comprehensive Plan as well.

Table 3-2: Martin in Motion Goals vs. National and State Goals

	Fixi	ng Am	erica's Nati	Surfac		nsporta	ation		2060 F	lorida ⁻ Sta	Transp ate Go		on Plar	ו	
<i>Martin in Motion</i> (2045 LRTP) Goals/Objectives	Safety	Infrastructure Condition	Congestion Reduction	System Reliability	Freight Movement and Economic Vitality	Environmental Sustainability	Reduced Project Delivery Delays	Safety and Security	Agile, Resilient, and Quality Infrastructure	Efficient and Reliable Mobility for People and Freight	More Transportation Choices for People and Freight	Economic Competitiveness	Quality Places to Live, Learn, Work, and Play	Environment & Energy	
Infrastructure Maintenance and Congestion Management Goal:	An eff	icient	multir	nodal	trans	portat	ion s	ystem	that s	suppor	rts ec	onomi	ic grov	wth a	nd enhances the quality of life
															% of pavements on the Interstate Sys
Prioritize improvements that help maintain existing roadways and bridges.															% of pavements on the Interstate Sys
	x	x						x	x						% of pavements on the non-Interstate
	~							^							% of pavements on the non-Interstate
															% of NHS bridges by deck area class
															% of NHS bridges by deck area class
Prioritize improvements that maintain or improve acceptable travel performance.				х	х					х		х			Vehicle miles of travel operating at or
												v	V		Percent of jobs within 30-minute auto
Improve access to jobs.					X							Х	Х		Percent of jobs within 30-minute in-ve
Improve transit access to employment			v		v							~			Percent of jobs within a quarter mile of
Improve transit access to employment.			X		X							Х			Percent of population within a quarter
Improve transit access to recreational activities.						Х					Х		Х		Number of recreational facilities serve
															Changes in frequency or headway. (L
															Changes in geographic coverage. (Hi
			x		x					x	х	х			Change in revenue hours of service.
Support improvements to transit service.															Change in revenue hours of service r
															Riders per revenue hour. (Higher is b
															Total annualized capital cost and O&I
															On-time performance (Mini-bus). <i>(Hig</i>
				X						X					On-time performance (Demand Resp
															On-time performance (Cutaway Bus).

Performance Measure

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system in GOOD condition. (*Higher is better*)

system in POOR condition. (Lower is better)

ate NHS in GOOD condition. (Higher is better)

ate NHS in POOR condition. (Lower is better)

ssified as in GOOD condition. (Higher is better)

ssified as in POOR condition. (Lower is better)

or better than adopted level of service standard. (Higher is better)

to travel time for average household. (Higher is better)

vehicle travel time (transit) for average household. (Higher is better)

e of transit stops. *(Higher is better)*

ter mile of transit stops. (Higher is better)

rved by a transit route. *(Higher is better)*

(Lower is better)

Higher is better)

e. (Higher is better)

e relative to base year. (Higher is better)

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&M cost per rider. (Lower is better)

ligher is better)

sponse). (Higher is better)

s). (Higher is better)

	Fixir	ng Ame	erica's Nati	Surfac	ce Trar ioals	nsporta	ation	2	2060 FI	orida ⁻ Sta	Fransp ate Goa				
<i>Martin in Motion</i> (2045 LRTP) Goals/Objectives	Safety	Infrastructure Condition	Congestion Reduction	System Reliability	Freight Movement and Economic Vitality	Environmental Sustainability	Reduced Project Delivery Delays	Safety and Security	Agile, Resilient, and Quality Infrastructure	Efficient and Reliable Mobility for People and Freight	More Transportation Choices for People and Freight	Economic Competitiveness	Quality Places to Live, Learn, Work, and Play	Environment & Energy	
Infrastructure Maintenance and Congestion Management Goal:	An effi	icient	multir	nodal	trans	portat	ion sy	/stem	that s	uppoi	rts eco	onomi	c grov	vth ar	nd enhances the quality of life
															Missed runs due to major breakdown,
															Missed runs due to major breakdown, <i>is better)</i>
															Missed runs due to major breakdown, <i>better)</i>
		v		x					V	v					Number of Vehicles out of service for 3
Support improvements to transit service.		X							Х	Х					Number of Vehicles out of service for 3
															Number of Vehicles out of service for 3
															Age - % of revenue vehicles within a p exceeded their Useful Life Benchmark
															Age - % of vehicles that have met or e
															Vehicle hours of delay per capita comp
Manage traffic congestion.			X	v	v					V		V			Travel time reliability index on congest
			X	Х	X					Х		Х			% of person-miles traveled on the Inter
															% of person-miles traveled on the non-
Support improvements to major freight corridors.					Х						Х	Х			Truck Travel Time Reliability Index (TT
Implement strategies to reduce per capita vehicle miles of travel.			x	x		х				Х				х	Vehicle miles of travel per capita. (Low
															High occupant vehicle (HOV) person tr
Prioritize funding to support smaller scale congestion management projects and programs (TSM&O).			x							х				х	Dollars of funding to plan, design, and <i>is better)</i>

Performance Measure

n, as a percentage of total runs by mode (Mini-bus). (Lower is better)

n, as a percentage of total runs by mode (Demand Response). (Lower

n, as a percentage of total runs by mode (Cutaway Bus). (Lower is

r 30 or more days by mode (MB). *(Lower is better)*

r 30 or more days by mode (DR). *(Lower is better)*

r 30 or more days by mode (CB). *(Lower is better)*

particular asset class (Bus and Cutaway Bus) that have met or rk (ULB). *(Lower is better)*

exceeded their Useful Life Benchmark (ULB). (Lower is better)

mpared to base year conditions. (Lower is better)

sted corridors on non-NHS facilities. (Lower is better)

terstate that are reliable. (Higher is better)

on-Interstate NHS that are reliable. (Higher is better)

TTTRI) on the Interstate. (Lower is better)

ower is better)

trips. (Higher is better)

nd implement congestion management projects and programs. (Higher

	Fixir	ng Am		Surfac onal G	ce Trar ioals	isporta	ation		2060 F		Transp ate Go		on Plan	1	
<i>Martin in Motion</i> (2045 LRTP) Goals/Objectives	Safety	Infrastructure Condition	Congestion Reduction	System Reliability	Freight Movement and Economic Vitality	Environmental Sustainability	Reduced Project Delivery Delays	Safety and Security	Agile, Resilient, and Quality Infrastructure	Efficient and Reliable Mobility for People and Freight	More Transportation Choices for People and Freight	Economic Competitiveness	Quality Places to Live, Learn, Work, and Play	Environment & Energy	
Prioritize funding for projects that improve existing corridors that address multimodal transportation needs with context sensitive designs.		x							x						Percent of major roadways with appro
Support projects that enhance the quality of life.					х	х						х	х		Transportation projects that are locate <i>better</i>)
Safety Goal: A safe multimodal transportation system that meet	s the r	needs	of all	the us	sers.										
Prioritize projects that improve hurricane evacuation needs.	х			х				х	х		х				Centerline miles of roadway on evacua (Higher is better)
Prioritize projects and programs that improve safety on corridors with highest number of crashes with fatal and incapacitating injuries for all modes and users.	x							x			х				Number of fatalities <i>(Lower is better)</i> Rate of fatalities per 100 million vehicl Number of serious injuries. <i>(Lower is t</i> Rate of serious injuries per 100 million
Implement strategies to enhance bicycle and pedestrian safety.	Х							Х			Х				Number of non-motorized fatalities and
Reduce transit vehicle crashes and facility-accidents	x							x			х				Number of accidents per 100,000 reve Number of accidents per 100,000 reve Number of accidents per 100,000 reve Number of facility-accident related acc
Environmental and Equity Goal: Preserve natural environment a	nd pro	omote	equit	v and	health	iv cor	nmun	ities.							
Minimize adverse impacts to the natural environment.						x	Х						х	Х	Acres of impacted environmentally ser conservation lands. (Lower is better)
Reduce on-road mobile source emissions						х							х	Х	Change in pollutants (tonnage) includi
Increase the sidewalk coverage on roadways serving concentrations of population and employment in urban areas.	х					х		х			х		х	Х	Miles of pedestrian facilities on the ma density. <i>(Higher is better)</i>
Increase the bicycle facility coverage throughout the planning area.	Х					Х		Х			Х		Х	Х	Miles of bicycle facilities on the major
Implement strategies that increase the miles of multi-use trails and support the trail network.	x					х		x			х		x	Х	Miles of shared use facility. (Higher is

Performance Measure

propriate bicycle, pedestrian and transit facilities. (Higher is better)

ated in Indiantown or other community redevelopment areas. (Higher is

cuation routes operating at or belter than the adopted level of service.

icle miles traveled (VMT). (Lower is better)

s better)

ion vehicle miles traveled (VMT). (Lower is better)

and serious injuries. (Lower is better)

evenue miles by mode (MB). (Lower is better)

evenue miles by mode (DR). (Lower is better)

evenue miles by mode (CB). *(Lower is better)*

accidents to employees or customers. (Lower is better)

sensitive lands, such as, wetlands or significant wildlife habitat or

uding carbon dioxide/greenhouse gas. (Lower is better)

major roadway system in areas with high population and employment

or roadway system. (Higher is better)

is better)

	Fixir	Fixing America's Surface Transportation National Goals 2060 Florida Transportation Plan State Goals													
Martin in Motion (2045 LRTP) Goals/Objectives	Safety	Infrastructure Condition	Congestion Reduction	System Reliability	Freight Movement and Economic Vitality	Environmental Sustainability	Reduced Project Delivery Delays	Safety and Security	Agile, Resilient, and Quality Infrastructure	Efficient and Reliable Mobility for People and Freight	More Transportation Choices for People and Freight	Economic Competitiveness	Quality Places to Live, Learn, Work, and Play	Environment & Energy	
Prioritize improvements that provide non-motorized access to recreational opportunities.						х							х	х	Percent of major roadways that acces (Higher is better)
Minimize adverse impacts to the minority and/or low-income populations.					х							х	х		Investment in transportation improver the county. (Higher is better)
Improve access to jobs in areas that have high concentration of transportation disadvantaged population groups.					х							х	х		Number of jobs within 30 minutes of in (Higher is better)
Innovation Goal: A transportation system with an ability to harn	ess ch	ange	s in th	e futu	re.										
Identify and support projects that provide synergy or flexibility in accommodating emerging transportation technologies.				х	х	х			х		х	х	х	х	Funding for projects that have ITS co
Prioritize projects that improve extreme weather resiliency and/or harden infrastructure against Sea Level Rise (SLR)	х	х		х	х	х		х	x	х		х	х	х	Transportation improvement projects and other extreme weather events inc
Project Streamlining and Delivery Goal: A transportation system	n that r	reflect	s the	comm	nunity'	s nee	ds an	d desi	ires.						
Advance projects that the community supports.					Х		Х				Х		Х		Level of support for improvements in
Prioritize projects that can be accelerated through project development process.							Х					Х	Х	Х	Right of way availability and/or cost.
Support project that are strategically important for Martin County.					х	х	х		х		х		х		Funding allocation for strategic transp

Performance Measure

cess recreational opportunities with bicycle and pedestrian facilities.

ement projects in environmental justice areas compared to the rest of

f in-vehicle travel time by public transportation during peak hour.

components to advance ACES. *(Higher is better)*

cts located in areas prone to inundation due to storm surge, king tides including SLR. (*Higher is better*)

in the community. (Higher is better)

(Lower is better)

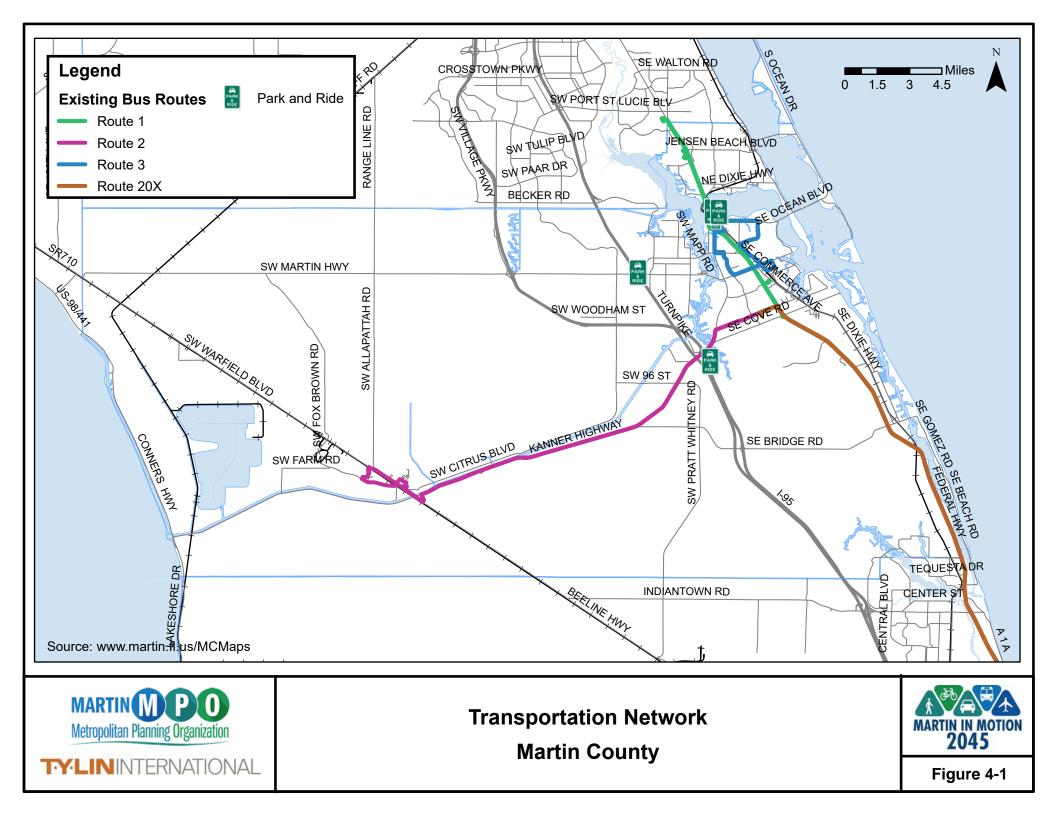
sportation improvement projects. (Higher is better)

4. PLANNING CONTEXT

This chapter includes a synopsis of existing travel patterns, travel behavior as well as future travel demand, emerging issues, and trends to set the local and regional planning context and inform the Martin MPO's needs assessment.

4.1 Existing Transportation Network

Martin County is located in South Florida and is bordered on the north by St. Lucie County, on the south by Palm Beach County, on the west by Okeechobee County, and on the east by the Atlantic Ocean. Very little of the county is incorporated as there are only four municipalities. Among these incorporated municipalities, the largest city, Stuart, has over 16,000 residents and is in the northeastern quadrant of the county. The most populated place within the county is unincorporated Palm City, with a population of over 23,000 according to 2016 American Community Survey (ACS) 5-year estimates. **Figure 4-1** presents a physical representation of the county and the existing transportation and transit network.



4.1.1 Highways

Regionally significant transportation corridors in Martin County including designated Strategic Intermodal System (SIS) facilities are I-95, Florida's Turnpike, State Road 710 and US 98. Other roadway facilities that carry local traffic include all of the major and minor arterials, such as, State Road 76/Kanner Highway, US 1/Federal Highway, County Road A1A/Dixie Highway, State Road 714 /Martin Highway, Martin Downs Boulevard, County Road 76A/Citrus Boulevard, County Road 711/Pratt Whitney Road, County Road 708/Bridge Road, County Road 722/Salerno Road and Cove Road.

4.1.2 Transit

Martin County's public transit system, Marty, operates four routes. These routes comprising the Marty system include the following two fixed-routes, one deviated fixed route and one express route for commuters:

- Route 1, an intercounty route serving US 1 from the Port St. Lucie Walmart to Cove Road and providing connections to the Treasure Coast Connector in St. Lucie County. Service operates on weekdays (Monday- Friday) from 6:00 am to 8:00 pm.
- Route 2, a deviated fixed route primarily serving Indiantown. Service operates on weekdays (Monday- Friday) from 6:00 am to 8:15 pm.
- Route 3, primarily serving Stuart. Service operates on weekdays (Monday-Friday) from 6:00 am to 8:00 pm.
- Route 20x, an express route providing service from Stuart to Palm Beach County and providing connections to Palm Tran at Palm Beach Gardens Mall and the Veteran's Administration Medical Center (VAMC) in Palm Beach County. Service operates on weekdays (Monday- Friday) from 6:30 am to 7:35 pm.

ADA service is offered within a ³/₄-mile buffer of Marty's fixed-routes for individuals with disabilities. Other transit agencies with connecting opportunities to Marty routes include Palm Tran, which operates in Palm Beach County, the Treasure Coast Connector (TCC), which operates in St. Lucie County, and Stuart's downtown Tram route, which provides connectivity to key destinations within the downtown area.

4.1.3 Freight

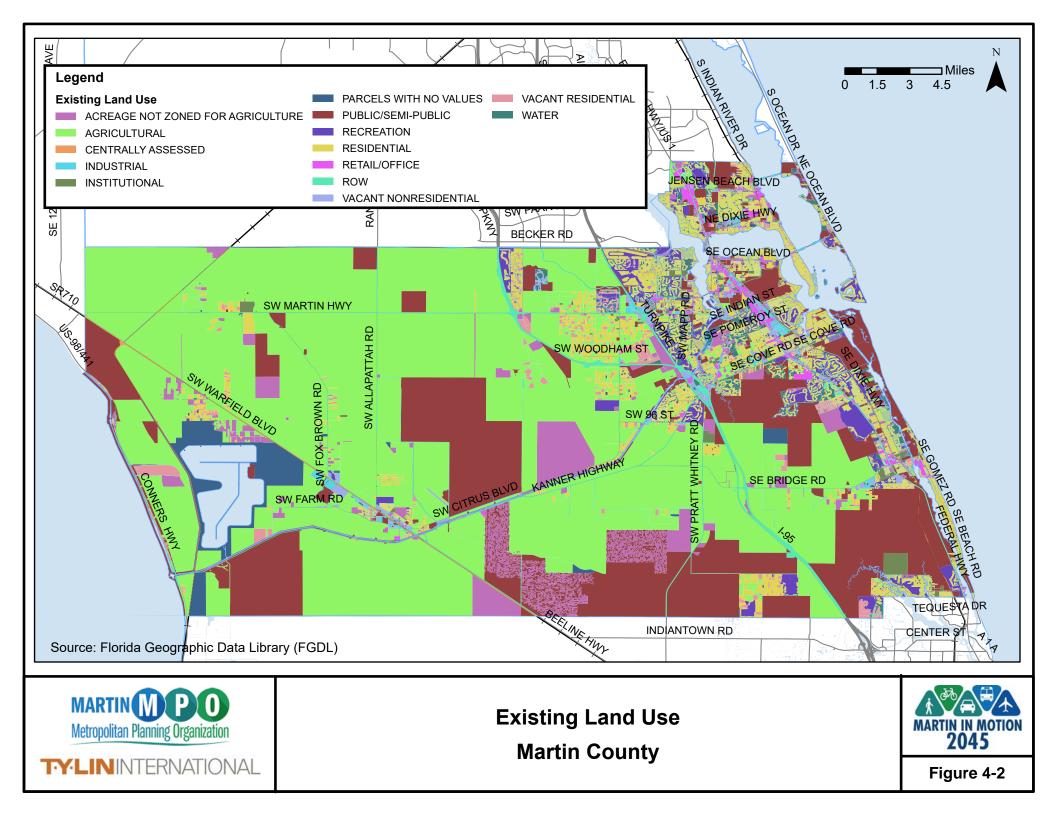
In Martin County, I-95 is included in the Primary Highway Network System (PHNS), which is a critical component of the freight transportation network. In addition, the County's designated SIS facilities that include Florida's Turnpike, State Road 710 and US 98 as well as the Atlantic Intracoastal Waterway (AIW) are part of the regionally significant freight network. While Martin County has not designated any local roadways as truck routes, all the major and minor arterials comprise regionally significant freight network. Witham Field, located approximately one mile southeast of Stuart, does not have commercial or air cargo services but plays a significant role in the general aviation needs of the region. Key freight railroads that traverse Martin County include Florida East Coast Railway (FEC) and CSX Transportation (CSX).

4.1.4 Waterways

Martin County has an extensive network of waterways. The Intracoastal Waterway (ICW), also known as the Atlantic Intracoastal Waterway (AIW), spans roughly 44 miles through Martin and St. Lucie counties and provides connections to both the St. Lucie Inlets and Fort Pierce. The St. Lucie River, including its north and south forks, provides connections to the ICW, water access inland, and a connection to Lake Okeechobee via the St. Lucie Canal (C-44). Additionally, Martin County has a series of smaller creeks, canals, and tributaries, which provide additional waterway connections for residents, business owners, visitors, and marine life. Waterways in Martin County are primarily used for recreational purposes by the marine industry and limited cargo service comprising of barge traffic to specific industrial hubs (power plants).

4.2 Existing Land Use

Martin County is centered around the Atlantic Ocean, St. Lucie Inlet, estuaries of the St. Lucie River, Indian River, Loxahatchee River, and Lake Okeechobee. Martin County's total land area consists of approximately 344,316 acres or 538 square miles. The urbanized area predominantly lies between the Florida Turnpike and Atlantic Ocean in the eastern portion of the county, and Stuart is the most urbanized portion of the county. A western urban core occurs in the Indiantown area along the State Road 710 corridor. The western portion of the county is largely agricultural, with older, rural residential developments. The top land uses within the county according to the Martin County Comprehensive Plan include agriculture land, state lands, single-family homes, and vacant acreage. **Figure 4-2**, 2010 Existing Land Use Map, shows existing land uses categorized by Department of Revenue Codes (DOR) and assigned by the Martin County Property Appraiser.



4.3 Existing Travel Patterns

This section describes the travel characteristics of Martin County. The focus is on work trips made by workers that live in Martin County as work trips make up more than 15% of the total daily traffic and are the single most important contributing factor to traffic congestion during peak hours. The analysis will be based on the 5-year (2012-2016) American Community Survey (ACS)/Census Transportation Planning Product (CTPP) data. CTPP is a data program sponsored by AASHTO with funding contributions from all state DOTs and some MPOs. The CTPP uses ACS samples for data tabulation and the dataset includes the following three parts:

- Part 1: Residence-based tabulations summarizing worker and household characteristics
- Part 2: Workplace-based tabulations summarizing worker characteristics
- Part 3: Worker flows between home and work, including travel mode

The 2012-2016 ACS/CTPP dataset was released in March 2019 and provides most current and most comprehensive information on socio-economic and commute characteristics at various geographic levels.

4.3.1 Places of Work for Martin County Residents

Figure 4-3 illustrates the counties and places where residents of Martin County worked. Between 2012 and 2016, there were a total of 60,881 workers residing in Martin County. Close to two-thirds (65.2%) of the resident workers (39,690) in Martin County were employed within the County. Palm Beach County was the most popular workplace outside Martin County, employing 13,663, or 22.4% of the County's workforce. This was followed by the neighboring St. Lucie County where 5,045, or 8.3% of the Martin County resident workers traveled to work. There were 1,351 workers (2.2%) commuted to work in other counties in Florida, while a small percentage of people (1.9%, or 1,132) were employed out of the State.

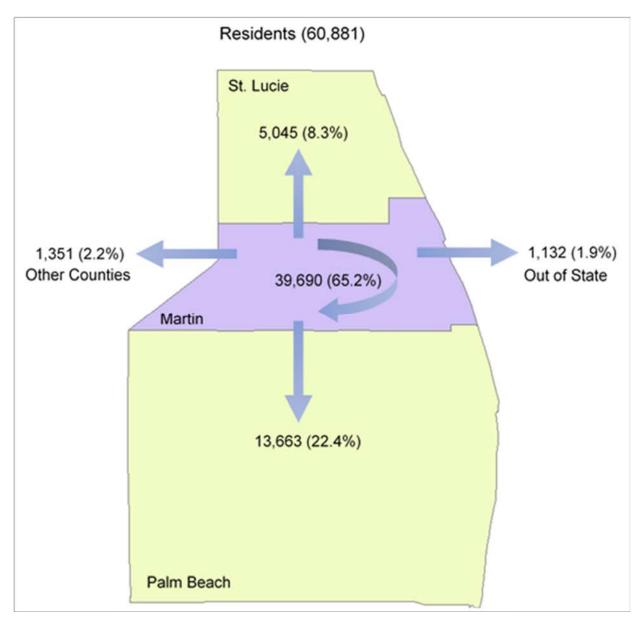


Figure 4-3: Work Place Counties for Martin County Residents

4.3.2 County of Residence for Martin County Workers

Figure 4-4 shows where workers in Martin County live. Between 2012 and 2016, a total of 62,520 workers were employed in Martin County. Compared to the 60,881 workers living in Martin County, Martin County provided more employment opportunities than the County's workforce and had an employment surplus of 1,639 jobs. About 28.7%, or 17,925 workers in Martin County lived in St. Lucie County. A smaller percentage, 5.5%, or 3,428 workers in Martin County came from Palm Beach County. Two percent (2%) or 1,251 people were residents of other Florida counties. There were 226 people traveling to Martin County to work from places outside Florida.

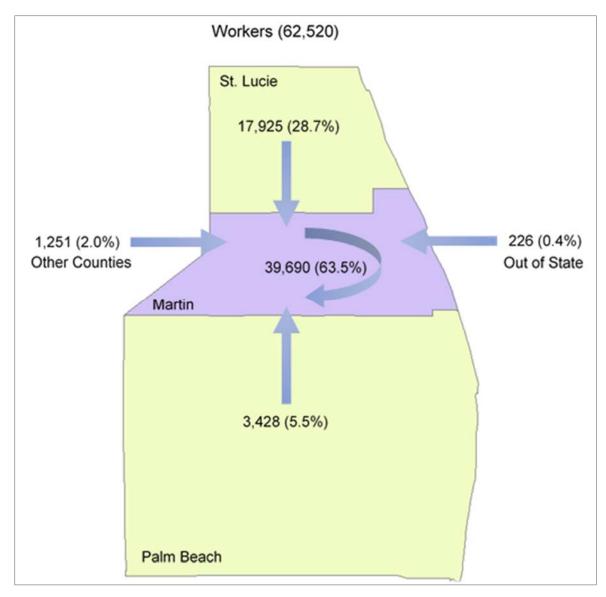


Figure 4-4: Residence Counties for Martin County Workers

4.3.3 Means of Transportation (MOT) to Work

Figure 4-5 depicts Means of Transportation distribution to work for workers that lived in Martin County between 2012 and 2016. "Drove Alone" was still the predominant mode of travel to work with 77.1%. Approximately 11% of workers commuted to work by carpool. Public Transportation made up about 0.4% of the mode shares, which was lower than the shares for Bicycle (0.9%) and Walk (1.6%). About 1.6% workers used "Other method" such as taxi or motorcycles to work. Nearly 8.0% of the employees worked from home.

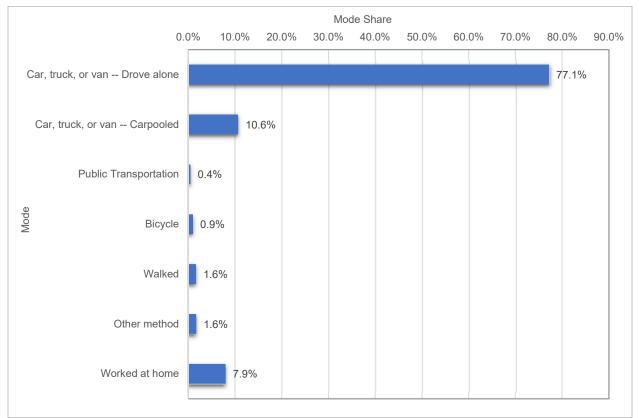


Figure 4-5: Martin County Resident Workers Means of Transportation to Work

4.3.4 Travel Time to Work

Figure 4-6 shows the travel time distribution for workers residing in Martin County between 2012 and 2016. Close to 25.7% of the workers took between 5 and 14 minutes to get to work. Another 21% took between 30 and 44 minutes to go to work. Over 16% people spent more than 45 minutes on the road to work. The average travel time for all employees that did not work from home was 27.8 minutes.

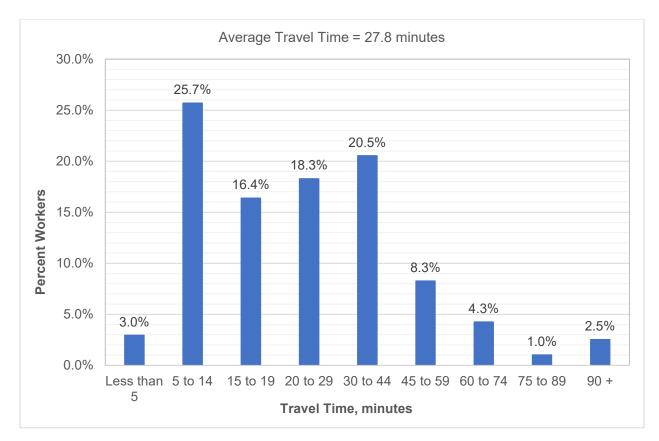


Figure 4-6: Martin County Resident Workers Travel Time to Work

4.4 Population and Employment Growth

The performance of a transportation network is impacted by the growth and transformation of population, households, and employment in the region. Because of this inextricable link, it is important to assess Martin County's socioeconomic changes to develop an understanding of the region's evolving travel patterns. Growth in population and employment underscores the need for a wide selection of transportation options. Therefore, a thorough understanding of the socioeconomic growth will help make informed decisions on how and where transportation investments should be leveraged over the next 25 years.

Technical Memorandum #4 – *Travel Demand Forecasting* provides an in-depth analysis of land use, demographic and socioeconomic composition of Martin County in preparation for the Martin MPO's 2045 LRTP – *Martin in Motion*. Below is discussion of major findings of projected growth in population and employment and overall future travel demand in the Treasure Coast Region.

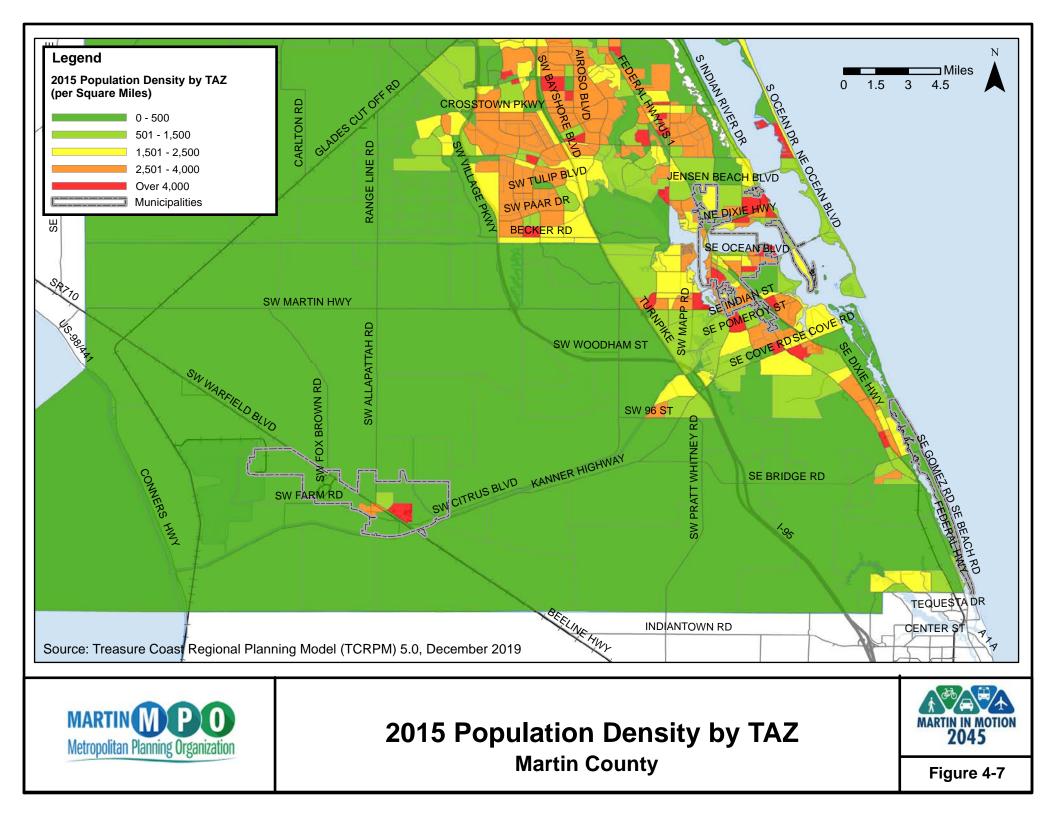
This socioeconomic data reveals trends in demographics and employment from the base year (2015) to the horizon year (2045). This section documents the findings of the population and employment 2045 forecast for 249 traffic analysis zones (TAZs) within Martin County and 1,261 traffic analysis zones (TAZs) within the Treasure Coast Region as defined in the TCRPM 5.0 model.

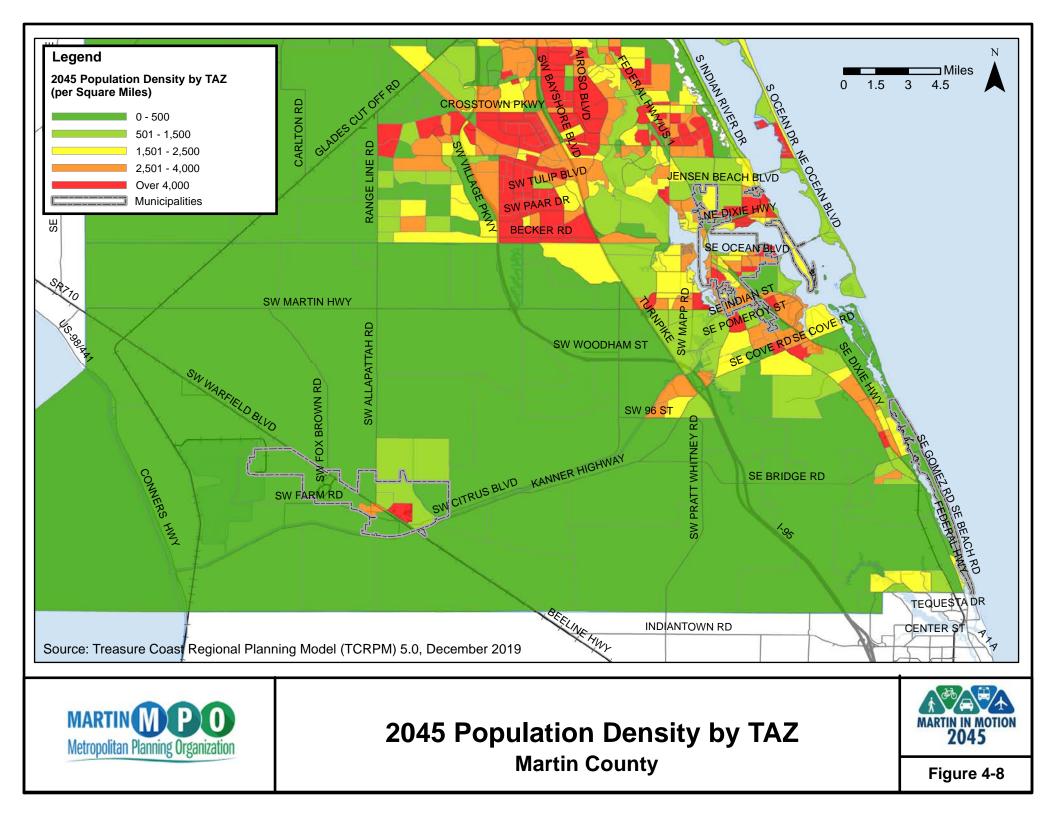
Table 4-1 shows the overall changes in population and employment between 2015 and 2045 at county level. Population in Martin County is projected to grow by 29,716 to reach almost 200,000 while employment will grow by 6,286 to reach just under 100,000 during the next 30 years. Overall, the region will continue to grow during this time; however, Martin County's population growth and employment growth during this period were lower than the population growth and employment growth of the Treasure Coast Region as a whole.

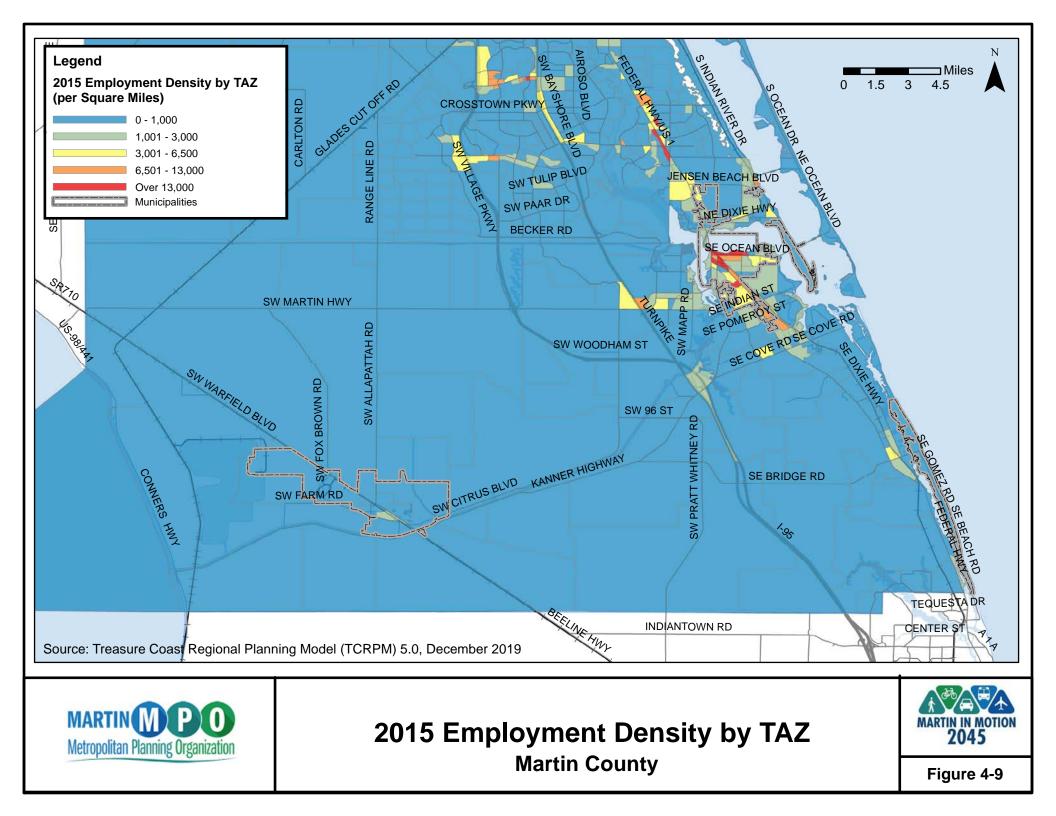
Geography	Population, 2015	Population, 2045	Percent Change, 2015-2045	Employment, 2015	Employment, 2045	Percent Change, 2015-2045
Martin County	151,596	181,312	19.60%	92,700	98,986	6.78%
St. Lucie County	292,362	525,100	79.61%	108,097	183,349	69.62%
Indian River County	143,326	201,839	40.83%	76,386	94,626	23.88%
Treasure Coast Region	587,284	908,251	54.65%	277,183	376,961	36.00%

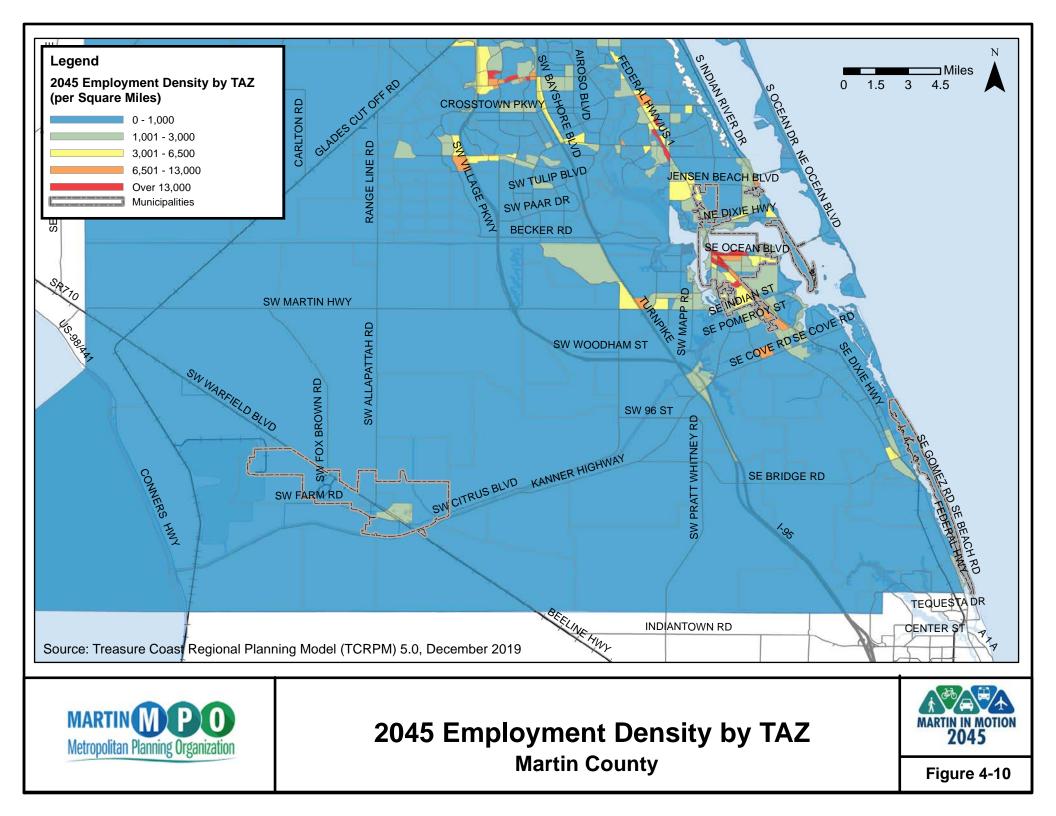
Table 4-1: Population and Employment Growth, 2015-2045

Population and employment growths are summarized by Traffic Analysis Zones (TAZs). **Figure 4-7** and **Figure 4-8** present the population density in 2015 and 2045. **Figure 4-9** and **Figure 4-10** show the employment density in 2015 and 2045.









4.5 Future Travel Demand, Year 2045

The Treasure Coast Regional Planning Model Version 5.0 (TCRPM 5.0) is the regional travel demand modeling tool that is used to forecast travel behavior in Martin County. The TCRPM 5.0 is an activity-based travel demand model serving the regional transportation modeling needs for the three counties within Treasure Coast Region – Martin, St. Lucie, and Indian River County.

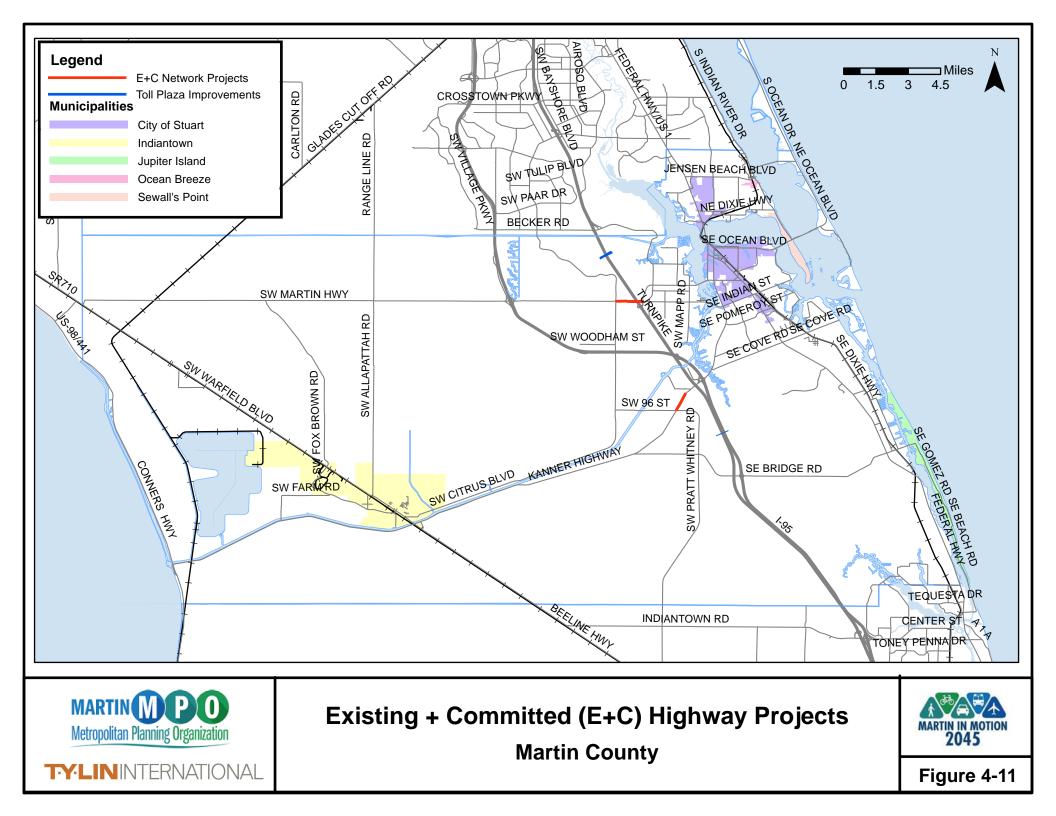
4.5.1 Existing plus Committed (E+C) Network

The 2015 transportation network is the base year and the network was adjusted to replicate the 2045 Existing plus Committed (E+C) transportation network incorporated FDOT's Five Year Work Program (2015-2020) and the Martin MPO's Transportation Improvement Program (TIP) for fiscal years (FY) 2015 through FY 2020. The 2045 E+C projects provided in **Table 4-2** were coded into the 2015 base network. The base year highway network was updated to reflect six lanes on S Kanner Highway/SR-76 since the highway widening project along S Kanner Highway/SR-76 north of I-95 was completed. Socioeconomic data for 2045 was utilized in the 2045 E+C scenario.

Facility	From	То	Project Description
SR-76/Kanner Highway	South of CR-711/Pratt Whitney Road	SW Jack James Drive	Two lanes will be added, going from two to four.
SR-714/SW Martin Highway	Citrus Boulevard	SW Martin Downs Boulevard	Widening SR-714 from two to four lanes.

Table 4-2: Committed Roadway Projects

Figure 4-11 provides a graphical representation of the E+C network.



4.5.2 Travel Demand Forecast, Year 2045

Using TCRPM 5.0, growth in travel demand was forecasted between the base year 2015 and future year 2045. **Tables 4-3**, **4-4** and **4-5** show total person trips in the base year 2015, future year 2045 and percentage growth between year 2015 and year 2045 respectively in the Treasure Coast Region.

Geography	Indian River County	St. Lucie County	Martin County	External	Total
Indian River County	492,676	27,308	2,084	3,068	525,136
St. Lucie County	27,348	798,996	65,716	11,676	903,736
Martin County	2,044	65,756	416,704	13,936	498,440
External	3,068	11,676	13,936		28,680
Total	525,136	903,736	498,440	28,680	1,955,992

 Table 4-3: Average Weekday Person Trips Matrix, Base Year 2015

 Table 4-4: Average Weekday Person Trips Matrix, Future Year 2045

Geography	Indian River County	St. Lucie County	Martin County	External	Total
Indian River County	674,516	45,940	3,056	3,440	726,952
St. Lucie County	46,020	1,496,576	103,744	19,912	1,666,252
Martin County	2,976	103,824	482,008	15,376	604,184
External	3,440	19,912	15,376		38,728
Total	726,952	1,666,252	604,184	38,728	3,036,116

Table 4-5: Growth in Daily Person Trips, Year 2015 to Year 2045

Geography	Indian River County	St. Lucie County	Martin County	External	Total
Indian River County	37%	68%	47%	12%	38%
St. Lucie County	68%	87%	58%	71%	84%
Martin County	46%	58%	16%	10%	21%
External	12%	71%	10%		35%
Total	38%	84%	21%	35%	55%

While person trips in the Treasure Coast Region will grow approximately 55% (from two million daily trips to 3 million daily trips) between 2015 and 2045 years, Martin County's transportation market is anticipated to grow by 21% (from 498,400 daily person trips to 604,200 daily person trips). This growth is proportional to the population growth forecasts for the County.

4.5.3 Travel Demand Parameters

Table 4-6 shows travel demand parameters comparison for the base year 2015 and future year 2045 to illustrate order of magnitude growth of Martin County's transportation market and related metrics.

Demand Parameter	Base Year, 2015	E+C Network w/ Future Land Use, 2045 ²	Percent Change
Vehicle Miles Traveled (VMT), Daily	1,508,760	2,186,891	44.9%
Vehicle Hours Traveled (VHT), Daily	32,429	59,217	82.6%
Vehicle Hours of Delay (VHD), Daily	3,954	18,389	365.1%
Population	151,596	181,312	19.6%
Household	67,977	81,127	19.3%
VMT per household	22.2	27.0	21.5%
VMT per capita	10.0	12.1	21.2%
VHT per household	0.5	0.7	53.0%
VHT per capita	0.2	0.3	52.7%
Transit Ridership, Daily	787	859	9.1%

Table 4-6: Travel Demand Parameters

The metrics in **Table 4-6** show that the growth in VMT (approximately 44.9%) is more than double the population growth (approximately 19.6%) while VHT grows more than four times (approximately 82.6%) compared to the population growth (approximately 19.6%) in Martin County. Significant delay is forecast for the future year 2045 compared to the base year 2015.

² E+C network with 2045 land use and socioeconomic data represents the 2045 Needs Assessment model outputs. This illustrates impact on the transportation network in Martin County if no additional improvements beyond those included in the FY 2020/21-FY 2024/25 are implemented.

5. MULTIMODAL NEEDS ASSESSMENT

This chapter discusses the different components of multimodal needs assessment needed in Martin County over the next 20 to 25 years to enhance mobility, accessibility, and safety for all the users of the transportation system. The needs assessment served as a foundation for the 2045 Needs Plan. In addition, this chapter includes a summary of the 2045 Needs Plan and project cost estimation methodology.



Figure 5-1: Multimodal Needs Assessment Components

As shown in **Figure 5-1**, the multimodal needs assessment conducted for *Martin in Motion* was a comprehensive effort to identify projects needed in the County to enhance mobility, accessibility, and safety for all the users of the transportation system. The community's vision, goals and objectives developed for the 2045 LRTP served as the foundation for needs assessment. Further, three major components - data driven analysis, previous transportation studies as well as internal stakeholder coordination and public involvement along were used to identify transportation improvements and projects for different modes and categories. It should be noted that each major component has several subcomponents, which are described below.

5.1 Data Driven Analysis

The data driven analysis is the technical component of the 2045 Needs Assessment, which comprises travel demand forecasting and deficiency analysis using the Treasure

Coast Regional Planning Model (TCRM) 5.0 as well as congested network analysis using "big data."

5.1.1 Roadway Deficiency Analysis

The deficiency analysis, which is one of the data driven components of 2045 Needs Assessment identified stresses in the transportation network using the Treasure Coast Regional Planning Model (TCRPM) 5.0. To conduct deficiency analysis and evaluate future year highway and transit needs, the 2045 travel demand (traffic volumes) derived from 2045 socioeconomic, demographic, and land use data was loaded on the E+C network³. This process helped identify stresses in the transportation network measured as volume to capacity (v/c) ratio. In the transportation network, if the demand (traffic volume) exceeds supply (roadway capacity), the v/c ratio is higher than 1.0 and indicates traffic congestion⁴. Approximately 48 roadway segments with v/c ratio higher than 1.0 were consolidated to create 16 corridors based on proximity, segment length and laneage. **Figure 5-2** shows v/c ratio for the Year 2045 in Martin County if no additional transportation improvements beyond the E+C is implemented. This information helped identify required improvement projects needed to maintain acceptable mobility conditions to an area's transportation network.

³ E+C network with 2045 land use and socioeconomic data represents the 2045 Needs Assessment model outputs. This illustrates impact on the transportation network in Martin County if no additional improvements beyond those included in the FY 2020/21-FY 2024/25 are implemented.

⁴ Volume-to-capacity (V/C) ratio is a measure of the traffic volume on a road compared to the capacity of the road. The capacity of a road depends on its physical and operational characteristics and varies by functional class. A higher V/C ratio indicates that the traffic volume of the road is nearing its capacity and is becoming congested. When estimating the V/C ratio, capacities corresponding to the 2012 FDOT Quality/Level of Service Handbook Tables were utilized. Roadway capacity was modified in the model to reflect local government comprehensive plans. The Martin County Roadway 2018 Level of Service Inventory and TCRPM data were examined to identify roadway deficiencies resulting from the growth in travel demand over the 25-year time horizon of the LRTP on the E+C roadway network.

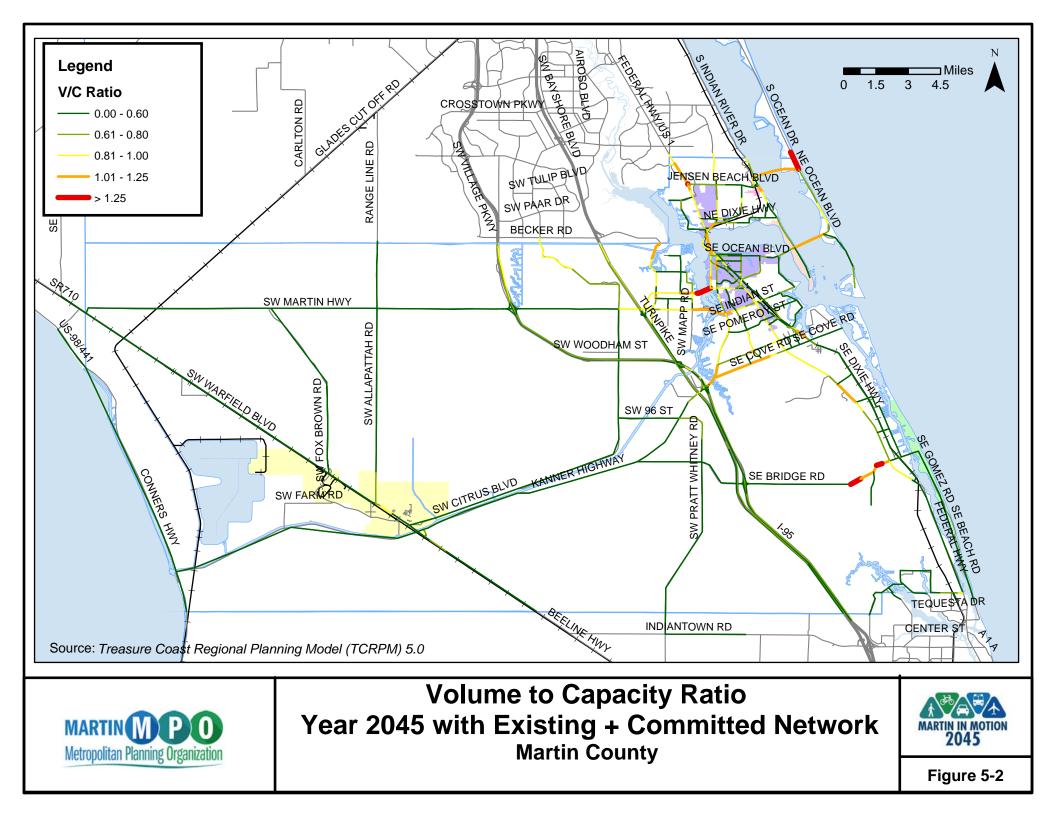


Table 5-1 shows roadway segments in Martin County with v/c ratio approximately 1.05 or more, indicating that traffic volume exceeds roadway capacity by at least 5%.

Facility	From	То	Average Volume to Capacity Ratio, 2045
Federal Highway/US 1	NW Mall Entry S	SE Westmoreland Blvd	1.12
Federal Highway/US 1	SW Ocean Blvd	NW Wright Blvd	1.09
Federal Highway/US 1	SE Heritage Blvd	SE Osprey St	1.05
Kanner Hwy (S Colorado Avenue)	SE Lonita St	SE Martin Luther King Jr Blvd	1.08
Kanner Hwy	I-95	SE Cove Rd	1.21
NE Causeway Blvd	NE Indian River Dr	NE Ocean Blvd	1.23
NE Ocean Blvd	S Sewalls Point Rd	NE MacArthur Blvd	1.12
NW Dixie Hwy	SW Joan Jefferson Way	US-1/Federal Highway (Roosevelt Bridge)	1.14
Old Dixie Hwy	SE Salerno Rd	SE Seaward St	1.06
S Ocean Dr	North County Line	NE Causeway Blvd	1.52
SE Bridge Rd	Powerline Ave	US-1/Federal Highway	1.21
SE Green River Pkwy	NW Wright Blvd	NW Dixie Hwy	1.16
SE Salerno Rd	SE Smith Ave	SE Willoughby Blvd	1.05
SW 36th Street	SW Mapp Rd	Kanner Hwy	1.04
SW Martin Downs Blvd	SW Matheson Ave	SW Palm City Rd	1.15
SW Murphy Rd	Wisper Bay Terrace	North County Line	1.08

Table 5-1: Volume to Capacity Ratio, Year 2045 with E+C Network

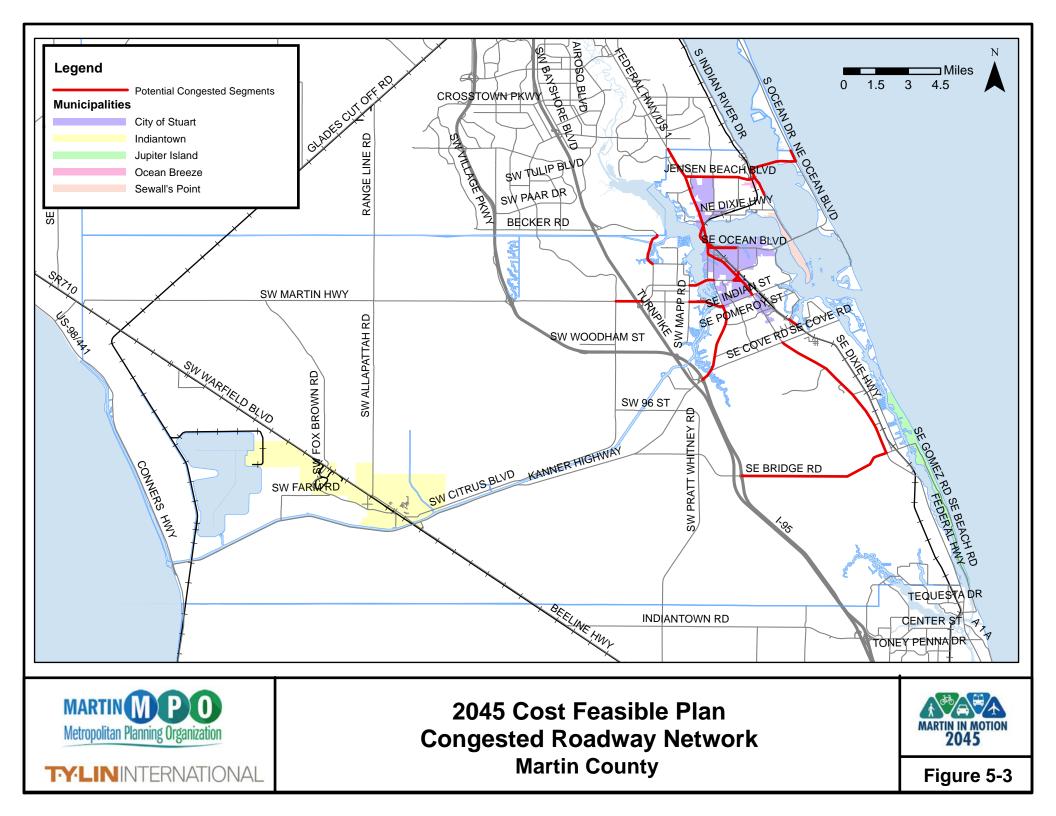
Source: Derived from TCRPM 5.0

Based on input received from the Project Steering Committee (PSC), March 4, 2020, all the roadway segments with v/c ratio higher than 1.05 were identified and included in the highway/roadway (non-Strategic Intermodal System) needs assessment.

5.1.2 Congested Network Analysis

As part of the Congestion Management Process (CMP) Update, the Martin MPO defined the CMP network and conducted network analysis to identify congested corridors. Technical Memorandum #5 – CMP Update provides a detailed explanation of the rationale used to define the CPM network, key data sources and evaluation processes used to identify congested roadway segments in Martin County. In addition to the congested network analysis, the FDOT's Transportation Systems and Operations Management (TSM&O) Master Plan, March 2019 and the Treasure Coast Congestion Assessment, June 2020 that identified congestion hotspots were used as reference data for CMP Update.

Figure 5-3 shows congested roadway segments based on travel time reliability (Travel Time Index (TTI) of 1.25 and Planning Time Index (PTI) of 1.30), volume to capacity ratio, and level of service analyses along the following travel corridors in Martin County.



As illustrated in **Figure 5-3**, approximately 25 congested roadway segments along the following facilities were identified.

- Bridge Road
- Jensen Beach Boulevard
- SW Kanner Highway/SR-76
- SW Martin Highway/CR-714
- SE Monterey Road
- US-1/Federal Highway
- SW Murphy Road
- SR-714
- Dixie Highway
- SW Ocean Boulevard
- SW Joan Jefferson Way
- Indian River Drive
- CR-732/NE Causeway Boulevard
- SR-A1A

5.2 Previous Transportation Studies and Plan

To ensure consistency with existing transportation and land use plans, more than 16 studies and plans prepared by the Martin MPO and its partner agencies listed below were reviewed.

- 2020-2029 Transit Development Plan, Martin County, August 2019
- Transportation Improvement Program, FY 2019/20-FY 2023/24, Martin MPO; June 2019
- City of Stuart Tram Business Plan, Martin MPO, Spring 2019
- Martin County Transit Operations Center Feasibility Study, Martin MPO, April 2018
- Bicycle, Pedestrian and Trails Master Plan, Martin MPO, December 2017
- FEC Railroad Grade Separation Feasibility Study, Martin MPO, August 2017
- Martin and St. Lucie Regional Waterways Plan, Martin MPO, December 2014
- FDOT Five-Year Work Program, FY 2019/20-FY 2023/24
- TSM&O Master Plan, FDOT, March 2019
- 2045 Strategic Intermodal System Plan, FDOT, June 2017
- Freight Mobility and Trade Plan (FMTP), April 2020
- Park-and-Ride Master Plan, FDOT, October 2018
- 2040 LRTP, Martin MPO, December 2015
- 2040 Treasure Coast RLRTP, 2017
- City of Stuart Brightline Station Analysis, 2018
- Martin County Airport/Witham Airfield Master Plan Update, FDOT, November 2010

Several multimodal projects that were valid in the current context as well relevant in the future were included in the 2045 Needs Plan. In addition, projects from on-going studies, such as Martin MPO's *Freight and Goods Movement Study* and *Complete Streets: Access to Transit Study* were also considered in the Needs Assessment for consistency.

Technical Memorandum #6 – Additional Elements provides a detailed discussion of freight and goods movement, Complete Streets and enhancing travel and tourism in Martin County.

5.3 Stakeholder Coordination and Public Involvement

5.3.1 Stakeholder Coordination

As part of stakeholder coordination the project team conducted one-on-one interviews with elected officials, presented 2045 LRTP information and solicited input from various focus groups as well as gathered input directly from several agencies including FDOT, Martin County and municipalities as well as through the Project Steering Committee (PSC). **Table 5-3** shows a log of various meetings.

Agency/Focus Group	Timeframe	Location	Key Discussion Topic
Stuart/Martin County Chamber of Commerce	9/25/2019	1650 S Kanner Hwy, Stuart, FL 34994	Project Overview
Martin County Employee Benefits Fair	10/19/2019	2401 SE Monterey Rd, Stuart, FL 34996	Funding Priorities
Jensen Beach Chamber of Commerce	11/4/2019	1960 NE Jensen Beach Blvd, Jensen Beach, FL 34957	Project Overview
Elected Officials One-on-one Interviews	Oct./Nov. 2019	Various	Transportation Needs
Florida Department of Transportation, District Four	11/21/2019	3400 W. Commercial Blvd., Ft. Lauderdale, FL 33309	Project Overview and Status Update
Project Steering Committee Meeting #3	3/4/2020	2401 SE Monterey Rd, Stuart, FL 34996	Needs Assessment

Table 5-2: Agency Coordination/Focus Group Meetings

5.3.2 Public Involvement

As shown in **Table 5-4**, public input was gathered through three Public Open House visioning sessions in early October 2019, online survey on the project website (<u>www.MartininMotion.com</u>), in-person survey at Treasure Coast Mall (September 29, 2019), and online mapping tool as well as through other digital communication channels.

	Table \$	5-3: F	Public	Meetings
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Meeting	Timeframe	Location	Key Discussion Topic
2045 LRTP Survey (in-person)	9/28/2019	Treasure Coast Square Mall 3174 NW Federal Hwy, Jensen Beach, FL 34957	Transportation Needs and Priorities
Public Open House #1 – Stuart City Hall	10/2/2019	121 SW Flagler Avenue, Stuart, FL. 34994	Visioning Session
Public Open House #2 – Port Salerno Civic Center	10/3/2019	15200 SW Adams Avenue, Indiantown, FL 34956	Visioning Session
Public Open House #3 – Elisabeth Lahti Library	10/8/2019	4940 SE Anchor Avenue, Stuart, FL. 34997	Visioning Session
Martin County, District 3 Town Hall Meeting - Hobe Sound Civic Center	12/11/2019	8980 SE Olympus St, Hobe Sound, FL 33455	Funding Priorities
Complete Streets: Access to Transit Public Open House - Indian River State College, Chastain Campus, Wolf Technology Center	1/14/2020	2400 SE Salerno Road, Stuart, FL 34997	Funding Priorities
Joint TAC/CAC/BPAC Advisory Committee Meeting	4/29/2020	Blake Library 2351 SE Monterey Road,	Needs Assessment
Martin MPO Policy Board Meeting	5/11/2020	Stuart, FL 34996	Needs Assessment

Input received from the Public Open House as well as through surveys is documented in the Public Involvement Summary Report (**Appendix B**). **Figure 2-4** shows public comments for specific locations in the County.

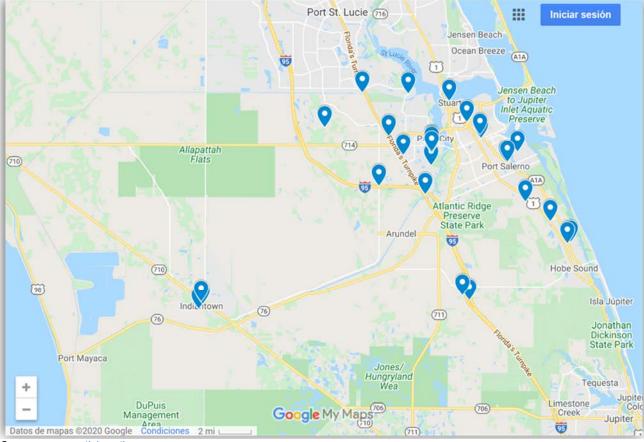


Figure 5-4: Location-specific Comments, Public Input

Source: www.martininmotion.com

Below is summary of the public comments received.

- Twenty-five location-specific comments for improvement needs through interactive map and emails/comment forms were received.
- Seven comments related to transportation issues senior transportation, school buses, transit service, bike/ped safety.
- Two comments requested providing project related information.

5.4 2045 Needs Plan

A summary description of the 2045 Needs Plan by mode or project categories follows. <u>Appendix C</u> provides an itemized project list and figures by mode. Project list includes map identifiers to cross reference figures.

5.4.1 Transit Projects

The following transit service (Marty) and capital improvements are included in the 2045 Needs Plan for a total operating expense of \$199.93 million (YOE) over 20 years and approximately \$52.08 million (YOE) in capital cost.

MARTY Transit Service/Operations

- Maintain existing service levels fixed route and paratransit
- Route Restructuring (Routes 2 and 3)
- Expanded Service Level (Routes 1, 2 and 3)
- New Routes (Jensen Beach Route)
- Mobility on Demand (MOD) Service
 - o Jensen Beach/Rio
 - Palm City

Capital Improvements

- Rolling stock (fleet replacement)
- Transit/bus stop infrastructure
- Transit operations and maintenance facility
- Intermodal hub
- New Park-and-Ride facility (connection to Palm Beach Tri-Rail Intermodal Center)
- Virgin Trains USA/Brightline Station (private sector funded)

Downtown Stuart Tram

- Maintain existing service level
- Expanded Service Level (Two Routes), 10- to 15-minute headway
- Expanded Service Level (Two Routes), Less than 10- to 15- minute headway
- Two New Shelters

The transit needs identified are consistent with Martin *County's* 2020-2029 *Transit Development Plan, August* 2019 and Martin MPO's *City of Stuart Tram Business Plan, Martin MPO, Spring* 2019, and Martin County Transit Operations Center Feasibility Study, *Martin MPO, April* 2018.

5.4.2 Non- Strategic Intermodal System (SIS) Facilities

These projects cost approximately \$593.4 million (YOE). Projects include three PD&E Studies and SR-714/Martin Highway construction project, two safety projects, seven roadway widening projects, and two new road projects. Of the two new road projects, Village Parkway Extension is privately funded.

- Currently Funded
 - o SR-714/Martin Hwy from Citrus Boulevard to Martin Downs Boulevard
 - Willoughby Boulevard PD&E Study
 - Cove Road PD&E Study

o CR-713/High Meadow Avenue PD&E Study

• Two Safety Projects

- o SR-5/US-1 at Joan Jefferson Way
- o CR-714/Martin Hwy Realignment

• Seven Roadway Widening Projects

- Cove Road
- o CR-713/High Meadow Avenue
- S Ocean Drive
- SE Bridge Road
- SE Green River Parkway
- o SW Murphy Road
- o Federal Highway/US-1
- o Martin Highway
- SW Martin Downs Road

• Two New Road Projects

- o Willoughby Boulevard
- Village Parkway Extension

5.4.3 Strategic Intermodal System (SIS) Facilities

The following SIS projects are identified by FDOT and included in the *SIS 2029-2045 Cost Feasible Plan, July 2018* for a total of approximately \$518.9 million (YOE) and *2045 Multimodal Unfunded Needs Plan, June 2017* for a total of approximately \$1.94 billion (YOE). These projects include Project Development & Environment (PD&E) studies for different segments of I-95, roadway improvements and highway capacity improvements on SR-710 and I-95, respectively as well as a grade separation project at Monterey Road and Florida East Coast (FEC) mainline.

- Three PD&E Studies on I-95
- Roadway improvements and highway capacity improvements on SR-710/Warfield Blvd. and I-95, respectively
- One safety/freight project at SR-714/Monterey Road and FEC mainline
- Two capacity projects on Florida's Turnpike
- New SR-710 bypass facility
- I-95 interchange modification (High Meadow Avenue to Becker Road in St. Lucie County⁵)
- Two fixed exclusive guideway transit projects along US-1/Federal Highway and SR-710
- One transit hub at Indiantown
- Amtrak passenger rail service (Miami to Jacksonville)

5.4.4 Freight Projects

The freight projects overlap with the SIS projects. Primary source for identifying freight project needs was FDOT's *Freight Mobility and Trade Plan (FMTP)*, *April 2020*. The majority of the freight projects included in the FMTP overlap with the FDOT's SIS 2029-

⁵ Figure 3-3 shows project extent within Martin County. It should be noted that the north limit of the project, which is Becker Road is in St. Lucie County.

2045 Cost Feasible Plan, July 2018 and 2045 Multimodal Unfunded Needs Plan, June 2017. In addition, improvements on I-95 and US-1/Federal Hwy were included from 2040 Regional LRTP. The total cost of freight projects is approximately \$555.7 million (YOE).

In addition to the seven SIS projects on I-95, SR-710, and SR-714/Monterey Road, the following two project initiatives have been identified by FDOT Leadership in District Four jurisdiction.

- Connected Freight Priority System Deployment
- Strategies for Reducing Railroad Trespassing (SRRT) Pilot Project

5.4.5 Transportation Systems Management & Operations (TSM&O)

Based on congested network analysis conducted for CMP Update and input received from Martin County, 15 roadway segments listed below were identified as part of 2045 Needs Plan. It should be noted that corridor-specific improvements have not been identified at this time. In addition, Intelligent Transportation System (ITS) infrastructure improvements, which include installing equipment at signalized intersections, were included in the 2045 Needs Plan.

- Roadway Segments
 - Colorado Avenue
 - o CR-732/Jensen Beach Causeway
 - o Dixie Highway
 - Jensen Beach Boulevard
 - Martin Downs Road/SR-714
 - NE Indian River Drive
 - o NE Ocean Boulevard
 - o SE Green River Parkway
 - SE Monterey Road (Ext.)
 - o SR-A1A
 - o SW 36th Street (Martin Highway)
 - o SW High Meadow Avenue
 - SW Joan Jefferson Way
 - o SW Ocean Boulevard
 - o SE Bridge Road

• ITS Infrastructure Needs

Based on FDOT's *TSM&O Master Plan, March 2019*, the following roadway segments were included in the 2045 Needs Plan. Some of these overlap with the above listed corridors. Further, six ITS projects included in the *I-95 Treasure Coast Multimodal Master Plan* are also part of the 2045 Needs Plan.

- On-system: Seven segments along -
 - Federal Highway
 - SW Martin Downs Boulevard
 - o Kanner Highway
 - o SR-714/SE Monterey Road
- Off-system: Nine segments along
 - o SE Salerno Road

- o SW Mapp Road
- SE Dixie Highway
- o SE Indian Street
- o SW Martin Highway
- $\circ \quad \text{SE Cove Road}$
- o SE Bridge Road
- Murphy Road

5.4.6 Other Projects – Travel Demand Management, Safety and Strategic Initiatives

The other project category includes Travel Demand Management (TDM), safety and strategic initiatives as well as Park-and-Ride facilties. These following needs were identified based on *Park-and-Ride Master Plan, FDOT, October 2018* and *FEC Railroad Grade Separation Feasibility Study, Martin MPO, August 2017,* and key stakeholder input.

- Park-and-Ride Facilities (three locations)
 - o Kanner Highway/SR-76 at I-95
 - West of I-95 between Becker Road and Martin Highway
 - West of Turnpike in vicinity of Sand Avenue
- Non-motorized grade crossings (pedestrian bridge) in Downtown Stuart and Golden Gate along Florida East Coast (FEC) main line
- FEC Rail Bridge Double Tracking over St. Lucie River

Total cost to implement the projects included in the category is estimated at approximately \$28.0 million (YOE). It should be noted that this does not include cost to double track FEC rail bridge over St. Lucie River, which is a funded through private sector.

5.4.7 Waterborne Transportation

Waterborne transportation needs were identified based on *Martin and St. Lucie Regional Waterways Plan, Martin MPO, December 2014*. The following specific projects and water taxi services were included in the 2045 Needs Plan at approximately \$17.92 million (YOE). This cost includes capital improvements and operations and maintenance cost for a 20-year period.

- Water Taxi Service
 - o Sandsprit Park to St. Lucie Preserve State Park
 - o Seasonal and/or Special Events/Festivals around key nodes
 - Stuart/Palm City
 - Port Salerno/Manatee Pocket
 - Stuart/Jensen/Rio
- Water based transportation feasibility study

5.4.8 Complete Streets

Martin MPO conducted a comprehensive *Complete Streets: Access to Transit Study, June 2020.* Various projects included in the 2045 Needs Plan are consistent with this *Study* and reflect Tier 1 priority. Further, the MPO prepared existing and proposed cross sections for 10 complete streets projects as part of this effort. A total of 17 projects that

would create 15 miles of complete streets network are part the 2045 Needs Plan. The total cost to implement these projects is estimated at approximately \$50.2 million (YOE).

5.4.9 Non-Motorized Transportation

An extensive network of non-motorized improvement needs was developed and included in the 2045 Needs Plan based on a review of 2040 LRTP – Moving Martin Forward, Martin MPO, December 2015 and Bicycle, Pedestrian and Trails Master Plan, Martin MPO, December 2017 as well as input received from Martin MPO's Bicycle and Pedestrian Advisory (BPAC) Committee. Total project cost to implement the non-motorized improvements is estimate at approximately \$623.0 million (YOE).

5.4.10 Aviation

The 2045 Needs Plan includes the following aviation projects at approximately \$3.9 million (YOE). These projects are included in the *Martin County Airport and Witham Field's Capital Improvement Plan (CIP)*.

- Air Traffic Control Tower Equipment Upgrade (Recorder and Radios)
- Construct Airport Interconnect Rd. Flying Fortress Extension
- Rehabilitation of MC Non-Movement Areas Phase V (Design & Const)
- Tree Mitigation Project RPZ and Part 77 (SE St. Lucie Canal)

It should be noted that the FDOT provides 80% funding of the total cost to support these projects while the remaining 20% is local and/or federal match.

5.4.11 Resiliency Projects

The Technical Memorandum #6 - Additional Elements includes literature review, a summary discussion of tools and various analyses conducted by Martin County and FDOT as it relates to extreme weather events, storm surge and sea level rise (SLR). Based on input received from the Martin MPO's Technical Advisory Committee (TAC) on April 29, 2020, the following two roadway segments were included as resiliency projects.

- N Sewalls Point Road from SR-A1A/NE Ocean Blvd. to SE Palmer Street
- SE MacArthur Blvd. from SE South Marina Way to approximately 1500 feet North

5.5 Project Cost Estimates

Planning level project cost estimates were developed from various sources discussed below. The methodology used to develop project cost estimates follows FDOT's *Revenue Forecasting Guidebook, July 3, 2018* and *MPO Advisory Council's (MPOAC) Financial Guidelines for MPO 2045 Long Range Plans, July 13, 2017* to reflect all the project costs in Year of Expenditure (YOE).

5.5.1 Transit Capital and Operations & Maintenance Cost

The Martin County's 2020-2029 Transit Development Plan, August 2019 and Martin MPO's City of Stuart Tram Business Plan, Martin MPO, Spring 2019, and Martin County Transit Operations Center Feasibility Study, Martin MPO, April 2018 served as the foundation for deriving transit capital infrastructure and operating cost. These costs were

adjusted from Present Day Cost (PCT) to Year of Expenditure (YOE) using FDOT's inflation factors included in the *Revenue Forecasting Guidebook, July 2018*.

5.5.2 Highway/Roadway (Non-SIS) Project Cost

Base construction cost for highway/roadway projects was derived from Martin MPO's 2040 LRTP, December 2015 and FDOT's generic cost per mile models. Base construction cost per mile were multiplied by the length of the project (in miles). In the next step, percentages were applied for mobilization (10%) and maintenance of traffic (MOT) (10%). To account for uncertainties and limitations in developing planning level cost estimates, the scope contingency/project unknown factor (20%) was added. Finally, the total construction cost estimates were developed to include design/preliminary engineering (15%) and construction engineering and inspection (CEI, 15% for state roads and 10% for county roads). These estimates developed in PDC were converted to YOE using FDOT's inflation factors corresponding to five-year increments, 2026-2030, 2031-2035, and 2036-2045.

It should be noted that project cost for the first five-year increment 2021-2025 were consistent with FDOT's Five-Year Tentative Work Program 2020-2025 and Martin MPO's FY 2020/21 – FY 2024/25. Further, project cost for SR-5/US-1 intersection modification were based on FDOT's *SR-5/US-1 at SW Joan Jefferson Way Planning Study, 2019* while cost estimate for CR-714/Martin Highway Realignment was obtained from *SR-710 PD&E Study from US 441 to SW Martin Highway in Okeechobee and Martin Counties.*

5.5.3 Strategic Intermodal System (SIS) Project Cost

Cost of SIS projects are consistent with the FDOT's *SIS 2029-2045 Cost Feasible Plan, July 2018* and 2045 *Multimodal Unfunded Needs Plan, June 2017.* The FDOT develops these project cost estimates in YOE dollars for projects included in the Cost Feasible Plan and therefore no adjustments are necessary. It should be noted that project costs in the SIS *Multimodal Unfunded Needs Plan* are in PDC.

5.5.4 Freight Project Cost

Majority of the freight projects overlap with SIS projects. From those project that do not overlap with the SIS facility improvements, cost was obtained from the FDOT's *Freight Mobility and Trade Plan, April 2020* as well as the *2040 Regional LRTP.* These costs were adjusted for inflation as appropriate.

5.5.5 Other Projects Cost

The cost for park-and-ride facilities are consistent with *Park-And-Ride Master Plan*, *FDOT*, *October 2018*, while cost for the two non-motorized grade separation projects are borrowed from the FEC Railroad Grade Separation Feasibility Study, Martin MPO, August 2017.

5.5.6 TSM&O/ITS Project Cost

Since corridor-specific improvements have not been identified at this time, project cost for TSM&O/ITS project cost were developed.

5.5.7 Complete Streets Project Cost

In the initial step, base construction cost for complete streets projects was derived using FDOT's generic cost per mile models. Then, cost of other project elements identified in the proposed cross section for a given facility were identified. Unit cost for these project elements were developed using a "top-down" approach, where unit costs are borrowed from standard industry sources. A composite unit cost was then derived, which include base construction cost plus project specific elements. This composite unit cost was multiplied by the length of the project (in miles) to calculate total cost. Similar to highway/roadway project cost estimates, factors were added to account for mobilization (10%) and maintenance of traffic (MOT, 10%), scope contingency/project unknown (20%), design/preliminary engineering (15%), and construction engineering and inspection (CEI, 15% for state roads and 10% for county roads). Finally, project cost in PDC were converted into YOE using FDOT's inflation factors corresponding to five-year increments, 2026-2030, 2031-2035, and 2036-2045.

5.5.8 Non-Motorized Projects Cost

The methodology used to develop cost for sidewalk improvements, bicycle corridors and greenways and trails is analogous to highway/roadway (non-SIS) cost estimation procedures. In addition, project cost for certain elements were borrowed from national and statewide sources. **Appendix-1** includes specific footnotes for such project elements.

5.5.9 Aviation Project Cost

Cost for aviation projects are from the *Martin County Airport and Witham Field's Capital Improvement Plan (CIP).*

5.5.10 Resiliency Project Cost

The roadway segment on N Sewalls Point Road overlaps with two non-motorized projects. Cost estimates for the above listed resiliency projects were not developed due to lack of information of specific improvements at the time.

As shown in **Table 5-4**, the total cost of projects included in the 2045 Needs Plan is approximately \$1.038 billion in Present Day Cost (PDC) or \$2.087 billion Year of Expenditure (YOE). These projects would be implemented over a 20-year period from 2026 to 2045. The first five-year time span of the LRTP from 2021 to 2025 is consistent with the projects included in the Martin MPO's FY 2020/21 – FY 2024/25 Transportation Improvement Program (TIP) at approximately \$129.2 million (YOE).

Table 5-4: 2045 Needs Plan Project Cost Summarv

Table 5-4. 2045 Needs Plan Project Co	Present Day Cost					25-Year Total	20-Year Total	YOE
Category	(PDC)	2021-2025 ¹	2026-2030	2031-2035	2036-2045	2021-2045	2026-2045	Beyond 2045 ²
Transit								
Transit Operating Cost*	\$152,490,775		\$36,761,913	\$44,832,288	\$118,332,841	\$199,927,043	\$199,927,043	-
Transit Capital Cost	\$17,113,534		\$18,089,276	\$4,057,466	\$29,929,951	\$52,076,694	\$52,076,694	-
Highway/Roadway (non Strategic Intermodal System (SIS))	\$385,079,416	\$47,082,871	\$57,182,483	\$96,082,119	\$440,163,831	\$640,511,304	\$593,428,433	-
Strategic Intermodal System (SIS)**	-	\$7,759,000	\$0	\$12,100,000	\$506,811,000	\$526,670,000	\$518,911,000	\$1,942,598,000
Freight ³	-	\$2,907,683	\$0	\$10,000,000	\$13,337,000	\$26,244,683	\$23,337,000	\$33,263,000
Transportation System Management & Operations (TSM&O) ⁴	-	-	-	-	-	-		-
Other (Park-and-Ride, Non-Motorized Grade Separation)	\$19,247,696	\$0	\$16,916,770	\$0	\$11,085,703	\$28,002,473	\$28,002,473	-
Water Based Transportation								
Operating Cost*	\$9,750,000	\$0	\$0	\$4,777,500	\$12,610,000	\$17,387,500	\$17,387,500	-
Capital Cost	\$710,000	\$0	\$0	\$529,200	\$0	\$529,200	\$529,200	-
Complete Streets⁵	\$46,433,783		\$27,292,804	\$14,528,710	\$8,400,509	\$50,222,023	\$50,222,023	-
Non-Motorized Projects ⁵	\$389,607,687	\$6,982,844	\$142,400,658	\$167,829,860	\$312,775,634	\$629,988,996	\$623,006,152	-
Sidewalks	\$10,289,028	\$2,443,147	\$1,927,773	\$3,033,445	\$12,965,488	\$20,369,853	\$17,926,706	-
Bicycle Corridors	\$50,948,813	\$1,484,697	\$18,925,957	\$22,748,337	\$38,878,286	\$82,037,277	\$80,552,580	-
Multi-Purpose Trails and Greenways	\$328,369,846	\$3,055,000	\$121,546,928	\$142,048,078	\$260,931,860	\$527,581,866	\$524,526,866	-
Aviation ⁶	\$17,620,000	\$0	\$3,962,500	\$0	\$0	\$3,962,500	\$3,962,500	-
Other Transportation Improvement Plan (TIP) Projects	-	\$67,375,663	-	-	-	-	-	-
Capacity Projects (non SIS)	-	\$12,312	-	-	-	-	-	-
Non-Capacity Projects	-	\$65,159,756	-	-	-	-	-	-
Planning (PL Funds)	-	\$2,203,595	-	-	-	-	-	-
Total Cost	\$1,038,052,891	\$129,200,378	\$302,606,405	\$344,737,143	\$1,440,109,470	\$2,149,277,733	\$2,087,453,018	
Strategic Intermodal System (SIS)**	\$0	\$7,759,000	\$0	\$12,100,000	\$506,811,000	\$526,670,000	\$518,911,000	\$1,942,598,000
Transit Operating Cost*	\$152,490,775	\$0	\$36,761,913	\$44,832,288	\$118,332,841	\$199,927,043	\$199,927,043	-
Water Based Transportation (Operating Cost)*	\$9,750,000	\$0	\$0	\$4,777,500	\$12,610,000	\$17,387,500	\$17,387,500	-
Capital Project Cost (all modes)	\$875,812,116	\$121,441,378	\$265,844,492	\$283,027,355	\$802,355,629	\$1,405,293,191	\$1,351,227,476	-

Notes

Notes
* Operating cost includes total cost for the entire 5-year or 10-year period in Year of Expenditure (YOE) dollars, while Present Day Cost (PDC) reflects 25-year total operating cost for transit and 20-year total operation cost for water-based transportation.
** Project costs are based on SIS First and Second Five-Year Plans, July 2020 and SIS Long Range Cost Feasible Plan, July 2018 and SIS Multimodal Unfunded Needs Plan, June 2017.
1 Time band includes funds "as programmed" in the FY 2021-2025 Transportation Improvement Program (TIP). Includes funds for transit, aviation, and Districtwide maintenance projects.
2 Project costs include SIS 2045 Multimodal Unfunded Needs Plan (MMUNP), Florida Department of Transportation (FDOT), June 2017.
3 All freight project costs are included in the Strategic Intermodal System (SIS) category except \$157,683 Consolidated Rail Infrastructure and Safety Improvements (CRISI) Program grant in the 5-year increment, 2021-2025.
4 Project specific cost for specific Transportation System Management & Operations (TSM&O) improvements have not been developed at this stage.
5 Complete streets and non-motorized project cost are distributed over the planning period (Year 2026-2035) to maintain internal consistency in YOE dollars.
6 Florida Department of Transportation (FDOT) share is limited to 80% of the project cost.

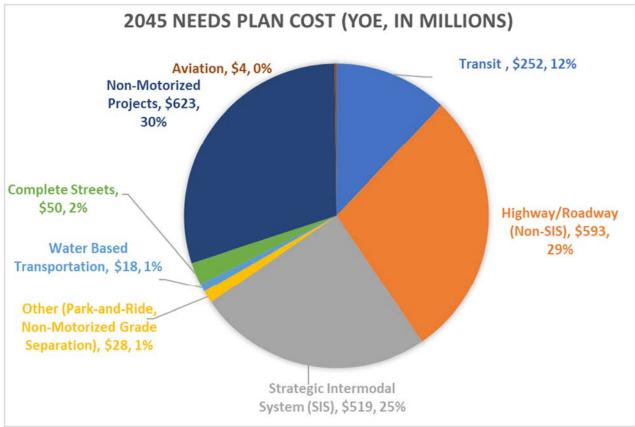


Figure 5-5: 2045 Needs Plan Project Cost Breakdown by Mode (YOE, in millions)

Approximately 51% of the total 2045 Needs Plan cost is for roadway improvements while 49% of the funds are for park and ride, complete streets, non-motorized, water-based transportation, aviation, and transit projects (**Figure 5-5**).

6. FINANCIAL RESOURCES

This chapter provides background and context for preparing revenue estimates, describes associated assumptions and methodology to develop future estimate of funds from various local, state, and federal funding programs over the next 20 to 25 years as well as applicable state and federal requirements and guidelines.

6.1 State and Federal Requirements and Guidelines

The revenues identified for Martin MPO's 2045 Long Range Transportation Plan's (LRTP) – *Martin in Motion* are expected to be available over the next 20 to 25 years through 2045. They are consistent with the requirements of Title 23 of the Code of Federal Regulations (23 C.F.R. 450.324(f)). Further, future revenue estimates developed for *Martin in Motion* follow the guidelines included in FDOT's *Revenue Forecasting Guidebook, July 3, 2018* and MPO Advisory Council's (MPOAC) *Financial Guidelines for MPO 2045 Long Range Plans, July 13, 2017.* Below is a brief discussion of key components related to state and federal requirements and guidelines that were adhered to prepare the 2045 Revenue Forecast for *Martin in Motion*, while **Appendices D, E**, and <u>F</u> include these documents in their entirety.

6.1.1 Project Phases and Year of Expenditure (YOE) Revenues

Federal planning regulations which were adopted in 2007 and corresponding MPO Advisory Council (MPOAC) guidelines require that both project cost and revenue forecasts be presented in Year of Expenditure (YOE) dollars. The FDOT revenue forecasts are provided in YOE dollars, and FDOT provides inflation forecasts which can be used to estimate YOE project costs. These YOE inflation factors are included in **Appendix A**. In addition, it is imperative that all project phases, such as, planning/design, right of way, and construction are included in the LRTP.

6.1.2 Full Time Span of LRTP (1st Five Years)

Consistent with Federal Highway Administration's (FHWA) expectations stated in the Federal Strategies for Implementation Requirements for LRTP Updates for the Florida MPOs date January 10, 2018 and MPOAC's guidelines, the MPOs should include full financial information for all years covered by the LRTP, including information from their TIP. Since Martin MPO's FY 2020/21 - FY 2024/25 Transportation Improvement Program (TIP) was adopted in June 2020, it provides the most recent and relevant list of projects priorities currently programmed for funding in the first five-year time span of the Martin MPO's 2045 LRTP.

6.1.3 Stability of Revenue Sources

Preparing the revenue forecast for the 2045 LRTP requires that future estimates be limited to existing and reasonably likely funding sources to implement transportation capacity projects, including transit and maintenance of the Federal-Aid Highway System. The FDOT guidance clearly states that if a project is funded using revenues available through one the state's discretionary programs, such projects be considered as "illustrative projects."

6.2 Methodology and Assumptions

The methodology and assumptions used for preparing the 2045 Revenue Forecast for Martin MPO's 2045 LRTP - *Martin in Motion* is consistent with state and federal requirements and guidelines included in Chapter 2. A short description of methodology and assumptions for state, local, and federal revenues follow.

6.2.1 State Revenues

FDOT's guidelines for estimating and presenting future revenues are followed in this review, as laid out in the *Revenue Forecasting Guidebook, July 3, 2018* and *2045 Revenue Forecast – Martin MPO/Martin Metropolitan Area, November 2018.* FDOT currently provides its revenue forecasts for program funding levels contained in the FDOT Adopted Work Program for FYs 2018 through 2022. The forecast of funding levels for FDOT programs for FYs 2020-2045 was developed based on the corresponding Program and Resource Plan (PRP), which includes the FDOT Adopted Work Program and planned funding for FYs 2023-2026. The updated FY 2020/21-FY 2024/25 Transportation Improvement Program (TIP) is used for near-term revenue forecasts prior to the "2nd five-year period 2026 to 2030." Funding in the "2045 Cost Feasible Plan" is provided for 2020 and then in five-year aggregates for the periods 2026 to 2030, 2031 to 2035, and 2036 to 2045. Funds allocated to Strategic Intermodal System (SIS) projects are based on statewide revenue estimates. These revenue estimates are not available at MPO level.

6.2.2 Local Revenues

Revenue growth rates for key local revenue sources – including fuel taxes, transportation impact fees, Marty farebox proceeds, and general fund (property taxes) – were developed in consultation with Martin County Office of Management and Budget (OMB) and Martin MPO staff. It should be noted that the revenue estimates for local fuel taxes and farebox recovery reflect the impact of the current COVID-19 situation⁶. Detailed assumptions for growth rates specific to sources are included in footnotes for documentation.

6.2.3 Federal Revenues

Assumption for growth rate of funds directly received by Marty (transit operator) from Federal Transit Administration (FTA) were based on Martin County's 2020-2029 Transit Development Plan (TDP), August 2019. Detailed assumptions for growth rates specific to sources are included in footnotes for documentation. It should be noted that federal revenues distributed directly to local governments or authorities from the Federal Airport and Airway Trust Fund are not included in the 2045 Revenue Forecast for Martin in Motion.

6.3 Limitations of Analysis

This analysis describes only State (FDOT) revenues forecasted to flow to Martin County for capital improvement purposes – that is, for the State Capacity Program. The review does not include FDOT operating and maintenance funds (i.e., the State Non-Capacity

⁶ Coronavirus disease 2019 (COVID-19) is defined as illness caused by a novel coronavirus now called severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2; formerly called 2019-nCoV), which was first identified amid an outbreak of respiratory illness cases in Wuhan City, Hubei Province, China. It was initially reported to the WHO on December 31, 2019. On January 30, 2020, the WHO declared the COVID-19 outbreak a global health emergency. On March 11, 2020, the WHO declared COVID-19 a global pandemic, its first such designation since declaring H1N1 influenza a pandemic in 2009. (Source: www.cdc.gov)

Program) that would be applied to facilities in Martin County. FDOT implements the Non-Capacity Program throughout the state and does not provide district-level revenue estimates. According to FDOT, the Department has estimated sufficient revenues to meet the Non-Capacity safety, preservation, and support objectives in each metropolitan area in the state.

6.4 State of Florida Department of Transportation (FDOT)

This section describes the State transportation funding programs and the forecasted revenues developed by FDOT that are projected to flow to Martin County through the year 2045. These program funds include state and federal funds that flow through FDOT. **Tables 6-1**, **6-2** and **6-3** show these funding programs and associated revenue estimates. It should be noted that the tables in this section are derived from the FDOT's 2045 *Revenue Forecast – Martin MPO/Martin Metropolitan Area, November 2018.*

Capacity Programs		26-Year Total ²				
	2020 ¹	2021-2025 ¹	2026-2030	2031-2035	2036-2045	2020-2045
Other Roads Construction & ROW	\$6,680,000	\$48,970,000	\$59,480,000	\$64,180,000	\$133,540,000	\$312,850,000
Product Support ³		\$10,773,400	\$13,085,600	\$14,119,600	\$29,378,800	\$67,357,400
Transit	\$2,740,000	\$15,230,000	\$19,210,000	\$21,030,000	\$43,820,000	\$102,030,000
*SIS Highways Construction & ROW		\$7,759,000	\$0	\$12,100,000	\$506,811,000	\$526,670,000
Total	\$9,420,000	\$82,732,400	\$91,775,600	\$111,429,600	\$713,549,800	\$1,008,907,400

Table 6-1: County Level Capacity Program Estimates, YOE

Source: 2045 Revenue Forecast Martin MPO, November 2018, FDOT. (Table 5, page 6)

¹Estimates for FYs 2018-2022 are contained in the FDOT Adopted Work Program.

² Columns and rows may not equal due to rounding.

³ Per FDOT 2045 Revenue Forecasting Guidebook, July 2018 and 2045 Revenue Forecast Martin MPO, 22% funds to be allocated for project support. Product support includes soft costs for planning and engineering activities.

* Revenue stream is derived from SIS project costs allocated to improvements programmed in Martin County.

Note: MPO in TMAs can assume 10% of their Other Roads program can be used for "off-system" roads (federal-aid highway system but not on SHS).

Table 6-2: Transportation Management Area (TMA) Fund Estimates, YOE

Port St. Lucie Urbanized Area/TMA		26-Year Total ¹				
	2020	2021-2025	2026-2030	2031-2035	2036-2045	2020-2045
TMA Funds for Martin and St. Lucie Metropolitan Areas ²	\$6,080,000	\$30,410,000	\$30,410,000	\$30,410,000	\$60,810,000	\$158,110,000

Source: 2045 Revenue Forecast Martin MPO, November 2018, FDOT. (Table 6, page 7)

¹ Columns and rows may not equal due to rounding.

² TMA funds to be allocated based on 32/68 split between Martin MPO and St. Lucie TPO.

Table 6-3: Transportation Alternatives Fund Estimates, YOE

Martin Metropolitan Area and Districtwide	Time Period (Fiscal Years)					26-Year Total ¹
	2020	2021-2025	2026-2030	2031-2035	2036-2045	2020-2045
TALU (>200,000 Population) for Martin and St. Lucie Metropolitan Areas, Funds for Port St. Lucie TMA ²	\$490,000	\$2,460,000	\$2,460,000	\$2,460,000	\$4,910,000	\$12,780,000
TALT (Any Area), District 4	\$4,550,000	\$22,740,000	\$22,740,000	\$22,740,000	\$45,470,000	\$118,220,000

Source: 2045 Revenue Forecast Martin MPO, November 2018, FDOT. (Table 9, page 8)

¹ Columns and rows may not equal due to rounding.

² TALU funds to be allocated based on 35/65 split between Martin MPO and St. Lucie TPO.

Tables 6-4, 6-5, and 6-6 show revenue estimates from FDOT's discretionary sources available at districtwide and statewide levels. The Martin MPO needs to compete for these funds.

Table 6-4: Districtwide Transportation Regional Incentive Program (TRIP) **Estimates, YOE**

FDOT District		26-Year Total ²					
PDOT District	2020 ¹	2021-2025 ¹	2026-2030	2031-2035	2036-2045	2020-2045	
District 4	\$4,100,000	\$28,900,000	\$43,100,000	\$47,900,000	\$98,200,000	\$222,300,000	
Sources 2045 Devenue Forecost Martin MBO, Nevember 2049, FDOT, (Table 7, none 7)							

Source: 2045 Revenue Forecast Martin MPO, November 2018, FDOT. (Table 7, page 7) ¹ Estimates for FYs 2018-2022 are contained in the FDOT Adopted Work Program.

² Columns and rows may not equal due to rounding.

Notes:

- · Projects that are funded partially using TRIP cannot be considered as "funded" or cost feasible since there is no guarantee of any specific project receiving these funds.
- Projects partially funded using TRIP can be included in the LRTPs as "illustrative" projects.

Table 6-5: Transit - Florida New Starts Program Estimates, YOE

Statewide Program		26-Year Total				
	2020	2021-2025	2026-2030	2031-2035	2036-2045	2020-2045
Statewide Total Forecast	\$41,800,000	\$226,300,000	\$259,200,000	\$282,400,000	\$593,400,000	\$1,403,100,000
Source: 2045 Revenue Forecast Martin MRO, November 2018, FDOT, (Table 8, page 8)						

Source: 2045 Revenue Forecast Martin MPO, November 2018, FDOT. (Table 8, page 8) Notes:

- · Projects that are funded partially using Florida New Starts Program cannot be considered as "funded" or cost feasible since there is no guarantee of any specific project receiving these funds.
- Projects partially funded using Florida New Starts Program can be included in the LRTPs as "illustrative" projects.

Table 6-6: Statewide Capacity Program Estimates – SUN Trail Program, YOE

Major Program		26-Year Total ²				
	2020 ¹	2021-2025 ¹	2026-2030	2031-2035	2036-2045	2020-2045
SUN Trail	\$25,000,000	\$125,000,000	\$125,000,000	\$125,000,000	\$250,000,000	\$650,000,000

Source: 2045 Revenue Forecast Martin MPO, November 2018, FDOT. (Table 4, page 6)

¹ Based on FDOT Tentative Work Program for FYs 2018-2022.

² Columns and rows may not equal due to rounding.

Note: FDOT uses its expertise in efficiently providing transportation projects to develop a statewide system of paved non-motorized trails as a component of the Florida Greenways and Trails System (FGTS), which is planned by Florida Department of Environmental Protection (FDEP).

Table 6-7 provides a summary of State of Florida Department of Transportation revenue estimates available from various state and federal funding programs through 2045. Appendix D and Appendix E include detailed guidance on funding eligibility for projects under different FDOT programs by mode or category.

Revenue Source		Tim	e Period (Fiscal	Years)		26-Year Total ¹
Revenue Source	2020	2021-2025	2026-2030	2031-2035	2036-2045	2020-2045
Other Roads Construction & ROW	\$6,680,000	\$48,970,000	\$59,480,000	\$64,180,000	\$133,540,000	\$312,850,000
Product Support ²	\$0	\$10,773,400	\$13,085,600	\$14,119,600	\$29,378,800	\$67,357,400
TMA Funds for Martin and St. Lucie Metropolitan Areas ³	\$1,945,600	\$9,731,200	\$9,731,200	\$9,731,200	\$19,459,200	\$50,595,200
TALU (>200,000 Population) for Martin and St. Lucie Metropolitan Areas, Funds for Port St. Lucie TMA ³	\$171,500	\$861,000	\$861,000	\$861,000	\$1,718,500	\$4,473,000
Transit	\$2,740,000	\$15,230,000	\$19,210,000	\$21,030,000	\$43,820,000	\$102,030,000
*SIS Highways Construction & ROW	\$0	\$7,759,000	\$0	\$12,100,000	\$506,811,000	\$526,670,000
Total	\$11,537,100	\$93,324,600	\$102,367,800	\$122,021,800	\$734,727,500	\$1,063,975,600
TALT (Any Area), District 4 ⁴	\$4,550,000	\$22,740,000	\$22,740,000	\$22,740,000	\$45,470,000	\$118,220,000
Transportation Regional Incentive Program (TRIP), District 4 ⁴	\$4,100,000	\$28,900,000	\$43,100,000	\$47,900,000	\$98,200,000	\$222,300,000
Transit- Florida New Starts Program, Statewide Program ⁴	\$41,800,000	\$226,300,000	\$259,200,000	\$282,400,000	\$593,400,000	\$1,403,100,000
SUN Trail ⁴	\$25,000,000	\$125,000,000	\$125,000,000	\$125,000,000	\$250,000,000	\$650,000,000

Table 6-7: Florida Department of Transportation Revenue Estimates Summary, YOE

¹ Columns and rows may not equal due to rounding.

² Per FDOT 2045 Revenue Forecasting Guidebook, July 2018 and 2045 Revenue Forecast Martin MPO, 25% funds to be allocated for project support. Product support includes soft costs for planning and engineering activities.

³ TMA funds are based on 32/68 split between Martin MPO and St. Lucie TPO, while TALU funds allocated based on 35/65 split respectively.

⁴ Discretionary funds available at District 4 or Statewide level. Project partially funded through these revenue sources cannot be considered as "cost feasible." They should be included as "illustrative projects."

* Revenue stream is derived from SIS project costs allocated to improvements programmed in Martin County.

6.5 Local Revenue Estimates

There are several separate fuel or gasoline taxes in the State of Florida which provide revenue for transportation improvements to Florida cities and counties. These fuel taxes are:

- Constitutional Fuel Tax
- County Fuel Tax
- Municipal Fuel Tax
- 1st Local Option Fuel Tax (the "6-Cent LOGT")
- 2nd Local Option Fuel Tax (the "5-Cent LOGT")
- Ninth-Cent Fuel Tax

The first three taxes are imposed by the State and distributed to the Counties, while the last three taxes are local option fuel taxes which can be imposed by each county, respectively, according to its discretion. This section describes projected revenues within Martin County from these sources and the uses of each fuel tax by county governments. In addition, funds committed by a private developer through a Development Order are also included in the local revenue forecast. These funds are dedicated for a specific roadway project. **Tables 6-8**, **6-9** and **6-10** show revenue estimates, growth rate assumptions and uses of funds.

Table 6-8: Local and Federal (FTA) Funds Revenue Estimates through 2045, YOE

												Time Pe	riod (Fiscal	Years)													26-Year Tota
Revenue Source	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2020-2045
Fuel Taxes ¹																											
1 st Local Option Fuel Tax (6 Cents) - County	\$1,257,358	\$1,257,358	\$1,267,417	\$1,277,556	\$1,287,777	\$1,298,079	\$1,308,463	\$1,318,931	\$1,329,483	\$1,340,118	\$1,350,839	\$1,361,646	\$1,372,539	\$1,383,520	\$1,394,588	\$1,405,744	\$1,416,990	\$1,428,326	\$1,439,753	\$1,451,271	\$1,462,881	\$1,474,584	\$1,486,381	\$1,498,272	\$1,510,258	\$1,522,340	\$35,902,47
1 st Local Option Fuel Tax (6 Cents) - Municipal	\$259,542	\$259,542	\$261,618	\$263,711	\$265,821	\$267,947	\$270,091	\$272,252	\$274,430	\$276,625	\$278,838	\$281,069	\$283,317	\$285,584	\$287,868	\$290,171	\$292,493	\$294,833	\$297,191	\$299,569	\$301,965	\$304,381	\$306,816	\$309,271	\$311,745	\$314,239	\$7,410,92
2 nd Local Option Fuel Tax (5 Cents) - County	\$917,823	\$917,823	\$925,165	\$932,567	\$940,027	\$947,547	\$955,128	\$962,769	\$970,471	\$978,235	\$986,061	\$993,949	\$1,001,901	\$1,009,916	6 \$1,017,995	\$1,026,139	\$1,034,348	\$1,042,623	\$1,050,964	\$1,059,372	\$1,067,847	\$1,076,389	\$1,085,001	\$1,093,681	\$1,102,430	\$1,111,249	\$26,207,41
2 nd Local Option Fuel Tax (5 Cents) - Municipal	\$189,455	\$189,455	\$190,971	\$192,499	\$194,038	\$195,591	\$197,156	\$198,733	\$200,323	\$201,925	\$203,541	\$205,169	\$206,810	\$208,465	5 \$210,132	\$211,814	\$213,508	\$215,216	\$216,938	\$218,673	\$220,423	\$222,186	\$223,964	\$225,755	\$227,561	\$229,382	\$5,409,68
9 th Cent (1 Cent)	\$2,696,118	\$2,696,118	\$2,717,687	\$2,739,428	\$2,761,344	\$2,783,435	\$2,805,702	\$2,828,148	\$2,850,773	\$2,873,579	\$2,896,568	\$2,919,740	\$2,943,098	\$2,966,643	3 \$2,990,376	\$3,014,299	\$3,038,414	\$3,062,721	\$3,087,223	\$3,111,920	\$3,136,816	\$3,161,910	\$3,187,206	\$3,212,703	\$3,238,405	\$3,264,312	\$76,984,68
Constitutional Fuel Tax (2 Cents)	\$597,255	\$597,255	\$602,033	\$606,849	\$611,704	\$616,598	\$621,531	\$626,503	\$631,515	\$636,567	\$641,659	\$646,793	\$651,967	\$657,183	3 \$662,440	\$667,740	\$673,082	\$678,466	\$683,894	\$689,365	\$694,880	\$700,439	\$706,043	\$711,691	\$717,385	\$723,124	\$17,053,96
County Fuel Tax (1 Cent)	\$262,748	\$262,748	\$264,849	\$266,968	\$269,104	\$271,257	\$273,427	\$275,614	\$277,819	\$280,042	\$282,282	\$284,540	\$286,817	\$289,111	1 \$291,424	\$293,756	\$296,106	\$298,474	\$300,862	\$303,269	\$305,695	\$308,141	\$310,606	\$313,091	\$315,596	\$318,120	\$7,502,46
Transportation Impact Fees ²	\$1,000,000	\$1,000,000	\$1,010,000	\$1,020,100	\$1,030,301	\$1,040,604	\$1,051,010	\$1,061,520	\$1,072,135	\$1,082,857	\$1,093,685	\$1,104,622	\$1,115,668	\$1,126,825	5 \$1,138,093	\$1,149,474	\$1,160,969	\$1,172,579	\$1,184,304	\$1,196,147	\$1,208,109	\$1,220,190	\$1,232,392	\$1,244,716	\$1,257,163	\$1,269,735	\$29,243,20
Transit (General Fund ³)	\$998,159	\$998,159	\$998,159	\$998,159	\$998,159	\$998,159	\$998,159	\$998,159	\$998,159	\$998,159	\$1,033,095	\$1,069,253	\$1,106,677	\$1,145,410	\$1,185,500	\$1,226,992	\$1,269,937	\$1,314,385	\$1,360,388	\$1,408,002	\$1,457,282	\$1,508,287	\$1,561,077	\$1,615,715	\$1,672,265	\$1,730,794	\$31,646,64
Transit (Marty) - Farebox Revenue ⁴	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$77,625	\$80,342	\$83,154	\$86,064	\$89,076	\$92,194	\$95,421	\$98,761	\$102,217	\$105,795	\$109,498	\$113,330	\$117,297	\$121,402	\$125,651	\$130,049	\$2,377,87
Federal Funds ⁵ (Transit Operating Revenue)	\$745,972	\$820,570	\$621,355	\$569,335	\$569,335	\$569,335	\$569,335	\$569,335	\$569,335	\$569,335	\$569,335	\$569,335	\$569,335	\$569,335	5 \$569,335	\$569,335	\$569,335	\$569,335	\$569,335	\$569,335	\$569,335	\$569,335	\$569,335	\$569,335	\$569,335	\$569,335	\$15,282,60
Federal Funds ⁶ (Transit Captial Revenue)	\$585,462	\$585,462	\$585,462	\$585,462	\$585,462	\$585,462	\$585,462	\$585,462	\$585,462	\$585,462	\$585,462	\$585,462	\$585,462	\$585,462	2 \$585,462	\$585,462	\$585,462	\$585,462	\$585,462	\$585,462	\$585,462	\$585,462	\$585,462	\$585,462	\$585,462	\$585,462	\$15,222,01
Private Sector Participation ⁷																	\$33,744,090	\$33,744,090									\$67,488,18

¹ Fuel taxes for Year 2020 based on Local Government Financial Information Handbook, Nov. 2019 published by Office of Economic and Demographic Research. (Pages 25, 31, 209, 213, 215, 225, 227, and 231) and reduced by 70% per Martin County Office of Management & Budget (OMB).

² Transportation impact fees for FY 2020 is based on average impact fee collected by Martin County over the previous 10-year period. FY 2020 Adopted County budget shows transportation impact fee in the amount of \$1,990,000.

³ Fiscal Year 2020 Adopted Budget, Martin County. The 2020-2029 TDP includes General Funds in the amount of \$756,000 per year based on Proposed FY 2020 Martin County Budget.

⁴ 2020-2029 Transit Development Plan, August 2019, Martin County. Fare revenue reduced by 25% (\$25K) due to lower ridership resulting from COVID-19.

⁵ Federal operating revenues from Federal Transit Administration's (FTA) Section 5307 Urbanized received directly by Marty. This revenue stream is not included in FDOT's Transit program.

⁶ Federal capital revenues from Federal Transit Administration's (FTA) Sections 5307 and 5339 received directly by Marty. This revenue stream is not included in FDOT's Transit program.

⁷ Funds for Village Parkway Extension project made available by the Developer.

Growth Rate Assumptions	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045
Fuel Taxes ¹	2020	0.00%	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%	0.80%
0																										
Transportation Impact Fees ²		0.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Tranist (General Fund) ³		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
Transit (Marty) - Farebox Revenue ⁴		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%
Federal Funds ⁵ (Transit Operating Revenue)					0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Federal Funds ⁶ (Transit Captial Revenue)		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Table 6-9: Growth Rate Assumptions for Local and Federal (FTA) Revenue Estimates

Notes:

¹ Fuel taxes assumed to grow at an annual rate of 0.8%, which is slightly higher than 0.6% annual population growth rate between 2015-2045. Since 1990, fuel taxes have grown at an annual rate of 1.8% while population has grown at 1.6% annually with the net difference being 0.2%.

² Transportation impact fees assumed to grow at 1% per year between 2022-2045.

³ General funds remain flat for 10-year period between 2020-2029 consistent with Martin County's Transit Development Plan assumptions. Growth assumed at annual rate of 3.5% between 2029-2045, which is in line with population growth rate of 0.6% per year plus 2.9% per year net different between nearly 30-year average of population growth (1.6%) and fuel tax growth (4.5%).

⁴ Farebox revenue remains flat for 10-year period between 2020-2029 consistent with Martin County's Transit Development Plan. Growth assumed at annual rate of 0.6% between 2029-2045, which is in line with population growth rate of 0.6% per year. Revenue stream from farebox is uncertain in the future due to unknown long-term impacts of COVID-19 on transit ridership.

⁵ Federal Funds (Section 5307) available are for the 10-year period between 2020-2029 consistent with Martin County's Transit Development Plan assumptions. These funds are assumed to remain flat between 2030 and 2045.

⁶ Federal Funds (Sections 5307 and 5339) assumed to remain flat for 10-year period between 2020-2029 consistent with Martin County's Transit Development Plan assumptions. Conservative assumption continues to consider revenue stream from these programs to remain flat between 2030 and 2045.

Table 6-10: Project Funding Eligibility vs. Local and Federal (FTA) Revenue Sources

	Typical Uses		
Revenue Source	Detailed Description	Summary Description, Martin County	
Fuel Taxes			1
1 st Local Option Fuel Tax (6 Cents) (County/Municipal)		Capital and O&M (including transit, sidewalks)	R
2 nd Local Option Fuel Tax (5 Cents) (County/Municipal)	Capital improvements including new road construction, reconstruction or resurfacing of existing paved roads, or the paving of existing roads are deemed to increase capacity, and such projects can be included in the CIP of an adopted comprehensive plan.	Capital Only	
9 th Cent (1 Cent)	Capital improvements and operations and maintenance including public transportation, roadways, bridges, traffic signals/engineering, and sidewalks.	Capital and O&M (including transit, sidewalks)	F
Constitutional Fuel Tax (2 Cents)1	Acquisition, construction and maintenance of roads. May include construction of traffic signals, sidewalks, bicycle paths, and landscaping. Bridge repair and maintenance may be funded.	Operations & Maintenance, Minor Capital (including sidewalks, bicycle paths)	F
County Fuel Tax (1 Cent) ²	Acquisition of ROW, construction, reconstruction, operation and maintenance of roads, bridges, bicycle paths and pedestrian pathways.	Operations & Maintenance, Minor Capital (including sidewalks, bicycle paths)	F
Transportation Impact Fees	Construction of urban and rural roads and pedestrian and bicycle pathways based on the impact fee special revenue fund.	Capital	Ro
Transit (General Fund)	Operations and maintenance of public transportation.	O&M	1
Transit (Marty) - Farebox Revenue	Operations and maintenance of public transportation.	0&M	1
Federal Funds ³ (Transit Operating Revenue)	Section 5307 - Martin County is in the Port Saint Lucie UZA which is an urbanized area with a population of over \$200,000. Urbanized areas of 200,000 or more may not use funds for operating assistance unless identified by FTA as eligible under the Special Rule. Martin County is eligible under the Special Rule relating to operating less than 100 buses in peak service. Every year FTA issues Table 3A apportionment table showing the maximum amount of Section 5307 Operating Assistance that Martin County is allowed to use . Martin County is capped at 75% of the percent of apportionment attributable to operator based on vehicle revenue hours based on vehicles operated in peak service for FY20 that is 28.037%.	O&M	
Federal Funds ⁴ (Transit Capital Revenue)	Section 5307 - Eligible activities include planning, engineering, design and evaluation of transit projects and other technical transportation-related studies; capital investments in bus and bus-related activities such as replacement of buses, overhaul of buses, rebuilding of buses, crime prevention and security equipment and construction of maintenance and passenger facilities; and capital investments in new and existing fixed guideway systems including rolling stock, overhaul and rebuilding of vehicles, track, signals, communications, and computer hardware and software. All preventive maintenance and some Americans with Disabilities Act complementary paratransit service costs are considered capital costs. Federal share 80% of net project cost, 90% for ADA related vehicle equipment or bicycle and 50% for operating assistance. Section 5339 - Capital projects to replace, rehabilitate and purchase buses, vans, and related equipment, and to construct bus-related facilities, including technological changes or innovations to modify low or no emission vehicles or facilities.	Capital	

¹ The funds may be used as matching funds for any federal, state, or private grant specifically related to these purposed identified in Section 206.47(7), F.S.

² Funds may be used for the reduction of bonded indebtedness incurred for road and bridge or other transportation purposes.

³ Federal operating revenues from Section 5307 Urbanized is not accounted in FDOT Transit revenues.

⁴ Federal capital revenues from Sections 5307 and 5339 are not accounted in FDOT Transit revenues.

Elicible Modee
Eligible Modes
Roadways, Transit, Sidewalks
Roadways
Roadways, Transit, Sidewalks
ROW, Roadways, Sidewalks, Bicycle, Landscaping
ROW, Roadways, Sidewalks, Bicycle
Roadways, Sidewalks and Bicycle Pathways
Transit
Transit
Transit
Transit
Roads, Rail

6.6 Federal Revenue Estimates

Funds received from FTA directly by Marty, the County's transit operator under Sections 5307 and 5339 are shown in **Table 6-8** with corresponding growth rates and assumptions included in **Table 6-9**. These funds can be expended on transit operations and maintenance as well capital with certain constraints explained in **Table 6-10**.

6.7 Revenue Forecast Summary

A summary of the forecasted revenues described in Sections 6.3, 6.4 and 6.5 is presented in **Figure 6-11**. While the Martin MPO does not have direct decision-making influence over all the revenues shown here, it is important to show the full range of highway and transit funds that will be available for use within the County over the coming years.

Future revenue estimates presented in this Chapter were used to prioritize highway, transit, Transportation Systems Management and Operations (TSM&O), non-motorized and complete streets investments in Martin County in a cost constrained manner, which is limited to existing and reasonably likely funding sources.

Table 6-11: 2045 Revenue Forecast Summary, YOE

Revenue Source		Tim	ne Period (Fiscal Ye	ears)		26-Year Total ¹	20-Year Total	
Revenue Source	2020	2021-2025	2026-2030	2031-2035	2036-2045	2020-2045	2026-2045	
Florida Dept. of Transportation							1	
Other Roads Construction & ROW	\$6,680,000	\$48,970,000	\$59,480,000	\$64,180,000	\$133,540,000	\$312,850,000	\$257,200,00	
Product Support ²	\$0	\$10,773,400	\$13,085,600	\$14,119,600	\$29,378,800	\$67,357,400	\$56,584,00	
TMA Funds for Martin and St. Lucie Metropolitan Areas ³	\$1,945,600	\$9,731,200	\$9,731,200	\$9,731,200	\$19,459,200	\$50,595,200	\$38,918,40	
TALU (>200,000 Population) for Martin and St. Lucie Metropolitan Areas, Funds for Port St. Lucie TMA ³	\$171,500	\$861,000	\$861,000	\$861,000	\$1,718,500	\$4,473,000	\$3,440,50	
Transit	\$2,740,000	\$15,230,000	\$19,210,000	\$21,030,000	\$43,820,000	\$102,030,000	\$84,060,00	
*SIS Highways Construction & ROW	\$0	\$7,759,000	\$0	\$12,100,000	\$506,811,000	\$526,670,000	\$518,911,000	
Total (State)	\$11,537,100	\$93,324,600	\$102,367,800	\$122,021,800	\$734,727,500	\$1,063,975,600	\$959,113,900	
TALT (Any Area), District 4 ⁴	\$4,550,000	\$22,740,000	\$22,740,000	\$22,740,000	\$45,470,000	\$118,220,000	\$90,930,000	
Transportation Regional Incentive Program (TRIP), District 4 ⁴	\$4,100,000	\$28,900,000	\$43,100,000	\$47,900,000	\$98,200,000	\$222,300,000	\$189,300,000	
Transit- Florida New Starts Program, Statewide Program ⁴	\$41,800,000	\$226,300,000	\$259,200,000	\$282,400,000	\$593,400,000	\$1,403,100,000	\$1,135,000,000	
SUN Trail ⁴	\$25,000,000	\$125,000,000	\$125,000,000	\$125,000,000	\$250,000,000	\$650,000,000	\$500,000,000	
Local	·	·		·				
Fuel Taxes⁵	\$6,180,298	\$31,399,885	\$32,676,137	\$34,004,263	\$72,211,027	\$176,471,610	\$138,891,428	
Transportation Impact Fees	\$1,000,000	\$5,101,005	\$5,361,208	\$5,634,683	\$12,146,304	\$29,243,200	\$23,142,194	
Transit (General Fund)	\$998,159	\$4,990,795	\$5,025,731	\$5,733,832	\$14,898,130	\$31,646,647	\$25,657,693	
Transit (Marty) - Farebox Revenue	\$75,000	\$375,000	\$377,625	\$430,831	\$1,119,421	\$2,377,876	\$1,927,876	
Total (Local)	\$8,253,457	\$41,866,685	\$43,440,700	\$45,803,609	\$100,374,882	\$239,739,333	\$189,619,191	
Private Sector Participation ⁶	\$0	\$0	\$0	\$0	\$67,488,180	\$67,488,180	\$67,488,180	
Federal								
Federal Funds (Transit Operating Revenue) ⁷	\$745,972	\$3,149,930	\$2,846,675	\$2,846,675	\$5,693,350	\$15,282,602	\$11,386,70	
Federal Funds (Transit Captial Revenue) ⁸	\$585,462	\$2,927,310	\$2,927,310	\$2,927,310	\$5,854,620	\$15,222,012	\$11,709,24	
Total (Federal)	\$1,331,434	\$6,077,240	\$5,773,985	\$5,773,985	\$11,547,970	\$30,504,614	\$23,095,94	
Grand Total (State, Local and Federal) for Martin MPO ⁹	\$21,121,991	\$141,268,525	\$151,582,485	\$173,599,394	\$846,650,352	\$1,401,707,727	\$1,239,317,21	

¹ Columns and rows may not equal due to rounding.

² Per FDOT 2045 Revenue Forecasting Guidebook, July 2018 and 2045 Revenue Forecast Martin MPO, 25% funds to be allocated for project support. Product support includes soft costs for planning and engineering activities. ³ TMA funds are based on 32/68 split between Martin MPO and St. Lucie TPO, while TALU funds allocated based on 35/65 split respectively.

⁴ Discretionary funds available at District 4 or Statewide level. Project partially funded through these revenue sources cannot be considered as "cost feasible." They should be included as "illustrative projects." ⁵ Fuel taxes include local option fuel taxes (1-6 Cents, 1-5 Cents, Ninth Cent), constitutional fuel tax and county fuel tax.

⁶ Funds for Village Parkway Extension project made available by the Developer.

⁷ Federal operating revenues from Sections 5307 Urbanized program. Under this program, Marty receives funds directly from the Federal Transit Administration (FTA).

⁸ Federal capital revenues from Sections 5307 and 5339 programs. Under these programs, Marty receives funds directly from the Federal Transit Administration (FTA).

⁹ Does not include discretionary funds available at Districtwide or Statewide levels.

* Revenue stream is derived from SIS project costs allocated to improvements programmed in Martin County.

7. COST FEASIBLE PLAN

This chapter discusses project prioritization, identifies projects by different modes or categories that are fully funded through local, state, and federal revenues reasonably expected to be available over the next 20 to 25 years as well as unfunded needs. Further, this chapter includes discussion of key cost feasible plan components, such as equity analysis, environmental mitigation and ETDM, comparative analysis of alternative scenarios and performance measurement.

7.1 Project Prioritization

As documented in Technical Memorandum #8 – Financial Resources, the 2045 revenue forecast indicates that a total of approximately \$1.239 billion (Year of Expenditure, (YOE)) can be reasonably expected from various local, state, and federal sources to implement transportation improvement projects in Martin County over the next 20 to 25 years. However, the total cost of all the projects included in the 2045 Needs Plan is approximately \$2.087 billion (YOE). There is a clear mismatch between the funds available versus funds required to implement all the Needs Plan projects. There is approximately 41% funding deficit (\$1.239 billion vs. \$2.087 billion) between revenues and projects cost.

In addition to the funding gap, there are specific requirements relative to various funding sources that govern how monies can be allocated to different types of projects. For instance, revenues from certain types of local fuel tax can be used to support transit capital and operating expenses while others can only be used to build roadway/highway, bicycle, and sidewalk projects. Similarly, a local match is required to leverage transit operating funds from the FDOT's Transit Program. To allocate funds objectively amongst various projects, given the funding deficit and constraints associated with revenue sources, the Martin MPO prioritized projects using the methodology described below.

7.1.1 Roadway/Highway Projects (Non-SIS Projects)

Non-Strategic Intermodal System (SIS) highway projects were prioritized using a set of 15 different performance measures and evaluation criteria relative to the 2045 LRTP -Martin in Motion's goals and objectives. These evaluation criteria included rating a projects' performance corresponding to travel time reliability, level of service, delay, funding, quality of life, safety (number of fatalities and injury crashes), environment, environmental justice, accessibility to jobs, strategic projects, and community support. Projects were assigned points on a scale of 1 to 4, where 1 indicated lowest performance while 4 suggested highest performance. In addition, projects received a one (1) point bump if they affected a Community Redevelopment Area (CRA) or were in an area vulnerable to inundation or overlapped with a hurricane evacuation route. A composite score for each project was developed based on its performance relative to the evaluation criteria. Using quartile distribution, the composite scores were used to rank projects in four priority tiers, Tier 1 through Tier 4. Two safety projects were also included as Tier 1 priorities. Table 7-1 shows highway/roadway project priorities. Appendix G provides a detailed project evaluation, performance, and scores relative to each criterion as well as composite score and ranking.

Map ID	Facility	From	То	Project Description	Existing Lanes	Future Lanes	Length (miles)	Total Score	Ranking	Priority
R-1	SR-714/Martin Highway	CR-76A/Citrus Boulevard	Martin Downs Boulevard	Highway Capacity	2	4	0.88	Under Construction	TIP	
4196693	Willoughby Boulevard	SR-714/ Monterey Road	SR-5/US-1/Federal Highway	PD&E Study	-	-	0.84	Funded	TIP	Currently
4417001	Cove Road	SR-76/Kanner Highway	SR-5/US-1/Federal Highway	PD&E Study	2	4	4.32	Funded	TIP	Funded
4416991	CR-713/High Meadow Avenue	I-95	CR-714/Martin Highway	PD&E Study	-	-	2.64	Funded	TIP	
R-3	Village Parkway Extension	SR-714/Martin Highway	St. Lucie County Line	New 4 Lane Road	0	4	3.00	Privately Funded	2	Not Applicable
R-5	Cove Road	Willoughby Boulevard	SR-5/US-1/Federal Highway	Widen from 2L to 4L	2	4	1.07	39	1	
R-6	Cove Road	SR-5/US-1/Federal Highway	CR-A1A	Widen from 2L to 4L	2	4	1.12	39	1	
R-4	Cove Road ¹	SR-76/Kanner Highway	Willoughby Boulevard	Widen from 2L to 4L	2	4	2.13	35	2	Tier 1
R-15	SR-5/US-1 ²	at SW Joan Jefferson Way		Intersection Modification	-	-	-	-	-	
R-16		Approximately 1200 feet east of SR-710	SE126th Blvd. (Okeechobee County)	Roadway Realignment	-	-	-	-	-	
R-2	Willoughby Boulevard	SR-714/ Monterey Road	SR-5/US-1/Federal Highway	New 2 Lane Road	0	2	0.84	36	2	
R-7	CR-713/High Meadow Avenue	I-95	CR-714/Martin Highway	Widen from 2L to 4L	2	4	2.64	36	2	Tier 2
R-8	Federal Highway/US 1	SE Seabranch Blvd	SE Osprey St	Widen from 4L to 6L	4	6	1.15	36	2	
R-10	SE Bridge Rd	Powerline Ave	US-1/Federal Highway	Widen from 2L to 4L	2	4	2.00	33	3	
R-11	SE Green River Pkwy	NW Wright Blvd	NW Dixie Hwy	Widen from 2L to 4L	2	4	0.37	33	3	Tier 3
R-13	SW Martin Downs Blvd	SW Matheson Ave	SW Palm City Rd	Widen from 4L to 6L	4	6	1.33	33	3	
R-14	SW Murphy Rd	Whisper Bay Terrace	North County Line	Widen from 2L to 4L	2	4	0.35	32	4	
R-9	S Ocean Dr	North County Line	NE Causeway Blvd	Widen from 2L to 4L	2	4	1.40	30	4	Tier 4
R-12	Martin Highway	SW Mapp Rd	Kanner Hwy	Widen from 4L to 6L	4	6	1.42	29	4	

Table 7-1: Highway/Roadway Projects Prioritization

Notes:

¹ Moved from Tier 2 to Tier 1 since the project, R-4 is contiguous with R-5. Further, construction projects on Cove Road and would be implemented in synchronization. ² SR-5/US-1 at SW Joan Jefferson Way (FM # 4383452) included in Martin MPO's TIP, FY 2020/21 - FY2024/25 is one of top priority projects (Tier 1).

³ CR-714/Martin Highway realignment project to enhance safety is one of top priority projects (Tier 1) for Martin MPO. Florida Department of Transportation (FDOT), District One completed SR-710 PD&E Study from US 441 to SW Martin Highway in Okeechobee and Martin Counties in 2010 and amended in Nov. 2018.

Prioritization Methodology

1. Project prioritized using a total 15 criteria relative to the goals and objectives of the 2045 LRTP.

2. Each project was assigned points on a scale of 1 to 4, with 1 being the lowest and 4 indicating the highest. In all cases a higher score indicated better performance compared to a lower score.

3. Projects overlapping with hurricane evacuation route(s), those in vulnerable areas as it relates to extreme weather events, King tides and sea level rise (SLR), and affecting Community Redevelopment Areas (CRAs) were assigned extra points.

