



2045

Long Range Transportation Plan

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RESOLUTION 03-2021

RESOLUTION OF THE HEARTLAND REGIONAL TRANSPORTATION PLANNING ORGANIZATION (HRTPO) AUTHORIZING THE SIGNING OF THE PUBLIC TRANSPORTATION GRANT AGREEMENT FOR FEDERAL 5305(D) FUNDS AWARDED TO THE HRTPO FOR PUBLIC TRANSPORTATION PLANNING ACTIVITIES AND ASSOCIATED ADMINISTRATIVE SUPPORT DOCUMENTS WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION FOR TRANSIT PROJECTS.

WHEREAS, the Heartland Regional Transportation Planning Organization has the authority to enter into a Public Transportation Grant Agreement (PTGA) with the Florida Department of Transportation to undertake a project as authorized by Chapter 341, Florida Statutes and/or by the Florida Transit Administration Act of 1964, as amended;

NOW, THEREFORE, BE IT RESOLVED BY THE Heartland Regional Transportation Planning Organization, Florida:

1. The PTGA for the Item-Segment-Phase-Sequence (Financial Management Number) 439215-1-14-05 is approved.
2. That Patricia M. Steed, Executive Director, is authorized to enter into, modify, extend, or terminate the PTGA with the Florida Department of Transportation, unless specifically rescinded.

Signed:

Handwritten signature of Tim Stanley in blue ink.

Tim Stanley, HRTPO Chair

Date:

Handwritten date "3-10-21" in blue ink.

Attest:

Handwritten signature of Kathy Hall in blue ink.

Kathy Hall, HRTPO Staff

Handwritten signature of the HRTPO Attorney in blue ink.

Reviewed by HRTPO Attorney

2045 L R T P Long Range Transportation Plan

The Heartland Regional Transportation Planning Organization (HRTPO), coordinates transportation plans for the Heartland region of Florida including the six counties of DeSoto, Glades, Hardee, Hendry, Highlands and Okeechobee and the urbanized area of Highlands County including the cities of Sebring and Avon Park. The HRTPO provides the forum for local elected officials, their staff, and industry experts, and the public to work together to improve transportation in the Heartland Region.

As the metropolitan planning organization for the Heartland of Florida, the HRTPO prepared the region's second Long Range Transportation Plan (LRTP) for the year 2045. The Plan was prepared in accordance with federal requirements of both the Federal Legislation, Fixing America's Surface Transportation (FAST) Act, Florida State requirements, the Florida 2060 Transportation Plan, and all approved local government comprehensive plans.

Stakeholders in the process include the Florida Department of Transportation (FDOT), Federal Highway Administration (FHWA), Federal Transit Administration (FTA), the cities in the region, the six counties of DeSoto, Glades, Hardee, Hendry, Highlands and Okeechobee, and the general public.

the VISION

Tomorrow's transportation system will connect the Heartland's communities, providing choices to move people and goods efficiently, safely, and reliably, while supporting a competitive economy.

the MISSION

Development of transportation systems to support a prosperous, globally competitive economy that improves the quality of life for the Heartland residents while minimizing impacts to the natural environment.

2045 Goals and Foundational Guidance



National	<ul style="list-style-type: none"> • FAST Act
Statewide	<ul style="list-style-type: none"> • Strategic Intermodal System (SIS) Plan • Florida Transportation Plan • Highway Safety Improvement Program (HSIP)
Local	<ul style="list-style-type: none"> • Heartland 2060 • Highlands Transit Plan • HRTPO Congestion Management Plan • HRTPO Bicycle and Pedestrian Safety Plan



Learn More: More information Goals and the Foundational Guidance may be found in Appendix B.

FLORIDA Transportation Plan



Florida Transportation Plan Overview

The Florida Transportation Plan (FTP) is the single overarching plan guiding Florida's transportation future. Updated every five years, the FTP is a collaborative effort of state, regional, and local transportation partners in the public and private sectors. The FTP is important because it not only sets a long-range vision for the future, but it guides transportation decisions today.

Four Elements of the Florida Transportation Plan:



Vision Element (May 2020) defines Florida's long-term transportation vision and goals for the next 25 years and beyond

Policy Element (December 2020) describes objectives and strategies to guide transportation partners statewide in accomplishing the vision and goals

Performance Element (December 2020) reports how our system performs on key measures of safety, asset condition and mobility

Implementation Element (2021) details how we will work towards implementation and track progress over the next five years

Foundational Strategies

Strategically align investments with goals

Provide sustainable and reliable transportation funding sources

Develop and retain a skilled transportation workforce

Key Strategies

Commit to vision zero as our top priority

Identify and mitigate risks to Florida's transportation system

Transform Florida's major transportation corridors and hubs

Strategically complete transportation systems and networks

Expand transportation infrastructure

Prioritize mobility for people and freight

Further access to opportunity for those who need it most

Integrate land use and transportation decisions

Develop transportation systems to protect and enhance air quality, water quality and quantity, critical lands, and habitats

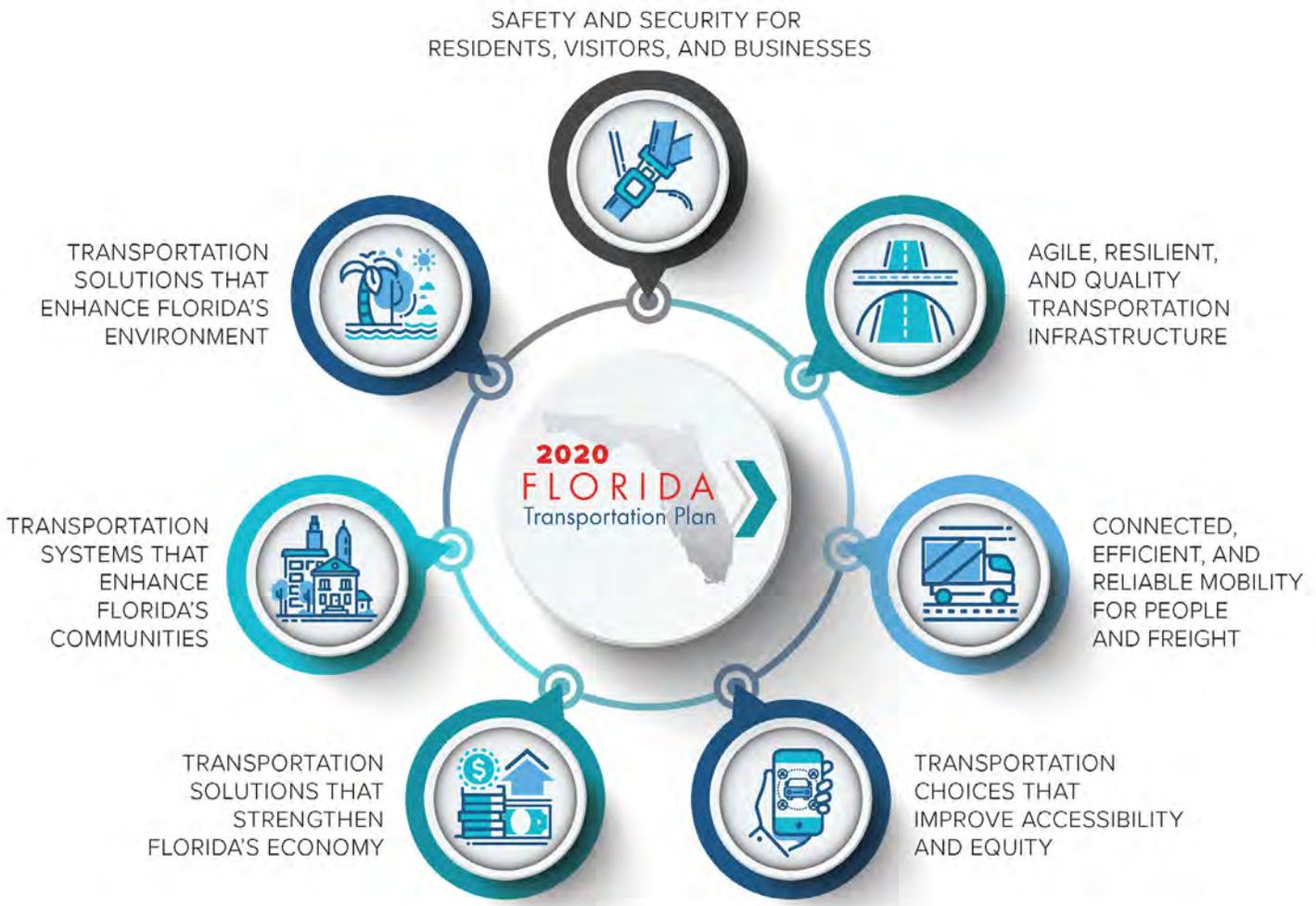


The Florida Transportation Plan Vision and Goals

From the early days of transportation that included trains and automobiles to modern land, air, sea, and space travel, Floridians have long valued transportation innovation. As we look to the future of transportation in Florida, we imagine new and better ways to move people and goods.

Our transportation preferences are spurred by our desire to be connected to our jobs, our friends and family, and the services we need while having safe, convenient, and affordable choices. Dramatic leaps in connectivity, rapidly changing technologies, an explosion of data, and new risks and disruptions set the stage for transformations in transportation. Regardless of how we make the journey from now to our future, the Florida Transportation Plan is steadfast in the vision for a safe, secure, agile, resilient, quality, connected, efficient, and reliable transportation system that provides affordable and convenient choices. Transportation will strengthen our economy and enhance our communities and environment.

The FTP vision is focused on seven goals for Florida's transportation future:



The Florida Transportation Plan guides the 2045 Long Range Transportation Plan by:

- Directing the vision for a transportation system that meets the needs of our residents, visitors, and businesses.
- Setting targets for a system that will have zero fatalities, reliable travel times, seamless mobility, and universal accessibility.
- Reflecting the importance of transportation to our economic prosperity, equity and accessibility, quality of life, and our environment.
- Providing guidance on ACES, sustainability, and safety.