7.1.2 Strategic Intermodal System (SIS) and Freight Projects

The Strategies Intermodal System (SIS) projects were included as line items to maintain consistency with the FDOT's SIS Cost Feasible Plan and Multimodal Unfunded Needs Plan. These projects were programmed by FDOT based on revenue forecast and funding allocation at statewide level. Since majority of the freight projects overlap with SIS projects, freight assumed similar prioritization as SIS projects.

7.1.3 Transit Projects

Transit projects were prioritized consistent with the Martin County's Transit Development Plan (TDP), 2020-2029 adopted in August 2019. Continuing to provide and maintain existing fixed route and paratransit services as well as State of Good Repair was the top priority. Service expansion and related capital and infrastructure improvements was lower priority based on funding availability. In addition, projects funded through private sector, such as the Brightline Station, were not assigned a specific priority.

7.1.4 TSM&O and Other Projects

The TSM&O corridors were not prioritized as part of the 2045 LRTP Cost Feasible Plan but rather funding was 'set aside.' These corridors were prioritized for the CMP Update in three separate tiers. The other projects were funded based on the cost and funds available from various sources. In addition, a project funded partially through private sector, such as non-motorized grade separation in Stuart was not assigned a specific priority.

7.1.5 Complete Streets and Non-Motorized Projects

The complete streets as well as non-motorized projects that include bicycle corridors, sidewalks and greenways and trails were also not prioritized since these improvements can be integrated with certain types of non-capacity programs, such as, Resurfacing, Rehabilitation and Reconstruction (RRR) projects, safety projects or other maintenance projects. Further, greenways and trails could be potentially funded through some of the statewide discretionary programs, such as Shared Use Non-motorized (SUN) Trail Program.

7.1.6 Resiliency Projects

Of the two resiliency projects, one of the projects overlaps with non-motorized projects while the other is included in the Cost Feasible Plan so that it is eligible for receiving funds through the Federal Emergency Relief (ER) Program.

7.2 2045 Cost Feasible Plan

As shown in **Table 7-2**, the total cost of projects included in the 2045 Cost Feasible Plan is approximately \$1.167 billion (YOE). These projects would be implemented over the 20-year period between 2026-2045. Further, projects included in the Martin MPO's FY 2020/21 – FY 2024/25 Transportation Improvement Program (TIP) at approximately \$129.2 million (YOE) span the first-year time band of the 2045 LRTP. The Martin MPO is not able to fully utilize the estimated funds available based on the 2045 Revenue Forecast

due to lack of local funds that could be used to leverage funds from the FDOT's Transit Program.

Category		Year of Expe	nditure (YOE)		25-Year Total	20-Year Total	
	2021-2025 ¹	2026-2030	2031-2035	2036-2045	2021-2045	2026-2045	
Transit							
Transit Operating Cost*		\$15,321,131	\$18,017,650	\$47,556,791	\$80,895,573	\$80,895,573	
Transit Capital Cost		\$5,269,796	\$4,057,466	\$10,115,598	\$19,442,861	\$19,442,861	
Highway/Roadway (non Strategic Intermodal System (SIS))	\$47,082,871	\$72,209,426	\$76,010,115	\$225,488,290	\$420,790,702	\$373,707,831	
Strategic Intermodal System (SIS)**	\$7,759,000	\$0	\$12,100,000	\$506,811,000	\$526,670,000	\$518,911,000	
Freight ²	\$2,907,683	\$0	\$10,000,000	\$13,337,000	\$26,244,683	\$23,337,000	
Transportation System Management & Operations (TSM&O) ³		\$30,090,585	\$20,432,716	\$18,643,258	\$69,166,559	\$69,166,559	
Other (Park-and-Ride, Non-Motorized Grade Separation)		\$6,028,750	\$0	\$0	\$6,028,750	\$6,028,750	
Water Based Transportation							
Operating Cost*		\$0	\$0	\$0	\$0	\$0	
Capital Cost		\$0	\$0	\$0	\$0	\$0	
Complete Streets ⁴	^	* 4 4 4 5 5 6 6 6	\$14.400.00F	* ***	ADE 400 E45	\$05 400 545	
Non-Motorized Projects ⁴	\$0	\$14,105,829	\$14,180,205	\$66,814,511	\$95,100,545	\$95,100,545	
Aviation ⁵		\$3,962,500	\$0	\$0	\$3,962,500	\$3,962,500	
Other Transportation Improvement Plan (TIP) Projects	\$74,358,507	\$0	\$0	\$0	\$0	\$0	
Capacity Projects (non SIS)	\$12,312	\$0	\$0	\$0	\$0	\$0	
Non-Capacity Projects	\$72,142,600	\$0	\$0	\$0	\$0	\$0	
Planning (PL Funds)	\$2,203,595	\$0	\$0	\$0	\$0	\$0	
Total Cost	\$129,200,378	\$146,988,018	\$144,798,152	\$875,429,449	\$1,222,057,490	\$1,167,215,619	
Strategic Intermodal System (SIS)**	\$7,759,000	\$0	\$12,100,000	\$506,811,000	\$526,670,000	\$518,911,000	
Transit Operating Cost*	\$0	\$15,321,131	\$18,017,650	\$47,556,791	\$80,895,573	\$80,895,573	
Water Based Transportation (Operating Cost)*	\$0	\$0	\$0	\$0	\$0	\$0	
Capital Project Cost (all modes)	\$121,441,378	\$131,666,886	\$114,680,502	\$321,061,658	\$614,491,917	\$567,409,046	

Table 7-2: 2045 Cost Feasible Plan Summary

Notes

* Operating cost includes total cost for the entire 5-year or 10-year period in Year of Expenditure (YOE) dollars. The 25-year total does not include transit operating funds included in the FY 2021-2025 Transportation Improvement Program (TIP). ** Project costs are based on SIS First and Second Five-Year Plans, July 2020 and SIS Long Range Cost Feasible Plan, July

** Project costs are based on SIS First and Second Five-Year Plans, July 2020 and SIS Long Range Cost Feasible Plan, July 2018.

¹ Time band includes funds "as programmed" in the FY 2021-2025 Transportation Improvement Program (TIP). Includes funds for transit, aviation, and Districtwide maintenance projects.

² All freight projects are included in the Strategic Intermodal System (SIS) category except \$157,683 Consolidated Rail Infrastructure and Safety Improvements (CRISI) Program grant in the 5-year increment, 2021-2025.

³ Funds "set-aside" for Transportation System Management & Operations (TSM&O) improvements.

⁴ Funds "set-aside" for Complete streets and non-motorized projects. Additional funds may be available through maintenance projects and discretionary grants.

⁵ Florida Department of Transportation (FDOT) share is limited to 80% of the project cost.

Approximately 76% or 3/4th of the funds are allocated for roadway improvements while 24% or 1/4th of the funds are for TSM&O, Park and Ride, Complete Streets and Non-motorized projects, Aviation and Transit projects over the 20-year period between 2026-2045 (**Figure 7-1**).



Figure 7-1: 2045 Cost Feasible Plan Funding Allocation (YOE, in millions)

A summary description of the 2045 Cost Feasible Plan by mode or project categories along with corresponding figures follows. <u>Appendix H</u> provides an itemized project list by mode and cross references the map identifiers shown on various figures.

7.2.1 Transit Projects

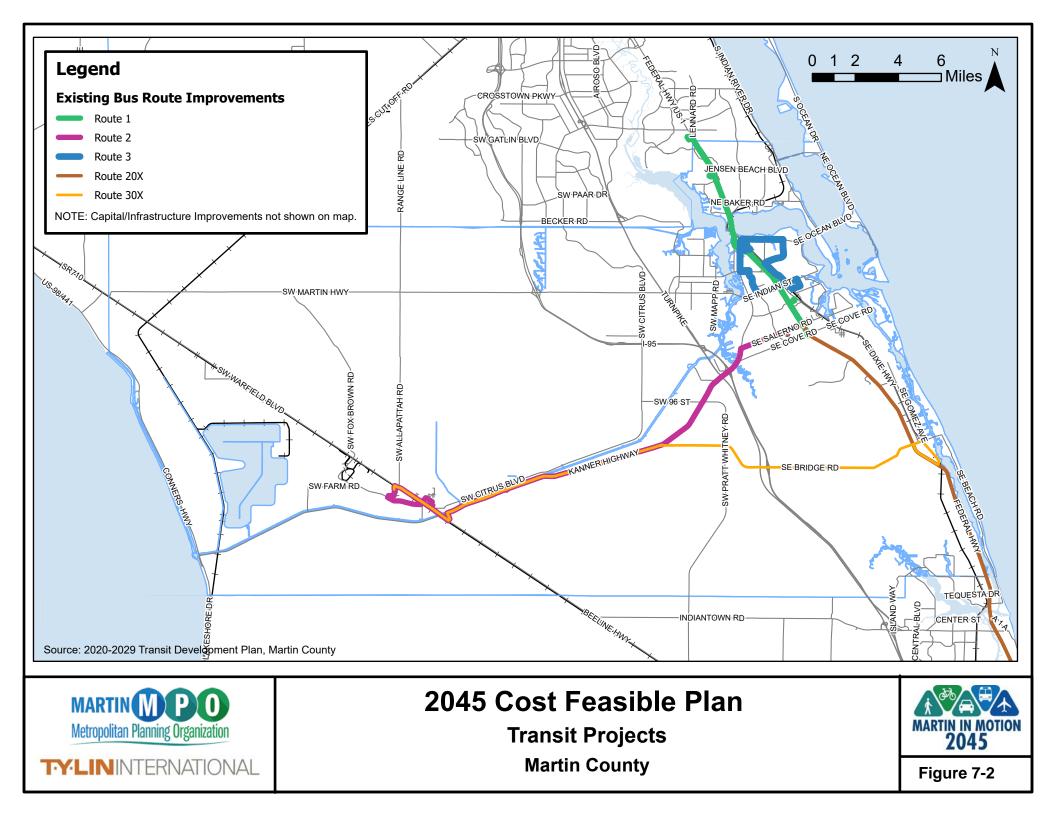
The following transit service (Marty) and capital improvements are included in the 2045 Cost Feasible Plan for a total operating expense of \$80.9 million (YOE) over 20 years and approximately \$19.4 million (YOE) in capital cost. **Figure 7-2** shows Marty's existing fixed routes.

Marty Transit Service/Operations (\$80.9M)

• Maintain existing service levels – fixed route and paratransit

Capital Improvements (\$19.4M)

- Rolling stock (fleet replacement)
- Transit/bus stop infrastructure
- New Park-and-Ride facility (connection to Palm Beach Tri-Rail Intermodal Center)
- Virgin Trains USA/Brightline Station (private sector funded)

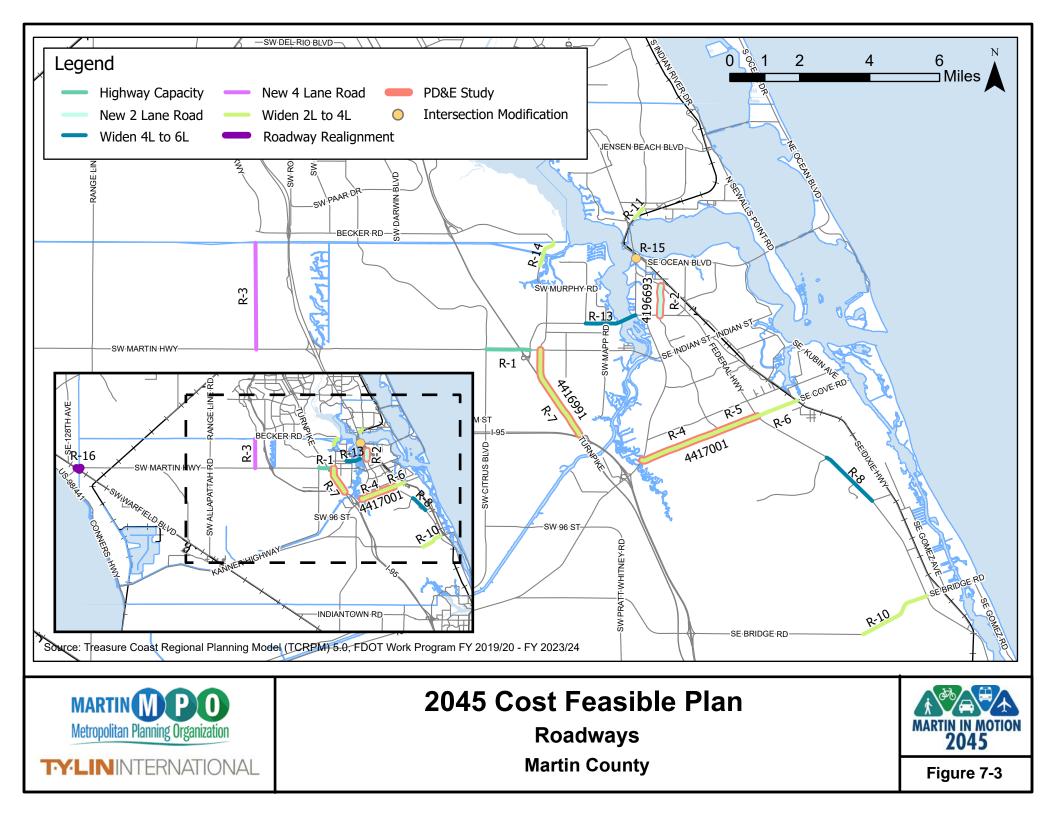


7.2.2 Roadway/Highway Projects

Non- Strategic Intermodal System (SIS) Facilities

Figure 7-3 shows cost feasible roadway projects. These projects cost approximately \$373.4 million (YOE). Projects include three PD&E Studies and SR-714/Martin Highway construction project, two safety projects and as well as roadway widening projects. Of the two new road projects, Village Parkway Extension is privately funded.

- Currently Funded
 - o SR-714/Martin Hwy from Citrus Boulevard to Martin Downs Boulevard
 - Willoughby Boulevard PD&E Study
 - Cove Road PD&E Study
 - o CR-713/High Meadow Ávenue PD&E Study
- Two Safety Projects
 - SR-5/US-1 at Joan Jefferson Way
 - o CR-714/Martin Hwy Realignment
- Seven Roadway Widening Projects
 - Cove Road
 - o CR-713/High Meadow Avenue
 - SE Bridge Road
 - SE Green River Parkway
 - o SW Murphy Road
 - o Federal Hwy/US-1
 - o SW Martin Downs Road
- Two New Road Projects
 - Willoughby Boulevard
 - Village Parkway Extension



Strategic Intermodal System (SIS) Facilities

The following SIS projects are programmed by FDOT and included in the cost feasible plan for a total of approximately \$526.67 million (YOE) from 2021 to 2045. These projects include Project Development & Environment Study (PD&E) studies for different segments of I-95, roadway and highway capacity improvements on SR-710 and I-95 as well as a grade separation project at Monterey Road and Florida East Coast (FEC) mainline (**Figure 7-4**).

- Three PD&E Studies on I-95
- Roadway improvements and highway capacity improvements on SR-710/Warfield Boulevard and I-95, respectively
- One grade separation project at SR-714/Monterey Road and FEC mainline

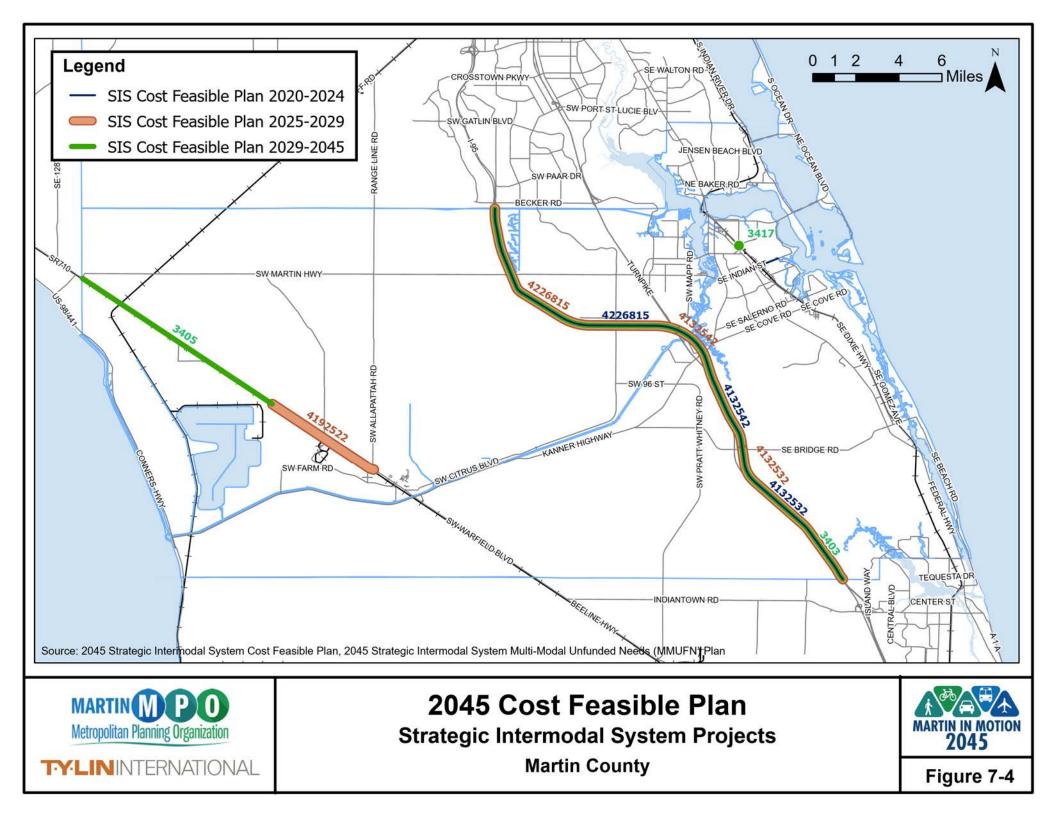
The preliminary engineering and right-of-way phases for the SR-710/Warfield Boulevard widening project (from CR-609/Allapattah Road to the FPL Power Plant) are currently funded in the SIS First Five-Year Plan FY 20/21 – FY 24/25 adopted in July 2020. However, due to funding constraints, the construction phase (\$41,422,000) was removed from the current SIS Second Five-Year Plan FY 25/26 – FY 30/31 that was adopted in July 2020. To allow for interim projects, such as safety projects at the intersection of SR-710 and SW Tommy Clements Street, to be developed along the SR-710 corridor from CR-609/Allapattah Road to the Martin/Okeechobee County Line prior to the ultimate widening projects from 2 to 4 lanes, SR-710 project descriptions have been revised to "Roadway Improvement" projects to avoid any issues associated with planning consistency. The MPO recommends that FDOT move any funds that were intended to be allocated to the segment of SR-710 from SW Allapattah Road to the FPL Power Plant be moved to the segment from FPL Power Plant to the Martin/Okeechobee County Line, more specifically, to fund safety improvements and any required infrastructure at the intersection of SW Tommy Clements and SR-710.

Multi-use Corridors of Regional Economic Significance (M-CORES) Program

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

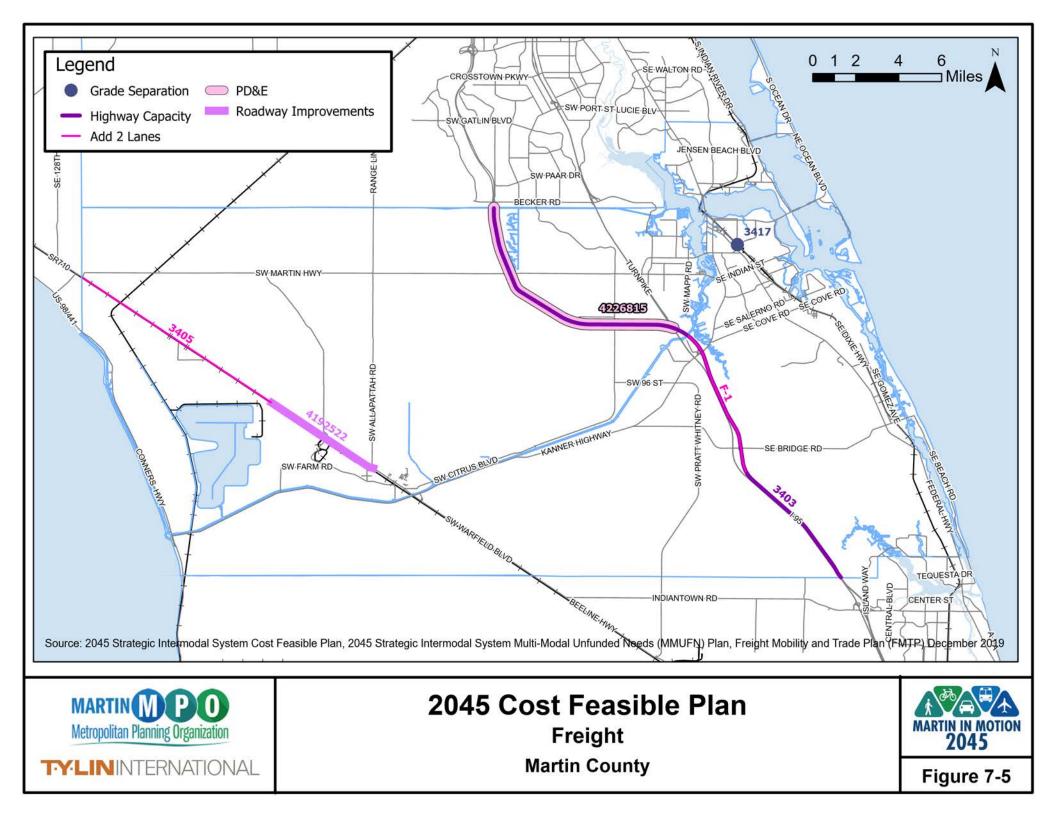
- The Suncoast Corridor, extending from Citrus County to Jefferson County
- The Northern Turnpike Corridor, extending from the northern terminus of Florida's Turnpike northwest to the Suncoast Parkway
- The Southwest-Central Florida Corridor, extending from Collier County to Polk
 County

None of these corridors intersect the Martin MPO area; however, planning for successful projects within this region may require coordinating with regional planning partners in the M-CORES study areas with regard to collecting and analyzing transportation data for projects that may be affected by the M-CORES Program.



7.2.3 Freight Projects

The freight projects overlap with the SIS projects (**Figure 7-5**). Additionally, the Strategies for Reducing Railroad Trespassing (SRRT) Pilot Project, which includes safety improvements along railroad corridors is part of the 2045 Cost Feasible Plan.

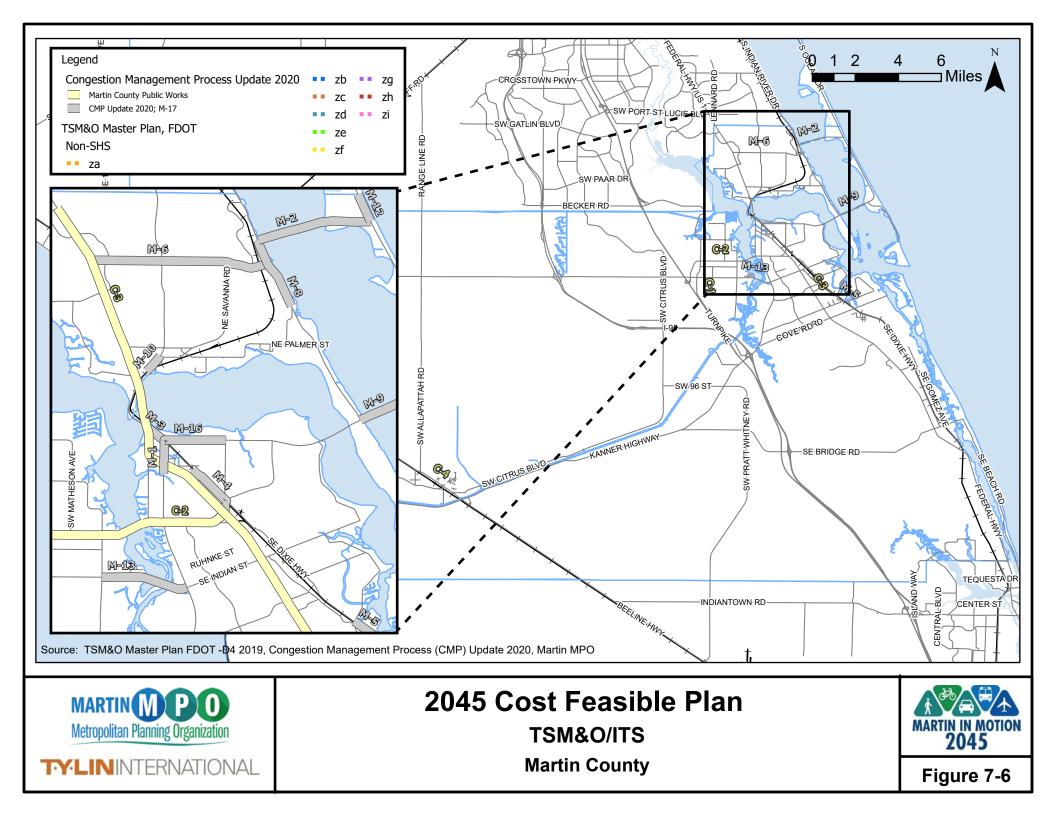


7.2.4 Transportation System Management & Operations (TSM&O)

Approximately \$69.2 million have been 'set aside' over a 20-year timeframe to address traffic congestion along various roadway segments in Martin County (**Figure 7-6**). There is a total of 29 roadway segments along 20 travel corridors as listed below. It should be noted that corridor-specific improvements have not been identified at this time. In addition, ITS infrastructure projects, which includes installing equipment at signalized intersections as well as six projects included in the I-95 Treasure Coast Multimodal Master Plan are also part of the 2045 Cost Feasible Plan.

• Twenty-nine (29) roadway segments along 20 corridors

- o Federal Highway/US-1
- o Martin Downs Road/SR-714/Monterey Road
- o Kanner Highway and Colorado Avenue
- o SE Salerno Road
- SW Mapp Road
- SE Dixie Highway
- SE Indian Street
- o SW Martin Highway
- SE Cove Road
- o SW Murphy Road
- o CR-732/Jensen Beach Causeway
- Jensen Beach Boulevard
- NE Indian River Drive
- o NE Ocean Boulevard
- SE Green River Parkway
- SE Monterey Road (Ext.)
- o SR-A1A
- o SW High Meadow Avenue
- o SW Joan Jefferson Way
- o SW Ocean Boulevard
- o SE Bridge Road
- Intelligent Transportation System (ITS) Infrastructure, Martin County
- I-95 Treasure Coast Multimodal Master Plan



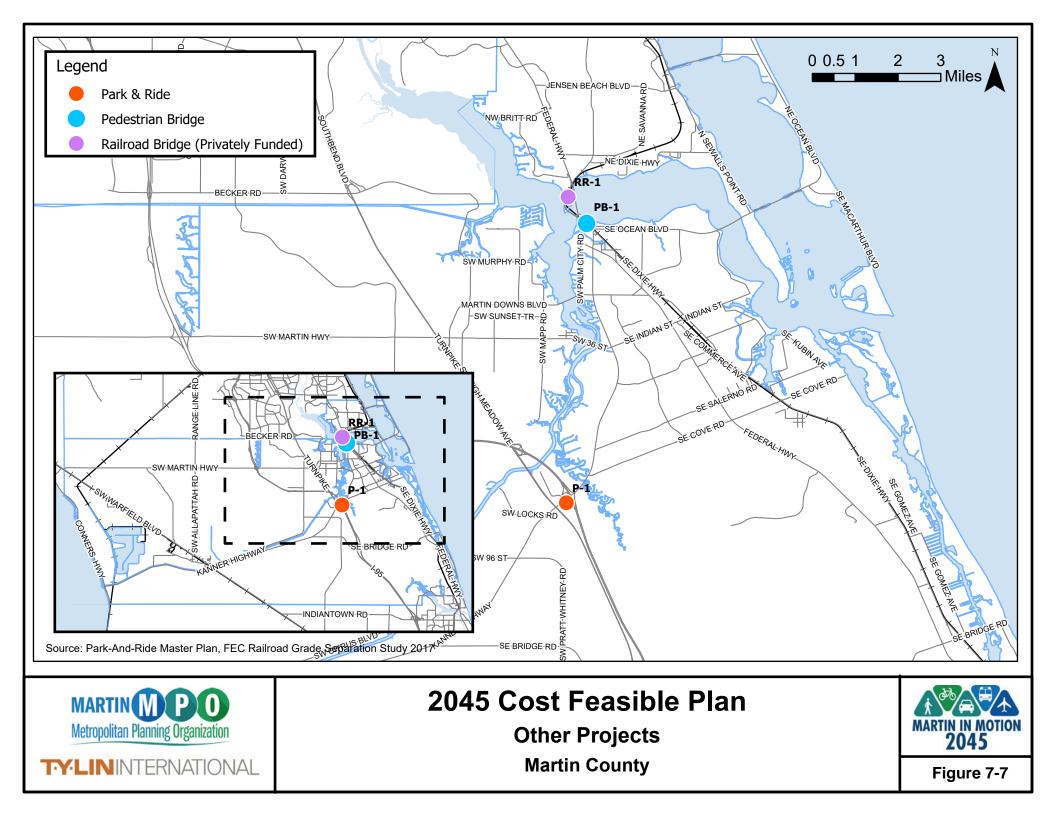
7.2.5 Other Projects

In the other projects categories, which includes Travel Demand Management (TDM), safety and strategic initiatives, three Park-and-Ride facilities are funded at a cost of \$6.0 million (YOE). It should be noted that the location of these Park-and-Ride facilities will be determined outside of the LRTP process through detailed studies conducted by the FDOT and/or MPO. Typically, Park-and-Ride feasibility studies consider several factors, such as, travel patterns, trip purpose and potential travel markets, land use, community support and integration of the proposed Park-and-Ride facility or facilities with the overall transportation network in the County as well as the region.

• Park-and-Ride Facilities

- Kanner Highway/SR-76 at I-95
- West of I-95 between Becker Road and Martin Highway
- o West of Turnpike in vicinity of Sand Avenue

In addition, a partially private funded non-motorized grade separation (pedestrian bridge) project in Downtown Stuart as well as a private sector funded project - double tracking FEC Rail Bridge over St. Lucie River is included the 2045 Cost Feasible Plan. Including partially funded private sector project provides Martin MPO leverage to obtain "matching" public sector funds or grants. **Figure 7-7** shows the general location of projects in this category.



7.2.6 Complete Streets and Non-Motorized Projects

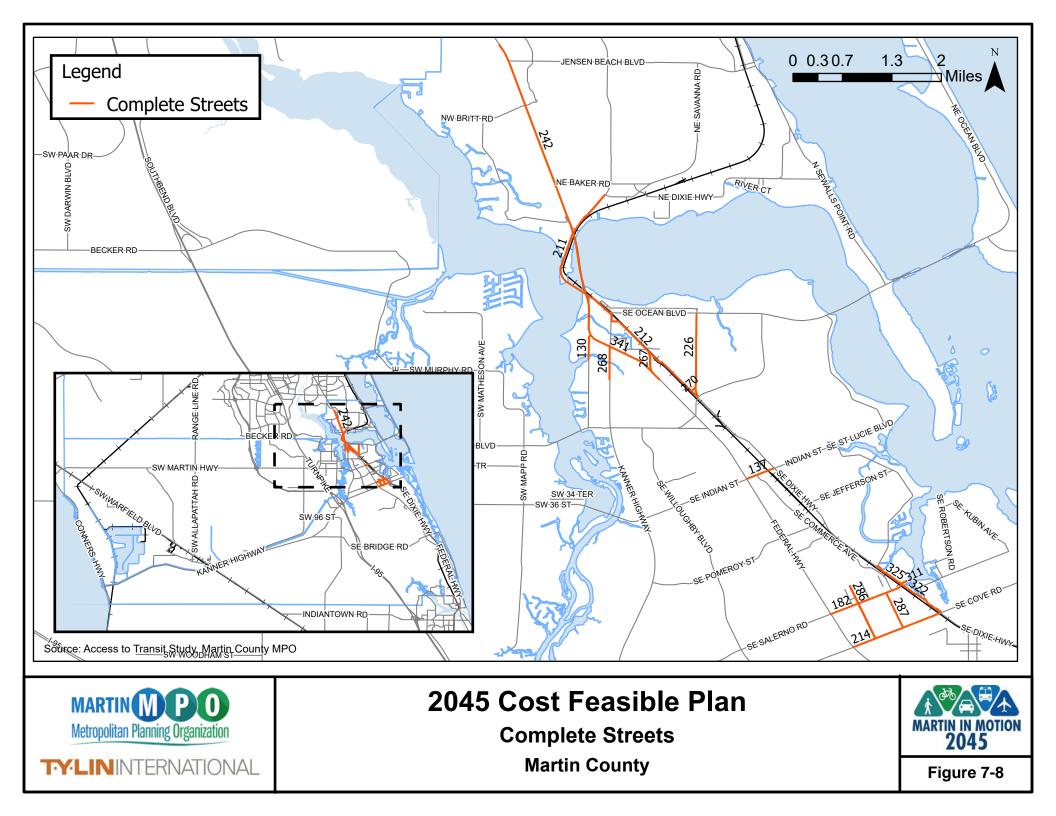
An extensive network of complete streets and non-motorized (pedestrian facilties, bicycle corridors, and greenways and trails) projects shown in **Figure 7-8** and **Figure 7-9** has been funded at approximately \$95.1 million (YOE). Below is a summary of the types of improvements included in the 2045 Cost Feasible Plan.

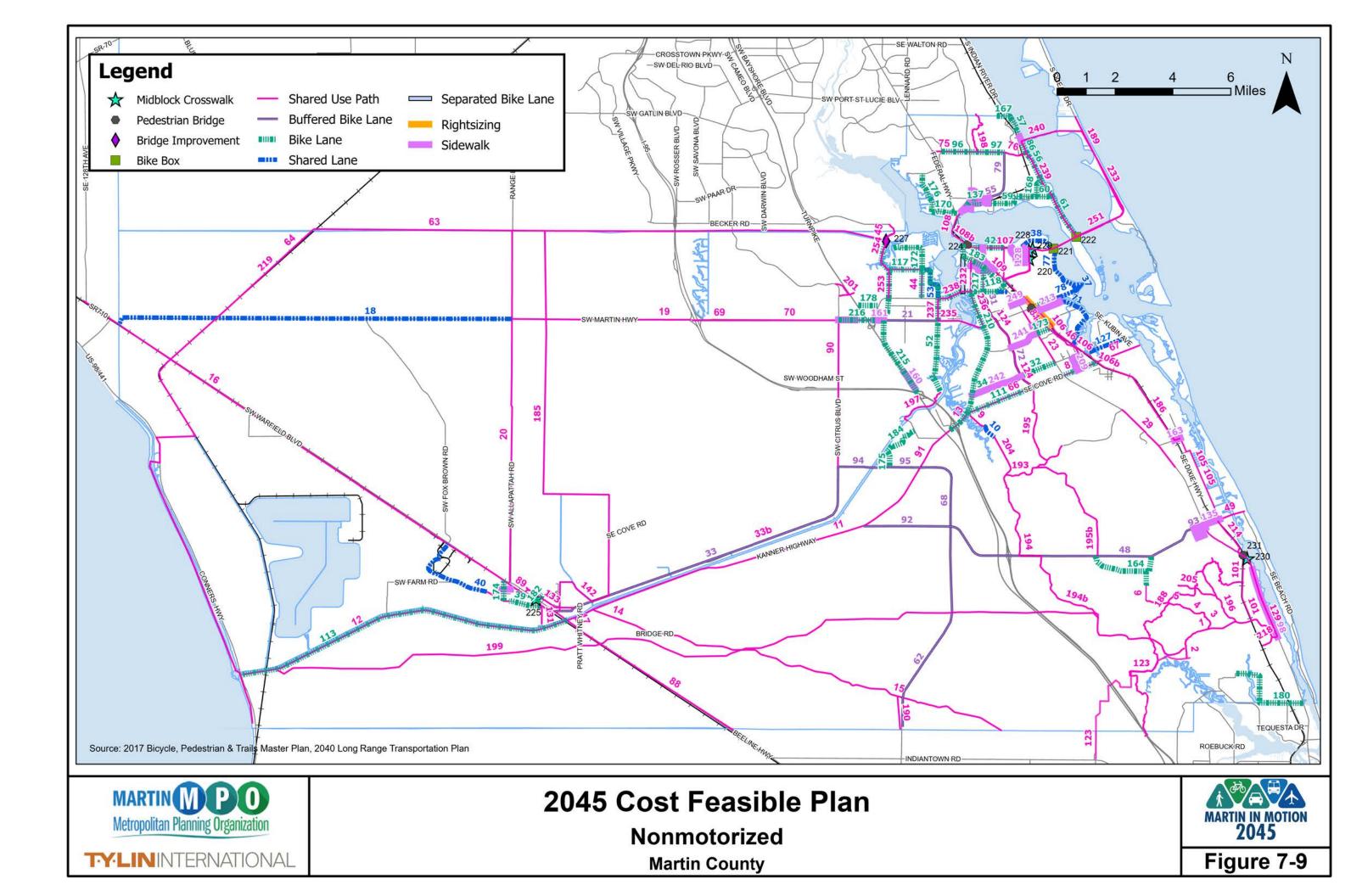
- Complete Streets
 - o 15 miles of complete streets
- Pedestrian Facilities
 - o 33 miles of sidewalk
 - o Five new crosswalks
 - Three pedestrian bridges

• Bicycle Corridors

- 100 miles of bicycle lanes
- 82 miles of buffered bicycle lanes
- o 35 miles of shared lanes
- Two miles of separated bicycle lanes
- Two bike boxes
- Multi-Purpose Trails & Greenways
 - o 685 miles of shared-use path

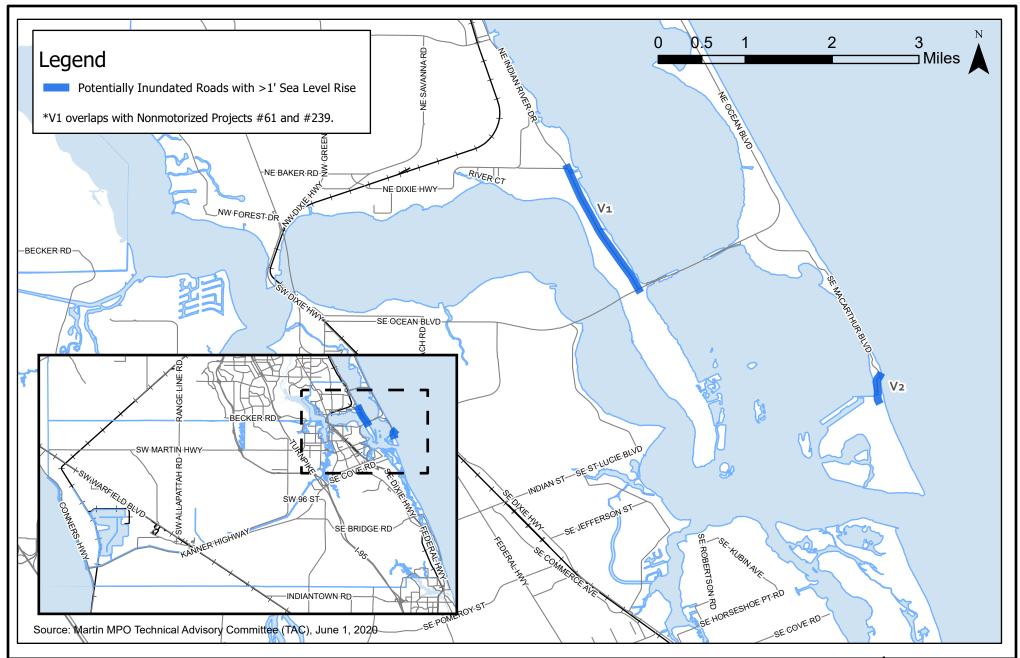
Out of a total of 17 complete streets projects, several are currently included in the FDOT's Five-Year Work Program. Several of the above listed improvements can be potentially implemented through non-capacity program funds. Some of the trails and greenways could be funded through discretionary funding programs, such as, SUN Trail Program.





7.2.7 Resiliency Projects

Two resiliency projects along Sewalls Point Road and SE MacArthur Blvd. are included in the 2045 Cost Feasible Plan (**Figure 7-10**). The Sewalls Point Road project overlaps with two non-motorized projects. These projects can be funded through Federal Emergency Relief (ER) Program.





2045 Cost Feasible Plan **Resiliency Projects**





7.2.8 Aviation Projects

The 2045 Cost Feasible Plan includes the following aviation projects at approximately \$3.9 million (YOE). These projects are included in the Martin County Airport and Witham Field's Capital Improvement Plan (CIP).

- Air Traffic Control Tower Equipment Upgrade (Recorder and Radios)
- Construct Airport Interconnect Rd. Flying Fortress Extension
- Rehabilitation of MC Non-Movement Areas Phase V (Design & Const)
- Tree Mitigation Project RPZ and Part 77 (SE St. Lucie Canal)

It should be noted that the FDOT provides 80% funding of the total cost to support these projects while the remaining 20% is local and/or federal match. Further, the 2045 Revenue Forecast does not reflect these monies since Aviation Program funds are forecast at statewide level.

7.2.9 Waterborne Transportation

Except for a feasibility study for waterborne transportation at approximately \$440,000 (YOE), none of the other waterways' projects are included in the 2045 Cost Feasible Plan.

7.3 2045 Unfunded Needs

7.3.1 Unfunded Transit and Highway/Roadway (Non-SIS) Needs

Unfunded Transit Needs

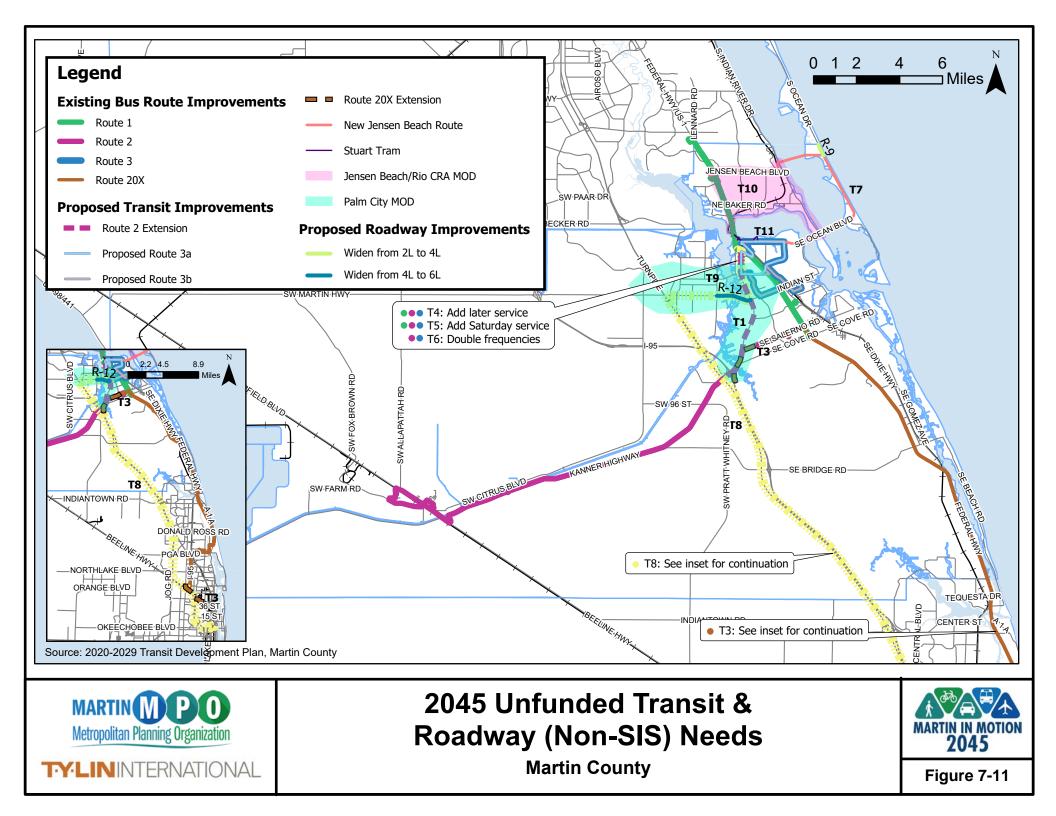
The unfunded transit needs include Marty service expansion, new routes, Saturday service, Mobility on Demand service. These service expansion projects remain unfunded due to lack of local funding available as "matching dollars" to support transit operations. Similarly, the unfunded transit capital improvements include new buses required to support expanded service as well as a new operations and maintenance facility and an intermodal hub.

In addition to Marty service, the Downtown Stuart Tram is also part of the unfunded transit needs. In the past this service has been supported through local funds and FDOT's Service Development Program that provides funding for demonstration projects for up to three years. It is likely that this funding may be available in the future, but there are no committed funds at this time.

Unfunded Highway/Roadway (Non-SIS) Needs

These include roadway widening projects on S. Ocean Drive from North County Line to NE Causeway Blvd. and Martin Highway from SW Mapp Rd. to Kanner Highway/SR-76.

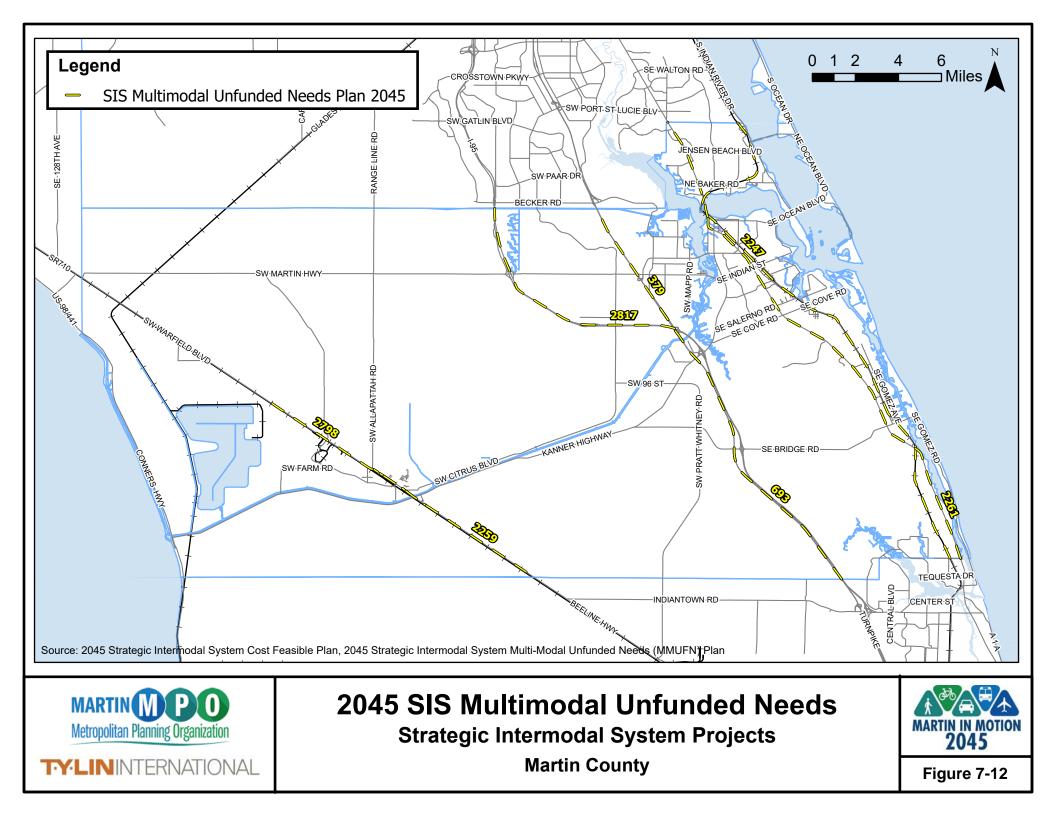
Figure 7-11 shows unfunded transit and highway/roadway (Non-SIS) needs.



7.3.2 Unfunded SIS Needs

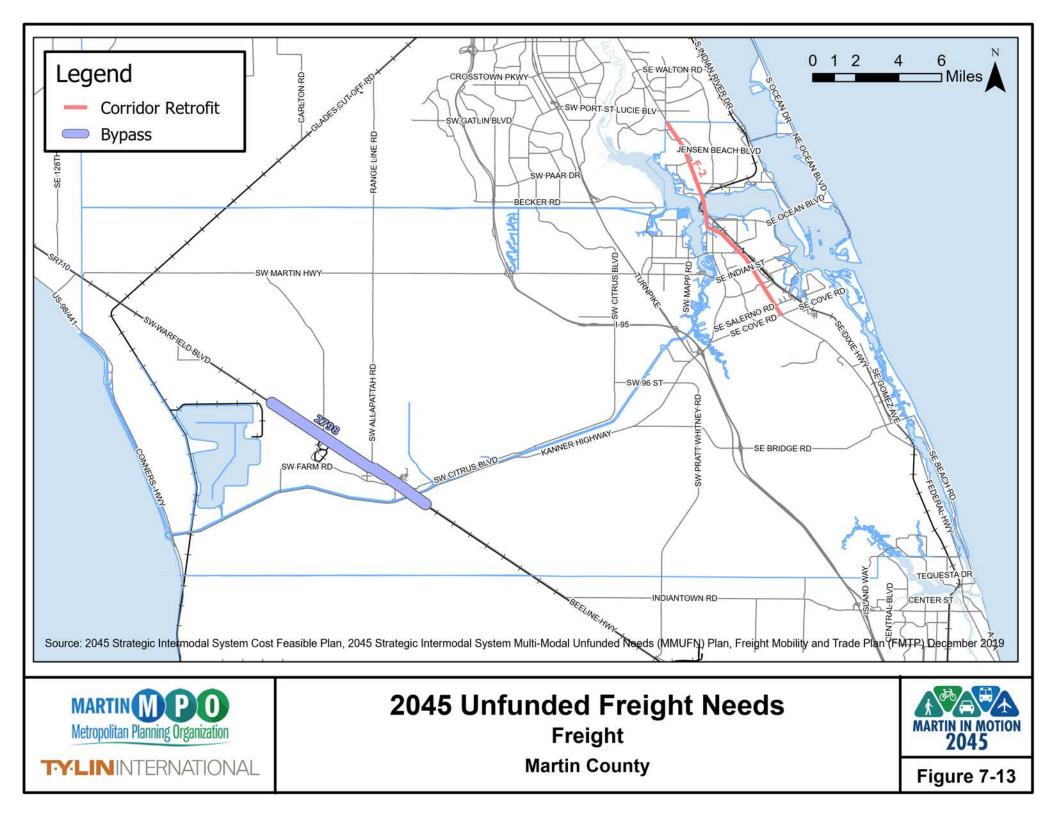
The following projects are included in the FDOT's SIS 2045 Multimodal Unfunded Needs Plan (**Figure 7-12**).

- Two fixed guideway transit projects (US-1/Federal Highway and SR-710)
- Transit hub (at Indiantown)
- Highway improvements on Turnpike and SR-710
- Amtrak Passenger Service (Miami to Jacksonville)



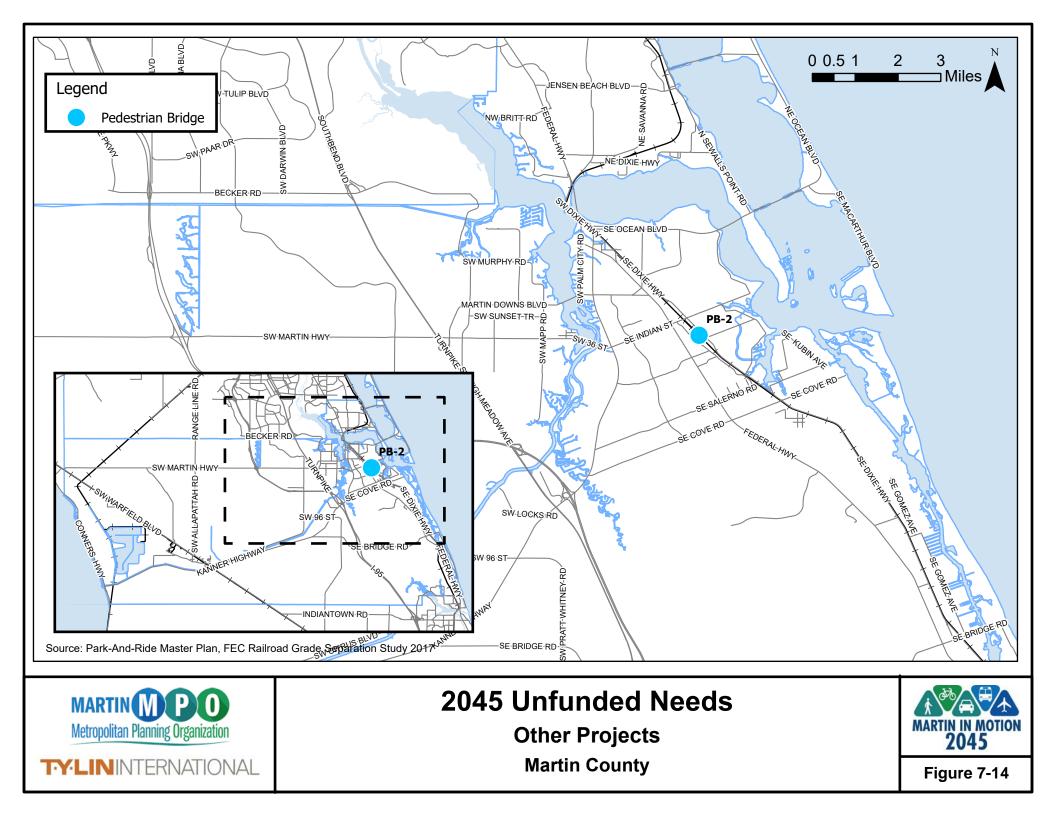
7.3.3 Unfunded Freight Needs

Unfunded freight needs include, SR-710 Bypass, a new facility, US-1 Corridor Retrofit Project as well as Connected Freight Priority System Deployment, which is an automated/connected vehicle technology project (**Figure 7-13**).



7.3.4 Unfunded Other Projects

This category includes the non-motorized grade crossing improvement in Golden Gate along Florida East Coast (FEC) mainline (**Figure 7-14**).

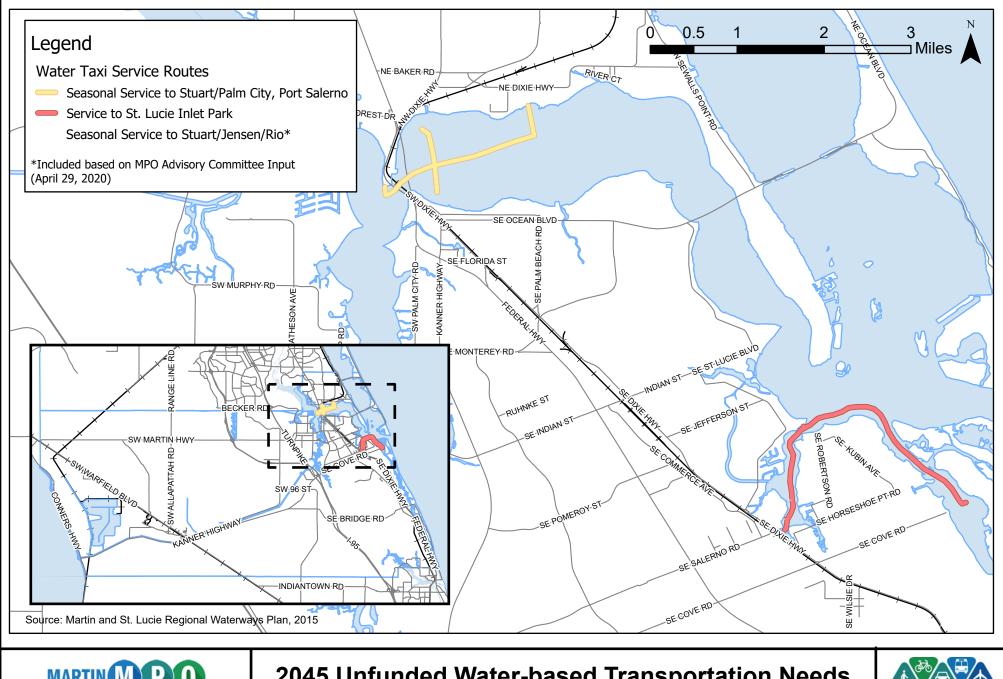


7.3.5 Unfunded Waterborne Transportation Needs

The following water taxi service/routes are included in the unfunded waterborne transportation (**Figure 7-15**). These improvements could not be funded due to lack of local funds to support operations and capital improvements.

• Water Taxi Service

- Sandsprit Park to St. Lucie Preserve State Park
- o Seasonal and/or Special Events/Festivals around key nodes
 - Stuart/Palm City
 - > Port Salerno/Manatee Pocket
 - Stuart/Jensen/Rio





2045 Unfunded Water-based Transportation Needs

Waterways

Martin County



7.4 Equity Analysis

This equity analysis seeks to ensure that the benefits and impacts of proposed multimodal projects are understood and that federally protected populations are not disproportionately burdened during the planning process. Title VI of the Civil Rights Act of 1964, as amended, prohibits discrimination in any program receiving federal assistance and provides guidance for fair and equitable transportation planning. Executive Order (EO) 12898 "Federal Actions to Address Environmental Justice (EJ) in Minority Populations and Low-Income Populations" seeks to minimize disproportionate impacts of federal programs on minority populations and low-income populations. In this analysis, minority and low-income populations were identified to guide the 2045 LRTP decision-making process. In addition to consideration of minority and low-income persons required by environmental justice guidelines, elderly and transit dependent persons were also considered.

7.4.1 Socioeconomic Characteristics, Martin County

A review of the 2013-2017 U.S. Census data for Martin County was conducted to evaluate representation of minority populations, low-income households, transit dependent households and the elderly (**Table 7-3**). The representation for each of these groups as a percentage of the total population was used to compare with the extent of benefits received from improvements prioritized in the plan. Minority populations and low-income households represent 21.0% and 9.6% of Martin County, respectively. Approximately 29.7% of Martin County's residents are 65 or older and 5.6% of households within Martin County have no car. Approximately 5.2% of residents between the ages of 20 and 65 with income in the past 12 months have a disability. Approximately 2.9% of households have Limited English Proficiency.

Socioeconomic Characteristic	Martin County	Percent of Total
Total Population	155,719	100%
Total Households	63,497	100%
Low Income Households	6,071	9.6%
Minority Population	32,719	21.0%
Limited English Proficiency (LEP) Households	1,812	2.9%
Disabled Population	8,099	5.2%
Zero-auto Households	2,827	5.6%
Elderly Population (Age 65+)	46,191	29.7%

Table 7-3: Martin County.	2013-2017 American Communit	v Survev	(ACS)
		J J	(/

Minority populations include Hispanics or persons of Latino descent, African American, American Indian, Asian, and Pacific Islanders. The 2013-2017 Census identifies the poverty threshold for a household as \$17,463 per year. Transit dependent households were identified as households with no car. Elderly are persons age 65 or older. Disabled population included ages 20 to 64 with income in the last 12 months with a disability.

<u>Appendix J</u> shows graphic representations of these populations and households while **Figures 7-2** to **7-10** show multimodal projects included in the Cost Feasible Plan. For purposes of distinguishing the distribution of the data, the populations are normalized to four or five equally distributed groups.

Some neighborhoods that are characterized by higher populations of low-income households include the urban core of Stuart and Port Salerno and in the western area of Indiantown. The westernmost portion of the County shows higher percentages of low-income populations.

Highest concentrations of minority populations are located within the westernmost portion of the County, west of I-95 where land use is majorly agricultural. Higher concentrations of minority populations are also located in the urban core of Stuart and Port Salerno, and along Federal Highway.

Higher concentrations of elderly populations exist within the eastern half of the County. Highest concentrations of elderly populations occur along the barrier island north of St. Lucie Inlet, as well as in the vicinity of several country clubs in Stuart and Port Salerno including Monarch County Club, The Yacht and Country Club, and Heritage Ridge Golf Club. These concentrations are attributed to the alure of coastal views and walkable urban communities for retired residents.

Transit dependent households (determined as those with zero automobiles) were also considered an important factor in planning for transportation improvements, particularly the addition or expansion of transit. Some correlation appears to occur between low-income and transit dependent households. Highest percentages of households without a vehicle are within the westernmost portion of the County and along Federal Highway in the City of Stuart. It should be noted that few zero-auto households are located within the barrier island north of St. Lucie Inlet, and in areas adjacent to I-95 and Florida's Turnpike.

7.4.2 Transportation Benefits

The degree to which a segment of the population benefits from each of the 2045 LRTP project type is measured and compared to total population benefited by that project type. To make this comparison, an analysis using Geographic Information System (GIS) to determine the inclusion of minority, low-income, transit dependent and elderly residents within a half-mile perimeter of the project type that is included in the Cost Feasible Plan. A second tally of the total population within that same half-mile perimeter was made. The number of persons or households in a socioeconomic group was then compared to the total period by those projects. Project types for which this comparison was made include transit, roadways/highways, freight, TSM&O, complete streets, non-motorized, resiliency, and "other" projects.

The comparative distribution of benefits⁷ is shown in **Table 7-4**. The types of projects included in the 2045 LRTP benefit a large portion of the socioeconomic groups evaluated.

⁷ Percent of population or households benefited was calculated by dividing the population/households for a distribution within a $\frac{1}{2}$ mile buffer by the total population/households within Martin County times the percent distribution of total population/households.

able 1-4. Italisportation Den	ents by 50		ne Group i		Total F opt	lation		
Distribution of Benefited Population/Households (with ½ mile of Project)	Transit	Roadways/ Highways	Freight	TSM&O	Other Projects	Complete Streets	Non- Motorized Projects	Resiliency Projects
Population (w/in ½ mile buffer)	110,042	97,564	37,698	132,982	23,358	59,649	155,719	6,002
% of Martin County	70.7%	62.7%	24.2%	85.4%	15.0%	38.3%	100.0%	3.9%
Households (w/in ½ mile buffer)	44,443	39,149	12,852	54,264	10,149	24,165	63,497	2,783
% of Martin County	70.0%	61.7%	20.2%	85.5%	16.0%	38.1%	100.0%	4.4%
Low Income Households (HHs)	4,551	3,626	1,398	5,531	945	2,692	6,071	328
Low Income HHs % of Total HHs				9.6	5%			
% of Total Benefits	10.2%	9.3%	10.9%	10.2%	9.3%	11.1%	9.6%	11.8%
% of Low-Income HHs Benefitted	75.0%	59.7%	23.0%	91.1%	15.6%	44.3%	100.0%	5.4%
Minority Population	27,445	20,373	13,509	29,174	3,351	14,588	32,719	304
Minority % of Total Population				21.	0%			
% of Total Benefits	24.9%	20.9%	35.8%	21.9%	14.3%	24.5%	21.0%	5.1%
% of Minority Population Benefited	83.9%	62.3%	41.3%	89.2%	10.2%	44.6%	100.0%	0.9%
Limited English Proficiency (LEP) HHs	1,669	958	815	1,630	203	716	1,812	6
LEP % of Total HHs				2.9	9%			
% of Total Benefits	3.8%	2.4%	6.3%	3.0%	2.0%	3.0%	2.9%	0.2%
% of LEP HHs Benefited	92.1%	52.9%	45.0%	90.0%	11.2%	39.5%	100.0%	0.3%
Disabled Population	6,090	5,153	2,181	7,185	1,307	3,736	8,099	439
Disabled Population % of Total Population				5.2	2%			
% of Total Benefits	5.5%	5.3%	5.8%	5.4%	5.6%	6.3%	5.2%	7.3%
% of Disabled Population Benefited	75.2%	63.6%	26.9%	88.7%	16.1%	46.1%	100.0%	5.4%
Zero-auto Households (HHs)	2,195	1,850	808	2,513	432	1,356	2,827	133
Zero-auto HHs % of Total Population				4.5	5%			
% of Total Benefits	4.9%	4.7%	6.3%	4.6%	4.3%	5.6%	4.5%	4.8%
% of Zero-auto HHs Benefited	77.6%	65.4%	28.6%	88.9%	15.3%	48.0%	100.0%	4.7%
Elderly Population (Age 65+)	30,764	27,897	8,127	38,312	7,392	15,403	46,191	2,264
Elderly Population % of Total Population				29.	7%			
% of Total Benefits	28.0%	28.6%	21.6%	28.8%	31.6%	25.8%	29.7%	37.7%
% of Elderly Population Benefited	66.6%	60.4%	17.6%	82.9%	16.0%	33.3%	100.0%	4.9%

Table 7-4: Transportation Benefits by Socioeconomic Group Relative to Total Population

7.5 Environmental Mitigation and ETDM

For highway projects, the LRTP shall include a discussion of types of potential environmental mitigation activities as required by federal regulations.

23 Code of Federal Regulation § 450.324 - Development and content of the metropolitan transportation plan.

(f) The metropolitan transportation plan shall, at a minimum, include:

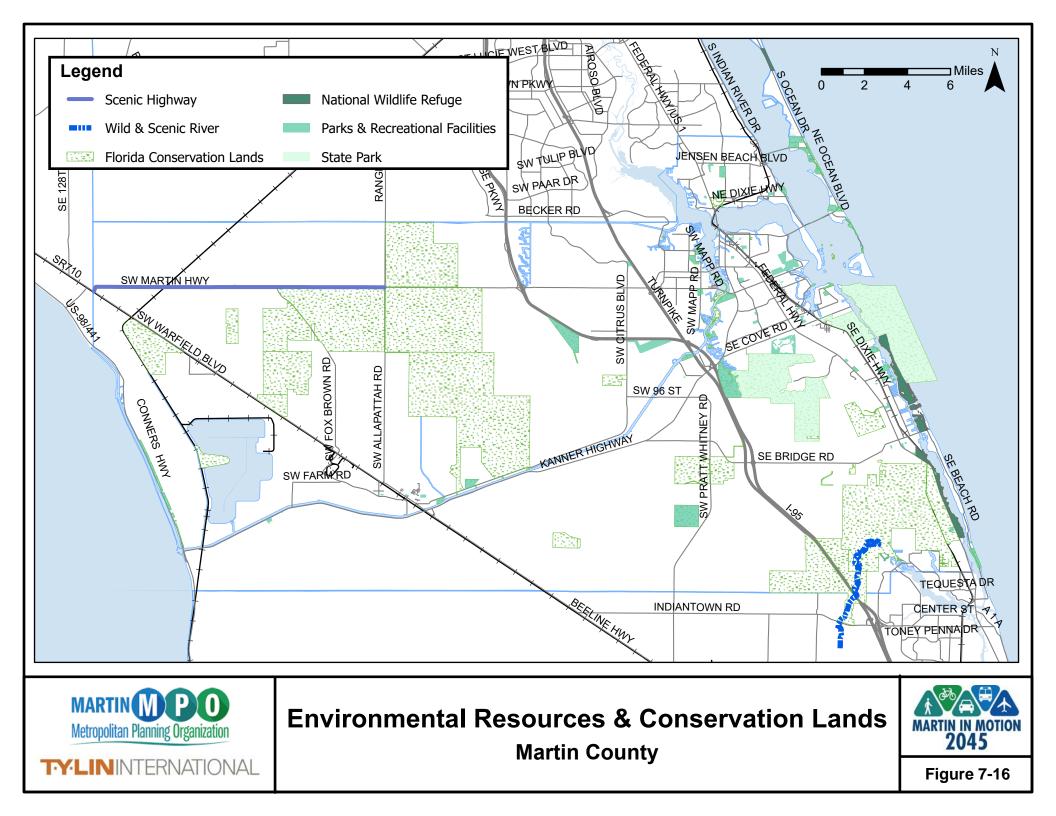
(10) A discussion of types of potential environmental mitigation activities and potential areas to carry out these activities, including activities that may have the greatest potential to restore and maintain the environmental functions affected by the metropolitan transportation plan. The discussion may focus on policies, programs, or strategies, rather than at the project level. The MPO shall develop the discussion in consultation with applicable Federal, State, and Tribal land management, wildlife, and regulatory agencies. The MPO may establish reasonable timeframes for performing this consultation.

Three main mitigation strategies that are generally applied in a sequential order are avoidance, minimization, and compensatory mitigation.

- Avoidance mitigation strategies include selecting the least-damaging project alternative, location, and extent which is compatible with the project purpose and need. Avoidance measures are carefully considered during the project planning stages in choosing the appropriate practical alternatives and project footprint.
- Minimization strategies manage the severity of a project's impact on resources at the selected site. Minimization strategies include the incorporation of design and risk avoidance measures and reducing impacts as much as possible when impacts are not avoidable. Minimization can include impacting resource areas of lower quality instead of a higher-quality area.
- Compensatory mitigation is the mitigation of a resource impact by providing a replacement or substitute resource for impacts that are to remain. Compensatory mitigation is achieved through restoration, establishment, enhancement, or preservation of resources in order to offset unavoidable impacts after all appropriate and practicable avoidance and minimization has been achieved. Compensatory mitigation can be provided through mitigation banks, in-lieu fee programs, and permittee-responsible mitigation. There are four mitigation banks that service areas within Martin County: Loxahatchee, Bear Point, RG Reserve, and Bluefield Ranch.

Martin County is committed to the preservation of its native habitat by avoiding and minimizing impacts to the greatest extent possible. Martin County's Land Development Regulations state that the County shall ensure that a minimum of 25 percent of the existing native upland habitat will be preserved. On sites where endangered, unique, or rare native habitats occur, a greater amount of upland areas shall be preserved. No preservation areas that shall be credited to upland preservation requirements shall be located within areas within rights-of-way. All wetlands within unincorporated Martin County are protected. A minimum buffer of 50 feet (75 feet if connected to surface waters of the state) shall be maintained around wetlands to protect the area from negative

impacts or alterations. **Figure 7-16** depicts the locations of environmental resources and conservation lands within Martin County.



7.5.1 Efficient Transportation Decision Making (ETDM)

The Efficient Transportation Decision Making (ETDM) process enables resource protection agencies and the public to provide early input to the Florida Department of Transportation and Metropolitan Planning Organizations (MPOs) about potential effects of proposed transportation projects. The ETDM process was developed to ensure that transportation projects are planned and implemented in a way that protects environmental resources. The ETDM is used as a screening tool to provide additional commentary, and to provide assurance that mitigation requirements are identified and considered as projects are advanced. Coordination has occurred with the Florida Department of Transportation in submitting the approved Martin County Draft 2045 Cost Feasible Plan for the ETDM process.

The following resources were reviewed for the environmental mitigation documentation:

7.5.2 Martin County Comprehensive Growth Management Plan, 2019

Within the Martin County Comprehensive Growth Management Plan, the Coastal Management Element provides guidelines for the preservation of the County's coastal and estuarine areas. A shoreline protection zone is established to be 75 feet laterally upland from the mean high-water line and includes mangrove species. Shoreline protection zones are protected from construction and building maintenance activities. Along with the Loxahatchee River, other water bodies that are protected include aquatic preserves, outstanding Florida waters, class 1 waters, marine sanctuaries, estuarine sanctuaries, and manatee sanctuaries or areas of critical manatee habitat. The uplands of the Coastal Ridge and adjacent coastline along the Indian River from the south County line to the St. Lucie Inlet have been designated an aquatic preserve and manatee sanctuary by the Florida Department of Environmental Protection. Chapter 9 of the Comprehensive Growth Management Plan includes the Conservation and Open Space Element to address the goals regarding the preservation and provision of the County's public open spaces. The County's Ecosystem Restoration and Management Division preserves, restores, maintains, and enhances environmental resources. The County manages approximately 35,000 acres of environmentally sensitive lands, which protect unique, rare or endangered habitat, assure survival of listed wildlife species, protect scenic water corridors, and provide public access and open space. As an overall environmental constraint due to strict regulations for future land uses and to preserve wetland and upland habitats, all development must preserve wetlands and native uplands on-site, with relationship to off-site regional natural resources. Activities that adversely affect wetlands are extremely restricted or prohibited. According to the future land use analysis, of the 347,258 acres of land in 2017 in Martin County, 65,682 acres, or 18.9%, are wetlands.

7.5.3 Florida Coastal Management Program Guide, 2017

The Florida Coastal Management Program (FCMP) is a guide to promote the effective protection and use of the land and water resources of Florida's coastal zone. The Department of Environmental Protection (DEP) is designated as the lead agency pursuant to the federal Coastal Zone Management Act. One of the state's aquatic preserves is located in Martin County from Jensen Beach to Jupiter Inlet.

7.5.4 Land Management Plan Amendment Savannas Preserve State Park, 2017

Savannas Preserve State Park is located in St. Lucie and Martin Counties. The southern portion of the park is located within northeastern Martin County. The purpose of Savannas Preserve State Park is to preserve and protect environmentally unique and irreplaceable lands associated with the North Fork of the St. Lucie River corridor, freshwater basin marsh and scrub ridge characteristic of the southeast Florida coast for the perpetual enjoyment of Florida residents and visitors. This plan serves as the basic statement of policy and direction for the management of Savannas Preserve State Park as a unit of Florida's state park system.

7.5.5 Martin and St. Lucie Regional Waterways Plan, 2014

The purpose of the plan is to identify and prioritize waterway access needs and facilities of the regional waterways system to promote and maximize its economic vitality and public benefit. The plan supports the continuation of many of the counties' extensive, ongoing programs related specifically to the protection of natural systems, recreation and environmental enhancement, public access, and economic development. The plan also highlights a series of key activities that go beyond the ongoing restoration and enhancement activities and recommends that they be prioritized in the next five to ten years.

7.5.6 Martin Grade Scenic Corridor Management Plan, 2014

The Martin Grade Scenic Corridor is an approximately 12-mile long two-lane, minor arterial roadway in western Martin County. The Corridor Management Plan (CMP) was developed under the Corridor Advisory Group (CAG) and with community input through Martin County agencies and the Metropolitan Planning Organization (MPO). The CMP's vision is that the "Martin Grade Scenic Corridor's rare Old-Florida ambiance, scenic beauty, and natural environment are preserved, maintained and enhanced for the enjoyment of countless generations." The CMP proposes to protect this resource through education, awareness and integration into the local tourism economy and also addresses fundraising and sustained community support. The Plan seeks to preserve the canopy trees and other scenic resources along the corridor and envisions a greenway along the Grade, which helps to integrate the Scenic Corridor into the larger tourism economy in the area, and provides access to outdoor, low-impact recreational opportunities in publicly conserved lands. An objective of the CMP is to ensure that protection for the Martin Grade is included in the Martin County Growth Management Plan and Land Development Regulations.

7.5.7 Allapattah Flats Management Area Ten-Year General Management Plan 2014-2024

This plan guides the South Florida Water Management District (SFWMD) in managing the Allapattah Complex, a natural water storage and treatment area in western Martin County. The C-23 canal along the Martin County/St. Lucie County line provides drainage for Allapattah Flats. The plan guides District land management personnel toward ecologically beneficial and cost-effective land management practices. Lands were purchased with funding from the Save Our Everglades Trust Fund, Martin County, the

Natural Resources Conservation Service Wetlands Reserve Program, and the District's Everglades ad valorem tax. The acquisition and restoration of these lands by the District are vital to the restoration of the Everglades and will provide benefit to the Indian River Lagoon through water storage in natural wetland systems.

7.5.8 Jonathan Dickinson State Park Unit Management Plan, 2012

Jonathan Dickinson State Park is located in Martin County and Palm Beach County. The Board of Trustees of the Internal Improvement Trust Fund (Trustees) and the SFWMD hold fee simple title to Jonathan Dickinson State Park. The purpose for acquiring the park was to protect, develop, operate and maintain the property for public outdoor recreation, conservation, historic and related purposes. In addition, the SFWMD management agreement with the Department of Environmental Protection (Department) stipulates that the purpose of the agreement is to promote the restoration, protection and enhancement of the water resources and related environmental values of the Loxahatchee National Wild and Scenic River.

7.5.9 Loxahatchee River National Wild and Scenic River Management Plan, 2010

The Loxahatchee River consists of 10.3 miles of federally designated Wild and Scenic River and provides essential habitats that support a wide spectrum of ecological resources. The Loxahatchee River National Wild and Scenic River Management Plan ensures that special consideration and review is given to the watershed surrounding the river. The principal goals of the plan are to preserve and enhance the river's unique natural values, restore the river's historical hydrology and reverse the deleterious impacts of saltwater intrusion on the river's ecosystems. The 2010 plan update contains an overview of enacting legislation and policy, government agency authority and responsibilities, a description and assessment of natural and cultural resources within the river area, preservation objectives, strategies and tasks and progress to date.

7.5.10 Atlantic Ridge Preserve State Park Unit Management Plan, 2005

Atlantic Ridge Preserve State Park consists of two disjunct sections: Atlantic Ridge and the Medalist. Both sites are located in Martin County about 2.5 miles southwest of Port Salerno and six miles south of Stuart. This management plan serves as the basic statement of policy and direction for the management of Atlantic Ridge Preserve State Park. The plan consists of two interrelated components, resource management and land use. The resource management component provides a detailed inventory and assessment of the natural and cultural resources of the park. The land use component is the recreational resource allocation plan for the unit.

7.5.11 The Central and Southern Florida Project Comprehensive Review Study, 2000

The Central and Southern Florida Project was first authorized by Congress in 1948, and has been updated to improve the quality of the environment, protect water quality in the south Florida ecosystem, improve protection of the aquifer, improve the integrity, capability, and conservation of urban and agricultural water supplies, and improve other water-related purposes. The lead agency of this study, the U.S. Army Corps of Engineers, consulted with other federal agencies and scientists to provide a comprehensive plan for

the restoration, protection, and preservation of the water resources of central and southern Florida, including the Everglades.

7.5.12 Comprehensive Everglades Restoration Plan, 2000

The Comprehensive Everglades Restoration Plan is a framework for preserving and protecting the South Florida ecosystem while providing for other water-related needs of the region, including water supply and flood protection. A series of planning studies led by the U.S. Army Corps of Engineers in partnership with the South Florida Water Management District is underway to determine the next generation of restoration projects as part of the plan. The Loxahatchee River Watershed Restoration Project seeks to restore and sustain the overall quantity, quality, timing, and distribution of fresh water to the federally designated "National Wild and Scenic" Northwest Fork of the Loxahatchee River for current and future generations. This project also seeks to restore, sustain and reconnect the wetlands and watersheds that form the historic headwaters for the river.

7.6 Scenario Planning

The scenario planning effort addresses one of the proactive improvements area as well as emerging issues – Mobility on Demand (MDD), which are included in the FHWA's *Federal Strategies for Implementation Requirements for LRTP Updates for the Florida MPOs, January 10, 2018.* Further, the scenario planning effort integrates FDOT's *Guidance for Accessing Planning Impacts and Opportunities of Automated, Connected, Electric and Shared-Use Vehicles, May 2018.*

The scenario planning exercise is an analytical framework that considers the impact of policy transformation and various investments on the transportation system. Consistent with federal and state guidance to incorporate multiple planning scenarios in the LRTP development process, the purpose of this effort is to evaluate impact of transportation improvements and strategies on travel behavior and transportation network capacity relative to the cost feasible plan. It should be noted that the improvements included in the scenario planning effort are not fiscally constrained. To that end, the scenarios includes projects and strategies that go beyond the 2045 LRTP Cost Feasible Plan.

Two alternative scenarios – Emerging Technologies and Enhanced Transit were developed for the Martin MPO. Each of the scenarios was compared to the Cost Feasible Plan. In addition to evaluating the systemwide performance of these scenarios, a high-level impact on revenues and costs was derived based on available readily available data. A systemwide comparative evaluation provided the Martin MPO an overall framework to allocate resources available as "box items" or "set-aside" funds, make policy decisions regarding revenue sources as well as inform future planning efforts.

In addition to the regional travel demand model - Treasure Coast Regional Planning Model (TCRPM 5.0), some off-model adjustments were made to evaluate the impacts of the two scenarios. A detailed discussion of the assumptions, methodology, and evaluation results of from the scenario planning effort follows.

7.6.1 Enhanced Transit Scenario

An Enhanced Transit Scenario emphasizes investment in public transportation to create a robust bus-based transit network that comprises fixed route bus service, express or commuter service, and Bus Rapid Transit (BRT) service. The emphasis in this scenario is on improving transit rider's experience and thereby attracting new riders. This improved experience includes short travel time, more frequent service or reduced headways, increased span of service, real time passenger information, enhanced bus stops as well as transit signal priority and even exclusive or dedicated lanes in case of BRT corridors. It should be noted that the future year land use and socioeconomic factors were considered to remain unchanged relative to the Cost Feasible Plan⁸. In addition to existing fixed route bus service (Routes 1, 2, 3, 20x, and 30X) operated by MARTY, an Enhanced Transit Scenario comprises expanded transit services included in the Martin County's 2020-2029 Transit Development Plan, August 2019 and two BRT projects along SR-710 and US-1/Federal Highway. **Table 7-5** shows expanded transit service while **Table 7-6** includes BRT projects description and service characteristics as well as transit guideway configuration assumptions.

Project Description	Location/Geography	Improvement Category
Extend Route 2	Add a stop at Halpatiokee Park during peak commute hours, transfer opportunities to Routes 1 and 3. Closed door service during non-peak hours.	Restructure Route
Split Route 3 into Routes 3a and 3b	Same service coverage area but provides new service along Monterey Road between Willoughby Boulevard and US-1/Federal Highway. Maintain existing headways and transfer opportunities to Route 1 and to each other.	Restructure Route
Extend Route 20X	Extend service to Halpatiokee Park to the north and to Mangonia Tri- Rail Station in Palm Bach County to the south during peak commute hours only.	Restructure Route
Add later service for Routes 1, 2 and 3	Increase span of service by approximately 2 hours from 8:00 pm to 10:00pm. Current span of service is approximately 6:00 am to 8:00 pm, weekday service only.	Increase Span of Service
Add Saturday service for Routes 1, 2 and 3	Provide Saturday service from 6:00 am to 8:00 pm on Routes 1, 2 and 3.	Add Saturday Service
Double frequencies for Routes 2 and 3	Reduce headway on Route 2 from 40 minutes (Indiantown loop) and 95 minutes (Closed door eastbound service to Stuart) to 20 minutes and 48 minutes respectively. Reduce headway on Route 3 from 40 to 20 minutes.	Reduce Headway
New Jensen Beach Route	From Treasure Coast Square to Jensen Beach Park (serving Hoke Library, Jensen Beach Park, Hutchinson Island and Kiwanis Park- and-Ride).	New Service
New regional Turnpike commuter route to West Palm Beach Downtown Intermodal Transit Center	From US-1/Federal Highway and Kanner Highway to Intermodal Transit Center (serving FDOT Park-and-Ride at SW Martin Highway, West Palm Beach Virgin Trains USA/Brightline station, City Place and Palm Tran's Intermodal Transit Center). Peak hour service only with two morning and two evening trips.	New Service

⁸ No changes were made to the 2045 land use and socioeconomic in the regional travel demand model (TCRPM 5.0). Holding the land use constant allowed for evaluating the impact of enhanced transit service on ridership, mode split and transportation network capacity between the Cost Feasible Plan and Enhanced Transit scenario.

BRT Corridor	From/To	Span of Service	Headway (in minutes) (Peak/Off- Peak)	Transit Guideway Configuration	Station Location
SR-710	Martin /Palm Beach County Line to Indiantown (Indianwood Drive/SR-710)	6:00 am to	10/20	Dedicated lanes for bus in addition to	Every half mile
US-1/Federal Highway	Martin /Palm Beach County Line to Port St. Lucie (just south of St. Lucie Blvd.)	8:00 pm	10/20	existing general-purpose travel lanes.	or major intersections

Table 7 6. Due De	nid Tranait (DDT)	Drojooto	Enhanced Transit Coor	aria
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Compared to the 2045 Cost Feasible Plan, an Enhanced Transit Scenario provides approximately three to four times more transit service, an increase of approximately 311% revenue miles and almost 378% vehicle hours of local, express, and BRT service.

7.6.2 Emerging Technologies Scenario

Technical Memorandum #2 –*Data Compilation, Review and Summary* provides a detailed discussion on emerging technologies and its impact on transportation and land use as well as evolution of the industry based on comprehensive literature review. Further, it describes Martin County's Intelligent Transportation Systems (ITS) network and discusses the Florida Department of Transportation's (FDOT) guidance on incorporating emerging technologies in the MPO's LRTP process as well as introduces initial assumptions for scenario planning exercise.

The proliferation of automated and connected vehicles, ride-hailing, bikesharing, microtransit, e-scooters, and at some point, autonomous trucks presents both challenges and opportunities for communities and public transit operators. The level of disruption and the impacts on land development, vehicle miles traveled, pollutant emissions, public transit ridership, and other key quality of life factors brings levels of uncertainty not seen in transportation since the advent of the automobile.

With respect to emerging technologies, the Martin MPO's 2045 LRTP scenario planning effort provides a framework that allows for existing and yet to be determined mobility options to contribute to economic development and quality of life while minimizing harmful unintended consequences. This approach acknowledges that automation, connectivity, and electrification will bring about significant changes that expand the diversity of transportation choices, and that these choices will involve increased participation by the private sector making greater use of shared fleets as a business model. It is important to recognize that the readiness of many technologies and corresponding services and products is overstated. Accordingly, a continued focus on actions that improve safety, decrease delay, and increase reliability under various levels of market penetration of these services and products is warranted rather than expending effort in an attempt to guess or select which ones will be successful at what point in time.

Given the uncertainty of when ACES and other emerging technologies will come online, it is prudent to plan around thresholds in addition to timeframes. FDOT in its *Guidance for Assessing Planning Impacts and Opportunities of Automated, Connected, Electric,* *and Shared-Use Vehicles, May 2018* incorporates the six Connected Vehicle/AV Scenarios developed by the Federal Highway Administration (**Figure 7-17**).

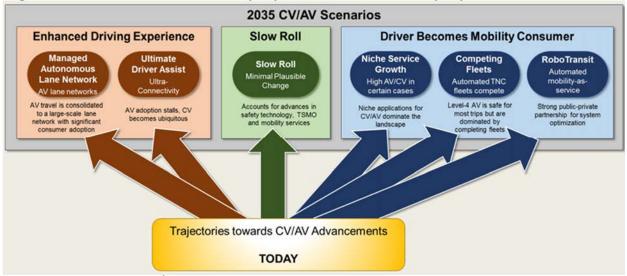


Figure 7-17: Connected Vehicle (CV)/Automated Vehicle (AV) Scenarios

Consistent with FDOT's guidance, Emerging Technologies Scenario assumes a certain level of market penetration of AVs or EVs for the planning horizon 2045 to evaluate the interplay between the technology and travel behavior as well as impacts on the transportation network¹⁰. Given the socioeconomic and demographic profile of Martin County, size of the metropolitan area and modest growth in jobs and population over the next 25 years, "Slow Roll" ACES scenario was considered to be a "good fit" and selected for further analysis. **Table 7-7** shows detailed assumptions for the six ACES scenarios included in **Figure 7-17** as well as highlights key AV/CV and EV sales and shared trips characteristic for "Slow Roll" scenario.

Slow Roll – Minimum plausible change – Nothing beyond currently available technology and investments already in motion.

Source: USDOT, November 20179

⁹ USDOT 5th ITS PCB University Workshop, Role of Connected and Automated Vehicles in Planning, November 2017 viewed on July 16, 2019 at https://www.pcb.its.dot.gov/universityworkshops/Nov2017/Day1_Azizi.pdf.

¹⁰ Land use and socioeconomic changes resulting from emerging technologies were not evaluated as part of the scenario planning effort.

	LRTP Goal	Slow Roll	Niche Service Growth	Ultimate Traveler Assist	Managed Automated Lane Network	Competing Fleets	RoboTransit
		Minimum plausible change - Nothing beyond currently available technology and investments already in motion is adopted. (Baseline for comparison)	Innovation proliferates, but only in special purpose or 'niche'' AV zones, including retirement communities, campuses, transit corridors, urban cores, and ports.	CV technology progresses rapidly, but AV stagnates – 85% of vehicles have V2X capability by 2035 due to NHTSA mandate allowing DOTs to manage congestion aggressively.	Certain lanes become integrated with CV and AV – 50-60% of vehicles (75% of trucks) have automation capability for platooning in controlled settings.	Automated TNC-like services proliferate rapidly, but do not operate cooperatively. VMT doubles due to induced demand and empty vehicle repositioning.	On-demand shared services proliferat and integrate with other modes via cooperative data sharing, policies, and infrastructure.
9	AVs-L2	50 - 60%	50 - 60%	50 - 60%	30 - 40%	30 - 40%	30 - 40%
2035	AVs-L3	0%	0%	0%	20%	1%	0%
12	AVs-L4	0% / 0%	1-5%/1-5%	0%	1%	30%	30%
res	CVs in Fleet	40%	40%	85%	75%	75%	75%
Share	EV Sales (urban/all)	15% / 5 - 10%	15% / 5 - 10%	15% / 5 - 10%	15% / 5 - 10%	85% / 85%	85% / 85%
ACES	Shared Trips (urban/all)	20% / 5 – 10%	20% / 5 – 10%	20% / 5 – 10%	20%/5-10%	85% / 85%	85% / 85%
_	Safety & Security	tracking, automatic braking) reduce	Prevalence of AVs allows "Vision Zero" goals to be realized in AV zones. Level 2 features improve safety elsewhere.	V2V communications enable 80% reduction in crashes systemwide.	V2V communications enable significant (but less than 80%) reduction in crashes systemwide.	Automated fleets and V2V communications enable 80% reduction in crashes systemwide, including realization of "Vision Zero" in urban areas.	Automated fleets and V2V communications enable 80% reduction in crashes systemwide, including realization of "Vision Zero" in urban areas.
	Maintenance and Operations		Improvements to lane markings, pavement maintenance and new V2X infrastructure are concentrated in AV zones.	CV roadside units proliferate to cover all roads with V2I infrastructure.	AV-only lanes on rural interstates and urban expressways and separate freight corridors allow for safe, efficient and automated travel. Eco-signal corridors reduce congestion and emissions in urban cores. Cooperative use of CV data allows DOTs to improve network operations systemwide.	Suburban freight centers are interface between automated long-haul trucking and local delivery. Evenly distributed EV charging network serves fleets. Maintenance of lane markings and pavement improves for AVs. Restricted data sharing prevents optimization of road capacity, increasing congestion.	Suburban freight centers are interface between automated long-haul trucking and local delivery. Evenly distributed EV charging network serves fleets. Maintenance of lane markings and pavement improves for AVs. Cooperative use of CV data allows DOTs to improve network operations systemwide, nearly eliminating congestion.
	Mobility and Connectivity	Mobility services reduce car ownership near urban cores, while increasing travel by elderly and disabled populations everywhere.	Car ownership falls dramatically in AV zones as residents shift to local mobility services.	Public transit improves efficiency, competitiveness and customer service due to real-time pricing, universal trip planning and multimodal integration.	Mobility services reduce car ownership near urban cores, while increasing travel by elderly and disabled populations everywhere. Transit becomes less competitive with managed lanes.	Vigorous competition between mobility service providers drives many toward car-free lifestyles. Door-to-door, transportation as low as \$0.20/mile is available in most contexts, outcompeting traditional transit.	Personal mobility becomes a commodity, integrating door-to-door and fixed quideway transit in urban corridors. Automated long-haul and local freight makes immediate consumption universal. Regions offer universal shared mobility services as low as \$0.20/mile.
	Economic Competitiveness	Widespread use of real-time travel info reduces costs of congestion.	AV zones gain significant advantages from efficient transportation, leading to increased desirability and rising real estate values.	Near elimination of congestion through cooperative dynamic routing and pricing incentives improves economic productivity.	Reduced congestion and automated trucking improve economic productivity.	Costs of local travel and long-haul trucking plummet due to automation, increasing economic productivity. Induced demand offsets savings with congestion costs.	Near elimination of congestion through cooperative dynamic routing and pricing incentives, combined with driverless travel, dramatically improver economic productivity.
5.	Community Livability		Quality of life improves in AV zones, leading to concerns about equitable access to technology benefits outside niche areas.		Businesses locate outside of the urban core and people to move to the suburbs and exurbs near managed lanes.	Parking is converted to other uses in urban and suburban areas.	Parking is converted to other uses in urban and suburban areas. Walkable mixed-use development dominates in transit corridors.
	Environmental Stewardship	Electrification trend continues, decarbonizing the transportation sector and reducing emissions.			Automation of long-haul trucking reduces rail mode share and convenience of driving reduces transit mode share, increasing VMT and emissions.	Fleets use EVs exclusively, making 85% of urban VMT (plus 50% suburban and 5% rural) electric, greatly reducing emissions. Gains are offset by VMT increases.	Fleets use EVs exclusively, making 85% of urban VMT (plus 50% suburban and 5% rural) electric, greath reducing emissions. Shared use reduces offsetting VMT gains.

Table 7-7: ACES Potential Scenarios: Impacts on Progress toward Planning Goals

Source: FDOT's Guidance for Assessing Planning Impacts and Opportunities of Automated, Connected, Electric, and Shared-Use Vehicles, May 2018

7.6.3 Methods of Evaluation

As described in Sections 4.1.1 and 4.1.2, each scenario consists of a unique set of transportation improvements. Having non-overlapping improvements as well as consistent land use and socioeconomic data for both the scenarios as well as the 2045 LRTP Cost Feasible Plan helped evaluate the impact of policy transformation and investments on the transportation system and explain the performance of each scenario. Both the Enhanced Transit and Emerging Technologies scenarios were evaluated using the regional travel demand forecast model (TCRPM 5) and compared against the 2045 LRTP Cost Feasible Plan approved by the Martin MPO Policy Board in June 2020. Performance measures for evaluating the scenarios using TCRPM included:

- Vehicle Miles Traveled (VMT)
- Vehicle Hours Traveled (VHT)
- Congestion speed
- Transit ridership
- Trip length

In addition to using TCRPM, certain performance measures were evaluated using offmodel techniques based on literature review and empirical data. Appropriate adjustments were made to performance measures to reflect local planning context. Off model calculations were used to determine the impact on the following performance measures:

- Greenhouse gas (GHG) emission
- Energy consumption
- Safety (Crashes)
- Transportation revenue (Funding)

The following is a brief description of the scenarios along with the discussion of modeling methodology for the two scenarios.

7.6.3.1 Regional Travel Demand Model

To evaluate performance measures, such as, VHT, VMT, congested speed, transit ridership, and trip length, the regional travel demand model – Treasure Coast Regional Planning Model (TCRPM) 5.0 was used.

Enhanced Transit Scenario Modeling Approach – New BRT routes, headways, and span of service adjustments for fixed route bus service and new commuter route was coded in the regional travel demand model. Fixed bus route modifications were coded based on transit networks provided by Martin County while span of service adjustments were incorporated in appropriate transit input files.

Because both the new BRT routes serve residents from Palm Beach in addition to Martin County residents, it was necessary to develop an external transit trip table to estimate the number of transit trips coming to and from Palm Beach County. Unlike other travel demand models or vehicle trip tables which are traffic analysis zone/micro analysis zone (TAZ/MAZ) based, the transit trip table in TCRPM 5.0 is based on Transit Access Points (TAP), which are pseudo-TAZs where transit boarding and alighting take place. The relevant steps in TCRPM model were run first to generate a list of TAPs, including TAPs

serving the external stations where transit trips from and to Palm Beach occur. The transit trip interchanges were developed using 2012-2016 ACS/CTPP county-to-county flows and mode share information. To account for the mode shift from auto trips to BRT trips, external-internal/internal-external (EI/IE) trips were adjusted accordingly. The model was run with the 2045 socioeconomic data, cost-feasible highway network, extended transit network, and newly developed EI/IE transit trip table and revised IE/EI vehicle trip table.

Emerging Technologies Scenario Modeling Approach - To model the impact of the "Slow Roll" Scenario, no changes were made to either the highway network or the transit network. However, it was assumed that there will be a 2.5% increase in vehicle trips to account for demand from underserved transportation market and a 5% reduction in transit trips to account for the mode shift from transit vehicles to ACES. On the supply side, because of the efficiencies resulting from enhanced safety features and better communication between the vehicles, it was assumed that there will be an increase in roadway capacity. In the TCRPM 5.0 model, the capacities for limited access facilities and freeways were increased by 5%, and capacities for uninterrupted arterials were increased by 2%. The capacities for other facilities remained the same. The model was run with the 2045 socioeconomic data, cost-feasible network, and revised trip tables and roadway capacities.

7.6.3.2 Off Model Adjustments

To evaluate performance measures such as GHG emission, energy consumption, safety (crashes), and transportation revenue (funding) as well as account for VMT resulting from shared-use vehicle and electric vehicles, off-model adjustments were applied based on available literature and empirical data. Below is a short discussion of off-model techniques and methodology used for each evaluation parameter.

Greenhouse gas (GHG) emission – Estimates for GHG emission were developed for each scenario by multiplying passenger miles for a given mode times emission rates per passenger mile from *Cato Institute's Policy Analysis, "Does Rail Transit Save Energy or Reduce Greenhouse Gas Emissions?", published April 14, 2008.* For transit, average passenger trip length was based on 2019 Florida Transit Information and Performance Handbook, FDOT.

Energy consumption - To calculate the daily energy cost, the average kilowatt per hour rate from Florida Power & Light (FPL) was multiplied by the daily energy use under each scenario. Energy consumption rates for various modes and technology were based on *Cato Institute's Policy Analysis, "Does Rail Transit Save Energy or Reduce Greenhouse Gas Emissions?", published April 14, 2008.*

Safety (Crashes) – A range for potential reduction in crashes for Emerging Technologies scenario, which translates to improvement in safety for all users of the transportation system was based on FDOT's *Guidance for Assessing Planning Impacts and Opportunities of Automated, Connected, Electric, and Shared-Use Vehicles, May 2018,* which in turn uses Insurance Institute for Highway Safety study that provides a summary of the Institute's estimated reduction of various in-vehicle technologies.

Transportation revenue (Funding) – Change in anticipated federal, state, and local fuel taxes comprising transportation infrastructure funding resulting from an increased market share of autonomous vehicles and electric vehicles was estimated based on *Autonomous Vehicle (AV) and Alternative Fuel Vehicle (AFV) Florida Market Penetration Rate and VMT Assessment Study, Center for Urban Transportation Research (CUTR), October 2019.*

7.6.4 Scenario Evaluation

As explained in Section 7.6.3, Enhanced Transit and Emerging Technologies scenarios were evaluated on a host of performance measures using the regional travel demand model and off-model calculations. The following is a description and comparison of evaluation results for the Enhanced Transit and Emerging Technologies scenarios relative to Martin MPO's 2045 LRTP Cost Feasible Plan. It should be noted that performance measures for Existing and Committed (E+C) Network with 2045 Land Use Data¹¹ are provided for reference purposes as well as to establish context for the 2045 Cost Feasible Plan baseline. In the figures below, the yellow triangle indicates change relative to the E+C Network while the green triangle shows change relative to the 2045 Cost Feasible Plan for any given performance measure.

7.6.4.1 Vehicle Miles Traveled (VMT)

Daily VMT represents the total travel demand on an average weekday in Martin County. **Figure 7-18** indicates that travel demand reduces marginally by approximately 0.2% in an Enhanced Transit Scenario while it increases by approximately 3.2% under Emerging Technologies Scenario.

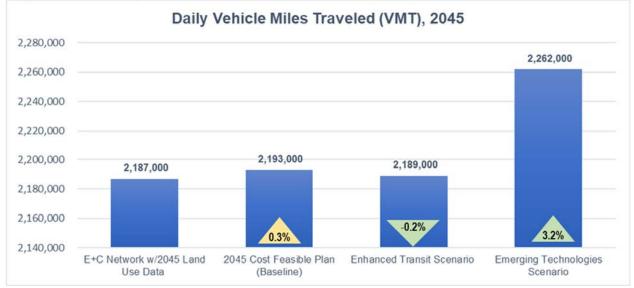


Figure 7-18: Daily Vehicle Miles Traveled, All Trip Purposes, 2045

¹¹ E+C network with 2045 land use and socioeconomic data represents the 2045 Needs Assessment model outputs. This illustrates impact on the transportation network in Martin County if no additional improvements beyond those included in the FY 2020/21-FY 2024/25 are implemented.

While different levels of automation and market penetration will have varying impacts on travel demand, one way AVs can affect vehicle travel demand is through supplying shared mobility services to the currently underserved transportation markets, including youth, the elderly, and those with driving-prohibitive medical conditions. For Martin County, it is estimated that approximately 3% increase (or 66,000) in daily VMT could be attributed to shared mobility¹² resulting from AVs under Emerging Technologies scenario. Further, all the VMT for shared mobility would comprise an electric vehicle (EV) fleet. In addition, another 2% eVMT is estimated from personal automobiles as well as commercial usage. Overall, eVMT could comprises 5% of the total VMT in Martin County for Emerging Technologies Scenario¹³.

7.6.4.2 Vehicle Hours Traveled (VHT)

VHT is the total number of hours that all automobiles spend on the road during an average weekday. **Figure 7-19** shows the system-wide measurement of VHT in the County. The results for the two scenarios are in the same general direction relative to the 2045 Cost Feasible Plan in that VHT reduces marginally by approximately 0.5% and increases by approximately 4.7% in Enhanced Transit and Emerging Technologies Scenarios respectively.

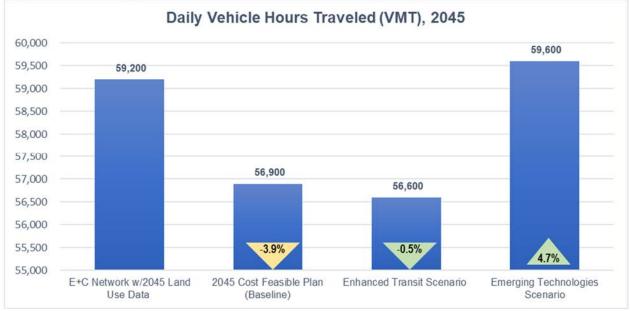


Figure 7-19: Daily Vehicle Hours Traveled, All Trip Purposes, 2045

¹² Estimated impact of new travel demand from the underserved population can result in a 2% to 14% increase in VMT. Between 2035 and 2048, AV market penetration will result in gradual increase in VMT from 3.8% to 15%. (Source: *Autonomous Vehicle (AV) and Alternative Fuel Vehicle (AFV) Florida Market Penetration Rate Study, Center for Urban Transportation Research (CUTR), October 2019*).

¹³ By 2048, eVMT is projected to account for approximately 25.1% of total VMT in Florida. (Source: *Autonomous Vehicle (AV) and Alternative Fuel Vehicle (AFV) Florida Market Penetration Rate Study, Center for Urban Transportation Research (CUTR), October 2019*).

The reduction in VHT of approximately 3.9% in the 2045 Cost Feasible Plan compared to the E+C Network despite a slight increase in travel demand demonstrates that transportation investments in the Plan help improve mobility in the County.

7.6.4.3 Congested Speed

Congested speed measured in miles per hour (mph) for the transportation network affects travel time. At the systemwide level, lower congested speeds imply longer travel time between various origins and destinations in the County and vice versa. The change in congested speed between various scenarios shows either an improvement or degradation in travel time during to traffic congestion. This performance measure is highly correlated to the VHT. Lower congested speeds and longer travel time will generally result in higher VHT.

In Enhanced Transit Scenario, congested speeds show slight improvement of approximately 0.7% compared to the 2045 Cost Feasible Plan on a daily basis. Improvement in congested speeds can be expected to be higher in select corridors, especially those with BRT service during peak hours due to an increase in transit ridership. However, since transit mode split is miniscule one cannot expect dramatic changes in congested automobile speeds. On the other hand, congested speeds degrade under Emerging Technologies Scenario by approximately 2.3% (**Figure 7-20**). However, it should be noted that degradation in congested speed is not proportional to increase in travel demand (VMT) at 3.2% and VHT at 4.7%. This indicates that the transportation network in Martin County can absorb higher travel demand to some extent due to an increase in roadway capacity from efficiencies yielded by ACES.



Figure 7-20: Congested Speed, 2045

Further, this metric demonstrates that as ACES comprise a larger market share, higher travel demand and resulting congestion will require Martin MPO to consider transportation

investment in a variety to Intelligent Transportation System (ITS)/TSM&O infrastructure to network efficiency.

An improvement of approximately 9.5% in congested speeds in the 2045 Cost Feasible Plan compared to the E+C Network despite an increase in travel demand illustrates that transportation investments in the Plan help improve mobility in the County.

7.6.4.4 Average Trip Length

Average auto trip length (the average distance traveled in miles) combined for all trip purposes remained constant at 6.7 miles in both an Enhanced Transit and Emerging Technologies Scenarios, as shown in **Figure 7-21**.

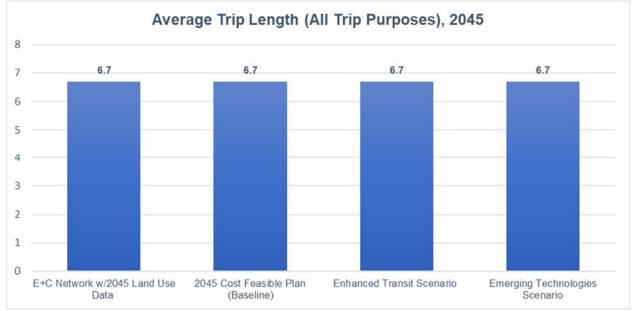


Figure 7-21: Average Trip Length, All Trip Purposes, 2045

Since land use and socioeconomic data was static between various scenarios, it was expected that changes in average length would not occur. Jobs and housing location decisions are affected by transportation facilities and choices in the long term, which will likely impact travel behavior and trip lengths under the two scenarios.

7.6.4.5 Transit Ridership

Transit ridership measures the number of daily boardings (unlinked transit trips) on all public transportation modes, such as, local, commuter and BRT service in Martin County. Enhanced Transit Scenario showed a dramatic increase of approximately 782% in daily ridership compared to the 2045 Cost Feasible Plan (**Figure 7-22**).



Figure 7-22: Daily Transit Ridership, 2045

However, it should be noted that the under this scenario transit service levels were increased by approximately 311% revenue miles and almost 378% vehicle hours of local, express, and BRT service. This represents almost three to four times more transit service relative to the 2045 Cost Feasible Plan. Further, the increased transit boardings includes riders that transfer from local bus to express or commuter bus as well as BRT service. Typically, transfers account for 40% to 50% of the transit boardings. In other words, the proportion of "net new riders" may be not as significant as the total increase transit boardings.

Under Emerging Technologies Scenario, ridership is expected to reduce by approximately 13% relative to the 2045 Cost Feasible Plan. While the travel demand model considers mode choice in a sequential and objective manner, the real-world impacts may be more nuanced. The Marty may focus on shared mobility for enhancing first and last mile connection, re-direct resources in priority corridors, offer Mobility on Demand (MOD) services in certain areas as well as partner with Transportation Network Companies (TNCs) to provide weekend and night service as well as paratransit service.

7.6.4.6 Greenhouse Gas (GHG) Emission

Carbon dioxide is one of the key components that exacerbates climate change and sea level rise. The transportation sector accounts for approximately 28% of GHG emissions. As shown in **Figure 7-23**, the Enhanced Transit and Emerging Technologies scenarios have positive impacts on GHG reduction. This can be explained due to shift from driving to transit and impact of AVs/EVs in Enhanced Transit and Emerging Technologies scenarios scenarios respectively.

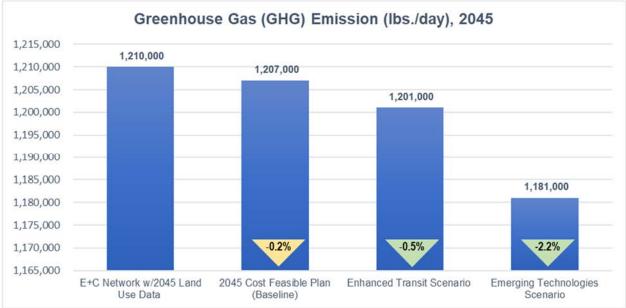


Figure 7-23: CO₂ Emissions (lbs./day), 2045

Since full EVs have zero tailpipe or direct emissions, an Emerging Technologies Scenario has a larger impact on reducing GHG emission compared to an Enhanced Transit Scenario. However, it should be noted emissions may be produced by the source of electrical power, such as a power plant.

7.6.4.7 Energy Consumption

Energy consumption was measured in terms of daily energy cost under various scenarios (**Figure 7-24**). Calculations were based on mode specific energy consumption rates.



Figure 7-24: Daily Energy Cost, 2045

The energy consumption rates were converted in kilowatt hour unit and multiplied by FPL rates to develop energy costs. As shown in **Figure 7-24**, both scenarios drive down the energy consumption with an Emerging Technologies Scenario outperforming an Enhanced Transit Scenario.

7.6.4.8 Safety (Crashes)

There is industry wide recognition of various types of safety features built into AVs/CVs and its potential to reduce crashes. According to Insurance Institute for Highway Safety (IIHS), basic forward-collision warning systems attribute to a seven percent reduction in crashes and automatic braking results in a reduction of 14% to 15%. With fully self-driving cars (Automation Level 4 or 5) crashes can be reduced up to 90 percent.

It should be noted that automated vehicles may have less impact on the overall safety because they represent only part of the predicted vehicle fleet, even by the year 2045, and cannot mitigate for human-controlled vehicles. For Emerging Technologies scenario, it is anticipated that crashes could be reduced by two to three percent.

7.6.4.9 Transportation Revenue (Funding)

The Autonomous Vehicle (AV) and Alternative Fuel Vehicle (AFV) Florida Market Penetration Rate and VMT Assessment Study, October 2019 conducted by Center for Urban Transportation Research (CUTR) estimates that between State Fiscal Year (SFY) 2017/2018 to SFY 2047/2048, an increased adoption of AFVs and AVs will negatively impact tax revenue generation.

The transportation revenue losses will occur gradually as the AV and AFV industry matures and the share of eVMT as a percentage of total VMT increases¹⁴. In the 10-year period between SFY 2017/2018 to SFY 2027/208, fuel-based state revenue shortfall will range from less than one percent to 1.3% annually. Over the 30-year period from SFY 2017/2018 to SFY 2047/2048, the cumulative impact of AFV and AV market penetration will result in \$18.3 billion in revenue losses, which is approximately eight percent of federal, state, and local fuel taxes. In SFY 2047–48, annual revenue losses will be about to about 26 percent of federal, state, and local fuel taxes.

Consistent with state level trends projected in the CUTR Study, it is assumed that transportation funding shortfall under Emerging Technologies Scenario will range from seven to nine percent over the 20-year period between 2026 to 2045.

To address potential transportation funding shortfalls, the Martin MPO could consider policy options, including imposing AFV fees and taxes, adjusting motor fuel excise taxes to better reflect the energy content of fuels (emission fees), mileage-based transportation funding options (road user fee/VMT fee), congestion pricing and tolling, and public-private partnership models to fund transportation infrastructure.

¹⁴ Total eVMT in Florida is projected to reach 47.5 billion by 2048, accounting for about 14.0 percent of the overall VMT in the state (baseline scenario). Under a scenario of high growth in total Florida VMT, eVMT is projected to reach 12.5 percent of the overall state VMT in 2048. In the low-growth scenario, eVMT is forecasted to account for 16.1 percent of the total annual VMT.

7.6.5 Summary

Table 7-8 provides a summary of all the scenarios compared to the 2045 LRTP Cost Feasible Plan baseline across all performance measures. The data for Existing and Committed (E+C) Network with 2045 Land Use is provided for reference purposes as well as to establish context for baseline 2045 Cost Feasible Plan.

Performance Measures	E+C Network w/2045 Land Use Data	2045 Cost Feasible Plan (Baseline)	Enhanced Transit Scenario	Emerging Technologies Scenario
Vehicle Miles Travelled (VMT), Daily	2,187,000	2,193,000	2,189,000	2,262,000
e-VMT, Daily	-	11,000	22,000	113,000
Shared-Use VMT, Daily	-	4,000	22,000	66,000
Absolute Change from CFP	-	6,000	(4,000)	69,000
Percent Change from CFP	-	0.3%	-0.2%	3.2%
Vehicle Hours Travelled (VHT), Daily	59,200	56,900	56,600	59,600
Absolute Change from CFP	-	(2,300)	(300)	2,700
Percent Change from CFP	-	-3.9%	-0.5%	4.7%
Congested Speed (mile per hour), Original	-6.30	-5.70	-5.66	-5.83
Absolute Change from CFP	-	0.6	0.0	(0.1)
Percent Change from CFP	-	9.5%	0.7%	-2.3%
Trip Length (miles)	6.7	6.7	6.7	6.7
Absolute Change from CFP	-	0.0	0.0	0.0
Percent Change from CFP	-	0%	0%	0%
Transit Ridership (Unlinked Trips), Daily	860	940	8,290	820
Absolute Change from CFP	-	80	7,350	(120)
Percent Change from CFP	-	9%	782%	-13%
Greenhouse Gas Emissions (CO2 lbs./day)	1,210,000	1,207,000	1,201,000	1,181,000
Absolute Change from CFP	-	(3,000)	(6,000)	(26,000)
Percent Change from CFP	-	-0.2%	-0.5%	-2.2%
Energy Cost, US dollars (Daily)	\$216,048	\$215,923	\$214,938	\$214,445
Absolute Change from CFP	-	(\$125)	(\$1,110)	(\$1,603)
Percent Change from CFP	_	-0.1%	-0.5%	-0.7%
Safety Change from CFP	-	-	-	-2% to -3%
Transportation Revenue Change from CFP	-	-	-	-7% to -9%

 Table 7-8: Comparative Scenario Evaluation Summary

The focus of scenario planning effort was to provide the Martin MPO an analytical framework that considers the impact of policy transformation and various investments on the transportation system. Further, the intent of scenario planning is not to necessarily choose one scenario over the other but rather use the information to inform resource allocation between competing interests as well as proactively plan for technology disruptions in the transportation sector.

The following observations are worth noting:

- Having a significant impact on systemwide VMT and VHT is difficult.
- Long term decisions related to job and housing locations are key factors that affect trip length and other related factors such overall number of trips, congestion and GHG emissions.
- Transit ridership is sensitive to frequency and speeds.
- There is no silver bullet to alleviate congestion, and certainly emerging technologies cannot be relied upon to solve traffic congestion and safety issues.
- Elected officials need to consider policy options to address transportation funding shortfalls in the future years.
- Communities need to proactively invest in transportation infrastructure improvements to take full advantage of emerging technologies. The infrastructure improvements include road markings and signage, managed/dedicated AV lanes, the addition of drop-off lanes, ITS roadside devices to enhance vehicle-toinfrastructure (V2I) capabilities, and demand management strategies.

7.7 System Performance Report

7.7.1 Background

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

On May 27, 2016, the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) issued the Statewide and Nonmetropolitan Transportation Planning; Metropolitan Transportation Planning Final Rule (The Planning Rule).¹⁵ This rule details how state DOTs and MPOs must implement new MAP-21 and FAST Act transportation planning requirements, including the transportation performance management provisions.

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

¹⁵ The Final Rule modified the Code of Federal Regulations at 23 CFR Part 450 and 49 CFR Part 613.

performance of the transportation system and how changes in local policies and investments have impacted the costs necessary to achieve the identified targets.¹⁶

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

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

The Martin MPO 2045 LRTP *Martin in Motion* was adopted on **October 19, 2020**. Per the Planning Rule, the System Performance Report for the Martin MPO is included for the required Highway Safety (PM1), Bridge and Pavement (PM2), System Performance (PM3), and Transit Asset Management sections.

7.7.2 Highway Safety Measures (PM 1)

Effective April 14, 2016, the FHWA established five highway safety performance measures¹⁷ to carry out the Highway Safety Improvement Program (HSIP). These performance measures are:

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

The Florida Department of Transportation (FDOT) publishes statewide safety performance targets in the HSIP Annual Report that it transmits to FHWA each year. Current safety targets address calendar year 2020. For the 2020 HSIP annual report, FDOT established statewide at "0" for each performance measure to reflect Florida's vision of zero deaths.

The Martin MPO adopted/approved safety performance targets on February 17, 2020. **Table 7-9** indicates the areas in which the MPO is expressly supporting the statewide target developed by FDOT.

¹⁶ Guidance from FHWA/FTA for completing the preferred scenario analysis is expected in the future. As of June 2020, no guidance has been issued.

¹⁷ 23 CFR Part 490, Subpart B

Table 7-9: Highway Safety (PM1) Targets

Martin MPO agrees to plan and program projects so that they contribute toward the accomplishment of the FDOT safety target of zero
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Source: Martin MPO TIP, FY 2020/21-FY2024/25

Statewide system conditions for each safety performance measure are included in **Table 7-10**, along with system conditions in the Martin MPO metropolitan planning area. System conditions reflect baseline performance (2013-2017). The latest safety conditions will be updated annually on a rolling five-year window and reflected within each subsequent system performance report, to track performance over time in relation to baseline conditions and established targets.

	Florida S	Calendar Year 2020 Florida Performance Targets		
Performance Measures	2012-2016	2013-2017	2014-2018	
Number of Fatalities	2,688.2	2,825.4	2,972.0	0
Rate of Fatalities per 100 Million VMT	1.33	1.36	1.39	0
Number of Serious Injuries	20,844.2	20,929.2	20,738.4	0
Rate of Serious Injuries per 100 Million VMT	10.36	10.13	9.77	0
Number of Non-Motorized Fatalities and Non-Motorized Serious Injuries	3,294.4	3,304.2	3,339.6	0

Table 7-10: Highway Safety (PM1) Conditions and Performance

7.7.2.1 Baseline Conditions

To evaluate baseline Safety Performance Measures, the most recent five-year rolling average (2013-2017) of crash data and VMT were utilized. **Table 7-11** presents the Baseline Safety Performance Measures for Florida and Martin MPO.

Performance Target	Florida (Five-Year Rolling Average 2013-2017)	Martin MPO (Five-Year Rolling Average 2013-2017)
Number of fatalities	2,825.4	23.2
Rate of fatalities per 100 million vehicle miles traveled (VMT)	1.36	1.59
Number of serious injuries	20,929.2	80.6
Rate of serious injuries per 100 million vehicle miles traveled (VMT)	10.13	5.63
Number of non-motorized fatalities and serious injuries	3,304.2	10.2

Table 7-11: Baseline Safety Performance Measures

7.7.2.2 Trends Analysis

The process used to develop the MPO's Long-Range Transportation Plan includes analysis of safety data trends, including the location and factors associated with crashes with emphasis on fatalities and serious injuries. These data are used to help identify regional safety issues and potential safety strategies for the LRTP and TIP.

Safety Programs and Investment Priorities in the TIP - Consistent with the Martin MPO's 2045 LRTP – *Martin in Motion*, the TIP includes funding which is used for programs that improve safety in areas with a high number of bicycle and pedestrian crashes. The TIP includes planning funds that are used by the MPO to educate and reinforce the message of how to walk, bicycle and drive safely.

The 2020/21 - 2024/25 TIP includes over \$10 million in projects relative to the NHS that improve safety conditions County-wide. These projects fall in the categories below.

- Bicycle Lane/Sidewalk
- Traffic control devices/system
- Safety projects
- Add turning lanes
- Pavement markings
- Corridor improvements

The Martin MPO continues monitoring investments in the TIP and demonstrating progress toward LRTP goals and objectives.

7.7.2.3 Coordination with Statewide Safety Plans and Processes

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

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

7.7.2.4 Martin in Motion Safety Priorities

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

The LRTP identifies safety needs within the metropolitan planning area and provides funding for targeted safety improvements. The Martin MPO has developed a project selection process that results in the prioritization of projects that are likely to reduce fatalities and serious injuries and increase safety performance. To that end, the 2045 LRTP – *Martin in Motion* includes a Safety Goal with corresponding objective and performance measures. The project prioritization methodology includes fatalities and serious injuries as evaluation criteria to select projects. The 2045 Cost Feasible Plan includes several projects that will help improve safety of the Martin County transportation system, including capacity and operational improvements, redesigns of roadway segments, grade separations, transportation systems management and operation (TSM&O), roadway and access improvements, and complete streets projects as well as non-motorized improvements.

The Martin MPO 2045 LRTP – *Martin in Motion* will provide information from the FDOT HSIP annual reports to track the progress made toward the statewide safety performance targets. The MPO will document the progress on any safety performance targets established by the MPO for its planning area.

7.7.3 Pavement and Bridge Condition Measures (PM2)

7.7.3.1 Pavement and Bridge Condition Performance Measures and Targets Overview

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

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

Five metrics are used to assess pavement condition:

- International Roughness Index (IRI) an indicator of roughness; applicable to asphalt, jointed concrete, and continuous concrete pavements;
- Cracking percent percentage of the pavement surface exhibiting cracking; applicable to asphalt, jointed concrete, and continuous concrete pavements;
- Rutting extent of surface depressions; applicable to asphalt pavements only;
- Faulting vertical misalignment of pavement joints; applicable to jointed concrete pavements only; and
- Present Serviceability Rating (PSR) a quality rating applicable only to NHS roads with posted speed limits of less than 40 miles per hour (e.g., toll plazas, border crossings). States may choose to collect and report PSR for applicable segments as an alternative to the other four metrics.

For each pavement metric, a threshold is used to establish good, fair, or poor condition. Using these metrics and thresholds, pavement condition is assessed for each 0.1 mile section of the through travel lanes of mainline highways on the Interstate or the non-Interstate NHS. Asphalt pavement is assessed using the IRI, cracking, and rutting metrics, while jointed concrete is assessed using IRI, cracking, and faulting. For these two pavement types, a pavement section is rated good if the rating for all three metrics are good, and poor if the ratings for two or more metrics are poor.

Continuous concrete pavement is assessed using the IRI and cracking metrics. For this pavement type, a pavement section is rated good if both metrics are rated good, and poor if both metrics are rated poor. If a state collects and reports PSR for any applicable segments, those segments are rated according to the PSR scale. For all three pavement types, sections that are not good or poor are rated fair.

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

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

The bridge measures are expressed as the percent of NHS bridges in good or poor condition. The percent is determined by summing the total deck area of good or poor NHS bridges and dividing by the total deck area of the bridges carrying the NHS. Deck area is computed using structure length and either deck width or approach roadway width. A bridge in good condition suggests that no major investment is needed. A bridge in poor condition is safe to drive on; however, it is nearing a point where substantial reconstruction or replacement is needed.

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

7.7.3.2 Pavement and Bridge Condition Baseline Performance and Established Targets

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

Table 7-12 presents baseline performance for each PM2 measure for the State as well as the two-year and four-year targets established by FDOT for the State.

Performance Measures	Statewide (2017 Baseline)	Statewide 2-year Target (2019)	Statewide 4-year Target (2021)
Percent of Interstate pavements in good condition	66.0%	n/a	≥60%
Percent of Interstate pavements in poor condition	0.1%	n/a	<5%
Percent of non-Interstate NHS pavements in good condition	76.4%	≥40%	≥40%
Percent of non-Interstate NHS pavements in poor condition	3.6%	<5%	<5%
Percent of NHS bridges (by deck area) in good condition	67.7%	≥50%	≥50%
Percent of NHS bridges (by deck area) in poor condition	1.2%	<10%	<10%

Table 7-12: Pavement and Bridge Condition (PM2) Performance and Targets

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

In addition, MAP-21 requires FDOT to develop a Transportation Asset Management Plan (TAMP) for all NHS pavements and bridges within the state. The TAMP must include investment strategies leading to a program of projects that would make progress toward achievement of the state DOT targets for asset condition and performance of the NHS. FDOT's TAMP was updated to reflect MAP-21 requirements in 2018 and the final TAMP was approved on June 28, 2019.

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

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

On May 18, 2018, FDOT established statewide performance targets for the pavement and bridge measures. On October 22, 2018, the Martin MPO agreed to support FDOT's statewide pavement and bridge performance targets, thus agreeing to plan and program projects in the TIP that once implemented, are anticipated to make progress toward achieving the statewide targets.

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

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

The Martin MPO 2045 LRTP – *Martin in Motion* seeks to address system preservation, identifies infrastructure needs within the metropolitan planning area, and provides funding for targeted improvements. The *Infrastructure Maintenance and Congestion Management Goal* includes objective - Prioritize improvements that help maintain existing roadways and bridges as well as identifies the PM2 performance measures and targets as metrics to monitor progress. Further, investments in pavement and bridge condition include resurfacing and bridge replacement/rehabilitation projects in the TIP. The TIP includes over \$42 million in new capacity and bridge projects as well as over \$25 million in resurfacing projects relevant to the NHS.

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

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

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

National Highway Performance Program (NHPP)

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

National Highway Freight Program (NHFP)

3. Truck Travel Time Reliability index (TTTR);

Congestion Mitigation and Air Quality Improvement Program (CMAQ)

- 4. Annual hours of peak hour excessive delay per capita (PHED);
- 5. Percent of non-single occupant vehicle travel (Non-SOV); and

6. Cumulative 2-year and 4-year reduction of on-road mobile source emissions (NOx, VOC, CO, PM10, and PM2.5) for CMAQ funded projects.

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

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

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

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

7.7.4.1 PM3 Baseline Performance and Established Targets

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

Table 7-13 presents baseline performance for each PM3 measure for the state and for the MPO planning area as well as the two-year and four-year targets established by FDOT for the state.

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

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

The Martin MPO agreed to support FDOT's PM3 targets on October 22, 2018. By adopting FDOT's targets, the Martin MPO agrees to plan and program projects that help FDOT achieve these targets.

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

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

The Martin MPO 2045 LRTP – *Martin in Motion* seeks to address system reliability and congestion mitigation through various means, including capacity expansion and operational improvements. The *Infrastructure Maintenance and Congestion Management Goal* includes several objectives, such as manage traffic congestion, support

improvements to major freight corridors, implement strategies to reduce per capita vehicle miles of travel, and prioritize funding to support smaller scale congestion management projects and programs (TSM&O)). Further, several performance measures include PM3 are identified to evaluate and prioritize projects. As part of the 2045 LRTP, several strategies were included in the CMP Update which are included in Technical Memorandum #5. The Martin MPO's investments in the TIP that address system performance and freight on the NHS include over \$4 million in intersection/congestion management improvements and over \$11 million in freight projects.

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

7.7.5 Transit Asset Management Measures

7.7.5.1 Transit Asset Performance

On July 26, 2016, FTA published the final Transit Asset Management rule. This rule applies to all recipients and subrecipients of Federal transit funding that own, operate, or manage public transportation capital assets. The rule defines the term "state of good repair," requires that public transportation providers develop and implement transit asset management (TAM) plans, and establishes state of good repair standards and performance measures for four asset categories: equipment, rolling stock, infrastructure, and facilities. The rule became effective on October 1, 2018. **Table 7-14** below identifies performance measures outlined in the final rule for transit asset management.

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

Table 7-14: FTA TAM Performance Measures

For equipment and rolling stock classes, useful life benchmark (ULB) is defined as the expected lifecycle of a capital asset, or the acceptable period of use in service, for a particular transit provider's operating environment. ULB considers a provider's unique operating environment such as geography and service frequency.

On September 17, 2018, the Martin MPO agreed to support the Martin County Public Transit's TAM targets. The transit asset management targets are based on the condition of existing transit assets and planned investments in equipment, rolling stock, infrastructure, and facilities. The targets reflect the most recent data available on the number, age, and condition of transit assets, and expectations and capital investment plans for improving these assets. The table summarizes both existing conditions for the

most recent year available, and the targets. **Table 7-15** summarizes existing conditions for the most recent year available and the targets.

Asset Category- Performance Measures	Asset Class	2021 Target	2022 Target	2023 Target	2024 Target	2025 Target
Revenue Vehicles						
Age - % of revenue vehicles	BU - Bus	0%	0%	0%	0%	0%
within a particular asset class that have met or exceeded their	CU - Cutaway Bus	14%	14%	0%	0%	0%
Useful Like Benchmark (ULB)	VN - Van	N/A	N/A	N/A	N/A	N/A
Equipment					•	
Age - % of vehicles within a particular asset class that have met or exceeded their Useful Like Benchmark (ULB)	Non-Revenue/Service Automobile	0%	0%	0%	0%	0%
Facilities	· · · · · ·					
Condition - % of facilities with a	Administration	N/A	N/A	N/A	N/A	N/A
condition rating below 3.0 on	Maintenance	N/A	N/A	N/A	N/A	N/A
the FTA Transit Economic Requirements Model (TERM)	Parking Structures	N/A	N/A	N/A	N/A	N/A
Scale	Passenger Facilities	N/A	N/A	N/A	N/A	N/A

Table 7-15: TAM Performance Measures and Targets

7.7.6 Transit Safety Performance

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

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

7.7.6.1 Transit Safety Performance Measures

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

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

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

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

Once the public transportation provider establishes targets, it must make the targets available to MPOs to aid in the planning process. MPOs have 180 days after receipt of the PTASP targets to establish transit safety targets for the MPO planning area. In addition, the Martin MPO must reflect those targets in any LRTP and TIP updated on or after July 20, 2021.

Over the course of 2020-2021, the Martin MPO will coordinate with public transportation providers in the planning area on the development and establishment of transit safety targets. LRTP amendments or updates after July 20, 2021 will include the required details about transit safety performance data and targets.

The Martin County Board of County Commissioners (BOCC) adopted the PTASP on August 2, 2020. Following the adoption of the PTASP and the Safety Performance Targets by the BOCC, the Martin MPO also adopted the Safety Performance Targets as set by Martin County Public Transit on September 21, 2020, attached as Appendix O.

Appendix A: Public Involvement Plan (PIP)

Technical Memorandum #1: **Public Involvement Plan** (PIP) June 2019

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Martin Metropolitan Planning Organization (MPO) 2045 Long Range Transportation Plan (LRTP)

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1. INTRODUCTION

The purpose of this Public Involvement Plan (PIP) is to assist in providing information, to obtain input from the public and to engage local government, agencies and citizens for the Martin Metropolitan Planning Organization (MPO) 2045 Long Range Transportation Plan (LRTP). The Martin MPO maintains a PIP to meet the requirements of state and federal laws by providing opportunities for public involvement and input in the multimodal transportation planning process. This plan utilizes information from the MPO's overall PIP but is specific to the 2045 LRTP project outreach and documentation. This project specific plan will help ensure the study reflects the values and needs of the communities it is designed to benefit. The public involvement activities which will be used to help develop a blueprint for Martin County's future multimodal transportation network.

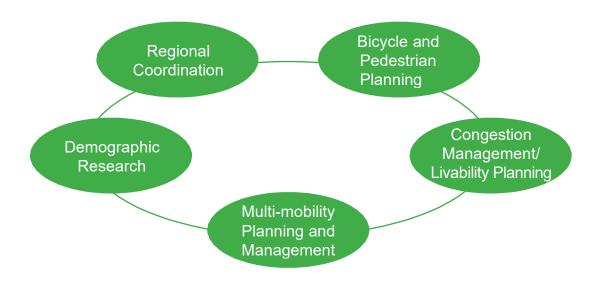
The 2045 LRTP will identify transportation needs, priorities and a strategic investment plan for improvements to all modes of transportation including roadway, public transportation, and bicycle and pedestrian facilities. It will outline both long-range and short-range strategies/actions that will help lead to the development of an integrated multimodal transportation system that facilitates the efficient movement of people and goods.