Chapter 2 | The Future of the Region

The counties of the Heartland share a rich cultural history and unique natural resources that provide dynamic opportunities and challenges in the coming decades. The six HRTPO counties are within the South Central Rural Area of Opportunity (RAO), which is defined as a region composed of rural communities that have been adversely affected by extraordinary economic events or natural disasters and designated as such by the State of Florida. The main economic activities of the region include agriculture (primarily citrus, sugar cane cultivation and cattle ranching) and natural resources, services including health care, and tourism.

DeSoto County

Square Miles: 637
Primary Economic Base: Agriculture and cattle
Number of Businesses: 482

Infrastructure

- State Highway: 82.9 miles
- County Roads: 361.2 miles
- City Roads: 70.7 miles
- Number of Bridges: 57
- Non-Commercial / Civic Public Use Airports: 1
- Route Miles of Freight Railroad: 24

Glades County

Square Miles: 774, of which 56 square miles are occupied by the Brighton Seminole Indian Reservation
Primary Economic Base: Agriculture and cattle
Number of Businesses: 109

Infrastructure

- State Highway: 89.8 miles
- County Roads: 207.73 miles
- City Roads: 19.44 miles
- Number of Bridges: 59
- Route Miles of Freight Railroad: 32

Hardee County

Square Miles: 637
Primary Economic Base: Agriculture and cattle
Number of Businesses: 395

Infrastructure

- State Highway: 94.7 miles
- County Roads: 493.52 miles
- City Roads: 58.69 miles
- Number of Bridges: 64
- Non-Commercial / Civic Public Use Airports: 1
- Route Miles of Freight Railroad: 21.7

Hendry County

Square Miles: 1,153, of which 67 square miles are occupied by the Big Cypress Indian Reservation.
Primary Economic Base: Agriculture
Number of Businesses: 583

Infrastructure

- State Highway: 64.9 miles
- County Roads: 350.75 miles
- City Roads: 102.06 miles
- Number of Bridges: 81
- Non-Commercial / Civic Public Use Airports: 2
- Route Miles of Freight Railroad: 10

Highlands County

Square Miles: 1,016
Primary Economic Base: Agriculture and natural resource economy remains strong while transitioning to a service and healthcare economy.
Number of Businesses: 1,921

Infrastructure

- State Highway: 132.6 miles
- County Roads: 1,196.48 miles
- City Roads: 249.89 miles
- Number of Bridges: 64
- Non-Commercial / Civic Public Use Airports: 2
- Route Miles of Passenger Railroad and Rail Transit: 40
- Route Miles of Freight Railroad: 75

Okeechobee County

Square Miles: 892
Primary Economic Base: Agriculture, cattle, trade, transportation, and utilities
Number of Businesses: 825

Infrastructure

- State Highway: 109 miles
- County Roads: 367.49 miles
- City Roads: 64.68 miles
- Number of Bridges: 67
- Non-Commercial / Civic Public Use Airports: 1
- Route Miles of Passenger Railroad and Rail Transit: 26
- Route Miles of Freight Railroad: 26



Heartland 2060: Building a Resilient Region—Revisited has convened hundreds of citizens, stakeholders, influencers, committed volunteers, and elected officials, both in-person and virtually. The work summarized in this report looks at today and forecasts what might be in the Heartland’s future. It served as a basis for thoughtful engagement with the conclusion that collaboration must continue as we find opportunities and solve mutual concerns to become a more resilient region and is the basis for the population, economic, and employment data that informed the 2045 Long Range Transportation Plan for the Heartland Region.

Population Growth

	2019	2045	2060	Population Growth (2019-2060)
Hardee	27,385	30,450	31,817	16%
DeSoto	36,065	43,350	46,861	23%
Highlands	103,434	127,550	138,220	34%
Okeechobee	41,808	48,950	52,602	26%
Glades	13,121	16,200	17,726	35%
Hendry	40,120	51,200	57,052	42%
Heartland (total)	261,933	317,700	344,278	31%

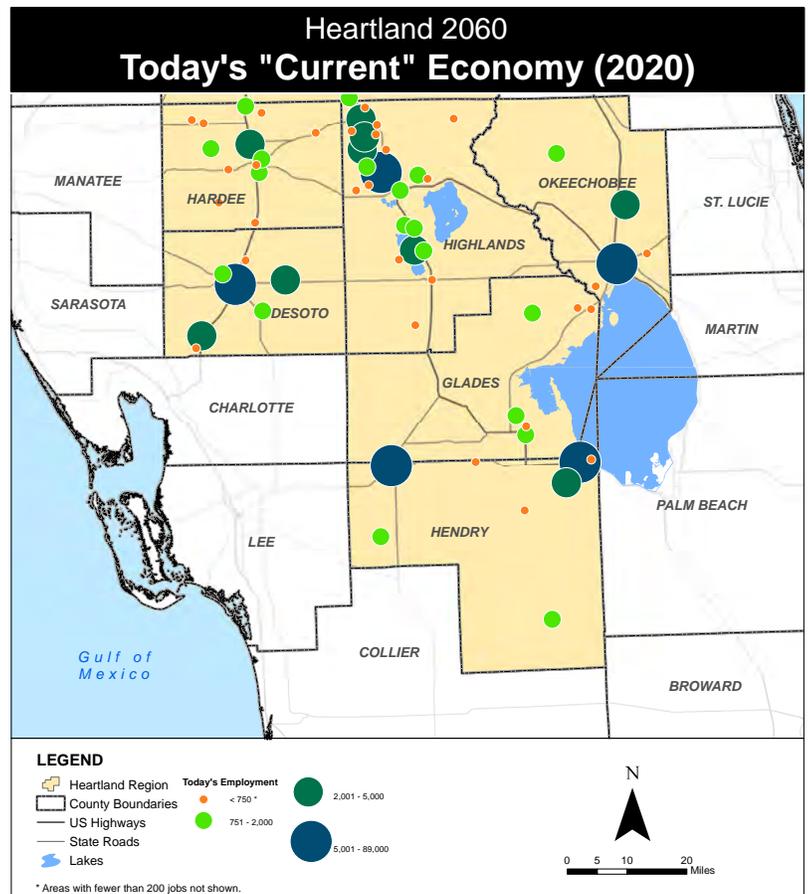
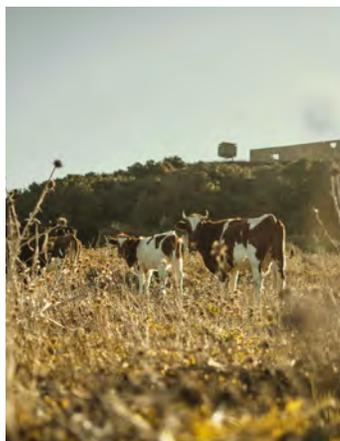
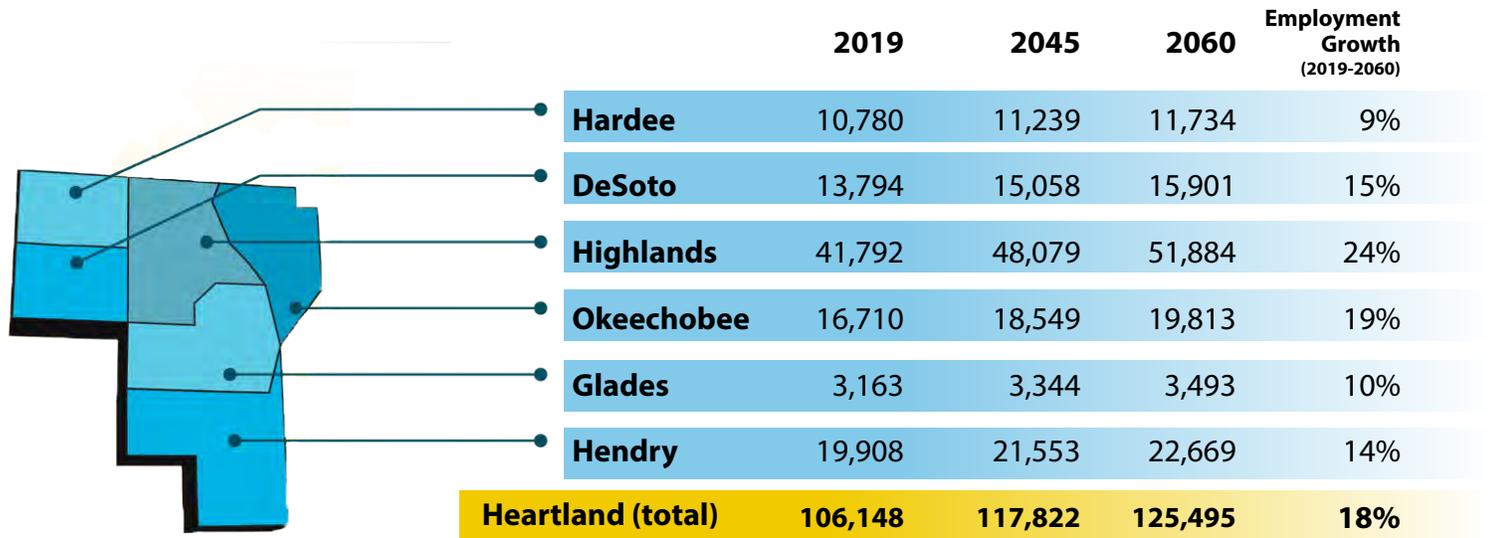


Learn More: Heartland 2060: Building a Resilient Region Revised is included in as a Technical Support Document to the 2045 LRTP and available at www.hrtpo2045.org

Employment Growth

Employment plays a role in transportation planning of both estimating the demand for future travel and for defining where those trips will go. Defining what type of employment, how many employees, and where those employees will be located, defines for future regional transportation needs. As a tool to ensuring those forecasts are resilient, looking at a variety of employment scenarios is important.

The Heartland 2060 Vision was updated in 2019/2020 to reflect current trends, forecast data, and shifting demographics. A range of employment projections were developed to explore the scenarios. The employment projections are used in the Futures modeling to allocate jobs spatially to employment centers and by industry. The employment projections were derived from using regional economic forecasting software (REMI PI+). The table below summarizes the anticipated employment growth by county.



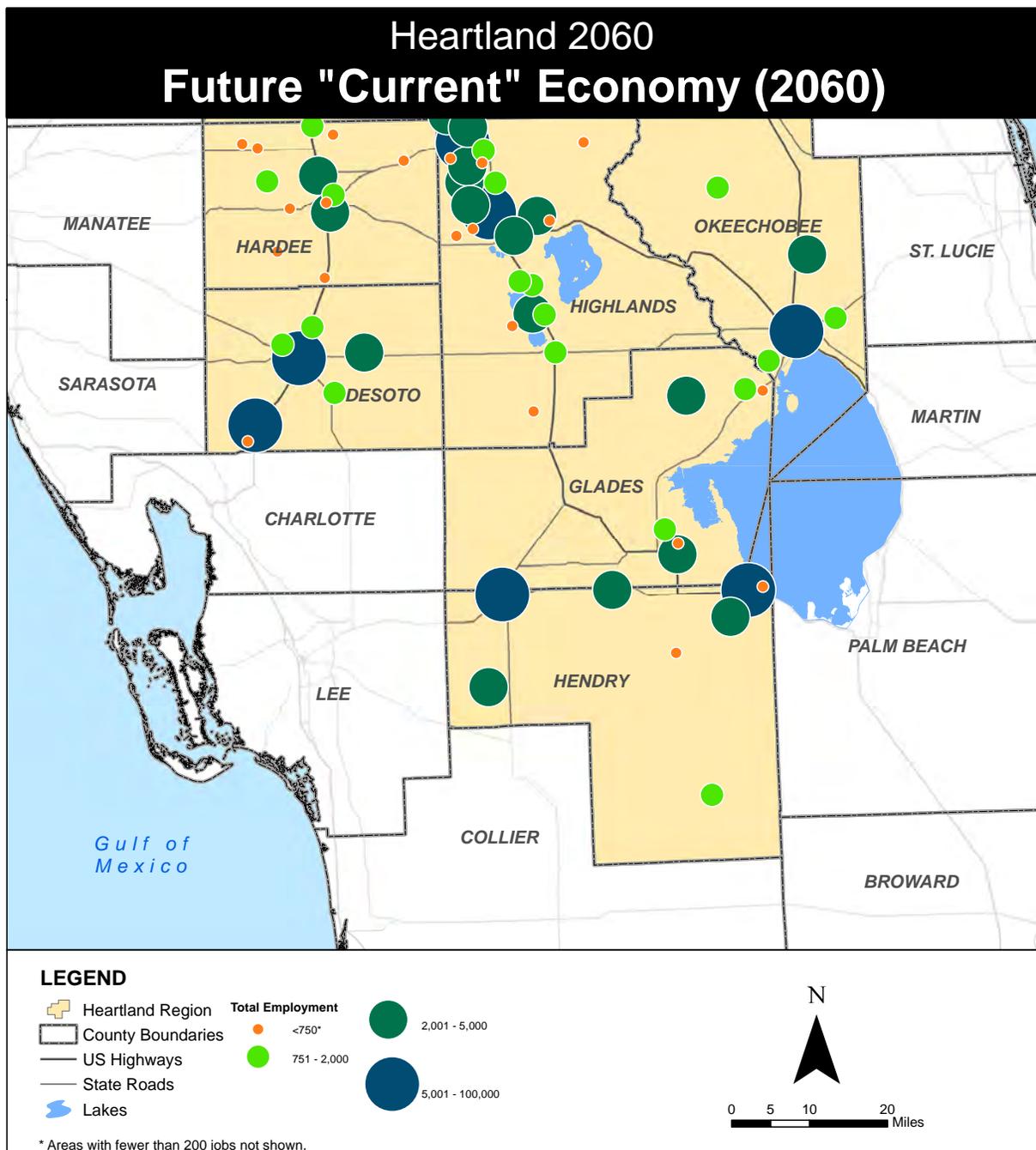
Economic Futures

Three Future economic scenarios were developed: the Current Economy, the Trade and Logistics Economy, and the Tourism and Ecotourism Economy. Two of the Futures (Trade and Logistics Economy and Tourism and Ecotourism Economy) correspond to a regional focus on particular industry clusters, and the Current Economy Future corresponds to a continuation of the current economic trajectory. All three economic futures were used to inform the data that predicts travel demand in the future.

Future "Current" Economy

The Future "Current" Economy projects what will happen if our current employment continues to grow from the present and follows historical trends in population, employment, and land use. This Future continues the current economic prominence of agriculture, healthcare, mining, warehousing, ecotourism, and service industries.

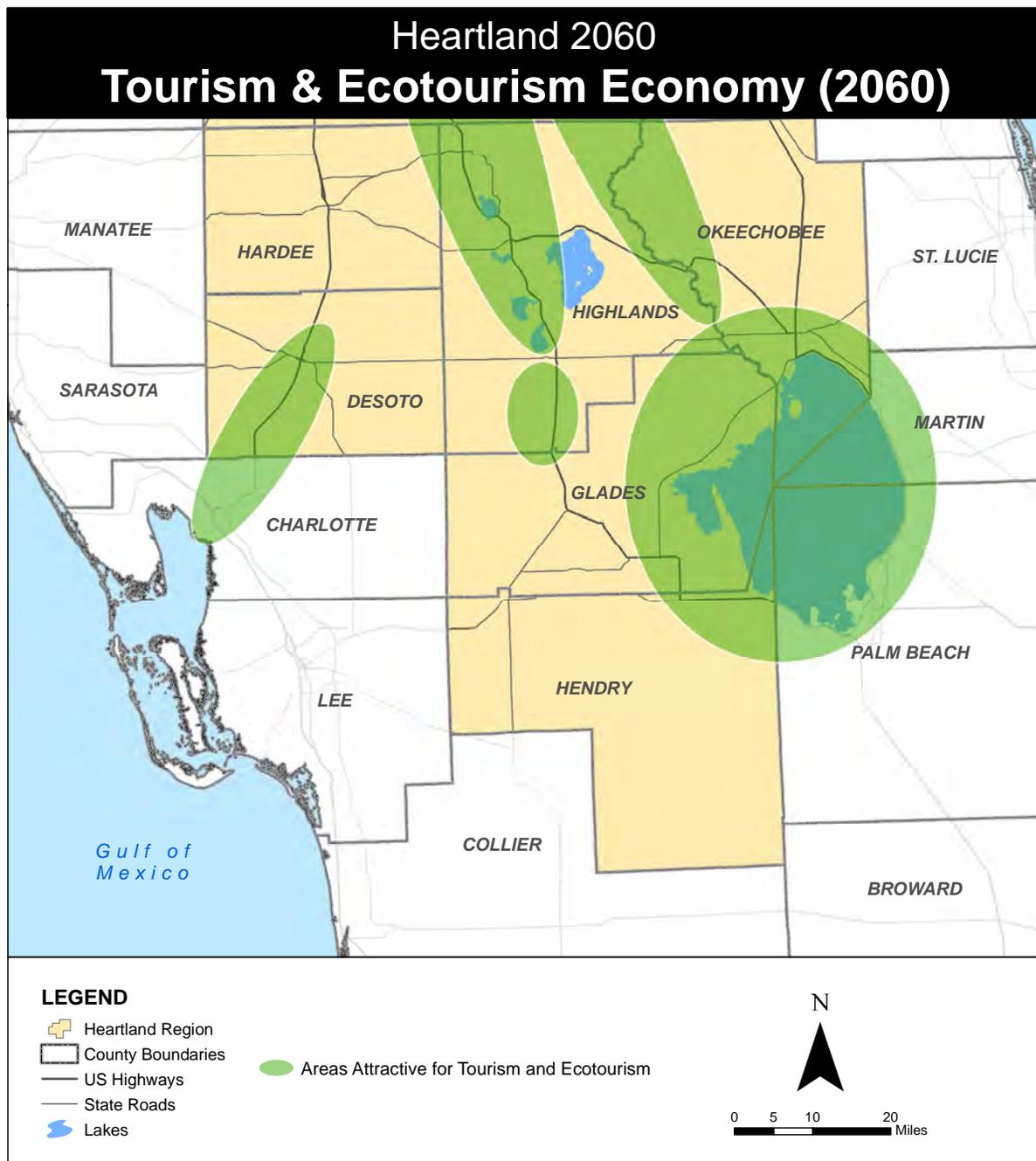
Total employment in the Future "Current" Economy for the region is projected to increase by 18% to 125,494 jobs by 2060.



Tourism and Ecotourism Economy

An important component of the Comprehensive Economic Strategy (CEDs) for the region and the basis for the Heartland 2060 regional vision, is tourism and ecotourism. The proximity and access to tourist destinations throughout the Heartland region shall be considered in development of the LRTP. Projects which support tourism may include, but not be limited to roadway, transit, pedestrian, bikeways, trails, or water access.