The LRTP PIP is integral to the success of the project in that it ensures public participation in each phase of the planning process. The PIP identifies community stakeholders, including many in the underserved and low-income communities, transportation disadvantaged, environmental groups, the business community, tourism officials and other interested stakeholders. Further, the plan lays out public involvement goals, summarizes public outreach strategies and identifies metrics that track, as well as measure the effectiveness of various outreach activities.

2. HISTORY

Martin Metropolitan Planning Organization (MPO)

The Martin MPO was established in 1993 and is governed by an eight (8) voting member Policy Board that serve the Metropolitan Planning Area with a US Census Bureau 2018 estimated population of 160,912. The 2040 LRTP was approved on December 14, 2015, prior to the Village of Indiantown becoming a voting member on December 10, 2018.



The Policy Board oversees a staff whose planning tasks include:

The Martin MPO serves as the conduit with the State of Florida. federal government and other agencies for all transportation and multi-modal transportation projects. On specific regional issues, the Martin MPO collaborates with the Palm Beach County Transportation Planning Agency (TPA), St. Lucie County Transportation Planning Organization (TPO), Indian River County MPO and the Heartland Regional Transportation Planning Organization (HRTPO), which serves Okeechobee County and Glades County and other area counties west of Lake Okeechobee.

Martin County includes the incorporated municipalities of Stuart, Sewall's Point, Jupiter Island, Indiantown, and Ocean Breeze.

The Martin MPO Governing Board utilizes multiple advisory committees for information in the policy making process. The advisory committees are composed of experts, state officials and Martin Countyresidents.

The Citizen Advisory Committee (CAC) consists of 11 voting members with three citizens at large, five members appointed by the Martin County Commission and one each by the City of Stuart, Town of Sewall's Point and Town of Jupiter Island.

The CAC represents all residents of Martin County and is responsible for providing public perspective in the MPO decision-making process. The CAC reviews and comments on transportation planning documents and issues that will be brought before the MPO Governing Body.

The Technical Advisory Committee (TAC) is comprised of 14 government members, one each from the Martin County Public Works Department, Martin County Growth Management, two City of Stuart representatives, Town of Sewall's Point, Town of Ocean Breeze, Town of Jupiter Island, Witham Airport Management, Treasure Coast Regional Planning Council, FDOT District Four Planning and Environmental, and one representative from a Public Transit Provider.

The TAC brings together a wide range of local and state government professional expertise for the MPO Governing Body. The TAC advises the Board on all technical matters, including transportation plans, studies and implementation programs.

The Bicycle/Pedestrian Advisory Committee (BPAC) is a 19-member committee with 15 voting members and four non-voting members. The committee includes: seven members appointed by the Martin County MPO Administrator, five members appointed by the Martin County Commission, two appointed by the City of Stuart, and four ex-officio/non-voting members, one each representing the Martin County Sheriff's Office, City of Stuart Police Department, Town of Sewall's Point Police Department, and the FDOT - District Four.

County residents with interest in bicycle and pedestrian safety comprise the BPAC. The committee provides input to the MPO decision-making process on all bicycle and pedestrian-related issues. The BPAC reviews and comments on planning documents and identifies issues or conflicts to be considered by the MPO Governing Body.

The Local Coordinating Board for the Transportation Disadvantaged (LCB-TD) is comprised of 16 voting members, and an undesignated number of non-voting members. There are two citizen advocates, and one each representing the FDOT, Florida Department of Children and Families (DCF), Florida Division of Vocational Rehabilitation or Division of Blind Services, Florida Department of Elder Affairs, Florida Agency for Health Care Administration, Public Education Community, a



representative from the Veterans' Services Office, an economically disadvantaged representative, a disabled representative, an elderly representative, an at-risk children representative, a representative from the local medical community, a representative from the Workforce Development Board and a private transportation industry representative.

The LCB-TD is the administrative entity, established by Florida Statute, responsible for providing information, advice, direction, and support to the Community Transportation Coordinator (CTC) for the delivery of transportation disadvantaged services.

3. PROJECT BACKGROUND

The Martin MPO is developing and adopting a 2045 Long Range Transportation Plan (LRTP) to meet federal planning requirements necessary for obtaining and expending federal transportation funds. The LRTP will develop goals and objectives for updating and revising the 2040 Transportation Plan which identified the following priorities from the public engagement process: enhanced maintenance of existing roadway conditions, local bus service and construction of bicycle infrastructure on roads and greenways. The 2045 LRTP includes technical analysis, such as, forecasting travel demand, developing strategies to manage congestion, improve freight movement, support complete streets, address potential climate change and/or extreme weather event impacts on the transportation network and enhance travel and tourism. This process will include developing a financial plan and a 20-year cost feasible plan. The overall goals are to have a safe multimodal transportation system that supports and maintains the quality of life as well as addresses the needs and concerns of the public.



SE Ocean Blvd and Sewalls Point Rd

4. PUBLIC INVOLVEMENT PROCESS

The current Martin MPO Public Involvement Plan outlines the expectations for public participation during transportation planning and decision-making activities. It outlines involving the appropriate agencies, governments and general public and identifying transportation improvements that are accepted by the community where the improvements are intended to serve.

Building on the Martin MPO PIP, the 2045 LRTP plan outlines the process to involve the community to include:

- · Engaging stakeholders early and throughout the plan
- · Maintaining regular communication with members of the community
- · Providing multiple opportunities and methods for the public to participate in the process
- Providing the opportunity for input and comments to help shape the plan

Key stakeholders and groups have been identified for inclusion in the public involvement process including the general public, younger generations, residents 65 and older, special interest groups, traditionally underserved communities and the Martin MPO committees. The detailed list can be found at the end of the PIP in section 7. Additionally, the LRTP PIP recognizes the changing characteristics of the county as outlined in the MPO 2017 MPO Community Characteristics Report, and endeavor to ensure all segments of the community are included. Additional stakeholders will be identified and



Veterans Memorial Bridge open house

added to the PIP throughout the study. A Project Steering Committee (PSC) comprising technical experts from the Martin MPO and its partner agencies will be assembled specifically for the 2045 LRTP. This PSC will provide guidance and input throughout the LRTP process. The public outreach efforts to these groups will help shape the recommendations for planned improvements.

The outreach for this project includes increased efforts to identify and provide the opportunity for involvement among traditionally underserved and underrepresented population groups. To that end, low-income, transportation disadvantaged, elderly population, minorities and

disabled residents who may be impacted by the multimodal components of the LRTP are included in this public outreach and involvement plan. **Appendix A** includes maps identifying concentration areas for environmental justice population groups and those protected by Title VI residing in Martin County.

Additionally, the PIP includes environmental community stakeholders who manage or oversee each of the environmentally sensitive lands as listed by Martin County, the Nature Conservancy, US Fish and Wildlife, Florida Fish and Wildlife Conservation Commission, and Florida Department of Environmental Protection. Those lands include:

- The Nathaniel P. Reed Hobe Sound National Wildlife Refuge, 13640 US Highway 1, Hobe Sound, FL 33475
- Seabranch Preserve State Park, Trailhead, 6093 SE Dixie Highway, Stuart, FL 34997
- Jonathan Dickinson State Park, 16450 SE Federal Highway, Hobe Sound, FL 33455
- St. Lucie Inlet Preserve State Park, 4810 SE Cove Road, Stuart, FL 34997
- Savannas Preserve State Park, 2498 NE Savannah Road, Jensen Beach, FL 34957
- Jensen Beach to Jupiter Inlet Aquatic Preserve, Offshore Island, Port Salerno, FL 34997
- Nature Conservancy Blowing Rocks, 575 S. Beach Road, Hobe Sound, FL 33455
- Peck Lake Park, 8108 SE Gomez Avenue, Hobe Sound, FL 33455
- Maggy's Hammock, 3845 SE Kubin Ave., Stuart, FL 34997
- Lake Okeechobee Ridge Park, US Highway 441, Port Mayaca, 34956
- Kiplinger Nature Preserve. 4146 S. Kanner Highway, Stuart, FI 34997
- John and Mariana Jones Hungryland Wildlife and Environmental Area, 4146 S. Kanner Highway, Stuart, FL, 34997
- Hawk's Hammock, 7201 Markel St., Palm City, FL 34990
- · Halpatiokee Regional Park, 7645 Lost River Road, Stuart, FI 34997, and
- Dupuis Wildlife and Environmental Area, 23500 SW Kanner Highway, Canal Point, 33438

Public Involvement Goals

GOAL 1	Collaborative and cooperative local and regional consensus: Achieve collaborative and cooperative local and regional consensus to identify the challenges in Martin County and assist Martin County and local governments in investigating efficient methods to improve infrastructure and manage capacity. Input gathered from stakeholders, agencies, and interested parties regarding community needs and perspectives also will become a part of the decision-making process.
GOAL 2	Opportunity: Provide opportunities to gather, seek and consider stakeholder input regarding the future of transportation management in Martin County. Through public involvement activities, provide a comprehensive transportation plan for Martin County, local municipal partners and the region.
GOAL 3	Information and Communication: Provide the public and stakeholders with clear, timely and accurate information related to the Plan and its progress.
GOAL 4	Maintain an open, two-way line of communication with stakeholders to ensure they are comfortable with and understand the process. This will include an interactive website, use of social media and a consistent responsive team contact.

5. PUBLIC INVOLVEMENT AND OUTREACH ACTIVITIES

A variety of tools and tactics will be used to communicate and engage the stakeholders and residents of Martin County in the 2045 Long Range Transportation Plan.

Project Branding: A project brand will be designed and implemented early in the project to help identify and separate the 2045 Long Range Transportation Planning Project from other projects and initiatives of the Martin MPO. A new logo and slogan will be used on all project collaterals throughout the study and in the final report.

Project Specific Website: A project specific ADA accessible website will be developed to distribute information regarding the LRTP and to help receive public feedback. The website will be used to spotlight the plan including project schedule, public meetings, project video and latest project information and announcements. The number of visits and time spent on the website will be monitored using Google Analytics. Stakeholders will be encouraged to submit comments and input through the website. The website will be designed using WordPress as the content management software to help make the website easy to update. The website will utilize the project branding and will be easy to navigate and updated periodically throughout the project. The project-specific website will be www.Martin2045.com.

Social Media: Project information will be dissemination using the MPO's established social media accounts. The project team will coordinate with the Martin MPO regarding content for social media to help engage the community, promote the opportunity for feedback and provide key project updates and meeting information.

Stakeholder Interviews and Focus Groups: These activities will be conducted by the MPO with input and support from the project team. Key stakeholders will be identified and will be asked to participate in one-on-one or small group sessions to provide input and insight to help identify strategic investments in transportation improvements as well as address issue-based needs. The project team anticipates using focus groups or stakeholder interviews to gather input on freight, travel and tourism, mobility and accessibility needs of aging population as well as improving resiliency of the transportation system relative to extreme weather events and/or climate change. The project team will conduct one-on-one stakeholder interviews and the MPO staff will conduct meetings with focus groups from stakeholder organizations such as the United Way and Council on Aging, among others.

Community Events: The Martin MPO will continue to seek opportunities to host a booth at local events and gatherings to help reach a wide variety of feedback and incorporate people. These booth events may be project specific or more general in nature, about overall Martin MPO activities. Specifically, the MPO will seek to host an event booth at places such as the Stuart Air Show and Indian River State College registration. The purpose of this booth event is to disseminate information and gather input from people, who might not normally seek out MPO initiatives.

Project Video: The project team will create one short, high-impact project video to help inform the public about the 2045 LRTP and help provide a call to action to gather involvement and feedback. The video will help explain the process and importance of feedback for transportation planning and opportunities for all residents to get involved. The video will be displayed on the project website and distributed through the Martin MPO.

Project Steering Committee (PSC): A project specific steering committee called PSC consisting of technical experts from the Martin MPO and its partner agencies will be assembled at the project outset. The PSC membership will include the following agencies' representatives; Martin MPO, City of Stuart, Martin County Public Works Department, Martin County Growth management Department, and Florida Department of Transportation, District Four.

AGENCY	
Martin MPO	Martin County Growth Management Department
City of Stuart	Florida Department of Transportation, District Four
Martin County Public Works Department	

Exhibit 1: Project Steering Committee Membership

The PSC will meet at major milestones throughout the course of the LRTP development process. The project team will provide the PSC with all the information and materials needed to allow for meaningful input and recommendations during the planning process. The project team will meet with the PSC to discuss, understand and concur on the LRTP goals and objectives, performance measures, provide study information, present data collection and results of the technical analysis, obtain feedback, present the results of the financial analysis and seek guidance for the multimodal improvements. In summary, the PSC will provide the project team guidance and input throughout the LRTP process. All the technical components as well as public input received by the project team will be shared with the PSC in advance of materials being presented to the MPO Advisory Committees and MPO Governing Board.

FINAL

Martin MPO Governing Board and Advisory Committee Meetings: As shown in **Exhibit 2**, the project team will make presentations at major milestones and at regularly scheduled Martin MPO meetings to update the groups on the progress of the plan and gather necessary feedback.

Project Phase	Timeframe	Type Of Meeting	Intended Outcome(S)
	June 3, 5, 10, 2019	TAC/CAC/BPAC meeting #1	Project overview
Project kick off	June 17, 2019	Board meeting #1	Public involvement planExpectations and vision
	Aug. 26, 2019	PSC Meeting #1	
Public Involvement and	Sept. 4, 9, 2019	TAC/CAC/BPAC meeting #2	
Outreach Activities Update	Sept. 16, 2019	Board meeting #2	Visioning open house announcement
	Oct. 2019	Visioning Public Open House	announcement
Goals, Objectives, and Performance Measures	Nov. 5, 2019	PSC meeting #2	Goals, objectives, performance
	Nov. 18, 2019	TAC/CAC/BPAC meeting #3	measures
	Dec. 9, 2019	Board meeting #3	
	Mar. 4, 2020	PSC meeting #3	Project costs
2045 Needs Plan	April 29, 2020	TAC/CAC/BPAC meeting #4	Financial analysis
	May 11, 2020	Board meeting #4	Funding plan
	May 29, 2020	PSC meeting #4	
Draft 2045 Cost Feasible	June 1, 3, 10, 2020	TAC, CAC, BPAC meeting #5	- Project prioritization
Plan (CFP	June 9, 2020	CFP Public Open House	 Project prioritization Project costs
	June 15, 2020	Policy Board meeting #5	
	Aug. 18, 2020	PSC meeting #5	
Final 2045 Cost Feasible	Sept. 9, 14, 2020	TAC/CAC/BPAC meeting #6	 Recommended short- and long-
Plan (CFP)	Oct. 19, 2020	Board meeting #6	term improvements Financial plan

Exhibit 2: MPO Meetings Timeline

All materials are provided to committee members in advance and available to the public. Feedback will be taken from these meetings in addition to community outreach opportunities. The team anticipates five meetings to take place throughout the LRTP process.

Municipal, Community Redevelopment Agency (CRA), Community and HOA Meetings: Community Groups and HOA's play an active role in the Martin County community and are supporters in helping engage residents and the public. The MPO will continue to meet with these groups to update them about the project and other Martin MPO programs. We will look for members of these groups and communities to get involved and provide feedback for the overall transportation plan. By attending neighbor gatherings and group meetings, you can inform and help gather necessary support for long range transportation planning. The team anticipates up to eight of these meetings to take place throughout the LRTP process.

The Martin MPO already actively participates with the Martin/Stuart Chamber of Commerce providing information on Martin MPO plans and programs, as well as funding issues. Historically, the Martin MPO Administrator attends the monthly Stuart/Martin Chamber of Commerce's Transportation committee meetings. Chamber of Commerce directors and staff are also included on the Martin MPO mailing list and receive information about open houses, meetings, and surveys.

Open Houses: The MPO and team will host three visioning public open houses in different ADA compliant locations across Martin County to include one in Indiantown, one in the southern part of the County and one in a central location in Stuart. By hosting the meetings in the different locations, the MPO can reach a wider audience and gather input to cover the County as a whole. One open house to present the 2045 Cost Feasible Plan will be held as part of this project. These will be interactive meetings to help encourage participation and targeted outreach effort to discussion and feedback. Presentations and other project materials will be available to the public to help educate and inform them about the LRTP and the process.

For these meetings, formal notice will be provided in advance including invitational letters emailed to elected and appointed officials, agency staff and other interested parties. The team will utilize local groups to support outreach efforts. The team will publicize the events via the project website, MPO social media and a targeted outreach effort.

Data and information will be collected from the meeting to use as part of the plan. Comment cards will be available, and attendees will be asked to sign into the meeting to provide contact information to stay on top of the latest project information and for any necessary follow up. Additional meetings will be hosted as needed and determined by the Martin MPO.

Surveys: The Martin MPO has used and may continue to use surveys to gather feedback from the public on plans and programs, as well as on the effectiveness of various public outreach techniques. At meetings, the Martin MPO may use brief surveys of attendees to track participant interest, demographics and the effectiveness of meeting notices, handouts and website. In addition, the Martin MPO has access to an online survey system known as "Survey Monkey" which can be used to conduct online surveys through the Martin MPO website, project website or on portable tablets at various events to obtain public feedback on transportation, transit and regional planning issues. Surveys can be made available in Spanish to ensure non-English speaking residents may participate.

Targeted Outreach: Every effort will be made to help ensure communication to traditionally underserved communities and to gather feedback from the Martin County community, including younger generations, special interest groups, retirement communities and groups challenged with Limited English Proficiency (LEP). These groups will be identified up front, and outreach will be tailored to reach them to include them in the transportation planning process. This outreach will include email communications, direct mail and flyer distributions. Our team will provide a 24-hour contact to reach for questions regarding the transportation plan and help answer questions or concerns. This contact will also document all coordination as part of this project for the project records.

The Martin MPO will continue to utilize an extensive mail and email database to convey information to the public, publicize upcoming meetings and events and solicit input. Martin County has an existing database, which, combined with the Martin MPO mail and database can be used to distribute transportation planning information. Also, the PIP includes contacts for multiple stakeholders. Notifications, when necessary, will be sent via electronic email addresses to members in the Martin County/Martin MPO community databases. In the event there is no email address on file, direct mail will be used to contact the stakeholder.

Documents and project information will be translated into Spanish as needed for this project.

Media Relations: The Martin MPO will distribute project press releases and public open house information to the established media contacts. The MPO will engage the media throughout the process to help promote the project and provide project opportunities to a wider audience. The team will support the MPO in providing key messages and talking points and proactive communication throughout the project.

Project Materials: Project materials will be prepared throughout the project to help distribute information and inform the community. Project materials will be both printed and displayed on the project website for easy access. Copies of the materials will be provided to key stakeholders, local agencies and community groups.

Radio: MPO staff will use radio broadcasting as a means of providing information to the public about upcoming MPO events and traffic safety related information. The MPO uses Public Service Announcements (PSA) to provide notice of meetings as well as participates in on-air interviews with local media related to transportation planning and decisions. The WQCS Radio Reading Service will also be used, when applicable, as a means of providing information to the visually impaired in the area.

MCTV Television: The Martin MPO will utilize the on-site Martin County public access television channel (MCTV) to broadcast project information, solicit input and promote open house information. The project video will be played on this station. Board meetings are currently aired on MCTV.

Documentation: Project documentation is a very important part of any project. The Martin MPO values input from residents throughout the transportation planning process. This input will be documented and incorporated into the plan. All comments, questions, concerns and coordination will be documented and provided to the MPO at the end of the project.

6. PUBLIC OUTREACH EVALUATION

The public involvement outreach and activities will be evaluated throughout the project and will be adjusted as necessary. This will help determine the effectiveness of the public involvement efforts used throughout the study. The evaluation will include tracking participation and outreach at meetings and events to ensure participation and equal opportunity to our targeted audience. Evaluation methods include monitoring attendance and feedback; website usage and analytics; including tracking the city of each website click, gamification at open houses to encourage participation, and tracking sign in sheets with attendees zip codes and email addresses among other methods to measure the level of interest. and measuring level of interest.

7. IDENTIFICATION OF KEY STAKEHOLDERS

A stakeholder is a person who has a particular interest in something. Stakeholders are residents who live and visit Martin County and will be able to identify potential issues, needs and possible solutions early in the development of the LRTP. Key stakeholders have been identified for inclusion in the public involvement process. This plan also identifies traditionally underserved groups including low-income, transportation disadvantaged, disabled and younger generations. Contacts from the Martin County trucking industry and freight haulers who rely on Martin County roads and infrastructure are also included. This document will be updated throughout the LRTP process and additional stakeholders will be added as they are identified.

STATE OF FLORIDA

Florida Department of Environmental Protection, Southeast District Office, Jason Andreotta, Acting Director

Florida Department of Transportation, District 4, Ann Broadwell, Environmental Administrator

Florida Department of State, Division of Historic Resources, Florida Historical Commission, Kathy Spurgeon, Hobe Sound, Commission Member Florida Department of Agriculture and Consumer Services, Florida Forest Service, Tim Elder, Okeechobee District Field Unit Manager

Florida Department of Agriculture and Consumer Services, Florida Forest Service, Calin Ionita, Martin County Forester

Florida Department of Economic Opportunity, Division of Community Development, Mario Rubio, Director

Florida Department of Economic Opportunity, Division of Community Planning and Growth, James Stansbury, Director

Florida Department of Transportation - Central Environmental Management Office, James Watts, Manager

Florida Department of Transportation, District 4, Gerry O'Reilly, Secretary

Florida Department of Transportation, District 4, Barbara Kelleher, Public Information Director

Florida Fish and Wildlife Conservation Commission, South Region,

Thomas Reinert, Regional Director

Florida Fish and Wildlife Conservation Commission, South Region, Division of Habitat & Species

Conservation, Michael Anderson, Regional Wildlife Administrator

Florida Highway Patrol, Ft. Pierce Troop L, Major Robert Chandler, Commander

Florida Highway Patrol, Florida's Turnpike Troop K, Major Kevin L. Blom, Commander

Florida's Turnpike Enterprise, Martin Horowitz, Environmental Administrator

Florida's Turnpike Enterprise, Headquarters,

Christine Colon, PE, Director of Transportation Development

Florida's Turnpike Enterprise, (VACANT), Public Information Officer

FEDERAL

Federal Aviation Administration, Orlando District Office, Dan Elwell, District Administrator

Federal Emergency Management Agency, Region IV, Gracia Szczech, Regional Administrator

Federal Highway Administration, James Christian, Florida Division Administrator

Federal Highway Administration, Mark Clasgens, District IV Transportation Engineer

Federal Railroad Administration, L. Fred Dennin, Regional Administrator

U.S. Army Corps of Engineers, Lt. Col. Jennifer Reynolds, Deputy District Commander, South Florida

- U.S. Coast Guard, Capt. Megan Dean, Sector Miami Commander
- U.S. Coast Guard, Auxiliary, Flotilla 5-9, FC David A. Elliot, Stuart
- U.S. Department of Agriculture, Southern Region, Ken Arney, Regional Forester
- U.S. Department of Commerce, National Oceanic and Atmospheric Administration,

Dr. Roy E. Crabtree, Southeast Regional Administrator

U.S. Department of Housing and Urban Development, Al Cazzoli, Region IV Field Environmental Officer

U.S. Department of the Interior, Bureau of Land Management, Callie DeHaven, Director, Florida District

U.S. Department of the Interior, Bureau of Indian Affairs, Johanna Blackhair, Eastern Region, Regional Deputy Director

U.S. Department of the Interior, National Park Service, Southeast Region, Bob Vigel, Regional Director

U.S. Department of the Interior, U.S. Fish and Wildlife Conservation Service, John Wrubik, Planning and Resource Conservation

U.S. Department of the Interior, U.S. Fish and Wildlife Conservation Service, South Florida Ecological Services Office, Jack Arnold, Assistant Regional Director

U.S. Department of the Interior, U.S. Geological Survey, Holly Weyers, Southeast Region District Director

U.S. Environmental Protection Agency, Region 4, NEPA Program Office, Christopher Militscher, Chief

REGIONAL (MPO/TPO/TPA)

Martin Metropolitan Planning Organization St. Lucie Transportation Planning Organization, Indian River County Metropolitan Planning Organization Palm Beach County Transportation Planning Agency Treasure Coast Regional Planning Council South Florida Water Management District

LOCAL AGENCY

Martin County: www.martin.fl.us

County Administrator Deputy County Administrator Assistant County Administrator Public Works/Engineering Director Parks and Recreation Director Project Manager, Traffic Administration Project Manager, Utilities and Solid Waste Transit Manager ADA Coordinator Communications and Outreach Coordinator Emergency Management Chief, Martin County Fire Rescue Airport Director Chief of Staff, Martin County Sheriff's office Chief, Martin County Fire Rescue Executive Director, Martin County Community Redevelopment Agency Tourism & Marketing Director, Martin County Tourism Administration

City of Stuart: http://cityofstuart.us/

City Manager City Clerk Director of Public Works Police Chief Fire Chief Emergency Management Coordinator

Town of Sewall's Point: http://sewallspoint.org

Town Manager Town Clerk Police Chief CBO, Building Official

Town of Jupiter Island: http://townofjupiterisland.com

Town Manager Town Clerk Director of Engineering, Public Safety Director

Town of Ocean Breeze: www.townofoceanbreeze.org

Town Management Consultant Town Clerk

Village of Indiantown: www.indiantownfl.gov

Village Manager Village Clerk Director of Planning Building Official Village Attorney

ELECTED OFFICIALS

Federal

United States Senate

U.S. Senator Rick Scott, kyle_hill@rickscott.senate.gov

U.S. Senator Marco Rubio, scheduling@rubio.senate.gov

Unites States House of Representatives

Congressman Brian Mast, alex.melendez@mail.house.gov

State of Florida Delegation

Florida Senate

Senator Gayle Harrell, District 25, harrell.gayle.web@flsenate.gov

Florida House of Representatives

Representative Tobin Overdorf, District 83, toby.overdorf@myfloridahouse.gov Representative MaryLynn ("ML") Magar, District 82, marylynn.magar@myfloridahouse.gov

LOCAL OFFICIALS

Martin County Board of County Commissioners

The Honorable Doug Smith, Commissioner, District 1, dsmith@martin.fl.us The Honorable Stacey Hetherington, Commissioner, District 2, shetherington@martin.fl.us The Honorable Harold Jenkins, Vice Chairman, District 3, hjenkins@martin.fl.us The Honorable Sarah Heard, Commissioner, District 4, sheard@martin.fl.us The Honorable Edward Ciampi, Chairman, District 5, eciampi@martin.fl.us William Snyder, Sheriff, wdsnyder@sheriff.martin.fl.us Ms. Laurie Gaylord, Superintendent of Schools, gaylordl@martin.k12.fl.us

City of Stuart

The Honorable Becky Bruner, Mayor, bbruner@ci.stuart.fl.us

The Honorable Eula Clarke, Vice Mayor, Group V, eclarke@ci.stuart.fl.us

The Honorable Kelli Glass Leighton, Commissioner, Group IV, kglass@ci.stuart.fl.us

The Honorable Merritt Matheson, Commissioner, Group III, mmatheson@ci.stuart.fl.us

The Honorable Mike Meier, Commissioner, Group I, mmeier@ci.stuart.fl.us

Town of Sewall's Point

The Honorable Vinny Barile, Mayor, vbarile@sewallspoint.org The Honorable Frank Fender, Vice Mayor, ffender@sewallspoint.org The Honorable James Campo, CFP, Commissioner, jcampo@sewallspoint.org The Honorable Dave Kurzman, Commissioner, dkurzman@sewallspoint.org The Honorable VACANT, Commissioner,

Town of Ocean Breeze

The Honorable Karen Ostrand, Mayor, mayor@townofoceanbreeze.org The Honorable Ken DeAngeles, President, kdeangeles@townofoceanbreeze.org The Honorable Ann Kagdis, Vice President, akadgis@townofoceanbreeze.org The Honorable Richard Gerold, Council Member, rgerold@townofoceanbreeze.org

FINAL

The Honorable Terry Locatis, Council Member, tlocatis@townofoceanbreeze.org The Honorable David Wagner, Council Member, dwagner@townofoceanbreeze.org The Honorable Kevin Docherty, Council Member, kdocherty@townofoceanbreeze.org

Town of Jupiter Island

The Honorable Whitney Pidot, Mayor, thmail@tji.martin.fl.us The Honorable Maura Collins, Vice Mayor, thmail@tji.martin.fl.us The Honorable Peter Conze, Commissioner, thmail@tji.martin.fl.us The Honorable Barry Hall, Commissioner, thmail@tji.martin.fl.us The Honorable Penelope Townsend, Commissioner, thmail@tji.martin.fl.us *Village of Indiantown*

The Honorable Susan Gibbs Thomas, Mayor, sthomas@indiantownfl.gov The Honorable Guyton Stone, Vice Mayor, gstone@indiantownfl.gov The Honorable Jackie Gary Clarke, Council Member, jclarke@indiantownfl.gov The Honorable Anthony Dowling, Council Member, adowling@indiantownfl.gov The Honorable Janet Hernandez, Council Member, jhernandez@indiantownfl.gov

ENVIRONMENTAL

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Carolyn Davi, Executive Director, Palm City Chamber of Commerce, carolyn@palmcitychamber.com Donna Carman, President/CEO, Indiantown Chamber of Commerce, info@indiantownchamber.com Janet O'Brien, CEO, Martin County Board of Realtors, jobrien@martincountyrealtors.org Kate Muscarella, Business Development Board of Martin County, info@bdbmc.org

FREIGHT, TRUCKING AND MOVING COMPANIES

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INTERESTED BUSINESSES, MINORITY AND TRADITIONALLY UNDERSERVED COMMUNITY CONTACTS

Carol Houwaart-Diez, President/CEO, United Way of Martin County Jay Spicer, Fair Manager, Martin County Fair Association Jami Melnick, Executive Director, YMCA of the Treasure Coast, Louis Dreyfus Citrus Branch LaTricia Jenkins, Development Director, Boys & Girls Club of Martin County Keith Fletcher, CEO, Boys & Girls Club of Martin County David Heaton, Executive Director, Children's Services Council of Martin County Tammy Calabria, Executive Director, Children's Museum of the Treasure Coast Sr. Elizabeth Dunn, Director, Hope Rural School Suzy Hutcheson, President/CEO, Helping People Succeed Glenna Paris, Vice President, Helping People Succeed Ruth Mageria, Executive Director, CROS Ministries Sabrina Ferguson, Director, East Coast Migrant Head Start Gigi Suntum, Executive Director, Caring Children Clothing Children Rob Ranieri, CEO, House of Hope Jacqueline Clarke, Director, Indiantown Community Outreach MaryBeth Batchelor, President/CEO, Nicholas' Pantry Inc Judith Cruz, President/CEO, Treasure Coast Food Bank Krista Garofalo, Chief Program Officer, Treasure Coast Food Bank The Rev. Jerry Gore, Pastor, Martin County Ministerial Alliance Jimmy Smith, Executive Director, NAACP-Martin County Pastor George David, Pastor, Hobe Sound Ministerial Alliance Pastor George Palmer, Mt. Zion Missionary Baptist Church Pastor Bruce Butler, Pastor, Family Worship Center Steve Trolinger, Volunteer Coordinator, Caring Ministries/Mission House, Mary Barnes, Executive Director, Alzheimer's Community Care Brenda Dickerson. Executive Director, Love and Hope in Action, Lorie Shekailo, Finance & Operations Manager, Matthew 2535 The Rev. Jeff Bennett, Senior Pastor, First United Methodist Church

Maryann Diaz, Esq, Interim Executive Director, Florida Rural Legal Services Keith Muniz, Executive Director, ARC of Martin County Karen Ripper, President/CEO, Council on Aging of Martin County Richard Kottler, Jr., Executive Director, Deaf and Hearing Services of the Treasure Coast John Fowler, Executive Director, Drug Abuse Treatment Center Thelma Washington, Executive Director, Gertrude Walden Child Care Center Matt Markley, President/CEO, Hibiscus Children's Center Maryann King, Executive Director, Hobe Sound Early Learning Center Joanne Sweazey, Executive Director, Hobe Center for Autism Mark Miller, Executive Director, Legal Aid Society of Martin County Diamond Litty, Executive Director, Life Builders of the Treasure Coast Tim Arthur, Executive Director, Light of the World Charities Samantha Suffich, Executive Director, Martin County Healthy Start Coalition Gina Thompson, Executive Director, Mary's Shelter Robert Zaccheo, Executive Director, Project Lift Jill Borowicz, Executive Director, SafeSpace, Inc. Jeff Shearer, Executive Director, Tykes & Teens, Inc. John Lass, President/CEO, YMCA of the Treasure Coast Jason Townsley, President, Kiwanis Club of Stuart Karen Ripper, President/CEO Council on Aging of Martin County Nancy Weiss, President, Rio Civic Club Lisa Dames, President, The Banner Lake Club Jacqueline Clarke, Indiantown Community Outreach Center Jodi McNamara, President, Martin County Interagency Coalition Bruce Irwin, President, Stuart Rotary Club Michael Costopoulos, President, Stuart-Sunrise Rotary Club Additionally, there are 650 registered homeowner's associations, condominium associations or co-operatives in Martin County.

APPENDIX A

S OCEAN DR NE OCEAN BL CARLTON RD CARLTON RD 3R-70 Ν SE WALTON RD CROSSTOWN PKW ⊐Miles 1.5 4.5 SW PORT ST LUCIE BLV 3 RANGE LINE RD WVILLAGE PKINY **128TH AVE** SW TULIP BL JENSEN BEACH BLVD SW PAAR DR NE DIXIE HWY No rth - SO TO S lub She BECKER RD SIN MAPP SE OCEAN BLVD SPP10 R R SW MARTIN HWY 15-98/MAN 2 SE DIVIE HM SW WOODHAM ST ALLAPATTAH SE COI SW WARFIELD BLVD FOX BROWN RD SW 96 ST SW PRATT WHITNEY RD SE GOMEZ RD SW CITRUS BLVD KANNER HIGHWAY CONNERS HWY SE BRIDGE RD SW FARM RD TEQUESTA DR MARTI BEELINE HWY INDIANTOWN RD CENTER ST Sources: Esri, HERE, Garmir, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, © OpenStreetMap contribution, and the GIS User Community TONEY PENNA DR ALA 2013-2017 American Community Servey 5-Year Estimates

Legend

Percent Below Poverty Line by Census Tract

0.0 - 3.8% 3.8 - 9.2% 9.2 - 16.0% 16.0 - 35.3% Mean: 8.0%

Low Income Households Martin County Figure 1

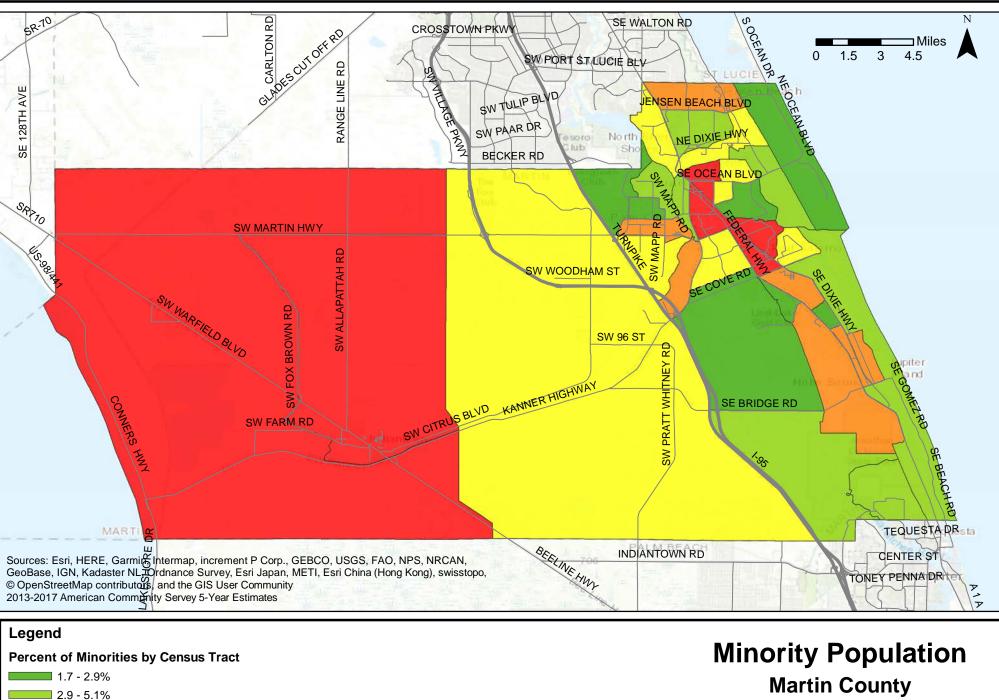


Figure 2

FINAI

7.1 - 26.4% Standard Deviation: 14.0% 26.4 - 55.9% Mean: 12.0%

5.1 - 7.1%

S OCEAN DR NE OCEAN BL CARLTON RD CARLTON RD R-70 Ν SE WALTON RD CROSSTOWN PKW Miles 1.5 4.5 SW PORT ST LUCIE BLY 3 RANGE LINE RD WVIILLAGE PKWY **128TH AVE** SW TULIP BL JENSEN BEACH BLVD SW PAAR DR NE DIXIE HWY - SO TO North SВ lub She BECKER RD SW MAPP SE OCEAN BLVD SPP10 RD SW MARTIN HWY NS-98/MAN SE DIXIE HMY SW WOODHAM ST S S S SE COVE SW WARFIELD BLVD ALLAPAT FOX BROWN RD SW 96 ST SW PRATT WHITNEY RD SE GOMEZ RD SW CITRUS BLVD KANNER HIGHWAY CONNERS HINY SE BRIDGE RD SW FARM RD SE BEACH RD TEQUESTA DR MARTI BEELINE HWY INDIANTOWN RD CENTER ST Sources: Esri, HERE, Garmir, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, © OpenStreetMap contribution, and the GIS User Community TONEY PENNA DR A1A 2013-2017 American Community Servey 5-Year Estimates Legend **Limited English** Percent Limited English Proficiency by Census Tract

 0.0 - 1.3%

 1.3 - 3.0%

 3.0 - 9.0%

 9.0 - 15.5%

 Standard Deviation: 5.8%

 15.5 - 27.7%

Limited English Proficiency Population Martin County Figure 3

SOCEAN DR NEOCEAN BUL E LINE RD 5R-70 Ν SE WALTON RD CROSSTOWN PKW ⊐Miles 1.5 3 4.5 SW PORT ST LUCIE BLV RANGE LINE RD WILLAGE PKINY SE 128TH AVE SW TULIP BL JENSEN BEACH BLVD SW PAAR DR NE DIXIE HWY No rth on care lub Sho BECKER RD SE OCEAN BLVD SW MAP SRP10 SW MAPP RD RD EDER SW MARTIN HWY TURNPIK 15-98/MA SW ALLAPATTAH RD SE DIXE HMY SW WOODHAM ST SW WARFIELD BLVD SW FOX BROWN RD SW 96 ST RD SE GOMEZ RD SW PRATT WHITNEY SW CITRUS BLVD KANNER HIGHWAY CONNERS HINY SE BRIDGE RD SW FARM RD SE BEACH RD *`*95 TEQUESTA DR MARTIN BEELINE HWY INDIANTOWN RD CENTER ST Sources: Esri, HERE, Garmir, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, © OpenStreetMap contribution, and the GIS User Community TONEY PENNA DR ALA 2013-2017 American Community Servey 5-Year Estimates Legend **Median Age** Median Age by Census Tract Under Age 35 **Martin County** Age 35 - Under Age 50 Figure 4 Age 50 - Under Age 65 Age 65+

Median Age for Martin County: 51.6 years

SOCEAN DR NEOCEAN BLUD E LINE RD 5R-70 Ν SE WALTON RD CROSSTOWN PKWY Miles 1.5 3 4.5 SW PORT ST LUCIE BLV RANGE LINE RD 5 WILLAGE PHINY SE 128TH AVE SW TULIP BL JENSEN BEACH BLVD SW PAAR DR NE DIXIE HWY No rth -onore lub She BECKER RD SIN MA SE OCEAN BLVD SANTO MAPP RD RO SW MARTIN HWY 15.98 MA SW ALLAPATTAH RD SE DIXIE HIM SW WOODHAM ST SW WARFIELD BLI SW 96 ST RD Ripiter SW PRATT WHITNEY CONNEL RD SW CITRUS BLVD KANNER HIGHWAY CONNERS HINY SE BRIDGE RD SW FARM RD SE BEACH RD `.₉₅ TEQUESTAR MARTI BEELINE HWY INDIANTOWN RD CENTER ST Sources: Esri, HERE, Garmir, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, © OpenStreetMap contribution, and the GIS User Community TONEY PENNA DR ALA 2013-2017 American Community Servey 5-Year Estimates

Legend

Percent Disabled Population by Census Tract

 5.9 - 10.5%

 10.5 - 14.3%

 14.3 - 16.4%

 16.4 - 19.3%

 Standard Deviation: 4.7%

 19.3 - 27.2%

 Mean: 15.2%

Disabled Population Martin County Figure 5

SOCEAN DR NEOCEEAN BLUE CARLTON RD CARLTON RD SR-70 Ν SE WALTON RD CROSSTOWN PKW ⊐Miles 1.5 4.5 SW PORT ST LUCIE BLY 3 RANGE LINE RD WVILLAGE PKINY **128TH AVE** SW TULIP BL ENSEN BEACH BLVD SW PAAR DR NE DIXIE HWY No rth - SO TO SВ lub Sh BECKER RD SW MP SE OCEAN BLVD SRP10 RD SW MARTIN HWY 15.981AA SE COVE RD SE DIXIE HIN SW WOODHAM ST SW WARFIELD BLI ALLAPAT OX BROWN R SW 96 ST SW PRATT WHITNEY RD ipiter SW CITRUS BLVD KANNER HIGHWAY and. GOMEZRD CONNERS HMY SE BRIDGE RD SW FARM RD SE BEACH RD TEQUESTA DR MART BEELINE HWY INDIANTOWN RD CENTER ST Sources: Esri, HERE, Garmir, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, © OpenStreetMap contribution, and the GIS User Community TONEY PENNA DR P1P 2013-2017 American Community Servey 5-Year Estimates

Legend

Percent of Households without a Vehicle by Census Tract

 0.0 - 1.5%

 1.5 - 4.0%

 4.0 - 7.2%

 7.2 - 16.8%

 Mean: 5.0%

Zero Auto Households Martin County Figure 6

Appendix B: Public Involvement Summary





Martin MPO 2045 Long Range Transportation Plan Workshops

Open House / Visioning Sessions

Stuart City Hall, 121 SW Flagler Avenue, Stuart, FL 34994 Wednesday, October 2, 2019 Elisabeth Lahti Library, 12500 SW Adams Ave., Indiantown, FL 34959 Thursday, October 3, 2019 Port Salerno Civic Center, 4940 SE Anchor Avenue, Stuart, FL 34997 Tuesday, October 8, 2019

Open House Summary

The Martin Metropolitan Planning Organization (MPO) held three open houses / visioning sessions for the 2045 Long Range Transportation Plan (LRTP) in early October 2019. Each session was held from 4 p.m. to 7 p.m. in an open house format. The sessions were held:

- Wednesday, October 2, 2019, Stuart City Commission Chambers, Stuart City Hall, Stuart, Fl 34994.
- Thursday, October 3, 2019, Elisabeth Lahti Library, Community Room, 12500 SW Adams Ave., Indiantown, FL 34959, and
- Tuesday, October 8, 2019, Port Salerno Civic Center, 4940 SE Anchor Ave., Stuart, FL 34997

MPO and consultant staff was available at each session to meet with residents, answer questions and seek input and receive comments. Surveys in English and Spanish were available as well.

Project Notification

Project flyers and a news release were sent to elected officials by the Martin MPO. The project team coordinated with city/town/village clerks to distribute flyers through their respective communication channels. The news release distributed by Martin County Office of Communications to all county email addresses on file. The Martin County Chamber of Commerce and Stuart Martin County Board of Realtors sent the flyer to all members. On two occasions, flyers were emailed to all charities, food banks and to multiple religious organizations. Martin County Transportation, MARTY Bus service, posted flyers on the buses. The flyer and news release were posted on the project website, <u>www.MartininMotion.com</u>.

Media Notification

The news release and the project flyers were sent to the local ABC, CBS and NBC television stations, radio stations WPSL and WSTU, and to the TCPalm and Palm Beach Post newspapers.

Open House Format

The open house was conducted in an informal setting. The project team had a formal PowerPoint presentation to explain the LRTP process and goals for the 2045 plan. Preceding the PowerPoint presentation, participants were invited to use hand-held clickers during an interactive multiple-choice question and answer session to gage demographical and basic transportation habits.

At each location, attendees were greeted at the entrance to the open house and asked to sign-in to the meeting and awarded \$100 in Martin Mobility Bucks. There was a large "Welcome" display board at the entrance to the chamber. Also, Title VI boards were on the sign-in table. Meeting flyers and surveys in English and Spanish were available at each location. Team members met with the public and explained each station and the LRTP.

Participants were encouraged to use an interactive map displayed on the project website to pinpoint locations of projects or improvements they want addressed in the LRTP.

Additionally, there were three photo board cutouts where attendees were encouraged to take photos and share on social media using the hashtag MartininMotion (#MartininMotion). Also, attendees were encouraged to write comments on the back of the boards.

Open House Attendance

Stuart City Hall, Wednesday, October 2, 2019

There were 12 members of the public, including Stuart Vice Mayor Eula Clarke and City Commissioner Merritt Matheson. Also, representatives from the Alzheimer's Association, Kane Center and Guardians of Martin County attended the open house.

One member of the media attended the open house.

Project Team Attendees

There were 10 staff representatives at the meeting to assist businesses, the public and agencies in answering questions and concerns. The project team included:

- Martin MPO: Beth Beltran, Bolivar Gomez, Ricardo Vazquez, Joy Puerta
- TY Lin: Vikas Jain, Sara Guteknust, Joseph Yesbeck
- Quest: Peter Dobens, Nannette Rodriguez, Maria Camacho.

Elisabeth Lahti Library, Wednesday, October 3, 2019

There were about 25 attendees at the meeting; 18 members of the public signed in and about 7 members of the public chose not to sign in. Among the participants was Indiantown mayor Guyton Stone, and Council Member Jackie Gary Clarke.

There were no members of the media at the Indiantown meeting.

Project Team Attendees

There were nine (9) staff representatives at the meeting to assist businesses, the public and agencies in answering questions and concerns. The project team included:

- Martin MPO: Beth Beltran, Bolivar Gomez, Ricardo Vazquez, Joy Puerta
- TY Lin: Vikas Jain, Sara Guteknust
- Quest: Peter Dobens, Nannette Rodriguez, Maria Camacho

Port Salerno Civic Center, Tuesday, October 8, 2019

There were 18 participants at the Port Salerno Civic Center open house. There were no elected officials or members of the media to participate.

Project Team Attendees

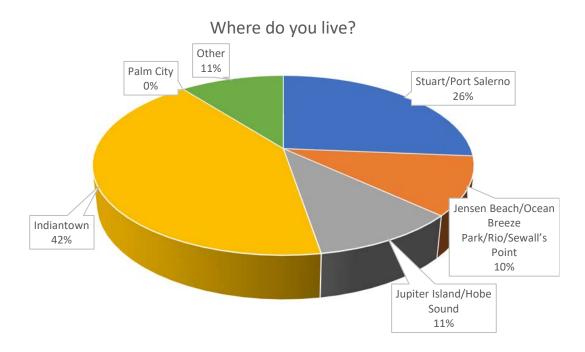
There were nine (9) staff representatives at the meeting to assist businesses, the public and agencies in answering questions and concerns. The project team included:

- Martin MPO: Beth Beltran, Bolivar Gomez, Ricardo Vazquez, Joy Puerta
- TY Lin: Vikas Jain, Sara Guteknust
- Quest: Peter Dobens, Nannette Rodriguez, Maria Camacho

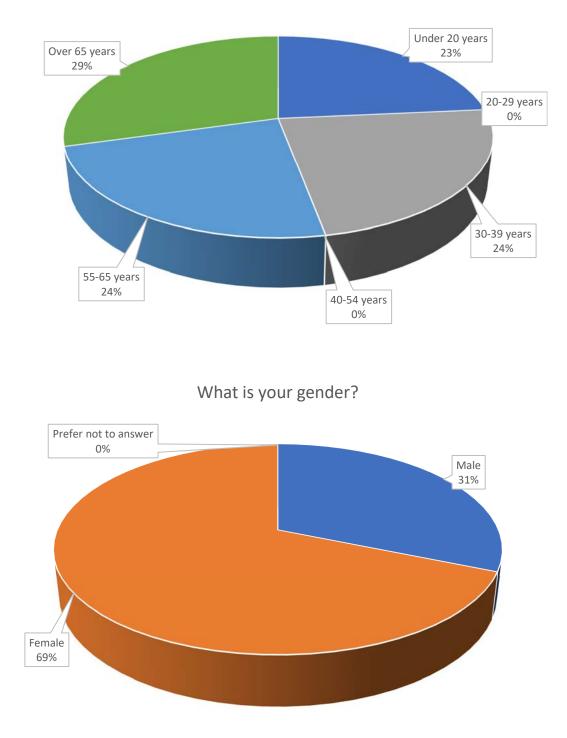
Clicker Game

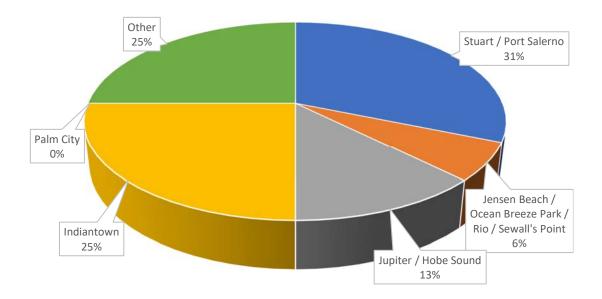
At the beginning of each presentation, a game was held where attendees were asked a series of questions and answers registered on a computer "clicker" that tabulated responses. The questions were similar to the questions asked on the online survey. Upon completion, a PowerPoint presentation was used to explain the MPO LRTP program and process.

The clicker game results included:



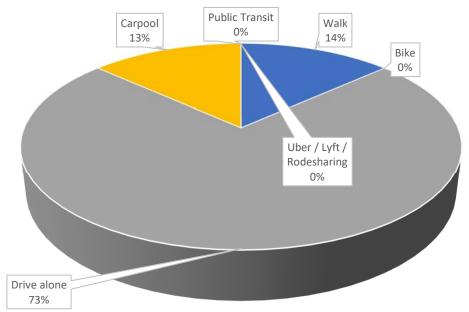
What age group are you in?

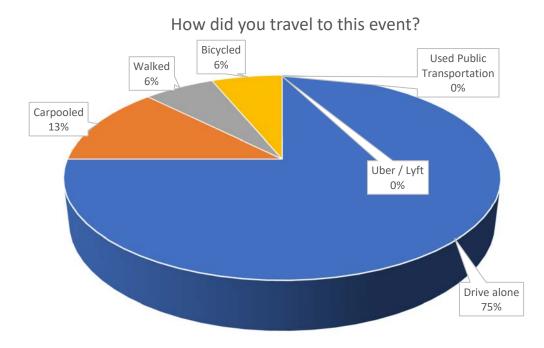




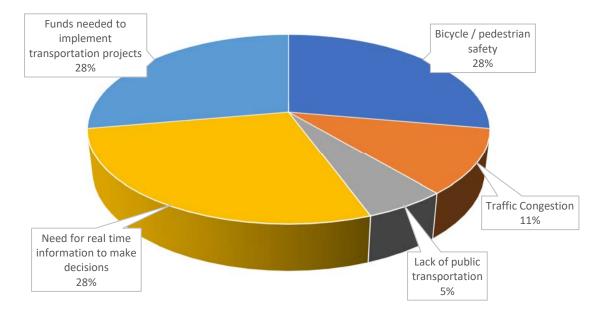
Where do you go to work or go to school?

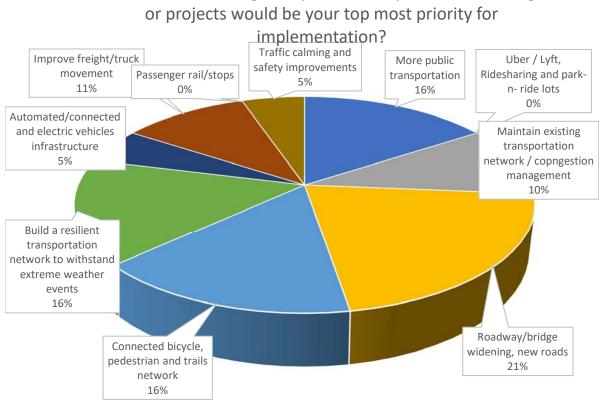
What is your most common mode of transportation to work or school?



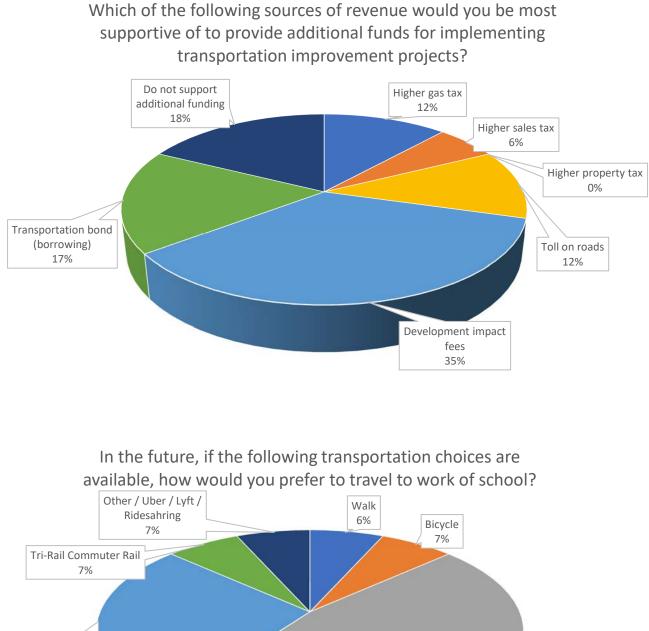


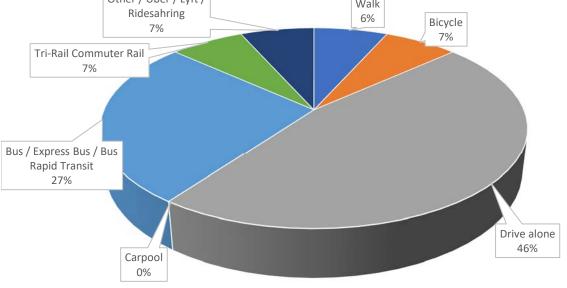
What are some of the most pressing transportation problems in Martin County?





Which of the following transportation improvement strategies





Open House Handouts

Each participant was provided with \$100 in Martin Mobility Bucks. The package included five (5) Mobility Bucks in \$20 denominations. The visitors were then asked how they believe the transportation funds should be distributed. There were 10 categories:

- Traffic Calming & Safety Improvements
- Transit Service Improvements
- Park-n-Ride/Ridesharing
- Maintain Existing Roadways & Relieve Congestion
- New Roads/Widen Roads and Bridges
- Bicycle, Pedestrian and Trails
- Extreme Weather Resilient Transportation Network
- Automated/Connected/Electric/Shared-use Vehicles
- Freight Improvements
- Passenger Rail

MOBILITY BUCKS RESULTS

	MARTIN IN MOTION MOBILITY BUCKS														
	Traffic Calming & Safety Improvements	Transit Service Improvements	Lots /	Maintain Existing Roadways & Relieve	Roads &	Bicycle, Pedestrian &	Resilient	Automated / Connected / Electric / Shared- use Vehicles	Freight Improvements	Passenger Rail					
Stuart	8	9	0	10	1	15	2	4	0	11					
Indiantown	7	16	1	13	15	13	15	1	2	12					
Port Salerno	16	7	3	13	0	31	8	0	4	8					
TOTALS	31	32	4	36	16	59	25	5	6	31					
	12.65%	13.06%	1.63%	14.69%	6.53%	24.08%	10.20%	2.04%	2.45%	12.65%					

Members of the public also were able to leave comments or take the project survey using a project handout, or online at the project website. There were six (6) project surveys completed and returned at the meeting. Surveys are still being accepted online.

Public Comments

Participants had the opportunity to complete written comment forms and placed into comment boxes at the meeting. A total of three comments were left in the comment boxes at the Stuart City Hall meeting; three at the Elisabeth Lahti Library and one at the Port Salerno Civic Center. Additional comments will be added if mailed to the MPO or added online.

End of Open House Summary

This open house summary was prepared by Quest Corporation of America, Inc. For additional questions or comments, you may reach Peter F. Dobens at 954-699-3556 or at <u>Peter.Dobens@QCAusa.com</u>.

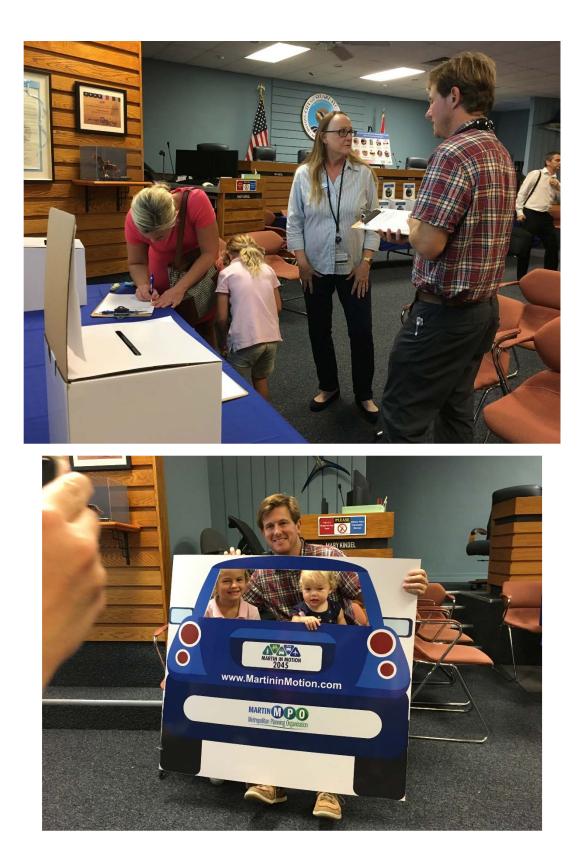
STUART CITY HALL OPEN HOUSE PHOTOS







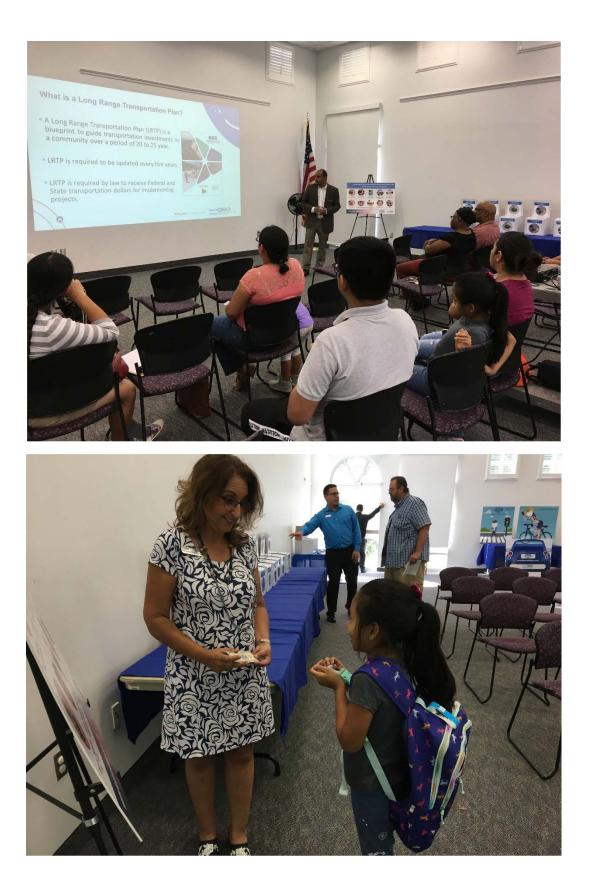


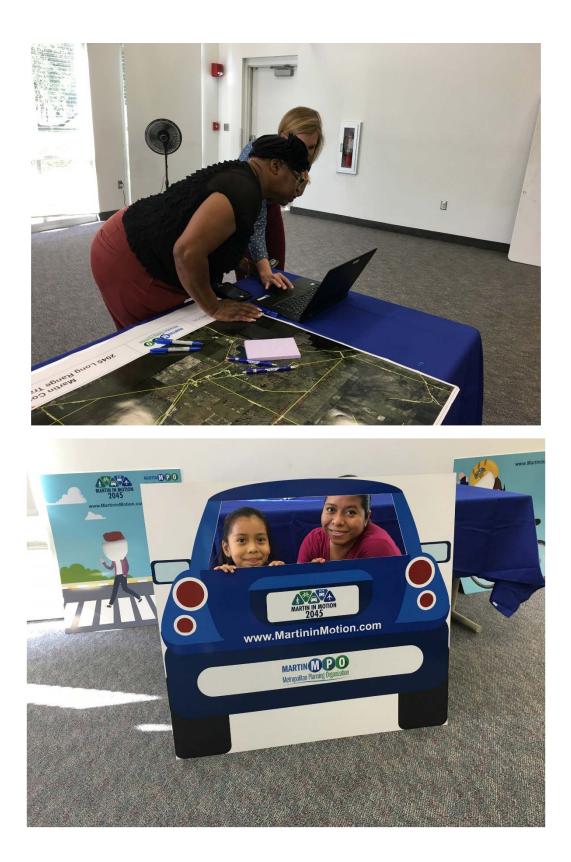




ELISABETH LAHTI LIBRARY PHOTOS

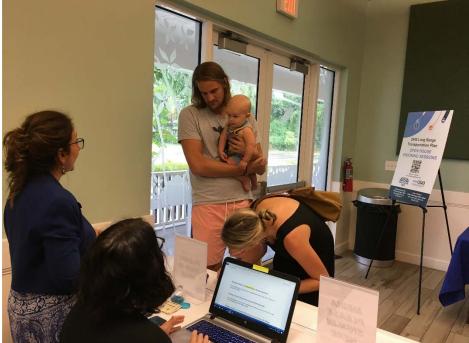






PORT SALERNO CIVIC CENTER













Martin MPO 2045 Long Range Transportation Plan Open Houses

Wednesday, October 2, 2019, Stuart City Hall Thursday, October 3, 2019, Elisabeth Lahti Library Tuesday, October 8, 2019, Port Salerno Civic Center

Appendix

- A. Public Notification
- **B. Media Notification**
- C. Display Boards / Photo Boards
- D. Sign-in Sheets
- E. Public Comments

Appendix A

Public Notification

2045 Long Range Transportation Plan OPEN HOUSE VISIONING SESSIONS

GET INVOLVED! Help Us Plan Martin County's Transportation Future

The Martin MPO is currently developing the 2045 Long Range Transportation Plan (LRTP). Attend a visioning session and give us your ideas for the future of transportation in Martin County!

Bolivar Gomez, MA Project Manager, MPO bgomez@martin.fl.us 772-288-5412



Peter F. Dobens Public Information Officer, Quest peter.dobens@QCAusa.com 954-699-3556



4 p.m. to 7 p.m.

WEDNESDAY, OCT. 2, 2019

Stuart City Hall 121 SW Flagler Ave. Stuart, FL 34994

THURSDAY, OCT. 3, 2019

Elisabeth Lahti Library 12500 SW Adams Ave. Indiantown, FL 34956

TUESDAY, OCT. 8, 2019

Port Salerno Civic Center 4940 SE Anchor Ave. Stuart, FL 34997



Martin in Motion www.MartininMotion.com

Public participation is solicited without regard to race, color, national origin, age, sex, religion, disability or family status. Persons with questions or concerns about non-discrimination, or who require special accommodations under the Americans with Disabilities Act (ADA) or language translation services (free of charge) should contact Bolivar Gomez, Senior Planner (Title VI/Nondiscrimination) at (772) 288-5412 or bgomez@martin.fl.us.



2045 Plan de Transporte Sesión de Visión

involucrarse!

Ayúdenos a planificar el futuro del transporte del condado de Martin

Martin MPO está desarrollando actualmente el 2045 Plan de Transporte. Atender una sesión de visión y bríndenos sus ideas para el futuro del transporte en el condado de Martin!

Bolivar Gomez, MA Gerente del proyecto, MPO bgomez@martin.fl.us 772-288-5412



Peter F. Dobens Oficial de información pública, Quest peter.dobens@QCAusa.com 954-699-3556



4 p.m. a 7 p.m.

Miércoles, OCT. 2, 2019

Stuart City Hall 121 SW Flagler Ave. Stuart, FL 34994

Jueves, OCT. 3, 2019

Elisabeth Lahti Library 12500 SW Adams Ave. Indiantown, FL 34956

Martes, OCT. 8, 2019

Port Salerno Civic Center 4940 SE Anchor Ave. Stuart, FL 34997



Martin en Movimiento www.MartininMotion.com

La participación pública es solicitada sin tener en cuenta raza, color, origen nacional, edad, sexo, religión, discapacidad o estado de familia. Personas con preguntas o preocupaciones sobre la no discriminacion, o personas que requieren acomodaciones especiales bajo el Acta de los Americanos con Discapacidades para participar en esta reunión informativa, o personas que requieran servicios de traducción (gratuitamente), deberá notificar a: Bolivar Gomez, Planificador de Transporte (Titulo VI/No discriminacion) a (772) 288-5412 o bgomez@martin.fl.us.



Filter by:	ge Group(s)	Boards & C	Wednesday × 2 Basic Computing > 2:00 pm Coding and Robots: One on One	(s) 🗸	Location(s)	v 60
Sunday	Monday	Tuesd	» 3:00 pm	ırsday	Friday	Saturday
		1	After School Art » 3:30 pm Coding and Robots: One on One » 3:30 pm Coding and Robots: One on One » 4:00 pm	DAY : Book 10.30 am ime 0-2	4 Android Q+A » 10:00 am Music & Motion @ Morgade »	5 Intermediate English Class » 10:00 am Family Story
6	7 Music and Motion @ Blake >> 10:30 am Joint Citizen's YIEW 2 MORE	8 Board of C Commissi Meeting » Preschool + VIEW 9 M	2045 Long Range Transportation Plan Open House Visioning Session » 4:00 pm Guitar Club » 4:15 pm Coding and Robots: One on One » 4:30 pm	ss pment of Martin Board of ors (13 MORE	 VIEW 5 MORE Android Q+A > 10:00 am Music & Motion (@ Morgade > VIEW 6 MORE 	VIEW 5 MORE 12 Intermediate English Class > 10:00 am Book Swap > VIEW 5 MORE
13	14	15	16 17		18	19

Stuar	Government Departments Residents Business
	Search calendar by: Start date Search Search Solect a Calendar V C
	October > 2019 City Events Calendar
	Su M Tu W Th F Sa 22 31 1 2 3 4 5 October 2, 2019, 4:00 PM -7:00 PM @ Stuart City Hall
	6 7 8 9 10 11 12 The Martin MPO is currently developing the 2045 Long Range Transportation Plan (LRTP). Attend a visioning session and give us your ideas for the future of transportation in Martin Countyl Additional Meetings: October 3rd at Elisabeth Lahti Library in Indiantown and October 8th at Port Salerno Civic Center in Stuart.
	12 14 15 16 17 18 19 More Details
	20 21 22 23 23 23 25 26 Martin County High School Homecoming Parade October 3, 2019, 5:00 PM -8:00 PM @ East Ocean Blvd
	27 28 29 30 31 1 2 Homecoming Parade Produced by: Martin County High School More Details
	Jump To: Stuart Sunrise Rotary Water Forum □ City Events Calendar (22) October 5, 2019, 9:00 AM - 12:00 PM @ Riverwalk Stage Water Forum Produced by: Rotary Club of Stuart- Sunrise
	City Meetings Catendar (8) More Details
	Recreation Activities (8) Stuart Green Market October 6, 2019, 9:00 AM - 1:00 PM Every Sunday - Year Round Vendors Contact Kevin Osburne: (772) 233-0297 stuartgreenmarket@yahoo.com https://www.facebook.com/StuartGreenMarket/ http://stuartgreenmarket.org/ The best of fresh produce, cut flowers, plants, shrubs & small trees. Take home fresh fruits, vegetables, baked goods, honey, jams, jellik preserves, eggs, cheese, sauces, plants, organic goods and much, much morel
	More Details Rock'n RiverWalk October 6, 2019, 1:00 PM -4:00 PM

Appendix **B**

Media Notification



www.martin.fl.us

2401 SE Monterey Road, Stuart, Florida 34996

For immediate release: Contact: Peter F. Dobens, 954 699 2556, <u>peter.dobens@QCAusa.com</u>

Martin MPO Seeks Public Input in Developing 2045 Long Range Transportation Plan

Martin County residents will have three opportunities to meet with transportation planners in early October and help shape the 2045 Long Range Transportation Plan (LRTP) at three open houses throughout the county. The open houses provide the community with an opportunity to give input and share their ideas about how and where Martin County should improve transportation, accessibility and safety as well as long term transit planning.

The open houses will be held from 4 p.m. to 6 p.m. on Wednesday, Oct. 2, at Stuart City Hall, 121 SW Flagler Ave., Stuart, FL 34994, Thursday, Oct. 3, at the Elisabeth Lahti Library, 12500 SW Adams Ave., Indiantown, FL 34956, and Tuesday, Oct. 8, at the Port Salerno Civic Center, 4940 SE Anchor Ave., Stuart, FL 34997.

"Martin County residents can provide us with insight on how to allocate our transportation dollars. They can help us outline where road and other transportation improvements are needed. Where do we need new sidewalks or bicycle paths," Martin MPO Administrator Beth Beltran said. "This is why resident participation is critical at the visioning sessions as we draft a plan that represents the Martin County community and its needs."

At the open house, each participant will be allocated "Martin Mobility Bucks" to spend on projects that mean the most to them and would give the most benefit to the community. Members of the public also are asked to take a survey on how to allocate transportation funds, rank multimobility priorities or recommend how to raise funds to bridge the transportation funding gap between federal, state and local dollars. The survey is accessible on the Martin MPO 2045 LRTP website, Martin in Motion (www.martininmotion.com). The website also includes an interactive map that allows visitors to drop a pin on the Martin County map and tell the MPO where improvements are needed or desired.

-more-

Pg 2. Martin MPO

The US Department of Transportation and Florida Department of Transportation programs transportation improvement projects based on the MPO's adopted LRTP.

The Martin MPO is charged with improving mobility and prioritizing transportation improvement projects for Martin County. The LRTP is adopted by the MPO Governing Board which is comprised of members of the Martin County Commission, City of Stuart, Town of Sewall's Point, Village of Indiantown. Under federal mandate, the LRTP is a 25-year plan, updated every five years to reflect the changing needs and desires of residents.

For more information on the 2045 LRTP, visit <u>www.MartininMotion.com</u>, call 772-288-5412 or email Bolivar Gomez, Senior Planner, <u>bgomez@martin.fl.us</u>.

####

Public participation is solicited without regard to race, color, national origin, age, sex, religion, disability or family status. This document may be reproduced upon request in an alternative format by contacting the County ADA Coordinator (772) 320-3131, the County Administration Office (772) 288-5400, Florida Relay 711, or by completing our accessibility feedback form at www.martin.fl.us/accessibility-feedback.

Appendix C

Display Boards



2045 Long Range Transportation Plan

OPEN HOUSE VISIONING SESSIONS



Martin in Motion www.MartininMotion.com





Bolivar Gomez, MA Project Manager, MPO bgomez@martin.fl.us 772-288-5412 Peter F. Dobens Public Information Officer, Quest peter.dobens@QCAusa.com 954-699-3556





Title VI

The Martin Metropolitan Planning Organization (MPO) is required to comply with variate non-discrimination laws and regulations, including Title VI of the Civil Fights Act of 1964.

Public participation is colicited without regard to race, color, national origin, age, sex, religion, disability or family status.

Persons wishing to express their concerns about Title VI may do so by contecting:

> Bylliogr Sonnez, MA Compliance College Martin MPO S481.9E Willaughby Boulevard Suite 101 Stoart, FL 34894 772-265-5412 bgoines (Smartin Rus





Título VI

La Organización de Planificación Metropolitana de Martin (MPO) debe cumplir con varias leyes y regulaciones antidiscriminatorias incluyendo el Título VI de la Ley de Derechos Civiles de 1964.

Se solicita la participación pública sin distinción de raza, color, nacionalidad, edad, sexo, religión, discapacidad o estado familiar.

Las personas que deseas expresar sus preocupaciones asiste el Titulo V. possion hacarlo comunicándose coro

> Bolher Gemer, MA Michal de Carriannidad

Martin MP2 3481 SE Willoughby Bouleyard Suite 101 Stuart, FL 34034 773-258-5412 byomez@martin.fl.us

MARTIN MPO 2045 LONG RANGE TRANSPORTATION PLAN Mobility Bucks Investment Categories



Traffic Calming & Safety Improvements



Bicycle, Pedestrian and Trails



Transit Service Improvements



Extreme Weather Resilient Transportation Network



Park-n-Ride Lots/Ridesharing



Automated/Connected/ Electric/Shared-use Vehicles



Maintain Existing Roadways & Relieve Congestion



Freight Improvements



New Roads/Widen Roads and Bridges



Passenger Rail

WWW.MARTININMOTION.COM





PHOTO BOARDS





Appendix D

Sign-in Sheets

SIGN IN

Stuart City Hall, 121 SW Flagler Avenue, Stuart, FL. 34994 Wednesday, October 2, 2019 dia Martin in Motion Open House

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Appendix E

Comments

STUART CITY HALL





COMMENT FORM

Open House

Martin MPO 2045 Long-Range Transportation Plan Stuart City Hall, 121 SW Flagler Ave., Stuart, FL Tuesday, October 2, 2019 Elisabeth Lahti Library, 12500 SW Adams Ave., Indiantown, FL Wednesday, October 3, 2019 Port Salerno Civic Center, 4940 SE Anchor Ave., Stuart, FL Tuesday, October 8, 2019

Please provide your comments below. If more space is needed, please use an additional sheet of paper. You may place your comments in the "comment box" provided at the meeting, or mail or email to Bolivar Gomez, MA, Senior Planner, Martin MPO, 3481 SE Willoughby Boulevard, Suite 101, Stuart, FL 34994, <u>bgomez@martin.fl.us</u>. You may also add comments by visiting <u>www.MartininMotion.com</u>.

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Martin MPO 2045 Long-Range Transportation Plan

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South Fork High School

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1	Form	10/2/2019 Chalsey	Matheson	Ate Ate	Stuart	34594	772-285-\$\$03	3494 772-285-§903 <u>cmatheson@kanecenter.org</u>	Transportation	As a representative of the Council con Aging of Martin County, I would like to advocate for an innovating new approach to senior transportation. Seniors can't use traditional forms of public transit. Many are to frail to be able to walk or wait at a bus stop, and they don't have the extra income or tech sarvy to utilize apps like Uber & Upf. If the community comes together through government, non- portis and volunteers. I'm sure we could come up with a solution.
5	Бот	10/2/2019 Merritt	Matheson	506 SW South Carolina Ave	Stuart	3494	772-285-8903	34994 772-285-8993 mmatheson@clistuart.fl.us	Traffic / pedestrian / trails	More traffic calming in urban areas; Traffic / Multi-use path along Palm City Road; pedestrian / traits Multi-use path across St.12:12.Lucie River next to old Roosevelt Bridge.
m	Form	10/2/2019	Form 10/2/2019 Mary Barrtes	1111 Federal Highway, #116 Towers Building	Stuart	3494	772-223-63\$1	34994 772-223-63\$1 mbarnes@akcare.org	Transit/ disabled transportation	Expand on City routes for the disabled Alzheimer's patients - caregivers travelling to specialized Alzheimer's Day Care Centers - Treatment and other medical clinical services.

No sidewalks on west side of 169th Drive, lack of drainage. Difficulty navigating during high rain events.	More bus for the South Fork High School. The buses are overcrowded and I have a friend tell me that her	son scared to go in the bus because they have to sit in the middle of the bus because it's unsafe for our idds in case of an accident. All locations for huse show backers down & Amonal	utasoop, aanaan nee a coorda pickup, Indian Mound or Osceola pickup, Booker Park pickup, SW Martin Ave pickup.	Hooding during high rain events.	Speeding in areas with children	MLK Blvd needs improvements	Need bike lane to extend at least until	Indian Street and preferably all the	way south past Jefferson on A1A (both sides north of Jefferson)	Need bike lane between US1 and A1A both wavs.	Meed bêtter signage so as to let 13- wheelers not allowed on 51. Lucie Boulevard and Inclian Street fast Dixie Highway in Golden Gate Areas, More control of bicycle riders - they hug the drive from Cove Road to Hote Sound on Dixie Hiet Wav.
Sidewalks/Floodi ng		School buses		Flooding /	speeding	Roadway improvements					Freight, signage, bicyclists
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		(two names on one form, no addresses)									3450 SE Fairmont St.
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Traffic calming on residential through streets, Bus nouses for every patron to all the CRA's on Tuesdays through Sundays until 12 midnight; minimize flow of collector streets	Please remove smaller road calming on the Gomez Avenue-Hobe Spund for freight truck accessibility	My name is April Young and 1 work with pregnant wemen in shelter for Martin County. My goal is to help them become self-sufficient and it is alfficult when they do not have their cwn vehicle. One thing that would be helpful to us for upcoming plans> 1. Evening commute - some of our moms have evening shifts (6-9) or sometimes need to take night classes at IRSC. The bus does not run during these weekday hours. 2. Weekend commute- working moms have trouble getting to and	from work on weekends with no bus transportation 3. We are off of Palm Beach Rd &
traffic calming, busing	traffic calming		Public Transit
34396 772-692-4344 <u>Jearra@eocaptec.com</u>	ginhalstead@aol.com		april@maryshome.org
772-692-4344	Hobe Sound 33455 772-240-9121		33496 772-223-5000
34996	33455		33496
Stuart	Hobe Sound		Stuart
905 ? Parkway	9125 SE Morning St.		Mary's Home, 1033 SE 14th Street
Form 10/8/2019 Rosiyn Wigren (sp?)	10/8/2019 Beverly Halstead		April Yaung
10/8/2019	10/8/2019		Email 10/9/2019
	Form		
11	12		13

 14th street- with Stuart lodge, Compassion house it would be heipful to have a stop closer because are moms are pregnant. Walking to US1 or Ocean can be difficult in the last trimester and other agencies close by can benefit with this stop. Hopefully, you can take our remarks in consideration during your sseessment of Martin County transit system as I was not able to attend last nights meeting. Thank you for your time! be heipful to us for upcoming plans> 	Speed bumps and/or lower speed limit (25 mph or maybe 30 mph) on SE Robertson Street; traffic calming	Bike access to Atlantic Ridge from Salerno or Rocky Point	SE Pettway - disrepair, potholes, maintenance issues - Repave the street from SR A1A and Gomez	SE Pettways Between SR A1A and US- 1, reduce number of speed bumps from four to two	Sidewalk needs to continue on SE Railway Ave up to Salerno.Road	Make sure to incorporate bike, ped and trails included in the 2017 Masterplan in the 2045 LRTP.
	traffic calming	bicycle paths	maintain traffic	traffic calming	sidewalks	bicycle paths
	samhhay@gmail.com	samhhay@gmail.com	gin nhaistead@aoi.com	ginnhalstead@aoi.com	nathan.a.bjornson@gmail.com sidewalks	tonyjoy@bellsouth.net
	Map	Map	Map	Map	Map	Map
	14	15	16	17	18	18





2045 Long Range Transportation Plan Cost Feasible Plan Open Houses

Virtual Open Houses, 3 p.m. to 4 p.m. and 4 p.m. to 5 p.m. In-person Open House, Blake Library, 2351 SE Monterey Road, Stuart, FL 34996 Tuesday, June 9, 2020

Public Information Workshop Summary

Two virtual and one in-person Public Information Open Houses were held Tuesday, June 9, 2020 for the Martin Metropolitan Planning Organization (MPO) 2045 Long Range Transportation Plan Draft Cost Feasible Plan. The open houses were held on the GoToWebinar platform and in-person in the John F. and Rita Armstrong Wing of the Blake Library, 2351 SE Monterey Road, Stuart, FL 34996. The Library was open to walk-in visitors from 3 p.m. to 5 p.m. The virtual meetings were hosted from 3 p.m. to 4 p.m. and 4 p.m. to 5 p.m. The open houses were held to present the draft Cost Feasible Plan and to answer questions from participants. Participants were also invited to submit written comments by Friday, June 19, 2020.

Project Notification

Because of the COVID-19 Pandemic, notification was limited to email addresses and printed flyers. Invitation flyers were sent to elected officials, appointed officials, interested stakeholders, area non-profit organizations, charities and everyone who contacted the Martin MPO requesting information. The online and printed project flyers included links to register for one or both webinars. The Martin MPO attached the online flyer invitation to the Martin County Constant Contact email notification system. The project team also sent flyers to each of the incorporated municipalities, Indiantown, Jupiter Island, Ocean Breeze, Sewall's Point and Stuart, and requested the flyer be sent via email to community members on the respective municipalities' contact list. Printed flyers were available at Stuart City Hall. Martin County Administrative Offices and other municipal offices were closed due to the COVID-19 Pandemic.

Also, the meeting notice was available on the 2045 Long Range Transportation Plan website, <u>www.MartininMotion.com</u> under the Get Involved/Meetings drop down menu.

Public Information Open Houses Format

The open house was conducted as a formal PowerPoint presentation where participants were welcomed to attend either online (virtually) or in-person. The in-person presentation included a live projected computer transmission of each of the virtual webinars. In-person attendees were greeted at the front door and asked to sign in. Each was offered a facemask and hand sanitizer upon entering the meeting. Each member was presented with a printed flyer that included a link to the project website, <u>www.MartininMotion.com</u>, and was told that a video recording of the virtual presentation and the PowerPoint PDF would be available online beginning Wednesday, June 10, 2020.

Each member of the project team was introduced at the beginning of each webinar. Online participants were then asked a two-question poll prior to beginning the PowerPoint presentation.

Poll Question One:

- How many people are attending the webinar with you?
 - o I am attending alone (66% at 3 p.m. / 100% at 4 p.m.)
 - o Two (33% at 3 p.m. / 0% at 4 p.m.)
 - o Three (0% at 3 p.m. / 0% at 4 p.m.)
 - Four or more (0 % at 3 p.m. / 0% at 4 p.m.)

Poll Question Two:

- Where do you live?
 - o Stuart/Port Salerno/Palm City (100 % at 3 p.m. / 75% at 4 p.m.)
 - Jensen Beach/Ocean Breeze/Rio/Sewall's Point (0 % at 3 p.m. / 0% at 4 p.m.)
 - Jupiter Island/Hobe Sound (0% at 3 p.m. / 25% at 4 p.m.)
 - o Indiantown (0 % at 3 p.m. / 0% at 4 p.m.)
 - Outside of Martin County (0% at 3 p.m. / 0% at 4 p.m.)

Open House Attendance

There were 14 registered attendees for the 3 p.m. to 4 p.m. webinar with seven attending the live session. There were 12 registered attendees for the 4 p.m. to 5 p.m. webinar with seven attending the session. There were two attendees for the 3 p.m. to 4 p.m. in-person open house presentation at the Blake Library. There were no in-person attendees for the 4 p.m. to 5 p.m. open house. There were no elected officials or members of the media present at any of the open houses (virtually or in-person).

Attending in-person at 3 p.m.:

- Melody Hearn, Family Care Council Area 15
- Phyl Weaver, Transportation for the Disadvantaged

Attending online at 3 p.m.:

- Lisa Lutz
- Margaret Baldino
- Melissa Zolla
- Stacy Ranieri
- David Kapill
- William Barry
- Anthony Zweiner

Attending online at 4 p.m.:

- Carol Spanier
- Dory Fitzwater
- Karen Kerwin
- Diana Scheiner
- Catherine Hilton, Urban Planner
- Denise Vidal-Bennette
- Karri Casper

Project Team Attendees

There were eight staff represented at the virtual and in-house open houses. The project team included:

- Online
 - o Vikas Jain, Consulting Project Manager, T.Y. Lin International
 - o Joe Yesbeck, Consulting Project Principal, T.Y. Lin International
 - o Beth Zsoka, Community Outreach Consultant, Quest Corporation of America
- In-person at the Blake Library
 - o Beth Beltran, Martin MPO Administrator
 - o Bolivar Gomez, Martin MPO Project Manager, Senior Planner
 - o Ricardo Vazquez, Martin MPO
 - Peter Dobens, Community Outreach Project Manager, Quest Corporation of America
 - Nannette Rodriguez, Community Outreach Support, Quest Corporation of America

Questions/Comments Received at the Open House

- 3 p.m. session
 - No comments
- 4 p.m. session

- What is the time frame for constructing a shared use path on Palm City Road? This road is heavily used by bicyclists and there are safety issues.
- Are there any improvements in Tequesta, south of Jonathan Dickinson Park?
- Does this plan address or discuss accessibility to rail?
- Are there plans to improve Bridge Road west of I-95 to Pratt Whitney Road?

-- End of Open House Summary --

This open house summary was prepared by Quest Corporation of America. For additional questions or comments, you can reach Peter F. Dobens, 954-699-3556, or at <u>Peter.Dobens@QCAusa.com</u>

APPENDIX

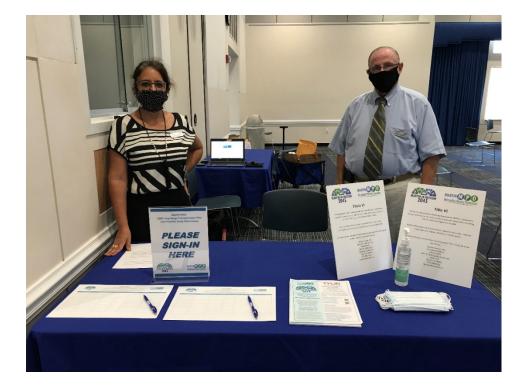
- A. Open House Photos
- B. Analytics (3 p.m.)
 - a. Attendees
 - b. Poll responses
 - c. Engagement
- C. Analytics (4 p.m.)
 - a. Attendees
 - b. Poll responses
 - c. Engagement (including online comments)
- D. Email Comments

E. Sign-in Sheets (at Blake Library)

- a. Public
- b. Staff
- F. Flyers
 - a. Online
 - b. In-person
- G. Online Presentation

Open House Photos











Engagement Analytics, 3 p.m. to 4 p.m. Virtual Webinar

GoToWebinar

Engagement Report

Last Name	First Name	Email Address	Engagement Typ-	Engagement Count(Per Person)	Question Asked	Answer Given
Lutz	Lisa	weezerflips@comcast.net	Poll	1	How many individuals are participating in this Webinar with you?	Two
Lutz	Lisa	weezerflips@comcast.net	Poll	2	Where do you live?	Stuart/Port Salerno/Palm City
Baldino	Margaret	margret@slfpoa.comcastbiz.net	Poll	1	How many individuals are participating in this Webinar with you?	I am attending alone
Baldino	Margaret	margret@slfpoa.comcastbiz.net	Poll	2	Where do you live?	Stuart/Port Salerno/Palm City
Zolla	Melissa	melissa@fireflyforyou.com	Poll	1	How many individuals are participating in this Webinar with you?	I am attending alone
Zolla	Melissa	melissa@fireflyforyou.com	Poll	2	Where do you live?	Stuart/Port Salerno/Palm City
Ranieri	Stacy	stacy@fireflyforyou.com	Q&A	1	I was unable to click on the selections for the two poll question. I am listening alone. And I live in Stuart. Hi Beth! Hi Bolivar. :)	

3 p.m. to 4 p.m. Poll

STANDARD MARTIN IN MOTION: DRAFT COST FEASIBLE VIRTUAL OPEN HOU Tuesday. Jun 09, 2020 02:32 PM EDT - 03:45 PM EDT	SE	>
Polls Survey Q&A		DOWNLOAD
2 7 43 % Pollquestions Attendees Avg, Response Rate		
Q Search poll questions or answers		
1 of 2. How many individuals are participating in this Webinar with you? Multiple choice with single answer		3 of 7 Attendees responded
66.67% I am attending alone	2 Responses	
33.33% Two	1 Responses	
2 of 2. Where do you live? Multiple choice with single answer		3 of 7 Attendees responded
100% Stuart/Port Salerno/Palm City	3 Responses	

3 p.m. to 4 p.m. Engagement

Overview > MARTIN IN MOTION: DRAFT COST ...

STANDARD

MARTIN IN MOTION: DRAFT COST FEASIBLE VIRTUAL OPEN HOUSE

Tuesday, Jun 09, 2020 02:32 PM EDT - 03:45 PM EDT

7 Attendees		③ Avg	58 Interest Rat	ing	7 48 Total Avg. Attentiveness	⑦ 39% Attendance Rate
Attendance Conversion				$\overline{\mathbf{A}}$	Number of Attendees in Session	Ŧ
Clicked Registration Link			80		6	
Registrants	18				4	
Attendees	7					
(2	5 50	75	100	01.3° 01.3' 01.4' 01.5' 01.5' 03.0' 03'	⁵¹ 63 ¹² 63 ¹² 63 ¹² 63 ²³ 63 ¹⁴ 63 ¹⁶

Engagement Analytics, 4 p.m. to 5 p.m. Virtual Webinar

GoToWebinar Engagement Report						
					Engagen	nent Metrics
LastName	First Name	Email Address	Engagement Type	Engagement Count(Per Person)	Question Asked	Answer Given
Spanier	Carol	cspanier@bellsouth.net	Q&A	1	Are there plans to widen SW/SE Bridge Rd between 195 and Pratt Whitney Rd (711)? There is no shoulder at all and it is very scary when a school bus or truck comes from the opposite direction and doesn't fit in their lane, there is no where to go without a shoulder.	
Spanier	Carol	cspanier@bellsouth.net	Q&A	2	Thankyou	
Spanier	Carol	cspanier@bellsouth.net	Poll	3	Where do you live?	Stuart/Port Salerno/Palm City
Spanier	Carol	cspanier@bellsouth.net	Poll	4	How many individuals are participating in this Webinar with you?	I am attending alone
Hilton	Catherine	catherine_h_2001@yahoo.com	Poll	1	Where do you live?	Stuart/Port Salerno/Palm City
Hilton	Catherine	catherine_h_2001@yahoo.com	Poll	2	How many individuals are participating in this Webinar with you?	I am attending alone
VIDAL-BENNETTE	DENISE	dedelynn@gmail.com	Q&A	1	What plans do you have for the Martin County section in Tequesta south of Jonathan Dickenson Park.	
Scheiner	Diana	dfscheiner@gmail.com	Q&A	1	When will a bike path be built on Palm City Road	
Fitzwater	Doug	dfitzwater@lucidodesign.com	Poll	1	Where do you live?	Stuart/Port Salerno/Palm City
Fitzwater	Doug	dfitzwater@lucidodesign.com	Poll	2	How many individuals are participating in this Webinar with you?	I am attending alone
Kerwin	Karen	kak33455@bellsouth.net	Poll	1	Where do you live?	Jupiter Island/Hobe Sound
Kerwin	Karen	kak33455@bellsouth.net	Poll	2	How many individuals are participating in this Webinar with you?	I am attending alone
Casper	Karri	KarriCasper@gmail.com	Q&A	1	I am not able to answer the questions. There is one person participating and I live in Port Salerno.	

Download

4 p.m. to 5 p.m. Poll

MARTIN IN MOTION: DRAFT COST FEASIBLE PLAN VIRTUAL OPEN HOUSE

Polls Survey	Q&A		DOWNLOAD
2 7 Poll questions Atte	57 % endees Avg. Response Rate		
Q Search poll qu	estions or answers		
	any individuals are participating in this Webinar with you? choice with single answer i am attending alone	4 Responses	4 of 7 Attendees responded
2 of 2. Where Multiple	do you live? choice with single answer		4 of 7 Attendees responded
75%	Stuart/Port Salerno/Palm City	3 Responses	
25%	Jupiter Island/Hobe Sound	1 Responses	

3 p.m. to 4 p.m. Engagement

Live	Recording				BUILD REPORT
 STANDAR MARTI 		RAFT COST FEASIB	LE PLAN VIRTU	AL OPEN HOUSE	Download
T	7 Attendees	() 83 Avg. Interest	© Rating	83.86 Total Avg. Attentiveness	⑦ 58% Attendance Rate
Attenda	ance Conversion		⊻ Nu	mber of Attendees in Session	$\overline{\mathbf{A}}$
Clicke Link Regist	d Registration		56 6 4		
Attend	dees 7	15 30 45	0	the the set of the set of the set of	in the second

EMAIL COMMENTS

From: To: Subject: Date: Dick Landrum "LongRange-PublicComment@martin.fl.us" MPO Meetings for Future Transportation Needs Sunday, June 7, 2020 6:44:37 PM

CAUTION: This e-mail message originated from outside of the QUEST organization. Verify that the sender's address is a correct address.

?

Sorry I won't be able to sit in on the meetings, but I have the same comment that I have had several times in the past.

- There should be bicycle paths everywhere in non-residential neighborhoods.
- There should be bicycle paths in high traffic residential neighborhoods; especially where the speed limit exceeds 25 mph.
- Where we have bicycle paths on our highways that suddenly terminate, we should push the sidewalks back and make room for bicycle paths.
- Also, in East Stuart along MLK Jr. Blvd., there are still abandoned telephone poles in the middle of the sidewalk... unacceptable.

Thanks for allowing my input,

Dick Landrum 2949 SW Cornell Ave. Palm City, FL 34990 Dick@LandrumSoftware.com (772) 249-7408



COVID-19 HOTLINE (772) 287-1652

This document may be reproduced upon request in an alternative format by contacting the County ADA Coordinator (772) 320-3131, the County Administration Office (772) 288-5400, Florida Relay 711, or by completing our accessibility feedback form at www.martin.fl.us/accessibility-feedback

The comments and opinions expressed herein are those of the author of this message and may not reflect the policies of the Martin County Board of County Commissioners. Under Florida Law, email addresses are public records. If you do not want your email address released in response to a public records request do not send electronic mail to this entity. Instead, contact this office by phone or in writing.

Vikas Jain		
Margret Balding		
Peter Dobens; Beth Zsoka; Bolivar Gomez; Beth Beltran		
RE: MPO		
Tuesday, June 9, 2020 8:35:41 AM		

CAUTION: This e-mail message originated from outside of the QUEST organization. Verify that the sender's address is a correct address.

Good morning Ms. Baldino,

Martin in Motion is Martin MPO's 2045 Long Range Transportation Plan (LRTP) that addresses mobility, accessibility and safety needs of all the residents and visitors in Martin County over the next 25 years. This Plan considers social, economic and demographic as well as land use changes and its impact on transportation. A key factor is to solicit feedback from the public and incorporate it in the plan. This Plan will accommodate and discuss mobility needs of aging population as well as disabled person. I would encourage you to participate in the open house and provide input.

You can register for the open house using the link below. You have the option to register for 3:00 pm or 4:00 pm session by clicking on the link "Register Here."

http://www.martininmotion.com/wp-content/uploads/CFP-PRINTED-VERSION-_Updated.pdf

Thanks, Vikas

Vikas Jain, AICP, GISP Associate Vice President Transportation Planning Group Manager T.Y. Lin International 500 W. Cypress Creek Road, Suite 330 Fort Lauderdale, FL 33309 Direct: 954.308.3353 Mobile: 954.695.8886 <u>Vikas.jain@tylin.com</u> Visit us online at <u>www.tylin.com</u> Twitter | Facebook | LinkedIn | Instagram

"One Vision, One Company"

From: Margret Baldino <margret@slfpoa.comcastbiz.net> Sent: Monday, June 8, 2020 9:36 PM To: Vikas Jain <vikas.jain@tylin.com> Subject: MPO

Will Martin In Motion benefit senior citizens and disabled persons with transportation needs? If so, please explain the benefits and how to register.

Looking forward to the webinar.

Respectfully, Margaret Baldino, LCAM Property Manager St Lucie Falls POA Inc 9000 SW Pennsylvania Avenue Stuart FL 34997 Margret@slfpoa.comcastbiz.net 772 221 1015

Get Outlook for Android

From: Diana Scheiner <dfscheiner@gmail.com> Sent: Wednesday, June 10, 2020 6:00 PM To: Vikas Jain <vikas.jain@tylin.com> Subject: Martin in Motion 2045 webinar

Thank you for hosting the Martin In Motion 2045 webinar.

I learned a lot from the program and my question on bike paths was answered.

I would like to volunteer to participate in future programs regarding bike paths in Martin County.

Thank you again.

Best regards,

Diana Scheiner

IN-PERSON SIGN IN SHEETS





STAFF SIGN IN

Martin in Motion Cost Feasibility Study Open House Martin in Motion Cost Feasibility Study Open House Blake Library, John F. and Rita M. Armstrong Wing, 2351 SE Monterey Road, Stuart, FL 34996 Tuesday, June 9, 2020 This document is subject to public record laws and may be released to the media or public upon request. If you do not want your personal information to be made public, do not provide this information.



NAME	ADDRESS	CITY/STATE/ZIP	TELEPHONE	EMAIL ADDRESS	ORGANIZATION
Ricaido Vazevez				Wheque @Mortin Flu)	Martin MPU
Bolivar Gomer				by one e emartin Fl. U	
Peter F. Dobens				Peter dobers OCAuse	aren Quest/ auss QCAusa.con Sue
	ez Quest Corp			nannette vodrigueza	QCAusa.con The
Beth Beltron	1			0	

Project Flyers

Online Flyer

Martin in Motion: 2045 Long Range **Transportation Plan** DRAFT COST FEASIBLE PLAN PUBLIC OPEN HOUSE

Martin Metropolitan Planning Organization

The Martin MPO is working on a study to evaluate transportation needs that will prioritize transportation projects with the expected state and federal funds. Whether you bike, walk, use public transportation or drive to your destination, your opinion matters. Please provide your input, virtually or in person, on transportation projects and priorities in Martin County at one of two Virtual Open Houses, 3 p.m. to 4 p.m. or 4 p.m. to 5 p.m.

Instructions to access as follows:

Please register for MARTIN IN MOTION: DRAFT COST FEASIBLE VIRTUAL OPEN HOUSE on June 9, 2020 3:00 PM EDT at:

Register for 3 p.m. meeting

Please register for MARTIN IN MOTION: DRAFT COST FEASIBLE PLAN VIRTUAL OPEN HOUSE on June 9, 2020 4:00 PM EDT at:

Register for 4 p.m. meeting

You must register in advance to participate. Once registered, you will receive a confirmation email that includes meeting log-in and access information.

To attend in person without registering:

Communications media technology will be made available to participate on June 9, 2020 from 3 p.m. to 5 p.m. at the Blake Library, 2351 SE Monterey Road, Stuart, FL 33496. Public comments emailed in advance or submitted during the meeting will be read into the record the day of the meeting. Email public comments to: LongRange-PublicComment@martin.fl.us or mail to Bolivar Gomez, MA, Project Manager, MPO, 3481 SE Willoughby Boulevard, Suite 101, Stuart, FL 34994.

> If you need additional information, please contact: Bolivar Gomez, MA Project Manager, MPO bgomez@martin.fl.us 772-288-5412

Peter F. Dobens **Public Information Officer, Quest** peter.dobens@QCAusa.com 954-699-3556





Click here to download the PDF informational flyer.

Public participation is solicited without regard to race, color, national origin, age, sex, religion, disability or family status. Persons with questions or concerns about nondiscrimination, or who require special accommodations under the American with Disabilities Act (ADA) or language translation services (free of charge) should contact Bolivar Gomez, Senior Planner (Title VI/Non-discrimination Contact) at (772) 288-5412 or bgomez@martin.fl.us.

www.MartininMotion.com Martin MPO | 3481 SE Willoughby Boulevard, Suite 101 | Stuart, FL 34994 | 772-288-5412

Printed Flyer





The Martin MPO is conducting a Draft Cost Feasible Plan Virtual Open House for the 2045 Long Range Transportation Plan hosted by T. Y. Lin International

WE WANT YOUR INPUT!

The Martin MPO is working on a study to to evaluate transportation needs that will prioritize transportation projects with the expected state and federal funds. Whether you bike, walk, use public transportation or drive to your destination, your opinion matters.

Please provide your input, virtually or in person, on transportation projects and priorities in Martin County.

Public participation is solicited without regard to race, color, national origin, age, gender, religion, disability or farnily status. Persons with questions or concerns about nondiscrimination, or who require special accommodations under the American with Disabilities Act or language translation services (free of charge) should contact Bolivar Gornez, Senior Planner (Title VI/ Non-discrimination Contact) at (772) 288-5412 or bgomez@martin.fl.us. Hearing impaired individuals are requested to telephone the Florida Relay System at #711.



Open House Tuesday, June 9, 2020 3 p.m. to 4 p.m. or 4 p.m. to 5 p.m. Blake Library John F. and Rita M. Armstrong Wing 2351 SE Monterey Road Stuart, FL 34996

In accordance with the Centers for Disease Control and Prevention (CDC) Guidelines and the Governor's Executive Orders pertaining to the COVID-19 Pandemic, this Open House will be conducted by virtual webinar, hosted by T.Y. Lin International. Instructions for access as follows:

To register for the webinar go to:

Jun 9, 2020 3:00 PM EDT at: Register for 3 p.m. meeting

Jun 9, 2020 4:00 PM EDT at: Register for 4 p.m. meeting



To attend in person:

(no registration required)

Communications media technology shall be made available to participate at the date and time of the virtual meeting at the John F. and Rita M. Armstrong Wing of the Blake Library, 2351 SE Monterey Road, Stuart, Florida 34996. Public comments emailed in advance, or submitted during the meeting will be read into the record the day of the meeting.

Email public comments to:

LongRange-PublicComment@martin.fl.us

If you require additional information, please call Bolivar Gomez, MA, Project Manager (772) 288-5412, <u>email bgomez@martin.fl.us</u> or submit your question via mail to 3481 SE Willoughby Blvd. Suite 101, Stuart, FL 34994. **Project Presentation**





2045 Long Range Transportation Plan

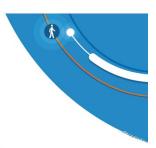
Public Open House Draft 2045 Cost Feasible Plan June 9, 2020

> MARTIN M PO Metropolitan Planning Organization

> > 1

TYLININTERNATIONAL

Non-Discrimination Policy

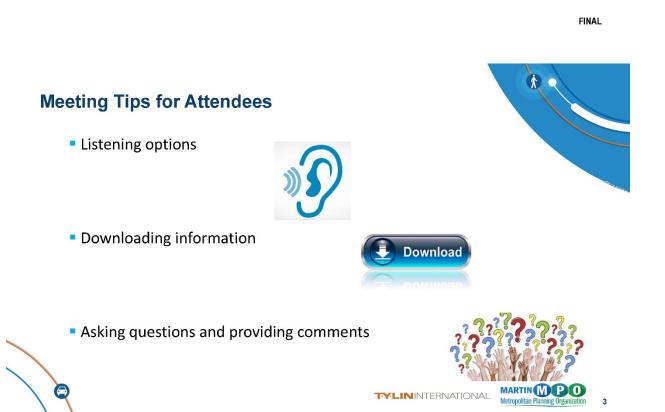


"Public participation is solicited without regard to race, color, national origin, age, sex, religion, disability or family status."

Contact:

Bolivar Gomez, MA, Project Manager (772) 288-5412, email bgomez@martin.fl.us





4

Today's Agenda

- Opening Remarks/Introductions
- Public Involvement & Outreach Activities
- Draft Cost Feasible Plan
- Public Comments/Q&A
- Closing Remarks







Public Involvement And Outreach Activities

- Open house (Visioning sessions), October 2019
 - Stuart, Indiantown and Port Salerno
- Surveys
 - Online
 - In-person at Treasure Coast Regional Mall, 9/28 (Saturday)
- Stakeholder interviews
 - Elected officials
- Focus groups
 - Stuart/Martin County Chamber of Commerce
 - Jensen Beach Chamber of Commerce
- Targeted outreach
 - Martin County Employee Benefits Fair
- Project video and website (<u>www.martininmotion.com</u>)

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MARTIN M PO Metropolitan Planning Organization 5

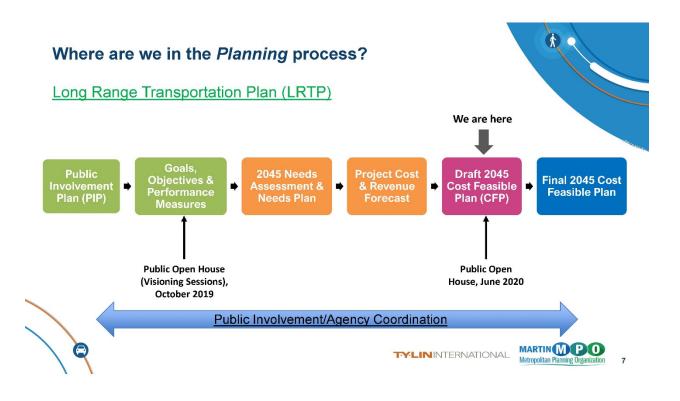


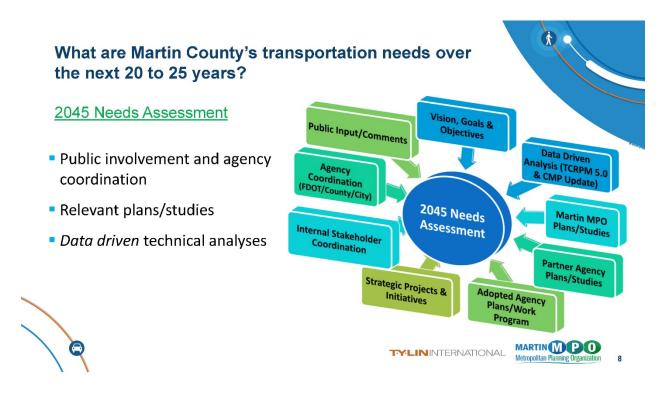
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Martin in Motion: 2045 Long Range Transportation Plan

- 1. Where are we in the *Planning* process?
- 2. What are Martin County's transportation needs over the next 20 to 25 years?
- 3. What is the cost of all the transportation projects needed in the County?
- 4. How much money is available to meet the County's transportation needs?
- 5. How will Martin MPO select transportation improvements for implementation?
- 6. What projects are included in the MPO's draft cost feasible plan?
- 7. What happens next?
- 8. When will the 2045 LRTP be completed?





What are Martin County's transportation needs over the next 20 to 25 years?

2045 Needs Plan

- Existing and Expanded Transit Service and Capital Improvements
- 12+ Roadway projects
- 15 SIS projects and several overlapping Freight Projects
- 25+ TSM&O/ITS segments

Transportation Systems Management & Operations (TSM&O); Parkand-Ride Projects

Complete Streets & Non-motorized Transportation Improvements (including pedestrian bridges in Stuart and Golden Gate) Capital Improvements (Marty and Downtown Stuart Tram); Water based Transportation; Aviation Projects

Roadway, SIS and Freight Projects & Private Sector Projects (Virgin USA/Brightline Station and Double Tracking FEC railroad bridge over St. Lucie River)

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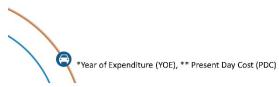
- Water taxi service
- 19 Complete Streets
 - projects
- 33 miles of sidewalks, 200+ miles of bicycle corridors and 685 miles of greenways and trails

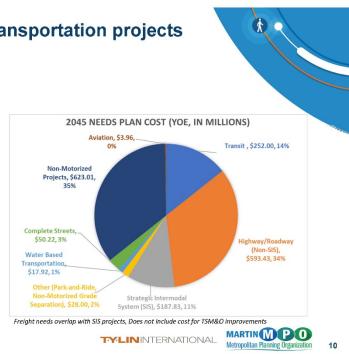
MARTIN M PO Metropolitan Planning Organization

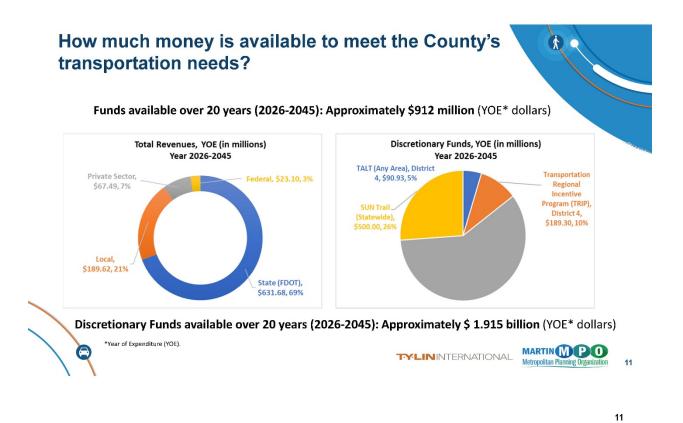
What is the cost of all the transportation projects needed in the County? 2045 Needs Plan Project Cost Aviation, \$3.96, Total Cost of 2045 Needs Plan (All

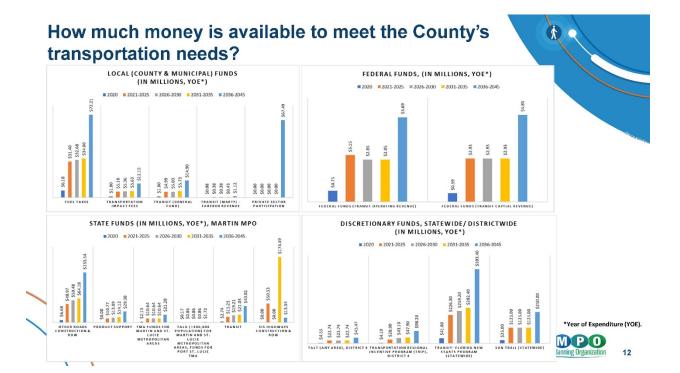
modes) over 20 years (2026-2045)

- Approximately \$1.756 billion (YOE* dollars)
- <u>OR</u>
- Approximately \$1.038 billion (PDC**)









How much money is available to meet the County's fransportation needs? • Miss match between project costs (needs) vs. funds available (revenue forecast). Funds Available \$912 million (YOE dollars) Needs Plan Cost \$1.756 billion (YOE dollars)

• Local, state and federal funding programs' requirements for allocating revenues to various projects.



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How will Martin MPO select transportation improvements for implementation?

Map ID	Facility	From	То	Project Description	Existing Lanes	Future Lanes	Length (miles)	Total Score	Ranking	Priority	
R-1	SR-714/Martin Highway	CR-76A/Citrus Boulevard	Martin Downs Boulevard	Highway Capacity	2	4	0.88	Under Construction	TIP		
4196693	Willoughby Boulevard	SR-714/ Monterey Road	SR-5/US-1/Foderal Highway	PD&E Study	-	-	0.84	Funded	TIP	Currently	
4417001	Cove Road	SR-76/Kanner Highway	SR-5/US-1/Federal Highway	PD&E Study	2	4	4.32	Funded	TIP	Funded	
4416991	CR-713/High Meadow Avenue	1-95	CR-714/Martin Highway	PD&E Study	-	-	2.64	Funded	TIP	1	
R-3	Village Parkway Extension	SR-714/Martin Highway	St. Lucie County Line	New 4 Lane Road	0	4	3.00	Privately Funded	2	Not Applicable	
R-5	Cove Road	Willoughby Boulevard	SR-5/US-1/Federal Highway	Widen from 2L to 4L	2	4	1.07	39	1		
R-6	Cove Road	SR-5/US-1/Federal Highway	CR-A1A	Widen from 2L to 4L	2	4	1.12	39	1		
R-4	Cove Road ¹	SR-76/Kanner Highway	Willoughby Boulevard	Widen from 2L to 4L	2	4	2.13	35	2	Tier 1	
R-15	SR-5/US-12	at SW Joan Jefferson Way		Intersection Modification	-	-	-		-		
R-16	CR-714/Martin Highway ³		SE126th Blvd. (Okeechobee County)	Roadway Realignment	-	-	•		-		
R-2	Willoughby Boulevard	SR-714/ Monterey Road	SR-5/US-1/Federal Highway	New 2 Lane Road	0	2	0.84	36	2		
R-7	CR-713/High Moadow Avonuo	1-95	CR-714/Martin Highway	Widen from 2L to 4L	2	4	2.64	36	2	Tier 2	
R-8	Federal Highway/US 1	SE Seabranch Blvd	SE Osprey St	Widen from 4L to 6L	4	6	1.15	36	2		
R-10	SE Bridge Rd	Powerline Ave	US-1/Federal Highway	Widen from 2L to 4L	2	4	2.00	33	3		
R-11	SE Green River Pkwy	NW Wright Blvd	NW Dixie Hwy	Widen from 2L to 4L	2	4	0.37	33	3	Tier 3	
R-13	SW Martin Downs Blvd	SW Matheson Ave	SW Palm City Rd	Widen from 4L to 6L	4	6	1.33	33	3		
R-14	SW Murphy Rd	Whisper Bay Terrace	North County Line	Widen from 2L to 4L	2	4	0.35	32	4		
R-9	S Ocean Dr	North County Line	NE Causeway Blvd	Widen from 2L to 4L	2	4	1.40	30	4	Tier 4	
R-12	Martin Highway	SW Mapp Rd	Kanner Hwy	Widen from 4L to 6L	4	6	1.42	29	4		

Note: Note: 1
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Note: 1
Note: 1
Note: 2
Note: 2 eted SR-/10 PD&E Study from US 441 to SW Martin Highway in Okeechobee and Martin Counties in 2010 and amended in Nov. 2018.

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What is 2045 Cost Feasible Plan?

Cost Feasible Plan is a financially constrained plan. This Plan includes multimodal transportation improvement projects that can be funded through the revenue stream or funds available over the plan period.

What projects are included in the MPO's Draft Cost Feasible Plan?

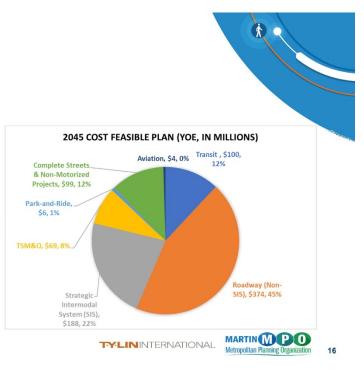


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Total Cost of 2045 Cost Feasible Plan (All modes) over 20 years (2026-2045)

Approximately \$840 million (YOE* dollars)

*Year of Expenditure (YOE)



Transit (Marty), \$100.3M

- Transit Service/Operations (\$80.9M)
 - Maintain Existing Service Level Fixed Route and Paratransit
- Capital Improvements (\$19.4M)
 - Rolling Stock (Fleet Replacement)
 - Transit/Bus Stop Infrastructure

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- New Park-and-Ride Facility (Connection to Palm Beach Tri-Rail Intermodal Center)
- Virgin USA/Brightline Station (Private Sector Funded)



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Unfunded Transit Needs

Transit (Marty)

- Service Improvements
 - Route Restructuring (Routes 2 and 3)
 - Expanded Service Level (Routes 1, 2 and 3)
 - New Routes (Jensen Beach Route)
 - Mobility on Demand (MOD) Service
 - Jensen Beach/Rio
 - Palm City
- Capital Improvements
 - Rolling Stock (New Buses)
 - Transit Operations & Maintenance Facility
 - Intermodal Hub

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<complex-block>

Unfunded Transit Needs

Downtown Stuart Tram

- Maintain Existing Service Level
- Two New Shelters
- Expanded Service Level
 - Two Routes, 10 to 15 minute headway or
 - Less than 10 to 15 minute headway







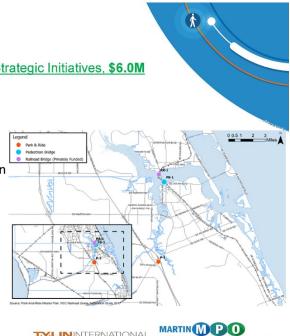
Strategic Intermodal System (SIS), \$187.8M

- SIS Facilities (\$187.8M)
 - Three PD&E Studies on I-95
 - Highway capacity improvements SR-710/Warfield Blvd. and I-95
 - One safety/freight project (SR-714/Monterey Road @ Florida East Coast (FEC))
- Unfunded SIS Multimodal Needs
 - Two fixed guideway transit projects (US-1/Federal Highway and SR-710)
 - Transit hub (at Indiantown)
 - Highway capacity projects on Turnpike, I-95 and SR-710



Other Projects - Travel Demand Management and Strategic Initiatives, \$6.0M

- Park-and-Ride Facilities (three locations), \$6.0M
 - Kanner Highway/SR-76 at I-95
 - West of I-95 between Becker Road and Martin Highway
 - West of Turnpike in vicinity of Sand Avenue
- Non-motorized grade crossing along in Downtown Stuart along Florida East Coast (FEC) main-line (50% private sector funding)
- FEC Rail Bridge Double tracking over St. Lucie River (Private sector funding)
- Unfunded Needs
 - Non-motorized grade crossings in Golden Gate along ×. Florida East Coast (FEC) main-line



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Freight Projects, \$187.8M (overlaps with SIS projects)

- Majority of freight project identified in the FDOT's 2045 Freight Mobility and Trade Plan (FMTP) overlap with the Strategic Intermodal System (SIS) projects included in the 2045 SIS Cost Feasible Plan and Multimodal Unfunded Needs Plan.
- In addition to the five SIS projects on I-95, SR-710, and SR-714/Monterey Road, the following project initiative is part of Martin MPO's 2045 CFP.
 - Strategies for Reducing Railroad Trespassing (SRRT) Pilot Project
- Unfunded Freight Needs
 - SR-710 Bypass (New Facility)
 - US-1/Federal Hwy Corridor Retrofit
 - Connected Freight Priority System Deployment









Complete Streets and Non-Motorized Projects, \$98.7M

Complete Streets

15 miles of complete streets

Pedestrian Facilities

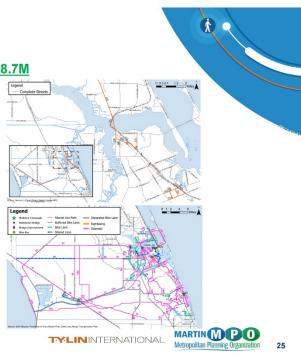
- 33 miles of sidewalk
- Five new crosswalks
- Three pedestrian bridges

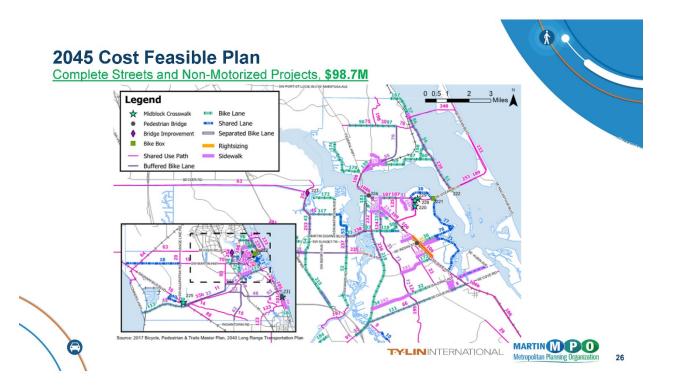
Bicycle Corridors

- 100 miles of bicycle lanes
- 82 miles of buffered bicycle lanes
- 35 miles of shared lanes
- Two miles of separated bicycle lanes
- Two bike boxes

Multi-Purpose Trails & Greenways

🝳 🛯 685 miles of shared-use path





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2045 Cost Feasible Plan

Water based Transportation

Water based Transportation Feasibility Study, \$0.44M

Unfunded Needs

Water Taxi Service

- Sandsprit Park to St. Lucie Preserve State Park
- Seasonal and/or Special Events/Festivals around key nodes
 - Stuart/Palm City
 - Port Salerno/Manatee Pocket
 - Stuart/Jensen/Rio



Aviation, \$3.9M

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- Air Traffic Control Tower Equipment Upgrade (Recorder and Radios)
- Construct Airport Interconnect Rd. Flying Fortress Extension
- Rehabilitation of MC Non-Movement Areas Phase V (Design & Const)
- Tree Mitigation Project RPZ and Part 77 (SE St. Lucie Canal)



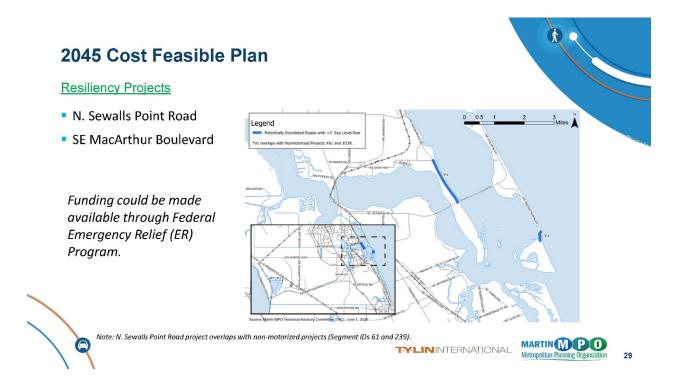
Note: Florida Department of Transportation (FDOT) funding share is limited to 80% of the project cost.

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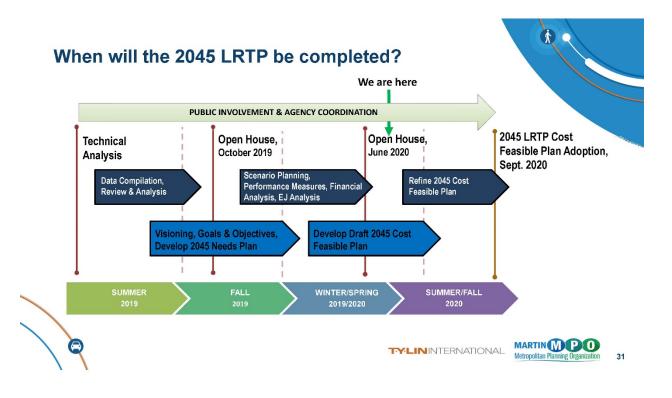
What happens next?

- Address public comments on the Draft Cost Feasible Plan
- Martin MPO Policy Board Meeting, June 15, 2020
- Technical Analyses and Documentation
- Present Final Cost Feasible Plan to the Martin MPO Advisory Committees and Policy Board, September 2020
- Continue Public Outreach









FINAL

Public Comments/Q&A



We Want Your Input!



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Thank You!!!

- A video of the meeting will be shared.
- Please submit comments by June 19, 2020.

LongRange-PublicComment@martin.fl.us or 3481 SE Willoughby Blvd., Suite 101, Stuart, FL 34994.

- Responses to comments will be provided within two weeks.
- Visit <u>www.martininmotion.com</u>

Contact Information: <u>Martin MPO Project Manager</u> Bolivar Gomez Email: <u>bgomez@martin.fl.us</u> Phone:772-288-5412

Q

Consultant Project Manager Vikas Jain, AICP, GISP Email: <u>vikas.jain@tylin.com</u> Phone: 954-308-3353

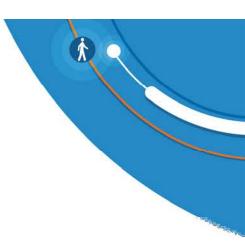
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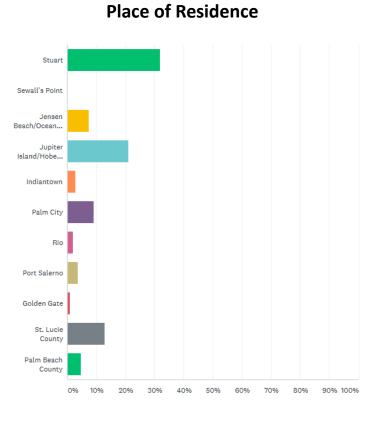
- 11 questions
- Consistency vs. current trends
- English and Spanish
- Online and hard copies
- Treasure Coast Regional Mall

Open 🚯	Draft 👩 O	Total responses 111 💿		Average completion rate		Typical time 00h:07	e spent m:52s O
Recent su	rveys						Manage all surveys »
Transportati	2045 Long Range on Plan - Survey 2019 Modified: 10/	Questions	111 Responses	98% Completion rate	8 mi Typical tim		••• Options
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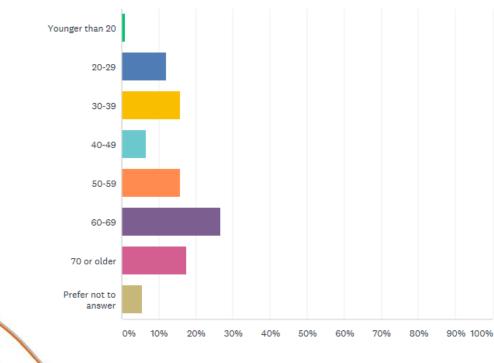


Place of Work or School Stuart Sewall's Point Jensen Beach/Ocean... Jupiter Island/Hobe... Indiantown Palm City Rio Port Salerno Golden Gate St. Lucie County Palm Beach County l am retired/unem... 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

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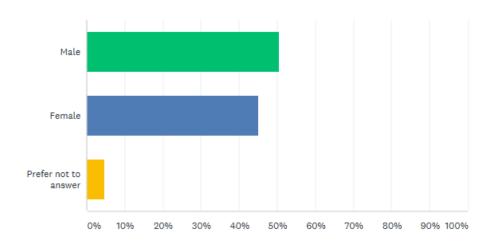


Feedback to Date



Respondent's Age Distribution

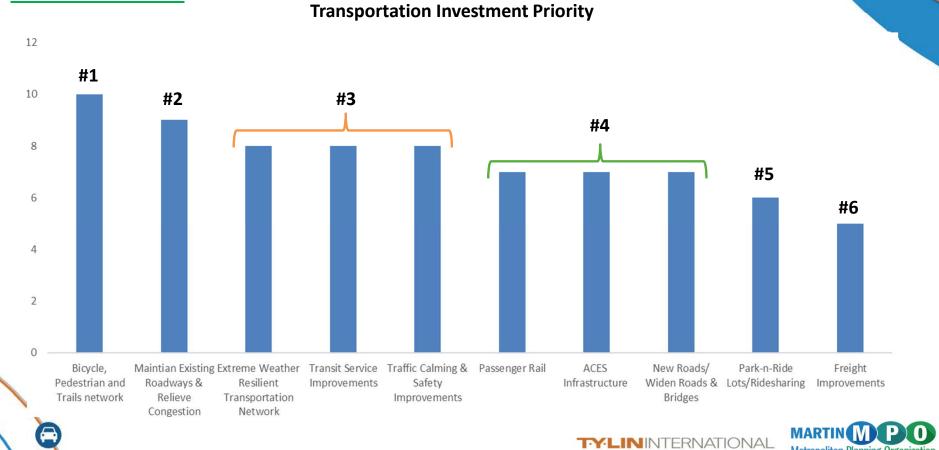
Respondent's Gender



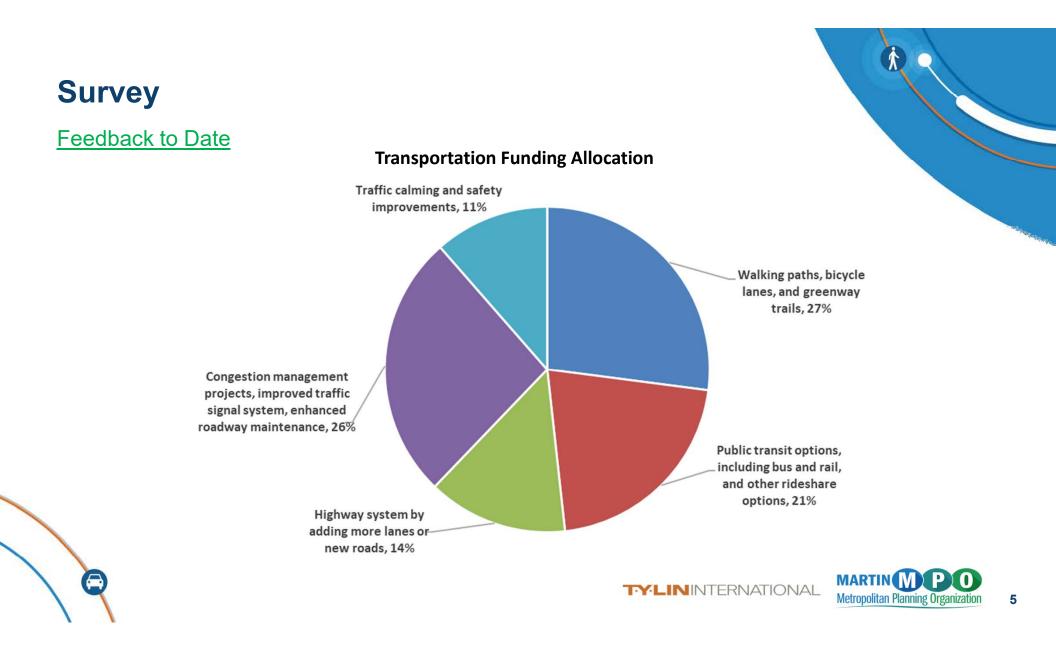
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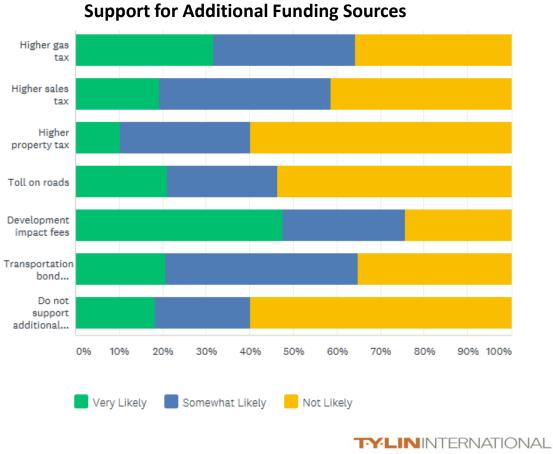
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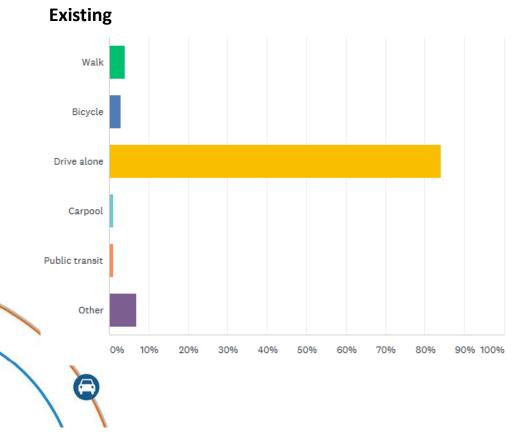
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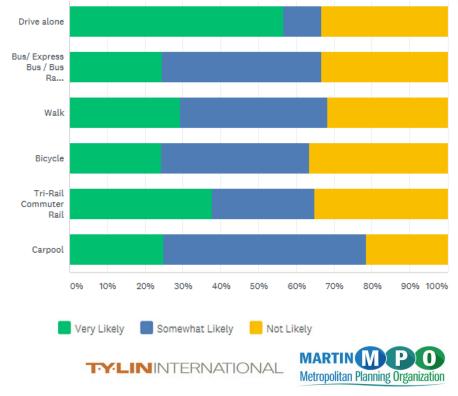
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Feedback to Date

Mode of Transportation to Work or School



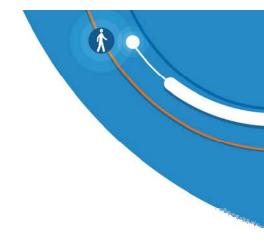
Preferred (if available)



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Project Video

- MC TV
- You Tube
- Project website (<u>www.MartininMotion.com</u>)
- Link on other websites
 - Local TV stations and newspaper
 - Chamber of Commerce websites
 - Downtown Business Owners Association
 - Martin County Realtors of the Treasure Coast



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Project Website (www.MartininMotion.com)

- ADA Accessible
- Intuitive and user friendly
- Redundancy multiple ways to access information
- Compatible with smart phones
- Interactive map to provide location specific comments
- QR code to access website











The Martin MPO Wants to Hear from YOU!

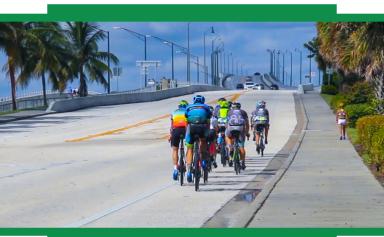
- Drive a road that needs better maintenance or improved resiliency?
- Walk a street that needs a sidewalk?
- Need traffic calming or crosswalks in your neighborhood?
- Know a busy road that needs a bike lane?
- Do we need a charging station for electric cars?
- Wish for better public transportation?
- Should we work toward passenger rail service?
- Have other suggestions on transportation?

Make your voice count as we work on Martin County's 2045 Long Range Transportation Plan.

Please visit **Martininmotion.com** to take our short survey







WHAT IS THE MPO?

The Martin MPO works to coordinate the improvement of all facets of the transportation network in Martin County. This effort includes the monitoring and evaluation of existing conditions, the development of improvement strategies, the facilitation of meaningful public input, and the implementation of evaluated and funded strategies.

WHAT IS THE 2045 LRTP?

Every five years, the Martin Metropolitan Planning Organization (MPO) is required by federal law to review and update it's transportation plan. The Long Range Transportation Plan (2045 LRTP) details how Martin County's multimodal transportation system will evolve over the next 25 years.

By participating in the 2045 LRTP process, residents and business owners will help shape the future of transportation in Martin County.

Appendix C: 2045 Needs Plan

Project Cost Summary, 2045 Needs Plan

Martin in Motion, 2045 LRTP

Category	Present Day Cost		Year of Expe	nditure (YOE)		25-Year Total	20-Year Total	YOE
Category	(PDC)	2021-2025 ¹	2026-2030	2031-2035	2036-2045	2021-2045	2026-2045	Beyond 2045 ²
Transit								
Transit Operating Cost*	\$152,490,775		\$36,761,913	\$44,832,288	\$118,332,841	\$199,927,043	\$199,927,043	-
Transit Capital Cost	\$17,113,534		\$18,089,276	\$4,057,466	\$29,929,951	\$52,076,694	\$52,076,694	-
Highway/Roadway (non Strategic Intermodal System (SIS))	\$385,079,416	\$47,082,871	\$57,182,483	\$96,082,119	\$440,163,831	\$640,511,304	\$593,428,433	-
Strategic Intermodal System (SIS)**	-	\$7,759,000	\$0	\$12,100,000	\$506,811,000	\$526,670,000	\$518,911,000	\$1,942,598,000
Freight ³	-	\$2,907,683	\$0	\$10,000,000	\$13,337,000	\$26,244,683	\$23,337,000	\$33,263,000
Transportation System Management & Operations (TSM&O) ⁴	-	-	-	-	-	-		-
Other (Park-and-Ride, Non-Motorized Grade Separation)	\$19,247,696	\$0	\$16,916,770	\$0	\$11,085,703	\$28,002,473	\$28,002,473	-
Nater Based Transportation								
Operating Cost*	\$9,750,000	\$0	\$0	\$4,777,500	\$12,610,000	\$17,387,500	\$17,387,500	-
Capital Cost	\$710,000	\$0	\$0	\$529,200	\$0	\$529,200	\$529,200	-
Complete Streets⁵	\$46,433,783		\$27,292,804	\$14,528,710	\$8,400,509	\$50,222,023	\$50,222,023	-
Non-Motorized Projects ⁵	\$389,607,687	\$6,982,844	\$142,400,658	\$167,829,860	\$312,775,634	\$629,988,996	\$623,006,152	-
Sidewalks	\$10,289,028	\$2,443,147	\$1,927,773	\$3,033,445	\$12,965,488	\$20,369,853	\$17,926,706	-
Bicycle Corridors	\$50,948,813	\$1,484,697	\$18,925,957	\$22,748,337	\$38,878,286	\$82,037,277	\$80,552,580	-
Multi-Purpose Trails and Greenways	\$328,369,846	\$3,055,000	\$121,546,928	\$142,048,078	\$260,931,860	\$527,581,866	\$524,526,866	-
Aviation ⁶	\$17,620,000	\$0	\$3,962,500	\$0	\$0	\$3,962,500	\$3,962,500	-
Other Transportation Improvement Plan (TIP) Projects	-	\$67,375,663	-	-	-	-	-	-
Capacity Projects (non SIS)	-	\$12,312	-	-	-	-	-	-
Non-Capacity Projects	-	\$65,159,756	-	-	-	-	-	-
Planning (PL Funds)	-	\$2,203,595	-	-	-	-	-	-
Total Cost	\$1,038,052,891	\$129,200,378	\$302,606,405	\$344,737,143	\$1,440,109,470	\$2,149,277,733	\$2,087,453,018	
Strategic Intermodal System (SIS)**	\$0	\$7,759,000	\$0	\$12,100,000	\$506,811,000	\$526,670,000	\$518,911,000	\$1,942,598,000
Transit Operating Cost*	\$152,490,775	\$0	\$36,761,913	\$44,832,288	\$118,332,841	\$199,927,043	\$199,927,043	-
Water Based Transportation (Operating Cost)*	\$9,750,000	\$0	\$0	\$4,777,500	\$12,610,000	\$17,387,500	\$17,387,500	-

Notes

¹ Time band includes funds "as programmed" in the FY 2021-2025 Transportation Improvement Program (TIP). Includes funds for transit, aviation, and Districtwide maintenance projects.

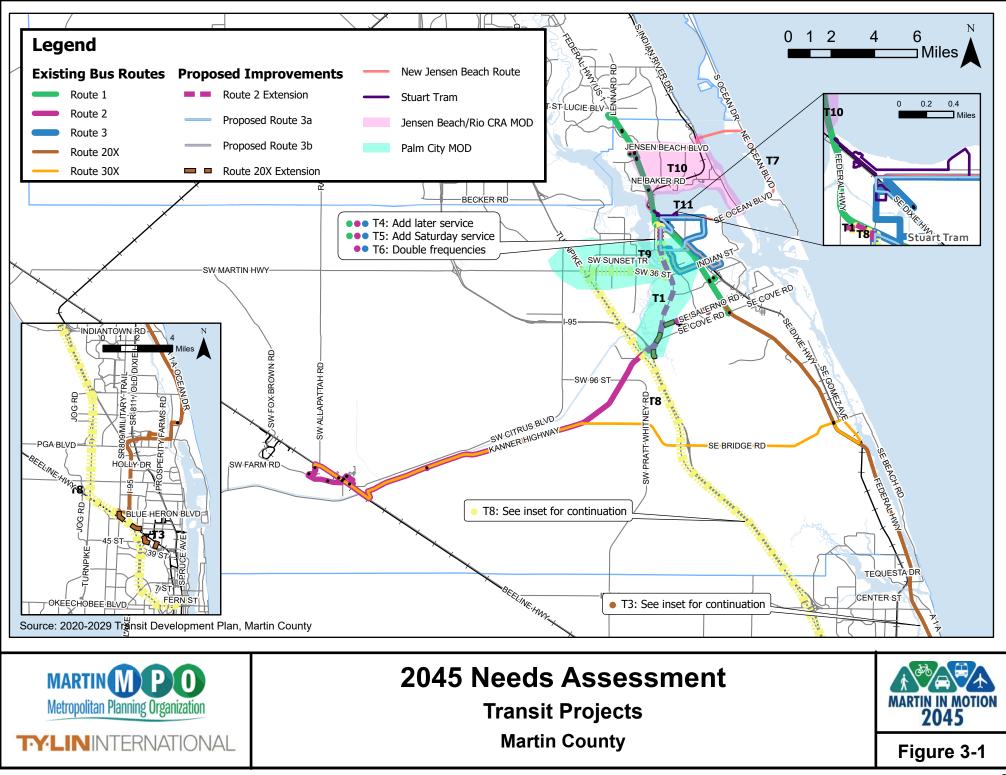
² Project costs include SIS 2045 Multimodal Unfunded Needs Plan (MMUNP), Florida Department of Transportation (FDOT), June 2017.

⁴ Project specific cost for specific Transportation System Management & Operations (TSM&O) improvements have not be developed at this stage.

⁵ Complete streets and non-motorized project cost are distributed over the planning period (Year 2026-2035) to maintain internal consistency in YOE dollars .

^{*} Operating cost includes total cost for the entire 5-year or 10-year period in Year of Expenditure (YOE) dollars, while Present Day Cost (PDC) reflects 25-year total operating cost for transit and 20-year total operation cost for water based transportation. ** Project costs are based on SIS First and Second Five-Year Plans, July 2020 and SIS Long Range Cost Feasible Plan, July 2018 and SIS Multimodal Unfunded Needs Plan, June 2017.

³ All freight project costs are included in the Strategic Intermodal System (SIS) category except \$157,683 Consolidated Rail Infrastructure and Safety Improvements (CRISI) Program grant in the 5-year increment, 2021-2025.



Transit Projects Martin in Motion, 2045 LRTP

Map ID	Project Description	Location/Geography	Source	Category or Type	Total Cost ²	Comments		Total Cost	(YOE**)	
				eategely et type	(PDC)		2021-2025	2026-2030	2031-2035	2036-2045
	nprovements Continue to maintain and operate existing fixed route b	us		Annual Operating			1.08	1.25	1.47	1.94
n/a	service ¹	Systemwide	TDP 2020-2029	Cost	\$2,032,923	Cost affordable plan.		\$12,705,769	\$14,941,984	\$39,438,70
n/a	Continue to maintain existing paratransit service	Systemwide	TDP 2020-2029	Annual Operating Cost	\$418,458	Cost affordable plan.		\$2,615,363	\$3,075,666	\$8,118,0
T-1	Extend Route 2	Add a stop at Halpatiokee Park during peak commute hours, transfer opportunities to Routes 1 and 3. Closed door service during non-peak hours.	TDP 2020-2029	Service Modification - Restructure Route.		Unfunded transit needs. Complementary ADA service is not required since the proposed modification is a commuter service.				
T-2	Split Route 3 into Routes 3a and 3b	Same service coverage area but provides new service along Monterey Road between Willoughby Boulevard and US-1/Federal Highway. Maintain existing headways and transfer opportunities to Route 1 and to each other.	TDP 2020-2029	Service Modification - Restructure Route.		Unfunded transit needs.				
T-3	Extend Route 20X	Extend service to Halpatiokee Park to the north and to Mangonia Tri-Rail Station in Palm Bach County to the south during peak commute hours only.	TDP 2020-2029	Service Modification - Restructure Route.		Unfunded transit needs. Complementary ADA service is not required since the proposed modification is a commuter service.				
T-4	Add later service for Routes 1, 2 and 3	Increase span of service by approximately 2 hours from 8:00 pm to 10:00pm. Current span of service is approximately 6:00 am to 8:00 pm, weekday service only.	TDP 2020-2029	Service Modification - Increase Span of Service	\$1,600,918	improvement through TDP's public outreach process. Complementary ADA service needs to be provided.		\$8,644,957	\$11,766,747	\$31,057,80
T-5	Add Saturday service for Routes 1, 2 and 3	Provide Saturday service from 6:00 am to 8:00 pm on Routes 1, 2 and 3.	TDP 2020-2029	Service Modification - Add Saturday Service.		Unfunded transit needs. Identified as a high priority improvement through TDP's public outreach process. Complementary ADA service needs to be provided.				
T-6	Double frequencies for Routes 2 and 3	Reduce headway on Route 2 from 40 minutes (Indiantown loop) and 95 minutes (Closed door eastbound service to Stuart) to 20 minutes and 48 minutes respectively. Reduce headway on Route 3 from 40 to 20 minutes.	TDP 2020-2029	Service Modification - Reduce Headway.		Unfunded transit needs. Identified as a high priority improvement through TDP's public outreach process.				
T-7	New Jensen Beach Route	From Treasure Coast Square to Jensen Beach Park (serving Hoke Library, Jensen Beach Park, Hutchinson Island and Kiwanis Park-and-Ride).	TDP 2020-2029	New Service Expansion		Unfunded transit needs. Complementary ADA service needs to be provided.				
T-8	New regional Turnpike commuter route to West Palm Beach Downtown Intermodal Transit Center	From US-1/Federal Highway and Kanner Highway to Intermodal Transit Center (serving FDOT Park-and-Ride at SW Martin Highway, West Palm Beach Virgin Trains USA/Brightline station, City Place and Palm Tran's Intermodal Transit Center). Peak hour service only with two morning and two evening trips.	TDP 2020-2029	New Service Expansion	\$544,167	Unfunded transit needs.		\$3,401,044	\$3,999,627	\$10,556,84
T-9	Palm City Mobility on Demand (MOD) Service	On demand service in Palm City.	TDP 2020-2029	New Service Expansion		Unfunded transit needs. Limitations exist to implement a dynamic real time MOD service using TripSpark, the County's existing route scheduling software.		<i>vo</i> , <i>io i</i> , <i>o i i</i>	¢0,000,0 <u>2</u> .	<i></i>
T-10	Jensen Beach/Rio CRA MOD	On demand service within Jensen Beach and Rio CRA as well as connecting to Marty routes.	TDP 2020-2029	New Service Expansion		If fixed route service is not implemented. Unfunded transit needs. Limitations exist to implement a dynamic real time MOD service using TripSpark, the County's existing route scheduling software.				
n/a	New Service - Deviated Fixed Route	Complementary service to New Jensen Beach Route	TDP 2020-2029	New Service Expansion - ADA	\$224,069	Unfunded transit needs.		\$1,400,431	\$1,646,907	\$4,346,9
n/a	New Service - ADA	Within 3/4 mile of proposed new transit routes to meet ADA requirements.	TDP 2020-2029	New Service Expansion - ADA	\$858,184	Unfunded transit needs.		\$5,363,650	\$6,307,652	\$16,648,7
T-11	Downtown Stuart Tram: Maintain Existing Service Level	Micro transit service (two routes) within downtown Stuart with 10- to 15- minute headway	City of Stuart Tram Business Plan, 2019	Annual Operating Cost	\$185,456			\$1,159,100	\$1,363,102	\$3,597,8
T-12	Downtown Stuart Tram: Expand Service Level (Two Ro		City of Stuart Tram Business Plan, 2019	Service Modification - Reduce Headway.	\$235,456	Expanded service to begin in 2023		\$1,471,600	\$1,730,602	\$4,567,84
T-13	Downtown Stuart Tram: Expand Service Level (Three R	Micro transit service (three routes) within downtown Stuart with 10- to 15- minute headway	City of Stuart Tram Business Plan, 2019	New Service Expansion or Reduced Headway	\$235,456	Expanded service to begin in 2023		\$1,471,600	\$1,730,602	\$4,567,84
pital/In	frastructure Improvements	Devenue vehicles to maintain existing convice based on Marty's float				I		1 1		
n/a	Fleet Replacement	Revenue vehicles to maintain existing service based on Marty's fleet replacement schedule	TDP 2020-2029	Revenue Vehicles		Cost affordable plan. Capital needs over a 10-year period.	\$2,594,765	\$3,003,200	\$3,531,763	\$9,321,93
n/a	Transit Security Equipment	n/a n/a	TDP 2020-2029	Equipment	¢01 256	Cost affordable plan. Capital needs over a 10-year period.	\$55,604	\$64,356	\$75,683	\$199,76
n/a n/a	Transit Technology Other Transit/Bus Stop Infrastructure	n/a New bus stops, safety/ADA improvements, benches, shelters, lighting, bicycle storage	TDP 2020-2029 TDP 2020-2029	Equipment Facility Improvements	\$306,136	Cost affordable plan. Cost affordable plan. Unfunded needs for this line item includes \$167,970 over a 10-year period.	\$91,104 \$330,627	\$105,445 \$382,670	\$450,020	\$593,9
n/a	Buses for New or Expanded Transit Service	12 fixed route vehicles and 2 ADA vehicles	TDP 2020-2029	Revenue Vehicles - New Service	\$3,363,584	Unfunded transit needs.		\$4,204,480		\$6,525,3
n/a	Transit Operations & Maintenance Facility	A centralized full-service transit operations facility/customer service center.	TDP 2020-2029; Martin County Transit Operations Center Feasibility Study, 2018	n New Facility	\$6,850,000	Unfunded transit needs.		\$8,562,500		\$13,289,00

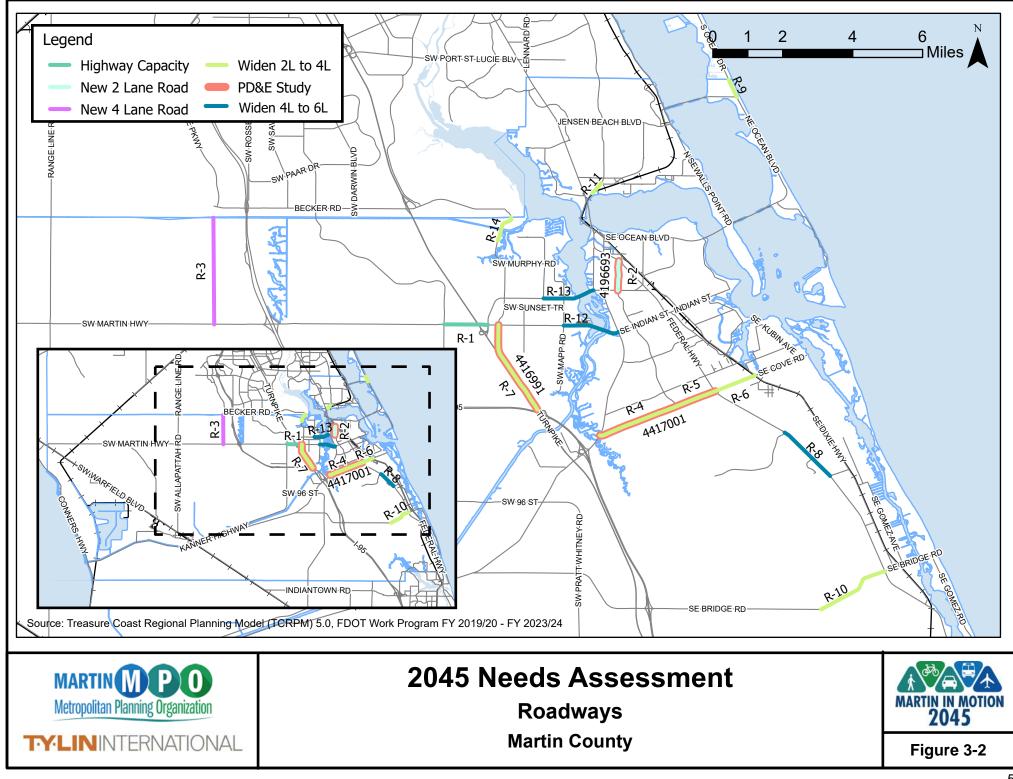
Map ID	Project Description	Location/Geography	Source	Category or Type	Total Cost ²	Comments		Total Cost	(YOE**)	
					(PDC)		2021-2025	2026-2030	2031-2035	2036-2045
n/a	Intermodal Hub ³	Adjacent to future planned Virgin Trains USA/Brightline station	TDP 2020-2029	New Facility	-not available-	Unfunded transit needs.	-not available-	-not available-	-not available-	-not available-
n/a	/a Downtown Stuart Tram New Shelters Two new shelters at \$21,000 per shelter		City of Stuart Tram Business Plan, 2019	New Facility	\$42,000	New shelters to be built in Year 2021, Year 2023 and 2025 and cost to be escalated based on 2% annual inflation		\$52,500		
n/a	Virgin Trains USA/Brightline Station	Intercity passenger rail station. Potential locations include East Coast Lumber, Kiwanis Park and Stypmann Boulevard.	City of Stuart Brightline Station Analysis, 2018	New Facility	-	Privately funded.	Private Sector Funded Project			
n/a	n/a Connection to Palm Beach Tri-Rail Intermodal Center New park-and-ride facility to provide connection to Plam Beach Tri-Rail Intermodal Center		Park-And-Ride Master Plan, FDOT - D4, Oct. 2018, pg. 10	New Facility	\$1,171,300	Assumes 50 spaces @ \$17,000/space as base construction cost. Total construction cost includes mobilization, MOT and desgin costs.		\$1,464,125		
Other	er in the second se									
n/a	n/a Transit Plans and Studies Transit Development Plan and other transit related studies		TDP 2020-2029	Study	\$388,068	For future TDPs and other transit planning studies	\$203,113	\$250,000		
Notes				\$152,490,775	Transit Operating Cost (25-year total)	\$0	\$36,761,913	\$44,832,288	\$118,332,841	
¹ Fixed bu	is route bus service includes commuter bus routes for a to	otal of five existing Marty routes (1, 2, 3, 20X and 30X)		\$17,113,534	Tranist Captial Cost	\$3,275,213	\$18,089,276	\$4,057,466	\$29,929,951	

² Includes annual operating cost for Year 2020 for various service improvements. Capital expense is in Present Day Cost (PDC).

³ Project cost not avaialable at this stage. Project cost could vary significantly based on development program for the facility.

** YOE - Year of Expenditure

n/a - Not Applicable



Roadway Projects Martin in Motion, 2045 LRTP

Martin in Moi	tion, 2045 LRTP																				•			
Map ID	Facility	From	То	Project Description	Existing Lanes	Future Lanes	Length (miles)	Source	Category or Type	Base Construction Cost (PDC*)	Construction	MOT (10%)	Mobilization (10%)	C Sub Total	Scope Contingency/P roject Unknowns	ROW Cost	Total Construction Cost	PE Design (15%) CE	I (15%) CEI (1	(PDC*)		Total Cos	st (YOE**)	
Under Orente	ction/On-going											10%	10%		(10%)			15%	15% 109		2021-2025	2026-2030	2031-2035	2036-2045 1.94
R-1	SR-714/Martin Highway ¹	CR-76A/Citrus Boulevard	Martin Downs Boulevard	Highway Capacity	2	4	1.13	Martin MPO Congestion Management Process (CMP) Update (Segment ID 11-12). Included in TIP FY 2020/21 - 2024/25; FM# 4368701				10%	1076		10%			13%	13% 107	\$36,417,87	36,417,871	1.20	1.47	1.34
New 2 Lane Ro 4196693	Willoughby Boulevard ¹	SR-714/ Monterey Road	SR-5/US-1/Federal Highway	PD&E Study		-	0.84	Martin MPO 2040 LRTP, Dec. 2015	PD&E Study											\$5,085,00	5,085,000			
R-2		SR-714/ Monterey Road	SR-5/US-1/Federal Highway	New 2 Lane Road	0	2	0.84	Martin MPO 2040 LRTP, Dec. 2015	Urban-Roadway New Construction: 2-Lane Undivided Roadway with 6' Sidewalk, 4' Bike Lane and Curb & Gutter	\$7,156,982	\$6,011,865	5	\$601,186	\$6,613,051	\$661,305	5	\$7,274,356	\$1,091,153	\$72	,436 \$9,092,94			13,366,629	
New 4 Lane Ro R-3	Village Parkway Extension	SR-714/Martin Highway	St. Lucie County Line	New 4 Lane Road	0	4	3.00	Martin MPO 2040 LRTP, Dec. 2015; Comprehensive Plan (Developer Funded)	Rural - Roadway New Construction: 4-Lane Roadway with 5' Bike Lane, with 5' Sidewalks	\$8,433,387	\$25,300,161		\$2,530,016	\$27,830,177			\$27,830,177	\$4,174,527	\$2,78	3,018 \$ 34,787,72				67,488,180
Widen from 2 to 4417001		SR-76/Kanner Highway	SR-5/US-1/Federal Highway	PD&E Study	2	4	4.32	FDOT Work Program FY 2019/20	PD&E Study							ГТ				\$3,075,00	3,075,000			
R-4		SR-76/Kanner Highway	Willoughby Boulevard	Widen from 2L to 4L	2	4	2.13	FY 2023/24 Martin MPO 2040 LRTP, Dec. 2015	Urban - Roadway Widening: 2-Lane Roadway to 4 Lanes (45mph Design Speed) with 5' Sidewalk, 5' Bike Lane, and Curb & Gutter	\$6,767,300	\$14,414,349	\$1,441,435	\$1,441,435	\$17,297,219		\$1,845,432	\$19,142,651	\$2,871,398	\$1,91				\$35,174,620	
R-5	Cove Road	Willoughby Boulevard	SR-5/US-1/Federal Highway	Widen from 2L to 4L	2	4	1.07	Martin MPO 2040 LRTP, Dec. 2015	Urban - Roadway Widening: 2-Lane Roadway to 4 Lanes (45mph Design Speed) with 5' Sidewalk, 5' Bike Lane, and Curb & Gutter	\$6,767,300	\$7,241,011	\$724,101	\$724,101	\$8,689,213		\$927,048	\$9,616,261	\$1,442,439	\$96	,626 \$12,020,32		\$15,025,408		
R-6	Cove Road	SR-5/US-1/Federal Highway	CR-A1A	Widen from 2L to 4L	2	4	1.12	Martin MPO 2040 LRTP, Dec. 2015	Urban - Roadway Widening: 2-Lane Roadway to 4 Lanes (45mph Design Speed) with 5' Sidewalk, 5' Bike Lane, and Curb & Gutter	\$6,767,300	\$7,579,376	\$757,938	\$757,938	\$9,095,251		\$971,391	\$10,066,642	\$1,509,996	\$1,00	,664 \$12,583,30		\$15,729,128		
4416991	CR-713/High Meadow Avenue ¹	I-95	CR-714/Martin Highway	PD&E Study	-	-	2.64	FDOT Work Program FY 2019/20 FY 2023/24	PD&E Study											\$2,505,00	\$2,505,000			I
R-7	CR-713/High Meadow Avenue	1-95	CR-714/Martin Highway	Widen from 2L to 4L	2	4	2.64	Martin MPO 2040 LRTP, Dec. 2015	Urban - Roadway Widening: 2-Lane Roadway to 4 Lanes (45mph Design Speed) with 5' Sidewalk, 5' Bike Lane, and Curb & Gutter	\$6,767,300	\$17,865,672	\$1,786,567	\$1,786,567	\$21,438,806	\$2,143,881	\$2,289,895	\$25,872,582	\$3,880,887	\$2,58	,258 \$32,340,72			\$47,540,869	
R-9	S Ocean Dr	North County Line	NE Causeway Blvd	Widen from 2L to 4L	2	4	1.40	Needs Assessment, TCRPM 5.0	Urban - Roadway Widening: Add 2- Lanes to Existing 2 Lane Undivided Roadway (40mph Design Speed) with 5' Sidewalk, 4' Bike Lane, and Curb & Gutter	\$4,920,784	\$6,889,097	\$688,910	\$688,910	\$8,266,917	\$826,692	2	\$9,093,608	\$1,364,041	\$90	,361 \$11,367,01				\$22,052,001
R-10	SE Bridge Rd	Powerline Ave	US-1/Federal Highway	Widen from 2L to 4L	2	4	2.00	Needs Assessment, TCRPM 5.0	Urban - Roadway Widening: Add 2- Lanes to Existing 2 Lane Undivided Roadway (35mph Design Speed) with 5' Sidewalk, 4' Bike Lane, and Curb & Gutter	\$4,920,784	\$9,841,568	\$984,157	\$984,157	\$11,809,881	\$1,180,988	3	\$12,990,869	\$1,948,630	\$1,29	,087 \$16,238,58				\$31,502,858
R-11	SE Green River Pkwy ²	NW Wright Blvd	NW Dixie Hwy	Widen from 2L to 4L	2	4	0.37	Needs Assessment, TCRPM 5.0	Urban - Roadway Widening: Add 2- Lanes to Existing 2 Lane Undivided Roadway (35mph Design Speed) with 5' Sidewalk, 4' Bike Lane, and Curb & Gutter	\$4,920,784	\$1,820,690	\$182,069	\$182,069	\$2,184,828	\$218,483	\$961,324	\$3,364,635	\$504,695	\$33	,463 \$4,205,79				\$8,159,239
R-14	SW Murphy Rd ²	Whisper Bay Terrace	North County Line	Widen from 2L to 4L	2	4	0.35	Needs Assessment, TCRPM 5.0	Urban - Roadway Widening: Add 2- Lanes to Existing 2 Lane Undivided Roadway (35mph Design Speed) with 5' Sidewalk, 4' Bike Lane, and Curb & Gutter	\$4,920,784	\$1,722,274	\$172,227	\$172,227	\$2,066,729	\$206,673	\$909,361	\$3,182,763	\$477,414	\$31	,276 \$3,978,45				\$7,718,201
Widen from 4 to		SE Seabranch Blvd	SE Osprey St	Widen from 4L to 6L	4	6	1.72	Needs Assessment, TCRPM 5.0	Urban - Roadway Widening: Add 2- Lanes to Existing 4 Lane Divided Roadway (55mph Design Speed) with 5' Sidewalk, 4' Bike Lane	\$5,063,222	\$8,708,742	\$870,874	\$870,874	\$10,450,490	\$1,045,049		\$11,495,539	\$1,724,331 \$1	1,724,331	\$13,219,87		\$16,524,838		
R-12	Martin Highway ³	SW Mapp Rd	Kanner Hwy	Widen from 4L to 6L	4	6	1.42	Needs Assessment, TCRPM 5.0	Urban - Roadway Widening: Add 2- Lanes to Existing 4 Lane Divided Roadway (45mph Design Speed) with 5' Sidewalk, 4' Bike Lane; Bridge Restriping		\$65,408,752	\$6,540,875	\$6,540,875	\$78,490,502	\$7,849,050		\$86,339,552	\$12,950,933 \$12	2,950,933	\$99,290,48				\$192,623,541
R-13	SW Martin Downs Blvd ⁴	SW Matheson Ave	SW Palm City Rd	Widen from 4L to 6L	4	6	1.33	Needs Assessment, TCRPM 5.0	Urban - Roadway Widening: Add 2- Lanes to Existing 4 Lane Divided Roadway (35mph Design Speed) with 5' Sidewalk, 4' Bike Lane; Bridge Replacement		\$37,562,926	\$3,756,293	\$3,756,293	\$45,075,511	\$4,507,551		\$49,583,062	\$7,437,459 \$7	7,437,459	\$57,020,52				\$110,619,812
Safety Projects																								
R-15	SR-5/US-1 ⁵	at SW Joan Jefferson Way		Intersection Modification	-	-	-	Included in TIP FY 2020/21 - 2024/25; FM# 4383452. SR-5/US - 1 at Joan Jefferson Way Planning Study, 2019, FDOT, District Four.	. Safety		\$2,229,644			\$2,229,644	\$445,929	\$856,139	\$3,531,712	\$353,171	\$35	,171 \$4,238,05		\$5,297,568		
R-16	CR-714/Martin Highway ⁶	Approximately 1200 feet east of SR-710	SE126th Blvd. (Okeechobee County)	Roadway Realignment	-	-	-	SR-710 PD&E Study from US 441 to SW Martin Highway in Okeechobee and Martin Counties, 2010, FDOT District One	Safety		\$2,855,250			\$2,855,250		\$494,235	\$3,349,485		\$502,423	\$3,684,43		\$4,605,542		
Notes * PDC - Present D																		Total	l Highway/Roadway	Cost \$385,079,41	47,082,871	57,182,483	96,082,119	440,163,831

* PDC - Present Day Cost

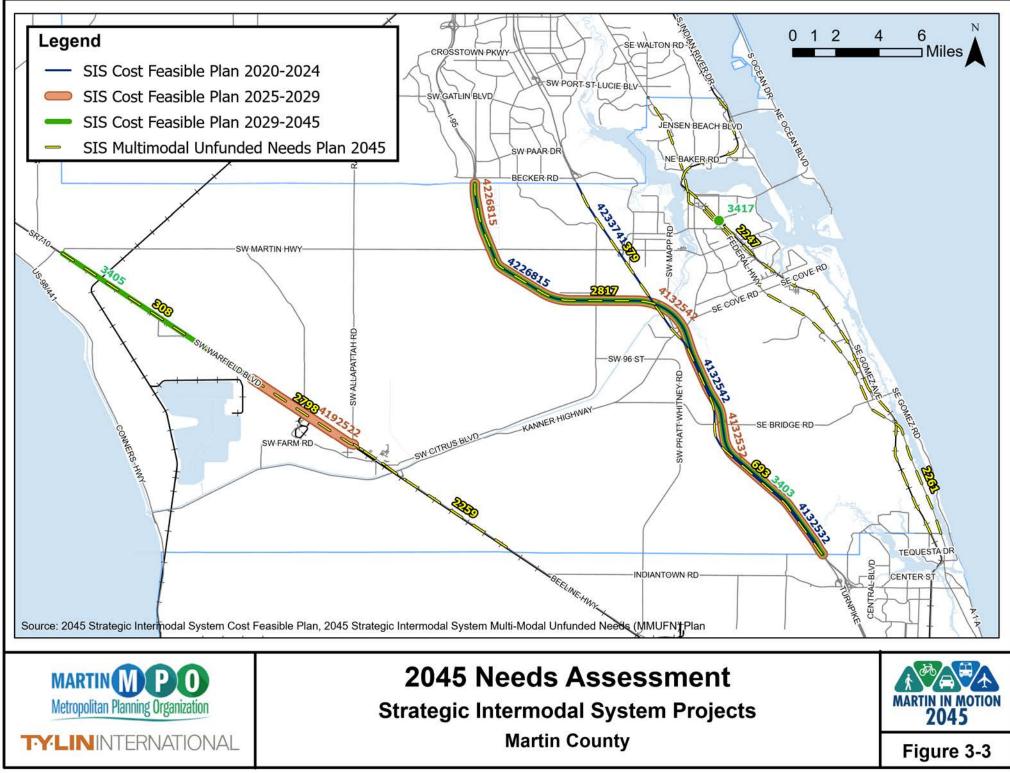
** YOE - Year of Expenditure

Base construction cost is unit cost derived from Martin MPO's 2040 LRTP and Florida Department of Transportation's cost per mile models (long range estimate). Project costs have been adjusted to PDC (in 2020 dollars) using inflation factors included in 2040 Revenue Forecasting Handbook. ¹ Project cost 'as programmed', FDOT's Five-Year Tentative Work Program 2020-2025.

¹ Project coat as programmed, if Orl 3 the train tenant which regram to concern. ² Right of way (ROW) cost calculated as 40% of total construction cost, Project Steering Committee Meeting, March 4, 2020. ³ Project cost includes new bridge (Concrete Deck/ Pre-stressed Girder - Simple Span) at approximately \$62 million (PDC). Unit cost for bridge demolition and construction is based on FDOT's Structures Design Guideline, Structures Manual Volume 1 (Chapter 9), January 2020.

Project cost includes new tricinge (Concrete Deck / re-stressed struter - simple span) a approximately soci-minine (FC/L) that cost no unige demonitor and construction is based on FDOT's Structures Beign Guideline, Structures Manual Volume 1 (Chapter 9), January 2020. ⁶ Project cost based on SR-5/US-1 at SW Joan Jefferson Way Planning Study, 2019, FDOT District Four and adjusted for inflation. Percentages for contingency, design and CEI are consistent with the Planning Study.

⁶ Project cost based on SR-710 PD&E Study from US 441 to SW Martin Highway in Okeechobee and Martin Counties. Percentages for contingency, design and CEI are consistent with the PD&E Study.



Strategic Intermodal System (SIS) Projects Martin in Motion, 2045 LRTP

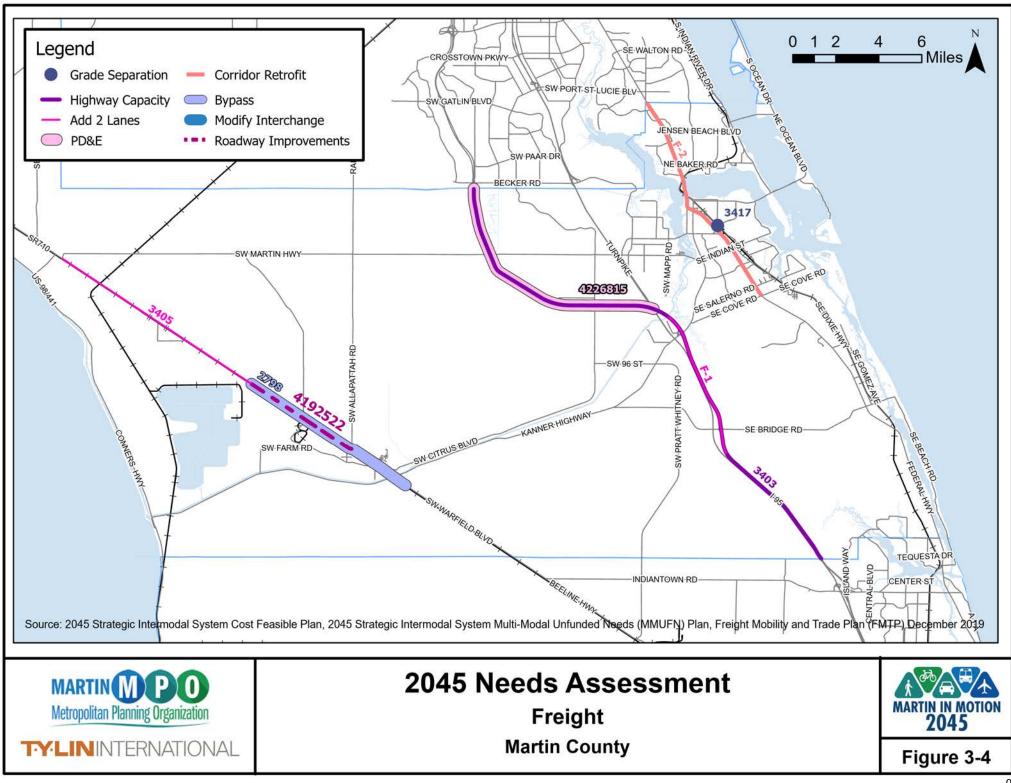
Map ID	Facility	From	То	Project Description	Source	Category or Type			Right	of Way / Constr		Total Project Cost (YOE**)		т	otal Cost (YOE**)			
							PDE	PE	Total	ROW	CON	Total		2021-2025	2026-2030	2031-2035	2036-2040	2041-2045
4132532	I-95*	Martin/Palm Beach County Line	CR-708/Bridge Road	Project Dev. & Env.	SIS CFP 2020-2024	PDE	\$2,200,000		\$2,200,000			\$0	\$2,200,000	\$2,200,000				
4132542	I-95*	CR-708/Bridge Road	High Meadow Avenue	Project Dev. & Env.	SIS CFP 2020-2024	PDE	\$2,150,000		\$2,150,000			\$0	\$2,150,000	\$2,150,000				
4226815	I-95*	High Meadow Avenue	Martin/St. Lucie County Line	Project Dev. & Env.	SIS CFP 2020-2024	PDE	\$2,750,000		\$2,750,000			\$0	\$2,750,000	\$2,750,000				
4192522	SR-710/Warfield Blvd.*	Martin FPL Power Plant	CR-609/SW Allapattah Road	Roadway Improvements	SIS CFP 2020-2024	PE, ROW & CON		\$7,585	\$7,585	\$651,094		\$658,679	\$659,000	\$659,000				
3403	I-95*	Martin/Palm Beach County Line	Becker Road	Highway Capacity (includes mainline and interchange improvements)	SIS CFP 2029-2045	PE, ROW & CON		\$10,000,000	\$10,000,000	\$10,000,000	\$301,189,000	\$311,189,000	\$321,189,000			\$10,000,000	311,189,000	
3405	SR-710*	Martin/Okeechobee County Line	Martin Powerplant Road	Roadway Improvements	SIS CFP 2029-2045	PE, ROW & CON		\$6,000,000	\$6,000,000	\$5,125,000	\$120,719,000	\$125,844,000	\$131,844,000				\$11,125,000	\$120,719,000
3417	SR-714/Monterey Road*	at Florida East Coast Railway		Grade Separation	SIS CFP 2029-2045	PDE, PE, ROW & CON	\$2,100,000	\$2,212,000	\$4,312,000				\$65,878,000			\$2,100,000	\$2,212,000	\$61,566,000
	· · · · · · · · · · · · · · · · · · ·											S Project Cost	\$526,670,000	\$7,759,000	\$0	\$12,100,000 \$	324,526,000	\$182,285,000

Notes * Projects included in the Florida Mobility and Trade Plan (FMTP), April 2020 ** YOE - Year of Expenditure Project included in Transportation Improvement Program (TIP), Project cost based on SIS First Five-Year and Second Five-Year Plans (as of July 1, 2020) SIS 2029-2045 CFP adopted in July 2018

SIS 2045 MULTI MODAL UNFUNDED NEEDS

Map ID	Facility	From	То	Project Description	Source	Category or Type	Project Cost
379	Turnpike Mainline/SR 91	SR-710 (MP 107)	Kissimmee-St. Could South (MP 242)	Add 2 Lanes to Build 6 Lanes	SIS 2045 Multimodal Unfunded Needs Plan, Turnpike	Highway Improvements (Long Term)	\$290,295,000
693	Turnpike Mainline/SR 91	Jupiter/Indiantown Road	SR-714/Stuart	Managed Lanes	SIS 2045 Multimodal Unfunded Needs Plan, Turnpike	Highway Improvements (Short Term)	\$455,700,00
2798	SR-710*	Martin Powerplant Road	SR 76 Connector Ramps	Bypass (New Facility)	SIS 2045 Multimodal Unfunded Needs Plan	Highway Improvements (Long Term)	\$33,263,000
2247	Amtrak Service	Miami	Jacksonville	Passenger Service	SIS 2045 Multimodal Unfunded Needs Plan, Statewide Rail Improvements	Transit Improvements (Short Term)	\$45,000,00
2259	SR-710 Exclusive Guideway	Indiantown	Mangonia Park Tri-Rail Station	Passenger Service	SIS 2045 Multimodal Unfunded Needs Plan	Transit Improvements (Mid Term)	\$386,460,000
2261	US 1 Exclusive Guideway	West Palm Beach Transit	Ft. Pierce	Passenger Service (Potential SIS Facility)	SIS 2045 Multimodal Unfunded Needs Plan	Transit Improvements (Mid Term)	\$720,480,000
2701	SR-710 Exclusive Guideway Transit Hub	at Indiantown		Passenger Terminal (Potential SIS Facility)	SIS 2045 Multimodal Unfunded Needs Plan	Transit Improvements (Mid Term)	\$11,400,000
						Total SIS Project Cost	\$1,942,598,0

Notes
* Projects included in the Florida Mobility and Trade Plan (FMTP), April 2020, FDOT



Freight Projects Martin in Motion, 2045 LRTP

		_	_		Source			Total Project Cost		T	Total Cost (YOE	**)	
Map ID	Facility	From	То	Project Description		Category or Type	Comments	(YOE**)	2021-2025	2026-2030	2031-2035	2036-2040	2041-2045
4192522	SR-710/Warfield Blvd.*	Martin FPL Power Plant	CR-609/SW Allapattah Road	Roadway Improvements	SIS CFP 2020-2024; Freight Mobility and Trade Plan (FMTP), April 2020; SIS CFP 2025-2029	PE, ROW & CON		\$659,000					
4226815	I-95*	High Meadows Avenue	Martin/St. Lucie County Line	Project Dev. & Env.	SIS CFP 2020-2024; Freight Mobility and Trade Plan (FMTP), April 2020; SIS CFP 2025-2029	PDE		\$2,750,000	\$2,750,000				
3403	1-95^	Martin/Palm Beach County Line	Becker Road	Highway Capacity (includes mainline and interchange improvements)	Freight Mobility and Trade Plan (FMTP), April 2020; SIS CFP 2029- 2045	PE, ROW & CON		\$321,189,000			\$10,000,000		
3405	SR-710*	Martin/Okeechobee County Line	Martin Powerplant Road	Major Safety Project	Freight Mobility and Trade Plan (FMTP), April 2020; SIS CFP 2029- 2045	PE, ROW & CON		\$131,844,000				\$11,125,000	\$120,719,000
3417	SR-714/Monterey Road*	at Florida East Coast Railway		Grade Separation	Freight Mobility and Trade Plan (FMTP), April 2020; SIS CFP 2029- 2045	PDE, PE, ROW & CON		\$65,878,000	\$0			\$2,212,000	\$61,566,000
F-1	I-95***	S of Bridge Road	S of High Meadow Avenue	Widen 6 to 8 Lanes	2040 Regional LRTP	Highway Improvements		-					
n/a	Strategies for Reducing	Florida East Coast (FEC)		Enhanced Safety Improvements per Brightline/ Virgin USA Trains and Martin County Agreement	Freight Mobility and Trade	Safety		-					
11/a	n/a Railroad Trespassing Rai (SRRT) Pilot Project	Railway Corridor		Dynamic Envelop project (Additional Striping) at all Railroad Crossings on State Roads in Martin County	Plan (FMTP), April 2020	Safety	CRISI Grant	\$157,683	\$157,683				
Notes							Total Freight Projects Cost	\$522,477,683	\$2,907,683	\$0	\$10,000,000	\$13,337,000	\$182,285,000

* Projects included in the Florida Mobility and Trade Plan (FMTP), April 2020

** YOE - Year of Expenditure

***Project segment is included in FM#s 4132542 and 3403, SIS Cost Feasible Plan, July 2020. Project included in Transportation Improvement Program (TIP)

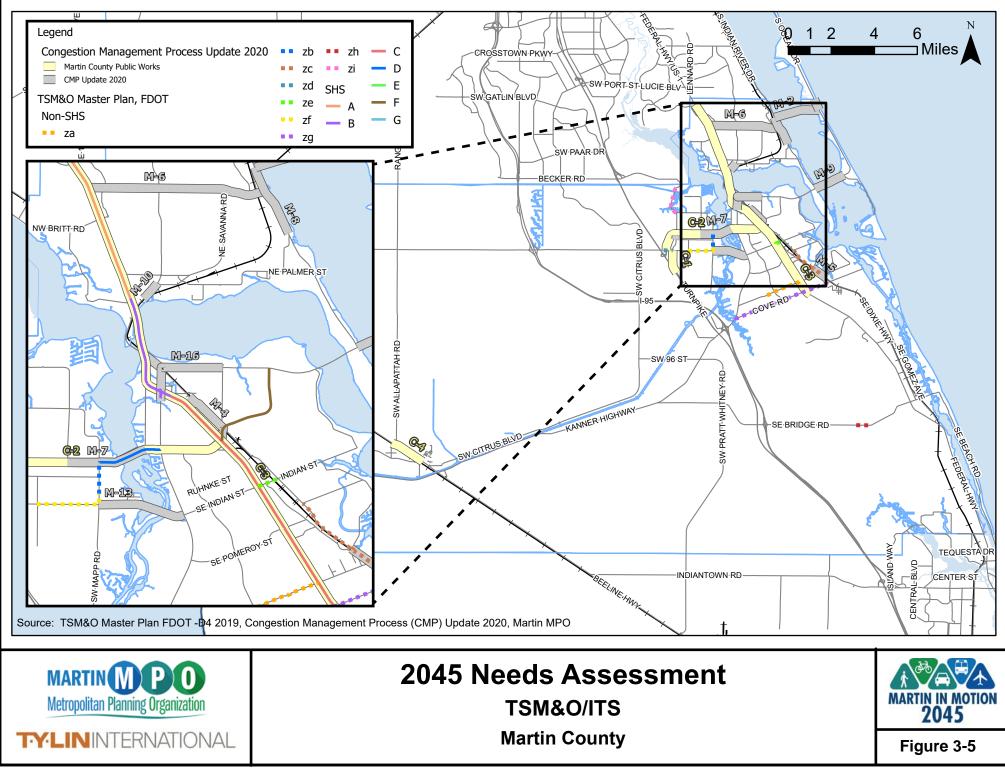
UNFUNDED FREIGHT NEEDS

Map ID	Facility	From	То	Project Description	Source	Category or Type	Comments	Project Cost
2798	SR-710*	Martin Powerplant Road	SR 76 Connector Ramps	Bypass (New Facility)	Freight Mobility and Trade Plan (FMTP), April 2020; SIS 2045 Multimodal Unfunded Needs Plan	Highway Improvements (Long Term)		\$33,263,000
F-2	US-1/Federal Highway ¹	Cove Road	St. Lucie County Line	Corridor Retrofit	2040 Regional LRTP		Dicussions for study with St. Lucie TPO and Indian River County MPO in progress. Strategies improvements - TSM&O and emerginng technologies being considered.	-Not Available-
n/a	Connected Freight Priority System Deployment			To Be Determined (Automated/Connected Vehicle)	Freight Mobility and Trade Plan (FMTP), April 2020		At this time, this project is very preliminary and does not include any facilities in Martin County Project included in prioritized project list.	-
Notes							Total Freight Projects Cost	\$33,263,000

* Projects included in the Florida Mobility and Trade Plan (FMTP), April 2020

Projects from Martin MPO's Good and Freight Movement Study to be added in Spring 2020.

¹ Project cost are not avaiable at this time. This project is a subset of US 1 Exclusive Guideway (SIS 2045 Multimodal Unfunded Needs Plan) which focuses on passenger service.



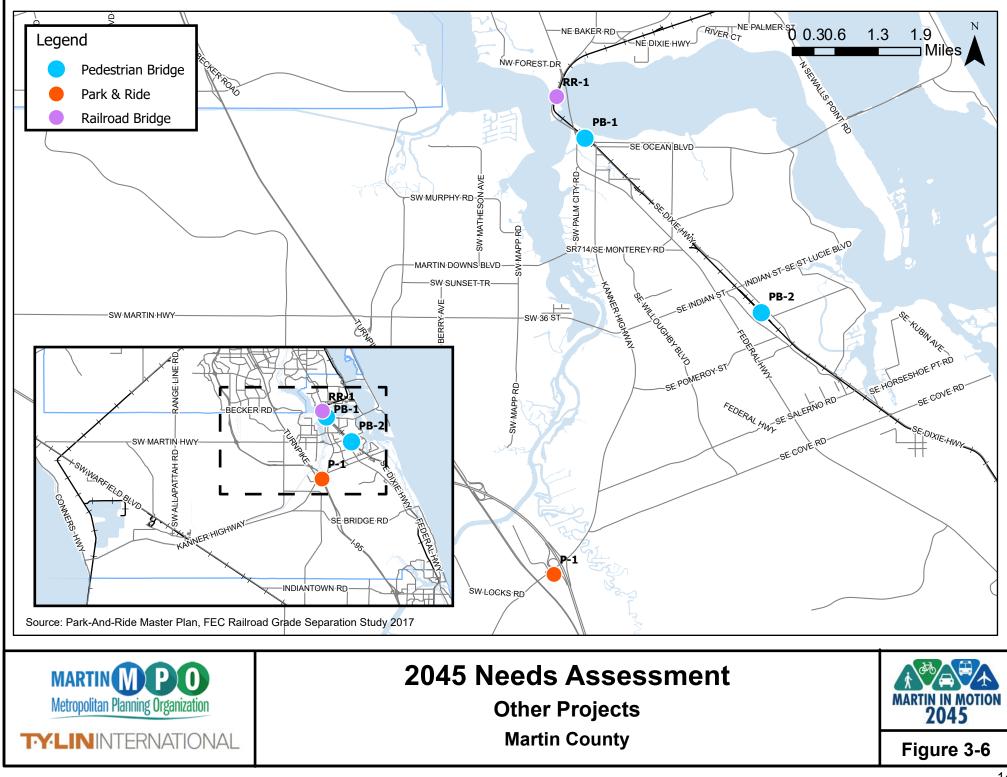
Transportation System Management & Operations (TSM&O) Projects Martin in Motion, 2045 LRTP

viai tiri iri							
Map ID	Facility	From	То	Length (miles)	Project Description	Source	Comments
Е	Kanner Highway	SW 96th Street	SE Salerno Road	3.08	To Be Determined	TSM&O Master Plan, FDOT - D4, March 2019, pg. 40	Includes CMP Update (Segment ID 7, 8, 9 and 10)
F	SR-714/SE Monterey Road	Federal Highway	SE Ocean Boulevard	1.85	To Be Determined	TSM&O Master Plan, FDOT - D4, March 2019, pg. 40	Includes CMP Update (Segment ID 15 and 16)
za	SE Salerno Road	SE Ault Road	Federal Highway	1.50	To Be Determined	TSM&O Master Plan, FDOT - D4, March 2019, pg. 41	TCRRPM 5.0, v/c ratio of 1.07
zb	SW Mapp Road	SW 36th Street	SW Martin Downs Boulevard	0.57	To Be Determined	TSM&O Master Plan, FDOT - D4, March 2019, pg. 41	
zc	SE Dixie Highway	SE Salerno Road	SE Jefferson Street	1.60	To Be Determined	TSM&O Master Plan, FDOT - D4, March 2019, pg. 41	
zd	SW Martin Highway	SW High Meadow Avenue	SW Armellini Avenue	0.37	To Be Determined	TSM&O Master Plan, FDOT - D4, March 2019, pg. 41	
ze	SE Indian Street	Federal Highway	SE Dixie Highway	0.36	To Be Determined	TSM&O Master Plan, FDOT - D4, March 2019, pg. 41	County Rank 18 and 20
zf	SW Martin Highway	SW Berry Avenue	SW Mapp Roaad	1.22	To Be Determined	TSM&O Master Plan, FDOT - D4, March 2019, pg. 41	
zg	SE Cove Road	Kanner Highway	SE Dixie Highway	4.34	To Be Determined	TSM&O Master Plan, FDOT - D4, March 2019, pg. 41	TCRRPM 5.0, v/c ratio of 1.05
zi	SW Murphy Road	SW High Meadow Avenue	County Line	1.57	To Be Determined	TSM&O Master Plan, FDOT - D4, March 2019, pg. 41	Corresponds to CMP Update (Segment ID 33 and 34)
n/a	SR-714/Martin Highway	at I-95	-	-	Advanced Digital Message Sign (ADMS) in Eastbound and WestboundDirection	I-95 Multimodal Treasure Coast Master Plan	
n/a	Martin County Rest Area (Southbound)	at I-95	-	-	Dynamic Truck Parking, Touch-Screen Informational Kiosk	I-95 Multimodal Treasure Coast Master Plan	
n/a	Martin County Rest Area (Northbound)	at I-95	-	-	Dynamic Truck Parking, Touch-Screen Informational Kiosk	I-95 Multimodal Treasure Coast Master Plan	
n/a	High Meadow Avenue	at I-95	-	-	Advanced Digital Message Sign (ADMS) in Southbound Direction	I-95 Multimodal Treasure Coast Master Plan	
n/a	SR-76/Kannery Highway	at I-95	-	-	Advanced Digital Message Sign (ADMS) in Eastbound and WestboundDirection, CCTV under Bridge, Signal Priority, ADMS at Proposed Park-and-Ride	I-95 Multimodal Treasure Coast Master Plan	Corresponds to CMP Update (Segment ID 7, 8, 9 and 10)
n/a	Bridge Road	at I-95	-	-	Advanced Digital Message Sign (ADMS) in Eastbound and WestboundDirection	I-95 Multimodal Treasure Coast Master Plan	
C-1	High Meadow Avenue	SR-714/Martin Highway	Golden Bear Way	1.05	Install Fiber Optic	Martin County Public Works Dept.	
C-2	Martin Downs Boulevard/Monterey Road	Turnpike Enterance	US-1/Federal Highway	4.85	Adaptive Corridor	Martin County Public Works Dept.	\$3500 per signalized intersections
C-3	US-1/Federal Highway	Summerfield Way	SE Westmoreland Blvd.	10.35	Adaptive Corridor	Martin County Public Works Dept.; CMP Update 2020 (Segment IDs 21 to 31); TSM&O Master Plan (Map IDs A, B and C), FDOT	\$3500 per signalized intersections, Overlaps with Project 'A'
n/a	Signalized Intersections	Countywide (Approximately 120 in	ntersections)		Install Bluetoad Devices	Martin County Public Works Dept.	\$6000 per intersection
	SR-710/Warfield Blvd.		Dr. Martin Luther King Jr. Drive	1.55	Install Fiber Optic	Martin County Public Works Dept.	
M-1	Colorado Avenue (SW Kanner Highway)		Ocean Boulevard	0.62	To Be Determined	CMP Update, 2020; Martin MPO & FDOT Congestion Analysis	CMP Update (Segment ID 35 and 36)
M-2	CR-732 (Jensen Beach Cswy.)	Indian River Drive	SR-A1A	1.90	To Be Determined	CMP Update, 2020; Martin MPO	CMP Update (Segment ID 51 and 52)
	Dixie Highway	US-1/Federal Highway	SW Ocean Blvd	0.42	To Be Determined	CMP Update, 2020; Martin MPO & FDOT Congestion Analysis	CMP Update (Segment ID 45 and 46), TCRPM 5.0, v/c = 1.14
M-4	Dixie Highway	Dixie Cutoff Rd	Monterey Rd	0.85	To Be Determined	FDOT Congestion Analysis	County Rank 12 (Southbound)
	Dixie Highway	SE Anchor Avenue	St.Lucie Blvd	0.74	To Be Determined	CMP Update, 2020; Martin MPO	CMP Update (Segment ID 37 and 38), TCRPM 5.0, v/c = 1.05

Map ID	Facility	From	То	Length (miles)	Project Description	Source	Comments
M-6	Jensen Beach Blvd	US-1/Federal Highway	Indian River Drive	2.92	To Be Determined	CMP Update, 2020; Martin MPO	Corresponds to CMP Update (Segment ID 3, 4, 5 and 6)
M-8	NE Indian River Drive	NE Dixie Hwy	CR-732 (Jensen Beach Cswy.)	1.35	To Be Determined	CMP Update, 2020; Martin MPO	Corresponds to CMP Update (Segment ID 47, 48, 49 and 50)
M-9	NE Ocean Blvd	S Sewalls Point Rd	NE MacArthur Blvd	4.77	To Be Determined	TCRPM, v/c = 1.14	
M-10	SE Green River Pkwy	NW Wright Blvd	NW Dixie Hwy	0.40 To Be Determined		TCRPM, v/c = 1.16	
M-11	SE Monterey Road (Ext)	US-1/Federal Highway	SE Dixie Hwy	0.58	To Be Determined	CMP Update, 2020; Martin MPO & FDOT Congestion Analysis	CMP Update (Segment ID 17 and 18), County Rank 19
M-12	SR-A1A	CR-732 (Jensen Beach Cswy.)	North County Line	0.80	To Be Determined	CMP Update, 2020; Martin MPO	CMP Update (Segment ID 53 and 54)
M-13	SW 36th Street (Martin Highway)	SW Mapp Rd	Kanner Hwy	1.88	To Be Determined	CMP Update, 2020; Martin MPO	CMP Update (Segment ID 13 and 14)
M-14	SW High Meadow Ave	SW Sunset Tr	SW Town Center Way	0.20	To Be Determined	TCRPM, v/c = 1.01	
M-15	SW Joan Jefferson Way	US-1/Federal Highway	Dixie Hwy	0.10	To Be Determined	CMP Update, 2020; Martin MPO	CMP Update (Segment ID 41 and 42)
M-16	SW Ocean Blvd	US-1/Federal Highway	SR-A1A	1.28	To Be Determined	CMP Update, 2020; Martin MPO & FDOT Congestion Analysis	CMP Update (Segment ID 39 and 40)
M-17	Bridge Road	I-95	US-1/Federal Highway	6.43	To Be Determined	CMP Update, 2020; Martin MPO	CMP Update (Segment ID 1 and 2), Project zh identified in the TSM&O Master Plan is a subset of this segment

Notes

Project "E" includes SR-76/Kannery Highway at I-95 interchange



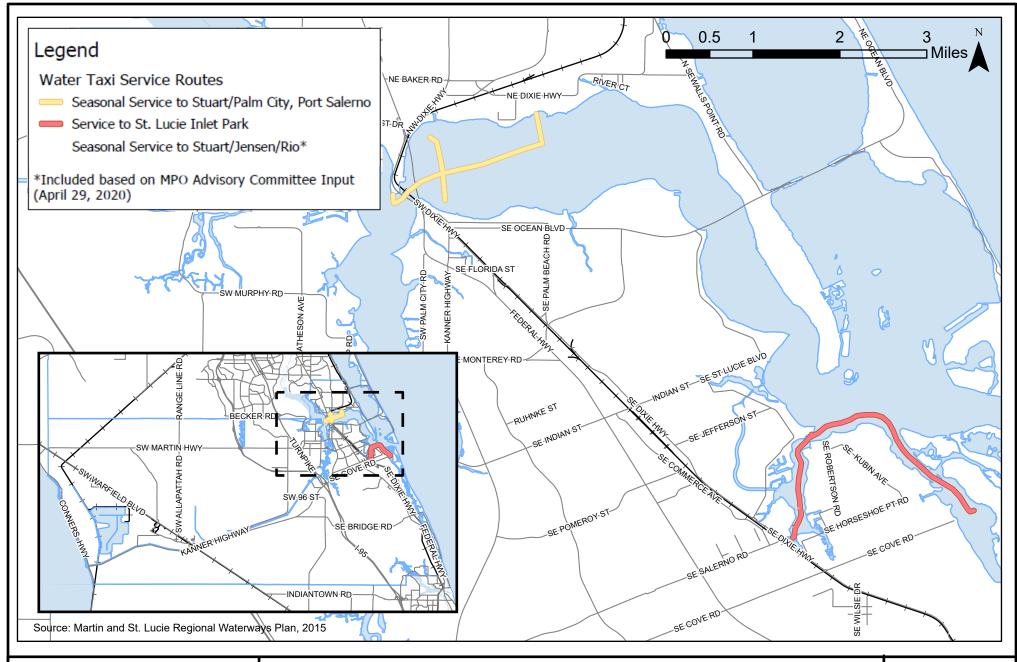
Other Projects Martin in Motion, 2045 LRTP

					Data		мот	Mobilization (10%)		Scope Contingency/	Tatal							Total Cost	(YOE**)	
Map ID	Facility	Project Description	Source	Category or Type	Base Construction Cost	Construction ¹	(10%)		Sub Total	Project Unknowns (10%)	Total Constructio n Cost	PE Design (15%)	CEI (15%)	CEI (10%)	Total Project Cost (PDC*)	Comments	2021-2025	2026-2030	2031-2035	2036-2045
							10%	10%		10%		15%	15%	10%			1.08	1.25	1.47	1.94
P-1	Kanner Highway/SR 76 at I-95	Facility located in southwest corner of Kanner Highway/SR 76, approximately 46,000 sq. ft. 106 parking spaces including four ADA spaces and six kiss-and-ride.	Park-And-Ride Master Plan, FDOT - D4, Oct. 2018, pg. 10, 38, 43 and 44	Travel Demand Management	\$1,800,000	\$1,908,000			\$1,908,000		\$1,908,000	\$286,200	\$286,200		\$2,480,400	Cost in 2018 dollars and includes MOT and contingency		\$3,100,500		
n/a	West of I-95 between Becker Road and Martin Highway		Park-And-Ride Master Plan, FDOT - D4, Oct. 2018, pg. 10	Travel Demand Management	\$850,000	\$901,000			\$901,000		\$901,000	\$135,150	\$135,150			Assumes 50 spaces @ \$17,000/space		\$1,464,125		
n/a	West of Turnpike in vicinity of Sand Avenue		Park-And-Ride Master Plan, FDOT - D4, Oct. 2018, pg. 10	Travel Demand Management	\$850,000	\$901,000			\$901,000		\$901,000	\$135,150	\$135,150		\$1 171 300	Assumes 50 spaces @ \$17,000/space		\$1,464,125		
PB-1	FEC Railroad and Dixie Highway near St. Lucie Avenue	Non-motorized grade crossing (bridge) in Downtown Stuart	FEC Railroad Grade Separation Study, Martin MPO, August 2017	Safety	\$4,700,000	\$5,076,000	\$507,600	\$507,600	\$6,091,200	\$609,120	\$6,700,320	\$1,005,048	\$1,005,048		\$8,710,416	Cost does not include operation and maintenance of elevators; Partially (50%) funded by Brightline/ Virgin USA Trains		\$10,888,020		
PB-2	FEC Main-Line in the area of the Golden Gate Community	Non-motorized railroad grade crossing	FEC Railroad Grade Separation Study, Martin MPO, August 2017	Safety	\$3,700,000	\$3,996,000			\$3,996,000	\$399,600	\$4,395,600	\$659,340	\$659,340		\$5,714,280					\$11,085,703
RR-1	FEC - St. Lucie River Bridge	Double tracking FEC railroad bridge over St. Lucie river, City of Stuart	Strategic Initiative	Rail Capacity								0	0		Private Sector Funding	Privately funded through Brightline/Virgin USA Trains			Private Sector Funded Project	Private Sector Funded Project
Notes													Total P	roject Cost	19,247,696		\$0	\$16,916,770	\$0	\$11,085,703

* PDC - Present Day Cost

** YOE - Year of Expenditure

¹ Construction cost includes adjustments applied to base construction cost to account for inflation. Inflation factors derived from FDOT 2045 Revenue Forecasting Guidebook, July 2018.





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Waterborne Transportation Projects

Martin in Motion, 2045 LRTP

						Catagory or	Total Cost		Total Cost	t (YOE**)	
Map ID	Project Description	From	То	Location/Geography	Source	Category or Type	(PDC*)	2021-2025	2026-2030	2031-2035	2036-2045
								1.08	1.25	1.47	1.94
n/a	Water based Transportation Feasibility Study	Martin County	-	Countywide	Martin and St. Lucie Regional Waterways Plan, 2015; Chapter 3, pg. 3-49	Study (to be funded through Non Cpacity Program)	\$350,000		\$437,500		
				From Sandsprit Park or potentially Pirate's Cove	Martin and St. Lucie Regional Waterways	Capital Cost	\$120,000			\$176,400	
W-1	Water taxi service to St. Lucie Inlet State Park	Sandsprit Park		Manatee Pocket	Plan, 2015; Chapter 3, pg. 3-23 to 3-34	Annual Operating Cost	\$275,000			\$2,021,250	\$5,335,000
	Water taxi service (seasonal or for waterfront	around key nodes such as Stuart/Palm City, Port		Potential routes include Stuart Floating Dock to Harborage Marina, Harborage Marina to Sunset	Martin and St. Lucie Regional Waterways	Capital Cost	\$240,000			\$352,800	
W-2	special events and festivals only)	Salerno/Manatee Pocket, Stuart/Jensen/Rio	-	Bay Marina, Stuart Floating Dock to Stuart Harbor/Rio Town Center, Sandsprit Park to	Plan, 2015; Chapter 3, pg. 3-23 to 3-34	Annual Operating Cost	\$375,000			\$2,756,250	\$7,275,000
Notes		Operating Cost	(20-year total)	\$9,750,000	\$0	\$0	\$4,777,500	\$12,610,000			
* PDC - Pr	esent Day Cost	Capital Cost 710,000 - 437,500						-			

** YOE - Year of Expenditure

Assumptions for water taxi service project cost.

Water tax service to St. Lucie Inlet State Park (one route)

1. Two vessels (20 passengers capacity/vessel) @ \$60,000 per vessel

2. Annual operating cost estimates at \$275,000 (includes fuel, 2-person crew, admin staff and maintenance). Route operates 7 days a week for 12 hours daily for nine (9) months.

3. Capital cost for landside improvements is not included.

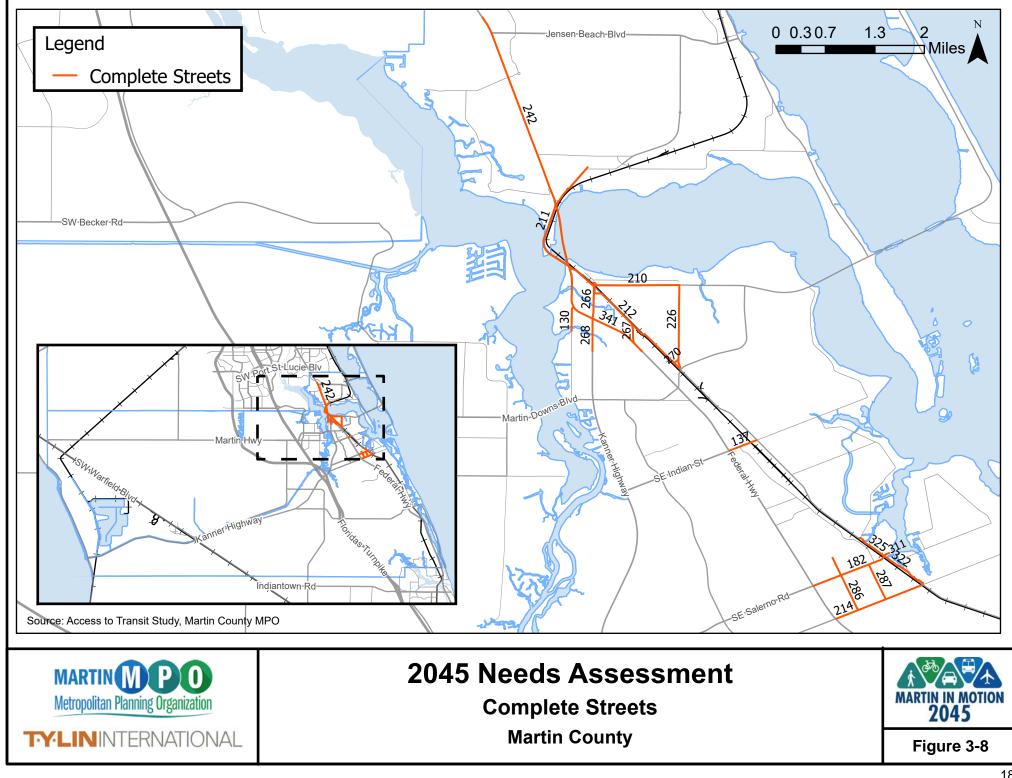
Water taxi service (seasonal or special event) (three routes)

1. Four vessels (20 passengers capacity/vessel) @ \$60,000 per vessel

2. Annual operating cost estimates at \$125,000 per (includes fuel, 2-person crew, admin staff and maintenance). Route operates 7 days a week for 12 hours daily for nine (4) months.

3. Capital cost for landside improvements is not included.

Source: Derived from Water Taxi Feasibility Study Report, Ulteig, 2016 (www.reapmatters.org)



Complete Streets Projects Martin in Motion, 2045 LRTP

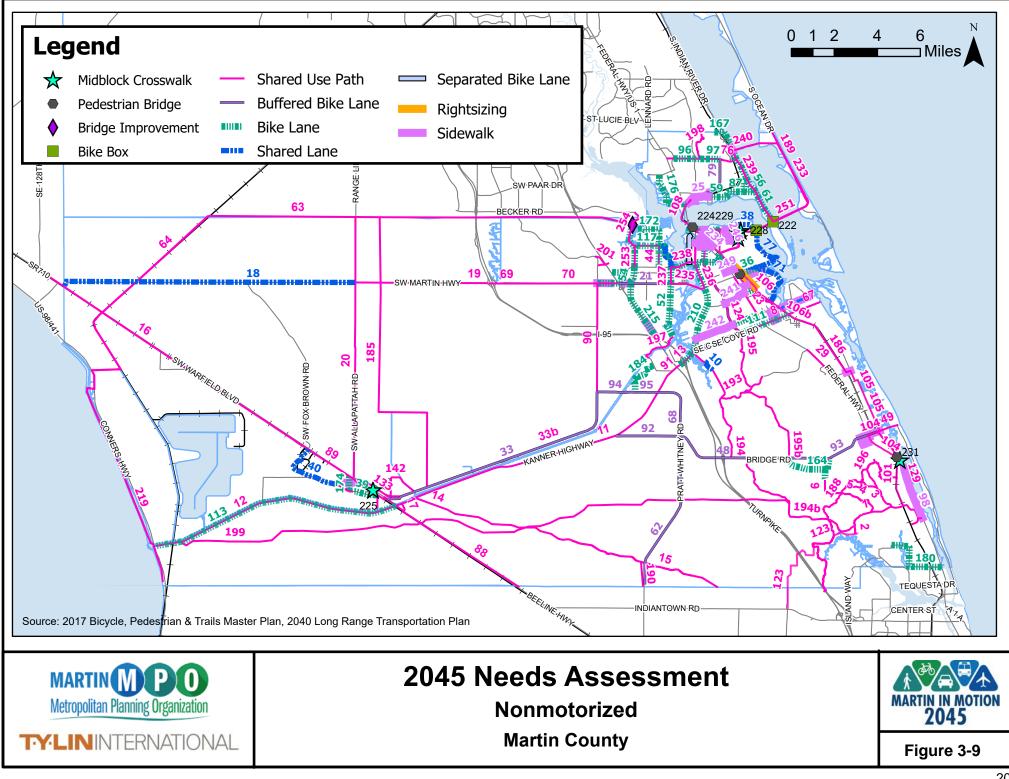
	mouon,	2045 LRTP																							
lap ID	Segment ID ¹	Facility/Segment Name	From	То	General Location	Length (miles)	ROW Width (feet)	(feet) Project Description Con		Construction	MOT (10%)	Mobilization (10%)	Sub Total	Scope Contingency/ Project Unknowns (10%)	/ ROW Cost	Total Construction Cost	PE Design (15%)	CEI (15%)	CEI (10%)	Total Project Cost (PDC*)	2021-2025	Total Cost 2026-2030	. ,	(YOE**) 2031-2035 2036-2045	
									Cost		10%	10%		(10%) 10%			15%	15%	10%	-	1.08	1.25	2031-2035	2036-2045	
CS-2	211	NW DIXIE HWY (SR 707)	NW GREEN RIVER PKWY	CONFUSION CORNER	Stuart	1.98	100	Four 12.5' travel lanes with center turn lane replaced with four 10'-11' travel lanes with landscaped median. Addition of protected bike lanes in both directions. Addition of shade trees & street lights adjacent to bike lanes.	\$1,521,847	\$3,013,257	301,326	301,326	3,615,908	361,591		3,977,499	596,625	596,625	10%	5,170,749		\$6,463,436	\$7,601,001	\$10,031,2	
CS-4	226	SE PALM BEACH RD	SE OCEAN BLVD (SR A1A)	SE MONTEREY RD	Stuart	1.09	80	Addition of raised bike lanes in both diretions. Addition of shade trees. Conversion of 5' side walks on both sides to 10' multi-use path on east side & 6' sidewalk on west side. 2' furnishing zones adjacent to sidewalk/paths.	\$3,239,243	\$3,530,775	353,077	353,077	4,236,930	423,693		4,660,623	699,093	699,093		6,058,809		\$7,573,512	\$8,906,450	\$11,754,09	
CS-5	270	SE CHRISTIE WAY	SE DIXIE HWY	SE PALM BEACH RD	Stuart	0.08	50	. Conversion of 6' side walks on north side to 8' multi-use path. Addition of shade trees and street lights adjacent to existing sidewalk on south side.	\$366,377	\$29,310	2,931	2,931	35,172	3,517		38,689	5,803	5,803		50,296		\$62,870	\$73,936	\$97,5	
CS-6	214	SE COVE ROAD	SR 5 (US 1)	SE DIXIE HWY	Salerno	1.11	75	Addition of bike lanes in both directions. Addition of shared used path on northern side. Plant Cypress Trees in existing swale. Two 12' traffic lanes shift to south and become 11'. (FM #441701.1)	\$5,541,060	\$6,150,576	615,058	615,058	7,380,692	738,069		8,118,761	1,217,814	1,217,814		10,554,389		\$13,192,986	\$15,514,952	\$20,475,5	
CS-7	286	SE JACK AVENUE	PORT SALERNO ELEMENTARY	SE COVE RD	Salerno	0.76	70	New curb & gutters. Addition of shade trees & street lights adjacent to new 10' shared use path. Project assumes improvements same as SE Palm City Road (CS-19)	\$1,459,112	\$1,108,925	110,892	110,892	1,330,710	133,071		1,463,781	219,567	219,567		1,902,915		\$2,378,644	\$2,797,285	\$3,691,6	
CS-8	242	SR 5 (US 1)	NW SUNSET BLVD	S END OF ROOSEVELT BRIDGE	Stuart	3.57	150	Addition of markings for existing bike lanes. Addition of sidewalks, shade trees & street lighting.	\$921,805	\$3,290,845	329,085	329,085	3,949,014	394,901		4,343,916	651,587	651,587		5,647,090		\$7,058,863	\$8,301,223	\$10,955,3	
CS-9	341	SR 5 (US 1) ¹	SW JOAN JEFFERSON WAY	600 FEET SOUTH OF SE TRESSLER DR	Stuart	1.42	150	Resurfacing (FM # 446110.1)		\$6,000,000			\$6,000,000			\$6,000,000				\$6,000,000	\$6,000,000				
S-10	137	SE INDIAN ST	SR 5 (US 1)	SE DIXIE HWY (SR A1A)	Stuart	0.36	100	Convert 5 lane urban roadway incuding center turn lane to 4	\$2,749,418	\$989,791	98,979	98,979	1,187,749	118,775		1,306,523	195,979	195,979		1,698,481		\$2,123,101	\$2,496,766	\$3,295,0	
S-11	268	S KANNER HWY (SR 76) ¹	SR 5 (US 1)	SW MANOR DR	Stuart	0.44	110	lane divided facility with separated bike lanes. (FM # 438071.1) Resurfacing (FM # 443995.1)		\$4,385,904			4,385,904			4,385,904				4,385,904	\$4,385,904				
S-12	182	SE SALERNO RD	SR 5 (US 1)	SE DIXIE HWY (SR A1A)	Salerno	0.93	65	Addition of street lights & landscaping on south side. Conversion of 6' sidewalk with 2' landscape to 8' multi-use path on north side. (FM #440242.1)	\$366,377	\$340,731	34,073	34,073	408,877	40,888		449,765	67,465	67,465		584,694		\$730,868	\$859,500	\$1,134,3	
S-13	311	SE SALERNO RD	SE DIXIE HWY (SR A1A)	SE DE SOTO AVE	Salerno	0.08	60	Project assumes continuation of improvements/cross section between SR 5 (US 1) and SE Dixie Hwy. (CS-12)	\$366,377	\$29,310	2,931	2,931	35,172	3,517		38,689	5,803	5,803		50,296		\$62,870	\$73,936	\$97,5	
S-14	267	SE CUTOFF RD	SR 5 (US 1)	SE DIXIE HWY (SR A1A)	Stuart	0.23	110	Shared use path on one side. Shade trees and lighting.	\$596,015	\$137,083	13,708	13,708	164,500	16,450		180,950	27,143	27,143		235,235		\$294,044	\$345,796	\$456,3	
S-15	212	SE DIXIE HWY	CONFUSION CORNER	SE PALM BEACH RD	Stuart	1.07	90	Addition of buffered bike lanes in both directions. Addition of shade trees & bioswales. Addition of sidewalk & street lights.	\$937,382	\$1,002,998	100,300	100,300	1,203,598	120,360		1,323,958	198,594	198,594		1,721,145		\$2,151,431	\$2,530,083	\$3,339,0	
S-16	322	SE DIXIE HWY (SR A1A)	SE SALERNO RD	SE COVE RD	Salerno	0.61	90	New markings along travel lanes and on-street parking lanes.	\$377,908	\$230,524	23,052	23,052	276,629	27,663		304,292	45,644	45,644		395,579		\$494,474	\$581,501	\$767,4	
S-17	325	SE DIXIE HWY (SR A1A)	PORT SALERNO CRA (NORTH BOUNDARY)	SE SALERNO RD	Salerno	0.39	90	New shade trees. Parklet options available. Project assumes continuation of improvements/cross section between SE Salerno Road and SE Cove Road. (CS-16)	\$377,908	\$147,384	14,738	14,738	176,861	17,686		194,547	29,182	29,182		252,911		\$316,139	\$371,779	\$490,6	
:S-18	287	SE EBBTIDE AVE	SE SALERNO RD	SE COVE RD	Salerno	0.5	65	Addition of buffered bike lanes in both directions. Addition of shade trees & bioswales. Addition of sidewalk & street lights.	\$1,047,812	\$523,906	52,391	52,391	628,687	62,869		691,556	103,733	103,733		899,023		\$1,123,779	\$1,321,564	\$1,744,1	
:S-19	130	SW PALM CITY RD	SR 5 (US 1)	400 FEET NORTH OF SW INDIAN GROVE DR	N Stuart	0.33	80	Two 12' travel lanes become two 11' travel lanes. New curb & gutters. Addition of shade trees & street lights adjacent to new 10' shared use path.	\$1,459,112	\$481,507	48,151	48,151	577,808	57,781		635,589	95,338	95,338		826,266		\$1,032,832	\$1,214,611	\$1,602,9	
DC - Pre	ent Day Co	st		1	1	1	1			1		1	1				Total Con	nplete Streets F	Projects Cost	46,433,783	\$10,385,904	\$45,059,849	\$52,990,382	\$69,932,8	

** YOE - Year of Expenditure

¹ Segment ID cross references projects identified in Martin MPO's on-going Access to Transit Study

Base construction cost are derived using FDOT's cost per mile models and based on existing and proposed typical section included in Martin MPO's Access to Transit Study (on-going).

¹ Project cost for CS-9 and CS-11 is "as programmed."



Non-Motorized Projects Martin in Motion, 2045 LRTP

Martin in Motion, 2045 LRTP																			
Facility	Map ID	From To		Project Description	Length (miles)	Sides	Base Construction Cost	Construction I	MOT (10%) Mobilizatio n (10%)	Sub Total	Scope Contingency/ Project Unknowns	Total Construction Cost	PE Design (15%)	CEI (10%)	Total Project Cost (PDC*)		Total Cost (Y	′OE**)	
											(10%)					2021-2025	2026-2030	2031-2035	2036-2045
Sidewalks									10% 10%		10%		15%	10%		1.08	1.25	1.47	1.94
	-	Florida Avenue	End	Sidewalk	0.08	2	\$165,943	\$25,219	\$2,522	\$27,741				\$3,051	\$38,143	6	\$47,679	\$56,071	\$73,998
		Florida Avenue	End	Sidewalk	0.08	2	\$165,943	\$27,973	\$2,797	\$30,770		\$33,847		\$3,385	\$42,309		\$52,887	\$62,195	\$82,080
		Green River Parkway Lantana Avenue	NE Braille Place	Sidewalk Sidewalk	0.55	2	\$165,943 \$165,943	\$183,305 \$43,657	\$18,330 \$4,366	\$201,635 \$48.023		\$221,799 \$52.825		\$22,180 \$5.282	\$277,249 \$66.031		\$346,561 \$82,539	\$407,555 \$97.066	\$537,862 \$128,100
	135		Gomez Avenue	Sidewalk	0.13	2	\$165,943	\$169,764	\$4,300	\$186,740					\$256,767	,	\$320,959	\$377.448	\$498,129
		NE Baker Road	Dixie Highway	Sidewalk	0.12	2	\$165,943	\$40,943	\$4,094	\$45,038					\$61,927	,	\$77,409	\$91,033	\$120,138
		Baker Road	SE Seneca Avenue	Sidewalk	0.14	2	\$165,943	\$47,445	\$4,745	\$52,190		\$57,408			\$71,761		\$89,701	\$105,488	\$139,216
		Lantana Avenue	Florida Avenue	Sidewalk	0.13	2	\$165,943	\$43,754	\$4,375	\$48,130		\$52,943					\$82,723	\$97,282	\$128,386
		Lantana Avenue Wright Blvd	End Existing Terminus Near Baker Road	Sidewalk Sidewalk	0.21	2	\$165,943 \$165,943	\$68,098 \$103.040	\$6,810 \$10,304	\$74,908 \$113,344				\$8,240 \$12,468	\$102,999 \$155,848		\$128,749 \$194,810	\$151,408 \$229,097	\$199,818 \$302,346
		SE 14 Street	SE Florida Street	Sidewalk	0.41	1	\$165,943	\$68.037	\$6,804	\$74,840				\$8,232	\$102,905		\$128.632	\$151.271	\$199,637
		Lantana Avenue	Florida Avenue	Sidewalk	0.13	2	\$165,943	\$43,769	\$4,377	\$48,146	\$4,815	\$52,961			\$66,201		\$82,752	\$97,316	\$128,430
		Lantana Avenue	Florida Avenue	Sidewalk	0.13	2	\$165,943	\$43,732	\$4,373	\$48,105		\$52,915		1	\$66,144	ł	\$82,680	\$97,232	\$128,320
		Bridge Road	Comus Street	Sidewalk	0.33	2	\$165,943 \$165,943	\$110,912 \$200.019	\$11,091 \$20.002	\$122,004					\$167,755 \$302.529		\$209,694 \$378,161	\$246,600 \$444,717	\$325,444 \$586,905
		Bane Berry Drive NE CAUSEWAY BLVD	Swallowtrail Way 1000 FT S of Admiral's Way	Sidewalk Sidewalk	0.60	2	\$165,943	\$200,019	\$20,002	\$220,021 \$51,115				\$24,202 \$5,623	\$302,529		\$378,161 \$87,853	\$444,717 \$103.316	\$586,905
		CROSSING US 1 EAST OF FEC RAILROAD		Crosswalk	0.14	1	\$7,219	\$7,219	\$722	\$7,941					\$10,919		\$13.648	\$16.050	\$21,182
		Florida Avenue	US 1	Sidewalk	0.21	2	\$165,943	\$70,563	\$7,056	\$77,619		\$85,381	\$12,807		\$106,726	i	\$133,407	\$156,887	\$207,048
		Martin Downs Boulevard	High Meadow Avenue	Sidewalk	0.27	2	\$165,943	\$89,156	\$8,916	\$98,071	\$9,807				\$134,848	1	\$168,560	\$198,227	\$261,606
		Citrus Boulevard	42nd Avenue	Sidewalk	0.50	2	\$165,943	\$167,339	\$16,734	\$184,073	\$18,407				\$253,101		\$316,376	\$372,058	\$491,015
	220 24	NE SAVANNAH RD	NE SUMNER AVE	Crosswalk Sidewalk	0.19	1	\$7,219 \$165.943	\$7,219 \$63,686	\$722 \$6,369	\$7,941 \$70,054				\$873 \$7,706	\$10,919 \$96,325	 	\$13,648 \$120,406	\$16,050 \$141,597	\$21,182 \$186,870
		SE GREEN RIVER PKWY	NE CARDINAL AVE	Sidewalk	0.43	2	\$165,943	\$143,499	\$14,350	\$157,849				\$17,363	\$217,042	<u>!</u>	\$271,303	\$319,052	\$421,062
Ne Seneca Ávenue		NE Cardinal Avenue	NW Greenrip Parkway	Sidewalk	0.29	2	\$165,943	\$97,151	\$9,715	\$106,866	\$10,687				\$146,941		\$183,677	\$216,004	\$285,066
		Florida Avenue	US 1	Sidewalk	0.21	2	\$165,943	\$70,544	\$7,054	\$77,599		\$85,359			\$106,698	<u> </u>	\$133,373	\$156,847	\$206,995
		Salerno Road Salerno Road	Cove Road Cove Road	Sidewalk Sidewalk	0.06	2	\$165,943 \$165,943	\$21,119 \$160,794	\$2,112 \$16,079	\$23,231 \$176,874	\$2,323 \$17.687	\$25,554 \$194,561			\$31,943 \$243,201	<u> </u>	\$39,929 \$304.002	\$46,956 \$357,506	\$61,969 \$471,811
		Salerno Road Salerno Road	Cove Road	Sidewalk	0.48	2	\$165,943	\$160,794	\$16,079	\$176,874					\$243,201 \$198,782	1	\$304,002	\$357,506	\$471,811 \$385,637
		Dixie Highway	Existing Terminus Near Alice Road	Sidewalk	0.27	2	\$165,943	\$88,140	\$8,814	\$96,955					\$133,312		\$166,641	\$195,969	\$258,626
Osprey Street	163	Dixie Highway	E of Railroad	Sidewalk	0.19	2	\$165,943	\$63,936	\$6,394	\$70,330	\$7,033	\$77,363	\$11,604	\$7,736	\$96,704		\$120,880	\$142,155	\$187,606
		Willoughby Blvd	Federal Hwy	Sidewalk	0.95	1	\$165,943	\$157,646	\$15,765	\$173,410				\$19,075	\$238,439	4	\$298,049	\$350,506	\$462,572
	155 224	Florida Avenue	End	Sidewalk Pedestrian Bridge	0.08	2	\$165,943 \$218,592	\$26,738 \$218,592	\$2,674 \$21,859	\$29,412 \$240,451	2 \$2,941 \$24,045	\$32,353 \$264,496	\$4,853 \$39,674	\$3,235 \$26,450	\$40,441 \$330,620		\$50,551 \$413,276	\$59,448 \$486,012	\$78,456 \$641,404
	229			Crosswalk	0.03	1	\$7,219	\$7,219	\$722	\$240,451				\$873	\$10,919		\$13,648	\$16,050	\$21,182
		Kanner Hwy	Willoughby Blvd	Sidewalk	1.63	1	\$165,943	\$270,487	\$27,049	\$297,536				\$32,729	\$409,112	2	\$511,390	\$601,394	\$793,677
		Lantana Avenue	Florida Avenue	Sidewalk	0.13	2	\$165,943	\$43,642	\$4,364	\$48,006		\$52,807		\$5,281	\$66,009)	\$82,511	\$97,033	\$128,057
		SE Birch Avenue	St. Lucie Boulevard	Sidewalk	0.64	2	\$165,943	\$210,882	\$21,088	\$231,970	\$23,197	\$255,167		\$25,517	\$318,958		\$398,698	\$468,869	\$618,779
		SE Tressler Drive SE Birch Avenue	Federal Hwy St. Lucie Boulevard	Sidewalk Sidewalk	0.22	2	\$165,943 \$165,943	\$73,015 \$211.865	\$7,301 \$21,187	\$80,316 \$233,052					\$110,435 \$320,446		\$138,044 \$400,558	\$162,340 \$471.056	\$214,244 \$621,666
		Lantana Avenue	Florida Avenue	Sidewalk	0.13	2	\$165,943	\$43,802	\$4,380	\$233,052					\$66,251		\$82.814	\$97.389	\$128,527
		700 FT S of SE KENSINGTON ST	SE AVIATION WAY	Rightsizing	1.13	1	\$165,943	\$187,470	\$18,747	\$206,217		\$226,838			\$283,548	1	\$354,435	\$416,815	\$550,083
		SE HIGHBORN WAY	JONATHAN DICKSON STATE PARK ENTRANCE	Sidewalk	2.42	2	\$165,943	\$803,164	\$80,316	\$883,481		+			17 7 1 1	i	\$1,518,483	\$1,785,736	\$2,356,685
		SE 10th Street	SE Ocean Boulevard	Sidewalk	0.52	2	\$165,943	\$173,567	\$17,357	\$190,924		\$210,017			\$262,521		\$328,151	\$385,905	\$509,290
		SE Johnson Avenue Martin Luther King	Dixie Highway SE Ocean Blvd.	Sidewalk Sidewalk	0.24 0.25	2	\$165,943 \$165,943	\$79,653 \$82,972	\$7,965 \$8,297	\$87,618 \$91,269					\$120,475 \$125,494	1	\$150,593 \$156,868	\$177,098 \$184.477	\$233,721 \$243,459
		Salerno Road	Cove Road	Sidewalk	0.23	2	\$165,943	\$81,051	\$8,105	\$89,156	\$8,916				\$123,434		\$153,237	\$180,206	\$237,823
SE Indian St at Railroad Ave	223			Pedestrian Bridge	0.02	1	\$145,728	\$145,728	\$14,573	\$160,301					\$220,414	ļ	\$275,517	\$324,008	\$427,602
		SE 10 Street	SE Ocean Blvd.	Sidewalk	0.58	2	\$165,943	\$192,494	\$19,249	\$211,743					\$291,147	'	\$363,934	\$427,986	\$564,825
		Bridge Road SE Florida Street	Comus Street Dixie Highway	Sidewalk Sidewalk	0.34	2	\$165,943 \$165,943	\$111,384 \$53,102	\$11,138 \$5,310	\$122,523 \$58,412				\$13,477 \$6,425	\$168,469 \$80,316		\$210,586 \$100,396	\$247,649 \$118.065	\$326,829 \$155.814
		Kanner Hwy	SE Casa Avenue	Sidewalk	0.18	2	\$165,943	\$76,334	\$7,633	\$38,412	\$8,397				\$115,455		\$144,319	\$169,719	\$223,982
		SE Biringham	Commerce Avenue	Sidewalk	0.37	1	\$165,943	\$61,399	\$6,140	\$67,539					\$92,866	i	\$116,082	\$136,513	\$180,160
SE Miami Street	250	Federal Hwy	Commerce Avenue	Sidewalk	0.27	1	\$165,943	\$165,943	\$16,594	\$182,537	\$18,254			\$20,079	\$250,989)	\$313,736	\$368,954	\$486,918
· · · · · · · · · · · · · · · · · · ·	228	05.0	Endered Date	Crosswalk	0.00	1	\$7,219	\$7,219	\$722	\$7,941				\$873	\$10,919		\$13,648	\$16,050	\$21,182
	-	SE Casa Avenue SW 173rd Avenue	Federal Hwy SW 168th Avenue	Sidewalk Sidewalk	0.28	1	\$165,943 \$165,943	\$165,943 \$331,886	\$16,594 \$33,189	\$182,537 \$365,075					\$250,989 \$501,978		\$313,736 \$627,472	\$368,954 \$737.907	\$486,918 \$973,837
	225		ow room wonde	Crosswalk	0.00	1	\$7,219	\$7,219	\$722	\$7,941				\$873	\$10,919		\$13,648	\$16,050	\$21,182
JS 1	231	PEDESTRIAN BRIDGE CROSSING FEC RAILROAD		Pedestrian Bridge	0.05	1	\$364,320	\$364,320	\$36,432	\$400,752	\$40,075	\$440,827		\$44,083	\$551,034		\$688,793	\$810,020	\$1,069,006
Bicycle Corridors	101			D ¹¹	1.04	_	A150 710	\$500 704	A50.070 A50.070		ATO 0.40	4770 700	A 4 4 5 5 70	477.050			A4 000 050	AL 115 0 10	<u></u>
		Bridge Road Green River Parkway	Powerline Avenue Cardinal Avenue	Bike Lanes	1.91	2	\$152,748 \$152,748	\$583,734 \$84,881	\$58,373 \$58,373 \$8,488 \$8,488	\$700,481 \$101,858				\$77,053 \$11,204	\$963,162 \$140,054		\$1,203,952 \$175,068	\$1,415,848 \$205,880	\$1,868,534 \$271,705
		Green River Parkway SW WARFIELD BLVD	SW 96TH ST	Bike Lanes Buffered Bike Lane	0.28		\$152,748	\$4,173,378	\$8,488 \$8,488 \$417,338 \$417,338	\$101,858				\$11,204 \$550,886	\$140,054 \$6,886,073		\$175,068 \$8,607,592	\$205,880	\$271,705
		NE Savannah Road	Indian River Road	Bike Lanes	0.40	2	\$152,748	\$123,253	\$12,325 \$12,325	\$147,903	\$14,790	\$162,694	\$24,404	\$16,269	\$203,367	′	\$254,209	\$298,949	\$394,532
Dixie Highway		Green River Parkway	Savannah Road	Bike Lanes	0.43		\$152,748	\$130,218	\$13,022 \$13,022	\$156,262					\$214,860	<u> </u>	\$268,575	\$315,845	\$416,829
		Wright Blvd Palmer Street	Green River Parkway Indian River Drive	Bike Lanes			\$152,748 \$152,748	\$112,741 \$225,789	\$11,274 \$11,274 \$22,579 \$22,579	\$135,290 \$270,947				\$14,882 \$29,804	\$186,023 \$372,552	+ +	\$232,529 \$465,689	\$273,454 \$547,651	\$360,885 \$722,750
		Paimer Street NE SAVANNAH RD	SEAHORSE PL	Bike Lanes Bike Lanes	0.74	2	\$152,748	\$225,789	\$22,579 \$22,579 \$29,690 \$29,690	\$270,947 \$356,283					\$372,552	 	\$465,689	\$720,136	\$722,750 \$950,384
		SEAHORSE PL	NE PALMER ST	Bike Lanes	0.86	2	\$152,748	\$262,099	\$26,210 \$26,210	\$314,518					\$432,463		\$540,578	\$635,720	\$838,977
isherman's Wharf Drive		Pennsylvania Avenue	Yachtsman Drive	Bike Lanes	0.25	2	\$152,748	\$76,547	\$7,655 \$7,655	\$91,856				\$10,104	\$126,302		\$157,877	\$185,664	\$245,026
	170		Pine Lake Drive	Bike Lanes	0.80	2	\$152,748	\$243,615	\$24,361 \$24,361	\$292,338				\$32,157	\$401,964		\$502,455	\$590,887	\$779,811
		SW MARTIN DOWNS BLVD SW MARTIN HWY	SW MURPHY RD SW MARTIN DOWNS BLVD	Bike Lanes Bike Lanes	0.97	2	\$152,748 \$152,748	\$297,367 \$241,108	\$29,737 \$29,737 \$24,111 \$24,111	\$356,840 \$289,330				\$39,252 \$31,826	\$490,655 \$397.829		\$613,319 \$497,286	\$721,264 \$584,808	\$951,872 \$771,788
		Martin Highway	I-95	Bike Lanes	2.81	2	\$152,748	\$858,275	\$85,827 \$85,827	\$289,330				\$113,292			\$497,200	\$2,081,745	\$2,747,337
ndian River Dr	56	NE PALMER ST	NE JENSEN BEACH BLVD	Bike Lanes	1.69	2	\$152,748	\$517,407	\$51,741 \$51,741	\$620,888	\$62,089	\$682,977	\$102,447	\$68,298	\$853,721		\$1,067,152	\$1,254,971	\$1,656,220
		NE CAUSEWAY BLVD	COUNTY LINE RD	Bike Lanes	0.93	2	\$152,748	\$282,591	\$28,259 \$28,259	\$339,109	\$33,911	\$373,020	\$55,953	\$37,302	\$466,275	i	\$582,843	\$685,424	\$904,573
		NE JENSEN BEACH BLVD SE DIXIE HWY	NE CAUSEWAY BLVD SE ST LUCIE BLVD	Bike Lanes	0.45	2	\$152,748	\$138,905	\$13,891 \$13,891	\$166,686					\$229,193		\$286,492	\$336,914	\$444,635
		GOLDENROD RD	SE ST LUCIE BLVD WARNER CREEK	Bike Lanes Bike Lanes	0.77	1	\$152,748 \$152,748	\$117,363 \$410.049	\$11,736 \$11,736 \$41,005 \$41,005	\$140,835 \$492,059					\$193,649 \$676,581	╬───┤	\$242,061 \$845,727	\$284,664 \$994,575	\$375,679 \$1,312,568
		WARNER CREEK	SAVANNAH RD	Bike Lanes	0.58	2	\$152,748	\$177,354	\$17,735 \$17,735	\$212,825				\$23,411	\$292,635	i †	\$365,793	\$430,173	\$567,711
Kanner Highway	210	Lost River	Monterey Road	Bike Lanes	5.15	1	\$152,748	\$786,617	\$78,662 \$78,662	\$943,940	\$94,394	\$1,038,334	\$155,750	\$103,833	\$1,297,918	l	\$1,622,398	\$1,907,940	\$2,517,961
		138th Street	Jonathan Dickson State Park Path	Bike Lanes	0.49	2	\$152,748	\$151,209	\$15,121 \$15,121	\$181,451				\$19,960	\$249,495		\$311,869	\$366,758	\$484,021
		SW SILVER WOLF DR SW MARTIN DOWNS BLVD	NW MARTIN HWY SE MAPP RD/SW MATHESON AVE	Bike Lanes	2.50 1.38	2	\$152,748	\$763,494	\$76,349 \$76,349 \$2,988 \$2,988	\$916,192				\$100,781			\$1,574,706	\$1,851,854	\$2,443,943 \$95,635
		SW MARTIN DOWNS BLVD SW MARTIN HWY	SE MAPP RD/SW MATHESON AVE	Shared Lane Bike Lanes	0.77	2	\$10,829 \$152,748	\$29,877 \$117,337	\$2,988 \$2,988 \$11,734 \$11,734	\$35,852 \$140.805				\$3,944 \$15,489	\$49,296 \$193.607	 	\$61,620 \$242,009	\$72,465 \$284.602	\$95,635 \$375,597
		Hidden River Avenue	Martin Downs Boulevard	Bike Lanes	2.98	2	\$152,748	\$911,003	\$91,100 \$91,100	\$1,093,203				\$120,252	\$1,503,154		\$1,878,943	\$2,209,637	\$2,916,120
Market Place	173	US 1	Commerce Avenue	Bike Lanes	0.40	2	\$152,748	\$120,963	\$12,096 \$12,096	\$145,156	\$14,516	\$159,671	\$23,951	\$15,967	\$199,589		\$249,487	\$293,396	\$387,203
		SW Citrus Boulevard	Florida Turnpike	Bike Lanes			\$152,748	\$342,155	\$34,215 \$34,215	\$410,586				\$45,164		i	\$705,694	\$829,897	\$1,095,238
		FLORIDA'S TURNPIKE Farm Road	SW MAPP RD Warfield Boulevard	Buffered Bike Lane Bike Lanes	2.17 0.72	2	\$190,935 \$152,748	\$830,097 \$218,476	\$83,010 \$83,010 \$21,848 \$21,848	\$996,117 \$262,171	\$99,612 \$26,217				\$1,369,661 \$360,485	<u> </u>	\$1,712,076 \$450,607	\$2,013,401 \$529,913	\$2,657,141 \$699,341
		SW MAPP RD	SW PALM CITY RD	Bike Lanes			\$152,748	\$122,740	\$12,274 \$12,274	\$262,171 \$147,288				\$20,039	\$202,520	 	\$253,150	\$297,705	\$392,889
		NE Baker Road	Dixie Highway	Bike Lanes			\$152,748	\$37,688	\$3,769 \$3,769	\$45,225				\$4,975	\$62,185	i İ	\$77,731	\$91,412	\$120,639
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Facility	Map ID From	То	Project Description	ngth S iles)	Sides	Base Construction Cost	Construction MOT ((10%) Mobiliz n (10	Sub Total	Scope Contingency/ Project Unknowns (10%)	Total Construction Cost	PE Design (15%) CEI (10%)	Total Project Cost (PDC*)	Total Cost (
Old St. Lucie Blvd	37 SE ST LUCIE BLVD	SE ST LUCIE BLVD	Shared Lane 0.	45	2	\$10,829	\$9,678	\$968 \$	968 \$11,61 4		\$12,776	\$1,916 \$1,27	2021-2025 8 \$15,969	2026-2030 \$19,962	2031-2035 \$23,475	2036-2045 \$30,981
Palmer St	60 NE DIXIE HWY	NE INDIAN RIVER DR			2	\$152,748		\$16,213 \$16,						\$334,393	\$393,247	\$518,979
Pennsylvania Avenue	175 96th Street/CR 711	Fisherman's Wharf Drive			2	\$152,748		\$16,759 \$16,				\$33,183 \$22,12		\$345,659	\$406,495	\$536,463
Pine Lake Drive Powerline Avenue	176 Fork Road 177 138th Street	Britt Road Bridge Road		.40	2	\$152,748 \$152,748		\$42,717 \$42, \$15.865 \$15.			\$563,861 \$209,416	\$84,579 \$56,38 \$31,412 \$20,94		\$881,032 \$327,213	\$1,036,094 \$384,802	\$1,367,362 \$507,834
Pratt Whitney Rd	62 Palm Beach County Line	SE Bridge Road		.27	2	\$190,935		\$277,624 \$277,				\$549,695 \$366,46		\$5,725,989	\$6,733,763	\$8,886,735
Pratt Whitney Rd	68 SW BRIDGE RD	SW KANNER HWY			2	\$190,935		107,461 \$107,				\$212,773 \$141,84		\$2,216,384	\$2,606,468	\$3,439,828
Salerno Rd Sand Trail	32 SE WILLOUGHBY BLVD 178 Sand Avenue	SE FEDERAL HWY Martin Downs Boulevard		.12	1	\$152,748 \$152,748		\$17,110 \$17, \$19,129 \$19.				\$33,879 \$22,58 \$37,876 \$25,25		\$352,902 \$394,545	\$415,013 \$463,985	\$547,704 \$612,334
Savannah Rd	55 NE CARDINAL AVE	NE PINELAKE VILLAGE BLVD		.05	1	\$190,935		\$19,998 \$19,				\$39,596 \$26,39		\$412,458	\$485,051	\$640,135
Savannah Rd	79 NE PINELAKE VILLAGE BLVD	NE JENSEN BEACH BLVD	Buffered Bike Lane 1.	.02	1	\$190,935		\$19,410 \$19,			\$256,217	\$38,433 \$25,62		\$400,339	\$470,799	\$621,326
SE Bridge Rd	48 FLORIDA'S TURNPIKE 92 SW KANNER HWY	POWERLINE AVE FLORIDA'S TURNPIKE			2	\$190,935 \$190,935		180,371 \$180, 176,747 \$176,				\$357,135 \$238,09 \$349,959 \$233,30		\$3,720,159 \$3,645,407	\$4,374,907 \$4,286,998	\$5,773,687 \$5.657.671
SE Bridge Rd SE Bridge Rd	93 POWERLINE AVE	GOMEZ AVE				\$190,935		\$92,793 \$92,						\$3,645,407	\$2,250,696	\$2,970,306
SE County Line Road	180 SE Girl Scout Camp	US 1	Bike Lanes 3.	.00	2	\$152,748	\$917,280 \$9	\$91,728 \$91,	,728 \$1,100,73			\$181,621 \$121,08	1 \$1,513,512	\$1,891,890	\$2,224,863	\$2,936,213
SE Horseshoe Road SE Monterey Rd	127 SE Anchor Avenue 50 SE ALHAMBRA ST	SE Kubin Avenue SE FEDERAL HWY	~ ~ ~		2	\$176,772 \$152,748		\$40,486 \$40, \$20,950 \$20.				\$80,163 \$53,44 \$41,481 \$27,65		\$835,033 \$432,093	\$981,999 \$508,141	\$1,295,971 \$670.608
SE Monterey Rd	83 SW PALM CITY RD	SE ALHAMBRA ST			2	\$152,748		\$20,950 \$20, \$19,408 \$19,				\$38,429 \$25,61		\$400,298	\$470,751	\$621,263
SE Monterey Rd	84 SE FEDERAL HWY	EAST OF SE DIXIE HWY		.31	2	\$152,748		\$9,519 \$9,					5 \$157,062	\$196,328	\$230,881	\$304,701
SE Monterey Rd Ext	85 SE MONTEREY RD	SE FEDERAL HWY		.00	2	\$10,829		\$713 \$			\$9,408	\$1,411 \$94		\$14,700	\$17,287	\$22,814
SE Ocean Blvd SE Ocean Blvd	41 SE PALM BEACH RD 42 S COLORADO AVE	SE MARTINS AVE SE PALM BEACH RD		.57 .98	2	\$190,935 \$152,748		\$21,951 \$21, \$29,941 \$29,				\$43,463 \$28,97 \$59,283 \$39,52		\$452,737 \$617,531	\$532,419 \$726,217	\$702,648 \$958,409
SE Ocean Blvd at N SEwalls Point Rd	222		Bike Box		1	\$6,050	\$6,050		605 \$7,26			\$1,198 \$79		\$12,478	\$14,674	\$938,409 \$19,366
SE Ocean Blvd at SE St Lucie Blvd	221		Bike Box		1	\$6,050	\$6,050	\$605 \$	605 \$7,26	\$726		\$1,198 \$79		\$12,478	\$14,674	\$19,366
SE Paulson Ave SE St. Lucie Blvd	10 ATLANTIC RIDGE PRESERVE STATE PARK 71 SE INDIAN ST	CARDINAL TRL SE DIXIE HWY		.52	2	\$10,829 \$10,829		\$1,120 \$1, \$2,486 \$2,				\$2,217 \$1,47 \$4,922 \$3,28		\$23,094 \$51,273	\$27,159 \$60,297	\$35,842 \$79,576
SE St. Lucie Blvd	71 SE INDIAN ST 77 SE INDIAN ST	SE DIAIE HWY SE OCEAN BLVD			2	\$10,829 \$10,829		\$2,486 \$2,			\$32,815 \$50,268	\$4,922 \$3,28		\$51,273	\$60,297 \$92,368	\$121,901
SE St. Lucie Blvd	78 SE INDIAN ST	SE ST. LUCIE BLVD	Shared Lane 0.	.65	1	\$10,829	\$7,070	\$707 \$	5707 \$8,48 4	4 \$848	\$9,333	\$1,400 \$93	3 \$11,666	\$14,582	\$17,149	\$22,632
Sewalls Point Rd	61 SE OCEAN BLVD	NE PALMER ST			2	\$152,748		\$47,695 \$47,				\$94,437 \$62,95		\$983,718	\$1,156,852	\$1,526,730
St. George Street St. Lucie Blvd	181 Yachtsman Drive 38 SE MARTIN AVE	Locks Road SE OCEAN BLVD		.19 .19	2	\$152,748 \$10.829		\$5,728 \$5, \$2,573 \$2,			\$75,610 \$33,962	\$11,341 \$7,56 \$5,094 \$3,39		\$118,140 \$53,066	\$138,933 \$62,405	\$183,353 \$82,358
SW 96th St	94 SW CITRUS BLVD	SW PENNSYLVANIA AVE			2	\$10,829		\$2,573 \$2, \$60,202 \$60,						\$1,241,670	\$1,460,204	\$1,927,072
SW 96th St	95 SW PENNSYLVANIA AVE	SW KANNER HWY		.00	2	\$190,935		\$36,213 \$36,	213 \$434,559	\$43,456		\$71,702 \$47,80		\$746,899	\$878,353	\$1,159,187
SW Adams Avenue SW Farm Rd	182 SW Palm Way 39 SW 169TH AVE	SW 150th Street RAILROAD AVE	Bike Lanes 0. Bike Lanes 1.		2	\$152,748 \$152,748		\$9,670 \$9, \$30,421 \$30,						\$199,443 \$627,430	\$234,545 \$737,858	\$309,536 \$973,772
SW Farm Rd/Silver Fox Ln	40 SW WARFIELD BLVD	SW ANDALUCIA CT		.00	2	\$152,746		\$6,675 \$6,						\$137.662	\$161.891	\$213.652
SW Martin Hwy	18 SW WARFIELD BLVD	SW ALLAPATAH RD			1	\$10,829		\$13,257 \$13,		,			1 1, 1, 11	\$273,422	\$321,544	\$424,350
SW Palm City Rd	28 SW MONTEREY RD	SW FEDERAL HWY		.21	2	\$522,553		126,885 \$126,				\$251,233 \$167,48		\$2,617,005	\$3,077,598	\$4,061,592
Willoughby Blvd	31 SE INDIAN ST 72 SE COVE RD	SE MONTEREY RD SE POMEROY ST		.16 .56	1	\$190,935 \$190,935		\$22,122 \$22, \$29,822 \$29,				\$43,802 \$29,20 \$59,048 \$39,36		\$456,273 \$615,086	\$536,577 \$723,341	\$708,135 \$954,613
Willoughby Blvd Willoughby Blvd	73 SE POMEROY ST	SE INDIAN ST		.03	1	\$190,935		\$19,602 \$19,				\$38,812 \$25,87		\$404,291	\$475,446	\$627,459
Willoughby Boulevard	217 Monterey Road	US 1	Bike Lanes 0.	.84	2	\$152,748	\$256,616 \$2	\$25,662 \$25,	,662 \$307,939	\$30,794	\$338,733	\$50,810 \$33,87	3 \$423,417	\$529,271	\$622,423	\$821,428
Yachtsman Drive	184 Fisherman's Wharf Drive	St. George Street	Bike Lanes 0.	.84	2	\$152,748	\$255,632 \$2	\$25,563 \$25,	563 \$306,75	\$30,676	\$337,435	\$50,615 \$33,74	3 \$421,793	\$527,242	\$620,036	\$818,279
Multi-Purpose Trails and Greenways A1A (Two Bridge Loop)	233 NE Causeway Blvd.	SE Ocean Blvd.	Shared Use Path 3	3.1	1	\$296,015	\$917,647 \$9	\$91,765 \$91,	765 \$1,101,176	6 \$110,118	\$1,211,294	\$181,694 \$121,12	9 \$1,514,117	\$1,892,647	\$2,225,753	\$2,937,388
Atlantic Ridge Trail Corridor - E/W Connector	193 Halpatiokee Park	Thru Atlantic Ridge to Seabranch Blvd			2	\$296,015		143,271 \$143,					8 \$2,363,977	\$2,954,971	\$3,475,046	\$4,586,115
Atlantic Ridge Trail Corridor - East	119 Bridge Road	PARK thru Johnathan Dickson Park to Ocean to Lake Trail		-	2	\$0	\$0	\$0	\$0 \$0	D \$0	\$0	\$0 \$	0 40	Under Study		
Atlantic Ridge Trail Corridor - East Atlantic Ridge Trail Corridor - East	195 Cove Raod 195b SE Seabranch Blvd thru Atlantic Ridge and SFWMD	Thru Atlantic Ridge State Park to SE Seabranch Blvd Bridge Road			2	\$0 \$0	\$0	\$0 \$0	\$0 \$0 \$0 \$0	0 \$0 D \$0	÷-		· •	Under Study Under Study		
Atlantic Ridge Trail Corridor - East Atlantic Ridge Trail Corridor - West	194 Halpatiokee Park	Thru Atlantic Ridge and Whiteworth Farms to Bridge Road		.04	2	\$0 \$0	\$0	\$0	\$0 \$0	0 \$0	\$0	\$0 \$	0 \$0	Under Study		
Atlantic Ridge Trail Corridor - West	204 Halpatiokee Park	south to Atlantic Ridge Trail E/W Connector #93	Shared Use Path 1.	.47	2	\$296,015	\$870,285 \$8	\$87,028 \$87,	028 \$1,044,34	\$104,434	\$1,148,776		8 \$1,435,969	\$1,794,962	\$2,110,875	\$2,785,781
Atlantic Ridge Trail Corridor - West	194b Bridge Road	Thru Canopus Sound LLC to Jonathan Dickson State Park		.55	2	\$296,015		446,983 \$446, 827.614 \$827.			, ,	1		\$9,219,022	\$10,841,570	\$14,307,922
Bee Line Highway Corridor Trail Bee Line Highway Corridor Trail	16 SW FOX BROWN RD 88 UNNAMED RD	SE 128TH AVE SW KANNER HWY			2	\$296,015 \$296,015		379.106 \$379.			+,	\$1,638,676 \$1,092,45		\$17,069,539 \$7,819,055	\$20,073,778 \$9,195,208	\$26,491,925 \$12,135,173
Bee Line Highway Corridor Trail	89 SW KANNER HWY	SW FOX BROWN RD		-	-	\$296,015		276,036 \$276,				\$546,551 \$364,36		\$5,693,239	\$6,695,249	\$8,835,906
C 23 -FNST Connector Trail	64 C-23 CANAL	OKEECHOBEE SCENIC TRAIL		1.73		\$296,015		694,308 \$694,						\$14,320,109	\$16,840,449	\$22,224,810
C-23 Trail Corridor (Robert B. Jenkins) C-44 Trail	63 FLORIDA EAST COAST RAILOAD 185 Beeline Highway Corridor	MAPP ROAD St. Lucie County Line		7.62 5.08		\$296,015 \$296,015	1 1/ 1/11	042,940 \$1,042, 892,782 \$892.			\$13,766,803 \$11,784,718	\$2,065,020 \$1,376,68 \$1,767,708 \$1,178,47	¢,200,001	\$21,510,630 \$18,413,622	\$25,296,500 \$21,654,420	\$33,384,497 \$28,577,942
Citrus Blvd	90 SW 96TH ST	SW MARTIN HWY				\$296,015	++,+=+,++++++++++++++++++++++++++++++++	295,826 \$295,		+ .,,				\$6,101,413	\$7,175,262	\$9,469,393
Citrus Blvd (new project)	33b SW WARFIELD BLVD	SW 96TH ST).93	2	\$296,015	\$6,470,891 \$64	647,089 \$647	,089 \$7,765,06		\$8,541,576		8 \$10,676,970	\$13,346,213	\$15,695,147	\$20,713,323
Citrus Cove Tunnel	201 Sand Avenue	Citrus Boulevard via Turnpike Underpass				\$296,015		\$38,981 \$38,						\$803,986	\$945,488	\$1,247,787
Citrus Grove Elementary Connection Commerce Ave	65 SW CITRUS BLVD 47 SE MARKET PL	SW MALLARD CREEK TRAIL SE INDIAN ST				\$296,015 \$296,015		\$29,455 \$29, \$56,262 \$56,						\$607,519 \$1,160,406	\$714,443 \$1,364,638	\$942,870 \$1,800,951
Commerce Ave	46 SE SALNERO RD	SE MARKET PLACE	Shared Use Path 1.	.29	2	\$296,015	\$764,390 \$7	\$76,439 \$76,	,439 \$917,26 8	B \$91,727	\$1,008,995	\$151,349 \$100,90	0 \$1,261,244	\$1,576,555	\$1,854,029	\$2,446,814
Cove Road	111 COVE ROAD FROM SR 9/I-95	SE DIXIE HIGHWAY				\$3,097,780	+++++++++++++++++++++++++++++++++++++++	309,778 \$309,						\$6,389,170	\$7,513,664	\$9,915,992
Cross County Trail - Kanner Hwy Cross County Trail - Kanner Hwy	11 SW WARFIELD BLVD 12 CONNERS HWY	SW 96TH ST SW WARFIELD BLVD		2.45		\$296,015 \$296,015		737,064 \$737, 629,283 \$629,						\$15,201,946 \$12,978,970	\$17,877,489 \$15,263,269	\$23,593,420 \$20,143,361
Cross County Trail - Kanner Hwy	13 SW JACK JAMES DR	SE COVE RD	Shared Use Path 0.	.83	2	\$296,015	\$494,077 \$4	\$49,408 \$49,	408 \$592,892	\$59,289	\$652,181	\$97,827 \$65,21	8 \$815,227	\$1,019,033	\$1,198,383	\$1,581,540
Cross County Trail - Kanner Hwy	91 SW PRATT WHITNEY RD	SW JACK JAMES DR	Shared Use Path 1.			\$296,015		\$92,340 \$92,	340 \$1,108,08	\$110,809			9 \$1,523,617	\$1,904,521	\$2,239,717	\$2,955,817
Cross-County Trail 1 Dixie Highway/East Coast Greenway	113 SR 76/KANNER HIGHWAY FROM SW CONNERS HWY 186 SE Bridge Road	SR 710/WARFIELD BLVD St. Lucie County Line				\$296,015 \$296,015		629,328 \$629, 197,146 \$197,				\$1,246,070 \$830,713 \$390,349 \$260,23		\$12,979,894 \$4,066,138	\$15,264,356 \$4,781,778	\$20,144,796 \$6,310,646
East Coast Greenway - Main	100 FLORIDA PARK SERVICES	US 1/FEDERAL HWY				\$296,015		\$15,985 \$15,				\$31,650 \$21,10		\$329,687	\$387,712	\$5,310,646
East Coast Greenway - Main	101 JONATHAN DICKINSON STATE PARK US 1/FEDERAL HWY	FLORIDA PARK SERVICES	Shared Use Path 2.	.35	2	\$296,015	\$1,391,271 \$13	139,127 \$139,	127 \$1,669,52	5 \$166,953	\$1,836,478	\$275,472 \$183,64	8 \$2,295,597	\$2,869,497	\$3,374,528	\$4,453,459
East Coast Greenway - Main	103 FEC CROSSING	MIDBLOCK CROSSWALK				\$296,015		\$8,288 \$8,	,288 \$99,46 *	\$9,946	\$109,407	\$16,411 \$10,94	1 1 1 1 1 1	\$170,949	\$201,036	\$265,312
East Coast Greenway - Main East Coast Greenway - Main	104 SE DIXIE HWY FROM RAILROAD CROSSING 105 SE GOMEZ AVE FROM SE BRIDGE RD	BRIDGE RD SE OSPREY ST			2	\$84,236 \$670,732	171,000 2,200,000			+			\$171,000 \$2,200,000	\$213,750 \$2,750,000	\$251,370 \$3,234,000	\$331,740 \$4,268,000
East Coast Greenway - Main East Coast Greenway - Main (Sailfish Capital Trail)	106 SE DIXIE HWY from Cove Road	SR 714/MONTEREY RD				\$1,593,137	6,500,000						\$6,500,000	\$8,125,000	\$9,555,000	\$12,610,000
East Coast Greenway - Main (Sailfish Capital Trail)	108 N/S of Bridge	WRIGHT BLVD		.93	2	\$822,581	765,000						\$765,000	\$956,250	\$1,124,550	\$1,484,100
East Coast Greenway - Main (Sailfish Capital Trail)	109 SE DIXIE HWY FROM SR 714/MONTEREY RD 110 SE DIXIE HWY FROM SE OCEAN BLVD	SE OCEAN BLVD SE SEMINOLE ST				\$531,646 \$12,631,579	840,000 2,400.000			+			\$840,000 \$2,400,000	\$1,050,000 \$3,000,000	\$1,234,800 \$3,528,000	\$1,629,600 \$4,656,000
East Coast Greenway - Main (Sailfish Capital Trail) East Coast Greenway - Main (Sailfish Capital Trail)	106b SE DIXIE HWY FROM SE OCEAN BLVD	COVE ROAD		.19 .61		\$296,015		\$36,114 \$36,	114 \$433,36	\$43,337	\$476,703	\$71,505 \$47,67		\$3,000,000	\$3,528,000 \$875,941	\$4,656,000 \$1,156,004
East Coast Greenway - Main (Sailfish Capital Trail)	108b SE DIXIE HWY From SE SEMINOLE ST	n/s of bridge				\$4,931,436	\$2,317,775 \$23	231,777 \$231,	,777 \$2,781,33	\$278,133	\$3,059,463	\$458,919 \$305,94	6 \$3,824,328	\$4,780,410	\$5,621,763	\$7,419,197
East Coast Greenway (thru Jonathan Dickson Park)	218 US 1	Old Dixie Hwy				\$296,015		\$38,048 \$38,						\$784,736	\$922,849	\$1,217,910
Federal Hwy - US 1 Federal Hwy/US 1	23 SE SALERNO RD 81 SE POMEROY ST	SE POMEROY ST SE INDIAN ST	Shared Use Path 1. Shared Use Path 0.	-		\$296,015 \$296,015		\$67,892 \$67, \$51,631 \$51,						\$1,400,270 \$1,064,889	\$1,646,717 \$1,252,310	\$2,173,219 \$1,652,708
Federal Hwy/US 1 Federal Hwy/US 1	129 Sand Road	Dixie Highway				\$296,015		\$94,731 \$94,				\$102,229 \$68,15		\$1,064,889	\$1,252,310	\$1,652,708
Historic Jupiter Indiantown Trail (Ex. Fdep Trail)	14 KANNER HWY	COUNTY LINE	Shared Use Path 8.	.17	2	\$296,015	\$4,839,475 \$48	483,948 \$483,	948 \$5,807,37	\$580,737	\$6,388,107	\$958,216 \$638,81	1 \$7,985,134	\$9,981,418	\$11,738,147	\$15,491,160
Hungryland Wildlife And Environmental Area Trail	15 SW WARFIELD BLVD	SW PRATT WHITNEY ROAD				\$296,015		321,915 \$321,				\$637,392 \$424,92		\$6,639,497	\$7,808,049	\$10,304,499
Indian Mound Trail Indian Mound Trail	142 Citrus Boulevard 143 Citrus Boulevard	Citrus Boulevard via Canal, American Street, Indian Mound Drive Citrus Boulevard via Canal, American Street, Indian Mound Drive				\$296,015 \$296,015		\$75,651 \$75, \$58,781 \$58.				\$149,789 \$99,85 \$116,386 \$77,59		\$1,560,297 \$1,212,351	\$1,834,910 \$1,425,725	\$2,421,581 \$1.881.569
Indian Mound Trail	202 Citrus Boulevard	Citrus Boulevard via Canal, American Street, Indian Mound Drive				\$296,015		\$75,780 \$75,						\$1,562,960	\$1,838,041	\$2,425,714
Indian Street (Two bridge loop)	235 Mapp Road	Kanner Hwy	Shared Use Path 1.	.44	1	\$296,015	\$426,262 \$4	\$42,626 \$42,	,626 \$511,51 4	\$51,151	\$562,666	\$84,400 \$56,26	7 \$703,332	\$879,165	\$1,033,898	\$1,364,464
Jensen Beach Blvd	30 SE GREEN RIVER PKWY	NE SAVANNAH RD	Shared Use Path 1.	.05	2	\$296,015	\$621,893 \$6	\$62,189 \$62,	189 \$746,271			\$123,135 \$82,09	0 \$1,026,123	\$1,282,654	\$1,508,401	\$1,990,679
Jansan Basah Blud		SE CREEN BIVER BKWY	Sharad Llas Bath	16	2	\$206 04F	\$600 FEC **	169 050 000	056 000 100	7 000 7 - 7	CO40 04 1	\$100 E00 \$04 00	1 \$1 127 767	¢4 400 000	\$1 070 F40	
Jensen Beach Blvd Jensen Beach Blvd	75 FEDERAL HIGHWAY 76 NE SAVANNAH RD	SE GREEN RIVER PKWY NE INDIAN RIVER DR			2	\$296,015 \$296,015		\$68,956 \$68, \$41,958 \$41,						\$1,422,209 \$865,389	\$1,672,518 \$1,017,698	\$2,207,268 \$1,343,084

Facility	Map ID	From	То	Project Description	Length (miles)	Sides	Base Construction Cost	Construction	MOT (10%)	Mobilizatio n (10%)	Sub Total	Scope Contingency/ Project Unknowns (10%)	Total Construction Cost	PE Design (15%)	CEI (10%)	Total Project Cost (PDC*)	2021-2025	Total Cost 2026-2030	(YOE**) 2031-2035	2036-2045
Jesup Trail	123	FROM INDIANTOWN RD	JONATHAN DICKINSON STATE PARK	Shared Use Path	6.48	2	\$296,015	\$3,836,356	\$383,636	\$383,636	\$4,603,628	\$460,363	\$5,063,990	\$759,599	\$506,399	\$6,329,988	2021 2020	\$7,912,485	\$9,305,082	\$12,280,177
Jonathan Dickinson State Park Trail	3	Park Road	future Ocean to Lake Trail	Shared Use Path	0.98	2	\$296,015	\$583,015	\$58,301	\$58,301	\$699,618	\$69,962	\$769,579	\$115,437	\$76,958	\$961,974		\$1,202,468	\$1,414,102	\$1,866,230
Jonathan Dickinson State Park Trail	4			Shared Use Path	0.51	2	\$296,015	\$299,299	\$29,930	4=0,000	\$359,158	\$35,916	\$395,074			\$493,843		\$617,303	\$725,949	\$958,055
Jonathan Dickinson State Park Trail	5			Shared Use Path	0.42	2	\$296,015	\$246,906	\$24,691	<i>q</i> =., <i>qq</i> .	\$296,287	\$29,629	\$325,916			\$407,395		\$509,244	\$598,871	\$790,347
Jonathan Dickinson State Park Trail	6			Shared Use Path	1.27	2	\$296,015	\$752,564	\$75,256		\$903,076	\$90,308	\$993,384	\$149,008	\$99,338	\$1,241,730		\$1,552,162	\$1,825,343	\$2,408,956
Jonathan Dickson State Park Trail Jonathan Dickson Trail - Park Rd	196	Flamingo Terminus	Thru Jonathan Dickson State Park	Shared Use Path Shared Use Path	2.75	2	\$296,015 \$296.015	\$1,629,361 \$1.662,576	\$162,936 \$166,258		\$1,955,234 \$1,995.091	\$195,523 \$199,509	\$2,150,757 \$2,194.600	\$322,614 \$329,190		\$2,688,446 \$2,743,250		\$3,360,558 \$3,429,063	\$3,952,016 \$4,032,578	\$5,215,586 \$5,321,906
Jonathan Dickson Trail/ Se Jonathan Dickinson Way	2	Jesup Trail	SE Beach Road	Shared Use Path	1.13	2	\$296,015	\$669,162	\$66,916		\$802,994	\$80,299	\$883.294			\$1,104,117		\$1,380,146	\$1.623.052	\$2,141,987
Kanner Highway		Monterev	Federal Hwy	Shared Use Path	1.06	1	\$296.015	\$313,776	+	\$31,378	\$376.531	\$37,653	\$414.184			\$517.730		\$647,163	\$761.064	\$1.004.397
Kanner Highway (Two bridge loop)		Indian Street	Martin Downs Boulevard	Shared Use Path	1.27	1	\$296,015	\$375,939		\$37,594	\$451,127	\$45,113	\$496,240			\$620,300		\$775,375	\$911,841	\$1,203,382
Lake Okeechobee Scenic Trail	219	Palm Beach County Line	St. Lucie County Line	Shared Use Path	21.30	2	\$296,015	\$12,610,245	\$1,261,025	\$1,261,025	\$15,132,294	\$1,513,229	\$16,645,524	\$2,496,829	\$1,664,552	\$20,806,905		\$26,008,631	\$30,586,150	\$40,365,396
Mapp Road (Two bridge loop)		Indian Street	Martin Downs Boulevard	Shared Use Path	0.77	1	\$296,015	\$227,932		\$22,793	\$273,518	\$27,352	\$300,870			\$376,087		\$470,109	\$552,848	\$729,609
Martin - East/West Corridor	199		Jonathan Dickson State Park	Shared Use Path	26.31	2	\$296,015	\$15,573,743		\$1,557,374	\$18,688,492		\$20,557,341	+0,000,000	<i>q</i> =,,	\$25,696,677		\$32,120,846	\$37,774,114	\$49,851,552
Martin Downs Boulevard (Two bridge loop)		Mapp Road	Kanner Hwy	Shared Use Path	1.08	1	\$296,015	\$319,696		\$31,970	\$383,636	\$38,364	\$421,999	\$63,300		\$527,499		\$659,374	\$775,424	\$1,023,348
Monterey Road		SE MONTEREY RD AT SE DIXIE HWY MONTEREY RD FROM ALHAMBRA AVE	OCEAN BLVD AT SE DIXIE HWY SE DIXIE HWY	Shared Use Path	3.40	1	\$296,015	\$1,006,452 \$550,588	\$100,645 \$55.059	\$100,645	\$1,207,742	\$120,774	\$1,328,516	\$199,277 \$109,016		\$1,660,645 \$908.470		\$2,075,806	\$2,441,148 \$1,335,452	\$3,221,651 \$1,762,433
Monterey Road Murphy Road	_	MONTEREY RD FROM ALHAMBRA AVE	SE BECKER RD	Shared Use Path Shared Use Path	2.90	2	\$296,015 \$296.015	\$550,588		\$55,059	\$660,706 \$2.058.403	\$66,071 \$205,840	\$726,776 \$2.264.243	,	\$72,678 \$226,424	\$908,470		\$1,135,588 \$3,537,880	\$1,335,452 \$4,160,547	\$1,762,433
Murphy Road		MURPHY RD FROM SR 714/MARTIN DOWNS BLVD	COUNTY LINE CANAL	Shared Use Path or Bike Lanes	3.10	2	\$296,015	\$1,835,294		\$183.529	\$2,202,353	\$220,235	\$2,204,243	\$363,388		\$3,028,235		\$3,785,294	\$4,451,505	\$5.874.776
N. Sewalls Point Road (Two Bridge Loop)		SE Ocean Blvd.	NE Causeway Blvd	Shared Use Path	3.71	1	\$296.015	\$1.098.216	1 2 2 7 2 2	\$109,822	\$1.317.859	\$131,786	\$1.449.645			\$1.812.057		\$2,265.071	\$2.663.723	\$3,515,390
NE Causeway (Two Bridge Loop)		N. Sewells Point Road	A1A	Shared Use Path	1.92	1	\$296,015	\$568,349	\$56,835		\$682,019	\$68,202	\$750,221			\$937,776		\$1,172,220	\$1,378,531	\$1,819,285
New Route	134	SW Indianwood Circle	SW Osceola Street	Shared Use Path	0.14	2	\$296,015	\$83,048	\$8,305	\$8,305	\$99,658	\$9,966	\$109,624	\$16,444	\$10,962	\$137,030		\$171,287	\$201,433	\$265,837
New Route		Locks Road	Over Canal to Mapp Road	Shared Use Path	1.79	2	\$296,015	\$1,058,387	4.00,000	\$105,839	\$1,270,065	\$127,006	\$1,397,071	+===;==	\$139,707	\$1,746,339		\$2,182,924	\$2,567,118	\$3,387,897
New Route		Flora Avenue Terminus	Thru Jonathan Dickson State Park	Shared Use Path	1.39	2	\$296,015	\$821,539		\$82,154	\$985,846	\$98,585	\$1,084,431			\$1,355,539		\$1,694,423	\$1,992,642	\$2,629,745
Nw Dixie Hwy		NW WRIGHT BLVD	NE BAKER RD	Shared Use Path	0.52	2	\$296,015	\$307,338	1	\$30,734	\$368,806	\$36,881	\$405,687			\$507,109		\$633,886	\$745,450	\$983,791
Ocean To Lake Trail Corridor		Palm Beach County Line	FEC	Shared Use Path	11.44	2	\$296,015	\$6,772,827		\$677,283	\$8,127,392	\$812,739	\$8,940,131			\$11,175,164		\$13,968,955	\$16,427,491	\$21,679,818
Old Dixie Highway	214	US 1	Bridge Road	Shared Use Path	1.32	2	\$296,015	\$779,716	\$77,972	\$77,972	\$935,659	\$93,566	\$1,029,225	\$154,384	\$102,922	\$1,286,531		\$1,608,164	\$1,891,201	\$2,495,871
Palm Beach Road	125	SE MONTEREY RD	SE OCEAN BLVD	Shared Use Path	1.09	2	\$296,015	\$645,313	\$64,531	\$64,531	\$774,376	\$77,438	\$851,813	\$127,772	\$85,181	\$1,064,766		\$1,330,958	\$1,565,207	\$2,065,647
Pratt & Whitney Trail Corridor	190	Palm Beach County Line	Old Jupiter Road	Shared Use Path	1.15	2	\$296,015	\$683,224	\$68,322	\$68,322	\$819,869	\$81,987	\$901,856	\$135,278	\$90,186	\$1,127,319		\$1,409,149	\$1,657,160	\$2,187,000
Savannah State Park Trail	198	Jensen Beach Boulevard	Thru Savannah State Park to St. Lucie County Line	Shared Use Path	1.74	2	\$296,015	\$1,030,917	\$103,092	\$103,092	\$1,237,101	\$123,710	\$1,360,811	\$204,122	\$136,081	\$1,701,013		\$2,126,267	\$2,500,490	\$3,299,966
SE Bridge Rd	_	SE DIXIE HWY	S BEACH RD	Shared Use Path	0.92	2	\$296,015	\$542,499	\$54,250	\$54,250	\$650,999	\$65,100	\$716,099	\$107,415	\$71,610	\$895,124		\$1,118,904	\$1,315,832	\$1,736,540
SE Cove Rd		SE WILLOUGHBY BLVD	SE DIXIE HWY	Shared Use Path	2.18	1	\$296.015	\$644,298	\$64,430		\$773.158	\$77.316	\$850,474	\$127,571	\$85.047	\$1.063.092		\$1,328,865	\$1,562,746	\$2,062,399
SE Cove Rd	-	KANNER HWY	SE WILLOUGHBY BLVD	Shared Use Path	2.16	1	\$296.015	\$638,594	\$63,859	\$63,859	\$766.313	\$76.631	\$842.945	\$126,442	\$84,294	\$1.053.681		\$1,317,101	\$1,548,911	\$2,044,141
SE Cove Rd		SE DIXIE HWY	COVE ROAD PARK	Shared Use Path	1.46	2	\$296,015	\$864.623	\$86,462		\$1.037.547	\$103,755	\$1.141.302	\$120,442	\$114.130	\$1,035,001		\$1,783,284	\$2.097.142	\$2,767,657
	-				2.60	_	1	1.1. 1.	1.1.1	1.1.1	1 1		1, ,	1 1		1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1		1 1	, ,,	
SE Federal Hwy		SE SEABRANCH BLVD	2000 FT N of DHARLYS ST	Shared Use Path		2	\$296,015	\$1,541,867	\$154,187		\$1,850,241	\$185,024	\$2,035,265	\$305,290	\$203,527	\$2,544,081		\$3,180,102	\$3,739,799	\$4,935,518
SE Ocean Blvd. (Two Bridge Loop)	_	N. Sewells Point Road	A1A	Shared Use Path	1.65	1	\$296,015	\$488,425	\$48,842		\$586,110	\$58,611	\$644,721	\$96,708	\$64,472	\$805,901		\$1,007,377	\$1,184,675	\$1,563,448
SE Paulson Ave		CARDINAL TRL	SW GAINES AVE	Shared Use Path	0.59	2	\$296,015	\$348,446	\$34,845		\$418,135	\$41,813	\$459,948	\$68,992	\$45,995	\$574,935		\$718,669	\$845,155	\$1,115,374
SW Allapatah Rd	20	SW WARFIELD BLVD	SW MARTIN HWY	Shared Use Path	12.06	2	\$296,015	\$7,137,895	\$713,790	\$713,790	\$8,565,475	\$856,547	\$9,422,022	\$1,413,303	\$942,202	\$11,777,527		\$14,721,909	\$17,312,965	\$22,848,403
SW Famel Avenue	_	Marina (End)	SW Farm Road	Shared Use Path	0.65	2	\$296,015	\$384,338	\$38,434	\$38,434	\$461,205	\$46,121	\$507,326	\$76,099	\$50,733	\$634,158		\$792,697	\$932,212	\$1,230,266
SW Farm Rd	82	SW ANDALUCIA CT	SW 169TH AVE	Shared Use Path	0.77	2	\$296,015	\$456,761	\$45,676	\$45,676	\$548,113	\$54,811	\$602,924	\$90,439	\$60,292	\$753,655		\$942,069	\$1,107,873	\$1,462,091
SW High Meadow Avenue	253	SW Martin Downs Blvd	Murphy Road	Shared Use Path	0.97	1	\$296,015	\$287,135	\$28,713	\$28,713	\$344,562	\$34,456	\$379,018	\$56,853	\$37,902	\$473,772		\$592,215	\$696,445	\$919,118
SW Indiantown Ave	_	SW WARFIELD BLVD	SW KANNER HWY	Shared Use Path	0.42	2	\$296,015	\$248,748	\$24,875	\$24,875	\$298,498	\$29,850	\$328,348	\$49,252	\$32,835	\$410,435		\$513,044	\$603,339	\$796,244
SW Martin Hwy		SW ALLAPATAH RD	I-95	Shared Use Path	5.49	2	\$296,015	\$3,251,292	\$325,129	\$325,129	\$3,901,551	\$390,155	\$4,291,706	\$643,756	\$429,171	\$5.364.632		\$6,705,790	\$7,886,009	\$10,407,386
SW Martin Hwy	69		84TH AVE	Shared Use Path	1.52	2	\$296.015	\$901,352	\$90,135	\$90,135	\$1.081.623	\$108,162	\$1.189.785	\$178,468	\$118,979	\$1,487,231		\$1,859,039	\$2,186,230	\$2,885,229
SW Martin Hwy		84TH AVE	FLORIDA'S TURNPIKE	Shared Use Path	3.82	2	\$296,015	\$2,262,011	\$226,201	\$226,201	\$2,714,413	\$271,441	\$2,985,855	\$447,878	\$298,585	\$3,732,318		\$4,665,398	\$5,486,508	\$7,240,698
	_									+ +										
SW Matheson Ave	_	SW MARTIN DOWNS BLVD	SW MURPHY RD	Shared Use Path	0.98	2	\$296,015	\$581,385	\$58,139		\$697,662	\$69,766	\$767,428	\$115,114	\$76,743	\$959,285		\$1,199,107	\$1,410,149	\$1,861,013
SW Murphy Road		SW High Meadows Road	North County Line	Shared Use Path	1.61	1	\$296,015	\$476,584	\$47,658	÷,	\$571,901	\$57,190	\$629,091	\$94,364	+ = = , = = =	\$786,364		\$982,955	\$1,155,955	\$1,525,547
SW Osceola Street	_	SW Warfield Boulevard	Citrus Boulevard	Shared Use Path	1.72	2	\$296,015	\$1,019,972	\$101,997		\$1,223,967	\$122,397	\$1,346,364	\$201,955		\$1,682,955		\$2,103,693	\$2,473,943	\$3,264,932
Treasure Coast Loop Trail Corridor (see others)	189	Ocean Boulevard/A1A	St. Lucie County Line	Shared Use Path	8.47	1	\$296,015	\$2,507,248	\$250,725	\$250,725	\$3,008,698	\$300,870	\$3,309,568	\$496,435	\$330,957	\$4,136,960		\$5,171,200	\$6,081,331	\$8,025,702
Willoughby Blvd	124	SE COVE RD	US 1/FEDERAL HWY	Shared Use Path	4.58	2	\$296,015	\$2,711,499	\$271,150	\$271,150	\$3,253,799	\$325,380	\$3,579,178	\$536,877	\$357,918	\$4,473,973		\$5,592,466	\$6,576,740	\$8,679,508
Notes															Sidewalks	\$10,289,028	\$0	\$12,861,285	\$15,124,871	\$19,960,714
* PDC - Present Day Cost														Bicyc	le Corridors	\$50,948,813	\$0	\$63,686,017	\$74,894,756	\$98,840,698
** YOE - Year of Expenditure													Multi-Purr	ose Trails and		\$328.369.846	\$0	\$410.462.308	\$482,703,674	\$637,037,502
Base construction cost for sidewalk (concrete - 5' one s	side 4 in	ch depth. Cost Per mile Model. FDOT July 2019												or Non-Motori		\$389,607,687	\$0	\$487,009,609	\$572,723,300	\$755,838,914
Dase construction coat for sidewark (conclete - 5 offers	, 4 11	on depth, oost of mile would, i bor, duly 2018											roldi i	or non-motori	Lou Frojecis	ψ 303,001,00 1	φU	9401,003,009	w012,120,000	ψ1 33,030,314

Aviation Projects

Martin in Motion, 2045 LRTP

Project Description	Total Project		Total Cos	t (YOE**)	
Project Description	Cost (PDC*)	2021-2025	2026-2030	2031-2035	2036-2045
Capital Improvement Projects supported by Partial FDOT Funding		1.08	1.25	1.47	1.94
Airfield Guidance Sign Replacement (Design and Construct)	\$250,000	\$270,000			
Airport Business Plan	\$200,000	\$216,000			
Airport Operations Center and Airfield Electrical Vault (Phase 3 Construction)	\$3,000,000	\$3,240,000			
Corporate Hangar 1	\$1,000,000	\$1,080,000			
Corporate Hangar 2	\$1,000,000	\$1,080,000			
Hold Bay Extension (Design & Const.)	\$240,000	\$259,200			
Mill & Resurface, MITL Replacement Taxiway C (Design & Const)	\$1,710,000	\$1,846,800			
Mill & Resurface, MITL Replacement Taxiway D (Design & Construct)	\$1,625,000	\$1,755,000			
PDC and MIRL Replacement 7-25 (Phase 1 and Phase 2 - Design ¹)	\$1,225,000	\$1,323,000			
Property Acquisition	\$2,500,000	\$2,700,000			
Rehabilitation of MC Non-Movement Areas Phase IV - Taxilane B (Const)	\$1,000,000	\$1,080,000			
Replace PAPIs on 12-30 with LED Units (Design & Construct)	\$100,000	\$108,000			
Sun Shade Hangars	\$500,000	\$540,000			
Tractor Equipment	\$100,000	\$108,000			
Air Traffic Control Tower Equipment Upgrade (Recorder and Radios ²)	\$200,000		\$250,000		
Construct Airport Interconnect Rd Flying Fortress Extension	\$1,850,000		\$2,312,500		
Rehabilitation of MC Non-Movement Areas Phase V (Design & Const)	\$1,000,000		\$1,250,000		
Tree Mitigation Project - RPZ and Part 77 (SE St. Lucie Canal)	\$120,000		\$150,000		
Total Airport Projects Co	st \$17,620,000	\$15,606,000	\$3,962,500		

Source: Draft Airport Future Funding Analysis, Martin County Aiport and Withan Field CIP, Feb. 28, 2020

Notes

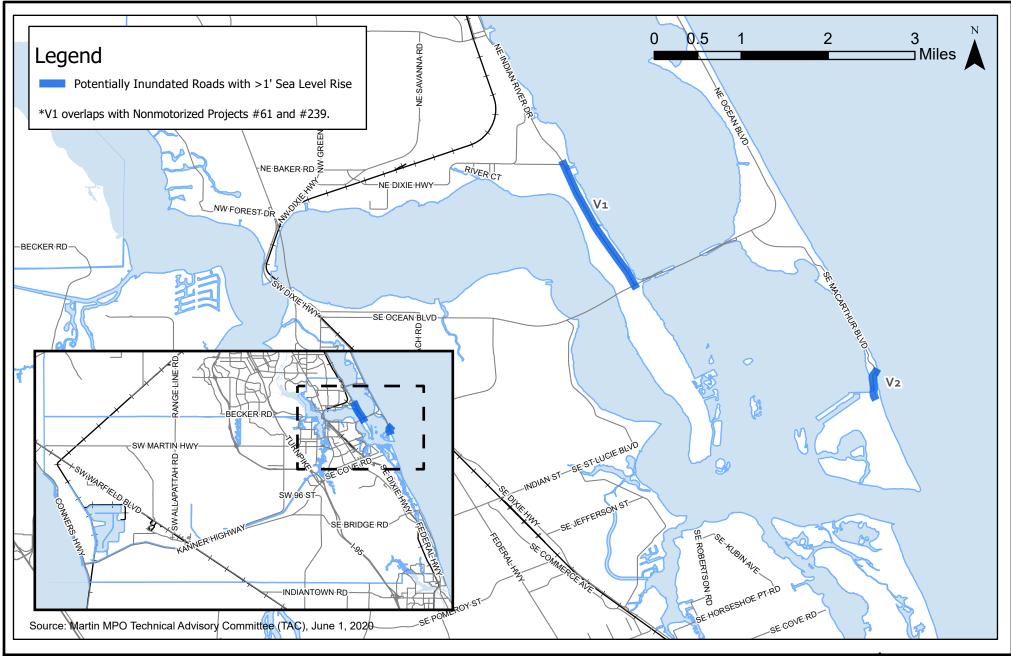
* PDC - Present Day Cost

** YOE - Year of Expenditure

¹ Phase 1 and Phase 2 design cost \$100K and \$1.25M respectively.