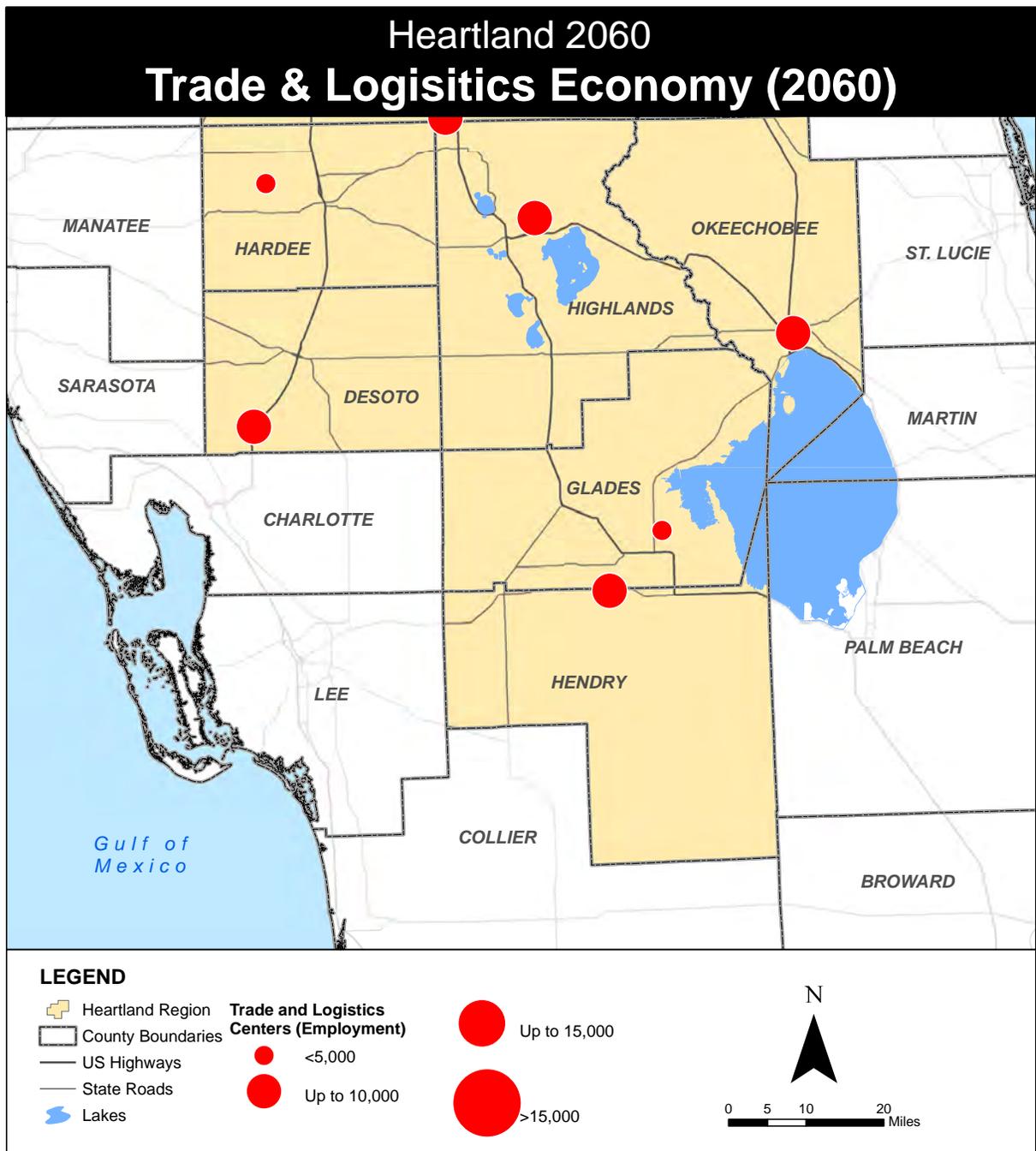
The Tourism and Ecotourism Economy is specifically located in the region along waterways such as the Peace and Kissimmee Rivers, lakes such as Okeechobee and Jackson, unique habitats like the northern Everglades and the Lake Wales Ridge, and parks like Highlands Hammock State Park and Paynes Creek Historic State Park.



Trade and Logistics Economy

Another vital component of the CEDS and basis for the Heartland 2060 regional vision is the continued growth, even during times of adverse economic conditions, in the trade and tourism economy. These industries continue to experience positive growth impacts and are considered in the LRTP's development. Projects supporting these industries include roadways, rail, and airports.

Aviation and its related industries have shown significant potential in recent years and are identified as continuing to have regional impact in the future. The region currently has a relatively significant talent pipeline in place to support the aviation industry, with educational programs dedicated to trainings and certifications. At least two of the region's airports have identified continued opportunity areas for the region, with development and investment ongoing, expanding operations and activities, and continued employment. These are Sebring Airport and AirGlades with each expected to have major impact on trade and logistics, and employment, in the years to come. Other airports in the region also offer employment growth opportunities and are reflected in employment forecasts.



Performance management is a strategic approach to connect investment and policy decisions to help achieve performance goals. Performance measures and targets are the benchmarks against which progress is assessed using available data.

The FDOT and the HRTPO are required to establish targets for the performance measures that align with the national goals and identified below. The HRTPO has adopted to support the FDOT in their targets on all performance measures. These measures and targets inform the goals of this plan, the project evaluation criteria used by the HRTPO, project priorities and the FDOT Work Program and the HRTPO's Transportation Improvement Program.



Highway Safety Measures

The HRTPO has a commitment to improving transportation safety which is demonstrated through planning and programming activities. Activities included in the Unified Planning Work Program (UPWP) such as the completion of Bike and Pedestrian Safety Plan (BPSP), health and safety partnerships with local agencies, participation on the Community Traffic Safety Teams (CTST) and analysis of crash data have led to increased safety awareness and project specific recommendations to reduce injuries and fatalities throughout the planning area.

By August 31, 2019, FDOT established statewide performance targets for the safety measures. On January 21, 2021, the HRTPO again agreed to support FDOT's statewide safety performance targets, thus agreeing to plan and program projects in the LRTP that once implemented, are anticipated to make progress toward achieving the statewide targets.

Safety Performance Measures	HRTPO Regional Baseline Performance (Five-Year Rolling Average)				HRTPO and Florida 2021 Performance Targets
	2012-2016	2013-2017	2014-2018	2015-2019	
Number of Fatalities	60.6	66.8	72.4	3,110.6	0
Rate of Fatalities per 100 million Vehicle Miles Traveled (VMT)	2.099	2.235	2.346	1.43	0
Number of Serious Injuries	342	390.4	428.4	20,166.4	0
Rate of Serious Injuries per 100 million VMT	11.751	12.912	13.814	9.29	0
Number of Non-motorized Fatalities and Serious Injuries	32.4	33.4	35	3,401.8	0

Pavement and Bridge Condition Measures

On May 18, 2018, FDOT established statewide performance targets for the pavement and bridge measures. On September 19, 2018, the HRTPO agreed to support FDOT's statewide pavement and bridge performance targets, thus agreeing to plan and program projects in the LRTP that will, once implemented, make progress toward achieving the statewide targets.

Pavement and Bridge Condition Measures	2-year Statewide Target (2018 - 2019)	4-year Statewide Target (2018 - 2021)	HRTPO Region Current Conditions
Non-Interstate National Highway System (NHS) Pavement Measures			
Percent in good condition	≥ 40%	≥ 40%	35.5%
Percent in poor condition	< 5%	< 5%	0.3%
National Highway System (NHS) Bridge Deck Area Measures			
Percent of deck area in good condition	≥ 50%	≥ 50%	82.44%
Percent of deck area in poor condition	< 10%	< 10%	0.0%

System Performance, Freight, and Congestion Program Measures

On May 18, 2018, FDOT established statewide performance targets for the system performance measures. On September 19, 2018, the HRTPO agreed to support FDOT's statewide system 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.

System Performance and Freight Targets	2-year Statewide Target (2018 - 2019)	4-year Statewide Target (2018 - 2021)	HRTPO Region Current Conditions
Percent of person-miles on the Interstate system that are reliable	≥ 75%	≥ 70%	N/A
Percent of person-miles on the non-Interstate National Highway System that are reliable	Not Required	≥ 50%	99%
Truck travel time reliability	≥ 1.75	≥ 2.00	N/A

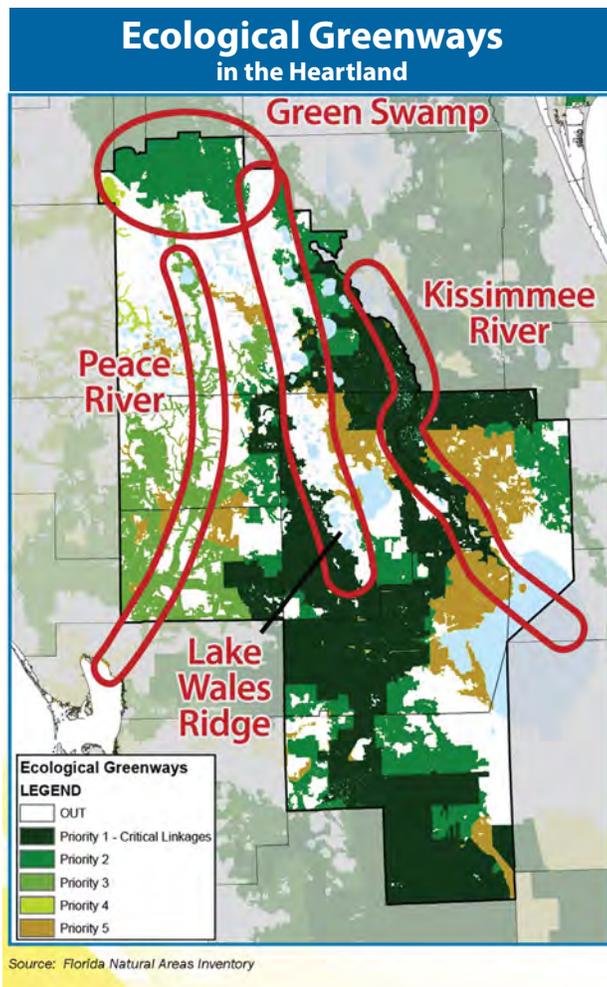
Transit Asset Management Measures

All transit agencies within the Heartland region are categorized as Tier II agencies and are participating in the FDOT Group Transit Asset Management Plan. On November 28, 2018, the HRTPO agreed to support the transit asset targets identified in the FDOT Group Transit Asset Management Plan, thus agreeing to plan and program projects in the L RTP that will, once implemented, make progress toward achieving the transit targets.