² Recorder and radios cost \$100K each.

Florida Department of Transportation (FDOT) funding share is limited to 80% of the proejct cost.





2045 Needs Assessment Resiliency Projects Martin County



Resiliency Projects

Martin in Motion, 2045 LRTP

Map ID	Facility	From To Project Description Leng	Longth (milos)	Total Project Cost (PDC*)	Year of Expenditure					
		Facility	From	10	Project Description	Length (innes)		2026-2030	2031-2035	2
	V1	N Sewalls Point Road ¹	SR-A1A (NE Ocean Boulevard)	SE Palmer Street	To be determined	1.57	\$2,599,031	\$3,248,789	\$3,820,575	\$
	V2	SE MacArthur Boulevard ²	SE South Marina Way	Approximately 1500 feet North	To be determined	0.28	-	-	-	

Notes

* PDC - Present Day Cost

** YOE - Year of Expenditure

¹ Project overlaps with non-motorized projects, segment IDs 61 and 239. Project cost are for non-motorized improvments.

² Roadway is eligible to received federal-aid funds. Funds could be available from Federal Emergency Relief Program (up to 80% of the project cost) in case of a natural disaster.

(YOE**)
2036-2045
\$5,042,120
-

Appendix D: Revenue Forecasting Guidebook, Florida Department of Transportation, July 3, 2018



Florida Department of Transportation

Revenue Forecasting Guidebook

July 3, 2018



Note

This document is designed to be viewed in an electronic format. All references are hyperlinked.

This is a living, working document. Please report errors, omissions, or corrections to Erika Thompson, Office of Policy Planning, <u>erika.thompson@dot.state.fl.us</u> or 850-414-4807.

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Introduction

The premise of the long range revenue forecast is rooted in federal regulation originally required by the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA). All transportation acts since that time have continued the requirement for a financial plan. Currently, Title 23 of the United States Code (U.S.C.) Section 134 requires a Metropolitan Planning Organization (MPO) Long-Range Transportation Plan (LRTP) to contain a financial plan that demonstrates how the adopted LRTP can be implemented.

The financial plan should indicate resources from public and private sources that are reasonably expected to be made available to carry out the plan and recommend any additional financing strategies for needed projects and programs. The financial plan should demonstrate fiscal constraint and ensure that the LRTP reflects realistic assumptions about future revenues. Additionally, Title 23 U.S.C. Section 134 indicates that the MPO, applicable transit operator, and State should cooperatively develop estimates of funds that will be available to support plan implementation.

Since 1994, the Florida Department of Transportation (FDOT) has worked with the Metropolitan Planning Organization Advisory Council (MPOAC) to develop long range revenue forecasts to assist Metropolitan Planning Organizations (MPOs¹). The Revenue Forecast helps them to comply with federal requirements for developing cost feasible transportation plans and to demonstrate coordinated planning for transportation facilities and services in Florida. The revenue forecast is used by FDOT for the Strategic Intermodal System (SIS) Cost Feasible Plan (CFP) which is FDOT's plan for identifying projects on the SIS that are considered financially feasible over a period of 11 to 25 years out from the CFP release date.

During the development of the revenue forecast, FDOT meets with and regularly updates the MPOAC on various milestones throughout the process. These updates encourage meaningful conversation about any issues or concerns involving the revenue forecast and allows FDOT to understand and address the concerns of the MPOAC. This regular communication has fostered a cooperative and collaborative environment, assisting the FDOT and MPOs in reconciling their long range plans; thus demonstrating coordinated planning for transportation facilities and services in Florida and better documenting long range needs in the state.

¹ For the purposes of this document, the acronym refers to all forms of a MPO including Transportation Planning Organization (TPO), Transportation Planning Agency (TPA), and Metropolitan Transportation Planning Organization (MTPO).

Purpose

This Guidebook is intended to provide FDOT and MPO staff and consultants with a single source that documents the process for preparing the long range transportation revenue forecast. It also

provides the principles by which the process will be guided and the measures used to evaluate the process. Florida's MPOs are advised to use the revenue estimates provided by FDOT and this guidebook to assist in the update of their LRTPs.

If a MPO does not use the FDOT revenue forecast, they are required to develop their own independent forecast. Under current FHWA/FTA policy, they are required to document their forecast in their LRTP. Additionally, FDOT recommends (based If an independent forecast is used, it is in the best interests of all to develop it in a cooperative process with the District and the Office of Policy Planning (OPP).

on 23 CFR 450.324(f)(11)(ii)) that the FDOT Revenue Forecast be included in an Appendix to the LRTP, and that recommendation would still apply even if an MPO develops an independent forecast.

Several fundamental points drive the development of the statewide long range revenue forecast:

- The forecast is based on current federal and state laws, funding sources, and FDOT policies, as well as assumptions concerning factors affecting state revenue sources (e.g., population growth rates, motor fuel consumption and tax rates).
- The FDOT's Program and Resource Plan (PRP) is used as the basis for the forecast. It is the financial planning document used by the Department for the 10-year period that includes the Five Year Work Program. Annual estimates of funding levels for each subprogram and fund source in the PRP are prepared through the horizon year to ensure that the forecast is compatible with the PRP format and structure; however, they are consolidated for analysis and reporting purposes as described later in this document.
- The forecast is centered only on state and federal funds that "pass through" the FDOT Five Year Work Program. It does not include estimates for local government, local/regional authority, private sector, federal funds that go directly to transit operators, or other funding sources except as noted. While these other fund sources are not part of the statewide forecast, they should be considered as part of the overall metropolitan forecast based on their information source.
- The forecast consolidates the numerous fund codes used by the FDOT into three major fund categories: Federal, State, and Turnpike and Tolls. Federal funds include all federal aid (e.g., Surface Transportation Program) that pass through the department's budget. Turnpike funds include proceeds from Turnpike tolls, bonds sold for Turnpike activities, and concession revenues. State funds include the remaining state revenues, such as motor fuel taxes, motor vehicle fees, and right of way bonds. Toll credits are used to match federal aid (referred to as 'soft match') to minimize the state funds used to match regular federal programs.

- No estimates are developed for new revenue sources or increases in existing revenues unless otherwise stipulated in law. This helps ensure long range plans are not jeopardized by erroneous assumptions regarding the time or magnitude of future changes in revenue sources.
- The forecast collapses the Department's major programs into two categories: capacity programs and non-capacity programs. Capacity programs are major FDOT programs that expand the capacity of the state's transportation systems. Non-capacity programs are the remaining FDOT programs that are designed to support, operate, and maintain the state transportation system. Table 1 includes a brief description of each major program. Appendix A contains a more detailed discussion of the programs and the types of activities eligible for funding in each.
- Revenue forecasts estimate the value of money at the time it will be collected and reflects future revenue. Future revenue is often referred to as *year of expenditure* dollars. In recent statewide revenue forecasts, federal funding has been projected to be constant in year of expenditure dollars, meaning it is projected to slowly decline in purchasing power. Typically, state funding has been projected to increase more rapidly, but the projections still amount to slow growth in purchasing power. All amounts in the forecast are expressed in year of expenditure dollars.
- A statewide revenue forecast developed cooperatively, provides consistency in the assumptions and approaches used when estimating future state and federal funding.
- Using the statewide revenue forecast, FDOT will identify planned projects and programs funded with allocations for SIS Highways Construction & ROW, Aviation and Spaceport, Rail, Seaport, and Shared Use Network (SUN Trail, providing a statewide network of paved greenways and trails) programs as part of development of the SIS Cost Feasible Plan. The MPOs will identify planned projects and programs funded by Non-SIS Highways and Transit programs.

Table 1 provides a description of the eight major capacity programs and six major non-capacity programs included in the revenue forecast.

Advisory Concerning Florida's Turnpike Enterprise

Within the framework of the Florida Department of Transportation (FDOT), Florida's Turnpike Enterprise (Turnpike) is given authority, autonomy and flexibility to conduct its operations and plans in accordance with Florida Statute and its Bond Covenants. The Turnpike's traffic engineering consultant projects Toll Revenues and Gross Concession Revenues for the current year and the subsequent 10-year period, currently FYs 2018-2028. The consultant's official projections are available at http://www.floridasturnpike.com/documents/reports/Traffic%20Engineers%20Annu al%20Report/1_Executive%20Summary.pdf.

Projections of Turnpike revenues within the State of Florida Revenue Forecast beyond FY2028 are for planning purposes, and no undue reliance should be placed on the

estimates. Such amounts are generated and shared by the FDOT Office of Policy Planning (OPP) for purposes of accountability and transparency in development of this document. Such projections are part of the Revenue Forecast process, which serves the needs of MPOs generating required Long Range Transportation Plans (LRTPs). MPOs do not program capital projects or make decisions concerning Turnpike spending. OPP projections are not part of the Turnpike's formal revenue estimating process and are not utilized for any purpose other than to provide MPOs with an approximation of potential future revenues. Such amounts do not reflect the Turnpike's requirement to cover operating and maintenance costs, payments to bondholders for principal and interest, long-term preservation costs, and other outstanding Turnpike obligations and commitments."

Capacity Programs	Non-Capacity Programs
SIS Highway Construction & ROW – Construction, improvements, and associated right of way on SIS highways (i.e., Interstate, the Turnpike, other toll roads, and other facilities designed to serve interstate and interregional commerce including SIS connectors).	Safety – Includes the Highway Safety Improvement Program, the Highway Safety Grant Program, bicycle and pedestrian safety activities, the Industrial Safety Program, and general safety issues on a Department-wide bases.
Aviation – Financial and technical assistance to Florida's airports in the areas of safety, security, capacity enhancement, land acquisition, planning, economic development, and preservation.	Resurfacing – Resurfacing of pavements on the State Highway System and local roads as provided by state law.
Rail – Rail safety inspections, rail-highway grade crossing safety, acquisition of rail corridors, assistance in developing intercity and commuter rail service, and rehabilitation of rail facilities.	Bridge – Repair and replace deficient bridges on the State Highway System. Includes federal bridge funds which must be expended off the federal highway system (e.g., local bridges not on the State Highway System).
Intermodal Access – improving access to intermodal facilities, airports and seaports, and acquisition of associated rights of way.	Product Support – Planning and engineering required to "produce" FDOT products and services (i.e., each capacity program of safety resurfacing, and bridge programs).
Seaport Development – Funding for development of public deep-water port projects, such as security infrastructure and law enforcement measures, land acquisition, dredging, construction of storage facilities and terminals, and acquisition of container cranes and other equipment used in moving cargo and passengers	Operations & Maintenance (O&M) – Activities to support and maintain transportation infrastructure once it is constructed and in place. The Revenue Forecast includes projections of future FDOT expenditures for O&M on the State Highway System on the District level. Projections are not made on the MPO level because they would not serve any purpose.
Non-SIS Highways Construction & ROW – Construction, improvements, and associated right of way on State Highway System roadways not designated as part of the SIS. Also includes funding for the Economic Development Program, the County Incentive Grant Program, the Small County Road Assistance Program, and the Small County Outreach Program.	Administration and Other – Resources required to perform the fiscal, budget, personnel, executive direction, document reproduction, and contract functions. Also includes the Fixed Capital Outlay Program, which provides for the purchase, construction, and improvement of non- highway fixed assets (e.g., offices, maintenance yards).

Table 1 Description of the Major Programs Included in the Revenue Forecast

Transit – Technical, operating, and capital assistance to transit, paratransit, and ridesharing systems.	
SUN Trail – FDOT is directed to make use of its expertise in efficiently providing transportation projects to develop a statewide system of paved non-motorized trails as a component of the Florida Greenways and Trails System (FGTS), which is planned by the Florida Department of Environmental Protection (FDEP).	

Guiding Principles

Guiding principles establish the foundation by which an organization or process will function. The principles listed below will be used to prepare the statewide revenue forecast. They set the standard of practice for how FDOT will identify and forecast financial resources that are reasonably expected to be available to plan and develop the transportation system.

Financial Integrity

<u>Guiding Principle</u>: FDOT Central Office will demonstrate financial integrity by exhibiting fiscal responsibility when estimating future revenues.

Financial integrity involves responsibly evaluating the probability of risks. As stewards of public money, it is prudent for both FDOT and the MPOs to balance both risk and reward when estimating future revenues. A complete financial plan should consider all potential resources realistically expected to be available under reasonable assumptions at the time of the estimate. Having a financially sound approach can help guard against future unknowns to the greatest extent possible.

Collaboration

<u>Guiding Principle</u>: FDOT Central Office will collaborate with the FDOT District MPO Liaisons and the MPOAC regarding the statewide revenue forecast.

Collaboration is a process where multiple individuals or groups work together to achieve a shared goal. Acknowledging the complex process of developing the statewide revenue forecast, FDOT works with the MPOAC and the MPOs to draft, discuss, and agree upon financial guidelines to ensure consistency in the preparation and use of the forecast. Input and acceptance by all parties (internal and external to FDOT) is important for success and acceptance. Therefore,

agreement on the financial guidelines early in the process helps to minimize the potential for misunderstanding or disagreement as the forecast is prepared.

Communication and Transparency

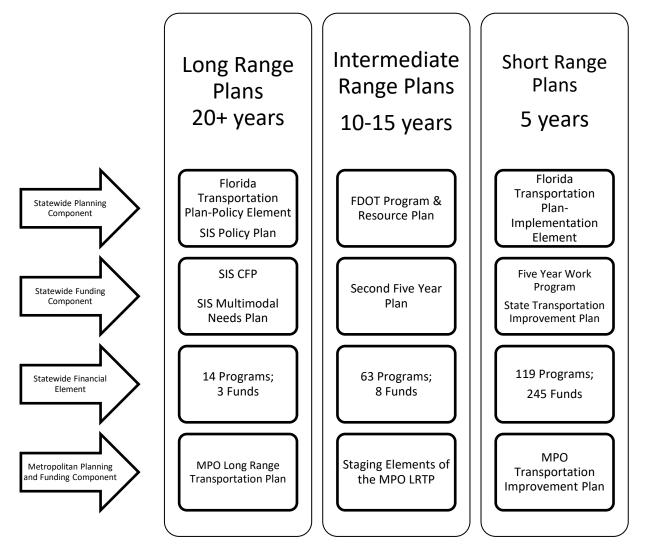
<u>Guiding Principle</u>: FDOT Central Office will communicate with the FDOT District MPO Liaisons and the MPOAC regarding the statewide revenue forecast.

Communication is the transfer of ideas and information among all parties. Communication is the key to FDOT, the MPOAC, and the MPOs making sound decisions to document assumptions on future revenue through the statewide revenue forecast. Throughout the process, it is the intent of FDOT to conduct frequent and thorough updates to encourage open and transparent dialog.

Financial Planning for Transportation

Financial planning for statewide and metropolitan transportation plans is typically required for three periods: long range (20 or more years), intermediate range (10-15 years), and short range (5 years). Figure 1 summarizes the three periods and the types of plans prepared at each stage. The specificity of these plans, including financial elements, varies in detail and implied accuracy. Assumptions, and the level of detail of underlying data, used in development of these three types of plans vary. These assumptions move from general (long range) to specific (short range) as information becomes available as shown below.

Figure 1 Summary of Planning Periods



The following describes the purpose and characteristics for long-, intermediate-, and short-range plans.

Long Range Plans

The purpose of long range plans is to set policy including vision, goals, objectives, and strategies. In some cases, it also identifies needed major improvements while preserving and maintaining prior investments. When improvements are identified, a determination should be made as to those that are "cost feasible". Long range plans are updated every three to five years and are more general than intermediate and short range plans. They are based upon general assumptions and estimates, and can be affected as conditions change (e.g., changes in policy, technology, growth). Characteristics of long range plans typically include:

- Horizons of 20+ years where project plans are sometimes organized in stages (e.g., first five years, second five years);
- Planned public transportation improvements may not specify technologies or detailed access requirements and have general alignments, routes or coverage areas;
- Traffic operations improvements, including the use of Intelligent Transportation System (ITS) techniques, may be included as area-wide programs or multi-corridor programs; and
- System preservation activities such as roadway resurfacing, bridge rehabilitation and maintenance, if included, are treated as programs rather than site- or corridor-specific projects.

In the development of a long range plan, revenue and program forecasts are general in nature to encourage a variety of approaches and technologies to meet stated goals. Program forecasts differentiate only between major types of activities (e.g., capacity improvements for eligible modal programs, preservation programs, and support activities) that are sufficient to develop estimates. Revenue and program forecasts cover 20 or more years and can fluctuate from year to year. Estimates for one year or a few years are not produced because they can be misleading in such a short time frame.

Long range plans are broad guides to the makeup and management of the future transportation system. They do not offer the detail of the FDOT Five Year Work Program or the MPO's Transportation Improvement Program (TIP). Planned improvements and programs may have to be modified as more detailed information becomes available or as conditions change. Project cost estimates and descriptions — including the primary mode in a corridor or system — will change during project development activities. In addition, subsequent changes in revenue estimates, costs, program levels and laws and policies are likely to happen and may affect future 10-year plans such as the Program and Resource Plan (PRP) and shorter term plans such as the Work Program and TIPs. Ideally, these changes are monitored for the purpose of improving the long range planning process.

Long range planning happens at the state and regional/local level. The state carries out long range planning through regular updates of the Florida Transportation Plan (FTP), the Strategic Intermodal System (SIS) Policy Plan, statewide modal plans, the SIS Cost Feasible Plan (CFP), and the Multimodal Unfunded Needs Plan. MPOs document their long range planning efforts with the Long Range Transportation Plan (LRTP).

Types of Plans – State Level

Florida Transportation Plan (FTP). The FTP is the single overarching statewide plan guiding Florida's transportation future. It is a plan for all of Florida created by, and providing direction to the FDOT and all organizations that are involved in planning and managing Florida's transportation system, including the MPOs. The FTP provides the policy framework for the department's intermediate and short range plans including the Program and Resource Plan (PRP), legislative budget requests, and the Work Program.

SIS Policy Plan. The SIS Policy Plan is a primary emphasis of FTP implementation and aligns with the current FTP. The SIS Policy Plan establishes the policy framework for planning and managing Florida's Strategic Intermodal System, the high priority network of transportation facilities important to the state's economic competitiveness. The SIS Policy Plan details policy that focuses on capacity improvements and building a system. It provides guidance for decisions about which facilities are designated as part of the SIS, where future SIS investments should occur, and how to set priorities among these investments given limited funding.

SIS Cost Feasible Plan. The Cost Feasible Plan identifies projects on the SIS that are considered financially feasible during the next fifteen to twenty years based on current revenue forecasts. Projects in this plan could move forward into the Second Five (Years 6 through 10) as funds become available or backwards into the Unfunded Needs Plan if revenues fall short of projections.

Multimodal Needs Plan. The Unfunded Needs Plan identifies transportation projects on the SIS that help meet mobility needs, but where funding is not expected to be available during the time period of the SIS Cost Feasible Plan. Projects in the unfunded needs plan could move forward into the SIS Funding Strategy as funds become available.

Type of Plans – Regional/Local Level

Long Range Transportation Plan (LRTP). The MPO is responsible for developing a LRTP that addresses no less than a 20-year planning horizon. The LRTP encourages and promotes the safe and efficient management, operation, and development of a cost feasible intermodal transportation system. That system will serve the mobility needs of people and freight within and through urbanized areas of this state, while minimizing transportation-related fuel consumption and air pollution. The LRTP must include long-range and short-range strategies consistent with state and local goals and objectives.

Intermediate Range Plans

The purpose of the intermediate range plans is to bridge the gap between long and short range plans given the timing of those two plans. They should show how progress will be made in attaining goals and objectives of the long range plan (e.g., resurfacing objectives). Characteristics include:

- Generally a 10 to 15 year time period
- Increased levels of specificity and detail (but less detail than a Work Program or TIP)
- May be updated each year

Intermediate range planning happens at the state and regional/local level. Intermediate range planning at the state level include production of the Program and Resource Plan (PRP) and the Second Five Year Plan. MPOs accomplish intermediate range planning by updating the staging elements (e.g., highest priority projects for the first 10 or 15 years) of their long range plans.

Types of Plans – State Level

Program and Resource Plan (PRP). The PRP addresses a ten year period. It includes estimates of funding and program accomplishments for over 60 categories of activities (programs or subprograms). Revenue forecasts for these years are developed for four categories of federal funds and four categories of state funds, but specific projects are not identified. Planned program and subprogram levels may have to be modified over time as more detailed information becomes available or as conditions change, including the results of analyses of performance from carrying out previous work programs. FDOT assesses these changes during the annual update and extension of the PRP.

Second (2nd) Five Year Plan. The 2nd Five Year Plan illustrates SIS projects that are scheduled to be funded in the five years following the Tentative Work Program (Years 6 through 10). This plan is developed during the FDOT work program development cycle in the same manner as the Tentative Work Program. Upon annual commencement of the FDOT work program development cycle, the first year of the previous 2nd Five-Year Plan becomes the new fifth year of the Tentative Work Program and the 2nd Five-Year Plan is shifted accordingly. An Approved plan is published for public consumption typically in the fall following the publication of the Adopted Five-Year Work Program.

Types of Plans – Regional/Local Level

Staging elements of the LRTP. As part of drafting the LRTP, the MPO develops a Cost Feasible Plan (CFP) to identify projects for funding by establishing need, defining funding limits, and identifying projects in the Needs Assessment. Projects are evaluated based on project selection criteria that scores a project's benefits and impacts. Within the CFP, the MPO stages projects to be funded based on evaluation criteria and the revenues generally expected to be available during the planning period. The staging of projects should account for limitations in the use of various revenue sources as well as prior investment and commitments to be consistent with the streams of funding from various programs.

Transit Development Plans. TDPs are required for grant program recipients in the Public Transit Block Grant Program, Section 341.052, F.S. A TDP shall be the provider's planning, development, and operational guidance document, based on a ten-year planning horizon and covers the year for which funding is sought and the nine subsequent years. A TDP or an annual update is used in developing the Department's five-year Work Program, the Transportation Improvement Program, and the Department's Program and Resource Plan. It is formally adopted by a provider's governing body, and requires a major update every five years. Technical assistance in preparing TDPs is available from the Department. Specific requirements can be found in Rule 14-73, Florida Administrative Code.

Short Range Plans

The purpose of short range plans – usually called programs – is to identify specific types of work (e.g., planning, engineering, construction) and specific funding (e.g., FDOT fund codes) for projects and programs. They should contain activities that will make progress in attaining goals and objectives of the FTP. Characteristics include:

- Time period of 3-5 years
- Most exact of the three types of planning
- Based on specific assumptions and detailed estimates
- May not be dramatically affected by changed conditions (e.g., adopted projects and programs are intended to be commitments, but may change in extraordinary circumstances).

Short range planning also happens at both the state and regional/local level. The state performs short range planning through production of the Work Program and the State Transportation Improvement Program (STIP). MPOs accomplish short range planning through production of their Transportation Improvement Program (TIP).

Types of Programs – State Level

Adopted Five Year Work Program. The Department's Five Year Work Program addresses project and program funding for the next five fiscal years. It includes detailed information for almost 120 programs and numerous job types, systems, phases, and more than 245 fund categories ("fund codes"). They all have strict eligibility criteria. Changes to the adopted Five Year Work Program are discouraged, but may be required because of revisions to revenue estimates, cost estimates or schedules, or changes in FDOT and MPO priorities. The Work Program is updated and extended each year as part of the Work Program development process.

State Transportation Improvement Program (STIP). The STIP is a federally mandated document including a list of projects planned with federal participation in the next four fiscal years. Although the STIP is approved annually by FHWA at the beginning of each federal fiscal year (October 1st), FHWA allows FDOT to report these four years on a state fiscal year basis (July 1 thru June 30). This is because the report is based upon the same projects that are listed

in the first four years of FDOT's Adopted Five Year Work Program. The STIP and the MPOs TIP must be consistent.

Types of Programs – Regional/Local Level

Transportation Improvement Program (TIP). The TIP is required by state and federal law. It is a prioritized listing/program of transportation projects, covering a period of five years. The TIP is developed and formally adopted by a MPO as part of the metropolitan transportation planning process, consistent with the long range transportation plan. It is developed in cooperation with the Department and public transit operators.

Evaluating the Process of Revenue Forecasting

The measures shown below are quantifiable indicators used to assess progress toward a desired objective. FDOT desires to assess timeliness, level of customer service, frequency, and productivity regarding the production, distribution, and usage of the statewide revenue forecast. This evaluation of the management and planning process demonstrates transparency and accountability both internally among FDOT offices and externally among the MPOAC and the MPOs.

Timeliness: Adherence to schedule

<u>Objective</u>: Produce a timely and accurate forecast to assist the MPO partners in preparation of their long range plans. Timely data is beneficial to producing useful and reliable documents.

<u>Measure</u>: Provide metropolitan level revenue forecast to the MPOs in advance of the next LRTP update cycle.

Target: Within 17 months of first LRTP due in 2019.

Customer Service: Outreach to MPOs

<u>Objective</u>: Ensure the information contained in the revenue forecast is explained and understood based on agreed upon parameters for production. This understanding comes through outreach to partners and assurance that all partners are invited and accommodations are made for participation. This approach to customer service and communication promotes transparency and accountability in the process.

<u>Measure</u>: The number of MPO representatives at the statewide teleconference.

Target: At least one from each MPO.

<u>Measure</u>: Conduct follow up calls to districts and MPOs as requested to obtain feedback on information and explanation provided at the statewide teleconference.

Target: Complete all that are requested.

<u>Measure</u>: Conduct information sessions to MPOs as requested to provide assistance and resources as needed.

<u>Target</u>: Complete all that are requested.

Frequency: Review of financial information

<u>Objective</u>: Provide current financial information as available. FDOT will monitor changes in economic conditions as well as remain closely aligned to the financial information reported by the Revenue Estimating Conference (REC). FDOT will meet with the MPOs as needed to understand the feedback they receive on draft LRTPs concerning the revenue forecast and its relevance to the current economic conditions. FDOT will consider adjustments to the statewide revenue forecast on a periodic basis, if warranted, to determine if a revised revenue forecast is needed for MPOs over the staggered adoption schedule. The current adoption schedule is provided in Table 2.

<u>Measure</u>: Review the statewide revenue forecast to evaluate potential impacts of any change in the financial outlook and update, if needed and when feasible, to ensure relevant and current financial information is being reported.

Target: Evaluate annually

Productivity: Usefulness of document

<u>Objective</u>: Provide financial information that is useful in preparation of long range plan documentation. This is fostered through continuous conversations with the MPOAC and the individual MPOs so that all parties feel ownership in the process.

<u>Measure</u>: The number of MPOs using the statewide revenue forecast as part of the LRTP update process.

<u>Target</u>: 27

<u>Measure</u>: The number of MPOs responding positively concerning the usefulness of the revenue forecast information.

Target: 27

Table 2 LRTP Adoption Schedule

MPO	LRTP Adoption Date Within Current Update Cycle	LRTP Adoption Date Within Next Update Cycle
Palm Beach MPO	10/16/2014	10/16/2019
Miami-Dade Urbanized MPO	10/23/2014	10/23/2019
Hillsborough County MPO	11/12/2014	11/12/2019
North Florida TPO	11/13/2014	11/13/2019
Hernando-Citrus MPO	12/9/2014	12/9/2019
Pinellas County MPO	12/10/2014	12/10/2019
Broward MPO	12/11/2014	12/11/2019
Pasco County MPO	12/11/2014	12/11/2019
River to Sea TPO	9/23/2015	9/23/2020
Gainesville MTPO	10/5/2015	10/5/2020
Charlotte-Punta Gorda MPO	10/5/2015	10/5/2020
Space Coast TPO	10/8/2015	10/8/2020
Florida Alabama TPO	11/3/2015	11/3/2020
Capital Region TPA	11/16/2015	11/16/2020
Ocala-Marion County TPO	11/24/2015	11/24/2020
St. Lucie TPO	12/2/2015	2/3/2021
METROPLAN	12/9/2015	12/9/2020
Lake Sumter MPO	12/9/2015	12/9/2020
Indian River County MPO	12/9/2015	12/9/2020
Polk TPO	12/10/2015	12/10/2020
Collier MPO	12/11/2015	12/11/2020
Martin MPO	12/14/2015	12/14/2020
Sarasota-Manatee MPO	12/14/2015	12/14/2020
Lee MPO	12/18/2015	12/18/2020
Heartland Regional TPO	3/16/2016	3/16/2021
Bay County TPO	7/27/2016	6/22/2021
Okaloosa Walton TPO	3/15/2017	2/16/2022

Timeline for Planning and Conducting the Revenue Forecast

Process Step	M/W/Ds from Workshop*	Estimated Dates	Responsible Party	Date Completed
2016				
Kickoff revenue forecast process with FDOT Central Office	27.5 M	Mid Feb	Martin Markovich	Mid Feb
Begin drafting Revenue Forecast Guidebook	27.5 M	Mid Feb	Regina Colson	Mid Feb
Identify changes in process as a result of FAST Act	26.5 M	Mid Mar	Martin Markovich	Mid Mar
Finalize Revenue Forecast Guidebook	22 M	End Jul	OPP	Jan 2018
Begin developing Financial Guidelines for MPO Long Range Plans	21.5 M	Mid Aug	MPOAC	Mid Aug
Initiate discussion with MPOAC Policy and Technical Committee on financial guidelines at scheduled meeting	17.5 M	Mid Dec	Regina Colson Martin Markovich	Mid Dec
2017				
MPOAC Board meeting in Sunrise Florida; present outcomes from discussion with MPOAC Policy & Technical Committee on financial guidelines	16.5 M	Jan 26 th	Carmen Monroy	Jan 26 th
Meeting of Revenue Subcommittee	15.5 M	Feb 10	Regina Colson Martin Markovich	Feb 10
Finalize discussions with SPO regarding SIS Cost Feasible Plan	14 M	End Mar	Martin Markovich	End Mar
Review draft <i>Financial Guidelines for MPO Long</i> <i>Range Plans</i> at scheduled meeting	13 M	End Apr	MPOAC	End Apr
Draft revenue forecast information and training materials for MPOs	13 M	End Apr	Martin Markovich	End Apr
Update list of FDOT District MPO Liaison contacts for revenue forecast purposes	1 Y	End May	Alex Gramovot	End May
Establish and document policies for revenues from Managed Lane networks and other P3s	10.5 M	Early Jul	Leon Corbett	Early Jul
Finalize financial guidelines methodology	10.5 M	Mid Jul	MPOAC	Deferred
Receive LRTP Revenue Forecast PRP from OWPB	10.5 M	Mid Jul	Tammy Rackley	Mid Jul
Review LRTP Revenue Forecast PRP; establish program to finalize revenue estimates	9.5 M	Mid Aug	Martin Markovich	Mid Aug
Secure final MPOAC approval of Financial Guidelines for MPO Long Range Plans at scheduled meeting	7.5 M	Mid Nov	MPOAC	Deferred
Finalize forecast methodology	7 M	End Oct	Martin Markovich	End Oct

The steps below outline the general timeline for planning and conducting the revenue forecast.

Process Step	M/W/Ds from Workshop*	Estimated Dates	Responsible Party	Date Completed
Receive and review most current REC results	5.5 M	Mid Dec	Martin Markovich	Mid Dec
Perform data reduction to consolidate, collapse, and organize the revenue forecast	5.5 M	Mid Dec	Martin Markovich	Mid Dec

* Approximate months, weeks, or days from Revenue Forecast Workshop (May 2018); "+" means after Workshop

Process Step	M/W/Ds from Workshop*	Estimated Dates	Responsible Party	Date Completed
2018				
Policy Planning management reviews the draft revenue forecast	5 M	Early Jan		
Policy Planning staff finalizes the revenue forecast	5 M	Early Jan		
Finalize revenue forecast information and training materials	4.5 M	Mid Jan		
Transmit highway revenue forecast information to SPO	4.5 M	Mid Jan		
Provide training to districts on how to prepare forecast information for MPO	3 M	End Feb		
Receive and review the Tentative Work Program	3 M	Early Mar		
Receive and review CFP from SPO	2.5 M	Mid Mar		
Transmit CFP to districts for distribution to MPOs	2.5 M	Mid Mar		
Transmit metropolitan estimates to districts for review and comment	2.5 M	Mid Mar		
Transmit all draft revenue forecast information to districts including spreadsheets, final guidebook, and PPT	2 M	End Mar		
Follow up teleconference with FDOT District MPO Liaisons	7 W	Early Apr		
Transmit final spreadsheet and other materials to FDOT District MPO Liaisons	6 W	April 11		
Finalize meeting room, videoconference equipment, etc. with central office and district offices	1 M	April 23		
Transmit custom spreadsheets, guidebook and PPT to MPOs	1 W	May 16		
Conduct statewide video conference (approximately 17 months before first LRTP is due)	0	May 23		

Process Step	M/W/Ds from Workshop*	Estimated Dates	Responsible Party	Date Completed
Follow up meetings with FDOT District MPO Liaisons and MPO staff to provide clarification, as needed	+1 M	End June		
Feedback sessions with FDOT District MPO Liaisons, as needed	+3-6 M	Sep-Dec		

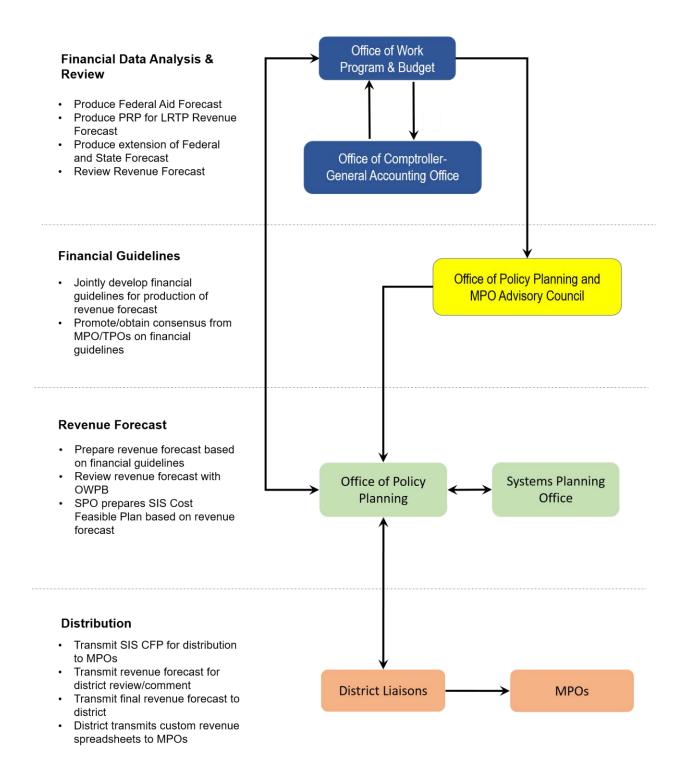
Revenue Forecast Process

As part of assisting with the updates of all 27 metropolitan long range transportation plans, FDOT develops a long range revenue forecast. The forecast horizon is agreed upon by FDOT and the MPOAC. The forecast reflects changes in state revenue since the previous forecast approximately five years prior. The revenue forecast includes estimates through the agreed upon horizon year to provide all MPOs projections concerning state and federal funds that are expected to be included in the FDOT Work Program. The statewide forecast provides consistency and a basis for financial planning across all 27 MPOs. This section provides an overview of roles and responsibilities and details the methodology for producing the revenue forecast.

Overview of Roles and Responsibilities

Production of the statewide revenue forecast involves multiple offices within FDOT and a variety of responsibilities within each office. It also involves communication and collaboration with the MPOAC and the 27 MPOs who represent a diverse arrangement of local and regional entities. The flow of information from each office and entity, as shown in Figure 2, is key to producing an accurate and timely revenue forecast.

Figure 2 Flow of Information for the Revenue Forecast



The roles and responsibilities for each office and entity, as it relates to the statewide revenue forecasting process, are summarized in Table 3.

Key Roles	Responsibilities			
Intermodal System Development, Office of Policy Planning				
 Director Economist Demographics Coordinator Public Transportation Manager 	This office develops, documents, and monitors the statewide and metropolitan planning processes including production of a statewide revenue forecast for statewide and metropolitan long range planning.			
Office of Work Program and Budget (OWPB)				
 Program and Resource Allocation Supervisor Program Plan Supervisor Finance, Program, and Resource Allocation Manager 	This office allocates and manages the resources available to the Department for transportation programs in a manner which is consistent with the Florida Transportation Plan, Florida Statutes, and the mission and vision of the Department.			
Office of Comptroller-General Accounting Office (OOC-GAO)				
 Transportation Revenue Coordinator Project Finance Manager 	This office represents the Department at Revenue Estimating Conferences; completes monthly and annual statistical reports to the Federal Highway Administration, and prepares annual updates of the Transportation Tax Source Primer, Transportation Funding Sources presentation, and Bond Finance Update Report. The Project Finance Manager projects surplus toll revenue and transit funding for Managed Lane facilities that have been in service for 5 years or more.			
Intermodal System Development, Systems Implementation Office (SPO)				
SIS Implementation ManagerSIS Statewide Coordinator	This office implements the Strategic Intermodal System (SIS) through the development of the SIS Needs Plan, Cost Feasible Plan, Second Five Year Plan, and the Work Program.			

FDOT District MPO Liaisons			
FDOT District MPO Liaisons	The District offices work with the MPOs in their respective districts to coordinate through the cooperative planning efforts of the MPOs and the FDOT District offices.		
Metropolitan Planning Organization Advisory Council (MPOAC)			
Executive Director	This council provides statewide transportation planning and policy support to augment the role of individual MPOs in the cooperative transportation planning process. The MPOAC assists MPOs in carrying out the urbanized area transportation planning process by serving as the principal forum for collective policy discussion.		
MPOAC - Policy and Technical Subcommittee			
ChairSubcommittee members	This subcommittee annually prepares legislative policy positions and develops initiatives to be advanced during Florida's legislative session.		
Metropolitan Planning Organizations (MPO)			
Staff DirectorMPO Staff	These organizations are made up of local elected and appointed officials responsible for developing, in cooperation with the state and public transportation operators, transportation plans and programs including the long range transportation plan (LRTP). The staff of these organizations are users of the SIS Cost Feasible Plan and the metropolitan estimates.		

Methodology for Developing the Revenue ForecastPreparation of the revenue forecast involves multiple offices and occurs over a period of approximately 17-18 months. The offices involved are listed below:

The following steps take place to prepare the revenue forecast (major milestones are called out):

Phase 1 – Office of Policy Planning

• The Office of Policy Planning discusses the update of the *Financial Guidelines for MPO Long Range Plans* with the MPOAC Executive Director and MPOs approximately 17-18 months before the revenue forecast is due. This document outlines the agreed upon guidance for defining and report needs, financial reporting for cost feasible long range plans, revenue estimates, and developing project costs. It also identifies the agreed upon horizon year and planning time periods.

- The Office of Policy Planning Economist meets with the Systems Implementation Office (SPO) to discuss timing of the revenue forecast for use in the SIS Cost Feasible Plan.
- The Office of Policy Planning, in consultation with the MPOAC and MPOs, finalizes the *Financial Guidelines for MPO Long Range Plans*.

Phase 2 – Offices of Finance and Administration

- Using the financial information provided to the states through the current federal authorization act (currently the FAST Act), the Office of Work Program and Budget (OWPB), Program and Resource Allocation Supervisor develops the FDOT Federal Aid Forecast. This forecast uses the inflation factors provided in the current federal authorization act through the life of the act (currently through FY 2020). OWPB calculates a projection of federal funding for Florida for several years beyond the end of the current federal authorization. The timeframe for the FDOT Federal Aid Forecast is the same as the Program and Resource Plan, generally a period of 11 years. This forecast is provided to the Office of the FDOT Comptroller-General Accounting Office (OOC-GAO) Transportation Revenue Coordinator.
- The OOC-GAO Transportation Revenue Coordinator develops a forecast of state revenues as input to the Transportation Revenue Estimating Conference (REC) and the Highway Safety REC. When preparing this forecast, FDOT assumes current law and administrative practices will remain in effect. The current year forecast is adjusted based on this observation and the historical proportion the data represents the total annual amount. FDOT uses forecasted growth in population, households (total number and average size), net migration, income, total tourism, air tourism, new vehicles sales, fuel prices, average vehicle mileage, and construction expenditures as its assumptions depending on the tax sources.
- All or part of the FDOT forecast may be included in the official forecast adopted by the conference principals, which then becomes the State Revenue Forecast (note: different from FDOT's statewide revenue forecast produced for the MPOs). FDOT also receives documentary stamp revenue forecasted at the General REC.
- Because the REC and Federal Aid forecasts only go out 10-11 years, the OOC-GAO Transportation Revenue Coordinator creates the State Transportation Trust Fund forecast. OOC-GAO extrapolates the federal and state 10-year forecasts out to the horizon year agreed upon by FDOT and the MPOAC using the following steps:
 - For the long range federal forecast, the Federal Aid Forecast discussed above is used and the rate held constant out to the horizon year. At this time, the projection is held constant in year of expenditure terms from the last year of the current act (FY 2020). With an expectation of future inflation, this projection means that Federal Aid will slowly decline in real terms.

- For the state forecast, the growth trend in years 6-10 are used and held constant out to the horizon year. Adjustments are made for fee revenue that does not change (flat fees).
- The OOC-GAO Transportation Revenue Coordinator prepares a spreadsheet to determine which revenues are exempt from inclusion in the public transportation allocation.
- The OOC-GAO Transportation Revenue Coordinator provides the State Transportation Trust Fund forecast to the OWPB, Program Plan Supervisor for use in creating the Revenue Forecast Program and Resource Plan (PRP). This document, prepared specifically for use in the LRTP Revenue Forecast process, begins with the tentative work program plus the new 'fifth' year and the next four years.

Note: The official tentative work program is due to the Governor and Legislature two weeks after the start date of legislative session. This tentative work program is the desired file to use in drafting the LRTP Revenue Forecast PRP. However, much depends on the timing of the REC cycle and the legislative session that year. The financial forecast resulting from the REC is used as the basis for the work program. Sometimes the tentative work program may be amended because of changes that are documented in the REC. It is important for the Office of Policy Planning to work closely with the Office of Work Program and Budget to ensure the most appropriate forecast with the understanding there is flexibility in the process.

- The OOC-GAO Project Finance Manager, after consulting with OPP, projects surplus toll revenue and transit funding for Managed Lane facilities that have been in service for 5 years or more.
- The OWPB, Program Plan Supervisor organizes the extended PRP into a variety of files using the information from the OOC-GAO Transportation Revenue Coordinator. These files are arranged for:
 - o Statewide
 - o SIS
 - P3 (This information in this file is reported as programmed because the amounts have already been inflated.)
 - Statewide less SIS & P3
- The OWPB Program Plan Supervisor reviews the various plans with the OWPB Finance, Program and Resource Allocation Manager for quality control.

Phase 3 – Office of Policy Planning

- The extended PRP is sent to the Office of Policy Planning Economist for review to ensure the document follows current policy, is mathematically correct, and is financially reasonable. The Office of Policy Planning Economist discusses and resolves any issues with OWPB staff.
- The Office of Policy Planning Economist reviews the extended PRP for anomalies in the extended years. The Office of Policy Planning Economist researches the anomalies that exist and smooths the data. This technical function ensures data outliers do not skew the overall results.

Note: To ensure accuracy of the formulas and the worksheet mechanics used to calculate the forecast, a test run was performed in the year prior to when the official revenue forecast is due.

- The Office of Policy Planning Economist smooths the data from the extended PRP. This involves using revenues and expenditures from the Work Program, which includes complete data, to revise projected revenues and expenditures for the outer years, in this case FYs 2027-2045. It also involves smoothing dollar values to eliminate abrupt crashing or soaring. There is no reason to forecast major, abrupt changes in dollar values in the 2030s or 2040s.
- With the smoothed data from the PRP, the Office of Policy
 Planning Economist performs a data reduction process to:
 data

Policy Planning performs data reduction process

- Consolidate the numerous fund codes used by the FDOT into three major fund categories: Federal, State, and Turnpike
 - Federal funds include all federal aid that passes through the Work Program
 - Turnpike funds include planning projections of proceeds from Turnpike tolls, bonds sold for Turnpike activities, and concession revenues
 - State funds include the remaining state revenues, such as motor fuel taxes, motor vehicle fees, and right-of-way bonds
- Collapse the FDOT's major programs into two categories: capacity and non-capacity.
 - Capacity programs are major FDOT programs that expand the capacity of Florida's transportation systems.
 - Non-capacity programs are remaining FDOT programs that are designed to support, operate, and maintain the state transportation system.
- Break down the capacity program funds geographically by county based on statutory formula.

- Statutory formula gives a 50 percent weight to the county's population as enumerated by the most recent census and a 50 percent weight to the county's recent annual gas tax receipts.
- The Office of Policy Planning Economist, in consultation with Office of Policy Planning Director and other Office of Policy Planning staff, reviews and edits the revenue forecast as necessary to ensure accuracy.
- The Office of Policy Planning Economist finalizes the revenue forecast and prepares the worksheets for each county's share of the statewide estimate.
- The Office of Policy Planning Economist provides the SPO the revenue forecast for highways to be used in the SIS Cost Feasible Plan. The Office of Policy Planning and SPO meet as needed to discuss the revenue forecast results for highways.
- The Office of Policy Planning Economist receives and reviews the SIS Cost Feasible Plan from the SPO for reasonableness. The Office of Policy Planning Economist, in consultation with SPO, transmits the SIS Cost Feasible Plan to the FDOT District MPO Liaisons for distribution to the MPOs.
- The Office of Policy Planning Economist transmits the metropolitan estimates from the revenue forecast to the FDOT District MPO Liaisons for review and comment. Based on comment from FDOT District MPO Liaisons, the Office of Policy Planning Economist will adjust if necessary in consultation with the appropriate managers and offices.

Phase 4 – FDOT Districts and Office of Policy Planning

- Within a week of transmission of the SIS Cost Feasible Plan and the metropolitan estimates, Office of Policy Planning staff provides training to FDOT District MPO Liaisons on the SIS Cost Feasible Plan and the metropolitan estimates from the revenue forecast. The training will explain how the District staff should package the metropolitan estimates for their MPOs.
- The FDOT District MPO Liaisons transmit the final metropolitan estimates and updated Revenue Forecast Handbook to all MPOs.

FDOT transmits final estimates to MPOs.

- Within a week of transmission of the metropolitan estimates, the Office of Policy Planning staff in conjunction with the FDPOT District MPO Liaisons and the MPOAC, conduct a statewide videoconference to review the agreed upon revenue forecast process and all materials distributed detailing the metropolitan estimates and the SIS Cost Feasible Plan.
- The Office of Policy Planning staff follows up with FDOT Districts and MPOs to offer meetings as needed to discuss specific details of individual metropolitan estimates.

Conduct statewide videoconference

Revenue Forecast Handbook for MPOs

The estimates and the guidance in this section were prepared by FDOT, based on a statewide estimate of revenues that fund the state transportation program, and are consistent with:

- "Financial Guidelines for MPO 2040 Long Range Plans" adopted by the Metropolitan Planning Organization Advisory Council (MPOAC) in 2012. Since the MPOAC Board has not adopted Financial Guidelines for the current LRTP cycle, FDOT is working with the previous adopted guidelines, which, with minor adjustments to time bands, are quite applicable to the current processing.
- "Federal Strategies for Implementing Requirements for LRTP Update for the Florida MPOs", adopted *Month Year*, prepared by the U.S. Department of Transportation, Federal Highway Administration in cooperation with the Federal Transit Administration.

This section documents how the Revenue Forecast is developed and provides guidance for using the forecast information in updating MPO plans. FDOT develops metropolitan estimates from the Revenue Forecast for certain capacity programs for each MPO. To be perfectly clear, it has never been FDOT policy to forecast estimates for specific fund codes in the Revenue Forecast, and it is not current FDOT policy. The metropolitan estimates are included in a separate document entitled "Supplement to the Revenue Forecast Handbook" prepared for each MPO. A separate report entitled *Appendix for the Metropolitan Long Range Plan* is prepared for each MPO to include in the documentation of its long range plan. Further guidance on use of these estimates is provided in the section, *Developing a Cost Feasible Plan*.

General Guidance on Using the Estimates

The metropolitan estimates are summarized into five fiscal year periods and a final 10-year period. For planning purposes, some flexibility should be allowed for estimates for these time periods (e.g., within 10 percent of the funds estimated for that period). However, for the LRTP to be fiscally constrained, it is required the total cost of all phases of planned projects for the entire forecast period not exceed the revenue estimates for each element or component of the plan.

When developing long range plans, MPOs are not legally required to use the same terminology used in the Department's Revenue Forecast such as *Non-SIS Highways Construction & ROW*. However, MPOs should identify the metropolitan estimates from the forecast, the source of the revenues, and how these revenues are used in documentation of their plan updates.

MPOs are encouraged to document project costs and revenue estimates for their long range transportation plans for fiscal years 20xx-20xx. This will provide a common basis for analyses of finance issues (e.g., unmet transportation needs). Appendix C includes inflation factors and guidance for converting project costs estimates to *year of expenditure* dollars.

Metropolitan Estimates

This section describes the revenue forecast information concerning metropolitan estimates and the guidance for using this information. The metropolitan estimates are for planning purposes only and do not represent a state commitment for funding, either in total or in any 5-year time period.

Metropolitan estimates reflect the share of each state capacity program planned for the area. The estimates can be used to fund planned capacity improvements to major elements of the transportation system (e.g., highways, transit). FDOT will develop an appendix for MPO plans that identifies statewide funding estimates and objectives for non-capacity programs.

Statewide estimates for major state programs are based on current laws and policies. The major program categories used in the forecast are listed below.

Major Program Categories

Capacity Programs	Non-Capacity Programs
Statewide	Safety
SIS Highways Construction & ROW	Resurfacing
Aviation	Bridge
Rail	Product Support
Intermodal Access	Operations & Maintenance
Seaport Development	Administration
Non-SIS Highways Construction & ROW	
Transit	
Sun Trail	

The forecast of funding levels for the Department's programs are developed based on the Program and Resource Plan. Annual estimates of funding levels through 2045 are based on federal and state laws and regulations and Department policies at the time the forecast is prepared. For example, statewide funding levels are established to accomplish the program objectives for resurfacing, routine maintenance, and bridge repair and replacement. These estimates are summarized to reflect the major program categories used in the 2045 Revenue Forecast.

Capacity Program Estimates

The FDOT Central Office prepares district and county estimates from the statewide forecast based on methods developed in consultation with MPOs, FDOT program managers, and district staff as shown in Table 4. Using this information prepared by the Central Office, District staff develops MPO estimates consistent with district and county shares of the statewide forecast, adjusting as needed to account for issues such as differences between metropolitan area boundaries, county boundaries or Transportation Management Area boundaries. The metropolitan estimates for each MPO are included in a separate document, entitled "Supplement to the 2045 Revenue Forecast Handbook."

Major Capacity Program Category	Methodology	
SIS Highways Construction & ROW	Based on the 2045 SIS Highways Cost Feasible Plan and other sources. Funding estimates and projects to be provided to MPOs.	
Non-SIS Highways Construction & ROW	 Generally, distribute funding estimates by statutory formula. Also develop estimates for TMA (SU) and Transportation Alternatives funds in TMAs; those funds taken "off the top" before distributing remaining funds. Apprise MPOs that at least some portion of these funds can be planned for Transit. Develop "off system" estimates. SCOP and CIGP are also included here. 	
Transit	Use statutory formula to distribute funds to Districts and counties.	
Aviation	Because the primary use of Aviation funds is for airside improvements not a part of MPO planning, develop only statewide estimates.	
Rail	Because of uncertainties with long range passenger rail and absence of commitments to specific rail corridors, develop only statewide estimates.	
Intermodal Access	The future of this program is not clear, given the creation of the SIS. As a result, develop only statewide estimates	
Seaport Development	Statewide estimates only, the Florida Seaport Transportation Economic Development (FSTED) Council identifies projects eligible for funding.	
SUN Trail	Statewide there is a \$25 million annual allocation from the redistribution of new vehicle tag revenues. FDOT uses the State Transportation Trust Fund (STTF) to develop a statewide system of nonmotorized, paved trails for bicyclists and pedestrians as a component of the Florida Greenways and Trails System (FGTS).	
Operations and Maintenance Estimates	Develop district-wide estimates of funding for Resurfacing, Bridge and Operations & Maintenance programs and provide to MPOs, per agreement between FDOT and FHWA Division Office related to reporting Operations and Maintenance estimates for the State Highway System in MPO LRTPs.	

Table 4 Methodology for Determining District and Metropolitan Estimates from the2045 Revenue Forecast

Statewide Capacity Programs

FDOT is taking the lead in identifying planned projects and programs funded by the following major programs: SIS Highways Construction & ROW, Aviation, Rail, Seaport Development and Intermodal Access. SIS Highways Construction & ROW projects and revenues are identified in the SIS Cost Feasible Plan and are provided to MPOs with the other elements of the revenue forecast. The SIS Cost Feasible Plan includes all roads on the Strategic Intermodal System including connectors between SIS corridors and SIS hubs. These estimates are for planning purposes and do not represent a commitment of FDOT funding. It should be noted that FDOT continues to work with modal partners to identify aviation, rail, seaport, and intermodal access projects beyond the years in the work program. However, FDOT and its partners have not been able to identify cost feasible projects beyond the work program sufficiently to include them in the SIS Cost Feasible Plan and therefore, in MPO cost feasible plans.

Other Capacity Programs

The Department requests that MPOs lead in the identification of planned projects and programs funded by the non-SIS Construction & ROW and Transit programs. MPOs may use the total funds estimated for these two programs to plan for the mix of public transportation and highway improvements that best meets the needs of their metropolitan areas. Since, the FDOT is responsible for meeting certain statutory requirements for public transportation funding, MPOs should provide the level of Transit Program funding for transit projects and programs.

Transportation Management Area (TMA) Funds

FDOT provides estimates of funds allocated for Transportation Management Areas, as defined by the U. S. Department of Transportation. They are the same as "SU" funds in the Five Year Work Program. MPOs should perform a thorough analysis of how these funds are to be reflected in their long range plan. The following is guidance for that analysis.

Planning for the Use of TMA Funds

MPOs eligible for TMA Funds are provided estimates of total TMA Funds. MPOs are encouraged to work with FDOT district programming and planning staff to determine how to reflect TMA Funds in the long range plan. Consideration should be given to:

- Programmed use of TMA Funds among the various categories in the FDOT revenue forecast. These include Non-SIS Highways Construction & ROW, Product Support (e.g., Planning, PD&E studies, Engineering Design, Construction Inspection, etc.), SIS Highways Construction & ROW, Transit.
- Planned use of TMA Funds based on policies regarding the planned use of funds through the long range plan horizon year.
- Clear articulation in the long range plan documentation of the policies regarding the use of TMA funds, and estimates of TMA funds planned for each major program and time period.

Transportation Alternatives (TA) Funds

FDOT provides estimates of funds for Transportation Alternatives, as defined by MAP-21, to assist MPOs in developing their plans. Estimates of Transportation Alternatives funds allocated for TMAs (i.e., "TALU" funds) are provided to each TMA.

Estimates of funds for areas with populations under 200,000 (i.e., TALL funds) and for any area of the state (i.e., TALT funds) are also provided to MPOs. MPOs may desire to include projects funded with TALL or TALT funds in the long range transportation plan. If so, the MPO should identify such projects as "illustrative projects" in its plan.

Funds for Off-System Roads

The Department estimates the amount of funds that may be used off-system which are funds that could be used for planned programs or projects on roads that are not on the State Highway System (i.e., roads owned by counties and municipalities). "Off-System" funds are included in the non-SIS Construction & ROW program estimates, which are comprised of federal and state funds. By law, state funds cannot be used for highway improvements not on the State Highway System, except to match federal aid or for SIS connectors owned by local governments or for other approved programs which could include projects not on the SHS such as SCOP and CIGP. Federal funds included in the Non-SIS Highways program estimates may be used anywhere except for roads that are functionally classified as local or rural minor collectors, unless such roads were on the federal-aid system as of January 1, 1991.

All estimates of TMA funds (see above) may be used on off-system roads. The following is guidance for estimating other federal funds that can be used for off-system roads:

- MPOs in TMAs can assume all estimated TMA funds and 10% of the FDOT estimates of Non-SIS Highways Construction & ROW funds can be used for "Off-System" roads.
- MPOs that are not in TMAs can assume that 15% of Construction & ROW funds provided by FDOT can be used for "Off-System" roads.

Preliminary Engineering Estimates

MPOs are encouraged to include estimates for key pre-construction phases in the LRTP, namely for Project Development and Environmental (PD&E) studies and Engineering Design.

FDOT has included sufficient funding for these and other Product Support activities to produce the construction levels in the 2045 Revenue Forecast. Costs for these phases for SIS highways will be provided to MPOs in the 2045 SIS Highways Cost Feasible Plan. For projects funded with the revenue estimates for Non-SIS Highways Construction & ROW Funds provided by FDOT, MPOs can assume that the equivalent of 22 percent of those estimated funds will be available from the statewide Product Support estimates for PD&E and Engineering Design. Note: these funds are <u>in</u> <u>addition to</u> the estimates for Non-SIS Highways Construction & ROW funds provided to MPOs. MPOs should document these assumptions. For example, if the estimate for Construction & ROW in a 5-year period is \$10 million, the MPO can assume that an additional \$2.2 million will be available for PD&E and Design in the 5-year period from FDOT Product Support estimates. If planned PD&E and Design phases use TMA funds, the amounts should be part of (i.e., <u>not</u> in addition to) estimates of TMA funds provided to MPOs.

The Department encourages MPOs to combine PD&E and Design phases into Preliminary Engineering in LRTP documentation. Boxed funds can be used to finance Preliminary Engineering; however, the specific projects using the boxed funds should be listed, or described in bulk in the LRTP (i.e., Preliminary Engineering for projects in Fiscal Years 2027-2045).

Additional State Revenues

It is well known that State of Florida gas tax revenues and fees are a primary source of funding the State Transportation Trust Fund (STTF).

Doc stamp taxes dedicated to the STTF have fluctuated because of volatility in the Florida real estate market and complex provisions in the law governing this major source of Florida revenues. Recent years have been characterized by recovery in the real estate market, and the projections of the transportation Revenue Estimating Conference (REC) indicate continued growth in this source of funding. However, state law provides for a cap of \$541.75 million per year on doc stamp taxes that can be allocated to the STTF. If growth continues as projected, this cap is estimated to be reached sometime in the next 10-15 years.

The following information regarding transportation proceeds from doc stamp taxes, fuel use tax fees, rental car surcharges and Motor Vehicle License fees is useful for planning of these funds in metropolitan LRTPs. None of these funds are specifically allocated on the County or MPO levels. Therefore, most categories of funding should not be used for funding constrained projects within LRTPs.²

Small County Outreach Program (SCOP)

Annually, 10% of the doc stamp transportation proceeds is allocated to this program for transportation projects in small counties and small cities. These allocations are made based on population as prescribed in law. The 2045 Revenue Forecast assumes these funds will not be available for projects in metropolitan areas. Other funding sources may include local option gas tax. *Additionally,* under provisions added to law in 2015, 5% of initial Motor Vehicle License fees is allocated to the SCOP.

New Starts Transit Program

Annually, 10% of FDOT doc stamp funds are applied to the Florida New Starts Program. State eligibility requires that:

² Funds allocated to the SIS are a somewhat different case. SIS projects are identified by FDOT, and they must be included in the LRTP in order to advance toward construction.

- Project must be a fixed-guideway rail transit system or extension, or bus rapid transit system operating primarily on a dedicated transit right of way;
- Project must support local plans to direct growth where desired;
- State funding limited to up to 50% of non-federal share;
- Local funding is required to at least match state contribution and be dedicated to the project; and
- Eligible phases are final design, right of way acquisition, construction, procurement of equipment, etc.

MPOs may desire to include projects partially funded with statewide New Starts funds in the long range transportation plan. Any commitment of these funds by FDOT should be documented in the LRTP. Otherwise, the MPO should identify such projects as "illustrative projects" in its plan along with, at a minimum, the following information:

- Description of the project and estimated costs;
- Assumptions related to the amount of statewide New Starts funding for the project; and
- Assumptions related to the share and amount of non-State matching funds for the project (federal and local) and the likelihood such funding will be available as planned.

MPOs should work with their district office in developing and documenting this information.

Strategic Intermodal System

After allocations to the Small County Outreach Program and the New Starts Transit Program, 75% of the remaining Documentary Stamp tax funds are allocated annually for the SIS. Additionally, at least 20.6% of initial Motor Vehicle License fees is allocated to the SIS. Section 339.61(1) requires \$60 million to the SIS. FDOT will plan for these funds as part of the SIS Cost Feasible Plan, which provides funding and project information to MPOs.

Transportation Regional Incentive Program (TRIP)

After allocations to the Small County Outreach Program and the New Starts Transit Program, 25% of the remaining documentary stamp tax funds are allocated annually to TRIP. Additionally, 6.9% of initial Motor Vehicle License fees is allocated to TRIP. Of the doc stamp funds allocated to TRIP, the first \$60 million are apportioned annually to the Florida Rail Enterprise. The purpose of TRIP is to encourage regional planning by providing state matching funds for improvements to regionally significant transportation facilities identified and prioritized by regional partners. TRIP funds are distributed to the FDOT Districts based on a statutory formula of equal parts population and fuel tax collections. Table 5 outlines TRIP requirements in Florida law. MPOs are provided estimates of TRIP funds. TRIP will fund up to 50 percent of eligible project costs.

MPOs may desire to include projects partially funded with TRIP funds in the long range transportation plan. If so, the MPO should identify such projects as "illustrative projects" in its plan along with, at a minimum, the following information:

- Status of regional transportation planning in the affected MPO area, including eligibility for TRIP funding;
- Description of the project and estimated costs;
- Assumptions related to the share and amount of district TRIP funding for the project; and
- Assumptions related to the share and amount of non-State matching funds for the project (federal and/or local) and the likelihood such funding will be available as planned.

MPOs should work with their district office in developing and documenting this information.

Table 5 TRIP Requirements in Florida Law (s. 339.155(4) and s. 339.2819, Florida Statutes)

Projects to be funded with TRIP funds shall, at a minimum:

- 1. Serve national, statewide, or regional functions and function as an integrated regional transportation system;
- 2. Be identified in the capital improvements element of a comprehensive plan that has been determined to be in compliance with Part II of Chapter 163, F. S. after July 1, 2005, and be in compliance with local government comprehensive plan policies relative to corridor management;
- 3. Be consistent with the Strategic Intermodal System Plan; and
- 4. Have a commitment for local, regional, or private financial matching funds as a percentage of the overall project cost.

In allocating TRIP funds, priority will be given to projects that:

- 1. Provide connectivity to the Strategic Intermodal System;
- 2. Support economic development and the movement of goods in rural areas of critical economic concern;
- 3. Are subject to a local ordinance that establishes corridor management techniques, including access management strategies, right-of-way acquisition and protection measures, appropriate land use strategies, zoning, and setback requirements for adjacent land uses; and
- 4. Improve connectivity between military installations and the Strategic Highway Network or the Strategic Rail Corridor Network.

SUN Trail

State law now provides that \$25 million of the annual initial Motor Vehicle License fees are allocated to the Florida Shared-Use Nonmotorized Trail Network (SUN Trail). This statewide network is being constructed by FDOT, and FDOT bears the primary responsibility for planning it. SUN Trail projects from the FDOT Work Program need to be included in MPO's TIPs to advance. As such, these TIP projects would also be required for the LRTP. MPOs may wish to

include proposed, but not programmed, SUN Trail projects among the illustrative projects included in their LRTPs. Finally, MPOs may wish to highlight planned connections with SUN Trail stemming from other Bike/Ped projects, or from projects of any mode.

Non-Capacity Programs

Non-Capacity Programs refer to the FDOT programs designed to support and maintain the state transportation system including safety; resurfacing; bridge; product support; operations and maintenance; and administration. Consistent with the MPOAC Guidelines, FDOT and FHWA agreed the LRTP will meet FHWA expectations if it contains a summary of FDOT estimates to operate and maintain the State Highway System in the FDOT district in which the MPO is located. FDOT provides these estimates in the "Supplement to the 2045 Revenue Forecast Handbook." FDOT also includes statewide funding for these programs in the forecast to meet statewide objectives as laid out in Florida Statute for operating and maintaining the State Highway System.

FDOT provides an "Appendix for the Long Range Metropolitan Plan" to MPOs to include in the documentation of their long range plans. The appendix is intended to provide the public with documentation of the state and federal financial issues related to each MPO plan and to facilitate reconciliation of statewide and metropolitan plans. The appendix will describe how the statewide 2045 Revenue Forecast was developed and identifies the metropolitan area's share of the forecast's capacity programs. In addition, the appendix includes the forecast's statewide estimates for non-capacity programs, which are sufficient for meeting statewide objectives and program needs in all metropolitan and non-metropolitan areas. This appendix should accomplish the goal of ensuring that sufficient funding will be available to operate and maintain the state transportation system in metropolitan areas.

Other Funds

The Department makes certain expenditures that are not included in major programs discussed above. Expenditures include debt service and, where appropriate, reimbursements to local governments. These funds are not available for statewide or metropolitan system plans.

Other Transportation Revenue

Local government revenues such as taxes and fees; federal funds distributed directly to local governments; local or regional tolls play a critical role in providing local and regional transportation services and facilities. The Department does not have access to detailed information on local and regional revenue sources and forecasts of revenues expected from them. Information on many of those sources can be found in *Florida's Transportation Tax Sources: A Primer*³ and the *Local Government Financial Information Handbook*.⁴ The following is guidance to MPOs in the identification and forecasting of current revenue sources, potential new sources and the development of long range estimates.

Current Revenue Sources

Initially, MPOs should identify sources of local and regional revenues that have funded transportation improvements and services in recent years and are expected to continue. The following is a summary of sources potentially available.

Local Government Taxes and Fees

Local government sources include those that are dedicated for transportation purposes. In many areas they are supplemented by general revenues allocated to specific transportation programs (e.g., transit operating assistance may be provided from the general fund). Other sources are available for transportation if enacted by one or more local governments in the metropolitan area. Local government financial staff will have information on recent revenue levels, uses of funds, and trends.

State Imposed Motor Fuel Taxes

Florida law imposes per-gallon taxes on motor fuels and distributes the proceeds to local governments as follows: the Constitutional Fuel Tax (2 cents); the County Fuel Tax (1 cent); and the Municipal Fuel Tax (1 cent). The Constitutional Fuel Tax proceeds are first used to meet the debt service requirements on local bond issues backed by the tax proceeds. The remainder is credited to the counties' transportation trust funds. The County Fuel Tax receipts are distributed directly to counties. Municipal Fuel Tax proceeds are transferred to the Revenue Sharing Trust Fund for Municipalities, combined with other non-transportation revenues, and distributed to municipalities by statutory criteria. The Constitutional Fuel Tax may be used for the acquisition, construction, and maintenance of roads. The County Fuel Tax and Municipal Fuel Tax may be used for any legitimate transportation purpose. Estimated distributions of these sources can be found in the *Local Government Financial Information Handbook*.

³ *Florida's Transportation Tax Sources, A Primer,* is published annually by FDOT at:

http://www.dot.state.fl.us/officeofcomptroller/pdf/GAO/RevManagement/Tax%20Primer.pdf ⁴ *Local Government Financial Information Handbook,* is an annual publication of the Florida Legislature's Office of Economic and Demographic Research at http://edr.state.fl.us/Content/localgovernment/reports/lgfih12.pdf.

Local Option Motor Fuel Taxes

Local governments may levy up to 12 cents of local option fuel taxes pursuant to three types of levies. Recent proceeds from these optional motor fuel taxes for each county are contained in the *Local Government Financial Information Handbook*.

First, a tax of 1 to 6 cents on every gallon of motor and diesel fuel may be imposed by an ordinance adopted by the majority vote of the county commission or by countywide referendum for up to 30 years. However, this tax is imposed on diesel fuel in every county at the rate of 6 cents per gallon. These funds may be used for any legitimate county or municipal transportation purpose (e.g., public transportation operations and maintenance, road construction or reconstruction). In addition, small counties (i.e., less than 50,000 as of April 1, 1992) may use these funds for other infrastructure needs.

Second, a tax of 1 to 5 cents on every gallon of motor fuel sold may be imposed by a majority plus one vote of the county commission or by countywide referendum. These funds may be used for transportation purposes to meet the requirements of the capital improvement element of an adopted comprehensive plan. This includes roadway construction, reconstruction, or resurfacing, but excludes routine maintenance.

Third, a tax of 1 cent (often referred to as the Ninth-Cent Fuel Tax) on every gallon of motor and diesel fuel sold may be imposed. A county can impose the tax on motor fuel by an extraordinary vote of its board of commissioners or by referendum. However, this tax is imposed on all diesel fuel sold in every county. These funds may be used for any legitimate county or municipal transportation purpose (e.g., public transportation operations and maintenance, construction or reconstruction of roads).

Other Transportation-Related Sources

Examples of these sources include public transportation fares and other charges, toll revenues from local or regional expressway and/or bridge authorities, transportation impact fees, and other exactions. The use of, and levels of proceeds from, these sources varies significantly among metropolitan areas.

Property Taxes and Other General Revenue Sources

Most local governments finance some transportation facilities and/or services from their general fund. These revenue sources include property taxes, franchise or business taxes, and local government fees. Sources, funding process, and eligible services vary widely among local governments. Local government financial staff have information on recent revenue levels, uses of funds, trends, and other information needed by MPOs.

Discretionary Sales Surtaxes

A Charter County and Regional Transportation System Surtax of up to 1% may be levied by charter counties, counties that are consolidated with one or more municipalities, and counties within or under an interlocal agreement with a regional transportation or transit authority created under Chapter 343 or Chapter 349, subject to a referendum. These funds may be used for fixed

guideway rapid transit systems, including the cost of a countywide bus system that services the fixed guideway system. Proceeds may also be transferred to an expressway or transportation authority to operate and maintain a bus system, or construct and maintain roads or service the debt on bonds issued for that purpose.

A Local Government Infrastructure Surtax of either 0.5% or 1% may be levied for transportation and other purposes. The governing authority in each county may levy the tax by ordinance, subject to a successful referendum. In lieu of county action, municipalities representing the majority of the county population may adopt resolutions calling for countywide referendum on the issue and it will take effect if the referendum passes. The total levy for the Local Government Infrastructure Surtax and other discretionary surtaxes authorized by state law (for school construction, hospitals and other public purposes) cannot exceed 1%. See section 212.055, Florida Statutes, for more information on these discretionary sales surtaxes.

Federal Revenues

These are revenues from federal sources that are not included in the 2045 Revenue Forecast. Examples include federal assistance for aviation improvements and capital and operation assistance for transit systems. Potential sources distributed directly to local governments or authorities include revenue from the Federal Airport and Airway Trust Fund, the Federal Highway Trust Fund (Mass Transit Account), and the Federal General Fund.

Bond Proceeds

Local governments may choose to finance transportation and other infrastructure improvements with revenue or general obligation bonds. These types of local government bonds are often area wide and/or designed to fund programs (e.g., transportation, stormwater) and/or specific projects. Primarily for this reason, analyses of the potential use of this source should be undertaken separately from analyses of the use of bonds for toll facilities, where toll revenues from specific projects are used for project costs and debt repayment.

Other Current Sources

Other possible sources include private sector contributions or payments, such as proportionate share contributions. Often, these will be sources for specific projects or programs.

New Revenue Sources

Revenues from current sources have not been sufficient to meet transportation capacity, preservation, and operational needs in Florida's metropolitan areas. MPOs should examine the potential for new revenue sources that could be obtained to supplement current sources to meet those needs. This examination of each potential source should include analyses of:

- Authority (how sources are authorized in current state and/or local laws and ordinances);
- Estimates of proceeds through 20xx;
- Reliability of the estimates (e.g., amount, consistency); and
- Likelihood that the source will become available (e.g., the probability that the proceeds will be available to fund improvements, taking into account issues such as previous state

and/or local government legislative decisions, results of previous referenda, and commitments from decision makers).

Optional Sources Authorized by Current State Law

Communities in most metropolitan areas have not taken full advantage of some of the optional and discretionary transportation revenue sources authorized by current state law. These include the Ninth-Cent Fuel Tax, the full 11 cents available from the Local Option Fuel Tax, the Charter County and Regional Transportation System Surtax, and the Local Government Infrastructure Surtax. Where authorized, these sources are subject to either the approval of local governing bodies or referenda.

Innovative Financing Sources

Typically, these are other sources that are used in some local areas in Florida or other states, but are not used in a specific metropolitan area (e.g., toll facilities). Most require state and/or local government legislative authorization before they can be established.

In addition, state and/or federal law has authorized several transportation finance tools that can make additional funds available or accelerate the completion of needed projects. These tools are described in Appendix B, *Leveraging, Cash Flow and Other Transportation Finance Tools*.

Development of Revenue Estimates

MPOs should develop estimates through 2045 for each current or new revenue source. Typically, these will be annual estimates that should be summarized for longer time periods (e.g., 5 years) for plan development purposes. MPOs should consult with financial planning staff from local governments and service providers and consider the following issues.

Historical Data

Information should be obtained related to factors that may affect the revenue estimates, such as recent annual proceeds and growth rates. MPOs should consider forecasting methodologies that include the relationships of revenue growth rates to other factors (e.g., population growth, retail sales), to assist with revenue projections, particularly if little historical data exist or annual proceeds fluctuate significantly (e.g., proceeds from impact fees).

Adjustments for Inflation

Estimates of future revenue sources usually identify the value of money at the time it will be collected, sometimes referred to as *year of expenditure* or *current* dollars, and reflect future growth in revenue and inflation. If this is not the case, see Appendix C for factors used for adjusting revenue forecasts to "year of expenditure" dollars.

Use of Revenues for Maintenance and Operations

About 50 percent of state and federal revenues in the 2045 Revenue Forecast is planned for non-capacity state programs. The emphasis on non-capacity activities funded with local and regional

revenue sources may vary widely among metropolitan areas, but it is important to ensure that sufficient local funds are planned for maintenance and operations activities. Those revenues needed for non-capacity programs should not be considered to be available to fund capacity improvements.

Constraints on the Use of Revenues

MPOs should identify any constraints or restrictions that may apply to a revenue source for its use to fund multimodal transportation improvements. For example, federal and local transit operating assistance may be limited to transit services and cannot be used to fund highway improvements. Other constraints include any time limitations on the funding source, such as the limitations on levies of discretionary sales surtaxes.

Developing a Cost Feasible Plan

Each MPO has established a process for updating its cost feasible plan for its metropolitan transportation system. These processes include public involvement programs tailored to the metropolitan area; schedules for identifying needs, and resources; testing of alternative system networks; and adoption. The Department, particularly through its district planning staff, is an active partner in assisting each MPO in plan development. This section, recognizing the diversity of structure in each MPO, provides general guidance and recommendations to MPOs in updating their cost feasible plans. The guidance should be tailored to the plan development process including establishing local priorities identified in each metropolitan area.

Project Identification

The long range plan will define the transportation system that best meets the needs of the metropolitan area and furthers metropolitan and state goals. The system plan will be comprised of transportation projects and/or programs that are expected to be implemented by 20xx, consistent with the MPOAC *Financial Guidelines for MPO 2045 Long Range Plans*. Projects and programs for at least the years 2027-2045 will be identified in TIPs and FDOT Adopted Work Programs⁵.

The following discusses projects or programs that should be identified for the years 2027-2045. They should be considered as candidates for inclusion in the adopted long range system plan, subject to each MPO's plan development process, including the reconciliation of all project and program costs with revenue estimates. MPOs are encouraged to clearly identify *regionally significant* projects, regardless of mode, ownership, or funding source(s).⁶

Statewide Capacity Programs

The Department is taking the lead in identifying planned projects and programs funded by these major programs: SIS Highways Construction & ROW, Aviation, Rail, and Intermodal Access. SIS Highways Construction & ROW projects planned within metropolitan areas were provided at the same time as the 2040 Revenue Forecast. These estimates are for planning purposes and do not represent a commitment of FDOT funding.

MPOs are encouraged to review those projects with district staff, identify any projects or areas that require further discussion, and reach agreement with district staff on how those projects will be incorporated in the update of the metropolitan cost feasible plan.

Issues that may require further discussion include candidate projects not included in the SIS Highways Cost Feasible Plan. These may include projects or major project phases that could not be funded by the estimates for the SIS Highways Construction & Right-of-Way program. Information to be discussed should include: project descriptions and cost estimates, funding

⁵ Several Florida MPOs are not scheduled to update LRTPs until 2020 and beyond. MPOs are encouraged to use the latest information available in the TIP or FDOT Adopted Work Program for any years after FY 2023 that may be available.

⁶ See "Federal Strategies for Implementing Requirements for LRTP Update for the Florida MPOs," for a description of regionally significant projects.

sources (e.g., Non-SIS Highways Construction & Right-of-Way funds; local, authority or private sector sources), and relationship to other planned improvements.

Other Capacity Programs

The MPOs will lead in identifying projects or programs that could be funded, or partially funded, by the state with (1) Non-SIS Highways Construction & Right-of-Way and (2) Transit programs. Estimates of those funds have been provided to MPOs. Each MPO should consider the mix of highway and transit projects and programs that best serves its metropolitan area, and that the funding estimates for these two programs are "flexible" for the years 2027-2045. MPOs are encouraged to work with district staff as candidate projects are identified and reach agreement on how they will be incorporated in the update of the metropolitan cost feasible plan. The following should be considered:

- <u>Project Descriptions and Cost Estimates</u> MPOs should work with district staff, local governments, authorities and service providers, and private sector interests to develop project descriptions and cost estimates in sufficient detail for their planning process. Projects may include improvements to the State Highway System, transit system improvements, and components of Transportation System Management (TSM) and Transportation Demand Management (TDM) programs such as intersection improvements, traffic signal systems, ridesharing programs, and ITS projects.
- <u>Costs of Major Phases</u> At a minimum, MPOs should identify construction, right-of-way, and Preliminary Engineering (PD&E and Design phases) costs separately. These estimates will be needed because (1) the Non-SIS Highways program estimates include state funding for construction plus right-of-way, and (2) sufficient funds have been estimated to provide planning and engineering (i.e., Product Support as defined in Appendix A) for all state capacity programs. Specific estimates for right-of-way costs should be used for any project where such estimates exist. For other projects, the Department will provide information on the relationship of construction and right-of-way costs to assist with these calculations (see Appendix C for more information).
- <u>Potential Supplemental Funding</u> MPOs should identify potential revenue sources that could be used to supplement the estimates from the Non-SIS Highways and Transit programs to fund, or partially fund, these projects. This includes federal funds that are not part of the Department's revenue forecast, or revenues from local and private sector sources.

Other Projects and Programs

Revenue and project information provided by the Department is intended for those activities that are funded through the state transportation program. Other transportation improvement activities in metropolitan areas may include improvements to local government roads, transit programs that are financed by local revenues and funds, and projects and programs for modes that are not funded by the state program. It is recommended that the following types of information should be developed for these candidate projects and programs: (1) project descriptions and cost estimates, (2) costs of major phases, and (3) funding sources.

Development of a Cost Feasible Multimodal Plan

Development of a *cost feasible multimodal system plan* requires a balancing of high-priority improvements with estimates for expected revenue sources, subject to constraints regarding how certain funding estimates can be used. The Department has provided some flexibility for one-third of the state and federal funds estimated for capacity improvements between 2027 and 2045. Due to program constraints included in the 2045 Revenue Forecast and other sources (e.g., federal transit operating assistance), the following discussion of major system plan elements is organized by transportation mode.

<u>Highways</u>

The highway element of the multimodal system plan will be comprised of current or proposed facilities that are SIS highways, the remainder of the State Highway System, and appropriate local roads. These three components must be examined separately because of the constraints related to the use of revenue estimates for various programs. MPOs may choose to include "illustrative projects" in their plan, partially funded with Transportation Regional Incentive Program (TRIP) funds. See the guidance under *Documentary Stamps Tax Funds* in the Metropolitan Area Estimates section of this handbook for more information.

• SIS Highways

The MPO should identify planned improvements and funding for corridors on the SIS, consistent with the 2045 SIS Highways Cost Feasible Plan and any adjustments agreed upon by the Department. Such adjustments could result from agreements to supplement SIS funds to either accelerate or add improvements to SIS Highways.

• Other Roads

The MPO should identify planned improvements and funding for corridors that are not on the SIS. Potential funding sources include the "flexible" funds from the state Non-SIS Highways Construction & ROW and Transit programs, and funds from local or private sector sources that have been identified as reasonably available.

• Local Highways and Streets

The MPO should identify planned improvements and funding for local road facilities that should be included in the long range plan. The Department has provided estimates of offsystem funds in the statewide forecast that can be used for these improvements, provided they meet federal eligibility requirements. Off-system funds estimated by the Department may be used anywhere except for roads that are functionally classified as local or rural minor collectors, unless such roads were on a federal-aid system as of January 1, 1991. Other funds should include local or private sector sources that have been identified as reasonably available. Operational Improvements Programs

MPOs should identify program descriptions and funding levels for transportation system management programs such as intersection improvements, traffic signal systems, and ITS projects. Transportation demand management program descriptions and funding levels can be identified in the highway element, in the transit element, or separately. Generally, such programs should be funded with revenues estimated for the State Non-SIS Highways Construction & ROW and Transit programs or local revenue sources.

<u>Transit</u>

MPOs should identify transit projects and programs and funding for local or regional bus systems and related public transportation programs in the transit element in cooperation with transit providers. Demand management programs, including ridesharing, bicycle and pedestrian projects can be included, or can be identified separately. Potential funding sources include the "flexible" funds from the state Non-SIS Highways Construction & ROW and Transit programs, federal and local transit operating assistance, and other funds from local or private sector sources that have been identified as reasonably available. MPOs may choose to include "illustrative projects" in their plan, partially funded with New Starts Program funds. See the guidance under *Documentary Stamps Tax Funds* in the Metropolitan Area Estimates section of this handbook for more information.

Balancing Planning Improvements and Revenue Estimates

It is expected that each MPO will test several alternative plans leading toward adoption of a cost feasible multimodal plan for the metropolitan transportation system (see Figure 3 below). The system alternatives should examine different ways to meet state and metropolitan goals and objectives through priority setting, and should be analyzed within the context of the metropolitan area's public involvement program. They may contain alternative mixes of the candidate projects discussed above, alternative schedules for implementation, and alternative improvements for specific projects. Throughout this process, MPOs should reconcile project costs with revenue estimates, taking into consideration the revenues estimated for transportation improvements and any flexibility or constraints associated with the estimates.

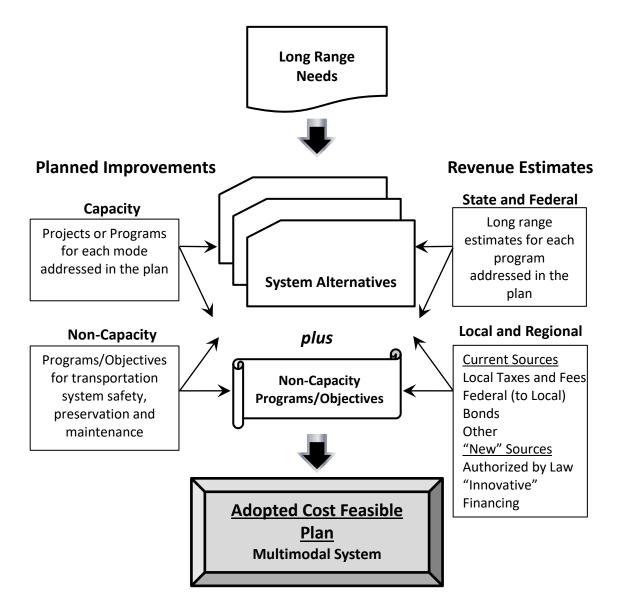
State and federal estimates for 20xx-20xx are prepared in five-year time periods to assist MPOs with the testing and staging of alternatives. For planning purposes, some flexibility should be allowed for estimates for these time periods. For example, the total cost of planned projects for the period 20xx-20xx for funding with the flexible Non-SIS Highways and Transit estimates should be within 10 percent of the funds estimated for that period. It is strongly recommended, however, that the total cost of planned projects for the entire 2027-2045 period not exceed revenue estimates for the entire period for each element or component of the plan.

As part of LRTP documentation, MPOs should identify all projects planned to be implemented with federal funds within the first 10 years of the plan.

Figure 3 Cost Feasible Plan Project and Financial Planning

Metropolitan Long Range Transportation Plan Development

System Plan Development



Appendix A: State Transportation Programs and Funding Eligibility

This appendix defines the major program categories used in the 2045 Revenue Forecast and provides guidelines for what types of planned projects and programs are eligible for funding with revenues estimated in the forecast. Metropolitan plan updates that incorporate the information from this revenue forecast should be consistent with these guidelines.

State Transportation Programs

The 2045 Revenue Forecast includes all state transportation activities funded by state and federal revenues. The basis for the forecast is the framework of the Program and Resource Plan (PRP), the Department's financial planning document for the 10-year period that includes the Work Program. The PRP addresses over 60 programs or subprograms. The chart at the end of this Appendix lists programs and major subprograms and how they have been combined for the revenue forecast.

Major Program Categories

Revenue estimates for all state programs were combined into the categories shown in Table 6. The funding eligibility information is organized according to these categories and the responsibilities for project identification for each program. Each of the major programs falls under one of the following PRP groups of programs:

- <u>Product</u> Activities which build the transportation infrastructure.
- <u>Product Support</u> Planning and engineering required to produce the products.
- <u>Operations & Maintenance</u> Activities which support and maintain transportation infrastructure after it is constructed and in place.
- <u>Administration</u> Activities required to administer the entire state transportation program.

Table 6 Major Program Categories

Program and Resource Plan	Major Programs		
	Capacity	Non-capacity	
Product	SIS Highways Construction & ROW Non-SIS Highways Construction & ROW Aviation Transit Rail Intermodal Access Seaport Development	Safety Resurfacing Bridge	
Product Support		Product Support Preliminary Engineering	
Operations & Maintenance		Operations & Maintenance	
Administration		Administration	

Planning for Major Programs

MPO long range plans will contain project and financial information for a wide range of transportation improvements expected through 2045. The Department and MPOs share the responsibility for identifying these improvements and the expected funding for each. The information in this document is limited to projects and programs funded with state and federal revenues that typically are contained in the state Five Year Work Program. MPOs must also consider projects and programs in their long range plans that may be funded with other sources available within the metropolitan area. These include local government taxes and fees, private sector sources, local/regional tolls, and other sources each MPO may identify. Responsibilities, and the general level of detail required for long range plans, include:

- <u>Capacity Programs</u> to the extent possible, project descriptions and costs will be developed for each transportation mode, consistent with estimated revenues, as follows:
 - SIS Highways, Aviation, Rail, Seaport Development and Intermodal Access the Department leads in project identification in each metropolitan area.
 - Note: The Department continues to work with modal partners to identify aviation, rail, seaport, and intermodal access projects beyond the years in the Work Program. However, FDOT and its partners have not been able to identify cost feasible projects beyond the Work Program sufficiently to include them in the SIS Cost Feasible Plan and, therefore, in MPO cost feasible plans.
 - Non-SIS Highways and Transit each MPO leads in project identification within its metropolitan area.
- <u>Non-Capacity Programs</u> the Department estimates sufficient revenues to meet statewide safety, preservation and support objectives through 2045, including in each metropolitan area. It is not necessary to identify projects for these programs, so estimates for these

activities have not been developed for metropolitan areas. The Department will prepare separate documentation to address these programs and estimated funding and provide it to MPOs for inclusion in the documentation of their long range plans.

Funding Eligibility for Major Programs

The SIS Cost Feasible Plan, Multimodal Unfunded Needs Plan and metropolitan LRTPs consider many types of transportation improvements to meet long range needs, constrained by the funding expected to be available during the planning period. The following are explanations of the types of projects, programs and activities that are eligible for state and/or federal funding in each of the major categories contained in the 2045 Revenue Forecast.

Statewide Capacity Programs

The Department leads in the identification of planned projects and programs that are associated with the Strategic Intermodal System (SIS) and provides detailed information to MPOs. As a result, metropolitan plans and programs that include state and federal funds for these major programs should be coordinated and consistent with state long range plans and programs. Each is discussed below.

SIS Highways Construction & Right-of-Way

The Strategic Intermodal System (SIS) and the Emerging SIS, includes over 4,300 miles of Interstate, Turnpike, other expressways and major arterial highways and connectors between those highways and SIS hubs (airports, seaports, etc.). The SIS is the state's highest priority for transportation capacity investments.

Metropolitan plans and programs for SIS Highways should be consistent with the 2045 SIS Highway Cost Feasible Plan, as provided to each MPO. Projects associated with aviation, rail, seaport development and intermodal access may be funded under this program, provided that they are included in the SIS Highway Cost Feasible Plan. Capacity improvement projects eligible for funding in the current plan include:

- Construction of additional lanes;
- The capacity improvement component of interchange modifications;
- New interchanges;
- Exclusive lanes for through traffic, public transportation vehicles, and other high occupancy vehicles;
- Bridge replacement with increased capacity;
- Other construction to improve traffic flow, such as intelligent transportation systems (ITS), incident management systems, and vehicle control and surveillance systems;
- The preferred alternative defined by an approved multi-modal interstate master plan;
- Weigh-in-motion stations;
- Acquisition of land which is acquired to support the SIS highway and bridge construction programs, and land acquired in advance of construction to avoid escalating land costs and prepare for long-range development; and
- New weigh stations and rest areas on the interstate.

The following activities are not eligible for funding from the SIS Highways Construction & Rightof-Way program estimates: planning and engineering in SIS corridors (see Product Support below), highway/road construction and right-of-way acquisition not listed above, and support activities to acquire right-of-way (see Product Support below).

<u>Aviation</u>

The state provides financial and technical assistance to Florida's airports. FDOT's Work Program Instructions provide information regarding additional funding eligibility and state matching funds requirements. Projects and programs eligible for funding include:

- Assistance with planning, designing, constructing, and maintaining public use aviation facilities;
- Assistance with land acquisition;
- "Discretionary" assistance for capacity improvement projects at certain airports. In 2017 those meeting the eligibility criteria are Miami, Orlando, Ft. Lauderdale/Hollywood, Tampa, Southwest Florida, and Orlando Sanford international airports.

The following activities are not eligible for funding from the Aviation program estimates: planning and engineering to support state programs (see Product Support below), financial and technical assistance for private airports, and "discretionary" capacity improvements at airports other than those listed above.

<u>Rail</u>

The state provides funding for acquisition of rail corridors and assistance in developing intercity passenger and commuter rail service, fixed guideway system development, rehabilitation of rail facilities and high speed transportation. FDOT's Work Program Instructions provide information regarding additional funding eligibility and state matching funds requirements. Projects and programs eligible for funding include:

- Financial and technical assistance for intermodal projects;
- Rail safety inspections;
- Regulation of railroad operations and rail/highway crossings;
- Identification of abandoned rail corridors;
- Recommendations regarding acquisition and rehabilitation of rail facilities; and
- Assistance for developing intercity rail passenger service or commuter rail service.

The following activities are not eligible for funding from the Rail program estimates: planning and engineering to support state programs (see Product Support below), financial and technical assistance for rail projects and programs not specified above.

Intermodal Access

The state provides assistance in improving access to intermodal facilities and the acquiring of associated rights of way. FDOT's Work Program Instructions provide information regarding additional funding eligibility and state matching funds requirements. Projects and programs eligible for funding include:

- Improved access to intermodal or multimodal transportation facilities;
- Construction of multimodal terminals;
- Rail access to airports and seaports;
- Interchanges and highways which provide access to airports, seaports and other multimodal facilities; and
- Projects support of certain intermodal logistics centers-

The following activities are not eligible for funding from the Intermodal Access program estimates: planning and engineering to support state programs (see Product Support below), and programs not specified above.

Seaport Development

The state provides assistance with funding for the development of public deep water ports. This includes support of bonds issued by the Florida Ports Financing Commission that finances eligible capital improvements. FDOT's Work Program Instructions provide information regarding additional funding eligibility and state matching funds requirements. Projects and programs eligible for funding and state matching funds requirements vary among several programs.

The following activities are not eligible for funding from the Seaport Development program estimates: planning and engineering to support state programs (see Product Support below), programs not specified above, and financial and technical assistance at other ports.

Other Capacity Programs

MPOs will lead in the identification of planned projects and programs for the (1) Non-SIS Highways Construction & ROW and (2) Transit programs. For 20xx-20xx, MPOs should identify projects as contained in the Work Program. For all years after 20xx, MPOs should plan for the mix of highway and transit programs that best meets the needs of their metropolitan area. As a result, MPOs may identify either highway or transit improvement programs and projects, consistent with the <u>total</u> amount of the two major programs, and consistent with the following eligibility criteria.

Non-SIS Highways Construction & Right of Way

The primary purpose of this program is to fund improvements on the part of the State Highway System (SHS) that is not designated as SIS. The approximately 8,000 miles of such highways represent about 64% of the SHS. Projects and programs eligible for funding include:

- Construction and improvement projects on state roadways which are not on the Strategic Intermodal System (SIS), including projects that:
 - Add capacity;
 - Improve highway geometry;
 - Provide grade separations; and
 - Improve turning movements through signalization improvements and storage capacity within turn lanes.

- Acquisition of land which is acquired to support the SHS highway and bridge construction programs, and land acquired in advance of construction to avoid escalating land costs and prepare for long-range development;
- Construction and traffic operations improvements on certain local government roads that add capacity, reconstruct existing facilities, improve highway geometrics (e.g., curvature), provide grade separations, and improve turning movements through signalization improvements and adding storage capacity within turn lanes; and
- Acquisition of land necessary to support the construction program for certain local government roads, as discussed immediately above.

The Department provides separate estimates of funds from this program that may be used on local government roads that meet federal eligibility criteria (i.e., off-system). By law, state funds cannot be used on local government roads except to match federal aid, for locally owned SIS Connectors, and under certain subprograms subject to annual legislative appropriations. Long range plans should not assume that state funds will be appropriated for local government road improvements.

Use of these funds for road projects not on the SHS will effectively reduce the amount of funds planned for the SHS and public transportation in the metropolitan area, the District and the state.

The following activities are not eligible for funding from the Non-SIS Highways Construction & Right-of-Way program estimates: planning and engineering in SHS corridors (see Product Support below), highway/road construction and right-of-way acquisition not listed above, support activities to acquire right-of-way (see Product Support below), land acquisition for airports (see Aviation above), and land acquisition for railroad corridors (see Rail above).

<u>Transit</u>

The state provides technical and operating/capital assistance to transit, paratransit, and ridesharing systems. Projects and programs eligible for funding include:

- Capital and operating assistance to public transit systems and Community Transportation Coordinators, through the Public Transit Block Grant Program Note: For this program, state participation is limited to 50% of the non-federal share of capital costs and up to 50% of eligible operating costs. The block grant can also be used for transit service development and corridor projects. An individual block grant recipient's allocation may be supplemented by the State if (1) requested by the MPO, (2) concurred in by the Department, and (3) funds are available. The Transportation Disadvantaged Commission is allocated 15% of Block Grant Program funds for distribution to Community Transportation Coordinators;
- Service Development projects, which are demonstration projects that can receive initial funding from the state Note: For these projects, Up to 50% of the net project cost can be provided by the state. Up to 100% can be provided for projects of statewide significance (requires FDOT concurrence). Costs eligible for funding include operating and maintenance costs (limited to no more than three years) and marketing and technology projects (limited to no more than two years);

- Transit corridor projects that are shown to be the most cost effective method of relieving congesting and improving congestion in the corridor;
- Commuter assistance programs that encourage transportation demand management strategies, ridesharing and public/private partnerships to provide services and systems designed to increase vehicle occupancy;
- Assistance with acquisition, construction, promotion and monitoring of park-and-ride lots; and
- Assistance to fixed-guideway rail transit systems or extensions, or bus rapid transit systems operating primarily on dedicated transit right-of-way under the New Starts Transit Program.

The following activities are not eligible for funding from the Transit program estimates: planning and engineering to support state programs (see Product Support below), and federally funded financial and technical assistance for transit plans and programs for those funds that are not typically included in the state Five Year Work Program (e.g., federal funds for operating assistance).

Non-Capacity Programs

Statewide estimates for all state non-capacity programs are an integral part of the 2045 Revenue Forecast to ensure that statewide system preservation, maintenance, and support objectives will be met through 2045. These objectives will be met in each metropolitan area, so it was not necessary to develop metropolitan estimates for these programs. Neither the Department nor the MPOs needs to identify projects for these programs. However, pursuant to an agreement between FDOT and the Federal Highway Administration Division Office, FDOT has provided districtlevel estimates of "Operations and Maintenance" costs on the State Highway System to MPOs for inclusion in the documentation of their long range transportation plans. The Operations and Maintenance estimates are the total estimates for the State Resurfacing, Bridge, and Operations & Maintenance programs.

The forecast for these programs and related information will be provided to each MPO in an Appendix for inclusion in the documentation of their long range plan. The following information on project eligibility for these programs is provided for informational purposes only.

<u>Safety</u>

Safety issues touch every area of the state transportation program. Specific safety improvement projects and programs in this major program address mitigation of safety hazards that are not included in projects funded in other major programs. Projects and programs eligible for funding include:

- Highway safety improvements at locations that have exhibited a history of high crash frequencies or have been identified as having significant roadside hazards;
- Grants to state and local agencies for traffic safety programs with the intent of achieving lower levels and severity of traffic crashes; and
- Promotion of bicycle and pedestrian safety and vulnerable road users, including programs for public awareness, education and training.

The following activities are not eligible for funding from the Safety program estimates: planning and engineering to support state programs (see Product Support below), safety improvements funded as a part of other major state programs (e.g., SIS construction), financial and technical assistance for safety programs not specified above.

Resurfacing

The state periodically resurfaces all pavements on the State Highway System (SHS) to preserve the public's investment in highways and to maintain smooth and safe pavement surfaces. Projects and programs eligible for funding include:

- Periodic resurfacing of the Interstate, Turnpike and other components of the SHS;
- Resurfacing or reconstructing of county roads in counties eligible to participate in the Small County Road Assistance Program; and
- Periodic resurfacing of other public roads, consistent with federal funding criteria and Department and MPO programming priorities.

The following activities are not eligible for funding from the Resurfacing program estimates: planning and engineering to support state programs (see Product Support below), resurfacing that is funded by other major state programs as a part of major projects that add capacity (e.g., SIS and Non-SIS Highways construction), thin pavement overlays which eliminate slippery pavements (funded by the Safety Program), and resurfacing of other roads not specified above. Other than the Small County Road Assistance Program, funds for resurfacing on off-system projects are not included in the forecast. Any planned off-system resurfacing projects must be funded from the off-system share of the Non-SIS Highways Construction & Right-of-Way estimates.

<u>Bridge</u>

The state repairs and replaces deficient bridges on the SHS, or on other public roads as defined by state and federal criteria. Projects and programs eligible for funding include:

- Repairs of bridges and preventative maintenance activities on bridges on the SHS;
- Replacement of *structurally deficient* bridges on the SHS (Note: The state Bridge Replacement Program places primary emphasis on the replacement of structurally deficient or weight restricted bridges. Planned capacity improvements for bridges that are to be widened or replaced to address highway capacity issues must be funded from the Non-SIS Highways or SIS Highways Construction & Right-of-Way major programs);
- Replacement of bridges which require structural repair but are more cost effective to replace;
- Construction of new bridges on the SHS;
- Replacement of *structurally deficient* bridges <u>off</u> the SHS but <u>on</u> the federal-aid highway system, subject to state and federal policies and eligibility criteria; and
- Replacement of *structurally deficient* bridges <u>off</u> the federal-aid highway system, subject to state and federal policies and eligibility criteria.

The following activities are not eligible for funding from the Bridge program estimates: planning and engineering to support state programs (see Product Support below), and repairs to or replacements of bridges on roads not specified above.

Product Support

Planning and engineering activities are required to produce the products and services described in the major programs discussed above. These are functions performed by Department staff and professional consultants. Costs include salaries and benefits; professional fees; and administrative costs such as utilities, telephone, travel, supplies, other capital outlay, and data processing. Functions eligible for funding include:

- Preliminary engineering (related to environmental, location, engineering and design);
- Construction engineering inspection for highway and bridge construction;
- Right of way support necessary to acquire and manage right-of-way land for the construction of transportation projects;
- Environmental mitigation of impacts of transportation projects on wetlands;
- Materials testing and research; and
- Planning and Public Transportation Operations support activities.

Estimates for the Product Support program are directly related to the estimates of the product categories of the 2045 Revenue Forecast. That is, these levels of Product Support are adequate to produce the estimated levels of the following major programs: SIS Highways Construction and Right-of-Way, Non-SIS Highways Construction & Right-of-Way, Aviation, Transit, Rail, Intermodal Access, Seaport Development, Safety, Resurfacing, and Bridge. As a result, the components of metropolitan plans and programs that are based on state and federal funds should be consistent with the total of the above product categories to ensure that sufficient Product Support funding is available from state and federal sources through 2045. MPOs are encouraged to include estimates for PD&E and Design phases in the LRTP, particularly for projects that cannot be fully funded by 2045 as described earlier in this guidebook.

The following activities are not eligible for funding from the Product Support program estimates: planning and engineering to support plans or programs that are not eligible for funding from the Product programs, and local and regional planning and engineering activities not typically included in the state Five Year Work Program.

Operations & Maintenance

Operations and maintenance activities support and maintain the transportation infrastructure once it is constructed. Scheduled major repairs or replacements such as resurfacing, bridge replacement or traffic operations improvements are parts of the Resurfacing, Bridge, and Non-SIS Highways Highway programs, respectively. Functions eligible for funding include:

- Routine maintenance of the SHS travel lanes; roadside maintenance; inspections of state and local bridges; and operation of state moveable bridges and tunnels;
- Traffic engineering analyses, training and monitoring that focus on solutions to traffic problems that do not require major structural alterations of existing or planned roadways;

- Administration of and toll collections on bonded road projects such as toll expressways, bridges, ferries, and the Turnpike; and
- Enforcement of laws and Department rules which regulate the weight, size, safety, and registration requirements of commercial vehicles operating on the highway system.

The following activities are not eligible for funding from the Operations and Maintenance program estimates: operations and maintenance activities on elements of the transportation system not specified above.

Administration

Administration includes the staff, equipment, and materials required to perform the fiscal, budget, personnel, executive direction, document reproduction, and contract functions of carrying out the state transportation program. It also includes the purchase of and improvements to non-highway fixed assets. Eligible functions and programs are:

- Resources necessary to manage the Department in the attainment of goals and objectives;
- Acquisition of resources for production, operation and planning units including personnel resources; external production resources (consultants); financial resources; and materials, equipment, and supplies;
- Services related to eminent domain, construction letting and contracts, reprographics, and mail service;
- Costs for the Secretary, Assistant Secretaries, and immediate staffs; for the Florida Transportation Commission and staff; and for the Transportation Disadvantaged Commission; and
- Acquisition, construction and improvements of non-highway fixed assets such as offices, maintenance yards, and construction field offices.

The following activities are not eligible for funding from the Administration program estimates: administrative activities not specified above.

Table 7 Program Categories for the 2045 Revenue Forecast and Program & ResourcePlan

2045 REVENUE	PROGRAM & RESOURCE PLAN		
FORECAST PROGRAMS	PROGRAMS	SUBPROGRAMS	
<u>CAPACITY</u>	I. PRODUCT		
SIS Highways Construction & Right-of-Way	SIS Highway Construction SIS Right of Way	 Interstate Construction Turnpike Construction Other SIS Construction SIS Traffic Operations SIS Advance Corridor Acquisition 	
Other Roads Construction & Right-of-Way	Other Roads Construction	 Other Traffic Operations Construction County Transportation Programs Economic Development 	
	Other Roads Right of Way	 Other Roads Other Roads Advance Corridor Acquisition Other Advance Corridor Acquisition 	
	Aviation	 Airport Improvement Land Acquisition Planning Discretionary Capacity Improvements 	
 Public Transportation Aviation Transit Rail Intermodal Access Seaport Development 	Transit	 Transit Systems Transportation Disadvantaged - Department Transportation Disadvantaged - Commission Other Block Grants New Starts Transit 	
	Rail	 High Speed Rail Passenger Service Rail/Highway Crossings Rail Capital Improvements/Rehabilitation 	
	Intermodal Access	None	
	Seaport Development	None	
	SUN Trail	None	

NON-CAPACITY	PROGRAMS	SUBPROGRAMS		
	Safety	1. Highway Safety		
Safety		2. Rail/Highway Crossings (discontinued)		
		3. Grants		
	Resurfacing	1. Interstate		
Resurfacing		2. Arterial & Freeway		
Resurracing		3. Off-System		
		4. Turnpike		
	Bridge	1. Repair - On System		
Bridge		2. Replace - On System		
Bridge		3. Local Bridge Replacement		
		4. Turnpike		
	II. PRODUCT SUPPORT	II. PRODUCT SUPPORT		
		A. Preliminary Engineering (all)		
		B. Construction Engineering Inspection (all)		
Product Support		C. Right-of-Way Support (all)		
		D. Environmental Mitigation		
		E. Materials & Research (all)		
		F. Planning & Environment (all)		
		G. Public Transportation Operations		
	III. OPERATIONS & MAINTEN	III. OPERATIONS & MAINTENANCE		
Onemations 8		A. Operations & Maintenance (all)		
Operations & Maintenance		B. Traffic Engineering & Operations (all)		
		C. Toll Operations (all)		
		D. Motor Carrier Compliance		
	IV. ADMINISTRATION			
Administration		A. Administration (all)		
		B. Fixed Capital Outlay (all)		
		C. Office Information Systems		

Notes:

• (all) refers to all levels of subprogram detail below the one shown in this table.

• Program and Resource Plan category "V. OTHER" is related to the "TOTAL BUDGET" and was included in the 2040 Revenue Forecast as "Other" (i.e., not as a "Program").

Appendix B: Leveraging, Cash Flow, and Other Transportation Finance Tools

Metropolitan areas are encouraged to consider innovative or non-traditional sources of funding and financing techniques in their long range plans. These may include optional revenue sources such as local option motor fuel taxes or local option sales taxes that are not currently in place, toll facilities, public/private partnerships, and debt financing. It should be noted that debt financing, borrowing implementation funds to be paid back from future revenues, should be analyzed carefully before deciding to use it to fund projects. There are tradeoffs between building a project earlier than would otherwise be the case and increased costs from interest and other expenses required to finance projects this way.

Several such sources or techniques are available because of state and federal laws. Concurrence of the Department, and in some cases the federal government, is required before projects or programs can be funded through these sources. As a result, each MPO should coordinate with the Department before including these sources and techniques in its long range plan.

The following is general guidance for specific sources. More detailed guidance can be obtained from FDOT staff. Guidance on planning for future toll facility projects concludes this appendix.

Federal/State Transportation Finance Tools

Federal law allows several methods of transportation finance that provide opportunities to leverage federal transportation funds. Most of the tools can be applied in more than one state program. The tools are not identified separately in the Program and Resource Plan, but the Department has established processes and criteria for their use. MPOs should work closely with FDOT before including these and other federal financing tools as part of their long range financial planning.

State Infrastructure Bank (SIB)

The SIB was originally established by the National Highway System Act of 1995 to encourage state and local governments to identify and develop innovative financing mechanisms that will more effectively use federal financial resources.

Florida has two separate SIB accounts: the federal-funded SIB account (capitalized by federal money and matched with appropriate state funds as required by law); and the state-funded SIB (capitalized with state funds and bond proceeds). The SIB can provide loans and other assistance to public and private entities carrying out or proposing to carry out projects eligible for assistance under state and federal law. Highway and transit projects are eligible for SIB participation. See FDOT Work Program Instructions for more details.

SIB applications are accepted during the published advertisement period via the FDOT online application process (See <u>http://www.dot.state.fl.us/officeofcomptroller/PFO/sib.shtm</u>).

Advance Construction (AC)

States can initially use state funds to construct projects that may eventually be reimbursed with federal funds. These are state funds used to finance projects in anticipation of future federal apportionments. Subsequently, authorized by <u>Title 23 U.S.C. 120(j)(1)</u>, the state can obligate federal-aid funds to reimburse the federal share of those projects (i.e., the share that was initially funded with state dollars). This is a way to construct federal-aid projects sooner than if Florida had to wait for future federal funding obligations before construction could begin. Florida has used this financing tool for many years to advance the construction of needed projects. AC has a greater impact on the timing of project construction than on the amount of federal funds.

Flexible Match

Federal law allows private funds, materials or assets (e.g., right of way) donated to a specific federal-aid project to be applied to the state's matching share. The donated or acquired item must qualify as a participating cost meeting eligibility standards and be within the project's scope. Such private donations will effectively replace state funds that would have been used to match the federal aid, freeing up the state funds for use on other projects.

Toll Credits (Soft Match)

Federal law permits the use of certain toll revenue expenditures as a credit toward the non-federal share of transportation projects, as authorized by <u>Title 23 U.S.C. 120</u>. For example, the Turnpike is paid for with tolls, but it is eligible for federal aid. A toll credit is a credit from the federal government for the unused federal matching funds that could have been requested for Turnpike construction. This credit can be used instead of state or local funds to meet federal match requirements for other transportation projects, including transit.

Such credits free up state or local funds for other uses, that otherwise would have been used to match federal aid. Toll credits can only be used for transportation capital investments (e.g., highway construction, buses).

Transportation Infrastructure Finance and Innovation Act (TIFIA)

Federal law authorizes the United States Department of Transportation (USDOT) to provide three forms of credit assistance for surface transportation projects of national or regional significance: secured (direct) loans, loan guarantees, and standby lines of credit. USDOT awards assistance on a competitive basis to project sponsors (e.g., state department of transportation, transit operators, special authorities, local governments, private consortia). Various highway, transit, rail, and intermodal projects may receive credit assistance under <u>TIFIA</u>.

State Transportation Finance Tools

Florida law establishes several programs that allow the state, local governments and transportation authorities to cooperatively fund transportation projects sooner than would be the case under traditional state programs. In addition, state funds can be used to assist local

governments and transportation authorities with pre-construction activities on potential toll facilities, and to assist with state economic development.

Local Fund Reimbursement

Local Fund Reimbursement (LFR) are local funds used to advance a project in the adopted work program. Local entities provide the funding for specific projects in advance and will be reimbursed in the future. The reimbursement will come in the year the project was initially funded in the adopted Work Program. Local governments can contribute cash, goods and/or services to the Department to initiate projects sooner than scheduled in the Work Program.

Section 339.12, F.S., authorizes the local government reimbursement program. It allows projects in the adopted Five Year Work Program to be advanced, subject to a statewide \$250 million cap on commitments. There are statutory exceptions to the \$250 million cap as described in the above referenced statute.

Economic Development Program

The Non-SIS Highways Construction & ROW Program contains an Economic Development subprogram. It is administered by FDOT, in cooperation with the Department of Economic Opportunity. The Program may provide funds for access roads and highway improvements for new and existing businesses and manufacturing enterprises that meet certain criteria.

For the purposes of MPO plan updates, it has been assumed that the metropolitan area's statutory share of these funds will be available for transportation improvements and is a part of the funds in the estimate of Non-SIS Highways Construction & Right of Way provided to the MPO. MPOs should not consider the Economic Development sub-program as a revenue source separate from, or in addition to, the estimates provided by the Department for the 2045 Revenue Forecast.

Future Toll Facility Projects in Metropolitan Long Range Transportation Plans

FDOT, primarily through the Turnpike Enterprise, and local expressway authorities are currently engaged in studies of the feasibility of new toll facilities or extensions of existing facilities. If a MPO desires to include future toll facility projects in its long range plan beyond those currently included in the FDOT SIS Cost Feasible Plan (CFP), the MPO should coordinate with Turnpike Enterprise and possibly local authority staff to determine if these facilities should be included in the plan (possibly as *illustrative* projects). Issues to be considered include:

- Local/regional support of elected officials and the public for the project;
- Environmental, socio-economic and related impacts of the project;
- Consistency with affected local comprehensive plans; and
- Economic feasibility of the project (costs, revenues, debt service coverage, value for money analysis which compares public and privately financed alternatives side-by-side before a financing option is selected. This analysis is a strong tool for informing the public and ensuring that the public good has been protected, etc.)

FDOT's experience with analyses of economic feasibility for such projects suggests that it is extremely difficult to meet debt service requirements for a new toll facility or extension solely with toll revenues generated by the project, particularly in early years of operation. Often, the difficulty varies depending upon the location of the facility (e.g., urban, rural). However, each project is different based upon the location, competing roadways, and other factors. When little project information is available, FDOT offers the following additional considerations to MPOs that are interested in including future toll facility projects in their cost feasible long range plans:

- For projects in suburban or emerging suburban areas, estimated toll revenues likely will cover only a portion of the total project cost;
- For projects in urban areas, estimated toll revenues may cover a somewhat higher portion of the cost of the project. However, project costs, particularly for right of way, are much higher than in other areas;
- For projects in rural areas, possibly associated with proposed new land development which will take time to materialize, estimated toll revenues in the early years likely will be substantially lower than total project cost.

For the purposes of the metropolitan long range plan, MPOs should document the amount and availability of revenues from other sources expected to be available to finance the project cost. Other sources may potentially include local revenue sources, Non-SIS Highways Construction & ROW funds from the 2045 Revenue Forecast, and private sector contributions. FDOT encourages MPOs to consult with the Turnpike Enterprise and/or local authority for technical assistance on preparing early analyses for possible toll facilities in the cost feasible long range plan.

Appendix C: Other Information

Inflation Factors

Consistent with federal planning regulations [23 CFR 450.324(f)(11)] and *Financial Guidelines for MPO 2045 Long Range Plans* to be adopted by the Metropolitan Planning Organization Advisory Council (MPOAC) in early 2017, the 2045 Revenue Forecast is expressed in Year of Expenditure (YOE) dollars. MPOs will need to use inflation factors to adjust project costs from "Present Day Cost" dollars (typically 2015 or 2016 dollars for recent cost estimates) to future YOE dollars. MPOs also may have to adjust estimates of local revenues not included in the Department's forecast to YOE dollars, depending on how those revenue estimates were developed.

Adjusting Project Costs

In order to balance project costs against the revenue estimates from the 2045 Revenue Forecast, costs and revenues need to be expressed using the same base year. Project cost estimates are typically expressed in "present day costs" (i.e., year that the project costs were developed, such as 2015), which are based on the value of money today and not adjusted for inflation.

Table 8 will assist MPOs in converting project costs to YOE dollars. For example, if the cost estimate for a specific project is expressed in fiscal year 2015 dollars and the project is planned to be implemented in the 2026 to 2030 time period, the MPO should multiply the cost estimate by 1.43to convert the cost estimate to YOE dollars. The inflation multipliers included in Table 8 are based on the Department's inflation factors associated with the FY 2018-2022 Work Program and previous work programs. Factors for project cost estimates developed in fiscal years 2015, 2016, 2017 and 2018 are shown in Table 8 because needed project cost estimates are likely to be denominated in dollars of one of those years. If subsequent project cost estimates are developed denominated in fiscal years 2019, 2020 or 2021, the table can be updated.

As a detailed example, consider a desired project for which a cost estimate was generated by local government in FY 2015. The annual inflation rates in the lower part of Table 8 can be used to convert local cost estimates prepared in "today's" dollars to YOE dollars. When the cost estimate is expressed in 2015 dollars, the MPO can estimate the amount in 2021 dollars as follows:

2021 dollars = (2015 dollars) * (1.030) * (1.027) * (1.025) * (1.027) * (1.028) * (1.026) (for 2016) (for 2017) (for 2018) (for 2019) (for 2020) (for 2021)

For consistency with other estimates, FDOT recommends summarizing estimated local funds for each year by the 5-year periods.

Table 8 Inflation Factors to Convert Project Cost Estimates to Year of Expenditure Dollars by Time Bands

Time Period for	Multipliers to Convert Project Cost Estimates to Year of Expenditure Dollars			
Planned Project or	Project Cost in	Project Cost in	Project Cost in	Project Cost in
Project Phase	2015 PDC \$*	2016 PDC \$*	2017 PDC \$*	2018 PDC \$*
Implementation				
2024-2025 (2 Year	1.29	1.25	1.22	1.19
Period)				
2026-2030	1.43	1.39	1.35	1.32
2031-2035	1.69	1.64	1.59	1.55
2036-2045	2.22	2.16	2.10	2.05

Table 9 Inflation Factors to Convert Project Cost Estimates to Year of ExpenditureDollars for Each Individual Year

Multipliers are based on the following annual inflation estimates:			
From	<u>To</u>	<u>Annual Rate</u>	
<u>2015 Dollars</u>	<u>2016 Dollars</u>	<u>3.0%</u>	
2016 Dollars	2017 Dollars	<u>2.7%</u>	
2017 Dollars	2018 Dollars	<u>2.5%</u>	
2018 Dollars	2019 Dollars	<u>2.7%</u>	
2019 Dollars	2020 Dollars	<u>2.8%</u>	
2020 Dollars	2021 Dollars	<u>2.6%</u>	
2021 Dollars	2022 Dollars	<u>2.5%</u>	
2022 Dollars	2023 Dollars	<u>2.7%</u>	
2023 Dollars	2024 Dollars	<u>2.8%</u>	
2024 Dollars	<u>2025 Dollar</u>	<u>2.9%</u>	
2025 Dollars	2026 Dollars	<u>3.0%</u>	
2026 Dollars	2027 Dollars	<u>3.1%</u>	
2027 Dollars	2028 Dollars	3.2%	
2028 Dollars	2029 Dollars	3.3%	
2029 Dollars	2030 Dollars and beyond	<u>3.3 % each year</u>	

* "PDC \$" means "Present Day Cost"

Relationship of Construction and ROW Costs

The Department experiences extreme variation in the costs of right-of-way for improvement projects. Since fiscal year 1991-92, district right-of-way programs have ranged from as low as 4% of construction costs to more than 30% and, in rare instances, have exceeded construction costs.

MPOs should work with their district office for more information on right of way costs (see the FDOT website at <u>http://www.dot.state.fl.us/planning/policy/costs/</u>).

The 2045 Revenue Forecast contains estimates for combined construction and right of way funding. For planned construction projects, MPOs are requested to work with district staff to develop right-of-way estimates and right-of-way inflation estimates. If no project-specific estimate is available, MPOs should use the right-of-way/construction ratio recommended by the district to estimate right-of-way costs. For example, if the estimated construction cost of a project is \$40 million and the district has established a right-of-way/construction ratio of 25%, then the total cost for construction and right-of-way is \$50 million (\$40 + \$10).

Appendix D: Glossary

Capacity Programs: Major FDOT programs that expand the capacity of existing transportation systems including the following statewide programs: SIS Highways Construction and Right-of-Way and Public Transportation programs. This category also includes 'Non-SIS Highways Construction and Right-of-Way' and Transit.

Charter County and Regional Transportation Surtax: A local discretionary sales tax that allows each charter county with an adopted charter, each county the government of which is consolidated with that of one or more municipalities, and each county that is within or under an interlocal agreement with a regional transportation or transit authority created under Ch. 343 or 349, F.S., to levy at a rate of up to 1 percent. Generally, the tax proceeds are for the development, construction, operation, and maintenance of fixed guideway rapid transit systems, bus systems, on-demand transportation services, and roads and bridges.

Concession Revenues: Non-toll revenues generated from concession contracts entered into by the Turnpike, such as the Service Plaza concession contract.

Constitutional Fuel Tax: A state tax of two cents per gallon of motor fuel. The first call on the proceeds is to meet the debt service requirements, if any, on local bond issues backed by the tax proceeds. The balance, called the 20 percent surplus and the 80 percent surplus, is credited to the counties' transportation trust funds.

Cost Feasible Plan (CFP): A phased plan of transportation improvements that is based on (and constrained by) estimates of future revenues.

County Fuel Tax: A county tax of 1 cent per gallon. The proceeds are to be used by counties for transportation-related expenses, including the reduction of bonded indebtedness incurred for transportation purposes.

Discretionary Sales Surtaxes: These taxes include eight separate surtaxes, also known as local option sales taxes, are currently authorized in law and represent potential revenue sources for county governments generally. These surtaxes apply to all transactions subject to the state tax imposed on sales, use, services, rentals, admissions, and other transactions authorized pursuant to Ch. 212, F.S., and communications services as defined for purposes of Ch. 202, F.S. The total potential surtax rate varies from county to county depending on the particular surtaxes that can be levied in that jurisdiction.

Documentary Stamps Tax: This tax is levied on documents, as provided under Chapter 201, Florida Statutes. Documents subject to this tax include, but are not limited to: deeds, stocks and bonds, notes and written obligations to pay money, mortgages, liens, and other evidences of indebtedness.

Fixing America's Surface Transportation Act (FAST) Act: Authorization of the federal surface transportation programs for highways, highway safety and transit for the five-year period 2016-2020.

Florida's Turnpike Enterprise (FTE): Florida's Turnpike Enterprise, part of the Florida Department of Transportation, oversees a 483-mile system of limited-access toll highways.

General Obligation Bonds: A municipal bond backed by the credit and taxing power of the issuing jurisdiction rather than the revenue from a given project.

Intelligent Transportation System (ITS): A wide range of advanced technologies and ideas, which, in combination, can improve mobility and transportation productivity, enhance safety, maximize the use of existing transportation facilities, conserve energy resources and reduce adverse environmental effects.

Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA): Legislative initiative by U.S. Congress that restructured funding for transportation programs. ISTEA authorized increased levels of highway and transportation funding from FY92-97 and increased the role of regional planning commissions/MPOs in funding decisions. The Act also required comprehensive regional and statewide long-term transportation plans and places an increased emphasis on public participation and transportation alternatives. (FHWA)

Local Option Fuel Taxes: County governments are authorized to levy up to 12 cents of local option fuel taxes in the form of three separate levies. The first is a tax of 1 cent on every net gallon of motor and diesel fuel sold within a county known as the Ninth-Cent Fuel Tax. The second is a tax of 1 to 6 cents on every net gallon of motor and diesel fuel sold within a county. The third tax is a 1 to 5 cents levy upon every net gallon of motor fuel sold within a county, and diesel fuel is not subject to this tax. A local government may pledge any of its revenues from the tax to repay state bonds issued on its behalf and, in addition, may use such revenues to match state funds in the ratio 50%/50% for projects on the State Highway System, or for other road projects which would alleviate congestion on the State Highway System.

Long-Range Transportation Plan (LRTP): A long range, 20-year, strategy and capital improvement program developed to guide the effective investment of public funds in transportation facilities. The plan is updated every three years and may be amended as a result of changes in projected federal, state and local funding, major improvement studies, congestion management system plans, interstate interchange justification studies and environmental impact studies.

Managed Lane Networks: In Florida, express lanes are a type of managed lane where congestion is managed with pricing, access, eligibility and dynamic tolling. Express lanes are implemented to address existing congestion, enhance transit services, accommodate future regional growth and development, enhance hurricane and other emergency evacuation and improve system connectivity between key limited access facilities.

Metropolitan Planning Organization (MPO): An organization made up of local elected and appointed officials responsible for developing, in cooperation with the state, transportation plans and programs in metropolitan areas containing 50,000 or more residents. MPOs are responsible for the development of transportation facilities that will function as an intermodal transportation system and the coordination of transportation planning and funding decisions.

Metropolitan Planning Organization Advisory Council (MPOAC): A statewide organization created by the Florida Legislature to augment the role of the individual Metropolitan Planning Organizations in the cooperative transportation planning process. The MPOAC assists the MPOs in carrying out the urbanized area transportation planning process by serving as the principal forum for collective policy decisions.

Municipal Fuel Tax: This one-cent fuel tax is one of the revenue sources that fund the Municipal Revenue Sharing Program. Municipalities must use the funds derived from this tax for transportation-related expenditures.

New Starts Transit Program: Established by the 2005 Florida Legislature to assist local governments in developing and constructing fixed-guideway and bus rapid transit projects to accommodate and manage urban growth and development.

Ninth-cent Fuel Tax: A tax of 1 cent on every net gallon of motor and diesel fuel sold within a county. The proceeds are used to fund specified transportation expenditures.

Non-capacity programs: FDOT programs designed to support, operate, and maintain the state transportation system including safety; resurfacing; bridge; product support; operations and maintenance; and administration.

Off-System Funds: Funds used for a project that is not on the State Highway System (SHS).

Performance Measures: A metric directly tied to achieving a goal or objective or used in a decision making process; or an indicator or context measure which is used to identify relevant background conditions and trends.

Program and Resource Plan (PRP): A 10-year plan that provides planned commitment levels for each of the department's programs. It guides program funding decisions to carry out the goals and objectives of the Florida Transportation Plan

Revenue: Income received.

Revenue Forecast: A forecast of State and Federal funds projected to be available for the FDOT Work Program for the long range (at least 20 years). The Revenue Forecast is usually prepared once every 5 years to help define funding available for the Systems Implementation Office Cost Feasible Plan (CFP) and to assist MPOs in fulfilling Federal requirements for their Long Range Transportation Plans (LRTPs).

Small County Outreach Program (SCOP): A program that allows municipalities and communities in Rural Areas of Opportunity designated under Section 288.0656(7)(a), Florida Statutes to request funding for qualifying projects under a special appropriation of \$9 million.

State Imposed Motor Fuel Taxes: Florida law imposes per-gallon taxes on motor fuels and distributes the proceeds to local governments as follows: the Constitutional Fuel Tax (2 cents); the County Fuel Tax (1 cent); and the Municipal Fuel Tax (1 cent).

Statutory Formula: Formula used that is made up of equal parts population and motor fuel tax collections.

Strategic Intermodal System (SIS): Florida's transportation system composed of facilities and services of statewide and interregional significance, including appropriate components of all modes.

Surface Transportation Program (STP): Federal-aid highway funding program that funds a broad range of surface transportation capital needs, including many roads, transit, sea and airport access, vanpool, bike, and pedestrian facilities.

TALL funds: Funding distribution code used by FDOT for a Transportation Alternatives Program project in areas of the State other than urban areas with a population greater than 5,000 but no more than 200,000.

TALN funds: Funding distribution code used by FDOT for a Transportation Alternatives Program project in areas of the State other than urban areas with a population of 5,000 or less.

TALT funds: Funding distribution code used by FDOT for a Transportation Alternatives Program project in any area of the State, not based on population.

TALU funds: Funding distribution code used by FDOT for a Transportation Alternatives Program project in urbanized areas of the State with an urbanized area population greater than 200,000.

Transportation Alternatives Funds: Funds from the Transportation Alternatives Program (TAP).

Transportation Alternatives Program (TAP): Federally-funded community-based projects that expand travel choices and improve the transportation experience by improving the cultural, historic, and environmental aspects of transportation infrastructure. Focuses on improvements that create alternatives to transportation for the non-motorized user and enhancements to the transportation system for all users.

Transportation Demand Management (TDM): Programs designed to reduce demand for transportation through various means, such as the use of transit and of alternative work hours.

Transportation Improvement Program (TIP): Short-term (three to five years) plan of approved policies developed by an MPO for a jurisdiction that is fiscally constrained.

Transportation Management Area (TMA): Urbanized areas with a population over 200,000 are designated as Transportation Management Areas (TMAs). These areas are subject to special planning and programming requirements.

Transportation Regional Incentive Program (TRIP): Created to improve regionally significant transportation facilities in "regional transportation areas". State funds are available throughout Florida to provide incentives for local governments and the private sector to help pay for critically needed projects that benefit regional travel and commerce.

Transportation System Management and Operations (TSM&O): An integrated program to optimize the performance of existing multimodal infrastructure through implementation of systems, services, and projects to preserve capacity and improve the security, safety, and reliability of our transportation system.

Work Program (Adopted): The five-year listing of all transportation projects planned for each fiscal year by the Florida Department of Transportation, as adjusted for the legislatively approved budget for the first year of the program.

Work Program (Tentative): The 5-year listing of all transportation projects planned for each fiscal year which is developed by the central FDOT office based on the district work programs.

Year of Expenditure Dollars: Dollars that are adjusted for inflation from the present time to the expected year of construction.

Appendix E: 2045 Revenue Forecast – Martin MPO/Martin Metropolitan Area, November 2018

2045 REVENUE FORECAST Martin MPO/Martin Metropolitan Area

2045 Forecast of State and Federal Revenues for Statewide and Metropolitan Plans

Overview

This report documents the Florida Department of Transportation (FDOT) revenue forecast through 2045. Estimates for major funding programs for the Martin metropolitan area, for FDOT Districts, and for Florida as a whole are included. This includes state and federal funds that "flow through" the FDOT five-year work program. This information is used for updates of Metropolitan Planning Organization (MPO¹) Long Range Transportation Plans (LRTPs) and related documents.

Background

In accordance with federal statute, longstanding FDOT policy, and leadership by the Metropolitan Planning Organization Advisory Council (MPOAC), the FDOT Office of Policy Planning (OPP) provides projections of future available funding to Florida's MPOs. This data is known as the Revenue Forecast. Consistent data is applied to development of the FDOT Strategic Intermodal System (SIS) Highway Cost Feasible Plan (CFP).

The Department has developed a long-range revenue forecast through 2045. The forecast is largely based upon recent federal legislation (e.g., the FAST Act²) and changes in multiple factors affecting state revenue sources and current policies. It incorporates (1) amounts contained in the FDOT work program for state fiscal years (FYs) 2018 through 2022, (2) the impact of the Department's objectives and investment policies, and (3) the Statutory Formula (50% population and 50% motor fuel tax collections) for distribution of certain program funds. All estimates are expressed in nominal dollars, also known as year of expenditure (YOE) dollars.

Purpose

This version of the forecast provides one specific MPO, and all interested parties, with dollar figures that will be necessary and useful as it prepares its 2045 LRTP. If more detail or particular additional numbers are needed, these may subsequently be delivered in spreadsheet format. This document does not forecast funds that do not "flow through" the FDOT five-year work program. Further information concerning local sources of revenue is available from State of Florida sources, particularly *Florida's Transportation Tax Sources: A Primer*, and the *Local Government Financial Information Handbook*.³

Although it has remained more practical to define geographic areas by county boundaries for some funding categories, it is important to recognize the role of MPOs in conducting metropolitan transportation planning as entities designated to serve urbanized areas as delineated

¹ In this document, the general term MPO is used to refer to organizations whose names take different forms, including TPO, TPA, and MTPO.

² Fixing America's Surface Transportation (FAST) Act, Public Law 114-94, December 4, 2015.

³ FDOT's tax source primer is available at <u>http://www.fdot.gov/comptroller/pdf/GAO/RevManagement/Tax%20Primer.pdf</u>. The financial information handbook is prepared by the Office of Economic and Demographic Research, part of the Florida Legislature; it is available at <u>http://edr.state.fl.us/Content/local-government/reports/lgfih17.pdf</u>.

by the U.S. Census Bureau. This forecast features county level estimates for major capacity programs, specifically Other Roads and Transit. If an MPO includes more than one county, the county level estimates are totaled to produce an overall MPO estimate. If an MPO's boundary does not match county boundaries, the FDOT District determines appropriate funding totals for that MPO. OPP is available for consultation and support, and Districts are asked to share their method and results with OPP. However, final responsibility rests with the appropriate District.

This forecast does not break down SIS Highway expenditures to the county or District level. SIS Highway expenditures are addressed in the SIS CFP, prepared by the FDOT Systems Implementation Office (formerly Systems Planning Office). Districts inform MPOs of projects proposed for the CFP, and, conversely, CFP projects need to be included in the appropriate MPO LRTP(s) to receive federal funding.

This forecast also includes funding for FDOT programs designed to support, operate, and maintain the State Highway System (SHS). The Department has set aside sufficient funds in the 2045 Revenue Forecast for these programs, referred to as non-capacity programs, to meet statewide objectives and program needs in all metropolitan and non-metropolitan areas. Specific District level amounts are provided for existing facilities expenditures. Funding for these programs is not included in the county level estimates.

2045 Revenue Forecast (State and Federal Funds)

The 2045 Revenue Forecast is the result of a three-step process:

- 1. State and federal revenues from current sources were estimated.
- 2. Those revenues were distributed among appropriate statewide capacity and non-capacity programs consistent with statewide priorities.
- 3. County level estimates for the Other Roads and Transit programs were developed, along with estimates for other funding categories of interest to Florida's MPOs.

Forecast of State and Federal Revenues

The 2045 Revenue Forecast includes program estimates for the expenditure of state and federal funds expected from current revenue sources (i.e., new revenue sources were <u>not</u> added). The forecast estimates revenues from federal, state, and Turnpike sources included in the FDOT five-year work program.

The forecast does not estimate revenue from other sources (i.e., local government/authority taxes, fees, and bond proceeds; private sector participation; and innovative finance sources). Estimates of state revenue sources were based on estimates prepared by the State Revenue Estimating Conference (REC) in September 2017 for FYs 2019 through 2028. Estimates of federal revenue sources were based on the Department's Federal Aid Forecast for FYs 2018 through 2027. In this forecast, Surplus Toll Revenue is only projected for the Miami-Dade Metropolitan Area, but that category may apply to more metropolitan areas in future Revenue Forecasts. Assumptions about revenue growth are shown in Table 1.

Revenue Sources	Years	Assumptions*
State Taxes (includes fuel taxes,	2019-2028	Florida REC Estimates; these average in the range
tourism-driven sources,		from 2.5% to 3.0% per year
vehicle-related taxes and	2029-2045	Annual 1.93% increase in 2029, gradually decreasing
documentary stamp taxes)		to -0.44% in 2045
Federal Distributions	2018-2027	FDOT Federal Aid Forecast
(Total Obligating Authority)	2028-2045	Annual 0.0% increase through 2045
Turnpike	2018-2028	Turnpike Revenue Forecast
	2029-2045	Annual 1.93% increase in 2029, gradually decreasing
		to -0.44% in 2045

Table 1Revenue Sources and Assumptions

* Note all growth rates show nominal, or YOE, dollar figures. Consistent with REC assumptions, a constant annual inflation rate of 2.60% is projected forward indefinitely. Therefore, *an assumption of nominal growth of 1.93% signifies a real decline of about 0.65% per year.*

A summary of the forecast of federal, state, and Turnpike revenues is shown in Table 2. The *2045 Revenue Forecasting Guidebook* provides additional information regarding the Revenue Forecast and includes inflation factors that can be used by MPOs to adjust project costs expressed in present day cost to YOE dollars.

Table 2Forecast of Revenues2045 Revenue Forecast (Millions of Dollars)

(Percentages reflect percentage of total period funding produced by that source. For example, federal

funding is projected to provide 24% of all funding for the period of FYs 2021 through 2025.)

Major	Time Periods (Fiscal Years)									
Revenue Sources	2020 ¹	2021-2025 ¹	2026-2030	2031-2035	2036-2045	26-Year Total ² 2020-2045				
Federal	2,353	10,884	11,878	12,108	24,217	61,440				
	28%	24%	23%	21%	20%	22%				
State	5,270	27,366	34,128	38,264	80,719	185,748				
	62%	61%	65%	66%	66%	65%				
Turnpike	814	6,572	6,688	7,861	16,518	38,453				
	10%	15%	13%	14%	14%	13%				
Total ²	8,437	44,823	52,694	58,233	121,454	285,641				

¹ Based on the FDOT Adopted Work Program for FYs 2018 through 2022.

² Columns and rows may not equal the totals due to rounding.

Estimates for State Programs

Long range revenue forecasts assist in determining financial feasibility of needed transportation improvements, and in identifying funding priorities. FDOT policy places primary emphasis on

safety and preservation. Remaining funding is planned for capacity programs and other priorities.

The 2045 Revenue Forecast includes the program funding levels contained in the FDOT Adopted Work Program for FYs 2018 through 2022. The forecast of funding levels for FDOT programs for FYs 2020-2045 was developed based on the corresponding Program and Resource Plan (PRP), which includes the FDOT Adopted Work Program and planned funding for FYs 2023-2026. This forecast provides information for capacity and non-capacity state programs. The information is consistent with "Financial Guidelines for MPO Long Range Plans" moved forward by the MPOAC Policy and Technical Committee on July 13, 2017.

The 2045 Revenue Forecast entails long-term financial projections for support of long-term planning. The forecast is timed to be delivered well in advance of the five-year LRTP adoption schedule. It is considered satisfactory for the duration of the five-year cycle; in other words, it is useful for MPOs whose adoptions come at the beginning or end of the cycle. However, FDOT reserves the right to consider adjustments to the Revenue Forecast during the LRTP adoption cycle, if warranted.

Capacity Programs

Capacity programs include each major funding program that expands the capacity of existing transportation systems (such as highways and transit). Table 3 includes a brief description of each major capacity program and the linkage to the program categories used in the PRP.

Statewide Forecast for Capacity Programs

Table 4 identifies the statewide estimates for capacity programs in the 2045 Revenue Forecast. \$285 billion is forecast for the entire state transportation program from FYs 2020 through 2045; about \$149 billion (52%) is forecast for capacity programs.

Metropolitan Forecast for Capacity Programs

Pursuant to federal law, Transportation Management Area (TMA) funds and certain Transportation Alternatives funds (TALU) are projected based on current population estimates. These two categories only apply to federally designated TMAs; 15 of the Florida's 27 MPOs qualify for these funds. District estimates for certain Transportation Alternatives (TA) funds and the Other Roads program were developed using the current Statutory Formula. For planning purposes, Transit program funds were divided between Districts and counties according to population.

Table 3Major Capacity Programs Included in the 2045 Revenue Forecastand Corresponding Program Categories in the Program and Resource Plan (PRP)

2045 Revenue Forecast Programs	PRP Program Categories
SIS Highways Construction & ROW - Construction, improvements, and associated right of way on SIS highways (i.e., Interstate, the Turnpike, other toll roads, and other facilities designed to serve interstate and regional commerce including SIS Connectors).	Interstate Construction Turnpike Construction Other SIS Highway Construction SIS Highway Traffic Operations SIS Highway Right of Way (ROW) SIS Advance Corridor Acquisition
<u>Other Roads Construction/ROW</u> - Construction, improvements, and associated right of way on State Highway System roadways not designated as part of the SIS. Also includes funding for local assistance programs such as the County Incentive Grant Program (CIGP).	Arterial Traffic Operations Construction County Transportation Programs Economic Development Other Arterial & Bridge Right of Way Other Arterial Advance Corridor Acquisition
<u>Aviation</u> - Financial and technical assistance to Florida's airports in the areas of safety, security, capacity enhancement, land acquisition, planning, economic development, and preservation.	Airport Improvement Land Acquisition Planning Discretionary Capacity Improvements
<u>Transit</u> - Technical and operating/capital assistance to transit, paratransit, and ridesharing systems.	Transit Systems Transportation Disadvantaged – Department Transportation Disadvantaged – Commission Other; Block Grants; New Starts Transit
<u>Rail</u> - Rail safety inspections, rail-highway grade crossing safety, acquisition of rail corridors, assistance in developing intercity and commuter rail service, and rehabilitation of rail facilities.	Rail/Highway Crossings Rail Capacity Improvement/Rehabilitation High Speed Rail Passenger Service
Intermodal Access - Improving access to intermodal facilities, airports and seaports; associated rights of way acquisition.	Intermodal Access
<u>Seaport Development</u> - Funding for development of public deep- water ports projects, such as security infrastructure and law enforcement measures, land acquisition, dredging, construction of storage facilities and terminals, and acquisition of container cranes and other equipment used in moving cargo and passengers.	Seaport Development
<u>SUN Trail</u> – FDOT is directed to make use of its expertise in efficiently providing transportation projects to develop a statewide system of paved non-motorized trails as a component of the Florida Greenways and Trails System (FGTS), which is planned by the Florida Department of Environmental Protection (FDEP).	Other State Highway Construction Other State Highway ROW Other Roads Construction Other Roads ROW Other SIS Highway Construction SIS Highway ROW

Table 4Statewide Capacity Program EstimatesState and Federal Funds from the 2045 Revenue Forecast (Millions of Dollars)

Major Programs		Time Periods (Fiscal Years)					
	2020 ¹	2021-25 ¹	2026-30	2031-35	2036-45	2020-2045	
SIS Highways Construction & ROW	2,199	12,940	12,490	13,933	28,971	70,534	
Other Roads Construction & ROW	892	6,538	8,006	8,650	18,103	42,188	
Aviation	211	1,143	1,433	1,596	3,354	7,738	
Transit	417	2,306	2,881	3,154	6,580	15,339	
Rail	178	850	1,255	1,425	2,985	6,692	
Intermodal Access	40	262	345	379	791	1,816	
Seaports	114	622	837	938	1,970	4,481	
SUN Trail	25	125	125	125	250	650	
Total Capacity Programs	4,075	24,786	27,372	30,200	63,004	149,438	
Statewide Total Forecast	8,437	44,823	52,694	58,233	121, 454	285,641	

¹ Based on the FDOT Tentative Work Program for FYs 2018 through 2022.

² Columns and rows may not equal the totals due to rounding.

Estimates for the Other Roads and Transit programs for the Martin metropolitan area are in Table 5.

Table 5County Level Capacity Program EstimatesState and Federal Funds from the 2045 Revenue Forecast (Millions of Dollars)

		Time Periods (Fiscal Years)						
Capacity Programs	2020 ¹	2021-25 ¹	2026-30	2031-35	2036-45	2020-2045		
Other Roads Construction & ROW	6.68	48.97	59.48	64.18	133.54	312.85		
Transit	2.74	15.23	19.21	21.03	43.82	102.03		
Total	9.42	64.20	78.69	85.21	177.36	414.88		

Estimates for the Martin Metropolitan Area

¹ Estimates for FYs 2018 through 2022 are contained in the FDOT Adopted Work Program.

² Columns and rows may not equal the totals due to rounding.

A few programs fund capacity projects throughout the state on a competitive or priority basis. The two most prominent programs for MPOs are the Transportation Regional Incentive Program (TRIP) and the Florida New Starts Transit Program. Formerly, TRIP was referred to as a Documentary Stamp Tax program, but there are currently multiple sources of funding. With the economic recovery, the forecast funding for TRIP is now over five times the level of five years ago. Amounts for the federally-funded TMA program are in Table 6. TRIP, Florida New Starts, and TMA funds are not included in Table 5.

Table 6Transportation Management Area (TMA) Funds EstimatesFederal Funds from the 2045 Revenue Forecast (Millions of Dollars)

Port St. Lucie Urbanized Area/TMA		26-Year Total ¹				
	2020	2021-25	2026-30	2031-35	2036-45	2020-2045
TMA Funds for Martin and St. Lucie Metropolitan Areas ²	6.08	30.41	30.41	30.41	60.81	158.11

¹ Row may not equal the total due to rounding.

² The Martin MPO and the St. Lucie TPO need to collaboratively determine how these funds will be used in their combined metropolitan (planning) areas as part of 2045 LRTP development.

"Off-system" funds are included in the Other Roads program estimates comprised of federal and state funds. By law, state funds cannot be used for highway improvements not on the SHS except under certain circumstances. All estimates of TMA funds may be used on "off-system" roads (i.e., roads on the federal-aid highway system but not on the SHS). The following is guidance for estimating other federal funds that can be used for "off-system" roads:

- MPOs in TMAs can assume all estimated TMA funds and 10% of their Other Roads program estimates can be used for "off-system" roads.
- MPOs that are not in TMAs can assume 15% of their Other Roads program estimates can be used for "off-system" roads.

Estimates of TRIP funds by District are in Table 7, and statewide estimates of Florida New Starts funds are in Table 8. Projects which would be partially funded by either of these programs cannot be counted as "funded" in LRTPs. This is because there is no guarantee of any specific project receiving TRIP or Florida New Starts funding in the future. Only a portion of potentially eligible projects receive funding. However, these projects can be included in LRTPs as "illustrative" projects. If MPOs have specific questions, they should consult with their District liaison and planning staff; District staff will contact the OPP, Work Program, or other Central Office staff as needed.

State Funds from the 2045 Revenue Forecast (willions of Dollars)								
FDOT District		26-Year Total ²						
	2020 ¹	2021-25 ¹	2026-30	2031-35	2036-2045	2020-2045		
District 1	3.1	21.9	32.7	36.4	74.6	168.8		
District 2	2.5	17.6	26.3	29.2	59.9	135.5		
District 3	1.6	11.6	17.3	19.2	39.3	89.0		
District 4	4.1	28.9	43.1	47.9	98.2	222.3		
District 5	4.7	32.8	49.0	54.4	111.7	252.6		
District 6	2.8	19.7	29.4	32.7	67.0	151.6		
District 7	3.3	23.2	34.6	38.4	78.8	178.2		
Statewide Total Forecast	22.2	155.8	232.3	258.2	529.5	1,197.9		

Table 7Districtwide Transportation Regional Incentive Program EstimatesState Funds from the 2045 Revenue Forecast (Millions of Dollars)

¹ Estimates for FYs 2018 through 2022 are contained in the FDOT Adopted Work Program.

² Columns and rows may not equal the totals due to rounding.

Table 8 Transit - Florida New Starts Program Estimates State Funds from the 2045 Revenue Forecast (Millions of Dollars)

Statewide Program		26-Year Total				
	2020	2021-25	2026-30	2031-35	2036-45	2020-2045
Statewide Total Forecast	41.8	226.3	259.2	282.4	593.4	1,403.1

The FAST Act continued funding for TA projects. Categories impacting MPOs include funds for (1) TMAs (TALU); (2) areas with populations greater than 5,000 up to 200,000 (TALL funds), and (3) any area of the state (TALT). Estimates of TA funds are in Table 9. TALT funds, which are presented as Districtwide totals, are programmed at each District's discretion. MPOs should identify any projects using them as "illustrative" projects since there is no guarantee of a share by MPO or specific projects for these funds.

Table 9Transportation Alternatives Funds EstimatesFederal Funds from the 2045 Revenue Forecast (Millions of Dollars)

Martin Metropolitan Area and		26 Year Total ¹				
Districtwide	2020	2021-25	2026-30	2031-35	2036-45	2020-2045
TALU (>200,000 Population) for Martin and St. Lucie Metropolitan Areas, Funds for Port St. Lucie TMA ²	0.49	2.46	2.46	2.46	4.91	12.78
TALL (<200,000 Population)	N/A	N/A	N/A	N/A	N/A	N/A
TALT (Any Area), Entire FDOT District	4.55	22.74	22.74	22.74	45.47	118.22

¹ Rows may not equal the totals due to rounding.

² The Martin MPO and the St. Lucie TPO need to collaboratively determine how these funds will be used in their combined metropolitan (planning) areas as part of 2045 LRTP development.

Other projects for which funding is uncertain may also be included in LRTPs as "illustrative" projects.

Non-Capacity Programs

Non-capacity programs refer to FDOT programs designed to support, operate, and maintain the SHS: Safety, Resurfacing, Bridge, Product Support, Operations and Maintenance, and Administration. County level estimates are not needed for these programs. Instead, FDOT has included sufficient funding in the 2045 Revenue Forecast to meet the statewide objectives and policies below and carry out its responsibilities and objectives for the non-capacity programs on the SHS in each District and metropolitan area:

- **Resurfacing program:** Ensure that 80% of SHS pavement meets Department standards;
- **Bridge program:** Ensure that 90% of FDOT-maintained bridges meet Department standards while keeping all FDOT-maintained bridges open to the public safe;
- **Operations and maintenance program:** Achieve 100% of acceptable maintenance condition standards on the SHS;

- **Product Support:** Reserve funds for Product Support required to construct improvements (funded with the forecast's capacity funds) in each District and metropolitan area; and
- Administration: Administer the state transportation program.

Table 10 includes a description of each non-capacity program and the linkage to the program categories used in the PRP.

Table 10Major Non-Capacity Programs Included in the 2045 Revenue Forecastand Corresponding Program Categories in the Program and Resource Plan (PRP)

2045 Revenue Forecast Programs	PRP Program Categories
<u>Safety</u> - Includes the Highway Safety Improvement Program, the Highway Safety Grant Program, Bicycle/Pedestrian Safety activities, the Industrial Safety Program, and general safety issues on a Department-wide basis.	Highway Safety Grants
<u>Resurfacing</u> - Resurfacing of pavements on the SHS and local roads as provided by state law.	Interstate Arterial and Freeway Off-System Turnpike
<u>Bridge</u> - Repair and replace deficient bridges on the SHS. In addition, not less than 15% of the amount of 2009 federal bridge funds must be expended off the federal-aid highway system (e.g., on local bridges not on the SHS).	Repair - On System Replace - On System Local Bridge Replacement Turnpike
<u>Product Support</u> - Planning and engineering required to "produce" FDOT products and services (i.e., each capacity program; Safety, Resurfacing, and Bridge Programs).	Preliminary Engineering Construction Engineering Inspection Right of Way Support Environmental Mitigation Materials & Research Planning & Environment Public Transportation Operations
Operations & Maintenance - Activities to support and maintain transportation infrastructure once it is constructed and in place.	Operations & Maintenance Traffic Engineering & Operations Toll Operations Motor Carrier Compliance
Administration and Other - Resources required to perform the fiscal, budget, personnel, executive direction, document reproduction, and contract functions. Also includes the Fixed Capital Outlay Program, which provides for the purchase, construction, and improvement of non-highway fixed assets (e.g., offices, maintenance yards). The "Other" category consists primarily of debt service.	Administration Fixed Capital Outlay Office Information Systems Debt Service

Table 11 identifies the statewide estimates for non-capacity programs. About \$136 billion (48% of total revenues) is forecast for non-capacity programs. For projects funded with estimates for

the Other Roads program, MPOs can assume the equivalent of 22 percent of those estimated funds will be available from the statewide Product Support estimates for PD&E and Engineering Design. These funds are <u>in addition to</u> the estimates for the Other Roads program provided to MPOs.

Major Programs		Time Periods (Fiscal Years)					
	2020	2021-25	2026-30	2031-35	2036-45	2020-2045	
Safety	141	820	826	825	1,659	4,271	
Resurfacing	633	4,354	4,150	4,241	8,756	22,135	
Bridge	1,035	1,051	2,403	2,946	6,122	13,556	
Product Support	1,302	6,576	6,709	7,096	14,614	36,299	
Operations and Maintenance	1,384	7,442	8,596	9,162	18,939	45,523	
Administration and Other	429	2,770	2,891	2,819	5,559	14,468	
Total Non-Capacity Programs	4,923	23,013	25,576	27,089	55,650	136,251	
Statewide Total Forecast	8,430	44,768	52,606	58,133	121,134	285,071	

Table 11Statewide Non-Capacity Expenditure EstimatesState and Federal Funds from the 2045 Revenue Forecast (Millions of Dollars)

¹ Columns and rows may not equal the totals due to rounding.

Table 12 contains Districtwide estimates for SHS existing facilities expenditures for information purposes. Existing facilities expenditures include all expenditures for the program categories Resurfacing, Bridge, and Operations and Maintenance (O&M). In the previous Revenue Forecast, these expenditures were described as SHS O&M, but the expenditures on the Resurfacing and Bridge categories, in combination, are about as much as those for O&M. These existing facilities estimates are provided pursuant to an agreement between FDOT and the Federal Highway Administration (FHWA) Division Office.

FDOT District		Time Periods (Fiscal Years)					
	2020	2021-25	2026-30	2031-35	2036-45	2020-2045	
District 1	457	1,922	2,267	2,446	5,060	12,151	
District 2	606	2,551	3,009	3,247	6,716	16,129	
District 3	495	2,084	2,458	2,652	5,487	13,176	
District 4	410	1,728	2,038	2,199	4,549	10,924	
District 5	561	2,362	2,785	3,006	6,217	14,931	
District 6	203	854	1,007	1,087	2,248	5,399	
District 7	319	1,345	1,586	1,712	3,541	8,503	
Statewide Total Forecast	3,051	12,847	15,150	16,348	33,817	81,214	

Table 12State Highway System Existing Facilities Estimates by DistrictState and Federal Funds from the 2045 Revenue Forecast (Millions of Dollars)

Note: Includes Resurfacing, Bridge, and Operations & Maintenance Programs.

¹ Columns and rows may not equal the totals due to rounding.

Advisory Concerning Florida's Turnpike Enterprise

Within the framework of FDOT, Florida's Turnpike Enterprise (Turnpike) is given authority, autonomy, and flexibility to conduct its operations and plans in accordance with Florida Statute and its Bond Covenants. The Turnpike's traffic engineering consultant projects Toll Revenues and Gross Concession Revenues for the current year and the subsequent 10-year period, currently FYs 2018-2028. The consultant's official projections are available at http://www.floridasturnpike.com/documents/reports/Traffic%20Engineers%20Annual%20Report/1_Executive%20Summary.pdf.

Projections of Turnpike revenues within the State of Florida Revenue Forecast beyond FY 2028 are for planning purposes, and no undue reliance should be placed on these projections. Such amounts are generated and shared by OPP for purposes of accountability and transparency. They are part of the Revenue Forecast process, which serves the needs of MPOs generating required LRTPs.

MPOs do not program capital projects or make decisions concerning Turnpike spending. OPP projections are not part of the Turnpike's formal revenue estimating process and are not utilized for any purpose other than to assist MPOs and perform related functions. Such amounts do not reflect the Turnpike's requirement to cover operating and maintenance costs, payments to bondholders for principal and interest, long-term preservation costs, and other outstanding Turnpike obligations and commitments.

REVENUE FORECAST FOR MARTIN MPO LONG RANGE TRANSPORTATION PLAN UPDATE

2045 Forecast of State and Federal Revenues for Statewide and Metropolitan Plans

Appendix F: Financial Guidelines for MPO 2045 Long Range Plans, July 13, 2017

Financial Guidelines for MPO 2045 Long Range Plans

Background

The MPOAC adopted financial guidelines in 2008 to guide the update of MPO 2035 Long Range Transportation Plans (LRTPs) and revised those guidelines in 2013 to guide the development of 2040 LRTPs. The purpose of the guidelines was to improve uniformity in the reporting of financial data in MPO LRTPs, to assist MPOs to better define transportation needs, to aid FDOT to prepare long range revenue forecasts for state and federal funds, and to facilitate a statewide estimate of unfunded transportation needs. This document provides guidelines for the next update of LRTPs.

Long Range Transportation Plan Needs and Cost Feasible Plan

Guidelines for Defining and Reporting Needs

- All MPOs will include a cost estimate of needs in base year dollars in their adopted LRTP. The needs estimate should include all costs (operations, maintenance, capacity expansion, etc.) associated with all modes. Estimated needs should be reported by mode.
- The MPO Needs Plan should include only transportation projects that are necessary to meet identified future transportation demand or advances the goals, objectives and policies of the MPO, the region and the state. Cost should be given significant consideration when choosing among various alternatives (mode or alignment) to meet an identified need. Compelling policy or practical reasons for selecting alternatives that exceed the identified transportation need may include increasing the availability of premium transit options, overwhelming environmental benefit or the need to use compatible technology to expand an existing transportation asset.
- Certain types of projects should not be considered "needed" if they represent projects that are extremely unlikely to be implemented and unnecessarily inflate the estimated transportation needs in the metropolitan area. The cost of such a project should not be included in an MPO Needs Plan. Such projects may include:
 - Projects that cannot be implemented due to policy constraints
 - Projects that cannot be implemented due to physical constraints
 - Projects that are unlikely to be implemented due to potential significant environmental constraints
 - Projects that are unlikely to be implemented due to potential significant environmental justice or civil rights impacts
- All MPOs will include an estimate of unfunded costs in base year dollars in their adopted LRTP.

Guidelines for Financial Reporting for Cost Feasible Long Range Transportation Plans

- Reasonably available revenue should be reported in year of expenditure dollars.
- An estimate of the cost of all projects and all phases, regardless of mode, should be included in the cost feasible LRTP.
- The costs of operating and maintaining the existing and future transportation system should be clearly stated in the cost feasible plan, in a manner agreed upon by the MPOAC, FDOT and FHWA/FTA.
- MPOs should include full financial information for all years covered by the LRTP, including information from their Transportation Improvement Program (TIP).
- For their next adopted cost feasible LRTP, MPOs will use:
 - \circ FY 2019/2020 as the base year.
 - \circ FY 2044/2045 as the horizon year.
- The recommended Base and Horizon Years are for financial reporting purposes only and do not impact individual MPO selection of alternative Base and Horizon Years for socioeconomic, modeling and other purposes.

Long Range Revenue Forecast for Long Range Transportation Plan Updates

FDOT, in cooperation with the MPOAC and Florida's MPOs, prepares long range revenue forecasts for state and federal funds that "flow through" the FDOT Work Program and other financial planning guidance. FDOT

will, in cooperation with the MPOAC and Florida's MPOs, develop an updated revenue forecast through 2045 and guidance for the next updates of metropolitan transportation plans and the Florida Transportation Plan (FTP). The following is guidance for developing and reporting financial estimates in those plans.

Guidelines for Revenue Estimates

- The recommended Base Year is FY 2019/2020 (State Fiscal Year) and recommended Horizon Year is FY 2044/2045 for all metropolitan long range transportation plans.
- The recommended Time Period for revenue estimates is 5 years between the Base Year and the year 2035 (2020-2024, 2025, 2026-2030, 2031-2035) and 10 years for the remaining years of the plan (2036-2045). This is essentially consistent with previous forecasts and simplifies reporting. The use of 5- and 10-year periods increases flexibility and reduces the need to "fine tune" project priorities.
- For estimates of State and Federal Revenues:
 - FDOT will provide Year of Expenditure (YOE) estimates for state capacity programs for individual MPOs that correlate to major FDOT fund codes and project eligibility constraints.
 - FDOT will provide system level estimates of the cost of operating and maintaining the State Highway System at MPO level. MPOs should include the material in long range transportation plan documentation.
 - FDOT will work with the MPOAC to develop the detailed assumptions required for these estimates.
- For estimates of local revenues, FDOT will provide guidance for development of estimates of traditional sources.

Guidelines for Developing Project Costs

- Project Cost Estimates are typically expressed in Present Day Cost (PDC) dollars and will have to be adjusted with inflation factors for the time period during which they are planned to be implemented.
- To adjust costs from PDC to Year of Expenditure:
 - FDOT has developed estimates of inflation factors through 2045 that MPOs are encouraged to use. FDOT will provide documentation of the assumptions used to develop those factors.
 - MPOs should document alternative inflation factors, with an explanation of assumptions.
- The recommended Time Period for cost estimates is 5 years between the Base Year and the year 2035 (2020-2024, 2025, 2026-2030, 2031-2035) and 10 years for the remaining years of the plan (2036-2045). Annual inflation factor estimates will be used to estimate "mid-point" factors for project costs during each respective 5- or 10-year period.
- FDOT will provide YOE cost estimates, phasing and project descriptions for projects included in the SIS Cost Feasible Plan to each MPO.

Guidelines for Distribution of Next Long Range Revenue Forecast

- The long range forecast of state and federal revenues will be needed by all MPOs for modeling and financial planning for their next updates. FDOT will provide:
 - The new revenue forecast, including the SIS Cost Feasible Plan, by (May 2018).
 - Revenues available statewide before allocation to SIS and a flow chart showing allocation of funds to SIS and other major programs.

Appendix G: Highway/Roadway Projects Prioritization

Highway Projects Prioritization (non Strategic Intermodal System projects) Martin in Motion, 2045 LRTP

Map ID	Facility	From	То	Project Description	Existing Lanes	Future Lanes	Length (miles)	Total Score	Ranking	Priority
R-1	SR-714/Martin Highway	CR-76A/Citrus Boulevard	Martin Downs Boulevard	Highway Capacity	2	4	0.88	Under Construction	TIP	
4196693	Willoughby Boulevard	SR-714/ Monterey Road	SR-5/US-1/Federal Highway	PD&E Study	-	-	0.84	Funded	TIP	Currently
4417001	Cove Road	SR-76/Kanner Highway	SR-5/US-1/Federal Highway	PD&E Study	2	4	4.32	Funded	TIP	Funded
4416991	CR-713/High Meadow Avenue	I-95	CR-714/Martin Highway	PD&E Study	-	-	2.64	Funded	TIP	
R-3	Village Parkway Extension	SR-714/Martin Highway	St. Lucie County Line	New 4 Lane Road	0	4	3.00	Privately Funded	2	Not Applicable
R-5	Cove Road	Willoughby Boulevard	SR-5/US-1/Federal Highway	Widen from 2L to 4L	from 2L to 4L 2		1.07	39	1	
R-6	Cove Road	SR-5/US-1/Federal Highway	CR-A1A	Widen from 2L to 4L	2	4	1.12	39	1	
R-4	Cove Road ¹	SR-76/Kanner Highway	Willoughby Boulevard	Widen from 2L to 4L	2	4	2.13	35	2	Tier 1
R-15	SR-5/US-1 ²	at SW Joan Jefferson Way		Intersection Modification	-	-	-	-	-	
R-16	('D /1////ortin Highwov'		SE126th Blvd. (Okeechobee County)	Roadway Realignment	-	-	-	-	-	
R-2	Willoughby Boulevard	SR-714/ Monterey Road	SR-5/US-1/Federal Highway	New 2 Lane Road	0	2	0.84	36	2	
R-7	CR-713/High Meadow Avenue	I-95	CR-714/Martin Highway	Widen from 2L to 4L	2	4	2.64	36	2	Tier 2
R-8	Federal Highway/US-1	SE Seabranch Blvd	SE Osprey St	Widen from 4L to 6L	4	6	1.15	36	2	
R-10	SE Bridge Rd	Powerline Ave	US-1/Federal Highway	Widen from 2L to 4L	2	4	2.00	33	3	
R-11	SE Green River Pkwy	NW Wright Blvd	NW Dixie Hwy	Widen from 2L to 4L	2	4	0.37	33	3	Tier 3
R-13	SW Martin Downs Blvd	SW Matheson Ave	SW Palm City Rd	Widen from 4L to 6L	4	6	1.33	33	3	
R-14	SW Murphy Rd	Whisper Bay Terrace	North County Line	Widen from 2L to 4L	2	4	0.35	32	4	
R-9	S Ocean Dr	North County Line	NE Causeway Blvd	Widen from 2L to 4L	2	4	1.40	30	4	Tier 4
R-12	Martin Highway	SW Mapp Rd	Kanner Hwy	Widen from 4L to 6L	4	6	1.42	29	4	

Notes:

¹ Moved from Tier 2 to Tier 1 since the project, R-4 is contiguous with R-5. Further, construction projects on Cove Road and would be implemented in synchronization.

² SR-5/US-1 at SW Joan Jefferson Way (FM # 4383452) included in Martin MPO's TIP, FY 2020/21 - FY2024/25 is one of top priority projects (Tier 1).

³ CR-714/Martin Highway realignment project to enhance safety is one of top priority projects (Tier 1) for Martin MPO. Florida Department of Transportation (FDOT), District One completed SR-710 PD&E Study from US 441 to SW Martin Highway in Okeechobee and Martin Counties in 2010 and amended in Nov. 2018. <u>Prioritization Methodology</u>

1. Project prioritized using a total 15 criteria relative to the goals and objectives of the 2045 LRTP.

2. Each project was assigned points on a scale of 1 to 4, with 1 being the lowest and 4 indicating the highest. In all cases a higher score indicated better performance compared to a lower score.

3. Projects overlapping with hurricane evacuation route(s), those in vulnerable areas as it relates to extreme weather events, King tides and sea level rise (SLR), and affecting Community Redevelopment Areas (CRAs) were assigned extra points.

/ e

Project Ranking

	New 2 Lane Road	New 4 Lane Road			Widen from 4 to 6 Lane									
	Willoughby Boulevard	Village Parkway Extension	Cove Road	Cove Road	Cove Road	CR- 713/High Meadow Avenue	S Ocean Dr	SE Bridge Rd	SE Green River Pkwy	SW Murphy Rd	Federal Highway/US 1	Martin Highway	SW Martin Downs Blvd	Project Description
Overall Performance	R-2	R-3	R-4	R-5	R-6	R-7	R-9	R-10	R-11	R-14	R-8	R-12	R-13	Map ID
Total Score	36.0	36.0	35.0	39.0 39.0 36.0 30.0 33.0 33.0 32.0 36.0 29.0 33.0										
Ranking	2	2	2	1 1 2 4 3 3 4 2 4 3										

Priority	Scoring	Syste
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,	00.0	00.0	00.0	00.0	00.0	00.0			
	2	2	2	1	1	2			
Descriptive Statistic				Priority	Scoring Sys	stem			
Average	34.6			4	< 25th Percentile				
SD	3.2			3	25th - 50th Pe	ercentile			
Maximum Value	39.0			2	51st - 75th Pe	ercentile			
Minimum Value	30.0			1	> 75th Percer	ntile			
Sum	277.0								
Median	34.0								
< 25th Percentile	32.7								
25th Percentile	32.8								
50th Percentile	34.0								
75th Percentile	36.8								
Range	9.0								

2

Highway Projects Prioritization Criteria Martin in Motion, 2045 LRTP

marann	1100001, 2045 LRTP		New 2 Lane Road	New 4 Lane Road				Widen from	2 to 4 Lane				Wi	den from 4 to 6 La	ane	Under Construction/On-going		PD&E Study		1
ltem Number	Evaluation Criteria	Performance Measure	Willoughby Boulevard	Village Parkway Extension	Cove Road	Cove Road	Cove Road	CR-713/High Meadow Avenue	S Ocean Dr	SE Bridge Rd	SE Green River Pkwy	SW Murphy Rd	Federal Highway/US 1	Martin Highway	SW Martin Downs Blvd	SR-714/Martin Highway	Willoughby Boulevard	Cove Road	CR-713/High Meadow Avenue	
			R-2	R-3	R-4	R-5	R-6	R-7	R-9	R-10	R-11	R-14	R-8	R-12	R-13	R-1	4196693	4417001	4416991	Map ID
1	Level of service	Vehicle miles of travel operating at or better than adopted level of service standard.	9,550	34,106	45,663	18,380	7,760	51,883	11,786	37,536	8,954	15,161	75,511	57,284	75,996					
2	Job access	Percent of jobs within 30-minute auto travel time for average household.	QTR	FULL	FULL	FULL	FULL	. FULL	QTF	FULL	THRQTR	QTR	FULL	FULL	FULL					
3	Delay	Vehicle hours of delay per capita compared to base year conditions. (Annualized)	0.0	0.0	(1.1)	(0.7)	(0.1)) (0.5)	(4.7)) (3.9)	(1.7)	(0.8)	(1.0)	0.1	(1.3)					
4	Travel time reliability	% of person-miles traveled on the non-Interstate NHS that are reliable.	1.67	1.32	1.51	1.67	1.69	9 1.17	1.40	2.29	2.11	1.74	1.28	2.03	2.40					
5	Funding	Percent of major roadways with appropriate bicycle, pedestrian and transit facilities.	SD/BL	SD/BL	SD/BL	SD/BL	SD/BL	SD/BL	SD/BL	SD/BL	SD/BL	SD/BL	SD/BL	SD/BL	SD/BL					
6	Quality of life	Transportation projects that are located in Community Redevelopment Areas (CRAs,	Outside	Outside	Outside	Outside	Partially Inside	e Outside	Outside	e Partially Inside	Adjacen	t Outside	Outside	Partially Inside	Partially Inside	2				
7	Hurricane Evacuation	Centerline miles of roadway on evacuation routes operating at or better than the adopted level of service.	0.0	0.0	0.0	0.0	0.0	0.0	0.6	5 2.3	0.4	0.0	1.9	0.0	1.5	;				
8	Fatal and serious injury crashes	Number of fatalities (Annual)	0	0	1	0	C	0 0	1	1	C	0 0	1	0	3	Funded	Funded	Funded	Funded	
9	Fatal and serious injury crashes	Number of serious injuries. (Annual)	7	10	37	16	٤	3 27	23	3 49	e	5 11	68	41	120					
10	Environmentally sensitive lands	Acres of impacted environmentally sensitive lands, such as, wetlands or significant wildlife habitat or conservation lands.	10.9	132.1	179.6	89.8	51.3	3 75.2	253.4	316.3	117.5	65.0	83.3	305.3	46.9					
11	Environmental justice	Investment in transportation improvement projects in environmental justice areas compared to the rest of the county.	136	3	25	50	24	. 0	6	23	87	. 18	15	20	24					
12	Extreme weather resiliency	Transportation improvement projects located in areas prone to inundation due to storm surge, king tides and other extreme weather events including SLR.	Partially Within	Outside	Partially Within	Adjacent to	Partially Within	Partially Within	Within	Outside	Within	Within	Outside	Within	Within					
13	Community support	Level of support for improvements in the community.	Medium Support	Low Support	High Support	High Support	High Support	Medium Support	Low Support	High Support	Medium Support	Medium Support	Medium Support	Medium Support	Medium Support					
14	Community support	Right of way availability and/or cost.	No Cost	No Cost	Low Cost	Low Cost	Low Cost	Low Cost	No Cost	No Cost	High Cost	Medium Cost	No Cost	High Cost	High Cost					
15	High impact transportation projects	Funding allocation for strategic transportation improvement projects.	High Commitment	High Commitment	High Commitment	High Commitment	High Commitment	High Commitment	Medium Commitment	Medium Commitment	Low Commitment	Medium Commitment	Medium Commitment	Medium Commitment	Medium Commitment					

Level of service

	New 2 Lane Road	New 4 Lane Road		Widen from 2 to 4 Lane Widen from 4 to 6 Lane												
Willoughby BoulevardVillage Parkway ExtensionCove RoadCove RoadCove RoadCove RoadCerean Cove RoadCerean Meadow AvenueSe Green 									Project Description							
Performance Measure	R-2	R-3	R-4	R-5	R-6	R-7	R-9	R-10	R-11	R-14	R-8	R-12	R-13	Map ID		
Vehicle miles of travel operating at or																
better than adopted level of service	9,550	34,106	45,663	18,380	7,760	51,883	11,786	37,536	8,954	15,161	75,511	57,284	75,996			
standard.																
Points/Score	1	2	3	2	1	3	2	3	1	2	4	4	4			

Descriptive Statistic Average 34,582

Points Scoring System

1 < 25th Percentile

2 25th - 50th Percentile

3 51st - 75th Percentile

4 > 75th Percentile

Average	34,582
SD	24,998
Maximum Value	75,996
Minimum Value	7,760
Sum	449,571
Median	34,106
< 25th Percentile	11,785
25th Percentile	11,786
50th Percentile	34,106
75th Percentile	51,883
Range	68,236

Note:

Job access

	New 2 Lane Road	New 4 Lane Road				Widen from	2 to 4 Lane				Wide	en from 4 to 6	Lane						
	Willoughby Boulevard	Village Parkway Extension	Cove Road	Cove Road	Cove Road	CR-713/High Meadow Avenue	S Ocean Dr	SE Bridge Rd	SE Green River Pkwy	SW Murphy Rd	Federal Highway/US 1	Martin Highway	SW Martin Downs Blvd	Project Description					
Performance Measure	R-2	R-3	R-4	R-5	R-6	R-7	R-9	R-10	R-11	R-14	R-8	R-12	R-13	Map ID					
Percent of jobs within 30-minute auto travel time for average household.	QTR	QTR	FULL	FULL	FULL	FULL	QTR	FULL	THRQTR	QTR	FULL	FULL	FULL						
Points/Score	1	1	4	4	4	4	1	4	4 4 4 1 4 3 1 4 4 4										

Descriptive Statistic

Average	#DIV/0!
SD	#DIV/0!
Maximum Value	0
Minimum Value	0
Sum	0
Median	#NUM!
< 25th Percentile	QTR
26th Percentile	HALF
50th Percentile	THRQTR
75th Percentile	FULL
Range	0

Points Scoring System

1 2

3

4

QTR Less than 25% of the project within 15-minute contour

HALF Approximately 25% to 49% of the project within 15-minute contour

THRQTR Approximately 50% to 74% of the project within 15-minute contour

FULL More than 75% to project within 15-minute time contour

Note:

Based on length of a given project within the 15-minute travel time contou based on three major activity centers, Indiantown, downtown Stuart, and Hope Sound

Delay

-	New 2 Lane Road	New 4 Lane Road		Widen from 2 to 4 Lane Widen from 4 to 6 Lane											
	Willoughby Boulevard	Village Parkway Extension	Cove Road	Cove Road	Cove Road Cove Road CR-713/High Meadow Avenue S Ocean Dr Rd Rd SE Bridge Rd SE Green River Pkwy Rd SW Murphy Rd Highway/US 1 Martin Highway Do										
Performance Measure	R-2	R-3	R-4	R-5	R-6	R-7	R-9	R-10	R-11	R-14	R-8	R-12	R-13	Map ID	
Vehicle hours of delay per capita compared to base year conditions. (Annualized)	0.0	0.0	-1.1	-0.7	-0.1	-0.5	-4.7	-3.9	-1.7	-0.8	-1.0	0.1	-1.3		
Points/Score	1	1	3	2 2 2 4 4 4 3 3 1 3											

Descriptive Statistic

Average -1.2 1.5 SD Maximum Value 0.1 Minimum Value -4.7 Sum -15.6 Median -0.8 < 25th Percentile -1.3 25th Percentile -1.3 50th Percentile -0.8 75th Percentile -0.1 Range 4.8

Points Scoring System

4	< 25th Percentile
3	25th - 50th Percentile

25th - 50th Percentile

2 51st - 75th Percentile 1 > 75th Percentile

Note:

Less delay translates into a higher score. Delays per person in the vehicles passing through the segment. The average vehicle occupacy (VOC) used in 1.3 per/Veh based on TCRPM model.

6

Travel time reliability

	New 2 Lane Road	New 4 Lane Road				Widen from	2 to 4 Lane				Wide	n from 4 to 6	Lane	
	Willoughby Boulevard	Parkway	Cove Road	Cove Road	Cove Road	CR-713/High Meadow Avenue	S Ocean Dr	SE Bridge Rd	SE Green River Pkwy	SW Murphy Rd	Federal Highway/US 1	Martin Highway	SW Martin Downs Blvd	Project Description
Performance Measure	R-2	R-3	R-4	R-5	R-6	R-7	R-9	R-10	R-11	R-14	R-8	R-12	R-13	Map ID
% of person-miles traveled on the non- Interstate NHS that are reliable.	1.67	1.32	1.51	1.67	1.69	1.17	1.40	2.29	2.11	1.74	1.28	2.03	2.40	
Points/Score	3	4	3	3 2 4 4 1 1 2 4 1 1										

Descriptive Statistic

Average	1.7
SD	0.4
Maximum Value	2.29
Minimum Value	1.17
Sum	13.58
Median	1.68
< 25th Percentile	1.47
25th Percentile	1.48
50th Percentile	1.68
75th Percentile	1.83
Range	1.12

Points Scoring System

4 < 25th Percentile

25th - 50th Percentile
 51st - 75th Percentile

2 51st - 75th Percentil1 > 75th Percentile

Note:

Accumulated congested travel time along the project, normalized by the distance.

7

Funding

	New 2 Lane Road	New 4 Lane Road		Widen from 2 to 4 Lane Widen from 4 to 6 Lane										
	Willoughby Boulevard	Village Parkway Extension	Cove Road	Cove Road	Cove Road	CR-713/High Meadow Avenue	S Ocean Dr	SE Bridge Rd	SE Green River Pkwy	SW Murphy Rd	Federal Highway/US 1	Martin Highway	SW Martin Downs Blvd	Project Description
Performance Measure	R-2	R-3	R-4	R-5	R-6	R-7	R-9	R-10	R-11	R-14	R-8	R-12	R-13	Map ID
Percent of major roadways with appropriate bicycle, pedestrian and transit facilities.	SD/BL	SD/BL	SD/BL	SD/BL	SD/BL	SD/BL	SD/BL	SD/BL	SD/BL	SD/BL	SD/BL	SD/BL	SD/BL	
Points/Score	2	2	2	2	2	2	2	2	2	2	2	2	2	

Descriptive Statistic

Average	#DIV/0!
SD	#DIV/0!
Maximum Value	0
Minimum Value	0
Sum	0
Median	#NUM!
< 25th Percentile	SD
25th Percentile	SD/BL
50th Percentile	TRST
75th Percentile	MM
Range	0

PointsScoring System1SDProject

2

3

4

SD Project includes sidewalk improvements

SD/BL Project includes sidewalk and bicycle facilities improvements

TRST Project includes express bus, commuter bus or BRT improvements

MM Project includes multimodal improvements, such as, sidewalk, bicycle and transit and/or freight improvements

Note:

Quality of life

Quality of life	-													
	New 2 Lane Road	New 4 Lane Road		Widen from 2 to 4 Lane Widen from 4 to 6 Lane										
	Willoughby Boulevard	Village Parkway Extension	Cove Road	Cove Road	Cove Road	CR-713/High Meadow Avenue	S Ocean Dr	SE Bridge Rd	SE Green River Pkwy	SW Murphy Rd	Federal Highway/US 1	Martin Highway	SW Martin Downs Blvd	Project Description
Performance Measure	R-2	R-3	R-4	R-5	R-6	R-7	R-9	R-10	R-11	R-14	R-8	R-12	R-13	Map ID
Transportation projects that are located in Community Redevelopment Areas (CRAs).	Outside	Outside	Outside	Outside	Partially Inside	Outside	Outside	Partially Inside	Adjacent	Outside	Outside	Partially Inside	Partially Inside	
Points/Score	0	0	0	0	1	0	0	1	1	0	0	1	1	

Descriptive Statistic

Descriptive Statistic		Points	Scoring S	System
Average	#DIV/0!	0	Outside	Project is outside the Community Redevelopment Area (CRA) boundary.
SD	#DIV/0!	1	Adjacent	Project is adjacent or touches Community Redevelopment Area (CRA) boundary.
Maximum Value	0	1	Partially Inside	Project is partially inside the Community Redevelopment Area (CRA) boundary (0 to 50%).
Minimum Value	0	1	Inside	Project is inside the Community Redevelopment Area (CRA) boundary (more than 50%).
Sum	0			
Median	#NUM!			
< 25th Percentile	Outside			
25th Percentile	Adjacent			
50th Percentile	Partially Inside			
75th Percentile	Inside			
Range	0			

Note: Based on GIS analysis. Project gets a 1 point bump if it is within or in vicinity of a Community Redevelopment Area (CRA).

9

Hurricane Evacuation

Hurricane Evacuation	-														
	New 2 Lane Road	New 4 Lane Road		Widen from 2 to 4 Lane Widen from 4 to 6 Lane											
	Willoughby Boulevard	Village Parkway Extension	Cove Road	Cove Road		CR-713/High Meadow Avenue	S Ocean Dr	SE Bridge Rd	SE Green River Pkwy	SW Murphy Rd	Federal Highway/US 1	Martin Highway	SW Martin Downs Blvd	Project Description	
Performance Measure	R-2	R-3	R-4	R-5	R-6	R-7	R-9	R-10	R-11	R-14	R-8	R-12	R-13	Map ID	
Centerline miles of roadway on evacuation routes operating at or better than the adopted level of service.	0.0	0.0	0.0	0.0	0.0	0.0	0.6	2.3	0.4	0.0	1.9	0.0	1.5		
Points/Score	0	0	0	0	0	0	1	1	0	0	1	0	1		

Descriptive Statistic

Average	0.41
SD	0.79
Maximum Value	2.27
Minimum Value	0.00
Sum	3.31
Median	0.00
< 25th Percentile	0.00
25th Percentile	0.00
50th Percentile	0.00
75th Percentile	0.47
Range	2.27

Points Scoring System

0 < 25th Percentile 0 25th - 50th Percentile

0 51st - 75th Percentile

1 > 75th Percentile

Note:

Based on GIS analysis. Project get a 1 point bump is it overlaps with hurrican evacuation route.

Fatal and serious injury crashes

	New 2 Lane Road	New 4 Lane Road		Widen from 2 to 4 Lane									Widen from 4 to 6 Lane				
	Willoughby Boulevard	Village Parkway Extension	Cove Road	Cove Road		CR-713/High Meadow Avenue	S Ocean Dr	SE Bridge Rd	SE Green River Pkwy	SW Murphy Rd	Federal Highway/US 1	Martin Highway	SW Martin Downs Blvd	Project Description			
Performance Measure	R-2	R-3	R-4	R-5	R-6	R-7	R-9	R-10	R-11	R-14	R-8	R-12	R-13	Map ID			
Number of fatalities (Annual)	0	0	1	0	0	0	1	1	0	0	1	0	3				
Points/Score	4	4	2	4	4	4	2	2	4	4	2	4	1				

Descriptive Statistic

Average	0.4
SD	0.5
Maximum Value	1
Minimum Value	0
Sum	3
Median	0
< 25th Percentile	0.00
25th Percentile	0.00
50th Percentile	0.00
75th Percentile	1.00
Range	1

Points Scoring System

4 < 25th Percentile

3 25th - 50th Percentile

2 51st - 75th Percentile

1 > 75th Percentile

Note:

Based on crash rates developed using crash analysis by FDOT D4 in 2013.

Fatal and serious injury crashes

	New 2 Lane Road	New 4 Lane Road		Widen from 2 to 4 Lane									Widen from 4 to 6 Lane			
	Willoughby Boulevard	Village Parkway Extension	Cove Road	Cove Road	Cove Road	CR-713/High Meadow Avenue	S Ocean Dr	SE Bridge Rd	SE Green River Pkwy	SW Murphy Rd	Federal Highway/US 1	Martin Highway	SW Martin Downs Blvd	Project Description		
Performance Measure	R-2	R-3	R-4	R-5	R-6	R-7	R-9	R-10	R-11	R-14	R-8	R-12	R-13	Map ID		
Number of serious injuries. (Annual)	7	7	37	16	8	27	23	49	6	11	68	41	120			
Points/Score	4	4	1	3	4	2	2	1	4	3	1	1	1			

Descriptive Statistic

Average	22.1
SD	15.1
Maximum Value	49
Minimum Value	6
Sum	177
Median	19.5
< 25th Percentile	10.2
25th Percentile	10.3
50th Percentile	19.5
75th Percentile	29.5
Range	43

Points Scoring System

< 25th Percentile 4 3

25th - 50th Percentile

2 51st - 75th Percentile

> 75th Percentile 1

Note:

Based on crash rates developed using crash analysis by FDOT D4 in 2013.

Environmentally sensitive lands

	New 2 Lane Road	New 4 Lane Road		Widen from 2 to 4 Lane Widen from 4 to 6 Lane											
	Willoughby Boulevard	Village Parkway Extension	Cove Road	Cove Road	Cove Road	CR-713/High Meadow Avenue	S Ocean Dr	SE Bridge Rd	SE Green River Pkwy	SW Murphy Rd	Federal Highway/US 1	Martin Highway	SW Martin Downs Blvd	Project Description	
Performance Measure	R-2	R-3	R-4	R-5	R-6	R-7	R-9	R-10	R-11	R-14	R-8	R-12	R-13	Map ID	
Acres of impacted environmentally sensitive lands, such as, wetlands or significant wildlife habitat or conservation lands.	10.9	10.9	179.6	89.8	51.3	75.2	253.4	316.3	117.5	65.0	83.3	305.3	46.9		
Points/Score	4	4	2	3	4	3	1	1	2	4	3	1	4		

Descriptive Statistic Average

Maximum Value

Minimum Value

< 25th Percentile

25th Percentile

50th Percentile

75th Percentile

143.5

97.2

316.3

51.3

1148.2

103.6

72.6

72.7

103.6

198.1

Range 265.0

SD

Sum

Median

Points Scoring System

4 < 25th Percentile

3 25th - 50th Percentile

2 51st - 75th Percentile

1 > 75th Percentile

Note:	
Based on GIS analysis.	

Environmental justice

	New 2 Lane Road	New 4 Lane Road		Widen from 2 to 4 Lane Widen from 4 to 6 Lane								Lane		
	Willoughby Boulevard	Village Parkway Extension	Cove Road	Cove Road	Cove Road	CR-713/High Meadow Avenue	S Ocean Dr	SE Bridge Rd	SE Green River Pkwy	SW Murphy Rd	Federal Highway/US 1	Martin Highway	SW Martin Downs Blvd	Project Description
Performance Measure	R-2	R-3	R-4	R-5	R-6	R-7	R-9	R-10	R-11	R-14	R-8	R-12	R-13	Map ID
Investment in transportation improvement projects in environmental justice areas compared to the rest of the county.	136	136	25	50	24	0	6	23	87	18	15	20	24	
Points/Score	4	4	3	4	3	1	1	2	4	2	2	2	3	

Descriptive Statistic

Average SD 29 28 Maximum Value 87 Minimum Value 0 233 Sum Median 24 < 25th Percentile 14 25th Percentile 15 50th Percentile 24 75th Percentile 31 87 Range

Points Scoring System

- 1 < 25th Percentile 2 25th - 50th Percentile
- 2 25th 50th Percentil
- 3 51st 75th Percentile
- 4 > 75th Percentile

Note:

Score based on density of zero auto households with 2 mile buffer of the project. New roadway projects that divide or bifurcate communities in EJ areas will be penalized by taking one point (-1) from the score for this criterion

Extreme weather resiliency

	New 2 Lane Road	New 4 Lane Road		Widen from 2 to 4 Lane Widen from 4 to 6 Lane										
	Willoughby Boulevard	Village Parkway Extension	Cove Road	Cove Road		CR-713/High Meadow Avenue	S Ocean Dr	SE Bridge Rd	SE Green River Pkwy	SW Murphy Rd	Federal Highway/U S 1	Martin Highway	SW Martin Downs Blvd	Project Description
Performance Measure	R-2	R-3	R-4	R-5	R-6	R-7	R-9	R-10	R-11	R-14	R-8	R-12	R-13	Map ID
Transportation improvement projects located in areas prone to inundation due to storm surge, king tides and other extreme weather events including SLR.	Partially Within	Outside	Partially Within	Adjacent to	Partially Within	Partially Within	Within	Outside	Within	Within	Outside	Within	Within	
Points/Score	1	0	1	1	1	1	1	0	1	1	0	1	1	

Descriptive Statistic

Average	#DIV/0!
SD	#DIV/0!
Maximum Value	0
Minimum Value	0
Sum	0
Median	#NUM!
< 25th Percentile	Outside
25th Percentile	Adjacent to
50th Percentile	Partially Within
75th Percentile	Within
Range	0

Points Scoring System

0 Outside Project located outside SLR vulnerability area, storm surge/king tides

1 Adjacent to

1

1 Partially Within

Within Project located within SLR vulnerability area, storm surge/king tides

Note:

Based on GIS analysis. Project gets a 1 point bump if it is within or in vicinity of flood prone location due to extreme weather events

Community support

	New 2 Lane Road	New 4 Lane Road		Widen from 2 to 4 Lane								Widen from 4 to 6 Lane			
Parkway Cove Road L Cove Road L Cove Road L Meadow LS Ocean Dr L						SW Martin Downs Blvd	Project Description								
Performance Measure	R-2	R-3	R-4	R-5	R-6	R-7	R-9	R-10	R-11	R-14	R-8	R-12	R-13	Map ID	
Level of support for improvements in the	Medium		High	High	High	Medium		High	Medium	Medium	Medium	Medium	Medium		
community.	Support	Low Support	Support	Support	Support	Support	Low Support	Support	Support	Support	Support	Support	Support		
Points/Score	3	2	4	4 4 3 2 4 3 3 3 3 3							3				

Descriptive Statistic

Average	#DIV/0!
SD	#DIV/0!
Maximum Value	0
Minimum Value	0
Sum	0
Median	#NUM!
< 25th Percentile	No Support
25th Percentile	Low Support
50th Percentile	Medium Support
75th Percentile	High Support
Range	0

Note:

Points Scoring System

1 No Support

2 Low Support

3 Medium Support

4 High Support

Community support

Community support	-														
	New 2 Lane Road	New 4 Lane Road		Widen from 2 to 4 Lane								Widen from 4 to 6 Lane			
	Willoughby Boulevard	Village Parkway Extension	Cove Road	ad Cove Road Cove Road CR-713/High Meadow Avenue S Ocean Dr Rd SE Bridge Rd SE Green River Pkwy Rd SW Murphy Rd Highway/US Martin Highway Downs Blvd Downs Blvd Desc								Project Description			
Performance Measure	R-2	R-3	R-4	R-5	R-6	R-7	R-9	R-10	R-11	R-14	R-8	R-12	R-13	Map ID	
Right of way availability and/or cost.	No Cost	No Cost	Low Cost	Low Cost	Low Cost	Low Cost	No Cost	No Cost	High Cost	Medium Cost	No Cost	High Cost	High Cost		
Points/Score	4	4	3	3	3	3	4	4	1	2	4	1	1		

Descriptive Statistic

Average #DIV/0! SD #DIV/0! Maximum Value 0 Minimum Value 0 0 Sum Median #NUM! < 25th Percentile No Cost 25th Percentile Low Cost 50th Percentile Medium Cost 75th Percentile High Cost Range 0

Note:

Points Scoring System

No Cost Right of way is not required 4

3 Low Cost Minor right of way may be required

2 Medium Cost Some right of way may be required

1 High Cost Project cannot be implemented without right of way acquisition or capital cost exceed \$25 million

High impact transportation projects

	New 2 Lane Road	New 4 Lane Road		Widen from 2 to 4 Lane								Widen from 4 to 6 Lane			
	Willoughby Boulevard	Village Parkway Extension	Cove Road	Cove Road	Cove Road	CR-713/High Meadow Avenue		SE Bridge Rd	SE Green River Pkwy	SW Murphy Rd	Federal Highway/US 1	Martin Highway	SW Martin Downs Blvd		
Performance Measure	R-2	R-3	R-4	R-5	R-6	R-7	R-9	R-10	R-11	R-14	R-8	R-12	R-13		
Funding allocation for strategic	High	High	High	High	High	High	Medium	Medium	Low	Medium	Medium	Medium	Medium		
transportation improvement projects.	Commitment	Commitment	Commitment	Commitment	Commitment	Commitment	Commitment	Commitment	Commitment	Commitment	Commitment	Commitment	Commitment		
Points/Score	4	4	4	4	4	4	3	3	2	3	3	3	3		

Descriptive Statistic

Average	#DIV/0!
SD	#DIV/0!
Maximum Value	0
Minimum Value	0
Sum	0
Median	#NUM!
< 25th Percentile	No Commitment
25th Percentile	Low Commitment
50th Percentile	Medium Commitment
75th Percentile	High Commitment

Range

0

Note:

Points Scoring System

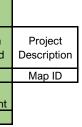
4

 1
 No Commitment
 Newly identifed project

 2
 Low Commitment
 Project included in one study/plan

 3
 Medium Commitment
 Project included in two studies/plans

High Commitment



Appendix H: 2045 Cost Feasible Plan, Projects List by Mode

2045 Cost Feasible Plan - Summary

Martin in Motion, 2045 LRTP

Category		Year of Expe	nditure (YOE)		25-Year Total	20-Year Total
Calegory	2021-2025 ¹	2026-2030	2031-2035	2036-2045	2021-2045	2026-2045
Transit						
Transit Operating Cost*		\$15,321,131	\$18,017,650	\$47,556,791	\$80,895,573	\$80,895,573
Transit Capital Cost		\$5,269,796	\$4,057,466	\$10,115,598	\$19,442,861	\$19,442,86 1
Highway/Roadway (non Strategic Intermodal System (SIS))	\$47,082,871	\$72,209,426	\$76,010,115	\$225,488,290	\$420,790,702	\$373,707,831
Strategic Intermodal System (SIS)**	\$7,759,000	\$0	\$12,100,000	\$506,811,000	\$526,670,000	\$518,911,000
Freight ²	\$2,907,683	\$0	\$10,000,000	\$13,337,000	\$26,244,683	\$23,337,000
Transportation System Management & Operations (TSM&O) ³		\$30,090,585	\$20,432,716	\$18,643,258	\$69,166,559	\$69,166,559
Other (Park-and-Ride, Non-Motorized Grade Separation)		\$6,028,750	\$0	\$0	\$6,028,750	\$6,028,750
Water Based Transportation						
Operating Cost*		\$0	\$0	\$0	\$0	\$0
Capital Cost		\$0	\$0	\$0	\$0	\$0
Complete Streets ⁴	\$ 0	* 44.405.000	* 4 4 9 9 9 9 5	*•••••••••••••	005 400 545	\$05 400 54
Non-Motorized Projects ⁴	\$0	\$14,105,829	\$14,180,205	\$66,814,511	\$95,100,545	\$95,100,545
Aviation ⁵		\$3,962,500	\$0	\$0	\$3,962,500	\$3,962,500
Other Transportation Improvement Plan (TIP) Projects	\$74,358,507	\$0	\$0	\$0	\$0	\$0
Capacity Projects (non SIS)	\$12,312	\$0	\$0	\$0	\$0	\$0
Non-Capacity Projects	\$72,142,600	\$0	\$0	\$0	\$0	\$0
Planning (PL Funds)	\$2,203,595	\$0	\$0	\$0	\$0	\$0
Total Cost	\$129,200,378	\$146,988,018	\$144,798,152	\$875,429,449	\$1,222,057,490	\$1,167,215,619
Strategic Intermodal System (SIS)**	\$7,759,000	\$0	\$12,100,000	\$506,811,000	\$526,670,000	\$518,911,000
Transit Operating Cost*	\$0	\$15,321,131	\$18,017,650	\$47,556,791	\$80,895,573	\$80,895,573
Water Based Transportation (Operating Cost)*	\$0	\$0	\$0	\$0	\$0	\$(
Capital Project Cost (all modes)	\$121,441,378	\$131,666,886	\$114,680,502	\$321,061,658	\$614,491,917	\$567,409,040

Notes

* Operating cost includes total cost for the entire 5-year or 10-year period in Year of Expenditure (YOE) dollars.

** Project costs are based on SIS First and Second Five-Year Plans, July 2020 and SIS Long Range Cost Feasible Plan, July 2018.

¹ Time band includes funds "as programmed" in the FY 2021-2025 Transportation Improvement Program (TIP). Includes funds for transit, aviation, and Districtwide maintenance projects.

⁴ Funds "set-aside" for Complete streets and non-motorized projects. Additional funds may be available through maintenance projects and discretionary grants.

All categories are funded through federal and state programs.

1

² All freight projects are included in the Strategic Intermodal System (SIS) category except \$157,683 Consolidated Rail Infrastructure and Safety Improvements (CRISI) Program grant in the 5-year increment, 2021-2025. ³ Funds "set-aside" for Transportation System Management & Operations (TSM&O) improvements.

Transit Projects

Martin in Motion, 2045 LRTP

initial and h											
Map ID	Project Description	Location/Geography	Source	Category or Type	Comments	Total Project Cost (YOE*)		Year of Expenditure (YOE)			
						COSL (TOE)	2021-2025	2026-2030	2031-2035	2036-2045	
Service I	Improvements										
n/a	Continue to maintain and operate existing fixed route bus service ¹	Systemwide	TDP 2020-2029	Annual Operating Cost	Cost affordable plan.	\$67,086,459	TIP	\$12,705,769	\$14,941,984	\$39,438,706	
n/a	Continue to maintain existing paratransit service	Systemwide	TDP 2020-2029	Annual Operating Cost	Cost affordable plan.	\$13,809,114	TIP	\$2,615,363	\$3,075,666	\$8,118,085	
Capital/In	nfrastructure Improvements										
n/a	Fleet Replacement	Revenue vehicles to maintain existing service based on Marty's fleet replacement schedule	TDP 2020-2029	Revenue Vehicles	Cost affordable plan. Capital needs over a 10-year period.	\$15,856,896	TIP	\$3,003,200	\$3,531,763	\$9,321,933	
n/a	Transit Security Equipment	n/a	TDP 2020-2029	Equipment	Cost affordable plan. Capital needs over a 10-year period.	\$339,801	TIP	\$64,356	\$75,683	\$199,762	
n/a	Transit Technology	n/a	TDP 2020-2029	Equipment	Cost affordable plan.	\$105,445	TIP	\$105,445			
n/a	Other Transit/Bus Stop Infrastructure	New bus stops, safety/ADA improvements, benches, shelters, lighting, bicycle storage	TDP 2020-2029	Facility Improvements	Cost affordable plan. Unfunded needs for this line item includes \$167.970 over a 10-year period.	\$1,426,594	TIP	\$382,670	\$450,020	\$593,904	
n/a	Connection to Palm Beach Tri-Rail Intermodal Center	New park-and-ride facility to provide connection to Palm Beach Tri-Rail Intermodal Center	Park-And-Ride Master Plan, FDOT - D4, Oct. 2018, pg. 10	New Facility	Assumes 50 spaces @ \$17,000/space as base construction cost. Total construction cost includes mobilization, MOT and design costs.	\$1,464,125		\$1,464,125			
n/a	Virgin Trains USA/Brightline Station	Intercity passenger rail station. Potential locations include East Coast Lumber, Kiwanis Park and Stypmann Boulevard.	City of Stuart Brightline Station Analysis, 2018	Now Eacility	Privately funded.	-	Private Sector Funded Project				
Other	•				·						
n/a	Transit Plans and Studies	Transit Development Plan and other transit related studies	TDP 2020-2029	Study	For future TDPs and other transit planning studies	\$250,000		\$250,000			
Notes					Transit Operating Cost (20-year total)	\$80,895,573		\$15,321,131	\$18,017,650	\$47,556,791	
n/a - Not A	Applicable				Transit Capital Cost	\$19,192,861		\$5,269,796	\$4,057,466	\$10,115,598	

* YOE - Year of Expenditure

¹ Fixed bus route bus service includes commuter bus routes for a total of five existing Marty routes (1, 2, 3, 20X and 30X).

Transit operating cost funded through local (General Fund, Fare Box, and 9th Cent Fuel Tax), federal funds directly received by Marty, and state funds (Transit Program, up to 50% of eligible expenses)

Transit capital/infrastructure cost funded through local funds (9th Cent Fuel Tax), FDOT Transit Program (550% of non-federal share), and federal funds directly received by Marty except the new park-and-ride facility.

Transit Plans and Studies is funded through Product Support under FDOT's a Non-Capacity Program.

New park-and-ride facility is funded through FDOT's Transit Program.

2045 Unfunded Transit Needs

Map ID	Project Description	Location/Geography	Source	Category or Type	Comments	Tota (P
Service I	mprovements			·		
T-1	Extend Route 2	Add a stop at Halpatiokee Park during peak commute hours, transfer opportunities to Routes 1 and 3. Closed door service during non-peak hours.	TDP 2020-2029	Service Modification - Restructure Route.	Unfunded transit needs. Complementary ADA service is not required since the proposed modification is a commuter service.	
T-2	Split Route 3 into Routes 3a and 3b	Same service coverage area but provides new service along Monterey Road between Willoughby Boulevard and US-1/Federal Highway. Maintain existing headways and transfer opportunities to Route 1 and to each other.	TDP 2020-2029	Service Modification - Restructure Route.	n Unfunded transit needs.	
T-3	Extend Route 20X	Extend service to Halpatiokee Park to the north and to Mangonia Tri-Rail Station in Palm Bach County to the south during peak commute hours only.	TDP 2020-2029	Service Modification - Restructure Route.	Unfunded transit needs. Complementary ADA service is not required since the proposed modification is a commuter service.	
T-4	Add later service for Routes 1, 2 and 3	Increase span of service by approximately 2 hours from 8:00 pm to 10:00pm. Current span of service is approximately 6:00 am to 8:00 pm, weekday service only.	TDP 2020-2029		Unfunded transit needs. Identified as a high priority improvement through TDP's public outreach process. Complementary ADA service needs to be provided.	\$1
T-5	Add Saturday service for Routes 1, 2 and 3	Provide Saturday service from 6:00 am to 8:00 pm on Routes 1, 2 and 3.	TDP 2020-2029	Service Modification - Add Saturday Service.	Unfunded transit needs. Identified as a high priority improvement through TDP's public outreach process. Complementary ADA service needs to be provided.	
T-6	Double frequencies for Routes 2 and 3	Reduce headway on Route 2 from 40 minutes (Indiantown loop) and 95 minutes (Closed door eastbound service to Stuart) to 20 minutes and 48 minutes respectively. Reduce headway on Route 3 from 40 to 20 minutes.	TDP 2020-2029		Unfunded transit needs. Identified as a high priority improvement through TDP's public outreach process.	
T-7	New Jensen Beach Route	From Treasure Coast Square to Jensen Beach Park (serving Hoke Library, Jensen Beach Park, Hutchinson Island and Kiwanis Park-and-Ride).	TDP 2020-2029	New Service Expansion	Unfunded transit needs. Complementary ADA service needs to be provided.	
T-8	New regional Turnpike commuter route to West Palm Beach Downtown Intermodal Transit Center	From US-1/Federal Highway and Kanner Highway to Intermodal Transit Center (serving FDOT Park-and-Ride at SW Martin Highway, West Palm Beach Virgin Trains USA/Brightline station, City Place and Palm Tran's Intermodal Transit Center). Peak hour service only with two morning and two evening trips.	TDP 2020-2029	New Service Expansion	Unfunded transit needs.	.
T-9	Palm City Mobility on Demand (MOD) Service	On demand service in Palm City.	TDP 2020-2029	New Service Expansion	Unfunded transit needs. Limitations exist to implement a dynamic real time MOD service using TripSpark, the County's existing route scheduling software.	
T-10	Jensen Beach/Rio CRA MOD	On demand service within Jensen Beach and Rio CRA as well as connecting to Marty routes.	TDP 2020-2029	New Service Expansion	If fixed route service is not implemented. Unfunded transit needs. Limitations exist to implement a dynamic real time MOD service using TripSpark, the County's existing route scheduling software.	



Map ID	Project Description	Location/Geography	Source	Category or Type	Comments	Total Cost ¹ (PDC)
n/a	New Service - Deviated Fixed Route	Complementary service to New Jensen Beach Route	TDP 2020-2029	New Service Expansion - ADA	Unfunded transit needs.	\$224,069
n/a	New Service - ADA	Within 3/4 mile of proposed new transit routes to meet ADA requirements.	TDP 2020-2029	New Service Expansion - ADA	Unfunded transit needs.	\$858,184
T-11	Downtown Stuart Tram: Maintain Existing Service Level	Micro transit service (two routes) within downtown Stuart with 10- to 15- minute headway	City of Stuart Tram Business Plan, 2019	Annual Operating Cost		\$185,456
T-12	Downtown Stuart Tram: Expand Service Level (Two Routes)	Micro transit service (two routes) within downtown Stuart with less than 10- to 15- minute headway	City of Stuart Tram Business Plan, 2019	Service Modification - Reduce Headway.	Expanded service to begin in 2023	\$235,456
T-13	Downtown Stuart Tram: Expand Service Level (Three Routes)	Micro transit service (three routes) within downtown Stuart with 10- to 15- minute headway	City of Stuart Tram Business Plan, 2019	New Service Expansion or Reduced Headway	Expanded service to begin in 2023	\$235,456
Capital/In	frastructure Improvements					
n/a	Buses for New or Expanded Transit Service	12 fixed route vehicles and 2 ADA vehicles	TDP 2020-2029	Revenue Vehicles - New Service	Unfunded transit needs.	\$3,363,584
n/a	Transit Operations & Maintenance Facility	A centralized full-service transit operations facility/customer service center.	TDP 2020-2029; Martin County Transit Operations Center Feasibility Study, 2018	New Facility	Unfunded transit needs.	\$6,850,000
n/a	Intermodal Hub ²	Adjacent to future planned Virgin Trains USA/Brightline station	TDP 2020-2029	New Facility	Unfunded transit needs.	-not available-
n/a	Downtown Stuart Tram New Shelters	Two new shelters at \$21,000 per shelter	City of Stuart Tram Business Plan, 2019	New Facility	New shelters to be built in Year 2021, Year 2023 and 2025 and cost to be escalated based on 2% annual inflation	\$42,000
Notes					Annual Operating Cost (Unfunded)	\$3,412,794
Present [Day Cost (PDC).				Unfunded Transit Capital/Infrastructure Needs	\$10,255,584

² Project cost not available at this stage. Project cost could vary significantly based on development program for the facility.

Roadway Projects Martin in Motion, 2045 LRTP

Map ID	Facility	From	То	Project Description	Existing	Future	Length	Priority	Total Co	st (Year of Expend	diture)	Total Project		Project	Phase	
mapib	- contry				Lanes	Lanes	(miles)	inonty	PDE/PE ¹	ROW ²	CON ³	Cost (YOE*)	2021-2025	2026-2030	2031-2035	2036-2045
R-1	SR-714/Martin Highway	CR-76A/Citrus Boulevard	Martin Downs Boulevard	Highway Capacity	2	4	0.88	TIP			\$36,417,871	\$36,417,871	CON			
4196693	Willoughby Boulevard	SR-714/ Monterey Road	SR-5/US-1/Federal Highway	PD&E Study	-	-	0.84	TIP	\$5,085,000			\$5,085,000	PDE			
4417001	Cove Road	SR-76/Kanner Highway	SR-5/US-1/Federal Highway	PD&E Study	2	4	4.32	TIP	\$3,075,000			\$3,075,000	PDE			
4416991	CR-713/High Meadow Avenue	I-95	CR-714/Martin Highway	PD&E Study	-	-	2.64	TIP	\$2,505,000			\$2,505,000	PDE			
R-5	Cove Road	Willoughby Boulevard	SR-5/US-1/Federal Highway	Widen from 2L to 4L	2	4	1.07	Tier 1	\$1,803,049	\$1,202,033	\$12,020,326	\$15,025,408		PE, ROW, CON		
R-6	Cove Road	SR-5/US-1/Federal Highway	CR-A1A	Widen from 2L to 4L	2	4	1.12	Tier 1	\$1,887,495	\$1,258,330	\$12,583,302	\$15,729,128		PE, ROW, CON		
R-4	Cove Road	SR-76/Kanner Highway	Willoughby Boulevard	Widen from 2L to 4L	2	4	2.13	Tier 1	\$3,589,247	\$2,392,831	\$27,278,277	\$33,260,355		PE, ROW	CON	
R-15	SR-5/US-1	at SW Joan Jefferson Way		Intersection Modification	-	-	-	Tier 1	\$423,805	\$1,059,514	\$3,814,249	\$5,297,568		PE, ROW, CON		
R-16	CR-714/Martin Highway	Approximately 1200 feet east of SR-710	SE126th Blvd. (Okeechobee County)	Roadway Realignment	-	-	-	Tier 1	\$414,499	\$598,720	\$3,592,323	\$4,605,542		PE, ROW, CON		
R-2	Willoughby Boulevard	SR-714/ Monterey Road	SR-5/US-1/Federal Highway	New 2 Lane Road	0	2	0.84	Tier 2	\$1,363,942	\$0	\$11,402,553	\$12,766,495		PE	CON	
R-7	CR-713/High Meadow Avenue ¹	I-95	CR-714/Martin Highway	Widen from 2L to 4L	2	4	2.64	Tier 2	\$4,851,109	\$2,829,814	\$37,329,284	\$45,010,207		PE, ROW	CON	
R-8	Federal Highway/US 1	SE Seabranch Blvd	SE Osprey St	Widen from 4L to 6L	4	6	1.15	Tier 2	\$2,148,229	\$0	\$14,376,609	\$16,524,838		PE, ROW, CON		
R-10	SE Bridge Rd	Powerline Ave	US-1/Federal Highway	Widen from 2L to 4L	2	4	2.00	Tier 3	\$3,780,343	\$0	\$27,722,515	\$31,502,858				PE, ROW, CON
R-13	SW Martin Downs Blvd	SW Matheson Ave	SW Palm City Rd	Widen from 4L to 6L	4	6	1.33	Tier 3	\$14,380,576	\$0	\$96,239,236	\$110,619,812				PE, ROW, CON
R-11	SE Green River Pkwy	NW Wright Blvd	NW Dixie Hwy	Widen from 2L to 4L	2	4	0.37	Tier 3	\$979,109	\$1,876,625	\$5,303,506	\$8,159,239				PE, ROW, CON
R-14	SW Murphy Rd	Whisper Bay Terrace	North County Line	Widen from 2L to 4L	2	4	0.35	Tier 4	\$926,184	\$1,775,186	\$5,016,830	\$7,718,201				PE, ROW, CON
R-3	Village Parkway Extension	SR-714/Martin Highway	St. Lucie County Line	New 4 Lane Road	0	4	3.00	Privately Funded	\$8,098,582		\$59,389,599	\$67,488,180				PE, ROW, CON

¹ Project Development & Environment Study (PDE), Preliminary Engineering (PE).

² Right of Way (ROW).

³ Construction (CON).

2045 Unfunded Roadway Needs

Map ID	Facility	From	То	Project Description	Existing Lanes		Length (miles)		Total Project Cost (PDC**)
R-9	S Ocean Dr	North County Line	NE Causeway Blvd	Widen from 2L to 4L	2	4	1.40	Tier 4	\$11,367,011
R-12	Martin Highway	SW Mapp Rd	Kanner Hwy	Widen from 4L to 6L	4	6	1.42	Tier 4	\$99,290,485
		-				i	Jnfunded	Roadway Needs	\$110,657,496

Notes

* YOE - Year of Expenditure

** PDC - Present Day Cost

All "off-system," federal-aid eligible facilities funded through local fuel taxes, transportation impact fee, TMA and Other Roads (10%) revenues.

All "on-system" facilities funded through Other Roads revenue stream.

¹ Funded through Other Roads program.

Strategic Intermodal System (SIS) Projects Martin in Motion, 2045 LRTP

Map ID Facility	From	То	Project Description	Source	Category or Type		Design		Right	of Way / Const	ruction	Total Project Cost (YOE**)		Т	otal Cost (YOE**)	
						PDE	PE	Total	ROW	CON	Total		2021-2025	2026-2030	2031-2035	2036-2040	2041-2045
4132532 I-95*	Martin/Palm Beach County Line	CR-708/Bridge Road	Project Dev. & Env.	SIS CFP 2020-2024	PDE	\$2,200,000		\$2,200,000			\$0	\$2,200,000	\$2,200,000				1 1
4132542 1-95*	CR-708/Bridge Road	High Meadow Avenue	Project Dev. & Env.	SIS CFP 2020-2024	PDE	\$2,150,000		\$2,150,000			\$0	\$2,150,000	\$2,150,000				1 1
4226815 I-95*	High Meadow Avenue	Martin/St. Lucie County Line	Project Dev. & Env.	SIS CFP 2020-2024	PDE	\$2,750,000		\$2,750,000			\$0	\$2,750,000	\$2,750,000				1 1
4192522 SR-710/Warfield Blvd.*	Martin FPL Power Plant	CR-609/SW Allapattah Road	Roadway Improvements	SIS CFP 2020-2024	PE, ROW & CON		\$7,585	\$7,585	\$651,094		\$651,094	\$659,000	\$659,000				1 1
3403 I-95*	Martin/Palm Beach County Line	Becker Road	Highway Capacity (includes mainline and interchange improvements)	SIS CFP 2029-2045	PE, ROW & CON		\$10,000,000	\$10,000,000				\$321,189,000			\$10,000,000	\$311,189,000	
3405 SR-710*	Martin/Okeechobee County Line	Martin Powerplant Road	Roadway Improvements	SIS CFP 2029-2045	PE, ROW & CON		\$6,000,000	\$6,000,000	\$5,125,000	\$120,719,000	\$125,844,000	\$131,844,000				\$11,125,000	\$120,719,000
3417 SR-714/Monterey Road*	at Florida East Coast Railway		Grade Separation	SIS CFP 2029-2045	PDE, PE, ROW & CON	\$2,100,000	\$2,212,000	\$4,312,000	\$14,969,000	\$46,597,000	\$61,566,000	\$65,878,000			\$2,100,000	\$2,212,000	\$61,566,000
										Total S	S Project Cost	\$526,670,000	\$7,759,000	\$0	\$12,100,000	\$324,526,000	\$182,285,000

Notes
* Projects included in the Florida Mobility and Trade Plan (FMTP), April 2020
** YOE - Year of Expenditure
Project included in Transportation Improvement Program (TIP), Project cost based on SIS First Five-Year and Second Five-Year Plans (as of July 1, 2020)
SIS 2029-2045 CFP adopted in July 2018

SIS 2045 MULTI MODAL UNFUNDED NEEDS

Map ID	Facility	From	То	Project Description	Source	Category or Type	Project Cost
379	Turnpike Mainline/SR 91	SR-710 (MP 107)	Kissimmee-St. Could South (MP 242)	Add 2 Lanes to Build 6 Lanes	SIS 2045 Multimodal Unfunded Needs Plan, Turnpike	Highway Improvements (Long Term)	\$290,295,00
693	Turnpike Mainline/SR 91	Jupiter/Indiantown Road	SR-714/Stuart	Managed Lanes	SIS 2045 Multimodal Unfunded Needs Plan, Turnpike	Highway Improvements (Short Term)	\$455,700,00
2798	SR-710*	Martin Powerplant Road	SR 76 Connector Ramps	Bypass (New Facility)	SIS 2045 Multimodal Unfunded Needs Plan	Highway Improvements (Long Term)	\$33,263,00
2247	Amtrak Service	Miami	Jacksonville	Passenger Service	SIS 2045 Multimodal Unfunded Needs Plan, Statewide Rail Improvements	Transit Improvements (Short Term)	\$45,000,00
2259	SR-710 Exclusive Guideway	Indiantown	Mangonia Park Tri-Rail Station	New Passenger Service	SIS 2045 Multimodal Unfunded Needs Plan	Transit Improvements (Mid Term)	\$386,460,000
2261	US 1 Exclusive Guideway	West Palm Beach Transit	Ft. Pierce	New Passenger Service (Potential SIS Facility)	SIS 2045 Multimodal Unfunded Needs Plan	Transit Improvements (Mid Term)	\$720,480,000
2701	SR-710 Exclusive Guideway Transit Hub	at Indiantown		New Passenger Terminal (Potential SIS Facility)	SIS 2045 Multimodal Unfunded Needs Plan	Transit Improvements (Mid Term)	\$11,400,000
						Total SIS Project Cost	\$1,942,598,00

Notes
* Projects included in the Florida Mobility and Trade Plan (FMTP), April 2020, FDOT

SIS 2045 MMUNP adopted in June 2017, FDOT

Freight Projects

Martin in Motion, 2045 LRTP

		-	-					Total Project		Т	otal Cost (YOE*	*)	
Map ID	Facility	From	То	Project Description	Source	Category or Type	Comments	Cost (YOE**)	2021-2025	2026-2030	2031-2035	2036-2040	2041-2045
4192522	SR-710/Warfield Blvd.*	Martin FPL Power Plant	CR-609/SW Allapattah Road	Roadway Improvements	SIS CFP 2020-2024; Freight Mobility and Trade Plan (FMTP), April 2020; SIS CFP 2025-2029	PE, ROW & CON		\$659,000		\$0			
4226815	I-95*	High Meadows Avenue	Martin/St. Lucie County Line	Project Dev. & Env.	SIS CFP 2020-2024; Freight Mobility and Trade Plan (FMTP), April 2020; SIS CFP 2025-2029	PDE		\$2,750,000	\$2,750,000				
3403	I-95*	Martin/Palm Beach County L	Becker Road	Highway Capacity (includes mainline and interchange improvements)	Freight Mobility and Trade Plan (FMTP), April 2020; SIS CFP 2029- 2045	PE, ROW & CON		\$321,189,000			\$10,000,000		
3405	SR-710*	Martin/Okeechobee County Line	Martin Powerplant Road	Major Safety Project	Freight Mobility and Trade Plan (FMTP), April 2020; SIS CFP 2029- 2045	PE, ROW & CON		\$131,844,000				\$11,125,000	\$120,719,000
3417	SR-714/Monterey Road*	at Florida East Coast Railway		Grade Separation	Freight Mobility and Trade Plan (FMTP), April 2020; SIS CFP 2029- 2045	PDE, PE, ROW & CON		\$65,878,000	\$0			\$2,212,000	\$61,566,000
F-1	I-95***	S of Bridge Road	S of High Meadow Avenue	Widen 6 to 8 Lanes	2040 Regional LRTP	Highway Improvements							
	Strategies for Reducing	Florida East Coast (FEC)		Enhanced Safety Improvements per Brightline/ Virgin USA Trains and Martin County Agreement	Freight Mobility and Trade	Safety		-					
	Railroad Trespassing (SRRT) Pilot Project	Railway Corridor		Dynamic Envelop project (Additional Striping) at all Railroad Crossings on State Roads in Martin County	Plan (FMTP), April 2020	Safety	CRISI Grant	\$157,683	\$157,683				
Notes							Total Freight Projects Cost	\$522,477,683	\$2,907,683	\$0	\$10,000,000	\$13,337,000	\$182,285,000

* Projects included in the Florida Mobility and Trade Plan (FMTP), April 2020

** YOE - Year of Expenditure

***Project segment is included in Map ID 3403, SIS Cost Feasible Plan, July 2020.

Project included in Transportation Improvement Program (TIP)

UNFUNDED FREIGHT NEEDS

Map ID	Facility	From	То	Project Description	Source	Category or Type	Comments	Project Cost
2798	SR-710*	Martin Powerplant Road	SR 76 Connector Ramps	Bypass (New Facility)	Freight Mobility and Trade Plan (FMTP), April 2020; SIS 2045 Multimodal Unfunded Needs Plan	Highway Improvements (Long Term)		\$33,263,000
F-2	US-1/Federal Highway ¹	Cove Road	St. Lucie County Line	Corridor Retrofit	2040 Regional LRTP		Discussions for study with St. Lucie TPO and Indian River County MPO in progress. Strategies improvements - TSM&O and emerging technologies being considered.	-Not Available-
n/a	Connected Freight Priority System Deployment			To Be Determined (Automated/Connected Vehicle)	Freight Mobility and Trade Plan (FMTP), April 2020	ITS	At this time, this project is very preliminary and does not include any facilities in Martin County Project included in prioritized project list.	-
Notes		•	•	•	•		Total Freight Projects Cost	\$33,263,00

* Projects included in the Florida Mobility and Trade Plan (FMTP), April 2020

Projects from Martin MPO's Good and Freight Movement Study to be added in Spring 2020.

¹ Project cost are not available at this time. This project is a subset of US 1 Exclusive Guideway (SIS 2045 Multimodal Unfunded Needs Plan) which focuses on passenger service.

Transportation Systems Management & Operations (TSM&O) Projects Martin in Motion, 2045 LRTP

iui ui i										
Map ID	Facility	From	То	Length (miles)	Project Description	Source	Source Comments 2026-2030 203 SIM&O Master Plan, FDOT - D4, March 2019, pg, 40 Includes CMP Update (Segment ID 15 and March 2019, pg, 41 SIM&O Master Plan, FDOT - D4, March 2019, pg, 41 TCRRPM 5.0, vic ratio of 1.07 SIM&O Master Plan, FDOT - D4, March 2019, pg, 41 TCRRPM 5.0, vic ratio of 1.07 SIM&O Master Plan, FDOT - D4, March 2019, pg, 41 County Rank 18 and 20 SIM&O Master Plan, FDOT - D4, March 2019, pg, 41 County Rank 18 and 20 SIM&O Master Plan, FDOT - D4, March 2019, pg, 41 County Rank 18 and 20 SIM&O Master Plan, FDOT - D4, March 2019, pg, 41 Corresponds to CMP Update (Segment ID 33 and 34) SIM&O Master Plan, FDOT - D4, March 2019, pg, 41 Corresponds to CMP Update (Segment ID 33 and 34) SIM&O Master Plan, FDOT - D4, March 2019, pg, 41 Corresponds to CMP Update (Segment ID 56 Multimodal Treasure Coast Master Plan I-95 Multimodal Treasure Coast Master Plan Corresponds to CMP Update (Segment ID 7, 8, 9 and 10) I-95 Multimodal Treasure Coast Master Plan Corresponds to CMP Update (Segment ID 7, 8, 9 and 10) I-95 Multimodal Treasure Coast Master Plan Corresponds to CMP Update (Segment ID 7, 8, 9 and 10) I-95 Multimodal Treasure Coast Master Plan Corresponds to CMP Update (Segment ID 7, 8, 9 and 10) I-95 Mul	r of Expenditure (
							Justicelas OMD Hadets (Os ana sut ID 7, 0, 0	2026-2030	2031-2035	2036-204
Е	Kanner Highway	SW 96th Street	SE Salerno Road	3.08	To Be Determined					
F	SD 714/SE Montorov Dood	Enderal History	SE Ocean Boulevard	1.85	To Be Determined					
Г	SR-714/SE Monterey Road	Federal Highway	SE Ocean Boulevard	1.00	To be Determined		16)			
za	SE Salerno Road	SE Ault Road	Federal Highway	1.50	To Be Determined		TCRRPM 5.0, v/c ratio of 1.07			
-1-	OW Marca Deart		OM/ Martin Davida Davida and	0.57	To De Determine d	TSM&O Master Plan, FDOT - D4,				
zb	SW Mapp Road	SW 36th Street	SW Martin Downs Boulevard	0.57	To Be Determined	÷10				
zc	SE Dixie Highway	SE Salerno Road	SE Jefferson Street	1.60	To Be Determined					
zd	SW Martin Highway	SW High Meadow Avenue	SW Armellini Avenue	0.37	To Be Determined	TSM&O Master Plan, FDOT - D4,				
Zu		SW High Meadow Avenue	Sw Armenini Avenue	0.37	To be Determined					
ze	SE Indian Street	Federal Highway	SE Dixie Highway	0.36	To Be Determined		County Rank 18 and 20			
-4	CW/ Martin Llichurger		SW/Mana Dood	1.00	To Be Determined	TSM&O Master Plan, FDOT - D4,				
zf	SW Martin Highway	SW Berry Avenue	SW Mapp Road	1.22	To be Determined					
zg	SE Cove Road	Kanner Highway	SE Dixie Highway	4.34	To Be Determined		TCRRPM 5.0, v/c ratio of 1.05			
_:		CW/ Llink Mandaur Avenue	Country Line	4 5 7	To Do Dotormined	TSM&O Master Plan, FDOT - D4,	Corresponds to CMP Update (Segment ID			
zi	SW Murphy Road	SW High Meadow Avenue	County Line	1.57	To Be Determined		33 and 34)			
n/a	SR-714/Martin Highway	at I-95	-	-	Advanced Digital Message Sign (ADMS) in Eastbound and Westbound Direction					
,					Dynamic Truck Parking, Touch-Screen	I-95 Multimodal Treasure Coast				
n/a	Martin County Rest Area (Southbound)	at I-95	-	-	Informational Kiosk					
n/a	Martin County Rest Area (Northbound)	at I-95	-	-	Dynamic Truck Parking, Touch-Screen					
					Informational Kiosk Advanced Digital Message Sign (ADMS) in	I-95 Multimodal Treasure Coast				
n/a	High Meadow Avenue	at I-95	-	-	Southbound Direction	Master Plan				
					Advanced Digital Message Sign (ADMS) in					
n/a	SR-76/Kanner Highway	at I-95	-	-	Eastbound and Westbound Direction, CCTV under Bridge, Signal Priority, ADMS at					
					Proposed Park-and-Ride		r, ö, ö and töj			
n/a	Bridge Road	at I-95	_	-	Advanced Digital Message Sign (ADMS) in	I-95 Multimodal Treasure Coast				
C-1	High Meadow Avenue	SR-714/Martin Highway	Golden Bear Way	1.05	Eastbound and Westbound Direction Install Fiber Optic			\$30,090,585	\$20,432,716	\$18,643,2
C-2	Martin Downs Boulevard/Monterey Road	Turnpike Entrance	US-1/Federal Highway	4.85	Adaptive Corridor	· · · · · ·	\$3500 per signalized intersections			
-						Martin County Public Works Dept.;				
C-3	US-1/Federal Highway	Summerfield Way	SE Westmoreland Blvd.	10.35	Adaptive Corridor	CMP Update 2020 (Segment IDs 21				
							Overlaps with Project 'A'			
n/a	Signalized Intersections	Countywide (Approximately 120 i	intersections)		Install Bluetoad Devices	Martin County Public Works Dept.	\$6000 per intersection			
C-4	SR-710/Warfield Blvd.	Jackson Avenue	Dr. Martin Luther King Jr. Drive	1.55	Install Fiber Optic	Martin County Public Works Dept.				
M-1	Colorado Avenue (SW Kanner Highway)	SE Lonita St	Ocean Boulevard	0.62	To Be Determined		CMP Update (Segment ID 35 and 36)			
M-2	CR-732 (Jensen Beach Cswy.)	Indian River Drive	SR-A1A	1.90	To Be Determined	CMP Update, 2020; Martin MPO	CMP Update (Segment ID 51 and 52)			
M-3	Dixie Highway	US-1/Federal Highway	SW Ocean Blvd	0.42	To Be Determined	CMP Update, 2020; Martin MPO &	CMP Update (Segment ID 45 and 46),			
M-4	Dixie Highway	Dixie Cutoff Rd	Monterey Rd	0.85	To Be Determined		, , ,			
M-5	Dixie Highway	SE Anchor Avenue	St. Lucie Blvd	0.74	To Be Determined	CMP Update, 2020; Martin MPO				
M-6	Jensen Beach Blvd	US-1/Federal Highway	Indian River Drive	2.92	To Be Determined	CMP Update, 2020; Martin MPO				
···· 🗸										
			CR-732 (Jensen Beach Cswy.)	1.35	To Be Determined	CMP Update, 2020; Martin MPO				
M-8	NE Indian River Drive	NE Dixie Hwy							1	
M-9	NE Ocean Blvd	S Sewalls Point Rd	NE MacArthur Blvd	4.77	To Be Determined	,				
		-		0.40	To Be Determined To Be Determined	TCRPM, v/c = 1.16	CMD Lindate (Segment ID 17 and 10)			
M-9	NE Ocean Blvd	S Sewalls Point Rd	NE MacArthur Blvd			TCRPM, v/c = 1.16 CMP Update, 2020; Martin MPO &				
M-9 M-10 M-11 M-12	NE Ocean Blvd SE Green River Pkwy SE Monterey Road (Ext) SR-A1A	S Sewalls Point Rd NW Wright Blvd US-1/Federal Highway CR-732 (Jensen Beach Cswy.)	NE MacArthur Blvd NW Dixie Hwy SE Dixie Hwy North County Line	0.40 0.58 0.80	To Be Determined To Be Determined To Be Determined	TCRPM, v/c = 1.16 CMP Update, 2020; Martin MPO & FDOT Congestion Analysis CMP Update, 2020; Martin MPO	County Rank 19 CMP Update (Segment ID 53 and 54)			
M-9 M-10 M-11 M-12 M-13	NE Ocean Blvd SE Green River Pkwy SE Monterey Road (Ext) SR-A1A SW 36th Street (Martin Highway)	S Sewalls Point Rd NW Wright Blvd US-1/Federal Highway CR-732 (Jensen Beach Cswy.) SW Mapp Rd	NE MacArthur Blvd NW Dixie Hwy SE Dixie Hwy North County Line Kanner Hwy	0.40 0.58 0.80 1.88	To Be Determined To Be Determined To Be Determined To Be Determined	TCRPM, v/c = 1.16 CMP Update, 2020; Martin MPO & FDOT Congestion Analysis CMP Update, 2020; Martin MPO CMP Update, 2020; Martin MPO	County Rank 19 CMP Update (Segment ID 53 and 54)			
M-9 M-10 M-11 M-12 M-13 M-14	NE Ocean Blvd SE Green River Pkwy SE Monterey Road (Ext) SR-A1A SW 36th Street (Martin Highway) SW High Meadow Ave	S Sewalls Point Rd NW Wright Blvd US-1/Federal Highway CR-732 (Jensen Beach Cswy.) SW Mapp Rd SW Sunset Tr	NE MacArthur Blvd NW Dixie Hwy SE Dixie Hwy North County Line Kanner Hwy SW Town Center Way	0.40 0.58 0.80 1.88 0.20	To Be Determined To Be Determined To Be Determined To Be Determined To Be Determined	TCRPM, v/c = 1.16 CMP Update, 2020; Martin MPO & FDOT Congestion Analysis CMP Update, 2020; Martin MPO CMP Update, 2020; Martin MPO TCRPM, v/c = 1.01	County Rank 19 CMP Update (Segment ID 53 and 54) CMP Update (Segment ID 13 and 14)			
M-9 M-10 M-11 M-12 M-13 M-14 M-15	NE Ocean Blvd SE Green River Pkwy SE Monterey Road (Ext) SR-A1A SW 36th Street (Martin Highway) SW High Meadow Ave SW Joan Jefferson Way	S Sewalls Point Rd NW Wright Blvd US-1/Federal Highway CR-732 (Jensen Beach Cswy.) SW Mapp Rd SW Sunset Tr US-1/Federal Highway	NE MacArthur Blvd NW Dixie Hwy SE Dixie Hwy North County Line Kanner Hwy SW Town Center Way Dixie Hwy	0.40 0.58 0.80 1.88 0.20 0.10	To Be Determined To Be Determined To Be Determined To Be Determined To Be Determined To Be Determined	TCRPM, v/c = 1.16 CMP Update, 2020; Martin MPO & FDOT Congestion Analysis CMP Update, 2020; Martin MPO CMP Update, 2020; Martin MPO	County Rank 19 CMP Update (Segment ID 53 and 54) CMP Update (Segment ID 13 and 14) CMP Update (Segment ID 41 and 42)			
M-9 M-10 M-11 M-12 M-13 M-14	NE Ocean Blvd SE Green River Pkwy SE Monterey Road (Ext) SR-A1A SW 36th Street (Martin Highway) SW High Meadow Ave	S Sewalls Point Rd NW Wright Blvd US-1/Federal Highway CR-732 (Jensen Beach Cswy.) SW Mapp Rd SW Sunset Tr	NE MacArthur Blvd NW Dixie Hwy SE Dixie Hwy North County Line Kanner Hwy SW Town Center Way	0.40 0.58 0.80 1.88 0.20	To Be Determined To Be Determined To Be Determined To Be Determined To Be Determined	TCRPM, v/c = 1.16 CMP Update, 2020; Martin MPO & FDOT Congestion Analysis CMP Update, 2020; Martin MPO CMP Update, 2020; Martin MPO TCRPM, v/c = 1.01 CMP Update, 2020; Martin MPO CMP Update, 2020; Martin MPO &	County Rank 19 CMP Update (Segment ID 53 and 54) CMP Update (Segment ID 13 and 14) CMP Update (Segment ID 41 and 42) CMP Update (Segment ID 39 and 40)			
M-9 M-10 M-11 M-12 M-13 M-14 M-15	NE Ocean Blvd SE Green River Pkwy SE Monterey Road (Ext) SR-A1A SW 36th Street (Martin Highway) SW High Meadow Ave SW Joan Jefferson Way	S Sewalls Point Rd NW Wright Blvd US-1/Federal Highway CR-732 (Jensen Beach Cswy.) SW Mapp Rd SW Sunset Tr US-1/Federal Highway	NE MacArthur Blvd NW Dixie Hwy SE Dixie Hwy North County Line Kanner Hwy SW Town Center Way Dixie Hwy	0.40 0.58 0.80 1.88 0.20 0.10	To Be Determined To Be Determined To Be Determined To Be Determined To Be Determined To Be Determined	TCRPM, v/c = 1.16 CMP Update, 2020; Martin MPO & FDOT Congestion Analysis CMP Update, 2020; Martin MPO CMP Update, 2020; Martin MPO TCRPM, v/c = 1.01 CMP Update, 2020; Martin MPO CMP Update, 2020; Martin MPO & FDOT Congestion Analysis	County Rank 19 CMP Update (Segment ID 53 and 54) CMP Update (Segment ID 13 and 14) CMP Update (Segment ID 41 and 42) CMP Update (Segment ID 39 and 40) CMP Update (Segment ID 1 and 2),			

Project "E" includes SR-76/Kanner Highway at I-95 interchange

Other Projects *Martin in Motion,* 2045 LRTP

Map ID	Facility	Project Description	Source	Category or	Comments	Total Project	Year	of Expenditure (YOE)
				Туре		Cost (YOE*)	2026-2030	2031-2035	2036-2045
P-1	Kanner Highway/SR 76 at I-95	Facility located in southwest corner of Kanner Highway/SR 76, approximately 46,000 sq. ft. 106 parking spaces including four ADA spaces and six kiss-and-ride.	Park-And-Ride Master Plan, FDOT - D4, Oct. 2018, pg. 10, 38, 43 and 44		Cost in 2018 dollars and includes MOT and contingency	\$3,100,500	\$3,100,500		
n/a	West of I-95 between Becker Road and Martin Highway		Park-And-Ride Master Plan, FDOT - D4, Oct. 2018, pg. 10		Assumes 50 spaces @ \$17,000/space	\$1,464,125	\$1,464,125		
n/a	West of Turnpike in vicinity of Sand Avenue		Park-And-Ride Master Plan, FDOT - D4, Oct. 2018, pg. 10	Travel Demand	Assumes 50 spaces @ \$17,000/space	\$1,464,125	\$1,464,125		
PB-1	FEC Railroad and Dixie Highway near St. Lucie Avenue ¹	Non-motorized grade crossing (bridge) in Downtown Stuart	FEC Railroad Grade Separation Study, Martin MPO, August 2017	Safety	Cost does not include operation and maintenance of elevators; Partially (50%) funded by Brightline/ Virgin USA Trains	\$8,710,416	\$5,444,010		
RR-1	FEC - St. Lucie River Bridge	Double tracking FEC railroad bridge over St. Lucie river, City of Stuart	Strategic Initiative	Rail Capacity	Privately funded through Brightline/Virgin USA Trains	Private Sector Funding		Private Sector Funded Project	Private Sector Funded Project
Notes * YOE - Yea	ar of Expenditure				Total (Park-and-Ride), Does no	t include PB-1	\$6,028,750	\$0	\$0

¹ Approximately 50% of the project cost would be available from the \$98 million "set-aside" funding available for implementing non-motorized and complete street projects.

Unfunded Needs, Other Projects

Map ID	Facility	Project Description	Source	Category or Type	Comments	Total Project Cost (PDC*)
PB-2	FEC Main-Line in the area of the Golden Gate Community	Non-motorized railroad grade crossing	FEC Railroad Grade Separation Study, Martin MPO, August 2017	Safety		\$5,714,280
Notes			-		Unfunded Project Needs	\$5,714,280

** PDC - Present Day Cost

Waterborne Transportation Projects

Martin in Motion, 2045 LRTP

Map ID	Project Description	From	То	Location/Geography	Source	Category or Type	Total Project Cost (YOE*)	Т	otal Cost (YOE*)
						туре	COST (TOE)	2026-2030	2031-2035	2036-2045
n/a	Water based Transportation Feasibility Study	Martin County	-	Countywide	Martin and St. Lucie Regional Waterways Plan, 2015; Chapter 3, pg. 3-49	Study (to be funded through Non Capacity Program)	\$437,500	\$437,500		

Notes

* YOE - Year of Expenditure

Feasibility Study is funded through Product Support under FDOT's a Non-Capacity Program.

Unfunded Water borne Transportation Needs

Map ID	Project Description	From	То	Location/Geography	Source	Category or Type	Total Project Cost (PDC**)
				From Sandsprit Park or potentially Pirate's Cove	Martin and St. Lucie Regional Waterways	Capital Cost	\$120,000
W-1	Water taxi service to St. Lucie Inlet State Park	Sandsprit Park	St. Lucie Inlet Preserve	Marina or Fish Market or Restaurant(s) stop at Manatee Pocket	Plan, 2015; Chapter 3, pg. 3-23 to 3-34	Annual Operating Cost	\$275,000
		around key nodes such as Stuart/Palm City, Port		Harborage Marina, Harborage Marina to Sunset	Martin and St. Lucie Regional Waterways	Capital Cost	\$240,000
W-2	special events and festivals only)	Salerno/Manatee Pocket, Stuart/Jensen/Rio	-	Bay Marina, Stuart Floating Dock to Stuart Harbor/Pio Town Center, Sandsprit Park to	Plan, 2015; Chapter 3, pg. 3-23 to 3-34	Annual Operating Cost	\$375,000
Notes					Annual Operating C	ost (Unfunded)	\$650,000
** PDC - P	Present Day Cost					Capital Cost	360,000

Assumptions for water taxi service project cost.

Water tax service to St. Lucie Inlet State Park (one route)

1. Two vessels (20 passengers capacity/vessel) @ \$60,000 per vessel

2. Annual operating cost estimates at \$275,000 (includes fuel, 2-person crew, admin staff and maintenance). Route operates 7 days a week for 12 hours daily for nine (9) months.

3. Capital cost for landside improvements is not included.

Water taxi service (seasonal or special event) (three routes)

1. Four vessels (20 passengers capacity/vessel) @ \$60,000 per vessel

2. Annual operating cost estimates at \$125,000 per (includes fuel, 2-person crew, admin staff and maintenance). Route operates 7 days a week for 12 hours daily for nine (4) months.

3. Capital cost for landside improvements is not included.

Source: Derived from Water Taxi Feasibility Study Report, Ulteig, 2016 (www.reapmatters.org)

Complete Streets Projects

Martin in Motion, 2045 LRTP Approximately \$95.10 million are allocated for non-motorized and complete streets projects over 20 years through a combination of local and state funds.

Map ID	Segmen	nt Facility/Segment Name	From	То	General	Length	ROW Width	Project Description	Total Project Cost (PDC*)		Total Cost	(YOE**)	
map ib	ID ¹				Location	(miles)	(feet)			2021-2025	2026-2030	2031-2035	2036-2045
										1.08	1.25	1.47	1.94
CS-2	211	NW DIXIE HWY (SR 707)	NW GREEN RIVER PKWY	CONFUSION CORNER	Stuart	1.98	100	Addition of shade trees & streetlights. Provide contiguous bike lanes in the corridor to the extent possible.	3,549,268		\$4,436,585	\$5,217,424	\$6,885,580
CS-4	226	SE PALM BEACH RD	SE OCEAN BLVD (SR A1A)	SE MONTEREY RD	Stuart	1.09	80	Addition of bike box, raised bike lanes in both directions. Addition of shade trees and relocation of sidewalks.	6,487,012		\$8,108,765	\$9,535,908	\$12,584,804
CS-5	270	SE CHRISTIE WAY	SE DIXIE HWY	SE PALM BEACH RD	Stuart	0.08	50	. Conversion of 6' side walks on north side to 8' multi-use path. Addition of shade trees and street lights adjacent to existing sidewalk on south side.	59,409		\$74,261	\$87,331	\$115,253
CS-6	214	SE COVE ROAD	SR 5 (US 1)	SE DIXIE HWY	Salerno	1.11	75	Addition of bike lanes in both directions. Addition of a raised lighted crosswalk. Addition of shared used path on northern side. Plant Cypress Trees in existing swale. Two 12' traffic lanes shift to south and become 11'. (FM #441701.1)	10,582,960		\$13,228,701	\$15,556,952	\$20,530,943
CS-7	286	SE JACK AVENUE	PORT SALERNO ELEMENTARY	SE COVE RD	Salerno	0.76	70	New curb & gutters. Addition of shade trees & street lights adjacent to new 10' shared use path. Project assumes improvements same as SE Palm City Road (CS-19)	1,902,915		\$2,378,644	\$2,797,285	\$3,691,655
CS-8	242	SR 5 (US 1)	NW SUNSET BLVD	S END OF ROOSEVELT BRIDGE	Stuart	3.57	150	Addition of markings for existing bike lanes. Addition of sidewalks, shade trees & street lighting.	5,647,090		\$7,058,863	\$8,301,223	\$10,955,356
CS-9	341	SR 5 (US 1) ¹	SW JOAN JEFFERSON WAY	600 FEET SOUTH OF SE TRESSLER DR	Stuart	1.42	150	Resurfacing (FM # 446110.1)	\$6,000,000	\$6,000,000			
CS-10	137	SE INDIAN ST	SR 5 (US 1)	SE DIXIE HWY (SR A1A)	Stuart	0.36	100	Convert 5 lane urban roadway including center turn lane to 4 lane divided facility with protected bike lanes. Add raised lighted crosswalk, shade trees, street lights, shade trees. (FM # 438071.1)	1,693,795		\$2,117,244	\$2,489,879	\$3,285,962
CS-11	268	S KANNER HWY (SR 76) ¹	SR 5 (US 1)	SW MANOR DR	Stuart	0.44	110	Resurfacing (FM # 443995.1)	4,385,904	\$4,385,904			
CS-12	182	SE SALERNO RD	SR 5 (US 1)	SE DIXIE HWY (SR A1A)	Salerno	0.93	65	Addition of street lights & landscaping and curb and gutter on both sides. Conversion of 6' sidewalk with 2' landscape to 8' multi- use path on north side. Addition of shared use path on south side. (FM #440242.1)	1,362,514		\$1,703,142	\$2,002,895	\$2,643,277
CS-13	311	SE SALERNO RD	SE DIXIE HWY (SR A1A)	SE DE SOTO AVE	Salerno	0.08	60	Project assumes continuation of improvements/cross section between SR 5 (US 1) and SE Dixie Hwy. (CS-12)	117,205		\$146,507	\$172,292	\$227,379
CS-14	267	SE CUTOFF RD	SR 5 (US 1)	SE DIXIE HWY (SR A1A)	Stuart	0.23	110	Shared use path on one side. Shade trees and lighting.	235,235		\$294,044	\$345,796	\$456,356
CS-15	212	SE DIXIE HWY	CONFUSION CORNER	SE PALM BEACH RD	Stuart	1.07	90	Addition of buffered bike lanes in both directions. Addition of shade trees & bioswales. Addition of sidewalk & street lights. Addition of a raised lighted crosswalk.	1,748,687		\$2,185,859	\$2,570,570	\$3,392,452
CS-16	322	SE DIXIE HWY (SR A1A)	SE SALERNO RD	SE COVE RD	Salerno	0.61	90	New markings along travel lanes and on-street parking lanes. New shade trees. Parklet options available.	395,579		\$494,474	\$581,501	\$767,423
CS-17	325	SE DIXIE HWY (SR A1A)	PORT SALERNO CRA (NORTH BOUNDARY)	SE SALERNO RD	Salerno	0.39	90	Project assumes continuation of improvements/cross section between SE Salerno Road and SE Cove Road. (CS-16)	252,911		\$316,139	\$371,779	\$490,648
CS-18	287	SE EBBTIDE AVE	SE SALERNO RD	SE COVE RD	Salerno	0.5	65	Addition of buffered bike lanes in both directions. Addition of shade trees & bioswales. Addition of sidewalk & street lights .	899,023		\$1,123,779	\$1,321,564	\$1,744,105
CS-19	130	SW PALM CITY RD	SR 5 (US 1)	400 FEET NORTH OF SW INDIAN GROVE DR	Stuart	0.33	80	Two 12' travel lanes become two 11' travel lanes. New curb & gutters. Addition of shade trees & street lights adjacent to new 10' shared use path.	826,266		\$1,032,832	\$1,214,611	\$1,602,955
* PDC - Pres	sent Day C	ost							46,145,774	\$10,385,904	\$44,699,837	\$52,567,009	\$69,374,148

** YOE - Year of Expenditure

¹ Segment ID cross references projects identified in Martin MPO's *on-going* Access to Transit Study

Base construction cost are derived using FDOT's cost per mile models and based on existing and proposed typical section included in Martin MPO's Access to Transit Study (on-going).

¹ Project cost for CS-9 and CS-11 is "as programmed."

Non-Motorized Projects Martin in Motion, 2045 LRTP

Approximately \$95.10 million are allocated for non-motorized and complete streets projects over 20 years through a combination of local and state funds.