Asset Category	Asset Class	FY 2020 Asset Conditions	FY 2021 Performance Targets
Revenue Vehicles - Age - % of revenue vehicles that have met or exceeded their Useful Life Benchmark (ULB)	Automobile	28.6%	≤28%
	Bus	17.0%	≤16%
	Cutaway Bus	14.1%	≤14%
	Mini-Bus	100%	≤75%
	Mini-Van	26.6%	≤26%
	SUV	18.2%	≤18%
	Van	47.9%	≤47%
Equipment - Age - % of non-revenue vehicles that have met or exceeded their ULB	Non Revenue/Service Automobile	66.7%	≤66%
	Trucks and other Rubber Tire Vehicles	7.1%	≤7%
Facilities % of facilities with a condition rating below 3.0 on the FTA Transit Economic Requirements Model (TERM) Scale	Administration	0%	≤0%
	Maintenance	0%	≤0%



Learn More: Appendix C is the HRTPO System Performance Report for the 2045 Long Range Transportation Plan.



Avoidance of Environmental and Natural Systems Impacts

As part of the Heartland 2060 cooperative effort, the concept of avoidance of impacts to the environment and natural systems in construction of new and expanded transportation infrastructure was established. To accomplish this, an extensive database was developed for the Heartland Region. Identified new and/or expanded roadways were proposed for locations outside of wetlands, floodplains, and prime habitat for endangered or threatened animal species. Traversing or crossings of these areas, as well as prime wildlife corridors, were minimized. When proposed transportation projects may impact these environmental or natural systems, the use of mitigation strategies will be used in the project development process.

Mitigation of Environmental and Natural Impacts

Transportation projects can significantly impact many aspects of the environment including wildlife and their habitats, wetlands, and groundwater resources. In situations where impacts cannot be completely avoided, mitigation or conservation efforts are required. Environmental mitigation is the process of addressing damage to the environment caused by transportation projects or programs.

The **Peace River** to the west supplies over **6 million gallons per day of drinking water** to the region.

The **Kissimmee River** to the east is critical to the region's **flood control** efforts and supports a wide array of **recreational opportunities**.

The **Lake Wales Ridge** in the center of the region supports **distinctive plant and wildlife species found nowhere else in the world**.

The **eastern half of the region** north of Lake Okeechobee make up the **Northern Everglades watershed**.

Potential Environmental Mitigation Opportunities

The process of mitigation is best accomplished through enhancement, restoration, creation and/or preservation projects that serve to offset unavoidable environmental impacts.

A typical approach to mitigation that the HRTPO can follow is to:

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

Sections 373.47137 and 373.4139, F.S. require that impacts to habitat be mitigated for through a variety of mitigation options, which include mitigation banks and mitigation through the WMD(s) and the FDEP. Potential environmental mitigation opportunities that could be considered when addressing environmental impacts from future projects proposed in the LRTP may include many opportunities.

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



Learn More: More information Environmental Mitigation may be found in Appendix D and includes maps identifying potential areas of avoidance and mitigation for each of the six Heartland counties including wetlands, lakes, and water features, tribal lands, state parks, military operating areas, and designated conservation areas.

Chapter 5 | Public Involvement & Consultation

Public Participation during the development of the LRTP is a key component. Meaningful and effective public involvement brings a diverse set of views into the discussion and improves decision making by generating ideas for how the transportation system may be improved. Public engagement efforts followed the guidance outlined in the Public Participation Plan to ensure “full and open access” as the LRTP was developed.

- Phase one: We engaged citizens and partners on what influences our transportation system today and what will be important for the future**
- Phase two: We forecast Heartland population and economy scenarios to determine 2045 transportation needs and engaged the public on future transportation choices.**



Heartland 2060 Summits

Heartland 2060: Building a Resilient Region—Revisited has convened hundreds of citizens, stakeholders, influencers, committed volunteers, and elected officials, both in-person and virtually in 2019. It served as a basis for thoughtful engagement with the conclusion that collaboration must continue as we find opportunities and solve mutual concerns to become a more resilient region. With more than 200 participants at two summits held in September and November of 2019, attendees engaged in conversations on topics including future trends, the environment, transportation and freight education and talent pipeline, and agriculture.

Based upon surveys which supplemented the in person engagements, the Heartland 2060: Building a Resilient Region--Revisited guide to collaboration, growth and development was completed in 2020.

What is one key action we should be thinking about for the future of the Heartland?



Public Involvement During the Public Comment Period

January 25 - February 25, 2021

- HRTPO Committee Meetings:**
- DeSoto, Hardee, Highlands, and Okeechobee Local Coordinating Board
 - Glades and Hendry Local Coordinating Board
 - Technical Advisory Committee
 - Citizen Advisory Committee

11
Comments Received

173
Document Downloads

16
Virtual Open House Participants

145
Surveys Completed

Chapter 6 | Modal Options

In addition to the Regional Roadway Network, the Heartland region is connected through other transportation modes including limited public transportation, bicycle and pedestrian systems, airports, rail, and freight. A goal of transportation in the Heartland region is to provide a safe and efficient and transportation network that accommodates all modes of transportation. These modes of transportation provide connections within the Heartland region as well as linkages to adjacent regions, the state, and the country as well as globally.



Transit and Mobility

Highlands Transit Plan

The Highlands Transit Plan is HRTPO's Transit Development Plan (TDP) for the Sebring-Avon Park Urbanized Area in Highlands County. As a result of the 2010 Census, and subsequently becoming part of the HRTPO, the urbanized area of Highlands County is eligible to file a grant application for, and receive, Federal Transit Administration (FTA) 5305(d) Transit Planning Funds. With the designation of the Sebring – Avon Park Urbanized Area, comes the State of Florida requirement to develop a Transit Development Plan (TDP). A Transit Development Plan (TDP) is a 10-year horizon plan intended to support the development of an effective multimodal transportation system for the State of Florida and was developed and funded through the Unified Planning Work Program in 2016/2017. Service options were developed that use a combination of dial-a-ride service, flex routes, and express service between Avon Park and Sebring within the designated Urban Transit Area.

Transit funding identified in the 2045 Revenue Forecast and set aside in the Cost Feasible Table can be used to fund the TDP for operations and capital beginning in 2022, if required local funding is identified.

Sample Service Option



Vision

Highlands County will have mobility choices allowing residents and visitors to travel easily and efficiently using accessible public transportation.



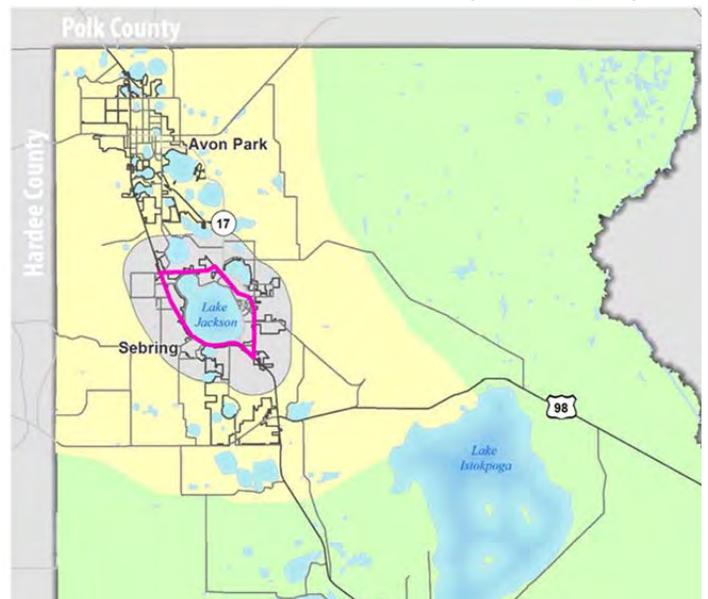
Mission

To provide Highlands County with safe, dependable, and cost efficient public transportation options.



Goals

- Goal 1: Expand mobility choices for residents and visitors.
- Goal 2: Create and maintain a reliable and efficient public transportation system.
- Goal 3: Support tourism and economic development.
- Goal 4: Maximize safety and security for all transportation services and facilities.



Learn More: The Highlands Transit Plan, Heartland Rural Mobility Plan, and Transportation Disadvantaged Service Plans are included in as a Technical Support Document to the 2045 L RTP and available at www.hrtpo2045.org

Heartland Rural Mobility Plan

The Heartland Rural Mobility Plan was initiated in 2007 and updated in 2018. The study area for the plan included the six counties that comprise the HRTPO, along with the four communities of Belle Glade, Pahokee and South Bay in Palm Beach County, and Immokalee in Collier County. Geographically, it included approximately 5,000 square miles and a diverse population of about 300,000 with a wide range of mobility needs. It mirrored the South Central Florida Rural Area of Critical Economic Concern (RACEC), which is now known as a Rural Area of Opportunity (RAO).

Mobility coordination and implementation is staffed by the Central Florida Regional Planning Council (CFRPC) in partnership with the Florida Department of Transportation (FDOT) District One. This coordination between stakeholders and service providers, as well as connecting disadvantaged residents of the Heartland region to transportation services, seeks to improve efficiency in all programs and operations while increasing mobility options for the entire Heartland region.



In response to the need for a comprehensive information resource on transportation and mobility options in the region, Heartland Rides was developed with stakeholder engagement and support. Designed as a mobility resource, Heartland Rides serves as a one-stop source to connect the general public, older adults, people with disabilities, and individuals from low-income households who need transportation with available transportation options in the Heartland region. Information is available online and by phone to help connect individuals with transportation providers and get them to the places necessary to live a healthy life including medical appointments, employment, education, and other life-sustaining services.

Transportation Disadvantaged Service Plans

Within the six counties that comprise the HRTPO, there is door-to-door paratransit service through the Transportation Disadvantaged (TD) program and rural public transit, which covers two distinct transit planning areas:

Glades and Hendry Counties

As of January 1, 2021 the CTC for this service area is Hendry County through an agreement with Glades County. The service area is served by Stream, the Hendry Glades Transportation System.

DeSoto, Hardee, Highlands, and Okeechobee Counties

The CTC for this service area is MV Transportation, Inc., a private for-profit provider and the TD planning agency is the CFRPC who also administers rural public transit funds and owns transit vehicles deployed to the system.

» DeSoto Arcadia Regional Transit (DART)

A deviated fixed-route public transit service in and around the City of Arcadia, which began in November of 2012, and is operated by the Community Transportation Coordinator with rural public transit funds administered by the CFRPC. This service provides the community with a low-cost, reliable mobility option and access to a variety of activities and destinations, and continues to report strong ridership.





Aviation, Rail, and Freight

The Central Florida region's logistics industry, including aviation, rail, and freight movement, has experienced a large amount of growth in the past several years, unhindered by other industry disruptions or natural disasters, and will continue to be a major component of the region's economic future. Freight, rail, and aviation are vital to the long-term resiliency of the region and are necessary for stable growth, as they positively impact the economy and serve as major employers while positioning the region as a trade hub. Logistics and Aviation are identified as target industries for the region and will be vital to economic growth for years to come. These industries must be supported and considered when planning for transportation as they are all interconnected.

Aviation

The aviation industry has shown significant potential in recent years and is identified as continuing to have regional impact in the future. The region currently has a relatively significant talent pipeline in place to support the aviation industry, with educational programs dedicated to trainings and certifications. The region's airports continue to be opportunity areas for the region, with development and investment ongoing, expanding operations and activities, and continued employment. Two of the region's airports (Sebring Airport and AirGlades) are expected to have major impact on trade and logistics, and employment, in the years to come.

Urban Air Mobility (UAM), envisions a safe and efficient aviation transportation system that will use highly automated aircraft that will operate and transport passengers or cargo at lower altitudes within urban, suburban, and even rural areas.

Successful implementation of UAM will coordinate with communities' existing transportation options and provide additional options for routine, urgent, and emergency travel across a variety of distances using a variety of aircraft, each appropriate to a given mission and range.

- City Center
- Suburbs to City
- Edge City to (edge) City
- Rural Access
- Hub Airport Access

The initial UAM ecosystem will utilize existing helicopter infrastructure such as routes, helipads, and Air Traffic Control (ATC) services, where practicable given the aircraft characteristics. Looking toward the future, the FAA is working to identify infrastructure design needs for these aircraft. FAA expects to develop a new vertiport standard in the coming years.



Learn More: A Resource on Urban Air Mobility prepared by The Community Air Mobility Initiative is included in as a Technical Support Document to the 2045 LRTP and available at www.hrtpo2045.org



Regional Airports

- **DeSoto County** | Arcadia Municipal Airport is located on the southeast side of Arcadia. Arcadia Municipal is served by two runways. In its current role, the airport concentrates primarily on serving general aviation aircraft. The airport presently focuses on recreational activity and flight training.
- **Hardee County** | Wauchula Municipal Airport has one paved runway. In its current role, the airport primarily serves general aviation aircraft.
- **Hendry County** | AirGlades Airport is served by one active runway. In its current role, the airport focuses primarily on serving the area's general aviation needs. AirGlades Airport focuses heavily on business flights, flight training, recreation, and air taxi operations. A logistics center is being developed which would serve as cargo operations and movement for perishable goods.
- **Hendry County** | LaBelle Municipal Airport is served by one runway. LaBelle Municipal Airport currently serves as a general aviation airport. The airport focuses primarily on serving recreational aircraft.
- **Highlands County** | Avon Park Executive Airport is served by two asphalt runways. In its current role, the airport focuses primarily on serving general aviation aircraft. The airport currently focuses on recreational aircraft activity and flight training with a growing corporate presence becoming more evident.
- **Highlands County** | Sebring Regional Airport is served by two intersecting runways. In its current role, Sebring Airport Authority (SAA) focuses primarily on serving the community and generating economic activity. The Sebring Airport serves as a multimodal logistics center, accommodating the ability to move goods on roadways and via rail in addition to serving aviation needs. The airport is also designated as a Foreign Trade Zone (FTZ).
- **Okeechobee County** | Okeechobee County Airport is comprised of two active asphalt runways. In its current role, Okeechobee County Airport serves the general aviation needs of the local population. There is a particularly high concentration of flight training at the field.



Photo Courtesy of Sebring Regional Airport

Photo Courtesy of Friends of Arcadia Municipal Airport

Rail

Unlike most other modes of transportation in Florida, the rail network is almost entirely owned and operated by the private sector. The rail network traverses the state and serves most of the major cities while providing access to seaports, citrus plants, phosphate facilities, power plants, and other vital industries. Rail in the Heartland region includes both freight and passenger service.

- **Passenger Rail** - Passenger rail service is provided through Amtrak. Sebring has four daily Amtrak services at Sebring Station on the Amtrak Silver Meteor and the Amtrak Silver Star which have routes between New York and Miami.
- **Freight Rail** - CSX Transportation (CSXT) owns more than 53 percent of the statewide railroad track mileage in the Heartland region. CSX and Seminole Gulf Railway serve DeSoto County. CSX serves Hardee County. South Central Florida Express serves the counties of Glades, Hendry, Highlands and Okeechobee in the Heartland region.

Freight

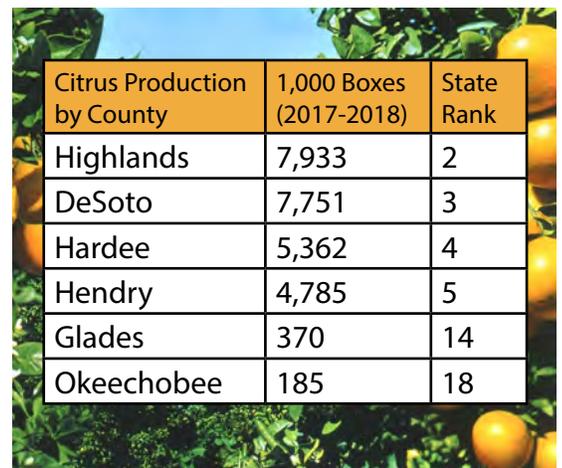
Freight and the movement of goods are important issues in the Heartland region as we plan for the expansion of the logistics and manufacturing industry clusters. As new and existing projects expand and come online, these regional changes will affect freight and roadway patterns and must be addressed. The economic development impacts of these activities are key to the Heartland region and are incorporated into the Comprehensive Economic Development Strategies (CEDs) that have been adopted in the Central Florida and Southwest Florida Economic Development Districts (EDD) of the Heartland.

The continued growth of the logistics and manufacturing employment centers will steadily increase the need for an integrated freight and roadway network that will support the increased population, total employment, and capitalize on the region's opportunity to grow as a trade hub.

Americas Gateway Logistics Center located on US 27 in Glades County is an emerging Logistics Center that will export and distribute manufactured goods by linking road and rail. The Sebring Multimodal Logistics Center and Commerce Park has many businesses on site including local, national, and international, and is located at the Sebring Regional Airport which encompasses 2,000 acres with a Foreign Trade Zone designation. It includes the fuel farm, Industrial Park, and Sebring International Raceway currently operated by NASCAR. Other key projects, investments, and opportunities identified in the region which impact the need for freight corridor improvements include the Hardee County Commerce Center, the US 17 South Distribution Center located in DeSoto County, Airglades Airport in Hendry County proposed as a major air cargo hub, and the Okeechobee Commerce Center/Okeechobee County Airport Area. The Polk Gateway (CSX logistics center) also contributes to the need for corridor and freight movement improvements in the Heartland region due to its proximity to US 27, US 98, and US 17 to the north in Polk County.

FDOT District One Freight Mobility and Trade Study

The Florida Department of Transportation District One Freight Mobility and Trade Study defines an integrated and connected regional freight transportation network and identifies regional freight investment priorities needed to provide ongoing economic growth in the region. In addition to emphasis on the movement of freight via rail, a number of corridors have been identified as priorities. These regional corridors include US 27, US 17, US 98, and sections of SR 70, SR 80, SR 64, and SR 66. Other studies and plans related to these activities and their associated prioritization and investments include the Florida Transportation Plan, the Florida Rail System Plan, the Strategic Intermodal System (SIS) Strategic Plan, and the Heartland 2060: Building a Resilient Region Vision plan.



Citrus Production by County	1,000 Boxes (2017-2018)	State Rank
Highlands	7,933	2
DeSoto	7,751	3
Hardee	5,362	4
Hendry	4,785	5
Glades	370	14
Okeechobee	185	18



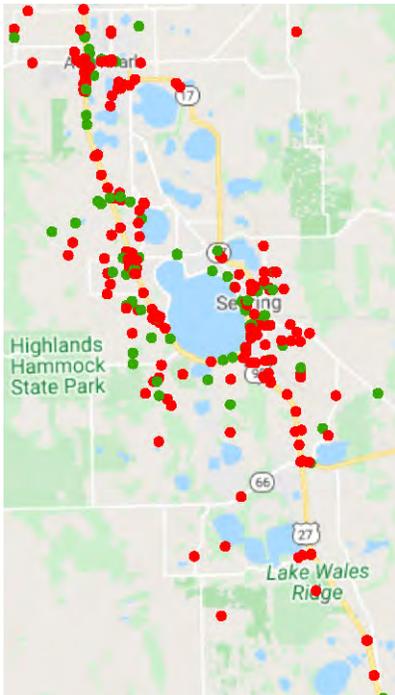
Learn More: The FDOT District One Freight Mobility and Trade Study is included in as a Technical Support Document to the 2045 L RTP and available at www.hrtpo2045.org



Bicycle and Pedestrian System and Safety

Bicycle and Pedestrian Safety Plan

The HRTPO adopted the Bicycle and Pedestrian Safety Plan (BPSP) adopted in June 2019 identifies the areas in the Heartland region that have the greatest opportunity to reduce pedestrian and bicycle fatalities, injuries, and crashes. The five-year plan will provide guidance to the stakeholders concerned with improving pedestrian and bicycle safety, including law enforcement, local governing agencies, and pedestrian and bicycle safety advocates. The BPSP was developed in coordination with the HRTPO Technical Advisory Committee and Citizens Advisory Committee, as well as coordination with staff from each city and county government in the HRTPO region. The plan includes:



Goals

The HRTPO supports the Florida Department of Transportation’s (FDOT) statewide safety performance target of zero Nonmotorized Fatalities and Serious Injuries. This target of zero serves as the singular goal of the BPSP.