Martin in Motion, 2045 LRTP		Approximately \$95.10 million are allocated for i	ion-motorized and complete streets projects over 20 ye	ars through a combination of lo	ocal and stat	e funds.			
Facility	Map ID	From	То	Project Description	Length (miles)	Total Project Cost (PDC*)		Total Cost (YOE**)	
							2026-2030	2031-2035	2036-2045
Sidewalks				•			1.25	1.47	1.94
Anthione Way		Florida Avenue	End	Sidewalk	0.08	\$38,143	\$47,679		\$73,998
Aurora Way		Florida Avenue	End	Sidewalk	0.08	\$42,309	\$52,887	\$62,195	\$82,080
Baker Road		Green River Parkway	NE Braille Place	Sidewalk	0.55	\$277,249		\$407,555	\$537,862
Begonia Way		Lantana Avenue	Florida Avenue	Sidewalk	0.13	\$66,031	\$82,539		\$128,100
Bridge Road		US 1 NE Baker Road	Gomez Avenue Dixie Highway	Sidewalk Sidewalk	0.51	\$256,767 \$61,927			\$498,129 \$120,138
Cardinal Avenue Cardinal Avenue		Baker Road	SE Seneca Avenue	Sidewalk	0.12	\$61,927 \$71,761	\$89,701	\$91,033	\$120,138
Citrus Way		Lantana Avenue	Florida Avenue	Sidewalk	0.14	\$66,178			\$128,386
Comus Street		Lantana Avenue	End	Sidewalk	0.21	\$102,999			\$199,818
Dixie Highway		Wright Blvd	Existing Terminus Near Baker Road	Sidewalk	0.31	\$155,848		\$229,097	\$302,346
Dixie Highway		SE 14 Street	SE Florida Street	Sidewalk	0.41	\$102,905		\$151,271	\$199,637
Eucalyptus Way	150	Lantana Avenue	Florida Avenue	Sidewalk	0.13	\$66,201	\$82,752	\$97,316	\$128,430
Fern Street	151	Lantana Avenue	Florida Avenue	Sidewalk	0.13	\$66,144		\$97,232	\$128,320
Florida Avenue	152	Bridge Road	Comus Street	Sidewalk	0.33	\$167,755			\$325,444
High Meadow Avenue		Bane Berry Drive	Swallowtrail Way	Sidewalk	0.60	\$302,529		\$444,717	\$586,905
Indian River Dr		NE CAUSEWAY BLVD	1000 FT S of Admiral's Way	Sidewalk	0.14	\$70,283		\$103,316	\$136,349
Jonathan Dickinson State Park Trail		CROSSING US 1 EAST OF FEC RAILROAD		Crosswalk	0.01	\$10,919			\$21,182
Mars Street		Florida Avenue	US 1	Sidewalk	0.21	\$106,726		\$156,887	\$207,048
Martin Highway		Martin Downs Boulevard	High Meadow Avenue	Sidewalk Sidewalk	0.27	\$134,848 \$253,101	\$168,560		\$261,606 \$491,015
Martin Highway N of SE Monterey Rd At SE Kingswood Terrace	162 220	Citrus Boulevard	42nd Avenue	Crosswalk	0.50	\$253,101 \$10,919	\$316,376 \$13,648		\$491,015
Ne Dixie Hwy		NE SAVANNAH RD	NE SUMNER AVE	Sidewalk	0.19	\$10,919 \$96,325			\$21,182
Ne Dixie Hwy		SE GREEN RIVER PKWY	NE CARDINAL AVE	Sidewalk	0.43	\$90,325			\$186,870
Ne Seneca Avenue		NE Cardinal Avenue	NW Greenrip Parkway	Sidewalk	0.43	\$146,941	\$183,677	\$216,004	\$285,066
Neptune Street	-	Florida Avenue	US 1	Sidewalk	0.23	\$106,698		\$156,847	\$206,995
New Route		Salerno Road	Cove Road	Sidewalk	0.06	\$31,943			\$61,969
New Route		Salerno Road	Cove Road	Sidewalk	0.48	\$243,201	\$304,002		\$471,811
New Route		Salerno Road	Cove Road	Sidewalk	0.40	\$198,782	\$248,477	\$292,209	\$385,637
Nw Alice Street	158	Dixie Highway	Existing Terminus Near Alice Road	Sidewalk	0.27	\$133,312	\$166,641	\$195,969	\$258,626
Osprey Street	163	Dixie Highway	E of Railroad	Sidewalk	0.19	\$96,704		\$142,155	\$187,606
Pomeroy Street		Willoughby Blvd	Federal Hwy	Sidewalk	0.95	\$238,439	\$298,049		\$462,572
Psyche Street		Florida Avenue	End	Sidewalk	0.08	\$40,441	\$50,551	\$59,448	\$78,456
S Dixie Hwy At SW Flagler Ave	224			Pedestrian Bridge	0.03	\$330,620	\$413,276		\$641,404
S of SE Monterey Rd at E Ocean Blvd	229			Crosswalk	1.00	\$10,919	\$13,648		\$21,182
Salerno Rd		Kanner Hwy	Willoughby Blvd	Sidewalk	1.63	\$409,112			\$793,677
SE Alamanda Way		Lantana Avenue	Florida Avenue	Sidewalk	0.13	\$66,009		\$97,033	\$128,057
SE Bonita Street SE Casa Avenue		SE Birch Avenue SE Tressler Drive	St. Lucie Boulevard Federal Hwy	Sidewalk Sidewalk	0.64	\$318,958 \$110,435	\$398,698 \$138,044	\$468,869 \$162,340	\$618,779 \$214,244
SE Clayton Street		SE Birch Avenue	St. Lucie Boulevard	Sidewalk	0.22	\$320,446			\$621,666
SE Date Street		Lantana Avenue	Florida Avenue	Sidewalk	0.13	\$66,251	\$82,814		\$128,527
SE Dixie Hwy		700 FT S of SE KENSINGTON ST	SE AVIATION WAY	Rightsizing	1.13	\$283,548		\$416,815	\$550,083
SE Federal Hwy		SE HIGHBORN WAY	JONATHAN DICKSON STATE PARK ENTRANCE	Sidewalk	2.42	\$1,214,786		\$1,785,736	\$2,356,685
Se Flamingo Avenue		SE 10th Street	SE Ocean Boulevard	Sidewalk	0.52	\$262,521	\$328,151	\$385,905	\$509,290
SE Florida Street		SE Johnson Avenue	Dixie Highway	Sidewalk	0.24	\$120,475		\$177,098	\$233,721
SE Georgia Avenue	245	Martin Luther King	SE Ocean Blvd.	Sidewalk	0.25	\$125,494	\$156,868	\$184,477	\$243,459
SE GROUPER AVE		Salerno Road	Cove Road	Sidewalk	0.24	\$122,589	\$153,237	\$180,206	\$237,823
SE Indian St at Railroad Ave	223			Pedestrian Bridge	0.02	\$220,414		\$324,008	\$427,602
SE Krueger Parkway		SE 10 Street	SE Ocean Blvd.	Sidewalk	0.58	\$291,147			\$564,825
SE Lantana Avenue		Bridge Road	Comus Street	Sidewalk	0.34	\$168,469			\$326,829
SE Lincoln Avenue		SE Florida Street	Dixie Highway	Sidewalk	0.16	\$80,316		\$118,065	\$155,814
SE Lonita Street		Kanner Hwy	SE Casa Avenue	Sidewalk	0.23	\$115,455	\$144,319	\$169,719	\$223,982
SE Luckhardt Street		SE Biringham	Commerce Avenue	Sidewalk Sidewalk	0.37	\$92,866 \$250,989	\$116,082 \$313,736	\$136,513 \$368,954	\$180,160 \$486,918
SE Miami Street SE Ocean Blvd at E Of SE Monterev Rd	000	Federal Hwy	Commerce Avenue		0.27		* 4 0 0 4 0	\$10.050	*0 4.400
SE Tressler Drive	228	SE Casa Avenue	Federal Hwy	Crosswalk Sidewalk	0.28	\$10,919 \$250,989			\$21,182 \$486,918
SW Magnolia Street		SW 173rd Avenue	SW 168th Avenue	Sidewalk	0.39	\$250,989			\$973,837
SW Warfield Blvd At SW Jefferson Ave	225			Crosswalk	0.00	\$10,919	\$13,648		\$21,182
US 1		PEDESTRIAN BRIDGE CROSSING FEC RAILROAD	1	Pedestrian Bridge	0.05	\$551,034			\$1,069,006
Bicycle Corridors				· · · · · · · · · · · · · · · · · · ·					
137th Street	164	Bridge Road	Powerline Avenue	Bike Lanes	1.91	\$963,162	\$1,203,952	\$1,415,848	\$1,868,534
Baker Road	165	Green River Parkway	Cardinal Avenue	Bike Lanes	0.28	\$140,054	\$175,068	\$205,880	\$271,705
Citrus Blvd		SW WARFIELD BLVD	SW 96TH ST	Buffered Bike Lane	10.93	\$6,886,073			\$13,358,982
County Line Road		NE Savannah Road	Indian River Road	Bike Lanes	0.40	\$203,367			\$394,532
Dixie Highway		Green River Parkway	Savannah Road	Bike Lanes	0.43	\$214,860			\$416,829
Dixie Highway		Wright Blvd	Green River Parkway	Bike Lanes	0.37	\$186,023			\$360,885
Dixie Highway		Palmer Street	Indian River Drive	Bike Lanes	0.74	\$372,552			\$722,750
Dixie Hwy		NE SAVANNAH RD	SEAHORSE PL	Bike Lanes	0.97	\$489,888		\$720,136 \$635,720	\$950,384
Dixie Hwy Fisherman's Wharf Drive		SEAHORSE PL Pennsylvania Avenue	NE PALMER ST	Bike Lanes	0.86	\$432,463 \$126,302			\$838,977 \$245,026
Fisherman's Whart Drive Fork Road		US 1	Yachtsman Drive Pine Lake Drive	Bike Lanes Bike Lanes	0.25	\$126,302 \$401,964			\$245,026 \$779,811
High Meadow Ave		SW MARTIN DOWNS BLVD	SW MURPHY RD	Bike Lanes	0.80	\$401,964			\$951,872
High Meadow Ave		SW MARTIN DOWNS BLVD	SW MARTIN DOWNS BLVD	Bike Lanes	0.79	\$397,829			\$951,872
High Medow Avenue		Martin Highway	I-95	Bike Lanes	2.81	\$1,416,153			\$2,747,337
Indian River Dr		NE PALMER ST	NE JENSEN BEACH BLVD	Bike Lanes	1.69	\$853,721	\$1,067,152		\$1,656,220
Indian River Dr		NE CAUSEWAY BLVD	COUNTY LINE RD	Bike Lanes	0.93	\$466,275			\$904,573
Indian River Dr		NE JENSEN BEACH BLVD	NE CAUSEWAY BLVD	Bike Lanes	0.45	\$229,193			\$444,635
Indian St		SE DIXIE HWY	SE ST LUCIE BLVD	Bike Lanes	0.77	\$193,649	\$242,061	\$284,664	\$375,679
Jensen Beach Blvd		GOLDENROD RD	WARNER CREEK	Bike Lanes	1.34	\$676,581			\$1,312,568
Jensen Beach Blvd		WARNER CREEK	SAVANNAH RD	Bike Lanes	0.58	\$292,635			\$567,711
Kanner Highway		Lost River	Monterey Road	Bike Lanes	5.15	\$1,297,918			\$2,517,961
Kitchen Creek Mapp Road		138th Street	Jonathan Dickson State Park Path	Bike Lanes	0.49	\$249,495			\$484,02
	1 50	SW SILVER WOLF DR	NW MARTIN HWY	Bike Lanes	2.50	\$1,259,765	\$1,574,706	\$1,851,854	\$2,443,943

Facility	Map ID	From	То	Project Description	Length (miles)	Total Project Cost (PDC*)		Total Cost (YOE**)	
Mapp Road	53	SW MARTIN DOWNS BLVD	SE MAPP RD/SW MATHESON AVE	Shared Lane	1.38	\$49,29	2026-2030 \$61,620	2031-2035 \$72,465	2036-2045 \$95,635
Mapp Road		SW MARTIN HWY	SW MARTIN DOWNS BLVD	Bike Lanes	0.77	\$193,607		\$284,602	\$375,597
Mapp Road		Hidden River Avenue	Martin Downs Boulevard	Bike Lanes	2.98	\$1,503,154		\$2,209,637	\$2,916,120
Market Place	173	US 1	Commerce Avenue	Bike Lanes	0.40	\$199,589	\$249,487	\$293,396	\$387,203
Martin Highway		SW Citrus Boulevard	Florida Turnpike	Bike Lanes	1.12	\$564,556		\$829,897	\$1,095,238
Martin Hwy		FLORIDA'S TURNPIKE	SW MAPP RD	Buffered Bike Lane	2.17	\$1,369,66			\$2,657,141
MLK, Jr Drive		Farm Road	Warfield Boulevard	Bike Lanes	0.72	\$360,48		\$529,913	\$699,341
Monterey Road - Palm City Bridge		SW MAPP RD NE Baker Road	SW PALM CITY RD Dixie Highway	Bike Lanes Bike Lanes	0.80	\$202,520 \$62,18		\$297,705 \$91,412	\$392,889 \$120,639
Ne Dixie Highway Old St. Lucie Blvd		SE ST LUCIE BLVD	SE ST LUCIE BLVD	Shared Lane	0.12	\$15,969		\$91,412	\$30,981
Palmer St		NE DIXIE HWY	NE INDIAN RIVER DR	Bike Lanes	0.53	\$267,51		\$393,247	\$518,979
Pennsylvania Avenue		96th Street/CR 711	Fisherman's Wharf Drive	Bike Lanes	0.55	\$276,52			\$536,463
Pine Lake Drive	176	Fork Road	Britt Road	Bike Lanes	1.40	\$704,820	\$881,032	\$1,036,094	
Powerline Avenue		138th Street	Bridge Road	Bike Lanes	0.52	\$261,770		\$384,802	\$507,834
Pratt Whitney Rd		Palm Beach County Line	SE Bridge Road	Buffered Bike Lane	7.27	\$4,580,79		\$6,733,763	\$8,886,735
Pratt Whitney Rd		SW BRIDGE RD	SW KANNER HWY	Buffered Bike Lane	2.81	\$1,773,10		\$2,606,468	\$3,439,828
Salerno Rd Sand Trail		SE WILLOUGHBY BLVD Sand Avenue	SE FEDERAL HWY Martin Downs Boulevard	Bike Lanes Bike Lanes	1.12 0.63	\$282,322 \$315,630		\$415,013 \$463,985	\$547,704 \$612,334
Savannah Rd		NE CARDINAL AVE	NE PINELAKE VILLAGE BLVD	Buffered Bike Lane	1.05	\$329,960			\$640,135
Savannah Rd		NE PINELAKE VILLAGE BLVD	NE JENSEN BEACH BLVD	Buffered Bike Lane	1.03	\$329,900		\$470,799	\$621,326
SE Bridge Rd		FLORIDA'S TURNPIKE	POWERLINE AVE	Buffered Bike Lane	4.72	\$2,976,12			\$5,773,687
SE Bridge Rd		SW KANNER HWY	FLORIDA'S TURNPIKE	Buffered Bike Lane	4.63	\$2,916,32	\$3,645,407	\$4,286,998	\$5,657,671
SE Bridge Rd		POWERLINE AVE	GOMEZ AVE	Buffered Bike Lane	2.43	\$1,531,080	\$1,913,857	\$2,250,696	\$2,970,306
SE County Line Road		SE Girl Scout Camp	US 1	Bike Lanes	3.00	\$1,513,512		\$2,224,863	\$2,936,213
SE Horseshoe Road		SE Anchor Avenue	SE Kubin Avenue	Sidewalk & Shared Lane Markings	1.15	\$668,020		\$981,999	\$1,295,971
SE Monterey Rd		SE ALHAMBRA ST	SE FEDERAL HWY	Bike Lanes	0.69	\$345,674		\$508,141 \$470,751	\$670,608 \$621,263
SE Monterey Rd SE Monterey Rd		SW PALM CITY RD SE FEDERAL HWY	SE ALHAMBRA ST EAST OF SE DIXIE HWY	Bike Lanes Bike Lanes	0.64	\$320,239 \$157,062			\$621,263 \$304,701
SE Monterey Rd Ext		SE MONTEREY RD	SE FEDERAL HWY	Shared Lane	0.31	\$157,062			\$304,701
SE Ocean Blvd		SE PALM BEACH RD	SE MARTINS AVE	Buffered Bike Lane	0.57	\$362,190		\$532,419	\$702,648
SE Ocean Blvd		S COLORADO AVE	SE PALM BEACH RD	Bike Lanes	0.98	\$494,02		\$726,217	\$958,409
SE Ocean Blvd at N SEwalls Point Rd	222			Bike Box		\$9,98	\$12,478	\$14,674	\$19,366
SE Ocean Blvd at SE St Lucie Blvd	221			Bike Box		\$9,98		\$14,674	\$19,366
SE Paulson Ave		ATLANTIC RIDGE PRESERVE STATE PARK	CARDINAL TRL	Shared Lane	0.52	\$18,47		\$27,159	\$35,842
SE St. Lucie Blvd		SE INDIAN ST	SE DIXIE HWY	Shared Lane	2.30	\$41,019		\$60,297	\$79,576
SE St. Lucie Blvd SE St. Lucie Blvd		SE INDIAN ST SE INDIAN ST	SE OCEAN BLVD SE ST. LUCIE BLVD	Shared Lane	1.76 0.65	\$62,830		\$92,368 \$17,149	\$121,901
Sewalls Point Rd		SE INDIAN ST SE OCEAN BLVD	NE PALMER ST	Shared Lane Bike Lanes	1.56	\$11,660 \$786,974			\$22,632 \$1,526,730
St. George Street		Yachtsman Drive	Locks Road	Bike Lanes	0.19	\$94,512			\$183,353
St. Lucie Blvd		SE MARTIN AVE	SE OCEAN BLVD	Shared Lane	1.19	\$42,452		\$62,405	\$82,358
SW 96th St	94	SW CITRUS BLVD	SW PENNSYLVANIA AVE	Buffered Bike Lane	1.58	\$993,330	\$1,241,670	\$1,460,204	\$1,927,072
SW 96th St		SW PENNSYLVANIA AVE	SW KANNER HWY	Buffered Bike Lane	0.95	\$597,519		\$878,353	\$1,159,187
SW Adams Avenue		SW Palm Way	SW 150th Street	Bike Lanes	0.32	\$159,55		\$234,545	\$309,536
SW Farm Rd		SW 169TH AVE	RAILROAD AVE	Bike Lanes	1.00	\$501,944		\$737,858	\$973,772
SW Farm Rd/Silver Fox Ln SW Martin Hwy		SW WARFIELD BLVD SW WARFIELD BLVD	SW ANDALUCIA CT SW ALLAPATAH RD	Shared Lane Shared Lane	3.08 12.24	\$110,130 \$218,73		\$161,891 \$321,544	\$213,652 \$424,350
SW Palm City Rd		SW MONTEREY RD	SW FEDERAL HWY	Separated Bike Lanes	1.21	\$2,093,604		\$3,077,598	\$4,061,592
Willoughby Blvd		SE INDIAN ST	SE MONTEREY RD	Buffered Bike Lane	1.16	\$365,018		\$536,577	\$708,135
Willoughby Blvd		SE COVE RD	SE POMEROY ST	Buffered Bike Lane	1.56	\$492,069		\$723,341	\$954,613
Willoughby Blvd	73	SE POMEROY ST	SE INDIAN ST	Buffered Bike Lane	1.03	\$323,433	\$404,291	\$475,446	\$627,459
Willoughby Boulevard		Monterey Road	US 1	Bike Lanes	0.84	\$423,41		\$622,423	\$821,428
Yachtsman Drive	184	Fisherman's Wharf Drive	St. George Street	Bike Lanes	0.84	\$421,793	\$527,242	\$620,036	\$818,279
Multi-Purpose Trails and Greenways					0.4		\$1,000,047	\$0.005 7 50	A O 007 000
A1A (Two Bridge Loop)		NE Causeway Blvd.	SE Ocean Blvd.	Shared Use Path	3.1	\$1,514,11		\$2,225,753	\$2,937,388
Atlantic Ridge Trail Corridor - E/W Connector Atlantic Ridge Trail Corridor - East		Halpatiokee Park Bridge Road	Thru Atlantic Ridge to Seabranch Blvd PARK thru Johnathan Dickson Park to Ocean to Lake Trail	Shared Use Path Shared Use Path	2.42 3.61	\$2,363,97	7 \$2,954,971 Under Study	\$3,475,046	\$4,586,115
Atlantic Ridge Trail Corridor - East		Cove Raod	Thru Atlantic Ridge State Park to SE Seabranch Blvd	Shared Use Path	2.76		Under Study	L	
Atlantic Ridge Trail Corridor - East		SE Seabranch Blvd thru Atlantic Ridge and SFWMD	Bridge Road	Shared Use Path	4.22		Under Study		
Atlantic Ridge Trail Corridor - West		Halpatiokee Park	Thru Atlantic Ridge and Whiteworth Farms to Bridge Road	Shared Use Path	3.04	\$(Under Study		
Atlantic Ridge Trail Corridor - West		Halpatiokee Park	south to Atlantic Ridge Trail E/W Connector #93	Shared Use Path	1.47	\$1,435,969		\$2,110,875	
Atlantic Ridge Trail Corridor - West		Bridge Road	Thru Canopus Sound LLC to Jonathan Dickson State Park	Shared Use Path	7.55	\$7,375,21		\$10,841,570	\$14,307,922
Bee Line Highway Corridor Trail		SW FOX BROWN RD	SE 128TH AVE	Shared Use Path	13.98	\$13,655,63		\$20,073,778	
Bee Line Highway Corridor Trail Bee Line Highway Corridor Trail		UNNAMED RD SW KANNER HWY	SW KANNER HWY SW FOX BROWN RD	Shared Use Path Shared Use Path	6.40 4.66	\$6,255,244 \$4,554,59		\$9,195,208 \$6,695,249	\$12,135,173 \$8,835,906
C 23 -FNST Connector Trail		C-23 CANAL	OKEECHOBEE SCENIC TRAIL	Shared Use Path Shared Use Path	4.66	\$4,554,59		\$6,695,249	\$8,835,906
C-23 Trail Corridor (Robert B. Jenkins)		FLORIDA EAST COAST RAILOAD	MAPP ROAD	Shared Use Path	17.62	\$17.208.504		\$25,296,500	
C-44 Trail		Beeline Highway Corridor	St. Lucie County Line	Shared Use Path	15.08	\$14,730,898		\$21,654,420	\$28,577,942
Citrus Blvd		SW 96TH ST	SW MARTIN HWY	Shared Use Path	5.00	\$4,881,13		\$7,175,262	\$9,469,393
Citrus Blvd (new project)	33b	SW WARFIELD BLVD	SW 96TH ST	Shared Use Path	10.93	\$10,676,970	\$13,346,213	\$15,695,147	\$20,713,323
Citrus Cove Tunnel		Sand Avenue	Citrus Boulevard via Turnpike Underpass	Shared Use Path	0.66	\$643,189			
Citrus Grove Elementary Connection		SW CITRUS BLVD	SW MALLARD CREEK TRAIL	Shared Use Path	0.50	\$486,010			
Commerce Ave		SE MARKET PL	SE INDIAN ST	Shared Use Path	0.95	\$928,32			
Commerce Ave Cove Road		SE SALNERO RD COVE ROAD FROM SR 9/I-95	SE MARKET PLACE SE DIXIE HIGHWAY	Shared Use Path Shared Use Path and Bike Lanes	1.29 5.15	\$1,261,244 \$5,111,330		\$1,854,029 \$7,513,664	
		SW WARFIELD BLVD	SE DIXIE HIGHWAY SW 96TH ST	Shared Use Path and Bike Lanes Shared Use Path	12.45	\$5,111,330		\$7,513,664	\$9,915,992
ICross County Trail - Kanner Hwy		CONNERS HWY	SW WARFIELD BLVD	Shared Use Path	10.63	\$10,383,170		\$15,263,269	\$20,143,361
Cross County Trail - Kanner Hwy Cross County Trail - Kanner Hwy		SW JACK JAMES DR	SE COVE RD	Shared Use Path	0.83	\$815,22		\$1,198,383	\$1,581,540
Cross County Trail - Kanner Hwy Cross County Trail - Kanner Hwy Cross County Trail - Kanner Hwy	13		SW JACK JAMES DR	Shared Use Path	1.56	\$1,523,61	\$1,904,521	\$2,239,717	\$2,955,817
Cross County Trail - Kanner Hwy	91	SW PRATT WHITNEY RD	off off off off an and off		10.63	\$10,000,04J	\$12,979,894	* 1 5 00 1 0 50	\$20,144,796
Cross County Trail - Kanner Hwy Cross County Trail - Kanner Hwy Cross County Trail - Kanner Hwy Cross-County Trail 1	91 113	SR 76/KANNER HIGHWAY FROM SW CONNERS HWY	SR 710/WARFIELD BLVD	Shared Use Path		\$10,383,91		\$15,264,356	
Cross County Trail - Kanner Hwy Cross County Trail - Kanner Hwy Cross County Trail - Kanner Hwy Cross-County Trail 1 Dixie Highway/East Coast Greenway	91 113 186	SR 76/KANNER HIGHWAY FROM SW CONNERS HWY SE Bridge Road	SR 710/WARFIELD BLVD St. Lucie County Line	Shared Use Path	3.33	\$3,252,910	\$4,066,138	\$4,781,778	\$6,310,646
Cross County Trail - Kanner Hwy Cross County Trail - Kanner Hwy Cross County Trail - Kanner Hwy Cross-County Trail 1 Dixie Highway/East Coast Greenway East Coast Greenway - Main	91 113 186 100	SR 76/KANNER HIGHWAY FROM SW CONNERS HWY SE Bridge Road FLORIDA PARK SERVICES	SR 710/WARFIELD BLVD St. Lucie County Line US 1/FEDERAL HWY	Shared Use Path Shared Use Path	3.33 0.27	\$3,252,910 \$263,749) \$4,066,138 9 \$329,687	\$4,781,778 \$387,712	\$6,310,646 \$511,674
Cross County Trail - Kanner Hwy Cross County Trail - Kanner Hwy Cross County Trail - Kanner Hwy Cross-County Trail - Kanner Hwy Dixie Highway/East Coast Greenway East Coast Greenway - Main East Coast Greenway - Main	91 113 186 100 101	SR 76/KANNER HIGHWAY FROM SW CONNERS HWY SE Bridge Road FLORIDA PARK SERVICES JONATHAN DICKINSON STATE PARK US 1/FEDERAL HWY	SR 710/WARFIELD BLVD St. Lucie County Line US 1/FEDERAL HWY FLORIDA PARK SERVICES	Shared Use Path Shared Use Path Shared Use Path	3.33 0.27 2.35	\$3,252,910 \$263,749 \$2,295,597	\$4,066,138 \$329,687 \$2,869,497	\$4,781,778 \$387,712 \$3,374,528	\$6,310,646 \$511,674 \$4,453,459
Cross County Trail - Kanner Hwy Cross County Trail - Kanner Hwy Cross County Trail - Kanner Hwy Cross-County Trail 1 Dixie Highway/East Coast Greenway East Coast Greenway - Main East Coast Greenway - Main East Coast Greenway - Main	91 113 186 100 101 103	SR 76/KANNER HIGHWAY FROM SW CONNERS HWY SE Bridge Road FLORIDA PARK SERVICES JONATHAN DICKINSON STATE PARK US 1/FEDERAL HWY FEC CROSSING	SR 710/WARFIELD BLVD St. Lucie County Line US 1/FEDERAL HWY FLORIDA PARK SERVICES MIDBLOCK CROSSWALK	Shared Use Path Shared Use Path Shared Use Path Shared Use Path	3.33 0.27 2.35 0.14	\$3,252,910 \$263,749 \$2,295,597 \$136,759	\$4,066,138 \$329,687 \$2,869,497 \$170,949	\$4,781,778 \$387,712 \$3,374,528 \$201,036	\$6,310,646 \$511,674 \$4,453,459 \$265,312
Cross County Trail - Kanner Hwy Cross County Trail - Kanner Hwy Cross County Trail - Kanner Hwy Cross-County Trail 1 Dixie Highway/East Coast Greenway East Coast Greenway - Main East Coast Greenway - Main East Coast Greenway - Main East Coast Greenway - Main	91 113 186 100 101 103 104	SR 76/KANNER HIGHWAY FROM SW CONNERS HWY SE Bridge Road FLORIDA PARK SERVICES JONATHAN DICKINSON STATE PARK US 1/FEDERAL HWY FEC CROSSING SE DIXIE HWY FROM RAILROAD CROSSING	SR 710/WARFIELD BLVD St. Lucie County Line US 1/FEDERAL HWY FLORIDA PARK SERVICES MIDBLOCK CROSSWALK BRIDGE RD	Shared Use Path Shared Use Path Shared Use Path Shared Use Path Shared Use Path	3.33 0.27 2.35 0.14 2.03	\$3,252,910 \$263,749 \$2,295,597 \$136,759 \$171,000	\$4,066,138 \$329,687 \$2,869,497 \$170,949 \$213,750	\$4,781,778 \$387,712 \$3,374,528 \$201,036 \$251,370	\$6,310,646 \$511,674 \$4,453,459 \$265,312 \$331,740
Cross County Trail - Kanner Hwy Cross County Trail - Kanner Hwy Cross County Trail - Kanner Hwy Cross-County Trail 1 Dixie Highway/East Coast Greenway East Coast Greenway - Main East Coast Greenway - Main East Coast Greenway - Main	91 113 186 100 101 103 104 105	SR 76/KANNER HIGHWAY FROM SW CONNERS HWY SE Bridge Road FLORIDA PARK SERVICES JONATHAN DICKINSON STATE PARK US 1/FEDERAL HWY FEC CROSSING	SR 710/WARFIELD BLVD St. Lucie County Line US 1/FEDERAL HWY FLORIDA PARK SERVICES MIDBLOCK CROSSWALK	Shared Use Path Shared Use Path Shared Use Path Shared Use Path	3.33 0.27 2.35 0.14	\$3,252,910 \$263,749 \$2,295,597 \$136,759	\$4,066,138 \$329,687 \$2,869,497 \$170,949 \$213,750 \$2,750,000	\$4,781,778 \$387,712 \$3,374,528 \$201,036 \$251,370 \$3,234,000	\$6,310,646 \$511,674 \$4,453,459 \$265,312 \$331,740 \$4,268,000

Facility	Map ID From	То	Project Description	Length (miles)	Total Project Cost (PDC*)	т	otal Cost (YOE**)	
						2026-2030	2031-2035	2036-2045
East Coast Greenway - Main (Sailfish Capital Trail)	109 SE DIXIE HWY FROM SR 714/MONTEREY RD	SE OCEAN BLVD	Shared Use Path	1.58	\$840,000	\$1,050,000	\$1,234,800	\$1,629,600
East Coast Greenway - Main (Sailfish Capital Trail)	110 SE DIXIE HWY FROM SE OCEAN BLVD	SE SEMINOLE ST	Shared Use Path (Elevated walkway)	0.19	\$2,400,000	\$3,000,000	\$3,528,000	\$4,656,000
East Coast Greenway - Main (Sailfish Capital Trail)	106b SE DIXIE HWY from Grafton Ave	COVE ROAD	Shared Use Path	0.61	\$595,878	\$744,848	\$875,941	\$1,156,004
East Coast Greenway - Main (Sailfish Capital Trail)	108b SE DIXIE HWY From SE SEMINOLE ST	n/s of bridge	Shared Use Path (Bridge)	0.47	\$3,824,328	\$4,780,410	\$5,621,763	\$7,419,197
East Coast Greenway (thru Jonathan Dickson Park)	218 US 1	Old Dixie Hwy	Shared Use Path	0.64	\$627,789	\$784,736	\$922,849	\$1,217,910
Federal Hwy - US 1 Federal Hwy/US 1	23 SE SALERNO RD 81 SE POMEROY ST	SE POMEROY ST SE INDIAN ST	Shared Use Path Shared Use Path	1.15 0.87	\$1,120,216 \$851,912	\$1,400,270 \$1,064,889	\$1,646,717 \$1,252,310	\$2,173,219 \$1,652,708
Federal Hwy/US 1	129 Sand Road	Dixie Highway	Shared Use Path	3.20	\$1,563,069	\$1,953,836	\$2,297,711	\$3,032,353
Historic Jupiter Indiantown Trail (Ex. Fdep Trail)	14 KANNER HWY	COUNTY LINE	Shared Use Path	8.17	\$7,985,134	\$9,981,418	\$11,738,147	\$15,491,160
Hungryland Wildlife And Environmental Area Trail	15 SW WARFIELD BLVD	SW PRATT WHITNEY ROAD	Shared Use Path	5.44	\$5,311,598	\$6,639,497	\$7,808,049	\$10,304,499
Indian Mound Trail	142 Citrus Boulevard	Citrus Boulevard via Canal, American Street, Indian Mound Drive	Shared Use Path	1.28	\$1,248,238	\$1,560,297	\$1,834,910	\$2,421,581
Indian Mound Trail	143 Citrus Boulevard	Citrus Boulevard via Canal, American Street, Indian Mound Drive	Shared Use Path	0.99	\$969,881	\$1,212,351	\$1,425,725	\$1,881,569
Indian Mound Trail	202 Citrus Boulevard	Citrus Boulevard via Canal, American Street, Indian Mound Drive	Shared Use Path	1.28	\$1,250,368	\$1,562,960	\$1,838,041	\$2,425,714
Indian Street (Two bridge loop)	235 Mapp Road	Kanner Hwy	Shared Use Path	1.44	\$703,332	\$879,165	\$1,033,898	\$1,364,464
Jensen Beach Blvd	30 SE GREEN RIVER PKWY	NE SAVANNAH RD	Shared Use Path	1.05	\$1,026,123	\$1,282,654	\$1,508,401	\$1,990,679
Jensen Beach Blvd Jensen Beach Blvd	75 FEDERAL HIGHWAY 76 NE SAVANNAH RD	SE GREEN RIVER PKWY NE INDIAN RIVER DR	Shared Use Path Shared Use Path	1.16 0.71	\$1,137,767 \$692,311	\$1,422,209 \$865,389	\$1,672,518 \$1,017,698	\$2,207,268 \$1,343,084
Jesup Trail	123 FROM INDIANTOWN RD	JONATHAN DICKINSON STATE PARK	Shared Use Path	6.48	\$6,329,988	\$7,912,485	\$9,305,082	\$12,280,177
Jonathan Dickinson State Park Trail	3 Park Road	future Ocean to Lake Trail	Shared Use Path	0.98	\$961,974	\$1,202,468	\$1,414,102	\$1,866,230
Jonathan Dickinson State Park Trail	4		Shared Use Path	0.51	\$493,843	\$617,303	\$725,949	\$958,055
Jonathan Dickinson State Park Trail	5		Shared Use Path	0.42	\$407,395	\$509,244	\$598,871	\$790,347
Jonathan Dickinson State Park Trail	6		Shared Use Path	1.27	\$1,241,730	\$1,552,162	\$1,825,343	\$2,408,956
Jonathan Dickson State Park Trail	196 Flamingo Terminus	Thru Jonathan Dickson State Park	Shared Use Path	2.75	\$2,688,446	\$3,360,558	\$3,952,016	\$5,215,586
Jonathan Dickson Trail - Park Rd	1		Shared Use Path	2.81	\$2,743,250	\$3,429,063	\$4,032,578	\$5,321,906
Jonathan Dickson Trail/ Se Jonathan Dickinson Way	2 Jesup Trail	SE Beach Road	Shared Use Path	1.13	\$1,104,117	\$1,380,146	\$1,623,052	\$2,141,987
Kanner Highway	232 Monterey	Federal Hwy	Shared Use Path	1.06	\$517,730	\$647,163	\$761,064	\$1,004,397
Kanner Highway (Two bridge loop) Lake Okeechobee Scenic Trail	236 Indian Street	Martin Downs Boulevard	Shared Use Path Shared Use Path	1.27 21.30	\$620,300	\$775,375	\$911,841	\$1,203,382 \$40,365,396
Mapp Road (Two bridge loop)	219 Palm Beach County Line 237 Indian Street	St. Lucie County Line Martin Downs Boulevard	Shared Use Path Shared Use Path	0.77	\$20,806,905 \$376,087	\$26,008,631 \$470,109	\$30,586,150 \$552,848	\$729,609
Martin - East/West Corridor	199 US 98	Jonathan Dickson State Park	Shared Use Path	26.31	\$25,696,677	\$32,120,846	\$37,774,114	\$49,851,552
Martin Downs Boulevard (Two bridge loop)	238 Mapp Road	Kanner Hwy	Shared Use Path	1.08	\$527,499	\$659,374	\$775,424	\$1,023,348
Monterey Road	107 SE MONTEREY RD AT SE DIXIE HWY	OCEAN BLVD AT SE DIXIE HWY	Shared Use Path	3.40	\$1,660,645	\$2,075,806	\$2,441,148	\$3,221,651
Monterey Road	118 MONTEREY RD FROM ALHAMBRA AVE	SE DIXIE HWY	Shared Use Path	0.93	\$908,470	\$1,135,588	\$1,335,452	\$1,762,433
Murphy Road	45 SE MAPP RD	SE BECKER RD	Shared Use Path	2.90	\$2,830,304	\$3,537,880	\$4,160,547	\$5,490,790
Murphy Road	117 MURPHY RD FROM SR 714/MARTIN DOWNS BLVD	COUNTY LINE CANAL	Shared Use Path or Bike Lanes	3.10	\$3,028,235	\$3,785,294	\$4,451,505	\$5,874,776
N. Sewalls Point Road (Two Bridge Loop)	239 SE Ocean Blvd.	NE Causeway Blvd	Shared Use Path	3.71	\$1,812,057	\$2,265,071	\$2,663,723	\$3,515,390
NE Causeway (Two Bridge Loop)	240 N. Sewells Point Road		Shared Use Path	1.92	\$937,776	\$1,172,220	\$1,378,531	\$1,819,285
New Route	134 SW Indianwood Circle 197 Locks Road	SW Osceola Street	Shared Use Path Shared Use Path	0.14	\$137,030 \$1,746,339	\$171,287 \$2,182,924	\$201,433 \$2,567,118	\$265,837 \$3,387,897
New Route	205 Flora Avenue Terminus	Over Canal to Mapp Road Thru Jonathan Dickson State Park	Shared Use Path	1.39	\$1,355,539	\$1,694,423	\$1,992,642	\$2,629,745
Nw Dixie Hwy	26 NW WRIGHT BLVD	NE BAKER RD	Shared Use Path	0.52	\$507,109	\$633,886	\$745,450	\$983,791
Ocean To Lake Trail Corridor	188 Palm Beach County Line	FEC	Shared Use Path	11.44	\$11,175,164	\$13,968,955	\$16,427,491	\$21,679,818
Old Dixie Highway	214 US 1	Bridge Road	Shared Use Path	1.32	\$1,286,531	\$1,608,164	\$1,891,201	\$2,495,871
		SE OCEAN BLVD		1.02	\$1,064,766		\$1,565,207	
Palm Beach Road	125 SE MONTEREY RD		Shared Use Path			\$1,330,958		\$2,065,647
Pratt & Whitney Trail Corridor	190 Palm Beach County Line	Old Jupiter Road	Shared Use Path	1.15	\$1,127,319	\$1,409,149	\$1,657,160	\$2,187,000
Savannah State Park Trail	198 Jensen Beach Boulevard	Thru Savannah State Park to St. Lucie County Line	Shared Use Path	1.74	\$1,701,013	\$2,126,267	\$2,500,490	\$3,299,966
SE Bridge Rd	49 SE DIXIE HWY	S BEACH RD	Shared Use Path	0.92	\$895,124	\$1,118,904	\$1,315,832	\$1,736,540
SE Cove Rd	8 SE WILLOUGHBY BLVD	SE DIXIE HWY	Shared Use Path	2.18	\$1,063,092	\$1,328,865	\$1,562,746	\$2,062,399
SE Cove Rd	66 KANNER HWY	SE WILLOUGHBY BLVD	Shared Use Path	2.16	\$1,053,681	\$1,317,101	\$1,548,911	\$2,044,141
SE Cove Rd	67 SE DIXIE HWY	COVE ROAD PARK	Shared Use Path	1.46	\$1,426,627	\$1,783,284	\$2,097,142	\$2,767,657
SE Federal Hwy	29 SE SEABRANCH BLVD	2000 FT N of DHARLYS ST	Shared Use Path	2.60	\$2,544,081	\$3,180,102	\$3,739,799	\$4,935,518
SE Ocean Blvd. (Two Bridge Loop)	251 N. Sewells Point Road	A1A	Shared Use Path	1.65	\$805,901	\$1,007,377	\$1,184,675	\$1,563,448
SE Paulson Ave	9 CARDINAL TRL	SW GAINES AVE	Shared Use Path	0.59	\$574,935	\$718,669	\$845,155	\$1,115,374
		SW GAINES AVE						
SW Allapatah Rd	20 SW WARFIELD BLVD		Shared Use Path	12.06	\$11,777,527	\$14,721,909	\$17,312,965	\$22,848,403
SW Famel Avenue	131 Marina (End)	SW Farm Road	Shared Use Path	0.65	\$634,158	\$792,697	\$932,212	\$1,230,266
SW Farm Rd	82 SW ANDALUCIA CT	SW 169TH AVE	Shared Use Path	0.77	\$753,655	\$942,069	\$1,107,873	\$1,462,091
SW High Meadow Avenue	253 SW Martin Downs Blvd	Murphy Road	Shared Use Path	0.97	\$473,772	\$592,215	\$696,445	
SW Indiantown Ave	17 SW WARFIELD BLVD	SW KANNER HWY	Shared Use Path	0.42	\$410,435	\$513,044	\$603,339	\$796,244
SW Martin Hwy	19 SW ALLAPATAH RD	I-95	Shared Use Path	5.49	\$5,364,632	\$6,705,790	\$7,886,009	\$10,407,386
SW Martin Hwy	69 I-95	84TH AVE	Shared Use Path	1.52	\$1,487,231	\$1,859,039	\$2,186,230	\$2,885,229
SW Martin Hwy	70 84TH AVE	FLORIDA'S TURNPIKE	Shared Use Path	3.82	\$3,732,318	\$4,665,398	\$5,486,508	\$7,240,698
SW Matheson Ave	44 SW MARTIN DOWNS BLVD	SW MURPHY RD	Shared Use Path	0.98	\$959,285	\$1,199,107	\$1,410,149	\$1,861,013
SW Murphy Road	254 SW High Meadows Road	North County Line	Shared Use Path	1.61	\$786,364	\$982,955	\$1,155,955	\$1,525,547
SW Osceola Street	133 SW Warfield Boulevard	Citrus Boulevard	Shared Use Path	1.01	\$1,682,955	\$982,955	\$2,473,943	\$3,264,932
Treasure Coast Loop Trail Corridor (see others)	189 Ocean Boulevard/A1A	St. Lucie County Line	Shared Use Path	8.47	\$4,136,960	\$5,171,200	\$6,081,331	\$8,025,702
Willoughby Blvd	124 SE COVE RD	US 1/FEDERAL HWY	Shared Use Path	4.58	\$4,473,973	\$5,592,466	\$6,576,740	\$8,679,508
Notes					\$10,289,028	\$12,861,285	\$15,124,871	\$19,960,714
* PDC - Present Day Cost					\$51,732,763	\$64,665,954	\$76,047,162	\$100,361,560
** YOE - Year of Expenditure					\$328,369,846	\$410,462,308	\$482,703,674	\$637,037,502
Base construction cost for sidewalk (concrete - 5' one sidewalk	de, 4 inch depth, Cost Per mile Model, FDOT, July 2019				\$390,391,637	\$487,989,546	\$573,875,706	\$757,359,776

\$390,391,637 \$487,989,546 \$573,875,706 \$757,359,776 Pedestrian bridge cost assumes 12' wide facility (Concrete Deck/Pre-stressed Girder - Simple Span (Medium Span Bridge)) at \$115 per square foot, Cost Per mile Model, FDOT's Structures Design Guideline, Structures Manual Volume 1 (Chapter 9), January 2020.

Crosswalk cost based on Pedestrian and Bicycle Cost Estimation Tool, NCDOT, 2013

Bike lane base construction cost assumes 5' paved facility.

Shared lane base construction cost assumes signing and marking only.

Buffered bike lane base construction cost reflects 5' facility with 2' buffer. Cost is 25% higher than 5' paved bike lane.

Shared use path (two directional, 12 feet) based on cost per mile model, FDOT, July 2019

Shared use path (bridge) cost assumes 16' wide facility (Concrete Deck/Pre-stressed Girder - Simple Span (Medium Span Bridge)) at \$115 per square foot, Cost Per mile Model, FDOT's Structures Design Guideline, Structures Manual Volume 1 (Chapter 9), January 2020.

Aviation Projects

Martin in Motion, 2045 LRTP

		Total Cos	t (YOE**)	
Project Description	2021-2025	2026-2030	2031-2035	2036-2045
Capital Improvement Projects supported by Partial FDOT Funding	1.08	1.25	1.47	1.94
Airfield Guidance Sign Replacement (Design and Construct)	\$270,000			
Airport Business Plan	\$216,000			
Airport Operations Center and Airfield Electrical Vault (Phase 3 Construction)	\$3,240,000			
Corporate Hangar 1	\$1,080,000			
Corporate Hangar 2	\$1,080,000			
Hold Bay Extension (Design & Const.)	\$259,200			
Mill & Resurface, MITL Replacement Taxiway C (Design & Const)	\$1,846,800			
Mill & Resurface, MITL Replacement Taxiway D (Design & Construct)	\$1,755,000			
PDC and MIRL Replacement 7-25 (Phase 1 and Phase 2 - Design ¹)	\$1,323,000			
Property Acquisition	\$2,700,000			
Rehabilitation of MC Non-Movement Areas Phase IV - Taxilane B (Const)	\$1,080,000			
Replace PAPIs on 12-30 with LED Units (Design & Construct)	\$108,000			
Sun Shade Hangars	\$540,000			
Tractor Equipment	\$108,000			
Air Traffic Control Tower Equipment Upgrade (Recorder and Radios ²)		\$250,000		
Construct Airport Interconnect Rd Flying Fortress Extension		\$2,312,500		
Rehabilitation of MC Non-Movement Areas Phase V (Design & Const)		\$1,250,000		
Tree Mitigation Project - RPZ and Part 77 (SE St. Lucie Canal)		\$150,000		
Total Airport Projec	cts Cost \$15,606,000	\$3,962,500		

Source: Draft Airport Future Funding Analysis, Martin County Airport and Within Field CIP, Feb. 28, 2020

Notes

** YOE - Year of Expenditure

¹ Phase 1 and Phase 2 design cost \$100K and \$1.25M respectively.

² Recorder and radios cost \$100K each.

Florida Department of Transportation (FDOT) funding share is limited to 80% of the project cost. Revenues for Aviation Program, which is under Public Transportation is not provided by FDOT at MPO level.

Resiliency Projects *Martin in Motion*, 2045 LRTP

Map ID	Facility	From	То	Project Description	Length		Yea	r of Expenditure (`	YOE**)
					(miles)	Cost (PDC*)	2026-2030	2031-2035	2036-2045
V1	N Sewalls Point Road ¹	SR-A1A (NE Ocean Boulevard)	SE Palmer Street	To be determined	1.57	\$2,599,031	\$3,248,789	\$3,820,575	\$5,042,120
V2	SE MacArthur Boulevard ²	SE South Marina Way	Approximately 1500 feet North	To be determined	0.28	-	-	-	-

Notes

* PDC - Present Day Cost

** YOE - Year of Expenditure

¹ Project overlaps with non-motorized projects, segment IDs 61 and 239. Project cost are for non-motorized improvements.

² Roadway is eligible to receive federal-aid funds. Funds could be available from Federal Emergency Relief Program (up to 80% of the project cost) in case of a natural disaster.

Appendix H-1: 2045 Cost Feasible Plan, Funding Sources

Transit Projects Martin in Motion, 2045 LRTP

Map ID	Project Description	Location/Geography	Source	Category or Type	Comments	Total Project		Year of Expend	diture (YOE)			Revenue So	ources (YOE)	
						Cost (YOE*)	2021-2025	2026-2030	2031-2035	2036-2045	2021-2025	2026-2030	2031-2035	2036-20
Service Im	nprovements	1		1								II agal (Canaral		
n/a	Continue to maintain and operate existing fixed route bus service ¹	Systemwide	TDP 2020-2029	Annual Operating Cost	Cost affordable plan.	\$67,086,459	TIP	\$12,705,769	\$14,941,984	\$39,438,706	TIP	Local (General Fund, Farebox, 9th Cent) \$7.37M; State (Transit Program)	``	x, Fund, Farel 9th Cent
n/a (Continue to maintain existing paratransit service	Systemwide	TDP 2020-2029	Annual Operating Cost	Cost affordable plan.	\$13,809,114	TIP	\$2,615,363	\$3,075,666	\$8,118,085	TIP	\$5.11M; Federal \$2.85M	\$6.01M; Federal \$2.85M	Frogram \$15.86M Federal \$5.69M
Capital/Infi	frastructure Improvements										<u> </u>			
n/a F	Fleet Replacement	Revenue vehicles to maintain existing service based on Marty's fleet replacement schedule	TDP 2020-2029	Revenue Vehicles	Cost affordable plan. Capital needs over a 10-year period.	\$15,856,896	TIP	\$3,003,200	\$3,531,763	\$9,321,933	TIP	Local (9th	Local (9th	Local (9th
n/a 1	Transit Security Equipment	n/a	TDP 2020-2029	Equipment	Cost affordable plan. Capital needs over a 10-year period.	\$339,801	TIP	\$64,356	\$75,683	\$199,762	TIP	State (Transit	Cent) \$0.76M State (Transit	t State (Tran
n/a 1	Transit Technology	n/a	TDP 2020-2029	Equipment	Cost affordable plan.	\$105,445	TIP	\$105,445			TIP	Program) \$0.21M; Federal	Program) \$0.38M; Federal	Program) \$1.43M; Federal
n/a (Other Transit/Bus Stop Infrastructure	New bus stops, safety/ADA improvements, benches, shelters, lighting, bicycle storage	TDP 2020-2029	Facility Improvements	Cost affordable plan. Unfunded needs for this line item includes \$167,970 over a 10-year period.	\$1,426,594	TIP	\$382,670	\$450,020	\$593,904	TIP	\$2.93M	\$2.93M	\$5.85M
n/a (Connection to Palm Beach Tri-Rail Intermodal Center	New park-and-ride facility to provide connection to Palm Beach Tri-Rail Intermodal Center	Park-And-Ride Master Plan, FDOT - D4, Oct. 2018, pg. 10	New Facility	Assumes 50 spaces @ \$17,000/space as base construction cost. Total construction cost includes mobilization, MOT and design costs.	\$1,464,125		\$1,464,125			-	State (Transit Program) \$1.46M	-	-
n/a \	Virgin Trains USA/Brightline Station	Intercity passenger rail station. Potential locations include East Coast Lumber, Kiwanis Park and Stypmann Boulevard.	City of Stuart Brightline Station Analysis, 2018	New Facility	Privately funded.	-	Private Sector Funded Project				Private Sector Funded Project	- b	-	-
Other				•						·			·	
n/a 1	Transit Plans and Studies	Transit Development Plan and other transit related studies	TDP 2020-2029	Study	For future TDPs and other transit planning studies	\$250,000		\$250,000				State (Product Support)	-	-
lotes					Transit Operating Cost (20-year total)			\$15,321,131	\$18,017,650	. , ,		\$15.32M	\$18.02M	\$47.56N
- Not App	plicable				Transit Capital Cost	\$19,192,861		\$5,269,796	\$4,057,466	\$10,115,598	1	\$5.02M	\$4.06M	\$10.12

* YOE - Year of Expenditure

¹ Fixed bus route bus service includes commuter bus routes for a total of five existing Marty routes (1, 2, 3, 20X and 30X).

Transit operating cost funded through local (General Fund, Fare Box, and 9th Cent Fuel Tax), federal funds directly received by Marty, and state funds (Transit Program, up to 50% of eligible expenses)

Transit capital/infrastructure cost funded through local funds (9th Cent Fuel Tax), FDOT Transit Program (550% of non-federal share), and federal funds directly received by Marty except the new park-and-ride facility.

Transit Plans and Studies is funded through Product Support under FDOT's a Non-Capacity Program.

New park-and-ride facility is funded through FDOT's Transit Program.

Roadway Projects Martin in Motion, 2045 LRTP

Map ID	Facility	From	То	Project Description	Existing	Future		Priority	Total Co	ost (Year of Exper	-	Total Project		-	t Phase				urces (YOE)	
					Lanes	Lanes			PDE/PE ¹	ROW ²	CON ³	Cost (YOE*)	2021-2025	2026-2030	2031-2035	2036-2045	2021-2025	2026-2030	2031-2035	2036-2045
R-1	SR-714/Martin Highway	CR-76A/Citrus Boulevard	Martin Downs Boulevard	Highway Capacity	2	4	0.88	TIP			\$36,417,871	\$36,417,871	CON				TIP			
4196693	Willoughby Boulevard	SR-714/ Monterey Road	SR-5/US-1/Federal Highway	PD&E Study	-	-	0.84	TIP	\$5,085,000			\$5,085,000	PDE				TIP			
4417001	Cove Road	SR-76/Kanner Highway	SR-5/US-1/Federal Highway	PD&E Study	2	4	4.32	TIP	\$3,075,000			\$3,075,000	PDE				TIP			
4416991	CR-713/High Meadow Avenue	I-95	CR-714/Martin Highway	PD&E Study	-	-	2.64	TIP	\$2,505,000			\$2,505,000	PDE				TIP			
R-5	Cove Road	Willoughby Boulevard	SR-5/US-1/Federal Highway	Widen from 2L to 4L	2	4	1.07	Tier 1	\$1,803,049	\$1,202,033	\$12,020,326	\$15,025,408		PE, ROW, CON				Local (1st, 2nd, 9th Cent, Constitutional Fuel Tax, County Fuel Tax, Traffic Impact Fee); State (Product Support; Other Roads Construction & ROW - 10%; TMA funds)		
R-6	Cove Road	SR-5/US-1/Federal Highway	CR-A1A	Widen from 2L to 4L	2	4	1.12	Tier 1	\$1,887,495	\$1,258,330	\$12,583,302	\$15,729,128		PE, ROW, CON				Local (1st, 2nd, 9th Cent, Constitutional Fuel Tax, County Fuel Tax, Traffic Impact Fee); State (Product Support; Other Roads Construction & ROW - 10%; TMA funds)		
R-4	Cove Road	SR-76/Kanner Highway	Willoughby Boulevard	Widen from 2L to 4L	2	4	2.13	Tier 1	\$3,589,247	\$2,392,831	\$27,278,277	\$33,260,355		PE, ROW	CON			Local (1st, 2nd, 9th Cent, Constitutional Fuel Tax, County Fuel Tax, Traffic Impact Fee); State (Product Support; Other Roads Construction & ROW - 10%; TMA funds)	Local (1st, 2nd, 9th Cent, Constitutional Fuel Tax, County Fuel Tax, Traffic Impact Fee); State (Other Roads Construction & ROW - 10%; TMA funds)	
R-15	SR-5/US-1	at SW Joan Jefferson Way		Intersection Modification	-	-	-	Tier 1	\$423,805	\$1,059,514	\$3,814,249	\$5,297,568		PE, ROW, CON				State (Product Support; Other Roads Construction & ROW Program)		
R-16	CR-714/Martin Highway	Approximately 1200 feet east of SR-710	SE126th Blvd. (Okeechobee County)	Roadway Realignment	-	-	-	Tier 1	\$414,499	\$598,720	\$3,592,323	\$4,605,542		PE, ROW, CON				Local (1st, 2nd, 9th Cent, Constitutional Fuel Tax, County Fuel Tax, Traffic Impact Fee); State (Product Support; Other Roads Construction & ROW - 10%; TMA funds)		
R-2	Willoughby Boulevard	SR-714/ Monterey Road	SR-5/US-1/Federal Highway	New 2 Lane Road	0	2	0.84	Tier 2	\$1,363,942	\$0	\$11,402,553	\$12,766,495	;	PE	CON			State (Product Support)	Local (1st, 2nd, 9th Cent, Constitutional Fuel Tax, County Fuel Tax, Traffic Impact Fee); State (Other Roads Construction & ROW - 10%; TMA funds)	
R-7	CR-713/High Meadow Avenue ¹	I-95	CR-714/Martin Highway	Widen from 2L to 4L	2	4	2.64	Tier 2	\$4,851,109	\$2,829,814	\$37,329,284	\$45,010,207	,	PE, ROW	CON			Local (1st, 2nd, 9th Cent, Constitutional Fuel Tax, County Fuel Tax, Traffic Impact Fee); State (Product Support; Other Roads Construction & ROW - 10%; TMA funds)	Local (1st, 2nd, 9th Cent, Constitutional Fuel Tax, County Fuel Tax, Traffic Impact Fee); State (Other Roads Construction & ROW - 10%; TMA funds)	
R-8	Federal Highway/US 1	SE Seabranch Blvd	SE Osprey St	Widen from 4L to 6L	4	6	1.15	Tier 2	\$2,148,229	\$0	\$14,376,609	\$16,524,838		PE, ROW, CON				State (Product Support; Other Roads Construction & ROW Program)		

Map ID	Facility	From	То	Project Description	Existing	Future	Length	Priority	Total Co	st (Year of Exper	diture)	Total Project		Projec	t Phase			Revenue So	ources (YOE)	
indp is					Lanes	Lanes	(miles)		PDE/PE ¹	ROW ²	CON ³	Cost (YOE*)	2021-2025	2026-2030	2031-2035	2036-2045	2021-2025	2026-2030	2031-2035	2036-2045
R-10	SE Bridge Rd	Powerline Ave	US-1/Federal Highway	Widen from 2L to 4L	2	4	2.00	Tier 3	\$3,780,343	\$0	\$27,722,515	\$31,502,858				PE, ROW, CON				Local (1st, 2nd, 9th Cent, Constitutional Fuel Tax, County Fuel Tax, Traffic Impact Fee); State (Product Support; Other Roads Construction & ROW - 10%; TMA funds)
R-13	SW Martin Downs Blvd	SW Matheson Ave	SW Palm City Rd	Widen from 4L to 6L	4	6	1.33	Tier 3	\$14,380,576	\$0	\$96,239,236	\$110,619,812				PE, ROW, CON				State (Product Support; Other Roads Construction & ROW Program)
R-11	SE Green River Pkwy	NW Wright Blvd	NW Dixie Hwy	Widen from 2L to 4L	2	4	0.37	Tier 3	\$979,109	\$1,876,625	\$5,303,506	\$8,159,239				PE, ROW, CON				State (Product Support; Other Roads Construction & ROW Program)
R-14	SW Murphy Rd	Whisper Bay Terrace	North County Line	Widen from 2L to 4L	2	4	0.35	Tier 4	\$926,184	\$1,775,186	\$5,016,830	\$7,718,201				PE, ROW, CON				Local (1st, 2nd, 9th Cent, Constitutional Fuel Tax, County Fuel Tax, Traffic Impact Fee); State (Product Support; Other Roads Construction & ROW - 10%; TMA funds)
R-3	Village Parkway Extension	SR-714/Martin Highway	St. Lucie County Line	New 4 Lane Road	0	4	3.00	Privately Funded	\$8,098,582		\$59,389,599	\$67,488,180				PE, ROW, CON	-	-	-	Privately Funded

¹ Project Development & Environment Study (PDE), Preliminary Engineering (PE). ² Right of Way (ROW). ³ Construction (CON).

Notes

* YOE - Year of Expenditure ** PDC - Present Day Cost

All "off-system," federal-aid eligible facilties funded through local fuel taxes, transportation impact fee, TMA and Other Roads (10%) revenues.

All "on-system" facilities funded through Other Roads revenue stream.

All the roadway improvement projects included in the cost feasible plan project list except SR714/Martin Highway (Map ID R-1) are funded through federal and state programs.

SR-714/Martin Highway (Map ID R-1) is 100% state funded. ¹ Funded through Other Roads program.

Strategic Intermodal System (SIS) Projects Martin in Motion, 2045 LRTP

Map ID	Facility	From	То	Project Description	Source	Category or Type		Design		Right of	Way / Constr	ruction	Total Project Cost (YOE**)		Т	otal Cost (YOE	E**)			Revenue Sources	(YOE)	
							PDE	PE	Total	ROW	CON	Total				2031-2035	2036-2040	2041-2045		2026-2030 2031-2035	2036-2040 204	1-2045
4132532	1-95*			Project Dev. & Env.	SIS CFP 2020-2024	PDE	\$2,200,000		\$2,200,000				\$2,200,000						TIP			
4132542 4226815	1-95*			Project Dev. & Env.	SIS CFP 2020-2024	PDE	\$2,150,000		\$2,150,000				\$2,150,000						TIP			
4226815	1-95*	High Meadow Avenue	Martin/St. Lucie County Line	Project Dev. & Env.	SIS CFP 2020-2024	PDE	\$2,750,000		\$2,750,000			\$0	\$2,750,000	\$2,750,000					TIP			
4192522	SR-710/Warfield Blvd.*	Martin FPL Power Plant	CR-609/SW Allapattah Road	Roadway Improvements	SIS CFP 2020-2024	PE, ROW & CON		\$7,585	\$7,585	\$651,094		\$651,094	\$659,000	\$659,000						State (SIS Highways Constructior & ROW)		
3403	I-95*	Martin/Palm Beach County Line	Becker Road	Highway Capacity (includes mainline and interchange improvements)	SIS CFP 2029-2045	PE, ROW & CON		\$10,000,000	\$10,000,000	\$10,000,000 \$	\$301,189,000	****	*****			\$10,000,000	0 ####################################	ŧ		State (SIS Highways Constructior & ROW)	State (SIS Highways Construction & ROW)	
3405	SR-710*	Martin/Okeechobee County Line	Martin Powerplant Road	Roadway Improvements	SIS CFP 2029-2045	PE, ROW & CON		\$6,000,000	\$6,000,000	\$5,125,000 \$	\$120,719,000	****	****				\$11,125,000) #########	ŧ		State (SIS Sta Highways Hig Construction Cons	ate (SIS ghways struction ROW)
3417	SR-714/Monterey Road*	at Florida East Coast Railway		Grade Separation	SIS CFP 2029-2045	PDE, PE, ROW & CON	\$2,100,000	\$2,212,000	\$4,312,000	\$14,969,000			\$65,878,000				0 \$2,212,000				Highways Hig Construction Cons	ate (SIS ghways struction ROW)
											Total SIS	S Project Cost	#######################################	\$7,759,000	\$0	\$12,100,000	0 ##########	######################################	ŧ			

Notes
* Projects included in the Florida Mobility and Trade Plan (FMTP), April 2020
** YOE - Year of Expenditure
Project included in Transportation Improvement Program (TIP), Project cost based on SIS First Five-Year and Second Five-Year Plans (as of July 1, 2020)
SIS 2029-2045 CFP adopted in July 2018
All SIS projects are funded through federal and state programs.

Freight Projects Martin in Motion, 2045 LRTP

	F (1)	E	Ŧ	Particul Description	0	0.1	0	Total Project		٢	Fotal Cost (YOE	**)			Revenue Sources	(YOE)	
Map ID	Facility	From	То	Project Description	Source	Category or Type	Comments	Cost (YOE**)	2021-2025	2026-2030	2031-2035	2036-2040	2041-2045	2021-2025	2026-2030 2031-2035	2036-2040	2041-2045
4192522	SR-710/Warfield Blvd.*	Martin FPL Power Plant	CR-609/SW Allapattah Road	Roadway Improvements	SIS CFP 2020-2024; Freight Mobility and Trade Plan (FMTP), April 2020; SIS CFP 2025-2029	PE, ROW & CON		\$659,000		\$0					State (SIS Highways Construction & ROW)	ı	
4226815	I-95*	High Meadows Avenue	Martin/St. Lucie County Line	Project Dev. & Env.	SIS CFP 2020-2024; Freight Mobility and Trade Plan (FMTP), April 2020; SIS CFP 2025-2029	PDE		\$2,750,000	\$2,750,000					TIP			
3403	I-95*	Martin/Palm Beach County L	Becker Road	Highway Capacity (includes mainline and interchange improvements)	Freight Mobility and Trade Plan (FMTP), April 2020; SIS CFP 2029- 2045	PE, ROW & CON		\$321,189,000			\$10,000,000				State (SIS Highways Construction & ROW)	State (SIS Highways Construction & ROW)	ı
3405	SR-710*	Martin/Okeechobee County Line	Martin Powerplant Road	Major Safety Project	Freight Mobility and Trade Plan (FMTP), April 2020; SIS CFP 2029- 2045	PE, ROW & CON		\$131,844,000				\$11,125,000	\$120,719,000			State (SIS Highways Constructior & ROW)	Highways
3417	SP_/1//Monterey Poad*	at Florida East Coast Railway		Grade Separation	Freight Mobility and Trade Plan (FMTP), April 2020; SIS CFP 2029- 2045	PDE, PE, ROW & CON		\$65,878,000	\$0			\$2,212,000	\$61,566,000			State (SIS Highways Constructior & ROW)	State (SIS Highways Constructio & ROW)
F-1	I-95***	S of Bridge Road	S of High Meadow Avenue	Widen 6 to 8 Lanes	2040 Regional LRTP	Highway Improvements									State (SIS Highways Construction & ROW)	State (SIS Highways Constructior & ROW)	
	Strategies for Reducing	Florida East Coast (FEC)		Enhanced Safety Improvements per Brightline/ Virgin USA Trains and Martin County Agreement	Freight Mobility and Trade	Safety		-									
n/a	Railroad Trespassing (SRRT) Pilot Project	Railway Corridor		Dynamic Envelop project (Additional Striping) at all Railroad Crossings on State Roads in Martin County	Plan (FMTP), April 2020	Safety	CRISI Grant	\$157,683	\$157,683					Federal Grant			
Notes	1	1	1			1	Total Freight Projects Cost	\$522,477,683	\$2,907,683	\$0	\$10,000,000	\$13,337,000	\$182,285,000		ļļ		4

* Projects included in the Florida Mobility and Trade Plan (FMTP), April 2020

** YOE - Year of Expenditure

***Project segment is included in Map ID 3403, SIS Cost Feasible Plan, July 2020.

Transportation Systems Management & Operations (TSM&O) Projects Martin in Motion, 2045 LRTP

Map ID	Facility	From	То	Length (miles)	Project Description	Source	Comments	Year of Expenditure (YOE)	Rev	enue Sources ((YOE)
				(2026-2030 2031-2035	2036-2045	2026-2030	2031-2035	2036-2045
Е	Kanner Highway	SW 96th Street	SE Salerno Road	3.08	To Be Determined	TSM&O Master Plan, FDOT - D4, March 2019, pg. 40	Includes CMP Update (Segment ID 7, 8, 9 and 10)					
F	SR-714/SE Monterey Road	Federal Highway	SE Ocean Boulevard	1.85	To Be Determined	TSM&O Master Plan, FDOT - D4, March 2019, pg. 40	Includes CMP Update (Segment ID 15 and 16)					
za	SE Salerno Road	SE Ault Road	Federal Highway	1.50	To Be Determined	TSM&O Master Plan, FDOT - D4, March 2019, pg. 41	TCRRPM 5.0, v/c ratio of 1.07					
zb	SW Mapp Road	SW 36th Street	SW Martin Downs Boulevard	0.57	To Be Determined	TSM&O Master Plan, FDOT - D4, March 2019, pg. 41						
zc	SE Dixie Highway	SE Salerno Road	SE Jefferson Street	1.60	To Be Determined	TSM&O Master Plan, FDOT - D4, March 2019, pg. 41						
zd	SW Martin Highway	SW High Meadow Avenue	SW Armellini Avenue	0.37	To Be Determined	TSM&O Master Plan, FDOT - D4, March 2019, pg. 41						
ze	SE Indian Street	Federal Highway	SE Dixie Highway	0.36	To Be Determined	TSM&O Master Plan, FDOT - D4, March 2019, pg. 41	County Rank 18 and 20					
zf	SW Martin Highway	SW Berry Avenue	SW Mapp Road	1.22	To Be Determined	TSM&O Master Plan, FDOT - D4, March 2019, pg. 41						
zg	SE Cove Road	Kanner Highway	SE Dixie Highway	4.34	To Be Determined	TSM&O Master Plan, FDOT - D4, March 2019, pg. 41	TCRRPM 5.0, v/c ratio of 1.05					
zi	SW Murphy Road	SW High Meadow Avenue	County Line	1.57	To Be Determined	TSM&O Master Plan, FDOT - D4,	Corresponds to CMP Update (Segment ID					
n/a	SR-714/Martin Highway	at I-95	-	-	Advanced Digital Message Sign (ADMS) in	March 2019, pg. 41 I-95 Multimodal Treasure Coast	33 and 34)					
n/a	Martin County Rest Area (Southbound)	at I-95	-	-	Eastbound and Westbound Direction Dynamic Truck Parking, Touch-Screen	Master Plan I-95 Multimodal Treasure Coast						
n/a	Martin County Rest Area (Northbound)	at I-95	-	_	Informational Kiosk Dynamic Truck Parking, Touch-Screen	Master Plan I-95 Multimodal Treasure Coast						
n/a	High Meadow Avenue	at I-95	-	_	Informational Kiosk Advanced Digital Message Sign (ADMS) in	Master Plan I-95 Multimodal Treasure Coast						
11/4					Southbound Direction Advanced Digital Message Sign (ADMS) in	Master Plan						
n/a	SR-76/Kanner Highway	at I-95	-	-	Eastbound and Westbound Direction, CCTV under Bridge, Signal Priority, ADMS at Proposed Park-and-Ride	I-95 Multimodal Treasure Coast Master Plan	Corresponds to CMP Update (Segment ID 7, 8, 9 and 10)			State (Other	State (Other	State (Other
n/a	Bridge Road	at I-95	-	-	Advanced Digital Message Sign (ADMS) in Eastbound and Westbound Direction	I-95 Multimodal Treasure Coast Master Plan		\$30,090,585 \$20,432,716	\$18,643,258	Roads	Roads	Roads
C-1	High Meadow Avenue	SR-714/Martin Highway	Golden Bear Way	1.05	Install Fiber Optic	Martin County Public Works Dept.				ROW) S30.09M	Construction &	
C-2	Martin Downs Boulevard/Monterey Road	Turnpike Entrance	US-1/Federal Highway	4.85	Adaptive Corridor	Martin County Public Works Dept. Martin County Public Works Dept.;	\$3500 per signalized intersections			KOW) 330.09W	KOW) \$20.43N	1 KOW) \$10.04
C-3	US-1/Federal Highway	Summerfield Way	SE Westmoreland Blvd.	10.35	Adaptive Corridor	CMP Update 2020 (Segment IDs 21 to 31); TSM&O Master Plan (Map IDs A, B and C), FDOT	\$3500 per signalized intersections, Overlaps with Project 'A'					
n/a	Signalized Intersections	Countywide (Approximately 120 i	intersections)		Install Bluetoad Devices	Martin County Public Works Dept.	\$6000 per intersection					
C-4	SR-710/Warfield Blvd.	Jackson Avenue	Dr. Martin Luther King Jr. Drive	1.55	Install Fiber Optic	Martin County Public Works Dept.						
M-1	Colorado Avenue (SW Kanner Highway)	SE Lonita St	Ocean Boulevard	0.62	To Be Determined	CMP Update, 2020; Martin MPO & FDOT Congestion Analysis	CMP Update (Segment ID 35 and 36)					
M-2	CR-732 (Jensen Beach Cswy.)	Indian River Drive	SR-A1A	1.90	To Be Determined	CMP Update, 2020; Martin MPO	CMP Update (Segment ID 51 and 52)					
M-3	Dixie Highway	US-1/Federal Highway	SW Ocean Blvd	0.42	To Be Determined	CMP Update, 2020; Martin MPO & FDOT Congestion Analysis	CMP Update (Segment ID 45 and 46), TCRPM 5.0, v/c = 1.14					
M-4	Dixie Highway	Dixie Cutoff Rd	Monterey Rd	0.85	To Be Determined	FDOT Congestion Analysis	County Rank 12 (Southbound)					
M-5	Dixie Highway	SE Anchor Avenue	St. Lucie Blvd	0.74	To Be Determined	CMP Update, 2020; Martin MPO	CMP Update (Segment ID 37 and 38), TCRPM 5.0, v/c = 1.05					
M-6	Jensen Beach Blvd	US-1/Federal Highway	Indian River Drive	2.92	To Be Determined	CMP Update, 2020; Martin MPO	Corresponds to CMP Update (Segment ID 3, 4, 5 and 6)					
M-8	NE Indian River Drive	NE Dixie Hwy	CR-732 (Jensen Beach Cswy.)	1.35	To Be Determined	CMP Update, 2020; Martin MPO	Corresponds to CMP Update (Segment ID 47, 48, 49 and 50)					
M-9	NE Ocean Blvd	S Sewalls Point Rd	NE MacArthur Blvd	4.77	To Be Determined	TCRPM, v/c = 1.14						
M-10	SE Green River Pkwy	NW Wright Blvd	NW Dixie Hwy	0.40	To Be Determined	TCRPM, v/c = 1.16 CMP Update, 2020; Martin MPO &	CMP Update (Segment ID 17 and 18),					
M-11	SE Monterey Road (Ext)	US-1/Federal Highway	SE Dixie Hwy	0.58	To Be Determined	FDOT Congestion Analysis	County Rank 19					
	SR-A1A SW 26th Street (Martin Highway)		North County Line	0.80	To Be Determined	CMP Update, 2020; Martin MPO	CMP Update (Segment ID 53 and 54) CMP Update (Segment ID 13 and 14)					
M-13 M-14	SW 36th Street (Martin Highway) SW High Meadow Ave	SW Mapp Rd SW Sunset Tr	Kanner Hwy SW Town Center Way	1.88 0.20	To Be Determined To Be Determined	CMP Update, 2020; Martin MPO TCRPM, v/c = 1.01	UNIP Update (Segment ID 13 and 14)					
	SW High Meadow Ave SW Joan Jefferson Way	US-1/Federal Highway	Dixie Hwy	0.20	To Be Determined	CMP Update, 2020; Martin MPO	CMP Update (Segment ID 41 and 42)					
M-16	SW Ocean Blvd	US-1/Federal Highway	SR-A1A	1.28	To Be Determined	CMP Update, 2020; Martin MPO & FDOT Congestion Analysis	CMP Update (Segment ID 39 and 40)					
M-17	Bridge Road	I-95	US-1/Federal Highway	6.43	To Be Determined	CMP Update, 2020; Martin MPO	CMP Update (Segment ID 1 and 2), Project zh identified in the TSM&O Master Plan is a subset of this segment					

Notes

Project "E" includes SR-76/Kanner Highway at I-95 interchange

All TSM&O projects are funded through federal and state programs.

Other Projects *Martin in Motion,* 2045 LRTP

Map ID	Facility	Project Description	Source	Category or Type	Comments	Total Project Cost (YOE*)	Year	of Expenditure (YOE)		Revenue Sou	rces (YOE)	
				туре		COSt (TOL)	2026-2030	2031-2035	2036-2045	2021-2025	2026-2030	2031-2035	2036-2045
P-1	Kanner Highway/SR 76 at I-95	Facility located in southwest corner of Kanner Highway/SR 76, approximately 46,000 sq. ft. 106 parking spaces including four ADA spaces and six kiss-and-ride.	Park-And-Ride Master Plan, FDOT - D4, Oct. 2018, pg. 10, 38, 43 and 44		Cost in 2018 dollars and includes MOT and contingency	\$3,100,500	\$3,100,500			-	State (Transit Program) \$3.1M	-	-
n/a	West of I-95 between Becker Road and Martin Highway		Park-And-Ride Master Plan, FDOT - D4, Oct. 2018, pg. 10		Assumes 50 spaces @ \$17,000/space	\$1,464,125	\$1,464,125			-	State (Transit Program) \$1.46M	-	-
n/a	West of Turnpike in vicinity of Sand Avenue		Park-And-Ride Master Plan, FDOT - D4, Oct. 2018, pg. 10		Assumes 50 spaces @ \$17,000/space	\$1,464,125	\$1,464,125			-	State (Transit Program) \$1.46M	-	-
PB-1	FEC Railroad and Dixie Highway near St. Lucie Avenue ¹	Non-motorized grade crossing (bridge) in Downtown Stuart	FEC Railroad Grade Separation Study, Martin MPO, August 2017	Safety	Cost does not include operation and maintenance of elevators; Partially (50%) funded by Brightline/ Virgin USA Trains	\$8,710,416	\$5,444,010			-	Local, State (Other Roads Construction & ROW - 10%; TMA and TALU funds)	-	-
RR-1	FEC - St. Lucie River Bridge	Double tracking FEC railroad bridge over St. Lucie river, City of Stuart	Strategic Initiative	Rail Capacity	Privately funded through Brightline/Virgin USA Trains	Private Sector Funding		Private Sector Funded Project	Private Sector Funded Project	-	-	Private Sector Funded Project	Private Sector Funded Project
Notes * YOE - Yea	ar of Expenditure				Total (Park-and-Ride), Does no	t include PB-1	\$6,028,750	\$0	\$0	-	\$6.02M	-	-

¹ Approximately 50% of the project cost would be available from the \$95 million "set-aside" funding available for implementing non-motorized and complete street projects.

Waterborne Transportation Projects Martin in Motion, 2045 LRTP

Map ID	Project Description	From	From	То	Location/Geography	Source		Total Project Cost (YOE*)	٦	otal Cost (YOE	*)	Rever	ue Sources	(YOE)
						Туре	COST (TOL)	2026-2030	2031-2035	2036-2045	2026-2030	2031-2035	2036-2045	
n/a	Water based Transportation Feasibility Study	Martin County	-	Countywide	Martin and St. Lucie Regional Waterways Plan, 2015; Chapter 3, pg. 3-49	Study (to be funded through Non Capacity Program)	\$437,500	\$437,500			State (Product Support) \$0.44M	-	-	

Notes * YOE - Year of Expenditure Feasibility Study is funded through Product Support under FDOT's a Non-Capacity Program.

Complete Streets Projects Martin in Motion, 2045 LRTP

							, ,	over 20 years through a combination of local and sta									
Map ID	Segment	Facility/Segment Name	From	То	General Location	Length (miles)	ROW Width (feet)	Project Description	Total Project Cost (PDC*)		Total Cost	t (YOE**)			Revenue	Sources (YOE)	
	U				Location	(1111105)	(ieet)			2021-2025	2026-2030	2031-2035	2036-2045	2021-2025	2026-2030	2031-2035	2036-2045
								Addition of chade trace & streetlights Dravide continuous hiles		1.08	1.25	1.47	1.94				
CS-2	211	NW DIXIE HWY (SR 707)	NW GREEN RIVER PKWY	CONFUSION CORNER	Stuart	1.98	100	Addition of shade trees & streetlights. Provide contiguous bike lanes in the corridor to the extent possible.	3,549,268		\$4,436,585	\$5,217,424	\$6,885,580	-			
CS-4	226	SE PALM BEACH RD	SE OCEAN BLVD (SR A1A)	SE MONTEREY RD	Stuart	1.09	80	Addition of bike box, raised bike lanes in both directions. Addition of shade trees and relocation of sidewalks.	6,487,012		\$8,108,765	\$9,535,908	\$12,584,804				
CS-5	270	SE CHRISTIE WAY	SE DIXIE HWY	SE PALM BEACH RD	Stuart	0.08	50	. Conversion of 6' side walks on north side to 8' multi-use path. Addition of shade trees and street lights adjacent to existing sidewalk on south side.	59,409		\$74,261	\$87,331	\$115,253	-			
CS-6	214	SE COVE ROAD	SR 5 (US 1)	SE DIXIE HWY	Salerno	1.11	75	Addition of bike lanes in both directions. Addition of a raised lighted crosswalk. Addition of shared used path on northern side. Plant Cypress Trees in existing swale. Two 12' traffic lanes shift to south and become 11'. (FM #441701.1)	10,582,960		\$13,228,701	\$15,556,952	\$20,530,943	-			
CS-7	286	SE JACK AVENUE	PORT SALERNO ELEMENTARY	SE COVE RD	Salerno	0.76	70	New curb & gutters. Addition of shade trees & street lights adjacent to new 10' shared use path. Project assumes improvements same as SE Palm City Road (CS-19)	1,902,915		\$2,378,644	\$2,797,285	\$3,691,655	-			
CS-8	242	SR 5 (US 1)	NW SUNSET BLVD	S END OF ROOSEVELT BRIDGE	Stuart	3.57	150	Addition of markings for existing bike lanes. Addition of sidewalks, shade trees & street lighting.	5,647,090		\$7,058,863	\$8,301,223	\$10,955,356	-	Local (1st, 2nd,	Local (1st, 2nd,	Local (1st, 2nd
CS-9	341	SR 5 (US 1) ¹	SW JOAN JEFFERSON WAY	600 FEET SOUTH OF SE TRESSLER DR	Stuart	1.42	150	Resurfacing (FM # 446110.1)	\$6,000,000	\$6,000,000				TIP	9th Cent, Constitutional Fuel Tax,	9th Cent, Constitutional Fuel Tax,	9th Cent, Constitutiona Fuel Tax,
CS-10	137	SE INDIAN ST	SR 5 (US 1)	SE DIXIE HWY (SR A1A)	Stuart	0.36	100	Convert 5 lane urban roadway including center turn lane to 4 lane divided facility with protected bike lanes. Add raised lighted crosswalk, shade trees, street lights, shade trees. (FM # 438071.1)	1,693,795		\$2,117,244	\$2,489,879	\$3,285,962	-	County Fuel Tax, Traffic Impact Fee);	County Fuel Tax, Traffic Impact Fee);	County Fuel Tax, Traffic Impact Fee);
CS-11	268	S KANNER HWY (SR 76) ¹	SR 5 (US 1)	SW MANOR DR	Stuart	0.44	110	Resurfacing (FM # 443995.1)	4,385,904	\$4,385,904				TIP	State (Other	State (Other	State (Other
CS-12	182	SE SALERNO RD	SR 5 (US 1)	SE DIXIE HWY (SR A1A)	Salerno	0.93	65	Addition of street lights & landscaping and curb and gutter on both sides. Conversion of 6' sidewalk with 2' landscape to 8' multi- use path on north side. Addition of shared use path on south side. (FM #440242.1)	1,362,514		\$1,703,142	\$2,002,895	\$2,643,277	-	Roads Construction & ROW - 10%;	Roads Construction & ROW - 10%;	Roads Construction & ROW - 10%;
CS-13	311	SE SALERNO RD	SE DIXIE HWY (SR A1A)	SE DE SOTO AVE	Salerno	0.08	60	Project assumes continuation of improvements/cross section between SR 5 (US 1) and SE Dixie Hwy. (CS-12)	117,205		\$146,507	\$172,292	\$227,379	-	TMA and TALU funds)	TMA and TALU funds)	TMA and TALU funds)
CS-14	267	SE CUTOFF RD	SR 5 (US 1)	SE DIXIE HWY (SR A1A)	Stuart	0.23	110	Shared use path on one side. Shade trees and lighting.	235,235		\$294,044	\$345,796	\$456,356	-			
CS-15	212	SE DIXIE HWY	CONFUSION CORNER	SE PALM BEACH RD	Stuart	1.07	90	Addition of buffered bike lanes in both directions. Addition of shade trees & bioswales. Addition of sidewalk & street lights. Addition of a raised lighted crosswalk.	1,748,687		\$2,185,859	\$2,570,570	\$3,392,452	-			
CS-16	322	SE DIXIE HWY (SR A1A)	SE SALERNO RD	SE COVE RD	Salerno	0.61	90	New markings along travel lanes and on-street parking lanes. New shade trees. Parklet options available.	395,579		\$494,474	\$581,501	\$767,423	-			
CS-17		SE DIXIE HWY (SR A1A)	PORT SALERNO CRA (NORTH BOUNDARY)	SE SALERNO RD	Salerno	0.39	90	Project assumes continuation of improvements/cross section between SE Salerno Road and SE Cove Road. (CS-16)	252,911		\$316,139	\$371,779	\$490,648	-			
CS-18	287	SE EBBTIDE AVE	SE SALERNO RD	SE COVE RD	Salerno	0.5	65	Addition of buffered bike lanes in both directions. Addition of shade trees & bioswales. Addition of sidewalk & street lights .	899,023		\$1,123,779	\$1,321,564	\$1,744,105	-			
CS-19	130	SW PALM CITY RD	SR 5 (US 1)	400 FEET NORTH OF SW INDIAN GROVE DR	Stuart	0.33	80	Two 12' travel lanes become two 11' travel lanes. New curb & gutters. Addition of shade trees & street lights adjacent to new 10' shared use path.	826,266		\$1,032,832	\$1,214,611	\$1,602,955	-			
	ent Day Co	at		1	1	1		1	46,145,774	\$10,385,904	\$44,699,837	\$52,567,009	\$69,374,148		1	1	1

** YOE - Year of Expenditure

¹ Segment ID cross references projects identified in Martin MPO's *on-going* Access to Transit Study

Base construction cost are derived using FDOT's cost per mile models and based on existing and proposed typical section included in Martin MPO's Access to Transit Study (on-going).

¹ Project cost for CS-9 and CS-11 is "as programmed."

Non-Motorized Projects Martin in Motion, 2045 LRTP

Approximately \$95.10 million are allocated for non-motorized and complete streets projects over 20 years through a combination of local and state funds.

Martin in Motion, 2045 LRTP		Approximately \$95.10 million are allocated for i	non-motorized and complete streets projects over 20 ye	ars through a combination of lo	ocal and stat	e funds.				-
Facility	Map ID	From	То	Project Description	Length (miles)	Total Project Cost (PDC*)		Total Cost (YOE**)		Re
							2026-2030	2031-2035	2036-2045	2026-203
Sidewalks Anthione Way	145	Florida Avenue	End	Sidewalk	0.08	\$38,143	1.25 \$47,679	1.47 \$56,071	1.94 \$73,998	8
Aurora Way		Florida Avenue	End	Sidewalk	0.08	\$42,309	\$52,887	\$62,195	\$82,080	
Baker Road	159		NE Braille Place	Sidewalk	0.55	\$277,249	\$346,561	\$407,555	\$537,862	
Begonia Way		Lantana Avenue US 1	Florida Avenue Gomez Avenue	Sidewalk Sidewalk	0.13	\$66,031 \$256,767	\$82,539 \$320,959	\$97,066 \$377,448	\$128,100 \$498,129	
Bridge Road Cardinal Avenue		NE Baker Road	Dixie Highway	Sidewalk	0.31	\$61,927	\$77,409	\$91,033	\$120,13	
Cardinal Avenue		Baker Road	SE Seneca Avenue	Sidewalk	0.14	\$71,761	\$89,701	\$105,488	\$139,21	
Citrus Way		Lantana Avenue	Florida Avenue	Sidewalk	0.13	\$66,178	\$82,723	\$97,282	\$128,38	6
Comus Street Dixie Highway		Lantana Avenue Wright Blvd	End Existing Terminus Near Baker Road	Sidewalk Sidewalk	0.21	\$102,999 \$155,848	\$128,749 \$194,810	\$151,408 \$229,097	\$199,81 \$302,34	8
Dixie Highway		SE 14 Street	SE Florida Street	Sidewalk	0.41	\$102,905	\$128,632	\$151,271	\$199,63	
Eucalyptus Way	150	Lantana Avenue	Florida Avenue	Sidewalk	0.13	\$66,201	\$82,752	\$97,316	\$128,43	0
Fern Street		Lantana Avenue	Florida Avenue	Sidewalk	0.13	\$66,144	\$82,680	\$97,232	\$128,32	
Florida Avenue High Meadow Avenue		Bridge Road Bane Berry Drive	Comus Street Swallowtrail Way	Sidewalk Sidewalk	0.33	\$167,755 \$302,529	\$209,694 \$378,161	\$246,600 \$444,717	\$325,444 \$586,90	
Indian River Dr		NE CAUSEWAY BLVD	1000 FT S of Admiral's Way	Sidewalk	0.14	\$70,283	\$87,853	\$103,316	\$136,349	
Jonathan Dickinson State Park Trail	230	CROSSING US 1 EAST OF FEC RAILROAD		Crosswalk		\$10,919	\$13,648	\$16,050	\$21,18	
Mars Street		Florida Avenue	US 1	Sidewalk	0.21	\$106,726	\$133,407	\$156,887	\$207,04	
Martin Highway Martin Highway		Martin Downs Boulevard Citrus Boulevard	High Meadow Avenue 42nd Avenue	Sidewalk Sidewalk	0.27	\$134,848 \$253,101	\$168,560 \$316,376	\$198,227 \$372,058	\$261,60 \$491,01	
N of SE Monterey Rd At SE Kingswood Terrace	220			Crosswalk	0.00	\$10,919	\$13,648	\$16,050	\$21,18	
Ne Dixie Hwy		NE SAVANNAH RD	NE SUMNER AVE	Sidewalk	0.19	\$96,325	\$120,406	\$141,597	\$186,87	
Ne Dixie Hwy		SE GREEN RIVER PKWY	NE CARDINAL AVE	Sidewalk	0.43	\$217,042	\$271,303	\$319,052	\$421,062	
Ne Seneca Avenue Neptune Street		NE Cardinal Avenue Florida Avenue	NW Greenrip Parkway US 1	Sidewalk Sidewalk	0.29	\$146,941 \$106,698	\$183,677 \$133,373	\$216,004 \$156,847	\$285,060 \$206,999	
New Route	206		Cove Road	Sidewalk	0.06	\$31,943	\$39,929	\$46,956	\$61,96	
New Route		Salerno Road	Cove Road	Sidewalk	0.48	\$243,201	\$304,002	\$357,506	\$471,81	
New Route			Cove Road	Sidewalk	0.40	\$198,782	\$248,477	\$292,209	\$385,63	
Nw Alice Street Osprey Street		Dixie Highway Dixie Highway	Existing Terminus Near Alice Road E of Railroad	Sidewalk Sidewalk	0.27	\$133,312 \$96,704	\$166,641 \$120,880	\$195,969 \$142,155	\$258,620 \$187,600	
Pomeroy Street		Willoughby Blvd	Federal Hwy	Sidewalk	0.95	\$238,439	\$298,049	\$350,506	\$462,572	2
Psyche Street	155	Florida Avenue	End	Sidewalk	0.08	\$40,441	\$50,551	\$59,448	\$78,450	
S Dixie Hwy At SW Flagler Ave	224			Pedestrian Bridge	0.03	\$330,620	\$413,276	\$486,012	\$641,40	
S of SE Monterey Rd at E Ocean Blvd Salerno Rd	229	Kanner Hwy	Willoughby Blvd	Crosswalk Sidewalk	1.63	\$10,919 \$409,112	\$13,648 \$511,390	\$16,050 \$601,394	\$21,182 \$793,67	7 2110, 511
SE Alamanda Way		Lantana Avenue	Florida Avenue	Sidewalk	0.13	\$66,009	\$82,511	\$97,033	\$128,05	7 0000
SE Bonita Street	212	SE Birch Avenue	St. Lucie Boulevard	Sidewalk	0.64	\$318,958	\$398,698	\$468,869	\$618,77	9 al Fuel Ta
SE Casa Avenue		SE Tressler Drive	Federal Hwy	Sidewalk	0.22	\$110,435	\$138,044	\$162,340	\$214,24	4 County
SE Clayton Street SE Date Street		SE Birch Avenue	St. Lucie Boulevard Florida Avenue	Sidewalk Sidewalk	0.64	\$320,446 \$66,251	\$400,558 \$82,814	\$471,056 \$97,389	\$621,660 \$128,52	Fuel Tax
SE Dixie Hwy	-	700 FT S of SE KENSINGTON ST	SE AVIATION WAY	Rightsizing	1.13	\$283,548	\$354,435	\$416,815	\$550,08	3 1 ramic
SE Federal Hwy		SE HIGHBORN WAY	JONATHAN DICKSON STATE PARK ENTRANCE	Sidewalk	2.42	\$1,214,786	\$1,518,483	\$1,785,736	\$2,356,68	
Se Flamingo Avenue		SE 10th Street	SE Ocean Boulevard	Sidewalk	0.52	\$262,521	\$328,151	\$385,905	\$509,29	(Other
SE Florida Street SE Georgia Avenue		SE Johnson Avenue Martin Luther King	Dixie Highway SE Ocean Blvd.	Sidewalk Sidewalk	0.24	\$120,475 \$125,494	\$150,593 \$156,868	\$177,098 \$184,477	\$233,72 \$243,45	
SE GROUPER AVE	208		Cove Road	Sidewalk	0.24	\$122,589	\$153,237	\$180,206	\$237,82	Construct
SE Indian St at Railroad Ave	223			Pedestrian Bridge	0.02	\$220,414	\$275,517	\$324,008	\$427,602	n & ROW 10%; TM
SE Krueger Parkway		SE 10 Street	SE Ocean Blvd.	Sidewalk	0.58	\$291,147	\$363,934 \$210,586	\$427,986 \$247,649	\$564,82 \$326,82	and TALL
SE Lantana Avenue SE Lincoln Avenue		Bridge Road SE Florida Street	Comus Street Dixie Highway	Sidewalk Sidewalk	0.34	\$168,469 \$80,316	\$210,586	\$247,649	\$326,823	funds)
SE Lonita Street		Kanner Hwy	SE Casa Avenue	Sidewalk	0.23	\$115,455	\$144,319	\$169,719	\$223,982	2
SE Luckhardt Street		SE Biringham	Commerce Avenue	Sidewalk	0.37	\$92,866	\$116,082	\$136,513	\$180,16	
SE Miami Street	000	Federal Hwy	Commerce Avenue	Sidewalk	0.27	\$250,989	\$313,736	\$368,954	\$486,91	-
SE Ocean Blvd at E Of SE Monterey Rd SE Tressler Drive	228	SE Casa Avenue	Federal Hwy	Crosswalk Sidewalk	0.28	\$10,919 \$250,989	\$13,648 \$313,736	\$16,050 \$368,954	\$21,18 \$486,91	
SW Magnolia Street		SW 173rd Avenue	SW 168th Avenue	Sidewalk	0.39	\$501,978	\$627,472	\$737,907	\$973,83	
SW Warfield Blvd At SW Jefferson Ave	225			Crosswalk		\$10,919	\$13,648	\$16,050	\$21,18	
US 1	231	PEDESTRIAN BRIDGE CROSSING FEC RAILROAD		Pedestrian Bridge	0.05	\$551,034	\$688,793	\$810,020	\$1,069,000	6
Bicycle Corridors 137th Street	164	Bridge Road	Powerline Avenue	Bike Lanes	1.91	\$963,162	\$1,203,952	\$1,415,848	\$1,868,534	4
Baker Road		Green River Parkway	Cardinal Avenue	Bike Lanes	0.28	\$140,054	\$175,068	\$205,880	\$271,70	
Citrus Blvd	33	SW WARFIELD BLVD	SW 96TH ST	Buffered Bike Lane	10.93	\$6,886,073	\$8,607,592	\$10,122,528	\$13,358,98	2
County Line Road		NE Savannah Road	Indian River Road	Bike Lanes	0.40	\$203,367	\$254,209	\$298,949	\$394,53	
Dixie Highway Dixie Highway		Green River Parkway Wright Blvd	Savannah Road Green River Parkway	Bike Lanes Bike Lanes	0.43	\$214,860 \$186,023	\$268,575 \$232,529	\$315,845 \$273,454	\$416,829 \$360,889	
Dixie Highway		Palmer Street	Indian River Drive	Bike Lanes	0.74	\$372,552	\$465,689	\$547,651	\$722,75	
Dixie Hwy		NE SAVANNAH RD	SEAHORSE PL	Bike Lanes	0.97	\$489,888	\$612,361	\$720,136	\$950,384	
Dixie Hwy		SEAHORSE PL	NE PALMER ST	Bike Lanes	0.86	\$432,463	\$540,578	\$635,720	\$838,97	
Fisherman's Wharf Drive Fork Road		Pennsylvania Avenue US 1	Yachtsman Drive Pine Lake Drive	Bike Lanes Bike Lanes	0.25	\$126,302 \$401,964	\$157,877 \$502,455	\$185,664 \$590,887	\$245,020 \$779,81	
High Meadow Ave		SW MARTIN DOWNS BLVD	SW MURPHY RD	Bike Lanes	0.00	\$490,655	\$613,319		\$951,872	
High Meadow Ave	54	SW MARTIN HWY	SW MARTIN DOWNS BLVD	Bike Lanes	0.79	\$397,829	\$497,286	\$584,808	\$771,78	8
High Medow Avenue		Martin Highway	I-95	Bike Lanes	2.81	\$1,416,153	\$1,770,191	\$2,081,745	\$2,747,33	
Indian River Dr Indian River Dr		NE PALMER ST NE CAUSEWAY BLVD	NE JENSEN BEACH BLVD COUNTY LINE RD	Bike Lanes Bike Lanes	1.69 0.93	\$853,721 \$466,275	\$1,067,152 \$582,843	\$1,254,971 \$685,424	\$1,656,220 \$904,573	
Indian River Dr Indian River Dr		NE CAUSEWAY BLVD NE JENSEN BEACH BLVD	ICOUNTY LINE RD NE CAUSEWAY BLVD	Bike Lanes Bike Lanes	0.93	\$466,275	\$582,843 \$286,492	\$685,424 \$336,914	\$904,573 \$444,633	
Indian St		SE DIXIE HWY	SE ST LUCIE BLVD	Bike Lanes	0.77	\$193,649	\$242,061	\$284,664	\$375,67	
Jensen Beach Blvd	96	GOLDENROD RD	WARNER CREEK	Bike Lanes	1.34	\$676,581	\$845,727	\$994,575	\$1,312,56	8
Jensen Beach Blvd		WARNER CREEK	SAVANNAH RD	Bike Lanes	0.58	\$292,635	\$365,793	\$430,173	\$567,71	
Kanner Highway Kitchen Creek		Lost River 138th Street	Monterey Road Jonathan Dickson State Park Path	Bike Lanes Bike Lanes	5.15 0.49	\$1,297,918 \$249,495	\$1,622,398 \$311,869	\$1,907,940 \$366,758	\$2,517,96 \$484,02	
Mapp Road		SW SILVER WOLF DR	NW MARTIN HWY	Bike Lanes	2.50	\$249,495	\$311,869		\$484,02	
mapp noud	JZ	ST SETENTIOLI DI		1=	2.00	ψ1,233,103	ψ1,01 - 1,100	ψ1,001,004	ψ2, 170, 34	-1

	nue Sources	
2026-2030	2031-2035	2036-2045
Local (1st, 2nd, 9th Cent, Constitution al Fuel Tax, Traffic Impact Roads Construction n & ROW - 10%; TMA and TALU funds)	Local (1st, 2nd, 9th Cent, Constitution al Fuel Tax, Traffic Impact Roads Construction n & ROW - 10%; TMA and TALU funds)	al Fuel Tax, County Fuel Tax, Traffic Impact Fee); State (Other Roads

Facility	Map ID	From	То	Project Description	Length (miles)	Total Project Cost (PDC*)		Total Cost (YOE**)		Rev
							2026-2030	2031-2035	2036-2045	2026-203
Mapp Road		SW MARTIN DOWNS BLVD	SE MAPP RD/SW MATHESON AVE	Shared Lane	1.38 0.77	\$49,296		\$72,465	\$95,635	5
Mapp Road Mapp Road		SW MARTIN HWY Hidden River Avenue	SW MARTIN DOWNS BLVD Martin Downs Boulevard	Bike Lanes Bike Lanes	2.98	\$193,607 \$1,503,154	242,009 \$1,878,943	\$284,602 \$2,209,637	\$375,597 \$2,916,120)
Market Place	173		Commerce Avenue	Bike Lanes	0.40	\$199,589	\$249,487	\$293,396	\$387,203	ł
Martin Highway		SW Citrus Boulevard	Florida Turnpike	Bike Lanes	1.12	\$564,556	\$ \$705,694	\$829,897	\$1,095,238	6
Martin Hwy MLK, Jr Drive		FLORIDA'S TURNPIKE Farm Road	SW MAPP RD Warfield Boulevard	Buffered Bike Lane Bike Lanes	2.17 0.72	\$1,369,661 \$360,485	\$1,712,076 \$450,607	\$2,013,401 \$529,913	\$2,657,141 \$699,341	_
Monterey Road - Palm City Bridge		SW MAPP RD	SW PALM CITY RD	Bike Lanes	0.80	\$202,520		\$297,705	\$392,889)
Ne Dixie Highway		NE Baker Road	Dixie Highway	Bike Lanes	0.12	\$62,185		\$91,412	\$120,639)
Old St. Lucie Blvd Palmer St	-	SE ST LUCIE BLVD NE DIXIE HWY	SE ST LUCIE BLVD NE INDIAN RIVER DR	Shared Lane Bike Lanes	0.45	\$15,969 \$267,515	\$19,962 \$334,393	\$23,475 \$393,247	\$30,981 \$518,979	
Pennsylvania Avenue		96th Street/CR 711	Fisherman's Wharf Drive	Bike Lanes	0.55	\$276,527		\$406,495	\$536,463	1
Pine Lake Drive	176	Fork Road	Britt Road	Bike Lanes	1.40	\$704,826		\$1,036,094	\$1,367,362	2
Powerline Avenue Pratt Whitney Rd		138th Street Palm Beach County Line	Bridge Road SE Bridge Road	Bike Lanes Buffered Bike Lane	0.52	\$261,770 \$4,580,791		\$384,802 \$6,733,763	\$507,834 \$8,886,735	
Pratt Whitney Rd		SW BRIDGE RD	SW KANNER HWY	Buffered Bike Lane	2.81	\$4,580,79	\$2,216,384	\$2,606,468	\$3,439,828	
Salerno Rd	32	SE WILLOUGHBY BLVD	SE FEDERAL HWY	Bike Lanes	1.12	\$282,322	\$352,902	\$415,013	\$547,704	
Sand Trail		Sand Avenue	Martin Downs Boulevard	Bike Lanes	0.63	\$315,636		\$463,985	\$612,334	
Savannah Rd Savannah Rd		NE CARDINAL AVE NE PINELAKE VILLAGE BLVD	NE PINELAKE VILLAGE BLVD NE JENSEN BEACH BLVD	Buffered Bike Lane Buffered Bike Lane	1.05	\$329,966 \$320,271		\$485,051 \$470,799	\$640,135 \$621,326	
SE Bridge Rd	-	FLORIDA'S TURNPIKE	POWERLINE AVE	Buffered Bike Lane	4.72	\$2,976,127		\$4,374,907	\$5,773,687	,
SE Bridge Rd		SW KANNER HWY	FLORIDA'S TURNPIKE	Buffered Bike Lane	4.63	\$2,916,325		\$4,286,998	\$5,657,671	
SE Bridge Rd SE County Line Road		POWERLINE AVE SE Girl Scout Camp	GOMEZ AVE US 1	Buffered Bike Lane Bike Lanes	2.43 3.00	\$1,531,086 \$1,513,512	5 \$1,913,857 2 \$1,891,890	\$2,250,696 \$2,224,863	\$2,970,306 \$2,936,213	<u>i</u>
SE Horseshoe Road		SE Anchor Avenue	SE Kubin Avenue	Sidewalk & Shared Lane Markings	1.15	\$668,026	\$835,033	\$981,999	\$1,295,971	
SE Monterey Rd	50	SE ALHAMBRA ST	SE FEDERAL HWY	Bike Lanes	0.69	\$345,674		\$508,141	\$670,608	ł
SE Monterey Rd		SW PALM CITY RD	SE ALHAMBRA ST	Bike Lanes	0.64	\$320,239	\$400,298	\$470,751	\$621,263	6
SE Monterey Rd SE Monterey Rd Ext		SE FEDERAL HWY SE MONTEREY RD	EAST OF SE DIXIE HWY SE FEDERAL HWY	Bike Lanes Shared Lane	0.31	\$157,062 \$11,760	2 \$196,328 0 \$14,700	\$230,881 \$17,287	\$304,701 \$22,814	
SE Ocean Blvd		SE PALM BEACH RD	SE MARTINS AVE	Buffered Bike Lane	0.57	\$362,190	\$452,737	\$532,419	\$702,648	1
SE Ocean Blvd		S COLORADO AVE	SE PALM BEACH RD	Bike Lanes	0.98	\$494,025		\$726,217	\$958,409)
SE Ocean Blvd at N SEwalls Point Rd SE Ocean Blvd at SE St Lucie Blvd	222 221			Bike Box Bike Box		\$9,983 \$9,983	8 \$12,478 8 \$12,478	\$14,674 \$14,674	\$19,366 \$19,366	
SE Paulson Ave		ATLANTIC RIDGE PRESERVE STATE PARK	CARDINAL TRL	Shared Lane	0.52	\$18,475		\$27,159	\$35,842	2
SE St. Lucie Blvd		SE INDIAN ST	SE DIXIE HWY	Shared Lane	2.30	\$41,019	\$51,273	\$60,297	\$79,576	/ / /
SE St. Lucie Blvd SE St. Lucie Blvd		SE INDIAN ST SE INDIAN ST	SE OCEAN BLVD SE ST. LUCIE BLVD	Shared Lane Shared Lane	1.76 0.65	\$62,836 \$11,666		\$92,368 \$17,149	\$121,901 \$22,632	Local (1st 2nd, 9th
Sewalls Point Rd		SE OCEAN BLVD	NE PALMER ST	Bike Lanes	1.56	\$786,974		\$1,156,852	\$1,526,730	Cent,
St. George Street		Yachtsman Drive	Locks Road	Bike Lanes	0.19	\$94,512	\$118,140	\$138,933	\$183,353	Constitutio
St. Lucie Blvd SW 96th St	_	SE MARTIN AVE SW CITRUS BLVD	SE OCEAN BLVD SW PENNSYLVANIA AVE	Shared Lane Buffered Bike Lane	1.19 1.58	\$42,452 \$993,336	2 \$53,066 \$1,241,670	\$62,405 \$1,460,204	\$82,358 \$1,927,072	al Fuel Tax County
SW 96th St		SW PENNSYLVANIA AVE	SW KANNER HWY	Buffered Bike Lane	0.95	\$597,519	5 5 5 5 5 5 5 5 5 5	\$878,353	\$1,159,187	
SW Adams Avenue	182	SW Palm Way	SW 150th Street	Bike Lanes	0.32	\$159,555	\$199,443	\$234,545	\$309,536	Traffic
SW Farm Rd		SW 169TH AVE	RAILROAD AVE	Bike Lanes	1.00	\$501,944		\$737,858	\$973,772	Impact
SW Farm Rd/Silver Fox Ln SW Martin Hwy		SW WARFIELD BLVD SW WARFIELD BLVD	SW ANDALUCIA CT SW ALLAPATAH RD	Shared Lane Shared Lane	3.08	\$110,130 \$218,737		\$161,891 \$321,544	\$213,652 \$424,350	Fee); State (Other
SW Palm City Rd		SW MONTEREY RD	SW FEDERAL HWY	Separated Bike Lanes	1.21	\$2,093,604		\$3,077,598	\$4,061,592	Roads
Willoughby Blvd		SE INDIAN ST	SE MONTEREY RD	Buffered Bike Lane	1.16	\$365,018	\$456,273	\$536,577	\$708,135	
Willoughby Blvd Willoughby Blvd	_	SE COVE RD SE POMEROY ST	SE POMEROY ST SE INDIAN ST	Buffered Bike Lane Buffered Bike Lane	1.56 1.03	\$492,069 \$323,433	615,086 \$404,291	\$723,341 \$475,446	\$954,613 \$627,459	n & ROW 10%; TMA
Willoughby Boulevard	-	Monterey Road	US 1	Bike Lanes	0.84	\$423,417	\$529,271	\$622,423	\$821,428	and TALL
Yachtsman Drive	184	Fisherman's Wharf Drive	St. George Street	Bike Lanes	0.84	\$421,793	\$527,242	\$620,036	\$818,279	funds)
Multi-Purpose Trails and Greenways	222	NE Courseway Blud	SE Ocean Blvd.	Shared Use Path	3.1	\$1,514,117	\$1,892,647	\$2,225,753	\$2,937,388	
A1A (Two Bridge Loop) Atlantic Ridge Trail Corridor - E/W Connector		NE Causeway Blvd. Halpatiokee Park	Thru Atlantic Ridge to Seabranch Blvd	Shared Use Path	2.42	\$1,514,117		\$3,475,046	\$4,586,115	<u>,</u>
Atlantic Ridge Trail Corridor - East	119	Bridge Road	PARK thru Johnathan Dickson Park to Ocean to Lake Trail	Shared Use Path	3.61	\$0	Under Study			
Atlantic Ridge Trail Corridor - East		Cove Raod	Thru Atlantic Ridge State Park to SE Seabranch Blvd	Shared Use Path	2.76		Under Study			_
Atlantic Ridge Trail Corridor - East Atlantic Ridge Trail Corridor - West		SE Seabranch Blvd thru Atlantic Ridge and SFWMD Halpatiokee Park	Bridge Road Thru Atlantic Ridge and Whiteworth Farms to Bridge Road	Shared Use Path Shared Use Path	4.22 3.04		Under Study Under Study			
Atlantic Ridge Trail Corridor - West		Halpatiokee Park	south to Atlantic Ridge Trail E/W Connector #93	Shared Use Path	1.47	\$1,435,969		\$2,110,875	\$2,785,781	
Atlantic Ridge Trail Corridor - West		Bridge Road	Thru Canopus Sound LLC to Jonathan Dickson State Park	Shared Use Path	7.55	\$7,375,217		\$10,841,570	\$14,307,922	
Bee Line Highway Corridor Trail Bee Line Highway Corridor Trail		SW FOX BROWN RD UNNAMED RD	SE 128TH AVE SW KANNER HWY	Shared Use Path Shared Use Path	13.98 6.40	\$13,655,631 \$6,255,244		\$20,073,778 \$9,195,208	\$26,491,925 \$12,135,173	
Bee Line Highway Corridor Trail		SW KANNER HWY	SW FOX BROWN RD	Shared Use Path	4.66	\$4,554,591		\$6,695,249	\$8,835,906	
C 23 -FNST Connector Trail	64	C-23 CANAL	OKEECHOBEE SCENIC TRAIL	Shared Use Path	11.73	\$11,456,087		\$16,840,449	\$22,224,810)
C-23 Trail Corridor (Robert B. Jenkins)		FLORIDA EAST COAST RAILOAD	MAPP ROAD	Shared Use Path	17.62	\$17,208,504		\$25,296,500	\$33,384,497	, ,
C-44 Trail Citrus Blvd		Beeline Highway Corridor SW 96TH ST	St. Lucie County Line SW MARTIN HWY	Shared Use Path Shared Use Path	15.08 5.00	\$14,730,898 \$4,881,131		\$21,654,420 \$7,175,262	\$28,577,942 \$9,469,393	
Citrus Blvd (new project)		SW WARFIELD BLVD	SW 96TH ST	Shared Use Path	10.93	\$10,676,970		\$15,695,147	\$20,713,323	1
Citrus Cove Tunnel		Sand Avenue	Citrus Boulevard via Turnpike Underpass	Shared Use Path	0.66	\$643,189		\$945,488	\$1,247,787	
Citrus Grove Elementary Connection		SW CITRUS BLVD SE MARKET PL	SW MALLARD CREEK TRAIL	Shared Use Path	0.50	\$486,016		\$714,443	\$942,870 \$1.800.951)
Commerce Ave		SE MARKET PL SE SALNERO RD	SE INDIAN ST SE MARKET PLACE	Shared Use Path Shared Use Path	0.95	\$928,325 \$1,261,244		\$1,364,638 \$1,854,029	\$1,800,951 \$2,446,814	
Cove Road	111	COVE ROAD FROM SR 9/I-95	SE DIXIE HIGHWAY	Shared Use Path and Bike Lanes	5.15	\$5,111,336	\$6,389,170	\$7,513,664	\$9,915,992	2
Cross County Trail - Kanner Hwy		SW WARFIELD BLVD	SW 96TH ST	Shared Use Path	12.45	\$12,161,557		\$17,877,489	\$23,593,420	2
Cross County Trail - Kanner Hwy		CONNERS HWY SW JACK JAMES DR	SW WARFIELD BLVD SE COVE RD	Shared Use Path Shared Use Path	10.63 0.83	\$10,383,176 \$815,227		\$15,263,269 \$1,198,383	\$20,143,361 \$1,581,540	-
Cross County Trail - Kanner Hwy Cross County Trail - Kanner Hwy		SW JACK JAMES DR SW PRATT WHITNEY RD	SE COVE RD SW JACK JAMES DR	Shared Use Path Shared Use Path	0.83	\$815,227		\$1,198,383	\$1,581,540 \$2,955,817	,
Cross-County Trail 1		SR 76/KANNER HIGHWAY FROM SW CONNERS HWY	SR 710/WARFIELD BLVD	Shared Use Path	10.63	\$10,383,915	\$12,979,894	\$15,264,356	\$20,144,796	i
Dixie Highway/East Coast Greenway		SE Bridge Road	St. Lucie County Line	Shared Use Path	3.33	\$3,252,910		\$4,781,778	\$6,310,646	i
		FLORIDA PARK SERVICES JONATHAN DICKINSON STATE PARK US 1/FEDERAL HWY	US 1/FEDERAL HWY FLORIDA PARK SERVICES	Shared Use Path Shared Use Path	0.27	\$263,749 \$2,295,597		\$387,712 \$3,374,528	\$511,674 \$4,453,459	
East Coast Greenway - Main	101			DOUGLEO USE FAILU	2.30	a2.295.59/	JZ,009,497	JJ.J/4.J28	ə 4 ,403,459	'
East Coast Greenway - Main East Coast Greenway - Main		FEC CROSSING	MIDBLOCK CROSSWALK	Shared Use Path	0.14	\$136,759	\$170,949	\$201,036	\$265,312	2
East Coast Greenway - Main	103 104	FEC CROSSING SE DIXIE HWY FROM RAILROAD CROSSING			0.14 2.03	\$136,759 \$171,000	\$213,750	\$201,036 \$251,370	\$331,740	
East Coast Greenway - Main East Coast Greenway - Main East Coast Greenway - Main	103 104 105	FEC CROSSING	MIDBLOCK CROSSWALK	Shared Use Path	0.14	\$136,759	x \$213,750 \$2,750,000	\$201,036		

Rever	nue Sources	(YOE)	
-2030	2031-2035	2036-2045	
al (1st, s, 9th ent, titution el Tax, affic pact truction ROW - 5 State ther TALU TALU nds)	County Fuel Tax, Traffic Impact Fee); State (Other Roads	al Fuel Tax, County Fuel Tax, Traffic Impact Fee); State (Other Roads	

Facility	Map ID	From	То	Project Description	Length (miles)	Total Project Cost (PDC*)	т	otal Cost (YOE**)		Re
							2026-2030	2031-2035	2036-2045	2026-203
East Coast Greenway - Main (Sailfish Capital Trail)		SE DIXIE HWY FROM SR 714/MONTEREY RD	SE OCEAN BLVD	Shared Use Path	1.58	\$840,000	\$1,050,000	\$1,234,800	\$1,629,600)
East Coast Greenway - Main (Sailfish Capital Trail)		SE DIXIE HWY FROM SE OCEAN BLVD SE DIXIE HWY from Grafton Ave	SE SEMINOLE ST COVE ROAD	Shared Use Path (Elevated walkway) Shared Use Path	0.19	\$2,400,000 \$595,878	\$3,000,000 \$744,848	\$3,528,000 \$875,941	\$4,656,000)
East Coast Greenway - Main (Sailfish Capital Trail) East Coast Greenway - Main (Sailfish Capital Trail)		SE DIXIE HWY From SE SEMINOLE ST	n/s of bridge	Shared Use Path (Bridge)	0.61	\$3,824,328	\$4,780,410	\$5,621,763	\$7,419,197	*
East Coast Greenway (thru Jonathan Dickson Park)		US 1	Old Dixie Hwy	Shared Use Path	0.64	\$627,789	\$784,736	\$922,849	\$1,217,910)
Federal Hwy - US 1		SE SALERNO RD	SE POMEROY ST	Shared Use Path	1.15	\$1,120,216	\$1,400,270	\$1,646,717	\$2,173,219	9
Federal Hwy/US 1		SE POMEROY ST	SE INDIAN ST	Shared Use Path	0.87	\$851,912	\$1,064,889	\$1,252,310	\$1,652,708	3
Federal Hwy/US 1 Historic Jupiter Indiantown Trail (Ex. Fdep Trail)		Sand Road KANNER HWY	Dixie Highway COUNTY LINE	Shared Use Path Shared Use Path	3.20 8.17	\$1,563,069 \$7,985,134	\$1,953,836 \$9,981,418	\$2,297,711 \$11,738,147	\$3,032,353 \$15,491,160)
Hungryland Wildlife And Environmental Area Trail		SW WARFIELD BLVD	SW PRATT WHITNEY ROAD	Shared Use Path	5.44	\$5,311,598	\$6,639,497	\$7,808,049	\$10,304,499)
Indian Mound Trail	142	Citrus Boulevard	Citrus Boulevard via Canal, American Street, Indian Mound Drive	Shared Use Path	1.28	\$1,248,238	\$1,560,297	\$1,834,910	\$2,421,581	I
Indian Mound Trail		Citrus Boulevard	Citrus Boulevard via Canal, American Street, Indian Mound Drive	Shared Use Path	0.99	\$969,881	\$1,212,351	\$1,425,725	\$1,881,569)
Indian Mound Trail Indian Street (Two bridge loop)		Citrus Boulevard Mapp Road	Citrus Boulevard via Canal, American Street, Indian Mound Drive Kanner Hwy	Shared Use Path Shared Use Path	1.28 1.44	\$1,250,368 \$703,332	\$1,562,960 \$879,165	\$1,838,041 \$1,033,898	\$2,425,714 \$1,364,464	
Jensen Beach Blvd		SE GREEN RIVER PKWY	NE SAVANNAH RD	Shared Use Path	1.05	\$1,026,123	\$1,282,654	\$1,508,401	\$1,990,679)
Jensen Beach Blvd		FEDERAL HIGHWAY	SE GREEN RIVER PKWY	Shared Use Path	1.16	\$1,137,767	\$1,422,209	\$1,672,518	\$2,207,268	3
Jensen Beach Blvd		NE SAVANNAH RD	NE INDIAN RIVER DR	Shared Use Path	0.71	\$692,311	\$865,389	\$1,017,698	\$1,343,084	l
Jesup Trail		FROM INDIANTOWN RD	JONATHAN DICKINSON STATE PARK	Shared Use Path	6.48	\$6,329,988	\$7,912,485	\$9,305,082	\$12,280,177	<u>,</u>
Jonathan Dickinson State Park Trail Jonathan Dickinson State Park Trail	4	Park Road	future Ocean to Lake Trail	Shared Use Path Shared Use Path	0.98	\$961,974 \$493,843	\$1,202,468 \$617,303	\$1,414,102 \$725,949	\$1,866,230 \$958,055	5
Jonathan Dickinson State Park Trail	5			Shared Use Path	0.42	\$407,395	\$509,244	\$598,871	\$790,347	,
Jonathan Dickinson State Park Trail	6			Shared Use Path	1.27	\$1,241,730	\$1,552,162	\$1,825,343	\$2,408,956	6
Jonathan Dickson State Park Trail	196	Flamingo Terminus	Thru Jonathan Dickson State Park	Shared Use Path	2.75	\$2,688,446	\$3,360,558	\$3,952,016	\$5,215,586	6
Jonathan Dickson Trail - Park Rd	1	Janua Tasil		Shared Use Path	2.81 1.13	\$2,743,250	\$3,429,063	\$4,032,578	\$5,321,906	5
Jonathan Dickson Trail/ Se Jonathan Dickinson Way Kanner Highway	2	Jesup Trail Monterey	SE Beach Road Federal Hwy	Shared Use Path Shared Use Path	1.13	\$1,104,117 \$517,730	\$1,380,146 \$647,163	\$1,623,052 \$761,064	\$2,141,987 \$1,004,397	,
Kanner Highway (Two bridge loop)		Indian Street	Martin Downs Boulevard	Shared Use Path	1.00	\$620,300	\$775,375	\$911,841	\$1,203,382	2
Lake Okeechobee Scenic Trail		Palm Beach County Line	St. Lucie County Line	Shared Use Path	21.30	\$20,806,905	\$26,008,631	\$30,586,150	\$40,365,396	Local (1st
Mapp Road (Two bridge loop)		Indian Street	Martin Downs Boulevard	Shared Use Path	0.77	\$376,087	\$470,109	\$552,848	\$729,609	
Martin - East/West Corridor Martin Downs Boulevard (Two bridge loop)		US 98 Mapp Road	Jonathan Dickson State Park Kanner Hwy	Shared Use Path Shared Use Path	26.31 1.08	\$25,696,677 \$527,499	\$32,120,846 \$659,374	\$37,774,114 \$775,424	\$49,851,552 \$1,023,348	
Martin Downs Bollevard (1wo Bridge 100p)		SE MONTEREY RD AT SE DIXIE HWY	OCEAN BLVD AT SE DIXIE HWY	Shared Use Path	3.40	\$1,660,645	\$2,075,806	\$2,441,148	\$3,221,651	Constitutio
Monterey Road		MONTEREY RD FROM ALHAMBRA AVE	SE DIXIE HWY	Shared Use Path	0.93	\$908,470	\$1,135,588	\$1,335,452	\$1,762,433	
Murphy Road	-	SE MAPP RD	SE BECKER RD	Shared Use Path	2.90	\$2,830,304	\$3,537,880	\$4,160,547	\$5,490,790	Fuel Tax,
Murphy Road		MURPHY RD FROM SR 714/MARTIN DOWNS BLVD SE Ocean Blvd.	COUNTY LINE CANAL	Shared Use Path or Bike Lanes	3.10 3.71	\$3,028,235	\$3,785,294 \$2,265,071	\$4,451,505 \$2,663,723	\$5,874,776	Traffic
N. Sewalls Point Road (Two Bridge Loop) NE Causeway (Two Bridge Loop)		N. Sewells Point Road	NE Causeway Blvd A1A	Shared Use Path Shared Use Path	1.92	\$1,812,057 \$937,776	\$2,265,071 \$1,172,220	\$2,663,723	\$3,515,390 \$1,819,285	inipaor
New Route		SW Indianwood Circle	SW Osceola Street	Shared Use Path	0.14	\$137,030	\$171,287	\$201,433	\$265,837	Fee); State (Other
New Route		Locks Road	Over Canal to Mapp Road	Shared Use Path	1.79	\$1,746,339	\$2,182,924	\$2,567,118	\$3,387,897	Roads
New Route		Flora Avenue Terminus	Thru Jonathan Dickson State Park	Shared Use Path	1.39	\$1,355,539	\$1,694,423	\$1,992,642	\$2,629,745	Construction
Nw Dixie Hwy Ocean To Lake Trail Corridor		NW WRIGHT BLVD Palm Beach County Line	NE BAKER RD FEC	Shared Use Path Shared Use Path	0.52	\$507,109 \$11,175,164	\$633,886 \$13,968,955	\$745,450 \$16,427,491	\$983,791 \$21,679,818	n & ROW
Old Dixie Highway		US 1	Bridge Road	Shared Use Path	1.32	\$1,286,531	\$1,608,164	\$1,891,201	\$2,495,871	10%; TMA and TALU
Palm Beach Road		SE MONTEREY RD	SE OCEAN BLVD	Shared Use Path	1.09	\$1,064,766	\$1,330,958	\$1,565,207	\$2,495,671	
Pratt & Whitney Trail Corridor		Palm Beach County Line	Old Jupiter Road	Shared Use Path	1.05	\$1,004,700	\$1,409,149	\$1,657,160	\$2,003,047	
Savannah State Park Trail	198	Jensen Beach Boulevard	Thru Savannah State Park to St. Lucie County Line	Shared Use Path	1.74	\$1,701,013	\$2,126,267	\$2,500,490	\$3,299,966	,
Se Bridge Rd	49	SE DIXIE HWY	S BEACH RD	Shared Use Path	0.92	\$1,701,013	\$1,118,904	\$2,500,490	\$3,299,960	<u>,</u>
SE Bridge Rd SE Cove Rd	49 8	SE DIALE HWY SE WILLOUGHBY BLVD	S BEACH RD SE DIXIE HWY	Shared Use Path	2.18	\$1,063,092	\$1,118,904	\$1,562,746	\$1,736,540	,
SE Cove Rd	66	KANNER HWY	SE WILLOUGHBY BLVD	Shared Use Path	2.16	\$1,063,092	\$1,317,101	\$1,562,746	\$2,062,399	-
SE Cove Rd	67	SE DIXIE HWY	COVE ROAD PARK	Shared Use Path	1.46	\$1,055,681	\$1,783,284	\$1,548,911 \$2,097,142	\$2,044,141	,
SE Cove Rd SE Federal Hwy	29	SE SEABRANCH BLVD	2000 FT N of DHARLYS ST	Shared Use Path	2.60	\$1,426,627	\$3,180,102	\$2,097,142 \$3,739,799	\$2,767,657 \$4,935,518	2
SE Ocean Blvd. (Two Bridge Loop)		N. Sewells Point Road	A1A	Shared Use Path	1.65	\$2,544,081	\$1,007,377	\$3,739,799 \$1,184,675	\$1,563,448	2
SE Paulson Ave	9	CARDINAL TRL	SW GAINES AVE	Shared Use Path	0.59	\$574,935	\$718,669	\$845,155	\$1,115,374	
SE Paulson Ave	20	SW WARFIELD BLVD	SW MARTIN HWY	Shared Use Path	12.06	\$11,777,527	\$14,721,909	\$045,155	\$1,115,374	, ,
SW Famel Avenue	131	Marina (End)	SW Farm Road	Shared Use Path	0.65	\$634,158	\$14,721,909 \$792,697	\$932,212	\$22,646,403	2
SW Farm Rd		SW ANDALUCIA CT	SW 169TH AVE	Shared Use Path	0.03	\$753,655	\$942,069	\$1,107,873	\$1,230,200	,
SW Farm Ru SW High Meadow Avenue			Murphy Road	Shared Use Path	0.97	\$473,772	\$942,089	\$696,445	\$1,462,091	,
SW High Meadow Avenue SW Indiantown Ave		SW WARFIELD BLVD	SW KANNER HWY	Shared Use Path	0.97	\$410,435	\$592,215	\$603,339	\$919,118 \$796,244	
SW Martin Hwy		SW ALLAPATAH RD	I-95	Shared Use Path	5.49	\$5,364,632	\$6,705,790	\$7,886,009	\$10,407,386	2
	69	I-95	84TH AVE			\$1,487,231			\$2,885,229	2
SW Martin Hwy SW Martin Hwy		84TH AVE	FLORIDA'S TURNPIKE	Shared Use Path Shared Use Path	1.52 3.82	\$1,487,231 \$3,732,318	\$1,859,039 \$4,665,398	\$2,186,230 \$5,486,508	\$2,885,229 \$7,240,698	2
SW Martin Hwy SW Matheson Ave		SW MARTIN DOWNS BLVD	SW MURPHY RD	Shared Use Path	0.98	\$3,732,318	\$4,665,398	\$5,486,508 \$1,410,149	\$7,240,698	,
	44 254	SW MARTIN DOWNS BLVD SW High Meadows Road	North County Line	Shared Use Path Shared Use Path	1.61	\$959,285 \$786,364	\$1,199,107 \$982,955	\$1,410,149 \$1,155,955	\$1,861,013 \$1,525,547	,
SW Murphy Road SW Osceola Street		SW High Meadows Road SW Warfield Boulevard	Citrus Boulevard	Shared Use Path Shared Use Path	1.61	\$786,364 \$1,682,955	\$982,955 \$2,103,693	\$1,155,955 \$2,473,943	\$1,525,547 \$3,264,932	,
SW Osceola Street Treasure Coast Loop Trail Corridor (see others)		Ocean Boulevard/A1A		Shared Use Path Shared Use Path	8.47	\$1,682,955 \$4,136,960	\$2,103,693 \$5,171,200	\$2,473,943 \$6,081,331	\$3,264,932 \$8,025,702	-
		SE COVE RD	St. Lucie County Line US 1/FEDERAL HWY		4.58	\$4,136,960 \$4,473,973	\$5,171,200 \$5,592,466	\$6,081,331 \$6,576,740	\$8,025,702	
Willoughby Blvd	124		US IFEDERAL HWT	Shared Use Path	4.38					
Notes * PDC - Present Day Cost						\$10,289,028 \$51,732,763	\$12,861,285 \$64,665,954	\$15,124,871	\$19,960,714 \$100,361,560	
** YOE - Year of Expenditure						\$51,732,763 \$328,369,846	\$64,665,954 \$410,462,308	\$76,047,162 \$482,703,674	\$637,037,502	
** YOE - Year of Expenditure Base construction cost for sidewalk (concrete - 5' one s	udo 4 i	ab depth Cent Per mile Medal EPOT July 2010				\$328,369,846		\$482,703,674		
DASH COUSTRUCTION COST TO SIDEWAIK (CONCRETE - 5' ONE S	side 4 Inc	a deput Cost Per mile Model EDOT JUN 2019				a.590.391.637	346/ 989 546	35/38/5/06	3/3/ 354 /76	

Base construction cost for sidewalk (concrete - 5' one side, 4 inch depth, Cost Per mile Model, FDOT, July 2019

Pedestrian bridge cost assumes 12' wide facility (Concrete Deck/Pre-stressed Girder - Simple Span (Medium Span Bridge)) at \$115 per square foot, Cost Per mile Model, FDOT's Structures Design Guideline, Structures Manual Volume 1 (Chapter 9), January 2020.

Crosswalk cost based on Pedestrian and Bicycle Cost Estimation Tool, NCDOT, 2013

Bike lane base construction cost assumes 5' paved facility.

Shared lane base construction cost assumes signing and marking only.

Buffered bike lane base construction cost reflects 5' facility with 2' buffer. Cost is 25% higher than 5' paved bike lane.

Shared use path (two directional, 12 feet) based on cost per mile model, FDOT, July 2019

Shared use path (bridge) cost assumes 16' wide facility (Concrete Deck/Pre-stressed Girder - Simple Span (Medium Span Bridge)) at \$115 per square foot, Cost Per mile Model, FDOT's Structures Design Guideline, Structures Manual Volume 1 (Chapter 9), January 2020.