Existing Facilities & Conditions

An inventory of relevant transportation infrastructure that identifies existing bicycle and pedestrian facilities and conditions, safety data, and planned, prioritized, and proposed projects in the region was developed as an interactive online map.

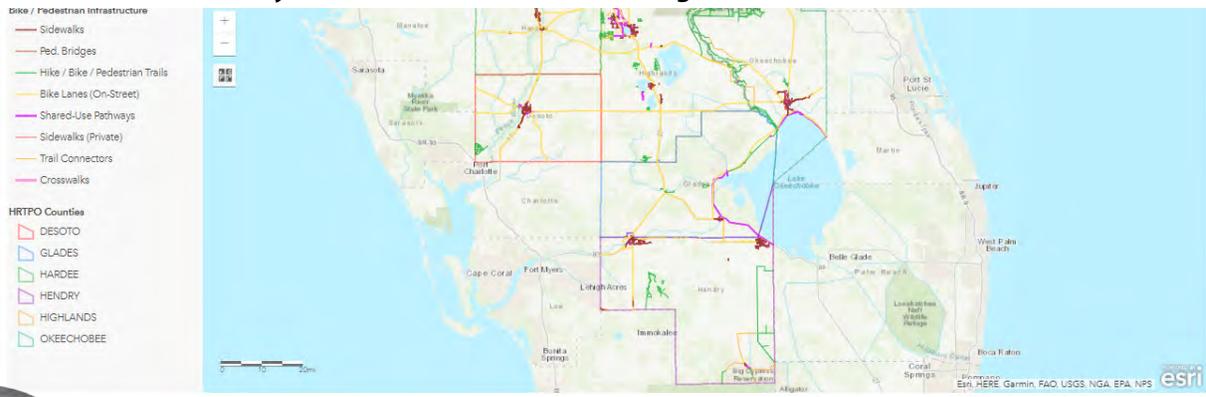
Action Plan

The Action Plan is a summary of proposed projects and study areas throughout the region that have indicated need on the basis of number of incidents in the past ten years, proximity to schools, and enhancements to environmental justice areas.

Next Steps

Using information, resources, funding sources, and the HRTPO Project Priorities, projects identified in the Action Plan will be advanced for potential design and construction.

An online interactive map on the HRTPO website www.heartlandregionaltpo.org allows users to layer data to learn how the existing conditions interact.



Learn More: The Bicycle and Pedestrian Safety Plan is included in as a Technical Support Document to the 2045 LRTP and available at www.hrtpo2045.org

Trails

Multi-Use Trails & Blueways

The Florida Greenways and Trails System Plan establishes the vision for implementing a connected statewide system of greenways and trails for recreation, conservation, alternative transportation, healthy lifestyles, a vibrant economy and a high quality of life. The Multi-Use Trails and Blueways Map depicts the trails system within the Heartland that primarily parallels the Regional Roadway Network. This map is based upon the Florida Greenways and Trails System Plan and 2018 Priority Trails Map. These trails and blueways reflect connectivity across the state, across the Heartland region, access to parks, lakes, and natural areas, and connection to communities who have their own local trails. These trails may be paved or unpaved and include multiple modes of transportation.

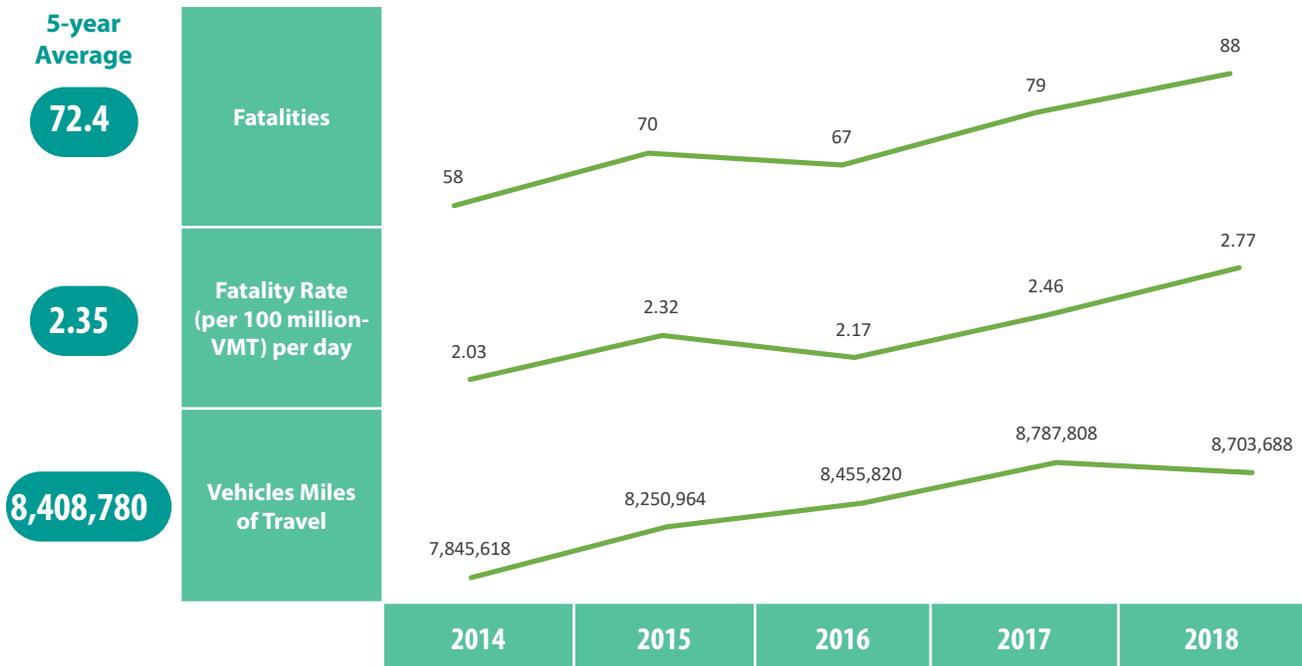
SUN Trail

In 2014, the Florida Legislature approved a \$25 million annual allocation to FDOT to fund a statewide network of paved or other hard surface trails. SUN Trail is a funding source to implement a network of recreational trails, specifically the paved component of the Florida Greenways and Trails System (FGTS) Plan and specifically support the transportation needs of bicyclists and pedestrians on statewide and local trails.



Total fatalities increased between 2014 to 2018 for the entire region, while several counties have seen a decrease. The graphic below includes the trend line from 2014 to 2018 related to fatalities and fatality rates.

Heartland Region - Fatality Performance Measures



The HRTPO has a commitment to improving transportation safety which is demonstrated through planning and programming activities. Activities included in the Unified Planning Work Program (UPWP) such as the completion of Bike and Pedestrian Safety Plan (BPSP), health and safety partnerships with local agencies, participation on the Community Traffic Safety Teams (CTST) and analysis of crash data have led to increased safety awareness and project specific recommendations to reduce injuries and fatalities throughout the planning area.

The HRTPO uses crash data tracking fatalities and serious injuries in the Heartland region to analyze past trends and identify regional safety issues. Tracking these measures will help to estimate the effectiveness of future HRTPO transportation investment, as reflected in the Transportation Improvement Program.

The HRTPO uses Safety Performance Measures data provided by the Department of Transportation through Signal Four Analytics. The data is continually refined over time and so there may be variances in the five-year annual averages based on when the data report is collected.

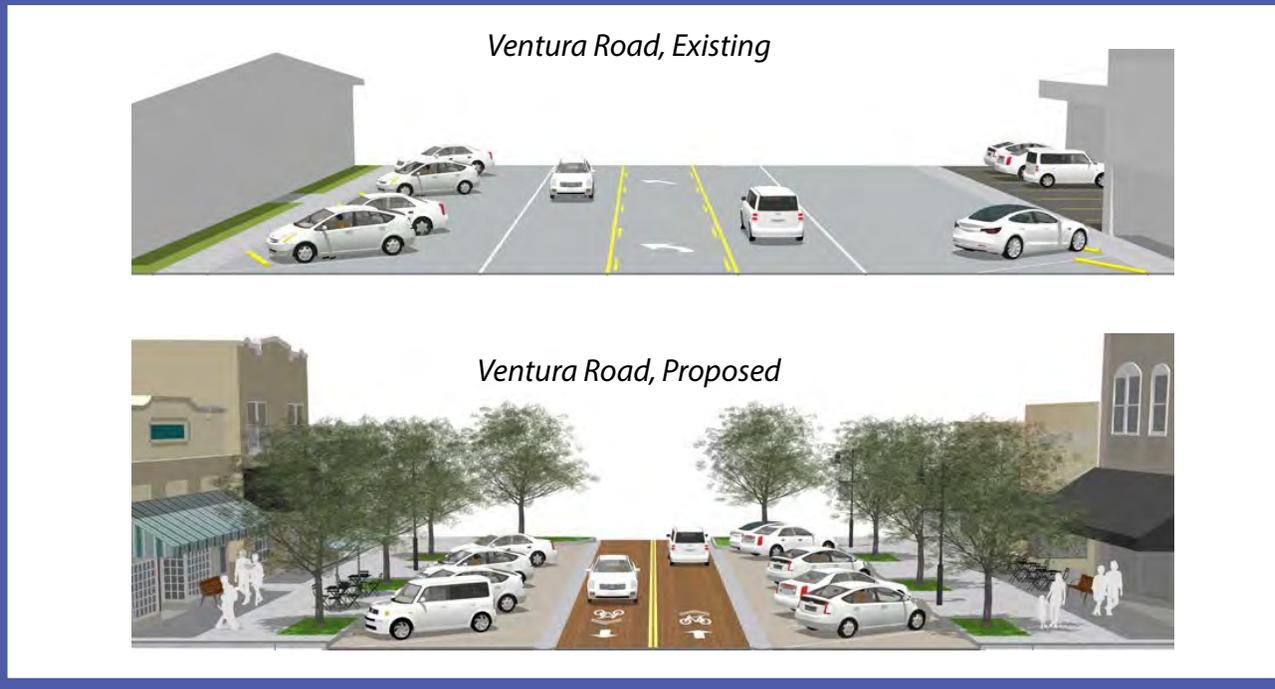
The HRTPO looks to the Florida Strategic Highway Safety Plan to provide focus to our safety initiatives including roadways, user behavior, traffic information, and evolving emphasis areas like work zones and rail crossings.