Rever	nue Sources	(YOE)
2026-2030	2031-2035	2036-2045
Local (1st, 2nd, 9th Cent,	Local (1st, 2nd, 9th Cent, Constitution al Fuel Tax, Traffic Impact Fee); State (Other Roads	Local (1st, 2nd, 9th Cent, Constitution al Fuel Tax, County Fuel Tax, Traffic Impact Fee); State (Other Roads

\$390,391,637 \$487,989,546 \$573,875,706 \$757,359,776

Aviation Projects Martin in Motion, 2045 LRTP

		Total Cos	st (YOE**)			Revenue So	urces (YOE)	
Project Description	2021-2025	2026-2030	2031-2035	2036-2045	2021-2025	2026-2030	2031-2035	203
Capital Improvement Projects supported by Partial FDOT Funding	1.08	1.25	1.47	1.94				
Airfield Guidance Sign Replacement (Design and Construct)	\$270,000							
Airport Business Plan	\$216,000							
Airport Operations Center and Airfield Electrical Vault (Phase 3 Construction)	\$3,240,000							
Corporate Hangar 1	\$1,080,000							
Corporate Hangar 2	\$1,080,000							
Hold Bay Extension (Design & Const.)	\$259,200							
Mill & Resurface, MITL Replacement Taxiway C (Design & Const)	\$1,846,800				TIP			
Mill & Resurface, MITL Replacement Taxiway D (Design & Construct)	\$1,755,000				IIP			
PDC and MIRL Replacement 7-25 (Phase 1 and Phase 2 - Design ¹)	\$1,323,000							
Property Acquisition	\$2,700,000							
Rehabilitation of MC Non-Movement Areas Phase IV - Taxilane B (Const)	\$1,080,000							
Replace PAPIs on 12-30 with LED Units (Design & Construct)	\$108,000							
Sun Shade Hangars	\$540,000							
Tractor Equipment	\$108,000							
Air Traffic Control Tower Equipment Upgrade (Recorder and Radios ²)		\$250,000						
Construct Airport Interconnect Rd Flying Fortress Extension		\$2,312,500				State (Public Transportation -		1
Rehabilitation of MC Non-Movement Areas Phase V (Design & Const)		\$1,250,000				Aviation Program)		
Tree Mitigation Project - RPZ and Part 77 (SE St. Lucie Canal)		\$150,000				riogram)		
Total Airport Projects Cos	t \$15,606,000	\$3,962,500						1

Source: Draft Airport Future Funding Analysis, Martin County Airport and Within Field CIP, Feb. 28, 2020

Notes

** YOE - Year of Expenditure

¹ Phase 1 and Phase 2 design cost \$100K and \$1.25M respectively.

² Recorder and radios cost \$100K each.

Florida Department of Transportation (FDOT) funding share is limited to 80% of the project cost. Revenues for Aviation Program, which is under Public Transportation is not provided by FDOT at MPO level.

2036-2045

Resiliency Projects Martin in Motion, 2045 LRTP

Map ID	Facility	From	То	Project Description		Total Project	Yea	r of Expenditure (YOE**)	Revenue Sources (YOE)		
					(miles)	Cost (PDC*)	2026-2030	2031-2035	2036-2045	2026-2030	2031-2035	2036-2045
										Local, State	Local, State	Local, State
										(Other Roads	(Other Roads	(Other Roads
V1	N Sewalls Point Road ¹	load ¹ SR-A1A (NE Ocean Boulevard)	SE Palmer Street	To be determined 1.5	1.57	\$2,599,031	\$3,248,789	\$3,820,575	\$5,042,120	Construction &	Construction &	Construction &
VI						ψ2,000,001	φ3,2+0,703	\$3,020,373	φ 3,0 42,120	ROW - 10%;	ROW - 10%;	ROW - 10%;
										TMA and TALU	TMA and TALU	TMA and TALU
										funds)	funds)	funds)
V2	SE MacArthur Boulevard ²	SE South Marina Way	Approximately 1500 feet North	To be determined	0.28	-	-	-	-	-	-	-

Notes

* PDC - Present Day Cost

** YOE - Year of Expenditure

¹Project overlaps with non-motorized projects, segment IDs 61 and 239. Project cost are for non-motorized improvements.

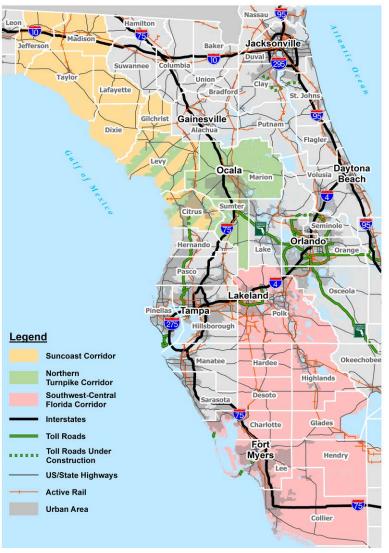
² Roadway is eligible to receive federal-aid funds. Funds could be available from Federal Emergency Relief Program (up to 80% of the project cost) in case of a natural disaster.

Appendix I: Multi-use Corridors of Regional Economic Significance (M-CORES) Program



Overview

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



charged with assembling task forces to study three specific corridors:

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

The objective of the M-CORES Program is to advance the construction of regional corridors that will accommodate multiple modes of transportation and multiple types of infrastructure. The Program benefits include, but are not limited to, addressing issues such as hurricane evacuation; congestion mitigation; trade and logistics; broadband, water, and sewer connectivity; distribution; autonomous, energy connected, shared, and electric vehicle technology; other transportation modes, such as shared-use non-motorized trails, freight and passenger rail, and public transit; mobility as a service; availability of

a trained workforce skilled in traditional and emerging technologies; protection or enhancement of wildlife corridors or environmentally sensitive areas; and protection or enhancement of primary springs protection zones and farmland preservation. Additional information is available at <u>www.floridamcores.com</u>.

Suncoast Corridor Study Area

The Suncoast Corridor study area spans eight (8) counties, from Citrus County to Jefferson County, as shown in the map.





Northern Turnpike Corridor Study Area

The Northern Turnpike Corridor study area spans four (4) counties—Citrus, Sumter, Marion, and Levy, as shown in the map.

Southwest-Central Florida Corridor Study Area

The Southwest-Central Florida Corridor study area spans nine (9) counties, from Collier County to Polk County, as shown in the map.

LRTP Considerations

None of these corridors intersect the Martin MPO area; however, planning for successful projects within this region may require coordinating with regional planning partners in the M-CORES study areas with regard to collecting and analyzing transportation data for projects that may be affected by the M-CORES Program.

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

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

The proposed projects within the M-CORES corridors will be tolled facilities and will be part of the Florida's Turnpike system and the Strategic Intermodal System (SIS). The projects will be included in the LRTP and TIP/STIP in accordance with guidance provided in the FDOT MPO Program Management Handbook. FDOT is working with each corridor Task Force to develop purpose and need, guiding principles, and potential paths/courses. Each Task Force will submit its evaluation report to the Governor, the President of the Senate, and the Speaker of the House of Representatives by November 15, 2020. As the M-CORES Program progresses to Project Development and Environment (PD&E), design and construction phases, FDOT will identify projects, prepare cost estimates, and coordinate with affected MPOs/TPOs to add identified projects into the LRTP and TIP. Subject to the economic and environmental feasibility statement requirements of Section 338.223, F.S., projects may be funded through Turnpike revenue bonds or right-of-way and bridge construction bonds or financing by the Florida Department of Transportation Financing Corporation; by advances from the State Transportation Trust Fund; with funds obtained through the creation of public-private partnerships; or any combination thereof. FDOT also may accept donations of land for use as transportation rights-of-way or to secure or use transportation rights-of-way for such projects in accordance with Section 337.25, F.S. To the maximum extent feasible, construction of the M-

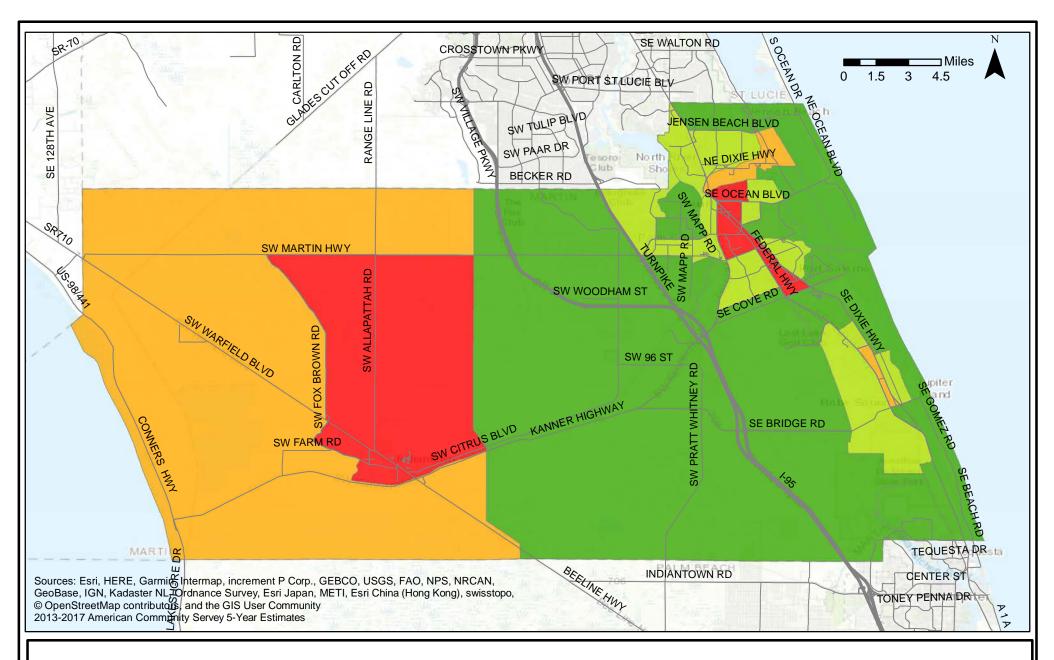




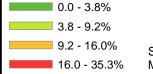
CORES projects will begin no later than December 31, 2022, and the corridors will be open to traffic no later than December 31, 2030.



Appendix J: Environmental Justice and Transportation Disadvantaged Population Groups



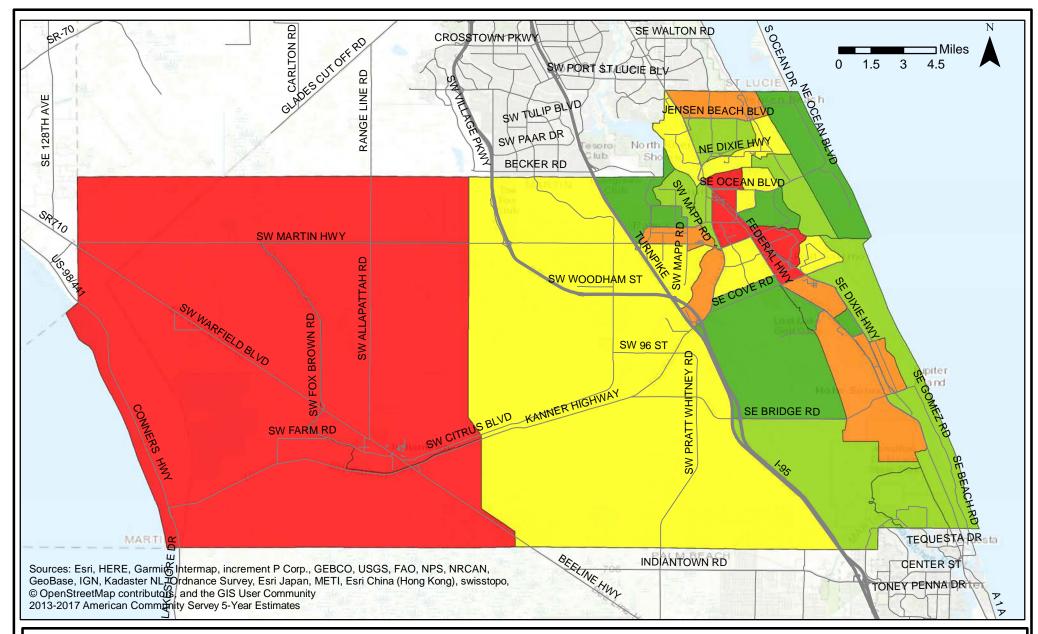
Percent Below Poverty Line by Census Tract



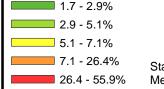
Standard Deviation: 8.8% Mean: 8.0%

Low Income Households Martin County

Figure 1

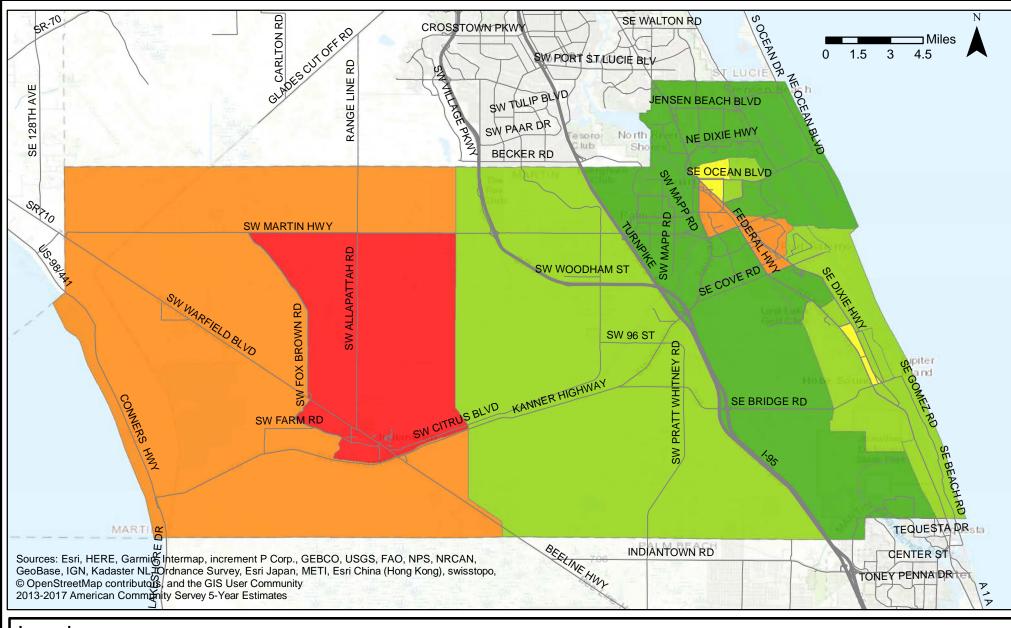


Percent of Minorities by Census Tract



Standard Deviation: 14.0% Mean: 12.0%

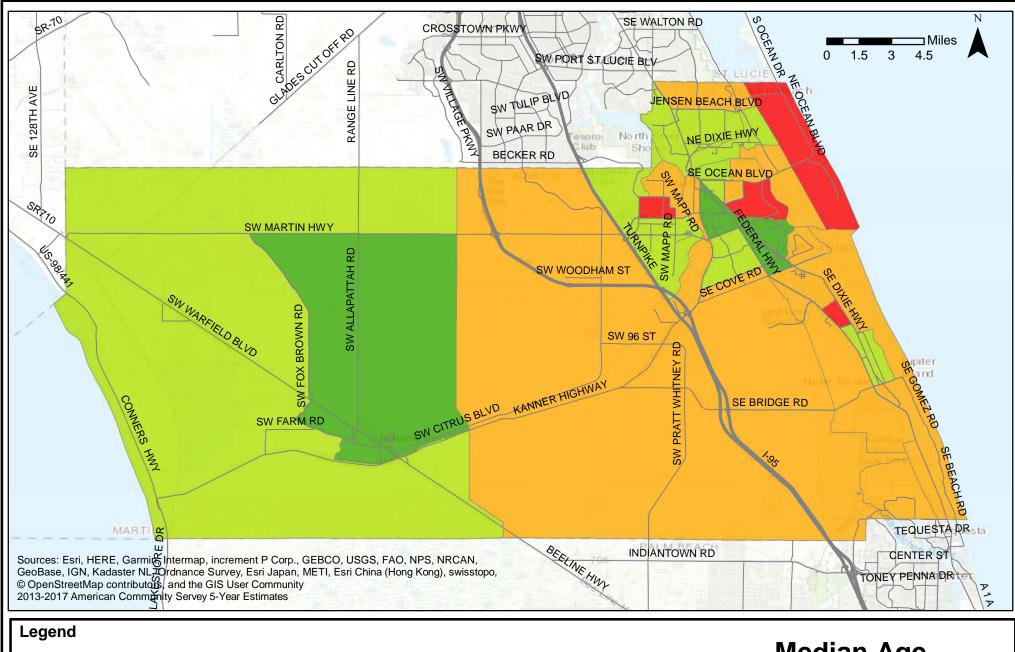
Minority Population Martin County Figure 2



Percent Limited English Proficiency by Census Tract

0.0 - 1.3%	
1.3 - 3.0%	
3.0 - 9.0%	
9.0 - 15.5%	Standard Deviation: 5.8%
15.5 - 27.7%	Mean: 3.4%

Limited English Proficiency Population Martin County Figure 3



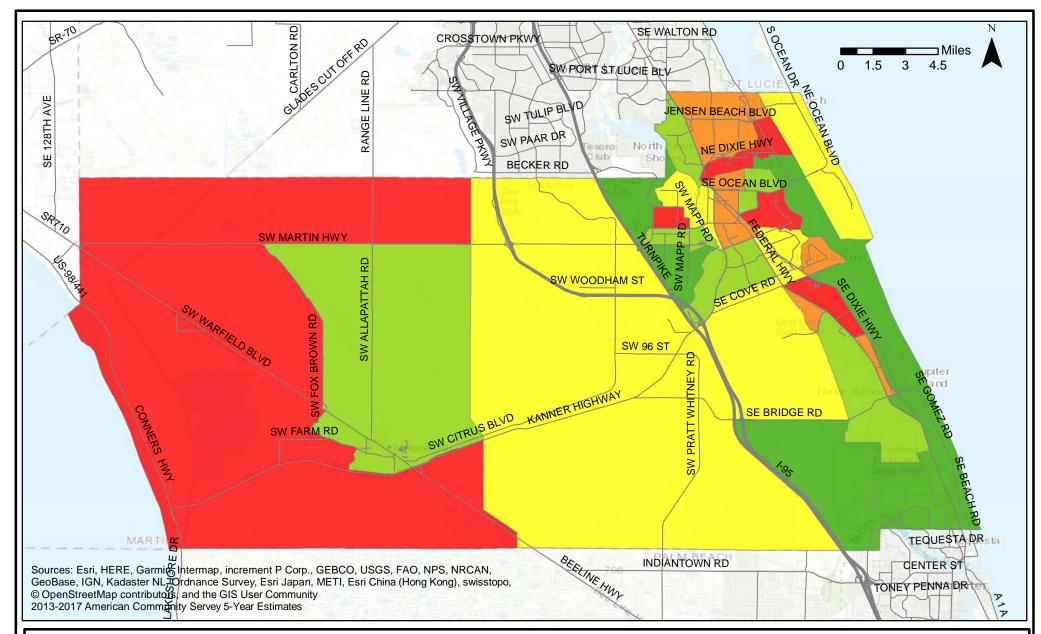
Median Age by Census Tract

Under Age 35 Age 35 - Under Age 50 Age 50 - Under Age 65

Age 65+

Median Age for Martin County: 51.6 years

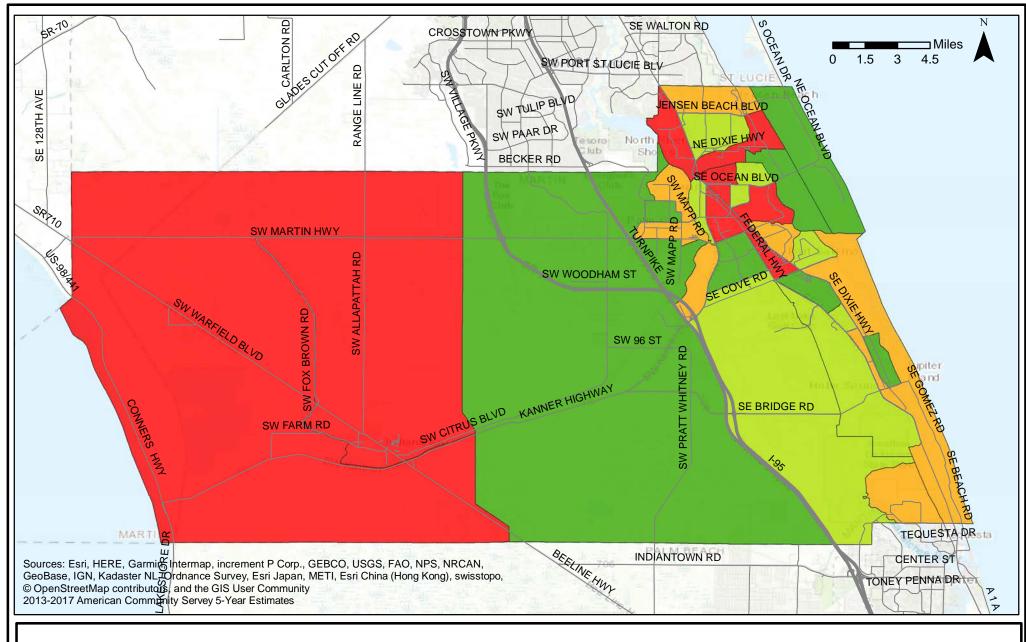
Median Age Martin County Figure 4



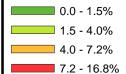
Percent Disabled Population by Census Tract

Standard Deviation: 4.7%
Mean: 15.2%

Disabled Population Martin County Figure 5



Percent of Households without a Vehicle by Census Tract



Standard Deviation: 4.0% Mean: 5.0%

Zero Auto Households Martin County Figure 6

Appendix K: FHWA LRTP Expectations Letter, 2012 & 2018

Federal Strategies for Implementing Requirements for LRTP Update for the Florida MPOs November 2012

The Federal Highway Administration (FHWA), in cooperation with the Federal Transit Administration (FTA), developed the following summary to provide clarification to the Florida Department of Transportation (FDOT) and Florida's Metropolitan Planning Organizations (MPOs) regarding our expectations for meeting some of the requirements to be addressed in the next cycle of Long Range Transportation Plan (LRTP) updates. 23 CFR 450.306, 316 and 322 describe the basic requirements of the metropolitan transportation planning process, including a documented public participation plan and development and content of the metropolitan transportation plans respectively. The following information is presented to highlight notable areas for improvement, as well as those of potential concern, and to assist the MPOs in meeting federal planning requirements. Additional areas may be addressed on an individual MPO basis as needed throughout the LRTP development process.

Because projects in a Transportation Improvement Program (TIP) are required to demonstrate planning consistency with the LRTP, the requirements for project inclusion in a TIP must also be considered when developing the LRTP. As a reminder, projects that need to be included in the TIP are: all projects using FHWA and/or FTA funds; all regionally significant projects requiring an FHWA or FTA action regardless of funding source; and regionally significant projects to be funded with Federal funds other than those administered by FHWA or FTA or regionally significant projects funded with non-federal funds (23 CFR 450.324(d)). There are exceptions for certain project such as emergency relief and state planning and research projects. All of the exempt project categories can be found in 23 CFR450.324(c). The reference to regionally significant projects applies to capacity and non-capacity projects. Capacity projects are projects that expand the capacity of existing transportation systems, such as adding lanes to roadways, new/expanded rail service and intermodal facilities. Non-capacity projects are activities that are designed to support, operate and maintain the state transportation system (See Appendix 1 for a list of capacity and non-capacity programs/activities).

<u>Projects in the LRTP:</u> Recently we have been responding to several questions regarding types of projects that need to be included in the LRTP. As stated in 23 CFR 450.322(f), the LRTP is required to include the projected transportation demand in the planning area, the existing and proposed transportation facilities that function as an integrated system, operational and management strategies, consideration of the results of the Congestion Management Plan, strategies to preserve the existing and projected future transportation infrastructure, pedestrian and bicycle facilities, and transportation and transit enhancement activities.

As noted in 23 CFR 450.104, a regionally significant project means a transportation project (other than projects that may be grouped in the TIP and/or STIP or exempt projects as defined in EPA's transportation conformity regulation (40 CFR part 93.126, 127 and 128)) that is on a facility which serves regional transportation needs (such as access to and from the area outside the region; major activity centers in the region; major planned developments such as new retail malls, sports complexes, or employment centers; or transportation terminals) and would normally be included in the modeling of the metropolitan area's transportation network. At a minimum, this includes all principal arterial highways and all fixed guideway transit facilities that offer a significant alternative to regional highway travel.

If a project meets the definition of regionally significant, then the project must be included in the Cost Feasible LRTP regardless of the project's activities (i.e. construction, facility widening, ITS installations, etc.).

<u>Grouped Projects in the LRTP</u>: Federal regulations allow a specifically defined type of project(s) to be grouped in the TIP. Similar groupings in the LRTP would be permissible. However, the ability to group project(s) depends on the regional significance of the project(s). Grouped projects in the TIP are typically ones that are not of an appropriate scale to be individually identified and can be combined with other projects which are similar in function, work type, and/or geographic area. Classifications of these grouped project types are listed under 23 CFR 771.117(c) and (d) and/or 40 CFR part 93. Examples are: activities which do not involve or lead directly to construction (such as planning and technical studies or grants for training and research programs); construction of non-regionally significant bicycle and pedestrian lanes, paths, and facilities; landscaping; installation of fencing, signs, pavement markings, small passenger shelters, traffic signals, and railroad warning devices where no substantial land acquisition or traffic disruption will occur; rest areas and truck weigh stations; ridesharing activities; and highway safety or traffic operations improvement projects. Therefore, if grouping projects in the LRTP, the groups need to be specific enough to determine consistency between the LRTP and the TIP.

Fiscal Constraint

Operations & Maintenance: LRTP cost estimates need to be provided for the Operations and Maintenance (O&M) activities for the entire timeframe of the LRTP. System level estimates for O&M costs may be shown for each of the five-year cost bands or may be provided as a total estimate for the full LRTP timeframe. System level is interpreted to mean the system within the MPO planning boundaries. Local agencies, working with the MPO, need to provide cost estimates for locally-maintained facilities covered in the Plan. FDOT, working with the MPO, needs to provide cost estimates for the state-maintained facilities covered in the Plan. System level estimates at the FDOT District level are acceptable for the state-maintained facilities. The LRTP will also need to identify the general source of funding for the O&M activities. Since O&M costs and related revenues are not available to balance the fiscal constraint of capital investment projects, a clear separation of costs for operations and maintenance activities from other grouped and/or regionally significant projects will need to be shown in order to demonstrate fiscal constraint. (23 CFR 450.322(f)(10)(i)).

<u>Total Project Costs</u>: For total project costs, all phases of a project must be described in sufficient detail to estimate and provide an estimated total project cost and explain how the project is expected to be implemented. Any project which will go beyond the horizon year of the LRTP must include an explanation of the project elements beyond the horizon year and what phases/work will be performed beyond the horizon year of the plan. The costs of work and phases beyond the horizon year of the plan must be estimated using Year of Expenditure (YOE) methodologies and the estimated completion date may be described as a band (i.e. Construction expected 2040-2050, \$40M). If there is more than one phase remaining to be funded, these may be shown as a combined line item for the project (i.e. ROW/Construction expected 2040-2050, \$50M). FHWA does not expect that this paragraph will apply to routine system preservation or maintenance activities. Total project costs will be shown for capacity expansion projects and for regionally significant projects. (23 CFR 450.322(f)).

<u>Cost Feasible Plan:</u> Revenues to support the costs associated with the work/phase must be demonstrated. For a project to be included in the cost feasible plan, an estimate of the cost and source of funding for each phase of the project being funded (including the Project Development and Environment (PD&E) phase) must be included. The phases to be shown in LRTPs include Preliminary Engineering, ROW and Construction (FHWA and FTA support the option of combining PD&E and Design phases into "Preliminary Engineering"). Boxed funds can be utilized as appropriate to finance projects. However, the individual projects utilizing the box need to be listed, or at a minimum, described in bulk in the LRTP (i.e. PD&E for projects in Years 2016-2020). (23 CFR 450.322(f)(10)).

<u>New Revenue Sources:</u> If the LRTP assumes a new revenue source as part of the cost feasible plan, the source must be clearly explained, why it is considered to be reasonably available, when it will be available, what actions would need to be taken for the revenue to be available, and what would happen with projects if the revenue source was not available. If, for example, the most recent action of a governing body or a referendum of the public defeated a similar revenue source, then the new revenue source may not be included in the Cost Feasible LRTP unless the MPO can justify the revenue source and explain the difference between the action that failed and the action being proposed (for further details, please see FHWA Guidance <u>Financial Planning</u> <u>and Fiscal Constraint for Transportation Plans and Programs</u> issued by Gloria Shepherd, Associate Administrator for Planning, Environment and Realty on April 17, 2009). This applies to all revenue sources in the LRTP (i.e. federal, state, local, private, etc.)

<u>Federal Revenue Sources</u>: Federal and state participation on projects in the Cost Feasible LRTP can be shown as a combined source for the cost feasible projects. Projects within the first ten years of the Plan must be notated or flagged to identify which projects are planned to be implemented with federal funds. Beyond the first ten year period, the specific federal funding notation is not expected. The project funding, however, must be clearly labeled as a combined Federal/State source in the Cost Feasible LRTP. (23 CFR 450.322(10)f(iii))

For FTA funded projects, MAP-21 has repealed eight programs from SAFETEA-LU and shifted many of the eligible activities to formula programs. Repealed programs (or uses consolidated in other formula programs) include Clean Fuels (5308), Fixed Guideway Modernization (5309), Bus and Bus Facilities (5309), JARC (5316), New Freedom (5317), Paul Sarbanes Transit in the Parks (5320), Alternatives Analysis (5339) and Over the Road Bus (3038). Formula programs now include Metropolitan Planning and State Planning (5305); Urbanized Area Formula (5307); Enhanced Mobility of Seniors and Persons with Disability (5310); Rural Area Formula (5311) and RTAP (5311); Formula Grants for Public Transportation on Indian Reservations (5311); Research and Development, Demonstration and Deployment (5312), State of Good Repair (5337), Bus and Bus Facilities Formula Grants (5339). Eligible new uses which are notable include Safety Programs and Transit Asset Management, Operations in areas with 200,000 or more population with up to 100 buses; Transit Oriented Development Planning and Bus Rapid Transit demonstration projects; Core Capacity Improvements and several others.

Discretionary awards that have been repealed under MAP-21 however, may have unspent funds awarded under SAFETEA-LU in the repealed programs that still must be shown in the LRTP, TIP and STIP to obligate the funds in FTA's TEAM system. Hence, project categories such as Bus Livability, Clean Fuels, Alternatives Analysis, Transit in the Parks, etc.) may still need to be described and/or pursued by the transit grantee within the LRTP for FFY 2011 and FFY 2012 funds remaining. However, MAP-21 greatly reduced the number and type of discretionary awards through FTA. As such, the MPO and the transit grantee may no longer need to consider how to account for the possibility of placing a discretionary transit project through a competitive award (as well as formula funds) as part of the cost feasible LRTP except for New Starts, Small Starts, Core Capacity, Bus Rapid Transit Demonstration or Transit Oriented Development Demonstration Planning programs.

The purpose, need and perceived benefit of the transit project as well as geographic distribution of funds may play a role in project selection. As such, a transit needs plan with projects which may be unfunded when the LRTP is prepared may need to be considered, especially for major New Start/Small Start and other capital projects like the new Core Capacity program which must eventually be placed within the cost feasible LRTP to have funds awarded. Regardless, discretionary awards if any must also be eventually listed within the cost feasible LRTP for FTA to obligate the awarded funds in a grant to a transit grantee.

<u>Full Timespan of the LRTP</u>: The LRTP is a document that has a planning horizon of at least 20 years. The LRTP is based upon the region's visioning of the future within the bounds of the financial resources that are available to the region during that timeframe. The LRTP is not a programming document, but rather a planning document that describes how the implementation of projects will help achieve the vision. Therefore, the MPOs will need to show all the projects and project funding for the entire time period covered by the LRTP, from the base year to the horizon year. (23 CFR 450.322(a))

Environmental Mitigation: For highway projects, the LRTP must include a discussion on the types of potential environmental mitigation activities and opportunities which are developed in consultation with Federal, State and Tribal wildlife, land management and regulatory agencies. This discussion should occur at more of a system-wide level to identify areas where mitigation may be undertaken (perhaps illustrated on a map) and what kinds of mitigation strategies, policies and/or programs may be used. This discussion in the LRTP would identify broader environmental mitigation needs and opportunities that individual transportation projects might later take advantage of. MPOs should be aware that the use of ETDM alone is not environmental mitigation. That effort would be considered project screening and is not a system-wide review. Documentation of the consultation with the relevant agencies should be maintained by the MPO. (23 CFR 450.322(f)(7) and (g))

For transit capital projects, the environmental class of action is usually considered by FTA regional offices in concert with transit grantees as the projects are analyzed and developed. Transit maintenance and transfer facilities and major capacity projects like light, heavy or commuter rail, BRT, etc. may require a separate National Environmental Policy Act (NEPA) document while acquisition of vehicles, provision of repairs, planning studies, engineering, etc, would not require a document. As such, environmental mitigation issues would tend to be developed as part of the NEPA document for specific projects with a NEPA decision made prior

to the award of FTA funds. Likewise, transit environmental benefits like reduction in SOV trips and VMT, reduction in greenhouse gases, pedestrian and bicycle linkages, transit oriented/compact development (which is more walkable) may need to be stated within the broad parameters in the LRTP. Most FTA planning studies are required to be listed in the Unified Planning Work Program (UPWP) and not necessarily the TIP and STIP (although many MPO's still list the studies in the TIP and STIP). Preliminary engineering, final design, right of way, utility relocation, construction, etc. for transit capital projects would need to be listed in the LRTP, TIP and STIP.

<u>Linking Planning and NEPA:</u> Since 2008, prior to FHWA approving an environmental document (Type-2 Categorical Exclusion, Finding of No Significant Impact, or Record of Decision) and thereby granting location design concept approval, the project must be determined to be consistent within the LRTP, the TIP and Statewide Transportation Improvement Program (STIP). The project consistency refers to the description (for example project name, termini and work activity) between the LRTP, the TIP and the STIP (23 CFR 450.216(k), 450.324(g) and 450.216(b)). The NEPA document must also describe how the project is going to be implemented and funded. The project implementation description in the NEPA document needs to be consistent with the implementation schedule in the LRTP and TIP/STIP as well.

<u>LRTP Documentation/Final Board Approval</u>: FHWA and FTA expect that at the time the MPO board adopts the LRTP, a substantial amount of LRTP analysis and documentation will have been completed, and all final documentation will be available for distribution no later than 90 days after the plan's adoption. The Board and its advisory committees, as well as the public should have periodically reviewed and commented on products from interim tasks and reports that culminate into the final Plan. Finalizing the LRTP and its supporting documentation should be the last activity in a lengthy process. All final documents should be posted online and available through the MPO office no later than 90 days after adoption. The MPOs' schedules for this round of LRTP development are expected to allow for the Board to adopt the final LRTP no later than 5 years from the MPOs' adoption of the previous LRTP.

Documented LRTP Modification Procedures: If not already in place, MPOs need established written and Board approved procedures that document how modifications to the LRTP are addressed after Board adoption. The procedures should specifically explain what qualifies as a modification as opposed to an amendment as defined in 23 CFR 450.104. These procedures can be included as part of the LRTP, the PPP, or provided elsewhere as appropriate. FHWA is currently beginning work with FDOT and the MPOs on an LRTP amendment process which will include statewide procedures and thresholds, similar to the STIP amendment process. This effort will assist the MPOs in determining when LRTP amendments are required.

<u>LRTP & STIP/TIP Amendment Consistency</u>: The STIP and TIPs must be consistent with the relevant LRTPs. When amendments to the STIP/TIP are made, the projects must also be consistent with the LRTP from which they are derived. FHWA and FTA staff will be checking for this consistency. Projects with inconsistencies between the STIP/TIP and the respective LRTP will not be approved for use of federal funds or federal action until the issue is addressed. (23 CFR 450.328 and 23 CFR 450.216(b))

FHWA and FTA understand that when developing project cost estimates in an LRTP, the cost is an estimate which becomes more refined as a project advances. Projects being refined between plans will not be required to update their costs in the existing LRTP if new, more accurate information regarding project cost becomes available. However, it is expected that upon the next scheduled adoption of the LRTP, the latest project cost estimates shall be used.

Transit Projects and Studies

<u>Major Transit Capital Projects:</u> For LRTP development purposes, federal funding sources for major transit capital projects must be proposed and may not currently be identifiable (or currently allocated) for use in the urbanized area. The Federal Transit Administration funds projects such as New Start rail and BRT, as well as major capital facilities such as administrative buildings or maintenance facilities with formula and/or discretionary program dollars allocated on an annual basis. As mentioned, MAP-21 made changes to and reductions in transit discretionary programs. Therefore in order to plan for a transit "New Start" in the LRTP, the MPO must assume they will be successful in competing for discretionary FTA New Starts

program dollars. A reasonable funding mix might be to assume 50% FTA/25% Local/25% State funding, as is currently the norm in Florida. Also, MAP-21 greatly expands the use of TIFIA loans. Grantees may be proposing use of a TIFIA loan or other loan to help bridge the gap in capital financing for a New Start which in some cases for large projects in multiple phases may take up to five years to design and build (per phase).

With regard to the planning of a major capital transit facility other than a New Start, the assumption must be made that FTA program funds such as "State of Good Repair" or "Bus and Bus Facilities" will be awarded to the transit system based on formula. As mentioned, large discretionary awards will be fewer under MAP-21. In most cases, a likely funding mix for State of Good Repair or Bus and Bus Facilities might be 80% FTA/20% local, or up to 100% FTA matched with toll revenue credits.

Transit Facility: The transit grantee may propose a specific transit maintenance facility, transfer facility, multi-modal station, park n ride lot with transit service or other transit facility for rehabilitation, renovation or new construction. Generally, such facility improvements remain eligible for FTA 5307, 5309, 5337 (new State of Good Repair formula program), 5339 (new bus and bus facility formula program) funds from FTA, or for FLEX funds from FHWA flexed to FTA for the transit use by the transit grantee. At a minimum, such facilities should be contained within the TIP, 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 (if any) 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.

<u>Transit Service including Fixed Route Bus</u>, <u>Deviated Route</u>, <u>Para-transit</u>, <u>Enhanced or Express</u> <u>Bus</u>: The transit grantee may propose a specific new transit service for a new area or corridor. Generally, such new service is eligible for 5307 or 5310 funds from FTA, or for L230 FLEX funds from FHWA to the transit grantee. At a minimum, such new service should be "consistent with" the LRTP. For example, consistent with the LRTP 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.

<u>Transit Service Including Bus Rapid Transit (BRT), Light Rail Transit (LRT) Heavy Rail Transit</u> (HRT), Commuter Rail Transit (CRT), Streetcar through the New Starts/Small Starts Program:

The transit grantee may propose a specific new fixed guideway transit service (like BRT, LRT, HRT, CRT or Streetcar) to serve a new area or corridor as part of FTA's New Starts/Small Starts or Core Capacity Program. Generally, such new service is eligible for 5307 or 5309 funds from FTA, or for FLEX funds from FHWA to the transit grantee. At a minimum, such new service should 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.

Emerging Issues

This section describes topics that may not currently be required by federal laws and rules to be addressed in LRTPs. <u>As such, MPOs are not required to include these considerations in their current planning processes and plans.</u> However, these issues are receiving considerable attention in discussions related to the passage of Moving Ahead for Progress in the 21st Century (MAP-21). Each MPO has the discretion to determine whether or not to address these topics in their LRTP at this time, and the appropriate level of detail. Depending upon when MAP-21 implementing guidance is released, the new requirements may have to be addressed within a short timeframe. So beginning to address these issues early on may potentially minimize the level of effort needed to achieve future compliance.

<u>Safety and Transit Asset Management:</u> MAP-21 also includes significant additions to safety planning and transit asset management on the part of transit grantees and the states. Federal Register guidance is expected on transit safety and transit asset management within the near future.

Performance Measurement: FHWA and FTA encourage the MPOs to consider ways to incorporate performance measures/metrics for system-wide operation, as well as more localized measures/metrics into their LRTPs. As funding for transportation capacity projects becomes more limited, increasing emphasis will be placed on maximizing the efficiency and effectiveness of our current transportation system. Consequently, measures to assess the LRTP's effectiveness in increasing system performance will be needed. Per the recent passage of MAP-21, USDOT will establish performance measures in consultation with State DOTs, MPOs and other stakeholders within 18 months of MAP-21's enactment. Once performance measures are identified, the States will have up to one year to set state level targets. Once state level targets have been set, MPOs will have up to six-month to set local level targets that support the state targets. The process and schedule for performance measure implementation and LRTP documentation is expected to evolve over the next two years.

Freight: The planning process is required to address the eight planning factors as described in 23 CFR 450.306(a). The degree to which each factor is addressed will vary depending upon the unique conditions of the MPO areas, but efforts should be made to think through and carefully consider how to address each factor. The importance of freight to the nation's economic well-being and global competitiveness, as well as its support and promotion of job creation and retention has heightened its status at the national and regional level. MPOs should be aware that discussions in MAP-21 have largely included a reference to the increasing importance of freight, including the development of Statewide Freight Plans. While this is part of one of the eight planning factors, special emphasis should be given to the freight factor, as it is anticipated to play a more prominent role in future planning requirements.

<u>Sustainable Transportation and Context Sensitive Solutions:</u> The MPOs are encouraged to identify and suggest contextual solutions for appropriate transportation corridors. For example, Context Sensitive Solutions (CSS) may be appropriate for historic parkways, historic districts, town centers, dense "walkable" neighborhood areas, arterial "gateways", greenway trails and pedestrian ways, environmentally sensitive areas or simply where right of way is not readily available. Under MAP-21, Transportation Alternatives like bicycle and pedestrian

improvements and trails remain eligible under the formula programs while transportation enhancement set-asides have been removed and some uses like historic building renovation and scenic easements may be more restrictive. The value of the resources present may suggest the need for alternative or special treatments (or even accepting a level of congestion and lower speeds that respects the resources). In these instances, specific livability principles adopted by the MPO might be employed for improved pedestrian and transit access – especially to schools and even traffic calming.

Also, spatial relationships that support public transit like transit oriented development and the "trip not taken" while reducing greenhouse gases might be recognized as characteristics of a town center or mixed use area with public transit access. Other livability planning goals might also need to be recognized like preserving affordable housing, improving/preserving special resources like parks, monuments and tourism areas, increasing floor area ratios and reducing parking minimums in select corridors to encourage walking trips and public transit, transportation demand management, etc.

Proactive Improvements

This section describes topics that are not currently required by federal laws and rules to be addressed in LRTPs. <u>As such, MPOs are not required to include these considerations in their current planning processes and plans.</u> These areas are intended to be a proactive change in the LRTPs to help Florida continue to make positive strides in long range planning.

<u>Linking Planning and NEPA</u>: For highway projects, we are continually looking for strategies that improve the linkage between planning and environmental processes. For the inclusion of regionally significant projects in the Cost Feasible Plan of the LRTP, MPOs should strongly consider including a purpose and need statement for the project in the LRTP. This purpose and need statement will be carried into the National Environmental Policy Act (NEPA) process and will be one way to enhance the linkage between planning and NEPA. For example, this purpose and need statement could briefly provide the rationale as to why the project warranted inclusion in the LRTP. (450.324 (d); 450 Appendix A to Part 450, Section II Substantive Issues, 8)

<u>Climate Change</u>: MPOs may also wish to give consideration to climate change and strategies which minimize impacts from the transportation system. FHWA supports and recognizes the importance of exploring the effects of climate change on transportation, as well as the limited environmental resources and fuel alternatives. State legislation now encourages each MPO to consider strategies that integrate transportation and land use planning in their LRTP to provide for sustainable development and reduce greenhouse gas emissions, as well as include energy considerations in all state, regional and local planning. As a result, MPO LRTP Updates are encouraged to include discussions and strategies aimed at addressing this issue.

<u>Scenario Planning</u>: Pursuant to MAP-21, MPOs may elect to develop multiple scenarios for consideration in the development of the LRTP. If the MPO chooses to develop these scenarios, 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.

Description of the Major Programs Included in the 2035 Revenue Forecast

Capacity Programs	Non-Capacity Programs
SIS Highways/ FIHS Construction & ROW - Construction, improvements, and associated right of way on SIS highways and the FIHS (i.e., Interstate, the Turnpike, other toll roads, and other facilities designed to serve interstate and regional commerce including SIS Connectors).	Safety - Includes the Highway Safety Improvement Program, the Traffic Safety Grant Program, Bicycle/Pedestrian Safety activities, the Industrial Safety Program, and general safety issues on a Department-wide basis.
<u>Aviation</u> - Financial and technical assistance to Florida's airports in the areas of safety, capacity improvements, land acquisition, planning, economic development, and preservation.	<u>Resurfacing</u> - Resurfacing of pavements on the State Highway System and local roads as provided by state law.
<u>Rail</u> - Rail safety inspections, rail-highway grade crossing safety, acquisition of rail corridors, assistance in developing intercity and commuter rail service, and rehabilitation of rail facilities.	<u>Bridge</u> - Repair and replace deficient bridges on the state highway system. In addition, 15% of federal bridge funds must be expended off the federal highway system (e.g., on local bridges not on the State Highway System).
Intermodal Access - Improving access to intermodal facilities and acquisition of associated rights of way.	<u>Product Support</u> - Planning and engineering required to "produce" FDOT products and services (i.e., each capacity program; Safety, Resurfacing, and Bridge Programs).
<u>Seaport Development</u> - Funding for the development of eligible ports, including projects such as land acquisition, dredging, construction of storage facilities and terminals, and acquisition of container cranes and other equipment used in moving cargo and passengers.	Operations & Maintenance - Activities to support and maintain transportation infrastructure once it is constructed and in place.
Other Arterial Construction/ROW - Construction, improvements, and associated right of way on State Highway System roadways not designated as part of the SIS or FIHS. Also includes funding for the Economic Development Program, the County Incentive Grant Program., and the Small County Outreach Program.	<u>Administration</u> - Resources required to perform the fiscal, budget, personnel, executive direction, document reproduction, and contract functions. Also includes the Fixed Capital Outlay Program, which provides for the purchase, construction, and improvement of non-highway fixed assets (e.g., offices, maintenance yards).
<u>Transit</u> - Technical and operating/capital assistance to transit, paratransit, and ridesharing systems.	<u>Other</u> – Technically, this category is not a "program." It primarily represents FDOT financial commitments such as debt service and reimbursements to local governments.

2035 Revenue Forecast Handbook

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May 2008

Federal Strategies for Implementing Requirements for LRTP Updates for the Florida MPOs

January 2018

The Federal Highway Administration (FHWA), in cooperation with the Federal Transit Administration (FTA), developed this document to provide clarification to the Florida Department of Transportation (FDOT) and Florida's Metropolitan Planning Organizations (MPOs) regarding our expectations for meeting some of the requirements to be addressed in the next cycle of Long Range Transportation Plan (LRTP) updates. 23 CFR 450.306, 316 and 324 describe the basic requirements of the scope of the metropolitan transportation planning process, including a documented public participation plan, and development and content of the LRTPs respectively.

Addressing Current Requirements

The following information is presented to highlight notable areas for improvement, as well as those of potential concern, in order to proactively assist the MPOs in meeting federal planning requirements. These topic areas were selected based on a past history of issues observed with them through our general stewardship responsibilities, or through the oversight responsibilities via the Transportation Management Area (TMA) certification reviews. FHWA and FTA would be pleased to work with FDOT and the MPOs to discuss interpretation examples and/or statewide templates as appropriate to support implementation consistency. Additional areas of concern may be addressed on an individual MPO basis as needed throughout the LRTP development process. Citations noted refer to regulations published in the May 27, 2016 Federal Register.

Stakeholder Coordination and Input

<u>Specific Public Involvement Strategies:</u> MPOs are required to develop a written plan that documents and explicitly describes the procedures, strategies, and outcomes of stakeholder involvement in the planning process for all the MPOs products and processes, including, but not limited to, the timing of and timeframe for public/stakeholder input on the LRTP and its amendments. The MPOs should take the time to ensure their LRTP outreach strategies in their public participation plan (PPP), whether documented in an overall MPO PPP or one specifically for LRTP outreach, are clear, transparent, and accurately describes when and how their stakeholders can be involved in the process. To this end, having non-transportation professional(s) review the document and provide their understanding of when and how long the public comment periods occur for the various planning products can be helpful to ensure the information is being interpreted as intended. {23 CFR 450.316(a)(1)}

<u>Public Involvement/Tribal/Resource Agency Consultation:</u> Consultation on the MPO's planning products (including the LRTP) with the appropriate Indian Tribal governments and Federal land management agencies (when the planning area includes such lands) is required to be documented. The interaction documentation with these stakeholders needs to outline the roles, responsibilities and key decision points for consulting with other governments and agencies. MPOs should ensure that their plans and/or documentation include such procedures.

Additionally, State and local agencies responsible for land use management, natural resources, environmental protection, conservation and historic preservation are required to be consulted during the development of the

LRTP. This consultation consists of comparisons of state conservation plans/maps, and inventories of natural or historical resources with transportation plans, as appropriate and if available. This consultation process is also required to be documented, ideally in the public participation plan. Note that the Tribal governments and resource agencies mentioned above are also required to be involved in the development of the various consultation processes with these agencies. {23 CFR 450.316(a)(1), (c), (d), (e); 23 CFR 450.324(g)}

<u>Measures of Effectiveness</u>: Many MPOs have what appear to be very successful strategies for reaching out and incorporating public comment into their products and processes. However, there is no systematic confirmation or validation that the strategies are indeed working. MPOs are required to periodically review the effectiveness of the procedures and strategies described within the public participation plan (PPP). The PPP is also required to contain the specific measures used, the timing of, and the process used to evaluate the MPO's outreach and PPP strategies. Ideally, once the LRTP is developed, the outreach is evaluated, and then any needed changes to the outreach process are incorporated and documented in the PPP prior to the next LRTP update. {23 CFR 450.316(a)(1)(x)}

Fiscal Constraint

Project Phases: Projects in LRTPs are required to be described in enough detail to develop cost estimates in the LRTP financial plan that show how the projects will be implemented. For a project in the cost feasible plan, the phase(s) being funded and the cost must be documented. Additionally, the source of funding for each phase must be documented in the first 10 years of the LRTP. The phases to be shown in LRTPs include Preliminary Engineering (PE), Right of Way (ROW) and Construction. PE includes both the Project Development and Environment (PD&E) and Design phases. FHWA and FTA support the option of combining the PD&E and Design phases into an overall PE phase for these long range estimates. Boxed funds can be utilized as appropriate to document the financing of smaller projects, such as sidewalks, or early phases of projects, such as PD&E. However, the individual projects utilizing the box need to be listed, or at a minimum, sufficiently described in bulk in the LRTP (i.e. PD&E for projects in Years 2020-2025). {23 CFR 450.324(f)(9), (f)(11); 23 CFR 450.326(h)}

<u>Full Time Span of LRTP (1st 5 Years)</u>: Plans are required to have at least a 20-year horizon. The effective date of the LRTP is the date of the MPO adoption of the plan. As such, the MPO is required to have an LRTP that includes projects from the date of adoption projected out at least 20 years from that date. The LRTP is a planning document that describes how the proposed projects will help achieve the regional vision. The Transportation Improvement Program (TIP), however, is a reflection of the investment priorities which are established in the LRTP. When adopting an updated LRTP, the projects in the previous LRTP are assessed and revised to acknowledge projects that have: 1) moved forward (these are typically removed from the updated LRTP), 2) shifted in time (these could be moved forward or back in implementation in the updated LRTP), and 3) been added or deleted based on the MPO's current priorities. The TIP is only a resource for determining which projects have moved forward. **The TIP, which is based on the previous LRTP, is not a substitute for the first 5 years of the updated LRTP.** Additionally, the TIP is a 4-year programming document that, in Florida, is adopted every year and thus expires annually. When LRTPs "include the TIP", it is a reference to a static and outdated document once the next TIP is incorporated into the Statewide Transportation Improvement Program (STIP), which occurs annually in Florida Therefore, the MPOs will need to show all of the projects, phases, and

estimates from the adoption date through the horizon year of the LRTP, which is considered the entire time period of the LRTP. In addition, funding sources need to be shown for all projects from the adoption date through the first 10 years. {23 CFR 450.324(a); 23 CFR 450.326(a)}

Technical Topics

<u>SHSP Consistency</u>: We have come a long way from "What is the Strategic Highway Safety Plan (SHSP)?" to having LRTPs address the safety of all users throughout the planning process. We have proactively and successfully encouraged the MPOs to include a safety element in their LRTPs and be consistent with the Florida SHSP. The changes to the planning regulations now require the goals, objectives, performance measures and targets of the Highway Safety Improvement Program (HSIP), which includes the SHSP, to be integrated into the LRTPs either directly or by reference. However, the specific priorities, strategies, countermeasures and projects of the HSIP are not required to be integrated. We continue to strongly encourage their incorporation where appropriate. {23 CFR 450.306(b)(2), (d)(4)(ii); 23 CFR 324(h)}

The link to FDOT's 2016 SHSP is: <u>http://www.fdot.gov/safety/SHSP2012/FDOT_2016SHSP_Final.pdf</u>

<u>Freight:</u> Florida's MPOs have been proactive in assessing and incorporating their freight needs. Freight shippers and providers of freight transportation services have been required to be incorporated into the stakeholder outreach that the MPO uses throughout the planning process and the LRTP to address the projected demand of goods transportation on the network. Changes to the planning requirements now also encourage the consultation of agencies and officials planning for freight movements. With the National Highway Freight Program a core funding category of federal funds, having a solid basis for incorporating freight needs and projecting the freight demands will be key to the LRTP's success for meeting its regional vision for the goods movement throughout the area. Additionally, the planning regulations now require the goals, objectives performance measures and targets of the State Freight Plan to be integrated into the LRTPs either directly or by reference. While freight is one of the planning factors, it deserves special emphasis, and will need to play a more prominent role in future LRTPs. The MPOs need to show a concerted effort to incorporate freight stakeholders and strategies into the next LRTP. {23 CFR 450.306(b)(4), (b)(6); 23 CFR 450.316(a); 23 CFR 450.324 (b), (f)(1), (f)(5)}

Environmental Mitigation/Consultation: For highway projects, the LRTP must include a discussion on the types of potential environmental mitigation activities and potential areas to carry out these activities. The environmental mitigation discussion in the LRTP must be developed in consultation with Federal, State and Tribal wildlife, land management and regulatory agencies. The LRTP discussion can be at a system-wide level to identify areas where mitigation may be undertaken (perhaps illustrated on a map) and what kinds of mitigation strategies, policies and/or programs may be used when these environmental mitigation needs and opportunities that individual transportation projects might take advantage of later. MPOs should be aware that the use of ETDM alone is not environmental mitigation. The use of ETDM is considered project screening and is not a system-wide review of the planning area. Documentation of the consultation with the relevant agencies should be maintained by the MPO. {23 CFR 450.324(f)(10)}

Congestion Management Process: The management of congestion has played an increasing role in the operations of transportation networks. One of the key activities of the process is to evaluate the effectiveness of the strategies the process produces. The MPO must demonstrate that the congestion management process is incorporated into the planning process. The process the MPO uses can be documented separately or in conjunction with the LRTP. The process is required to: 1) provide for the safe and effective integrated management and operations of the transportation network; 2) identify the acceptable level of performance; 3) identify methods to monitor and evaluate performance; 4) define objectives; 5) establish a coordinated data collection program; 6) identify and evaluate strategy benefits; 7) identity an implementation schedule; and 8) periodically assess the effectiveness of the strategies. The congestion management process should result in multimodal system measures and strategies that are reflected in the LRTP and TIP. The new planning requirements provide for the optional development of a Congestion Management Plan (CMP) that includes projects and strategies that will be considered in the TIP. This optional plan is different than documenting the processes that the MPO uses to address the congestion management. The CMP, if used, needs to 1) develop regional goals, 2) identify existing transportation services and commuter programs, 3) identify proposed projects, and 4) be developed in consultation with entities that provide job access reverse commute or jobrelated services to low-income individuals. {23 CFR 450.322}

Americans with Disabilities Act (ADA) Transition Plans: Government agencies with 50 or more employees that have control over pedestrian rights of way (PROW) must have transition plans for ADA. Agencies with less than 50 employees that have control over PROW must have an ADA Program Access Plan, describing how they provide access for those with disabilities to programs, services and activities. MPOs that are a part of a public agency that has these responsibilities need to have a heightened awareness for these responsibilities and plans. However, all MPOs play an important role in ADA compliance by assisting agencies with sidewalk inventories, gap studies, etc. MPOs can also go a good deal further, but should at a minimum serve as a resource for information and technical assistance in local government compliance with ADA. {28 CFR 35.105; 28 CFR 35.150(d)}

Administrative Topics

LRTP Documentation/Final Board Approval: The date the MPO Board adopts the LRTP is the effective date of the plan. The contents of the product that the MPO adopts on that date includes at a minimum: 1) the current and projected demand of persons and goods; 2) existing and proposed facilities that serve transportation functions; 3) a description of performance measures and targets; 4) a system performance report; 5) operational and management strategies; 6) consideration of the results of the congestion management process; 7) assessment of capital investment and other strategies to preserve existing and future infrastructure; 8) transportation and transit enhancement activities; 9) description of proposed improvements in sufficient detail to develop cost estimates; 10) discussion of potential environmental mitigation strategies and areas to carry out the activities; 11) a cost feasible financial plan that demonstrates how the proposed projects can be implemented and includes system level operation and maintenance revenues and costs; and 12) pedestrian walkway and bicycle transportation facilities which are required to be considered, where appropriate, in conjunction with all new construction and reconstruction of transportation facilities, except where bicycle and pedestrian use are not permitted. FHWA and FTA expect that at the time the MPO Board adopts the LRTP, a

substantial amount of LRTP analysis and documentation will have been completed, and all final documentation will be available for distribution no later than 90 days after the plan's adoption. The Board and its advisory committees, as well as the public, should have periodically had opportunities to review and comment on products from interim tasks and reports that culminated into what is referred to as the final Plan. Finalizing the LRTP and its supporting documentation is the last activity in a lengthy process. All final documents are required to be made readily available for public review and to be made available electronically. The final document(s) should be posted online and available through the MPO office no later than 90 days after adoption date. The MPOs' schedules for this round of LRTP development are expected to allow ample time for the Board to adopt the final LRTP product no later than 5 years from the MPOs' adoption of the previous LRTP. These adoption dates have recently been confirmed with each MPO. {23 CFR 450.324 (a), (c), (f), (k)}

LRTP & STIP/TIP Consistency: The STIP and TIPs must be consistent with the relevant LRTPs as they are developed. FHWA and FTA staff will be checking for this consistency during the STIP approval process. The results of previous reviews indicate that emphasis is still needed to ensure that projects are accurately reflected in both the TIP and STIP and that these projects are flowing from and are found to be consistent with the MPO's LRTP. Additionally, when amendments to the STIP/TIP are made, the projects must also be consistent with the LRTP from which they are derived. When STIP/TIP amendments are received by FHWA and FTA, they will be reviewed for consistency with the applicable LRTP. Projects with inconsistencies between the STIP/TIP and the respective LRTP will not be approved for use of federal funds or federal action until the issue is addressed. {23 CFR 450.330; 23 CFR 450.218(b)}.

New Requirements

This section describes topics that may not currently be required by federal laws and rules to be addressed in LRTPs. As such, MPOs are not required to include these considerations in their current planning processes and plans. However, they will be required to be addressed for the next LRTP.

<u>New Planning Factors</u>: The MPO is required to address several planning factors as a part of its planning processes. The degree of consideration and analysis of the factors should be based on the scale and complexity of the area's issues and will vary depending on the unique conditions of the area. Efforts should be made to think through and carefully consider how to address each factor. There are two new planning factors that need to be considered in the next LRTPs: 1) improving the resiliency and reliability of the transportation system and reducing or mitigating stormwater impacts of surface transportation; and 2) enhancing travel and tourism. Florida has a strong history of proactively addressing these transportation areas. These experiences can be drawn upon to incorporate the new factors into the planning processes. {23 CFR 450.306(b)9, (b)(10), (c)}

<u>Transportation Performance Management:</u> As funding for transportation capacity projects becomes more limited, increasing emphasis will be placed on maximizing the efficiency and effectiveness of our current transportation system and the resources that build and maintain the system. As such, a performance-based approach to transportation decision making will be required for the FDOT and MPOs. As the MPOs and FDOT are aware, the performance measures required to be addressed in the LRTPs are documented in final rules that were published in the Federal Register on March 15, 2016 and January 18, 2017. The MPOs will set their targets

in accordance with the schedule established in these final rules. FDOT and the MPOs have flexibility as to the documentation and process used for setting the targets, as long as the targets are made publicly available once they are set. The next LRTPs (when updated or amended after May 27, 2018) will be required to describe the performance measures and the targets the MPO has selected for assessing the performance of the transportation system.

A system performance report will also be required to be included in the LRTPs. The report is a tool that evaluates and updates the condition of the transportation system in relation to the performance measures and targets. While guidance is still being developed, the report would include for each performance measure information such as: the target set; the baseline condition at the start of the evaluation cycle; the progress achieved in meeting the targets; and a trend-type comparison of progress with previous performance reports. Depending on the timing of the LRTP, the date of the target setting, and length of the evaluation cycle, the LRTPs initially amended/updated after May 27, 2018 may not have a full cycle of specific information to include. However, the LRTPs need to include the data that is available and discuss how the MPO plans to use the full information once it does become available. We recognize that these initial LRTPs will be developed during a transition period, and commit to working with the MPOs to ensure that the regulations are reasonably being addressed. {23 CFR 450.306(d)(4); 23 CFR 450.324(f)(3), (f)(4)}

For more TPM information and the tools tailored for Florida partners, please go to: <u>https://www.fhwa.dot.gov/fldiv/tpm.cfm</u>

<u>Multimodal Feasibility</u>: The transportation plan shall include both long-range and short-range strategies/actions that provide for the development of an integrated multimodal transportation system (including accessible pedestrian walkways and bicycle transportation facilities) to facilitate the safe and efficient movement of people and goods in addressing current and future transportation demand. {23 CFR 450.324}

<u>Transit Asset Management:</u> The MPO is required to set performance targets for each performance measure, per 23 CFR 450.306(d). Those performance targets must be established 180 days after the transit agency established their performance targets. Transit agencies are required to set their performance targets by January 1, 2017. If there are multiple asset classes offered in the metropolitan planning area, the MPO should set targets for each asset class. Planning for TAM/Roles and Responsibilities for MPOs and State DOTs can be found on the FTA website: <u>https://cms.fta.dot.gov/sites/fta.dot.gov/files/planning-tam-fact-sheet.pdf</u>

Emerging Issues

This section describes topics that may not currently be required by federal laws and rules to be addressed in LRTPs. As such, MPOs are not required to include these considerations in their current planning processes and plans. These issues are receiving considerable attention in national discussions. Each MPO has the discretion to determine whether to address these emerging topics in their LRTP at this time and the appropriate level of detail. Beginning to address these issues early on may potentially minimize the level of effort needed to achieve future compliance.

<u>Mobility on Demand (MOD)</u>: Mobility on Demand (MOD) is an innovative, user-focused approach which leverages emerging mobility services, integrated transit networks and operations, real-time data, connected travelers, and cooperative Intelligent Transportation Systems (ITS) to allow for a more traveler-centric, transportation system- of-systems approach, providing improved mobility options to all travelers and users of the system in an efficient and safe manner. Automated vehicles (AV), now being called Automated Driving Systems (ADS) and Connected Vehicles (CV) are two components of the overall MOD model.

ADS (also known as self-driving, driverless, or robotic) are vehicles in which some aspect of vehicle control is automated by the car. For example, adaptive cruise control, where the vehicle automatically speeds up, slows down, or stops in response to other vehicle movements in the traffic stream is an automated vehicle function. Connectivity is an important input to realizing the full potential benefits and broad-scale implementation of automated vehicles. The preliminary five-part formal classification system for ADS is:

- Level 0: The human driver is in complete control of all functions of the car.
- Level 1: A single vehicle function is automated.
- Level 2: More than one function is automated at the same time (e.g., steering and acceleration), but the driver must remain constantly attentive.
- Level 3: The driving functions are sufficiently automated that the driver can safely engage in other activities.
- Level 4: The car can drive itself without a human driver

CV includes technology that will enable cars, buses, trucks, trains, roads and other infrastructure, and our smartphones and other devices to "talk" to one another. Cars on the highway, for example, would use short-range radio signals to communicate with each other so every vehicle on the road would be aware of where other nearby vehicles are. Drivers would receive notifications and alerts of dangerous situations, such as someone about to run a red light as they're nearing an intersection or an oncoming car, out of sight beyond a curve, swerving into their lane to avoid an object on the road.

Rapid advances in technology mean that these types of systems may be coming on line during the horizon of the next LRTPs. While these technologies when fully implemented will provide more opportunities to operate the transportation system better, the infrastructure needed to do so and the transition time for implementation is an area that the MPO can start to address in this next round of LRTP updates.

Resources for additional information:

Mobility on Demand: https://www.its.dot.gov/factsheets/pdf/MobilityonDemand.pdf Autonomous Vehicles: https://www.its.dot.gov/research_areas/pdf/WhitePaper_automation.pdf Connected Vehicles: https://www.its.dot.gov/cv_basics/index.htm Transportation Planning Capacity Building Connected Vehicle Focus Area: https://planning.dot.gov/focus_connectedVehicle.asp

Proactive Improvements

This section describes topics that are not currently required by federal laws and rules to be addressed in LRTPs nor are they required by the May 27, 2016 regulation changes. As such, MPOs are not required to include these considerations in their current planning processes and plans. These areas are intended to be a proactive change in the LRTPs to help Florida continue to make positive strides in long range planning.

<u>New Consultation</u>: There are two new types of agencies that the MPO should consult with when developing the LRTPs: agencies that are responsible for tourism and those that are responsible for natural disaster risk reduction. These consultations are a natural evolution of implementing the new planning factors for which Florida has experience in doing. {23 CFR 450.316(b)}

Summary of Public Involvement Strategies: Seeking out and considering the needs of traditionally underserved populations is a key part of any public involvement process. When the MPO carries out stakeholder involvement, they may use a variety of strategies. These strategies ultimately demonstrate that their planning process is consistent with Title VI and other federal anti-discrimination provisions in the development of the LRTP. In order to clearly demonstrate this consistency, the MPOs should summarize the outreach information. This information should be derived from the MPO's public involvement plan elements. The public involvement summary should be supported by more detailed information, such as the specific strategies used, feedback received and feedback responses, findings, etc. The detailed information should then be referenced and included in the form of a technical memorandum or report that can be appended to the LRTP, or included in a separate, standalone document that is also available for public review in support of the LRTP. {23 CFR 450.316(a)(1)(vii)}

Impact Analysis/Data Validation: In accordance with Title VI, MPOs need to have and document a proactive, effective public involvement process that includes outreach to low income, minorities and traditionally underserved populations, as well as all other citizens of the metropolitan area, throughout the transportation planning process. Using this process, the LRTP needs to document the overall transportation needs of the metropolitan area and be able to demonstrate how public feedback and input helped shape the resulting plan. Where some MPOs struggle in using data to assess likely impacts, other MPOs attempt to use data to assess the needs. Some look at a dollar spread among minority/non-minority areas to determine equity. This approach is probably not the best method to use, since higher dollar amounts might indicate capacity projects when the community needs more pedestrian connectivity, for example. We suggest using the data tools found at <u>https://www.fhwa.dot.gov/environment/environmental_justice/resources/data_tools/</u>. Additionally, as time passes it becomes more important to validate the 2010 census data being used. School Boards, emergency service agencies, tax rolls and staff knowledge are all good sources to ensure data quality. {23 CFR 450.316(a)(1)(vii); 23 CFR 420.324(e)}

<u>FDOT Revenue Forecast</u>: To help stakeholders understand the financial information and analysis that goes into identifying the revenues for the MPO, we recommend the MPO include FDOT's Revenue Forecast in the appendices that support the LRTP. {23 CFR 450.324(f)(11)(ii)}

<u>Sustainability and Livability in Context</u>: We encourage the MPO to implement strategies that contribute to comprehensive livability programs and advance projects with multimodal connectivity. MPO policies and practices that support an integrated surface transportation system for all users that is efficient, equitable, safe, and environmentally sustainable will improve transportation choices and connectivity for all users especially those walking and bicycling. Building partnerships with traditional and nontraditional stakeholders will facilitate the development and implementation of transportation projects that improve integration, connectivity, accessibility, safety and convenience for all users. The MPOs are encouraged to identify and suggest contextual solutions for appropriate transportation corridors within their area and utilize the flexibilities provided in the federal funding programs to improve the transportation network for all users. {23 CFR 450.306(b)}

<u>Scenario Planning</u>: The new planning requirements describe using multiple scenarios for consideration by the MPO in the development of the LRTP. If the MPO chooses to develop these scenarios, they are 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, a scenario that improves the baseline conditions, revenue constrained scenarios, and include estimated costs and potential revenue available to support each scenario. {23 CFR 450.324(i)}

Appendix L: LRTP Checklist

FDOT LRTP Review Checklist

	Section A- Federal Requirements	Where and How Addressed
<u>23 C.F</u>	R. Part 450 – Planning Assistance and Standards	
A-1	Does the plan cover a 20-year horizon from the date of adoption?	<i>Martin in Motion</i> was adopted on October 19, 2020 has a planning horizon of 2045 that covers a 25-year timeframe from 2021 to 2045.
	Please see the "Administrative Topics" section of the <u>2018 FHWA LRTP Expectations Letter</u> for guidance.	
	23 C.F.R. 450.324(a)	

	Section A- Federal Requirements	Where and How Addressed
A-2	Does the plan address the planning factors described in 23 C.F.R. 450.306(b)?	<u>Fiscal constraint</u> <i>Project Phase</i> – All roadway projects that are part of the Strategic Intermodal System (SIS) as well as Non-
	Please see the "Fiscal Constraint" section of the <u>2018</u> <u>FHWA LRTP Expectations Letter</u> for guidance.	SIS facilities include funding for design, construction, and right-of-way phases. Appendix H contains itemized list of SIS and Non-SIS projects with cost and phase information. The footnotes describe the sources of funds used to support various project
	Please see the "New Requirements" section of the <u>2018</u> <u>FHWA LRTP Expectations Letter</u> for guidance.	phases. <i>Full Time Span of LRTP (1st 5 Years)</i> – Current TIP for
	Risk and Resiliency Does the plan improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation?	FY 2021/22 – FY 2024/25 was adopted in June 2020. The 2045 Needs Assessment re-evaluated all the project needs and adjusted them including those in the first five-year time band. Technical Memorandum #7 provides documentation and project lists. Chapter
	Travel and Tourism Does that plan enhance travel and tourism?	5 shows 2045 Needs Plan cost for the entire 25-year period from 2021 to 2025. Revenue estimates included in Chapter 6 – Financial Resources cover
		funds available for the entire 25-year period from 2021 to 2025.
	Please see the "Proactive Improvements" section of the <u>2018 FHWA LRTP Expectations Letter</u> for guidance.	New Requirements Risk and Resiliency - As part of Martin in Motion
	23 C.F.R. 450.324(a)	planning process, the Martin MPO consulted with Coastal Management Coordinator (Jessica Garland), Public Works Department, Martin County and FDOT to incorporate risk and resiliency in the LRTP. Technical Memorandum #6 provides detailed documentation along with map. Project prioritization process in Chapter 7 identifies vulnerability to sea level rise and extreme weather events as one of the evaluation criteria. <i>Travel and Tourism</i> - Martin MPO consulted with Nerissa Okiye, Tourism Director, Martin County Office of Tourism & Marketing to incorporate their needs as it relates to transportation. Technical Memorandum #6 provides a detailed discussion on travel and tourism. One of the 2045 Needs Project – Jensen Beach Route was included to provide access to the beach and encourage tourism. Several greenways and trails projects are included in <i>Martin in Motion</i> to provide access to County and State Parks as well as recreational areas. A water taxi service was included in the 2045 Needs Plan to provide access to St. Lucie Preserve State Park to promote tourism.

	Section A- Federal Requirements	Where and How Addressed
A-3	Does the plan include both long-range and short-range strategies/actions that provide for the development of an integrated multimodal transportation system (including accessible pedestrian walkways and bicycle transportation facilities) to facilitate the safe and efficient movement of people and goods in addressing current and future transportation demand? Please see the "Technical Topics" section of the <u>2018</u> <u>FHWA LRTP Expectations Letter</u> for guidance.	Chapter 9 describe projects included in the Cost Feasible Plan for different modes to be implemented over a period of 25 years. Appendix H includes itemized list of transit, roadway, complete streets, non-motorized transportation, TSM&O, resiliency, aviation, "other" (park-and-ride) and freight projects. Further, projects are stratified into four time bands; 2021-2025, 206-2030, 2034-2035, and 2036-2045 for implementation to ensure current and future transportation demand is met using both long- and short-range multimodal strategies. Chapter 9 (Figure 7-9) identifies an extensive network of non-motorized
A-4	23 C.F.R. 450.324(b) Was the requirement to update the plan at least every	facilities through out the county. The 2040 LRTP was adopted in December 2015. The
~ -	five years met?	2045 LRTP – <i>Martin in Motion</i> is scheduled be adopted on September 21, 2020.
	Please see the "Administrative Topics" section of the <u>2018 FHWA LRTP Expectations Letter</u> for guidance. 23 C.F.R. 450.324(c)	Project information was presented to the public, MPO Advisory Committees and the Policy Board throughout the planning process as document in Chapter 2.
A-5	Did the MPO coordinate the development of the metropolitan transportation plan with the process for developing transportation control measures (TCMs) in a State Implementation Plan (SIP)?	Florida is currently in attainment of all air quality standards set by the EPA, July 31, 2020 (Source: <u>https://www.fdot.gov/planning/policy/bikeped/cleana</u> <u>ir/default.shtm</u>).
	23 C.F.R. 450.324(d)	
A-6	Was the plan updated based on the latest available estimates and assumptions for population, land use, travel, employment, congestion, and economic activity?	Chapters 4 and 5 as well as Technical Memorandum 4 – Travel Demand Forecasting and Technical Memorandum 5 - CMP Update provide a detailed analysis of existing and future land use, travel patterns
	Please see the "Proactive Improvements" section of the <u>2018 FHWA LRTP Expectations Letter</u> for guidance.	and demand, employment, traffic congestion, and economic activity. The Treasure Coast Regional Planning Model (TCRPM 5.0) is an activity-based model with base year 2015 and horizon year 2045
	23 C.F.R. 450.324(e)	that served as the basis of the analyses included in the above document.

	Section A- Federal Requirements	Where and How Addressed
A-7	 Does the plan include the current and projected transportation demand of persons and goods in the metropolitan planning area over the period of the plan? Please see the "Technical Topics" section of the <u>2018</u> <u>FHWA LRTP Expectations Letter</u> for guidance. Please see the "Administrative Topics" section of the <u>2018 FHWA LRTP Expectations Letter</u> for guidance. 	Chapter 5 and Technical Memorandum 4 – Travel Demand Forecasting provide a detailed analysis of existing and future travel patterns and travel demand, in Martin County over the next 25 years. The Treasure Coast Regional Planning Model (TCRPM 5.0) is an activity-based model with base year 2015 and horizon year 2045 that served as the basis of the travel demand forecasting. Technical Memorandum 6 – Additional Elements has a freight section that addresses goods movement.
	23 C.F.R. 450.324(f)(1)	
A-8	Does the plan include existing and proposed transportation facilities (including major roadways, public transportation facilities, intercity bus facilities, multimodal and intermodal facilities, nonmotorized transportation facilities, and intermodal connectors that should function as an integrated metropolitan transportation system, giving emphasis to those facilities that serve important national and regional transportation functions over the period of the transportation plan?	Chapter 4 provides a description of the existing multimodal transportation network in Martin County while Chapter 9 includes transit, roadway, complete streets, and non-motorized projects. Martin in Motion includes all the SIS projects that provide connectivity to regional and national transportation network. Chapter 3 of <i>Martin in Motion</i> includes goals and objectives consistent with Florida Transportation Plan – Next 50 Years and national goals stated in the FAST Act.
A-9	23 C.F.R. 450.324(f)(2) Does the plan include a description of the performance	Chapter 7, Section 7.7 includes System Performance
	measures and performance targets used in assessing the performance of the transportation system in accordance with §450.306(d)?	Report based on FDOT's template for MPOs, July 2020.
	Please see the "New Requirements" section of the <u>2018</u> <u>FHWA LRTP Expectations Letter</u> for guidance.	
	23 C.F.R. 450.324(f)(3)	

	Section A- Federal Requirements	Where and How Addressed
A-10	Does the plan include a system performance report and subsequent updates evaluating the condition and performance of the transportation system with respect to the performance targets described in §450.306(d), including progress achieved by the metropolitan planning organization in meeting the performance targets in comparison with system performance recorded in previous reports, including baseline data?	Chapter 7, Section 7.7 includes System Performance Report based on FDOT's template for MPOs, July 2020.
	Please see the "New Requirements" section of the <u>2018</u> <u>FHWA LRTP Expectations Letter</u> for guidance. 23 C.F.R. 450.324(f)(4)(i)	

Section A- Federal Requirements

A-11 Did the MPO integrate in the metropolitan transportation planning process, directly or by reference, the goals, objectives, performance measures, and targets described in other State transportation plans and transportation processes, as well as any plans developed under 49 U.S.C. chapter 53 by providers of public transportation, required as part of a performance-based program including:

(i) The State asset management plan for the NHS, as defined in 23 U.S.C. 119(e) and the Transit Asset Management Plan, as discussed in 49 U.S.C. 5326;

(ii) Applicable portions of the HSIP, including the SHSP, as specified in 23 U.S.C. 148;

(iii) The Public Transportation Agency Safety Plan in 49 U.S.C. 5329(d);

(iv) Other safety and security planning and review processes, plans, and programs, as appropriate;

(v) The Congestion Mitigation and Air Quality Improvement Program performance plan in 23 U.S.C. 149(I), as applicable;

(vi) Appropriate (metropolitan) portions of the State Freight Plan (MAP-21 section 1118);

(vii) The congestion management process, as defined in 23 CFR 450.322, if applicable; and

(viii) Other State transportation plans and transportation processes required as part of a performance-based program.

Please see the "New Requirements" section of the <u>2018</u> <u>FHWA LRTP Expectations Letter</u> for guidance.

23 C.F.R. 450.306 (d)(4)

Where and How Addressed

Chapter 3, Table 3-1 includes 63 performance measures corresponding to Martin in Motion's goals, objectives, and evaluation criteria. Out of these 63 performance measures, 29 are from FAST Act. In addition, Chapter 3, Table 3-2 demonstrates relationship and consistency between Martin in Motion's goals and objectives and performance measures and Florida Transportation Plan - Next 50 Years goals as well as FAST Act's national goals. Chapter 7, Section 7.7 System Performance Report and includes performance targets for highway safety, system performance, bridge and pavement conditions, and transit asset management and safety and shows consistency between FDOT and MPO. Technical Memorandum 5 – CMP Update, Chapter 2 illustrates consistency between Martin in Motion and CMP goals.

	Section A- Federal Requirements	Where and How Addressed
A-12	Does the plan include operational and management strategies to improve the performance of existing transportation facilities to relieve vehicular congestion and maximize the safety and mobility of people and goods? Please see the "Technical Topics" section of the <u>2018</u>	Technical Memorandum #5 – CMP Update was completed as part of <i>Martin in Motion</i> and integrated in the cost feasible plan. The CMP Updated addresses recurring congestion, unanticipated non-recurring congestion as well as planned event-based congestion.
	FHWA LRTP Expectations Letter for guidance.	
	23 C.F.R. 450.324(f)(5)	
A-13	Does the plan include consideration of the results of the congestion management process in TMAs, including the identification of SOV projects that result from a congestion management process in TMAs that are nonattainment for ozone or carbon monoxide?	Chapter 5, Section 5.1 Data Driven Analysis provides a summary of congested network analysis and results that were considered to develop the 2045 Needs Assessment and Needs Plan. Further, congestion management process documented in Technical Memorandum #5 – CMP Update was completed as
	Please see the "Technical Topics" section of the <u>2018</u> <u>FHWA LRTP Expectations Letter</u> for guidance.	part of <i>Martin in Motion</i> and integrated in the cost feasible plan.
	23 C.F.R. 450.324(f)(6)	
A-14	Does the plan include assessment of capital investment and other strategies to preserve the existing and projected future metropolitan transportation infrastructure, provide for multimodal capacity increases based on regional priorities and needs, and reduce the vulnerability of the existing transportation infrastructure to natural disasters? 23 C.F.R. 450.324(f)(7)	Capital investments for roadway, transit, complete streets, TSM&O, "other projects", aviation and non- motorized projects were identified in the multimodal cost feasible plan utilizing federal, state, and local funds shown in Chapter 6 Financial Resources and FDOT guidance in Appendix D and Appendix E. Further, Appendix H shows mode specific funding sources for projects included in the cost feasible plan. Per FDOT's Revenue Forecasting Guidebook in Appendix D, funds are set-aside and available for maintenance and operations.
A-15	Does the plan include transportation and transit enhancement activities, including consideration of the role that intercity buses may play in reducing congestion, pollution, and energy consumption in a cost-effective manner and strategies and investments that preserve and enhance intercity bus systems, including systems that are privately owned and operated, and including transportation alternatives, as defined in 23 U.S.C. 101(a), and associated transit improvements, as described in 49 U.S.C. 5302(a)? 23 C.F.R. 450.324(f)(8)	<i>Martin in Motion,</i> Chapter 7 includes privately funded intercity rail transit projects, such as Brightline/Virgin Trains USA station, double tracking of FEC rail bridge over St. Lucie river. Section 7.6 of Chapter 7 includes Enhanced Transit Scenario evaluation including its impact on VMT, VHT, speeds and GHG emission.

	Section A- Federal Requirements	Where and How Addressed
A-16	Does the plan describe all proposed improvements in sufficient detail to develop cost estimates?	Chapter 5, Section 5.5 Project Cost Estimates describes the methodology used to develop cost estimates for different modes and project categories.
	Please see the "Fiscal Constraint" section of the <u>2018</u> <u>FHWA LRTP Expectations Letter</u> for guidance.	
	23 C.F.R. 450.324(f)(9)	
A-17	Does the plan include a discussion of types of potential environmental mitigation activities and potential areas to carry out these activities, including activities that may have the greatest potential to restore and maintain the environmental functions affected by the metropolitan transportation plan?	Chapter 7, Section 7.5 Environmental Mitigation and ETDM includes the type of environmental mitigation activities and potential areas to carry them out. List of plans and data sources were reviewed specific to the development of the environmental mitigation documentation.
	Please see the "Technical Topics" section of the <u>2018</u> <u>FHWA LRTP Expectations Letter</u> for guidance. 23 C.F.R. 450.324(f)(10)	
A-18	Does the plan include a financial plan that demonstrates how the adopted transportation plan can be implemented?	Chapter 6 "Financial Resources" provides a summary of the financial plan including revenue reasonably expected to be available. Martin County's Office of Management and Budget (OMB) reviewed
	Please see the "Fiscal Constraint" section of the <u>2018</u> FHWA LRTP Expectations Letter for guidance.	assumptions for revenue generated from local sources and provided input via email correspondence in early May 2020. Steering Committee and MPO Advisory Committees as well as the MPO Board discussed the
	23 C.F.R. 450.324(f)(11)	financial plan on May 29, June 1, 3, 10 and June 15 respectively.
A-19	Does the plan include system-level estimates of costs and revenue sources to adequately operate and maintain Federal-aid highways and public transportation?	Chapter 6, Financial Resources, Table 6-10 shows revenue sources and project funding eligibility. Appendix H shows revenue sources used to maintain existing Martin County Public Transportation, MARTY service. FDOT's Revenue Forecasting Guidebook included in Appendix D explains availability of funds
	23 C.F.R. 450.324(f)(11)(i)	to adequately operate and maintain Federal-aid highway system.

	Section A- Federal Requirements	Where and How Addressed
A-20	Did the MPO, public transportation operator(s), and State cooperatively develop estimates of funds that will be available to support metropolitan transportation plan implementation, as required under §450.314(a)? Please see the "Proactive Improvements" section of the <u>2018 FHWA LRTP Expectations Letter</u> for guidance.	Chapter 6 Financial Resources explains methodology and assumptions used to develop revenue forecast for <i>Martin in Motion</i> , which is consistent with FDOT and MPOAC guidance included in Appendices D, E, and F. 2045 Revenue Forecast was reviewed by Martin MPO, FDOT, and Martin County in April, May and June 2020.
A 01	23 C.F.R. 450.324(f)(11)(ii)	The cost feasible plan companyed of Martin in Martin
A-21	Does the financial plan include recommendations on additional financing strategies to fund projects and programs included in the plan, and, in the case of new funding sources, identify strategies for ensuring their availability? 23 C.F.R. 450.324(f)(11)(iii)	The cost feasible plan component of Martin in Motion is based on revenue estimates that can be reasonably expected to be available in future as explained in Chapter 6 Financial Resources. Martin in Motion does not identify "new funding sources" to implement projects included in the cost feasible plan. However, Chapter 7, Section 7.6 Scenario Planning discusses potential policy options that the MPO may want to consider due anticipated shortfall in future transportation funding resulting from Alternative Fuel Vehicles (AFVs) and Autonomous Vehicles (AVs).
A-22	Does the plan's revenue and cost estimates use inflation rates that reflect year of expenditure dollars, based on reasonable financial principles and information, developed cooperatively by the MPO, State(s), and public transportation operator(s)?	Appendix C and Appendix H includes cost estimates for roadway, transit, complete streets, "other projects" and non-motorized projects, including a cost estimate in present day value that is then converted to year of expenditure (YOE) using inflation factors provided by FDOT are shown in Appendix D.
	23 C.F.R. 450.324(f)(11)(iv)	
A-23	Does the financial plan address the specific financial strategies required to ensure the implementation of TCMs in the applicable SIP?	Florida is currently in attainment of all air quality standards set by the EPA, July 31, 2020 (Source: <u>https://www.fdot.gov/planning/policy/bikeped/cleana</u> <u>ir/default.shtm</u>).
	23 C.F.R. 450.324(f)(11)(vi)	
A-24	Does the plan include pedestrian walkway and bicycle transportation facilities in accordance with 23 U.S.C.17(g)?	Chapter 7, Figure 7-8 shows complete streets project and 7-9 shows non-motorized projects included in <i>Martin in Motion</i> . Appendix H provide an itemized project description. The total funds set-aside for non- motorized and complete streets projects in cost
	23 C.F.R. 450.324(f)(12)	feasible plan is approximately \$95 million (YOE).

	Section A- Federal Requirements	Where and How Addressed
A-25	Does the plan integrate the priorities, goals, countermeasures, strategies, or projects for the metropolitan planning area contained in the HSIP, including the SHSP, the Public Transportation Agency Safety Plan, or an Interim Agency Safety Plan? Please see the "Technical Topics" section of the <u>2018</u> <u>FHWA LRTP Expectations Letter</u> for guidance.	Chapter 3, Martin in Motion's Safety Goal - A safe multimodal transportation system that meets the needs of all the users with its objectives and performance measures integrates FDOT's and MARTY's safety goals and targets.
	23 C.F.R. 450.324(h)	
A-26	Does the plan identify the current and projected transportation demand of persons and goods in the metropolitan planning area over the period of the plan? 23 C.F.R. 450.324(g)(1)	Chapter 4 and Technical Memorandum #4 – Travel Demand Forecasting document procedures and methodology used to identify roadway deficiencies and travel demand using the regional travel demand model (TCRPM 5.0) for the base year and future year.
A-27	Did the MPO provide individuals, affected public agencies, representatives of public transportation employees, public ports, freight shippers, providers of freight transportation services, private providers of transportation (including intercity bus operators, employer-based commuting programs, such as carpool program, vanpool program, transit benefit program, parking cashout program, shuttle program, or telework program), representatives of users of public transportation, representatives of users of pedestrian walkways and bicycle transportation facilities, representatives of the disabled, and other interested parties with a reasonable opportunity to comment on the transportation plan using the participation plan developed under §450.316(a)?	Chapter 2 provides a summary description of public engagement activities conducted during the planning process, which is consistent with the LRTP-specific Public Involvement Plan (PIP) included in Appendix A. The PIP was approved in June 2019. Section 7.0 Identification of Key Stakeholders of the PIP provides relevant information for coordination. It should be noted that the LRTP-specific PIP is consistent with the MPO overall Public Involvement Plan (PIP).

23 C.F.R. 450.324(j)

	Section A- Federal Requirements	Where and How Addressed
A-28	Did the MPO publish or otherwise make readily available the metropolitan transportation plan for public review, including (to the maximum extent practicable) in electronically accessible formats and means, such as the World Wide Web? Please see the "Stakeholder and Coordination Input" section of the 2018 FHWA LRTP Expectations Letter for	The Martin MPO made the Draft Plan – <i>Martin in Motion</i> available for a 30-day public comment period starting August 20, 2020. This Plan was made available on the MPO's website (<u>www.martinmpo.com</u>) and the project website (<u>www.martininmotion.com</u>). The Draft 2045 Cost Feasible Plan was presented to the MPO Advisory Committees on June 1, 3, and 10
	guidance.	and to the MPO Policy Board on June 15. All these meetings were open to the public.
	Please see the "Administrative Topics" section of the <u>2018 FHWA LRTP Expectations Letter</u> for guidance.	
	23 C.F.R. 450.324(k), 23 C.F.R. 450.316(a)(1)(iv)	
A-29	Did the MPO provide adequate public notice of public participation activities and time for public review and comment at key decision points, including a reasonable opportunity to comment on the proposed metropolitan transportation plan?	Chapter 2, Appendices A and B describe in detail public outreach activities, project promotion and education strategies as well as meeting notification and various communication channels to used to engage the public throughout the planning process.
	Please see the "Stakeholder and Coordination Input" section of the <u>2018 FHWA LRTP Expectations Letter</u> for guidance.	
	23 C.F.R 450.316(a)(1)(i)	
A-30	In developing the plan, did the MPO seek out and consider the needs of those traditionally underserved by existing transportation systems such as low-income and minority households?	Technical Memorandum #9, Section 3.2 and Appendix A describes activities undertaken to ensure participation from Environmental Justice, Title VI, and traditionally underserved population groups.
	Please see the "Stakeholder and Coordination Input" section of the <u>2018 FHWA LRTP Expectations Letter</u> for guidance.	
	Please see the "Proactive Improvements" section of the 2018 FHWA LRTP Expectations Letter for guidance.	
	23 C.F.R 450.316(a)(1)(vii)	

	Section A- Federal Requirements	Where and How Addressed
A-31	Has the MPO demonstrated explicit consideration of and response to public input received during development of the plan? If significant written and oral comments were received on the draft plan, is a summary, analysis, and report on the disposition of the comments part of the final plan? Please see the "Stakeholder and Coordination Input" section of the <u>2018 FHWA LRTP Expectations Letter</u> for guidance.	Chapter 2 provides a summary description of public engagement activities conducted during the planning process, which is consistent with the LRTP-specific Public Involvement Plan (PIP) included in Appendix A. Appendix B includes a summary of public input received. Chapter 3 explains how public input was used to shape the vision statement, goals, and objective for <i>Martin in Motion</i> . Chapter 5 demonstrates that public input was one of the key components of the 2045 Needs Assessment.
A-32	 23 C.F.R. 450.316(a)(1)(vi) & 23 C.F.R. 450.316(a)(2) Did the MPO provide an additional opportunity for public comment if the final plan differs significantly from the version that was made available for public comment and raises new material issues which interested parties could not reasonably have foreseen from the public involvement efforts? Please see the "Stakeholder and Coordination Input" section of the 2018 FHWA LRTP Expectations Letter for guidance. 23 C.F.R 450.316(a)(1)(viii) 	To be addressed after the completion of the 30-day public comment period.
A-33	Did the MPO consult with agencies and officials responsible for other planning activities within the MPO planning area that are affected by transportation, or coordinate its planning process (to the maximum extent practicable) with such planning activities? Please see the "Proactive Improvements" section of the <u>2018 FHWA LRTP Expectations Letter</u> for guidance. 23 C.F.R. 450.316(b)	As described in Chapter 2 and Appendix A – PIP, the Martin MPO set up a Project Steering Committee comprising representatives from Martin County Growth Management Department, Martin County Public Works, City of Stuart and Florida Department of Transportation to guide the planning process. The Martin MPO also consulted with MARTY representative as well as other County Departments to address emerging issues identified in the FHWA Expectations Letter, January 2018.
A-34	If the MPO planning area includes Indian Tribal lands, did the MPO appropriately involve the Indian Tribal government(s) in the development of the plan? 23 C.F.R 450.316(c)	Martin County does not have any Indian Tribal lands.

	Section A- Federal Requirements	Where and How Addressed
A-35	If the MPO planning area includes Federal public lands, did the MPO appropriately involve Federal land management agencies in the development of the plan? 23 C.F.R 450.316(d)	Martin County includes Hobe Sound National Wildlife Refuge, which is managed by U.S. Wildlife Service as well as U.S. Army Corp of Engineers (USACOE) lands associated with the C44 canal. The LRTP-specific PIP included in Appendix A identified all the key stakeholders at the project outset. Communication was established via multiple channels to receive input from local, state, and federal agencies throughout the planning process. Further, Technical Memorandum #2 – Data Compilation and Review includes all relevant land use, transportation, and environmental plans to ensure consistency between various plans and <i>Martin in Motion</i> .
A-36	In urbanized areas that are served by more than one MPO, is there written agreement among the MPOs, the State, and public transportation operator(s) describing how the metropolitan transportation planning processes will be coordinated to assure the development of consistent plans across the planning area boundaries, particularly in cases in which a proposed transportation investment extends across those boundaries? 23 C.F.R. 450.314(e)	The Martin MPO is a signatory of the "Interlocal Agreement Creating the Treasure Coast Transportation Council (TCTC) for Regional Transportation Planning and Coordination," which serves as the forum for coordination and communication among the three Treasure Coast MPOs, FDOT and other agencies to address regional transportation planning issues. In addition, the MPO is a signatory of the "Intergovernmental Coordination and Review and Public Transportation Coordination Joint Participation Agreement," providing coordination between the MPO, FDOT and the public transportation operator (i.e. the Martin County Board of County Commissioners). It also provides a process of intergovernmental coordination through the Treasure Coast Regional Planning Council.

Section B- State Requirements

Where and How Addressed

Florida Statutes: Title XXVI – Public Transportation, Chapter 339, Section 175

B-1	Are the prevailing principles in s. 334.046(1), F.S. – preserving the existing transportation infrastructure, enhancing Florida's economic competitiveness, and improving travel choices to ensure mobility – reflected in the plan? ss.339.175(1), (5) and (7), F.S.	Martin in Motion's Infrastructure Maintenance and Congestion Management Goal with the goal statement - An efficient multimodal transportation system that supports economic growth and enhances the quality of life and corresponding objectives and performance measures reflects these principles. Chapter 3 states Martin in Motion's goals, objectives, and performance measures.
B-2	Does the plan give emphasis to facilities that serve important national, state, and regional transportation functions, including SIS and TRIP facilities? ss.339.175(1) and (7)(a), F.S.	Chapter 7, Figure 7-4 identifies SIS projects included in the Plan. Martin in Motion is consistent with FDOT's SIS Cost Feasible Plan and Multimodal Unfunded Needs Plan. The SIS project are included as separate line items for consistency and transparency.
B-3	Is the plan consistent, to the maximum extent feasible, with future land use elements and the goals, objectives, and policies of the approved comprehensive plans for local governments in the MPO's metropolitan planning area? ss.339.175(5) and (7), F.S.	Martin in Motion accommodates future travel demand resulting for population and employment growth as well as land use changes as described in Technical Memorandum 4 – Travel Demand Forecasting. The growth in travel demand is based on future land use, which is consistent with local comprehensive plan and policies. The future land use component was developed in consultation with the Martin County Growth Management Department. Further, <i>Martin in Motion</i> includes Village Parkway Extension project, which is included in the comprehensive plan and is privately funded.
B-4	Did the MPO consider strategies that integrate transportation and land use planning to provide for sustainable development and reduce greenhouse gas emissions? ss.339.175(1) and (7) F.S.	<i>Martin in Motion</i> includes four park and ride facilities at approximately \$6 million to promote carpooling/ vanpooling as travel demand management strategies. Chapter 7 provides details for some of the park and ride facilities. Further, scenario planning exercise discussed in Chapter 7, Section 7.6 evaluates impact of transit and emerging technologies in reducing GHG emission.
B-5	Were the goals and objectives identified in the Florida Transportation Plan considered? s.339.175(7)(a), F.S.	Chapter 3, Table 3-2 demonstrates relationship and consistency between Martin in Motion's goals and objectives and performance measures and Florida Transportation Plan - Next 50 Years goals.

	Section B- State Requirements	Where and How Addressed
B-6	Does the plan assess capital investment and other measures necessary to 1) ensure the preservation of the existing metropolitan transportation system, including requirements for the operation, resurfacing, restoration, and rehabilitation of major roadways and requirements for the operation, maintenance, modernization, and rehabilitation of public transportation facilities; and 2) make the most efficient use of existing transportation facilities to relieve vehicular congestion and maximize the mobility of people and goods? s.339.175(7)(c), F.S.	As stated in Chapter 6 Financial Resources and consistent with FDOT's Revenue Forecasting Guidebook in Appendix D, FDOT implements the Non-Capacity Program throughout the state and does not provide district-level revenue estimates. According to FDOT, the Department has estimated sufficient revenues to meet the Non-Capacity safety, preservation, and support objectives in each metropolitan area in the state. <i>Martin in Motion</i> cost feasible plan includes 37 corridors for TSM&O projects and has a set-aside or "box funds" of approximately \$69 million (YOE) over the next 20 to 25 years.
B-7	Does the plan indicate, as appropriate, proposed transportation enhancement activities, including, but not limited to, pedestrian and bicycle facilities, scenic easements, landscaping, historic preservation, mitigation of water pollution due to highway runoff, and control of outdoor advertising? s.339.175(7)(d), F.S.	Chapter 7, Figure 7-8 includes 17 complete streets projects comprising a 15-mile network. As
B-8	Was the plan approved on a recorded roll call vote or hand-counted vote of the majority of the membership present?	Martin in Motion is scheduled to be adopted on a recorded roll call vote on September 21, 2020 following a public hearing.
	s.339.175(13) F.S.	

Section C- Proactive Recommendations

Where and How Addressed

C-1	Does the plan attempt to improve the resilience and reliability of the transportation system or mitigate the impacts of stormwater on surface transportation? 23 C.F.R 450.306(b)(9)	Technical Memorandum 6 – Additional Elements includes a discussion on impacts of sea level rise and extreme weather events on the transportation network. Relevant local and state plans and studies related to this subject matter are summarized as well as maps from Martin County are included in a separate appendix. Flooding due to sea level rise and extreme weather events is also considered in evaluating and prioritizing projects as explained in <i>Martin in Motion</i> Chapter 7, Section 7.1.
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	Section C- Proactive Recommendations	Where and How Addressed
C-2	Does the plan proactively identify climate adaptation strategies including—but not limited to—assessing specific areas of vulnerability, identifying strategies to reduce emissions by promoting alternative modes of transportation, or devising specific climate adaptation policies to reduce vulnerability?	Technical Memorandum 6 – Additional Elements includes maps in a separate appendix that shows area vulnerable to flooding due to sea level rise and King Tides. <i>Martin in Motion</i> includes four park and ride facilities to provide non SOV travel and thereby reduce emissions.
		<i>Martin in Motion</i> , Chapter 7, Section 7.6 Scenario Planning provides a comparative evaluation of different strategies to reduce GHG emissions.
C-3	Do the plan consider the transportation system's accessibility, mobility, and availability to better serve an aging population?	<i>Martin in Motion</i> , Chapter 7, Section 7.4 provides equity analysis which demonstrates benefits received by elderly population from various types of transportation improvements include in the plan.
C-4	Does the plan consider strategies to promote inter- regional connectivity to accommodate both current and future mobility needs?	Chapter 4 describes existing and future travel patterns and transportation demand in the Treasure Coast Region. The TCRPM 5.0 includes regional traffic demand and identifies project needs across Martin and St. Lucie counties. Martin in Motion includes SIS projects serve regional mobility and connectivity.
C-5	Is the MPO considering the short- and long-term effects of population growth and or shifts on the transportation network?	Through scenario planning effort documented in Chapter 7, Section 7.6 the Martin MPO evaluated impacts of changes in transportation technology and mode shift. Further, 37 TSM&O projects included in the plan have approximately \$69 million (YOE) in "box funds" to address short- and long-term effects of population growth and/or shifts on the transportation network.

Appendix M: Public Comments (30-day Public Review Period)

No public comments were received during the public review period. The 2045 LRTP – *Martin in Motion* Report was made available on August 20, 2020 on the project website (<u>www.martininmotion.com</u>) and the Martin MPO's website (<u>www.martininpo.com</u>).

Appendix N: Approval of Martin in Motion

NOTICE OF PUBLIC HEARING FOR THE MARTIN METROPOLITAN PLANNING ORGANIZATION 2045 LONG RANGE TRANSPORTATION PLAN

Notice is hereby given that the Martin Metropolitan Planning Organization (MPO) 2045 Long Range Transportation Plan (LRTP) is scheduled to be adopted at the MPO meeting and public hearing scheduled for October 19, 2020 at 9:00 AM at the John F. & Rita M. Armstrong Wing of the Blake Library, located at 2351 SE Monterey Road, Stuart, Florida. The purpose of this Public Hearing will be to complete the Plan Adoption process for the MPO's 2045 LRTP. Once adopted, the 2045 LRTP will serve as the guide for developing and implementing major transportation improvements within Martin County. Improvements for all of the surface transportation modes planned in Martin County are to be addressed and will include the future highway needs, public transportation service, bicycle and pedestrian facilities, how to best fund needed transportation improvements, and other transportation subjects. Digital copies of this document are available on the project website www.martininmotion.com or the MPO website www.martinmpo.com. Comments may be sent via either of these websites and written comments may be sent to the Martin MPO at 3481 SE Willoughby Boulevard, Suite 101 Stuart, Florida 34994.

Public participation is solicited without regard to race, color, national origin, age, gender, religion, disability or family status. Persons with questions or concerns about nondiscrimination, or who require special accommodations under the American with Disabilities Act or language translation services (free of charge) should contact Ricardo Vazquez, Associate Planner (Title VI/Non-discrimination Contact) at (772) 223-7983 or rvazquez@martin.fl.us. Hearing impaired individuals are requested to telephone the Florida Relay System at #711.

Español: Si usted desea recibir esta información en español, por favor llame al 772-223-7983.

This notice dated: Oct 7, 2020 (date notice was completed) Publication date: Oct <u>9</u>, 2020 **Appendix O: Transit Safety Performance Targets**

RESOLUTION NUMBER #20-08

A RESOLUTION OF THE MARTIN METROPOLITAN PLANNING ORGANIZATION TO ADOPT THE SAFETY PERFORMANCE TARGETS ESTABLISHED IN THE MARTIN COUNTY PUBLIC TRANSIT PUBLIC TRANSPORTATION AGENCY SAFETY PLAN

WHEREAS, state and federal statues, rules and regulations require that each designated Metropolitan Planning Organization (MPO) adopt Transit Safety Performance Targets within 180 days of the local transit agency's adoption of its Public Transportation Agency Safety Plan (PTSAP); and,

WHEREAS, the Martin County Board of County Commissioners adopted a PTSAP on June 2, 2020, that included the Transit Safety Performance Targets as shown in Exhibit "A"; and,

WHEREAS, the Martin MPO, by adopting the Transit Safety Performance Targets, agrees to plan and program projects to contribute toward their accomplishment.

NOW, THEREFORE, BE IT RESOLVED BY THE MARTIN METROPOLITAN PLANNING ORGANIZATION, THAT:

Section 1: Martin County's Transit Safety Performance Targets in the PTSAP attached hereto as Exhibit "A," are hereby adopted.

Section 2: The Martin MPO Chair is hereby authorized to sign this resolution certifying the Martin MPO Board's adoption of Martin County's Transit Safety Performance Targets for transmittal to FDOT, the Federal Highway Administration and the Federal Transit Administration.

DULY PASSED AND ADOPTED THIS 21 DAY OF September, 2020

MARTIN METROPOLITAN PLANNING ORGANIZATION

Doug Smith, Chairman

APPROVED AS TO FORM AND LEGAL SUFFICIENCY:

Sale WW ords

Sarah W. Woods, County Attorney

ATTEST:

Sos Florence Allen, Clerk

EXHIBIT A

Agency Safety Plan

for

Marty

Martin County's Public Transit Service





For

Federal Transit Administration

Approved 6/2/2020

Martin County Board of County Commissioners

Version 1

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1. Transit Agency Information

Transit Agency Name	Martin	Martin County Board of County Commissioners					
Transit Agency Address	2401 \$	2401 SE Monterey Road, Stuart, FL 34996					
Name and Title of Accountable Executive	Don G	Don G. Donaldson, PE, CFM, Deputy County Administrator					
Name of Chief Safety Officer or SMS Executive	Claude	Claudette Mahan, Transit Manager and Chief Safety Officer					
Mode(s) of Service Covered by This Plan	Fixed Route Bus: Commuter Bus; ParatransitList All FTA Funding Types (e.g., 5307, 5337, 5339)5307 5339						
Mode(s) of Service Provided by the Transit Agency (Directly operated or contracted service)	Fixed Route Bus; Commuter Bus; Paratransit This is a contracted service.						
Does the agency provide transit services on behalf of another transit agency or entity?	Yes	No ⊠	Description of Arrangement(s)				
Name and Address of Transit Agency(ies) or Entity(ies) for Which Service Is Provided	N/A						

2. Plan Development, Approval, and Updates

Name of Entity That Drafted This Plan	Claudette Mahan, Transit Manager and Chief Safety Officer					
	Signature of Accountable Executive	Date of Signature				
Signature by the Accountable Executive	Deputy County Administrator	06/08/2020				
	Martin County Board of County Commissioners	Date of Approval				
Approval by the Board	Approved BOCC meeting agenda item	6/2/2020				
of Directors or an Equivalent Authority	Relevant Documentation (Title and Location)					
•	Copy of meeting agenda and action summary approving the Agency Safety Plan (ASP), is maintained on file by the Chief Safety Officer, in the Martin County Public Works Department.					

Version Number and Updates

Record the complete history of successive versions of this plan.

Version Number	Section/Pages Affected	Reason for Change	Date Issued	
1		New Document	7/20/2020	

Annual Review and Update of the Agency Safety Plan

This plan will be jointly reviewed by the Chief Safety Officer and the Transit Systems Coordinator by June 1 of each year. The Accountable Executive will review and approve any changes, signing the new ASP, it will then go to the Board of County Commissioner for approval.

3. Safety Performance Targets

Safety Performance Targets

Specify performance targets based on the safety performance measures established under the National Public Transportation Safety Plan. Safety performance targets will be evaluated over a fiscal year period with baseline year Fiscal Year 2020 (October 1, 2019 – September 30, 2020).

Mode of Transit Service	Fatalities (Total)	Fatalities (Rate per Total VRM)	Injuries (Total)	Injuries (Rate per Total VRM)	Safety Events (Total)	Safety Events (Rate Per Total VRM)	System Reliability (VRM / failures)
Fixed Route Bus	0	0	0	0	0	0	54,950
Commuter Bus	0	0	0	0	0	0	28,661
ADA Paratransit	0	0	0	0	0	0	0

Safety Performance Target Coordination

Describe the coordination with the State and Metropolitan Planning Organization(s) (MPO) in the selection of State and MPO safety performance targets.

The Chief Safety Officer shares the ASP, including safety performance targets, with the Martin Metropolitan Planning Organization (MPO) each year after its formal adoption by the Martin County Board of County Commissioners.(MCBOCC) The Chief Safety Officer also provides a copy of our formally adopted plan to the Florida Department of Transportation (FDOT). Transit personnel are available to coordinate with FDOT and the MPO in the selection of FDOT and MPO safety performance targets upon request.

Targets	State Entity Name	Date Targets Transmitted
Transmitted to the State	Florida Department of Transportation	6/5/2020
Targets Transmitted to the	Metropolitan Planning Organization Name	Date Targets Transmitted
Metropolitan Planning	Martin Metropolitan Planning Organization	6/5/2020
Organization(s)		

4. Safety Management Policy

Safety Management Policy Statement

including safety objectives.

Martin County's Public Transit service, MARTY is committed to providing safe, secure, clean, reliable, and efficient transportation services to its patrons. This policy statement serves to express management's commitment to and involvement in providing and maintaining a safe and secure transit system.

In the interest of safety and security, MARTY has developed and adopted this Safety Management System (SMS) that complies with 49 CFR PART 673 and is dedicated to the following safety objectives:

- Communicating the purpose and benefits of the SMS to all staff, managers, supervisors, and employees.
- Providing a culture of open reporting of all safety concerns, ensuring that no action will be taken against any
 employee who discloses a safety concern through MARTY's Employee Safety Reporting Program (ESRP),
 unless such disclosure indicates, beyond any reasonable doubt, an illegal act, gross negligence, or a deliberate
 or willful disregard of regulations or procedures.
- Providing appropriate management involvement and the necessary resources that will encourage employees to communicate and report any unsafe work conditions, hazards, or at-risk behavior to management.
- Identifying hazardous and unsafe work conditions and investigating any reported safety concerns by employees.
- Establishing safety performance targets that are realistic, measurable, and data driven. Continually improving
 our safety performance through management processes that ensure appropriate safety management action is
 taken and is effective.

MARTY and its On-Road Contractor is authorized and responsible for maintaining a coordinated safety system in order to identify and prevent unsafe acts and conditions that present a potential danger or threat to public safety. Management commits to maintain and implement the ASP and comply with the policies, procedures, and standards included in this document. All MARTY and its On-Road Operator staff is charged with the responsibility of adhering to this ASP. Any violation of safety and security practices is subject to disciplinary actions. Management is ultimately responsible for enforcing the ASP and maintaining a safe and secure system.

Safety Management Policy Communication

The Chief Safety Officer, who leads SMS activities, introduced SMS principles to transit staff in June 2019, at a Staff meeting. MARTY's Safety Management Policy Statement was also distributed to each employee and the On-Road Contractor. All parties receiving a copy of the statement and subsequent updates are required to sign for its receipt and acknowledge their responsibility in implementation. Distribution of the Safety Management Policy Statement has also been incorporated into the new-hire training and annual refresher training.

Authorities, Accountabilities, and Responsibilities

Accountable Executive Accountable Executive Chief Safety Officer or SMS Executive The Ac Officer. response	eputy County Administrator serves as MARTY's Accountable Executive with the g authorities, accountabilities, and responsibilities under this plan: Accountable for ensuring that the agency's SMS is effectively implemented. Ensures action is taken, as necessary, to address substandard performance in the agency's SMS Assumes ultimate responsibility for carrying out MARTY's ASP, and SMS. Designates an adequately trained Chief Safety Officer who is a direct report. Controls and directs human and capital resources needed to develop and maintain the ASP and SMS. Maintains responsibility for carrying out the agency's Transit Asset Management Plan.
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Chief Safety Officer or SMS Executive Agency Leadership and Executive Management	The Chief Safety Officer has the following authorities, accountabilities, and sibilities under this plan: Holds a direct line of reporting to the Accountable Executive. Has the authority and responsibility for day-to-day implementation and operation of the agency's SMS.
Chief Safety Officer or SMS Executive Agency Leadership and Executive Management	The Chief Safety Officer has the following authorities, accountabilities, and sibilities under this plan: Holds a direct line of reporting to the Accountable Executive. Has the authority and responsibility for day-to-day implementation and operation of the agency's SMS.
Agency Leadership and Executive Management	Has the authority and responsibility for day-to-day implementation and operation of the agency's SMS.
Agency Leadership and Executive Management	the agency's SMS.
Agency Leadership and Executive Management	
Agency Leadership and Executive Management	Manages Marty's ESRP
Agency Leadership and Executive Management	Develops Marty's ASP and SMS policies and procedures.
Agency Leadership and Executive Management	Advises the Accountable Executive on SMS progress and status.
Executive Management •	ansit Systems Coordinator has been identified to have the following authorities and sibilities for day-to-day SMS implementation and operation of the SMS under this
•	Complete training on SMS and ASP elements
•	Oversee day-to-day operations of the SMS
	Modify policies consistent with implementation of the SMS, as necessary.
The Co	ntracted On-Road Operations and Safety Manager is responsible for Drivers' training.
•	
Key Staff	Drivers' Meetings: A permanent agenda item in all monthly Drivers' Meetings is dedicated to safety. Safety issues are discussed and documented.
•	Drivers' Meetings: A permanent agenda item in all monthly Drivers' Meetings is dedicated to safety. Safety issues are discussed and documented. Safety Event Investigations

Employee Safety Reporting Program

Martin County's Employee Safety Reporting Program (ESRP) encourages employees to report safety conditions to senior management. Employees may report safety concerns in good faith without fear of retribution in the following ways:

- Report conditions directly to Chief Safety Officer, or Transit Systems Coordinator
- Report conditions anonymously via a locked comment box in the County fuel/bus parking lot.
- Comments via a sealed envelope can be dropped off at the County Administration Office at the security desk. Must have the words "For MARTY Chief Safety Officer" on the front of the envelope to ensure proper delivery.
- Report conditions at the monthly staff/contractor or driver safety meetings

The comment box is checked daily with any safety comments given directly to the Chief Safety Officer. Any safety conditions identified will be logged into a Safety Risk Register and reviewed by the Chief Safety Officer and addressed through the Safety Risk Management (SRM) process.

Marty encourages participation in the ESRP by protecting employees that report safety conditions in good faith. However, disciplinary action may be required if the report involves any of the following:

- Willful participation in illegal activity, such as assault or theft;
- Gross negligence, such as knowingly utilizing heavy equipment for purposes other than intended such that
 people or property are put at risk; or
- Deliberate or willful disregard of regulations or procedures, such as reporting to work under the influence of controlled substances.

5. Safety Risk Management

Safety Risk Management Process

Describe the Safety Risk Management process, including:

- Safety Hazard Identification: The methods or processes to identify hazards and consequences of the hazards.
- Safety Risk Assessment: The methods or processes to assess the safety risks associated with identified safety hazards.
- Safety Risk Mitigation: The methods or processes to identify mitigations or strategies necessary as a result of safety risk assessment.

MARTY uses the SRM process as a primary method to ensure the safety of our operations, passengers, employees, vehicles, facilities. It is a process whereby hazards and their consequences are identified, assessed for potential safety risk, and resolved in a manner acceptable to leadership. The SRM process allows us to carefully examine what could cause harm and determine whether we have taken sufficient precautions to minimize the harm, or if further mitigations are necessary.

Safety Hazard Identification

The safety hazard identification process offers MARTY the ability to identify hazards and potential consequences in the operation and maintenance of our system. Hazards can be identified through a variety of sources, including:

- ESRP;
- Review of vehicle camera footage;
- Review of monthly performance data and safety performance targets;
- Observations by Transit staff;
- Maintenance reports;
- Comments from passengers

- Daily Vehicle Inspection forms
- Annual Bus Safety Inspections report
- Investigations into safety events, incidents, and occurrences;
- Federal Transit Administration (FTA) and other oversight authorities.

When a safety concern is identified, whatever the source, it is reported to the Chief Safety Officer. Procedures for reporting hazards to the Chief Safety Officer are reviewed during Staff Meetings.

Any identified hazard that poses a real and immediate threat to life, property, or the environment must immediately be brought to the attention of the Accountable Executive and addressed. This means that the Chief Safety Officer believes immediate intervention is necessary to preserve life, prevent major property destruction, or avoid harm to the environment that would constitute a violation of Environmental Protection Agency or Florida State environmental protection standards.

Safety Risk Assessment

The Chief Safety Officer prioritizes safety hazards using MARTY's Safety Risk Matrix. This matrix expresses assessed risk as a combination of one severity category and one likelihood level, also referred to as a hazard rating. For example, a risk may be assessed as "1A" or the combination of a Catastrophic (1) severity category and a Frequent (A) probability level.

This matrix also categorizes combined risks into levels, High, Medium, or Low, based on the likelihood of occurrence and severity of the outcome. For purposes of accepting risk:

- "High" hazard ratings will be considered unacceptable and require action to mitigate the safety risk.
- "Medium" hazard ratings will be considered undesirable and require the Chief Safety Officer to make a decision regarding their acceptability, and

Safety Risk Matrix		1	2	3	4	
A service and the service of the ser		Catastrophic	Critical	Marginal	Negligible	
Α	Frequent	High	High	High	Low	
В	Probable	High	High	Medium	Low	
С	Occasional	High	Medium	Medium	Low	
D	Remote	Medium	Medium	Low	Low	
Ε	Improbable	Low	Low	Low	Low	

"Low" hazard ratings may be accepted by the Chief Safety Officer without additional review.

Using a categorization of High, Medium, or Low allows for hazards to be prioritized for mitigation based on their associated safety risk

Once the Chief Safety Officer has assessed the safety risk, they will document the safety risk assessment, including the hazard rating and mitigation options for each identified safety hazard. The Chief Safety Officer will maintain a file for each identified safety risk for a period of three years from the date of generation.

Safety Risk Mitigation

The Chief Safety Officer will review current methods of safety risk mitigation and establish methods or procedures to mitigate or eliminate safety risk associated with specific hazards. MCPT can reduce safety risk by reducing the likelihood and/or severity of potential consequences of hazards.

Prioritization of safety risk mitigations is based on the results of the safety risk assessments. The Chief Safety Officer tracks and updates safety risk mitigation information in the identified safety risk file.

The Chief Safety Officer will also document any specific measures or activities, such as review, observation, or audits that will be conducted to monitor the effectiveness of mitigation once implemented in a Safety Risk Register.

6. Safety Assurance

Though our Safety Assurance process, MARTY:

- Evaluates our compliance with operations and maintenance procedures to determine whether our existing rules and procedures are sufficient to control our safety risk;
- Assesses the effectiveness of safety risk mitigations to make sure the mitigations are appropriate and are implemented as intended;
- Investigates safety events to identify causal factors; and
- Analyzes information from safety reporting, including data about safety failures, defects, or conditions.

Safety Performance Monitoring and Measurement

Describe activities to monitor the system for compliance with procedures for operations and maintenance.

MARTY has many processes in place to monitor its entire transit system for compliance with operations and maintenance procedures, including:

- Internal Safety audits
- Compliance with System Safety Program Plan
- Random inspections for safety compliance
- Facility inspections
- Daily Safety/Security data acquisition and analysis
- Daily Vehicle Inspections
- Regular review of onboard camera footage to assess drivers and specific incidents,
- Annual safety inspections
- Investigations of safety complaints
- Event investigations
- External safety audits
- Regular vehicle inspections and preventative maintenance.

Results from the above processes are compared against recent performance trends quarterly and annually by the Chief Safety Officer to determine where action needs to be taken. The Chief Safety Officer enters any identified non-compliant or ineffective activities, including mitigations, and puts them back through the Safety Risk Management Process.

Describe activities to monitor operations to identify any safety risk mitigations that may be ineffective, inappropriate, or were not implemented as intended.

MARTY monitors safety risk mitigations to determine if they have been implemented and are effective, appropriate, and working as intended. The Chief Safety Officer maintains a list of safety risk mitigations in the Safety Risk Register. The mechanism for monitoring safety risk mitigations varies depending on the mitigation.

The Chief Safety Officer establishes one or more mechanisms for monitoring safety risk mitigations as part of the mitigation implementation process and assigns monitoring activities to the appropriate staff. These monitoring mechanisms may include tracking a specific metric on daily, weekly, or monthly logs or reports; conducting job performance observations; or other activities. The Chief Safety Officer will endeavor to make use of existing MARTY processes and activities before assigning new information collections activities.

MARTY Chief Safety Officer will review the performance of individual risk mitigations based on the reporting schedule determined for each mitigation and determine if a specific safety risk mitigation is not implemented or performing as intended. If the mitigation is not implemented or performing as intended, the Chief Safety Officer will modify the mitigation or take other action to manage the safety risk.

Describe activities to conduct investigations of safety events, including the identification of causal factors.

MARTY conducts safety investigations of events (accidents, incidents, and occurrences, as defined by FTA) to find causal and contributing factors and review the existing mitigations in place at the time of the event.

In the case of any of these events, drivers are required to contact dispatch immediately. Dispatch calls 911 should emergency services be needed. The Operations & Safety Manager will be immediately notified and will be sent to the scene. Each investigation will be documented in a final report that includes a description of the investigation's activities, identified causal factors and any identified corrective action plan. For Specific procedures for conducting safety investigations see MV Transportation, Inc. Corporate Policy Statement S-30 for Injury Investigation and S-32 for Accident/Incident Reporting.

The Final Report and all documentation of the investigation, will be given to the Chief Safety Officer, for determination whether:

- The accident was preventable or non-preventable;
- Personnel require discipline or retraining;
- The causal factor(s) indicate(s) that a safety hazard contributed to or was present during the event; and
- The accident appears to involve underlying organizational causal factors beyond just individual employee behavior.

All records will be maintained by the Chief Safety Officer for a minimum of five years from the date of completion of the investigation.

Describe activities to monitor information reported through internal safety reporting programs.

The Chief Safety Officer will routinely review safety data captured in the ERSP, the monthly safety performance data, customer complaints and other safety communication channels. Any safety conditions identified will be logged into a Safety Risk Register and addressed through the Safety Risk Management (SRM) process.

7. Safety Promotion

Competencies and Training

Describe the safety training program for all agency employees and contractors directly responsible for safety.

MARTY 's comprehensive safety training program applies to all agency employees and contractors directly responsible for safety in the agency's public transportation system including:

- Bus vehicle operators
- Dispatchers
- Maintenance technicians
- Manager and supervisors
- Agency Leadership and Executive Management
- Chief Safety Officer
- Accountable Executive

The scope of the safety training, including annual refresher training, is appropriate to each employee's individual safetyrelated job responsibilities and their role in the MARTY SMS.

Safety training is conducted by the Operations and Safety Manager or the Chief Safety Officer.

Basic training requirements, including frequencies and refresher training are documented in

- Marty Non-Driver Safety Training and Procedures Manual
- Driver Safety Training is detailed in the SSPP, Section 7.
- Section 4. Safety Promotion of the MV Transportation, Inc. Safety Management system (SMS) Plan
- Maintenance Technicians Safety Training is outlined in the Marty-Vehicle Maintenance Plan, Pg 9, Training Section.
- Marty County Safety Manual, County personnel safety training is conducted using a software system called NEO GOV there are a minimum of 6 online courses that are required annually, these would include the Accountable Executive and Executive Management.

Operations safety-related skill training includes the following:

- New-hire bus vehicle operator classroom and hands-on skill training,
- Bus vehicle operator refresher training,
- Bus vehicle operator retraining (recertification or return to work),
- Classroom and on-the-job training for dispatchers,
- Classroom and on-the-job training for operations supervisors and managers, and

Accident investigation training for operations supervisors and managers.

Vehicle maintenance safety-related skill training includes the following:

- Ongoing vehicle maintenance technician skill training,
- Ongoing skill training for vehicle maintenance supervisors,
- Accident investigation training for vehicle maintenance supervisors,
- Ongoing hazardous material training for vehicle maintenance technicians and supervisors, and
- Training provided by vendors.

Marty's Accountable Executive, Chief Safety Officer or SMS Executive, Agency Leadership and Executive Management may take online FTA safety classes through the FTA-sponsored USDOT Transportation Safety Institute (TSI).

Safety Communication

Describe processes and activities to communicate safety and safety performance information throughout the organization.

The Chief Safety Officer and the Operations & Safety Manager coordinate MARTY's safety communication activities for the SMS.

Safety and safety performance information is communicated to the contractor and County staff during the monthly Staff/Contractor meetings and to the Drivers' at the monthly Drivers' Safety Meeting. Information typically conveyed during these meetings includes safety performance statistics, lessons learned from recent occurrences, upcoming events that may impact safety, and information on hazards and safety risks relevant to employees' roles and responsibilities.

During these meetings the employees are informed of any action taken in response to reports submitted through the ESRP and gives staff and driver's an opportunity to report any new safety conditions.

Additional Information

Supporting Documentation

Include or reference documentation used to implement and carry out the ASP that are not included elsewhere in this Plan.

MARTY will maintain documentation related to the implementation of its SMS; the programs, policies, and procedures used to carry out this ASP; and the results from its SMS processes and activities for a minimum of three years after creation. They will be available to the FTA or other Federal or oversight entity upon request.

Documents used to develop the ASP:

- Marty SSPP
- MV SMS plan
- Marty SMS plan
- Marty Vehicle Maintenance Plan
- Non-Driver Safety Training and Procedures Manual

Definitions of Special Terms Used in the ASP

MARTY incorporates all of FTA's definitions that are in §673.5 of the Public Transportation Agency Safety Plan regulation.

- Accident means an Event that involves any of the following: A loss of life; a report of a serious injury to a person; a collision of public transportation vehicles; a runaway train; an evacuation for life safety reasons; or any derailment of a rail transit vehicle, at any location, at any time, whatever the cause.
- Accountable Executive means a single, identifiable person who has ultimate responsibility for carrying out the Public Transportation Agency Safety Plan of a public transportation agency; responsibility for carrying out the agency's Transit Asset Management Plan; and control or direction over the human and capital resources needed to develop and maintain both the agency's Public Transportation Agency Safety Plan, in accordance with 49 U.S.C. 5329(d), and the agency's Transit Asset Management Plan; asset Management Plan in accordance with 49 U.S.C. 5329(d).
- Chief Safety Officer means an adequately trained individual who has responsibility for safety and reports directly to a transit agency's chief executive officer, general manager, president, or equivalent officer. A Chief Safety Officer may not serve in other operational or maintenance capacities, unless the Chief Safety Officer is employed by a transit agency that is a small public transportation provider as defined in this part, or a public transportation provider that does not operate a rail fixed guideway public transportation system.
- Equivalent Authority means an entity that carries out duties similar to that of a Board of Directors, for a recipient or subrecipient of FTA funds under 49 U.S.C. Chapter 53, including sufficient authority to review and approve a recipient or subrecipient's Public Transportation Agency Safety Plan.
- Event means any Accident, Incident, or Occurrence.
- FTA means the Federal Transit Administration, an operating administration within the United States Department of Transportation.
- Hazard means any real or potential condition that can cause injury, illness, or death; damage to or loss of the facilities, equipment, rolling stock, or infrastructure of a public transportation system; or damage to the environment.
- **Incident** means an event that involves any of the following: A personal injury that is not a serious injury; one or more injuries requiring medical transport; or damage to facilities, equipment, rolling stock, or infrastructure that disrupts the operations of a transit agency.
- **Investigation** means the process of determining the causal and contributing factors of an accident, incident, or hazard, for the purpose of preventing recurrence and mitigating risk.
- National Public Transportation Safety Plan means the plan to improve the safety of all public transportation systems that receive Federal financial assistance under 49 U.S.C. Chapter 53.
- Occurrence means an Event without any personal injury in which any damage to facilities, equipment, rolling stock, or infrastructure does not disrupt the operations of a transit agency.
- **Operator of a public transportation system** means a provider of public transportation as defined under 49 U.S.C. 5302(14).
- **Performance measure** means an expression based on a quantifiable indicator of performance or condition that is used to establish targets and to assess progress toward meeting the established targets.
- **Performance target** means a quantifiable level of performance or condition, expressed as a value for the measure, to be achieved within a time period required by the Federal Transit Administration (FTA).
- **Public Transportation Agency Safety Plan** means the documented comprehensive agency safety plan for a transit agency that is required by 49 U.S.C. 5329 and this part.
- Rail fixed guideway public transportation system means any fixed guideway system that uses rail, is
 operated for public transportation, is within the jurisdiction of a State, and is not subject to the jurisdiction of
 the Federal Railroad Administration, or any such system in engineering or construction. Rail fixed guideway
 public transportation systems include but are not limited to rapid rail, heavy rail, light rail, monorail, trolley,
 inclined plane, funicular, and automated guideway.
- Rail transit agency means any entity that provides services on a rail fixed guideway public transportation system.
- Risk means the composite of predicted severity and likelihood of the potential effect of a hazard.
- **Risk mitigation** means a method or methods to eliminate or reduce the effects of hazards.
- Safety Assurance means processes within a transit agency's Safety Management System that functions to
 ensure the implementation and effectiveness of safety risk mitigation, and to ensure that the transit agency
 meets or exceeds its safety objectives through the collection, analysis, and assessment of information.
- Safety Management Policy means a transit agency's documented commitment to safety, which defines the transit agency's safety objectives and the accountabilities and responsibilities of its employees in regard to safety.

- Safety Management System (SMS) means the formal, top-down, organization-wide approach to managing safety risk and assuring the effectiveness of a transit agency's safety risk mitigation. SMS includes systematic procedures, practices, and policies for managing risks and hazards.
- Safety Management System (SMS) Executive means a Chief Safety Officer or an equivalent.
- Safety performance target means a Performance Target related to safety management activities.
- Safety Promotion means a combination of training and communication of safety information to support SMS as applied to the transit agency's public transportation system.
- **Safety risk assessment** means the formal activity whereby a transit agency determines Safety Risk Management priorities by establishing the significance or value of its safety risks.
- **Safety Risk Management** means a process within a transit agency's Public Transportation Agency Safety Plan for identifying hazards and analyzing, assessing, and mitigating safety risk.
- Serious injury means any injury which:
 - Requires hospitalization for more than 48 hours, commencing within 7 days from the date of the injury was received;
 - o Results in a fracture of any bone (except simple fractures of fingers, toes, or noses);
 - o Causes severe hemorrhages, nerve, muscle, or tendon damage;
 - o Involves any internal organ; or
 - o Involves second- or third-degree burns, or any burns affecting more than 5 percent of the body surface.
- Small public transportation provider means a recipient or subrecipient of Federal financial assistance under 49 U.S.C. 5307 that has one hundred (100) or fewer vehicles in peak revenue service and does not operate a rail fixed guideway public transportation system.
- State means a State of the United States, the District of Columbia, Puerto Rico, the Northern Mariana Islands, Guam, American Samoa, and the Virgin Islands.
- State of good repair means the condition in which a capital asset is able to operate at a full level of performance.
- State Safety Oversight Agency means an agency established by a State that meets the requirements and performs the functions specified by 49 U.S.C. 5329(e) and the regulations set forth in 49 CFR part 674.
- **Transit agency** means an operator of a public transportation system.
- **Transit Asset Management Plan** means the strategic and systematic practice of procuring, operating, inspecting, maintaining, rehabilitating, and replacing transit capital assets to manage their performance, risks, and costs over their life cycles, for the purpose of providing safe, cost-effective, and reliable public transportation, as required by 49 U.S.C. 5326 and 49 CFR part 625.

List of Acronyms Used in the ASP

Acronym	Word or Phrase
ADA	American's with Disabilities Act of 1990
ASP	Agency Safety Plan (also referred to as PTASP in Part 673)
CFR	Code of Federal Regulations
ESRP	Employee Safety Reporting Program
FDOT	Florida Department of Transportation
FTA	Federal Transit Administration
MCBOCC	Martin County Board of County Commissioners
MCPT	Martin County Public Transit (aka MARTY)
МРО	Metropolitan Planning Organization
Part 673	49 CFR Part 673 (public Transportation Agency Safety Plan)
SMS	Safety Management System
SPT	Safety Performance Targets
SRM	Safety Risk Management Process
SSPP	System Safety Program Plan
TSI	Transportation Safety Institute
U.S.C.	United States Code
VRM	Vehicle Revenue Miles