Learn More: The Florida Strategic Highway Safety Plan is included in as a Technical Support Document to the 2045 LRTP and available at www.hrtpo2045.org

Complete Streets are planned, designed, constructed or reconstructed to consider the context of that transportation network and are sensitive to all modes of travel. The Florida Department of Transportation's (FDOT) Complete Streets Policy, Implementation Plan, and Context Classification Guide work together to promote safety, quality of life, and economic development in Florida and serve as a guide to the HRTPO for Complete Street projects.

A US 27 Clewiston Corridor Vision Plan is currently in development with the FDOT District One Planning Studio. The purpose of the plan is to develop and integrated land use and transportation 50 year vision for a 6.5 miles stretch of US 27. One component of the plan calls for a resign of Ventura Road as shown below.



A Complete Street approach results in:

Safety | Safety for all users is FDOT's and HRTPO's top priority. Roadways with context-appropriate speeds can result in reduced fatalities and serious injuries. The Complete Streets approach considers the mobility, convenience, accessibility, and safety of all road users, and places an emphasis on the most vulnerable users of a given roadway.

Quality of Life | A Complete Streets approach helps to align transportation decisions with land use, resulting in quality places where transportation investments support a community's quality of life.

Economic Development | A Complete Streets approach connects communities and supports Florida's existing economic centers, employment centers, and visitor destinations by striving to provide the highest level of multimodal infrastructure in these core areas.



Learn More: The FDOT Complete Streets Implementation Plan and Context Classification Guide is included in as a Technical Support Document to the 2045 LRTP and available at www.hrtpo2045.org



Although an effective and efficient transportation system is made of many modes of travel and should offer modal choices, the predominate mode of travel in the Heartland region today and in 2045 is expected to be automobiles for people, and trucks for freight. Because of this, it is important to look at the Regional Roadway Network to determine which roadways will carry the majority of trips within the region, from county to county, and also connect the Heartland region with other regions of the state and how well the Regional Roadway Network serves travel demand today and in 2045.

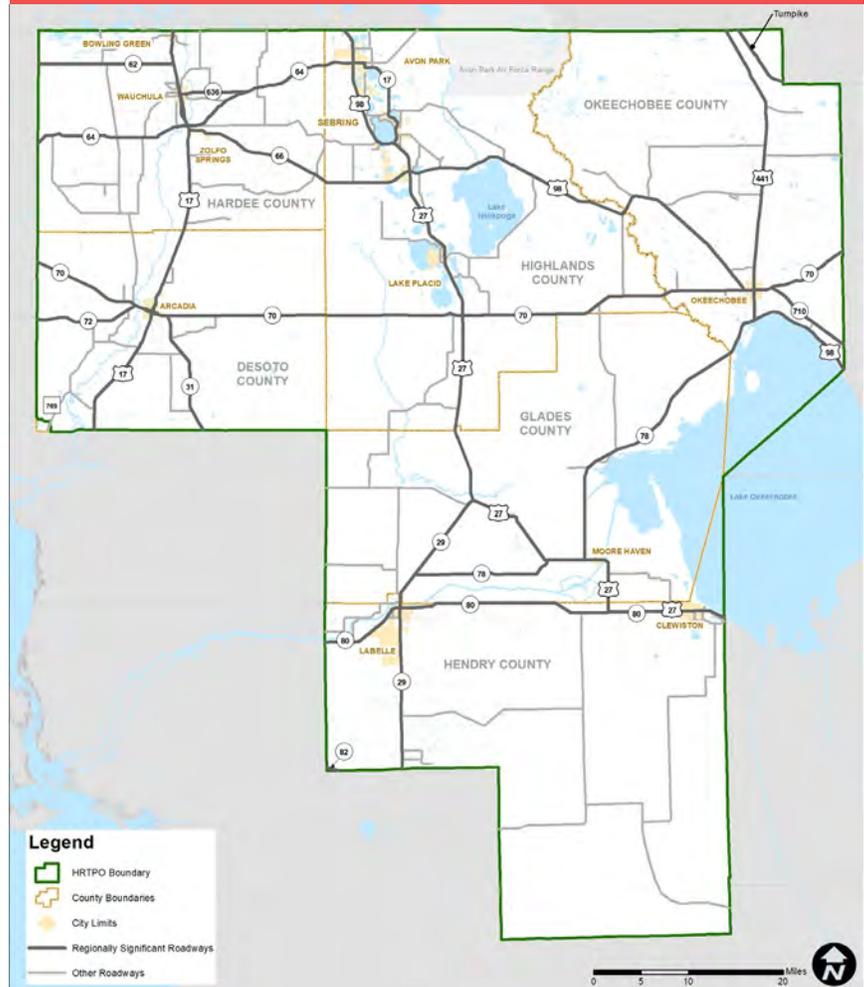
The Regional Roadway Network

The Regional Roadway Network for the Heartland region is the roadways of regional significance that are a part of the Strategic Intermodal System (SIS) and non-SIS facilities, both on and off the state highway system. In general, these roads form an interconnected network between cities and across county boundaries serving a relatively high number of motorists while providing access to major activity centers and public facilities.

The following considerations were used in determining the Regional Roadway Network in the Heartland Region:

- U.S. and State designated roadways
- Transportation facility or service that is a part of the Strategic Intermodal System (SIS)
- Transportation facility or service that is part of the region's economic development infrastructure and provides linkages to regional activity centers or the facility is designated as a regional freight mobility corridor
- Transportation facility or service that serves as an evacuation route as designated by the appropriate regional planning council
- Transportation facility or service that crosses county boundaries
- Transportation facility or service that is used by a significant number of people who live or work outside the county in which the facility or service is located

HRTPO Regional Roadway Network



Because the Regional Roadway Network is comprised of US Routes and State Roads, most of which are on the Florida Strategic Intermodal System (SIS), coordinating with the Florida Transportation Plan (FTP) and short- and long-range SIS Plans are foundational to developing the HRTPO's LRTP. The FTP was updated in 2020 and the LRTP is consistent with the vision, policies and strategies of the FTP.



Evaluating Travel Demand: Regional Planning Model

Roadway Needs through 2045 have been identified based on future travel demand. The evaluation of future travel demand was conducted through a collaborative process between the FDOT and MPO/TPO's using the District 1 Regional Planning Model (D1RPM). As part of the 2045 LRTP update, each District 1 MPO/TPO provided population and employment forecasts for use in the D1RPM. Each MPO/TPO submitted a series of transportation network alternatives to assess future roadway needs and regional travel demand. Regional coordination and testing of alternatives were conducted with the Sarasota/Manatee MPO, Charlotte County-Punta Gorda MPO, Lee County MPO, Collier MPO, Polk TPO, and the HRTPO.

Using a Districtwide model allowed future travel demands that cross county boundaries to be more accurately assessed. The D1 model uses a traditional four-step travel demand process to forecast traffic demand and transportation choice options for the future 2045 conditions. Six alternatives were tested, including an alternative that measured the effect of connected and automated vehicles (CAV). The testing of CAV was based on the 2018 FDOT Guidance for Assessing Planning Impacts and Opportunities of Automated, Connected, Electric and Shared-Use Vehicles (ACES).

Existing Conditions (2015 Base Year)

Miles Congested:

10.9

Percent Congested:

1.33%

Current Conditions

In total, the six counties of the HRTPO contain 820.8 total miles of US and state roadways in the HRTPO Regional Roadway Network, with 490.8 miles of two-lane roads, 18.9 of three lane facilities, 293.0 of four lane facilities, and 18 miles of six lane facilities.

According to 2015 FDOT data that serves as a base year for the FDOT District One model, the miles of roads on the state highway system within the HRTPO operating below an acceptable level standard (established by the FDOT) was 10.9 miles, or 1.33% of the 820.8 miles of the state roadway network within the HRTPO. The areas where these facilities are located are within or near the cities of Wauchula, Avon Park, Sebring, Okeechobee, Arcadia, and LaBelle. The segments of the Regional Roadway Network operating over capacity in 2015 are depicted on the map "Roadways Operating Over Capacity (2015)".

The segments of the HRTPO Regional Roadway Network projected to operate below a minimum acceptable LOS standard in 2015 based on FDOT historical traffic count projections are depicted on "Roadways Operating Over Capacity (2045)". The current lanes on the HRTPO Regional Roadway Network are depicted in the Current Number of Lanes map.

Future Conditions (2045 Forecast Year)

Miles Congested:

4.58

Percent Decrease:

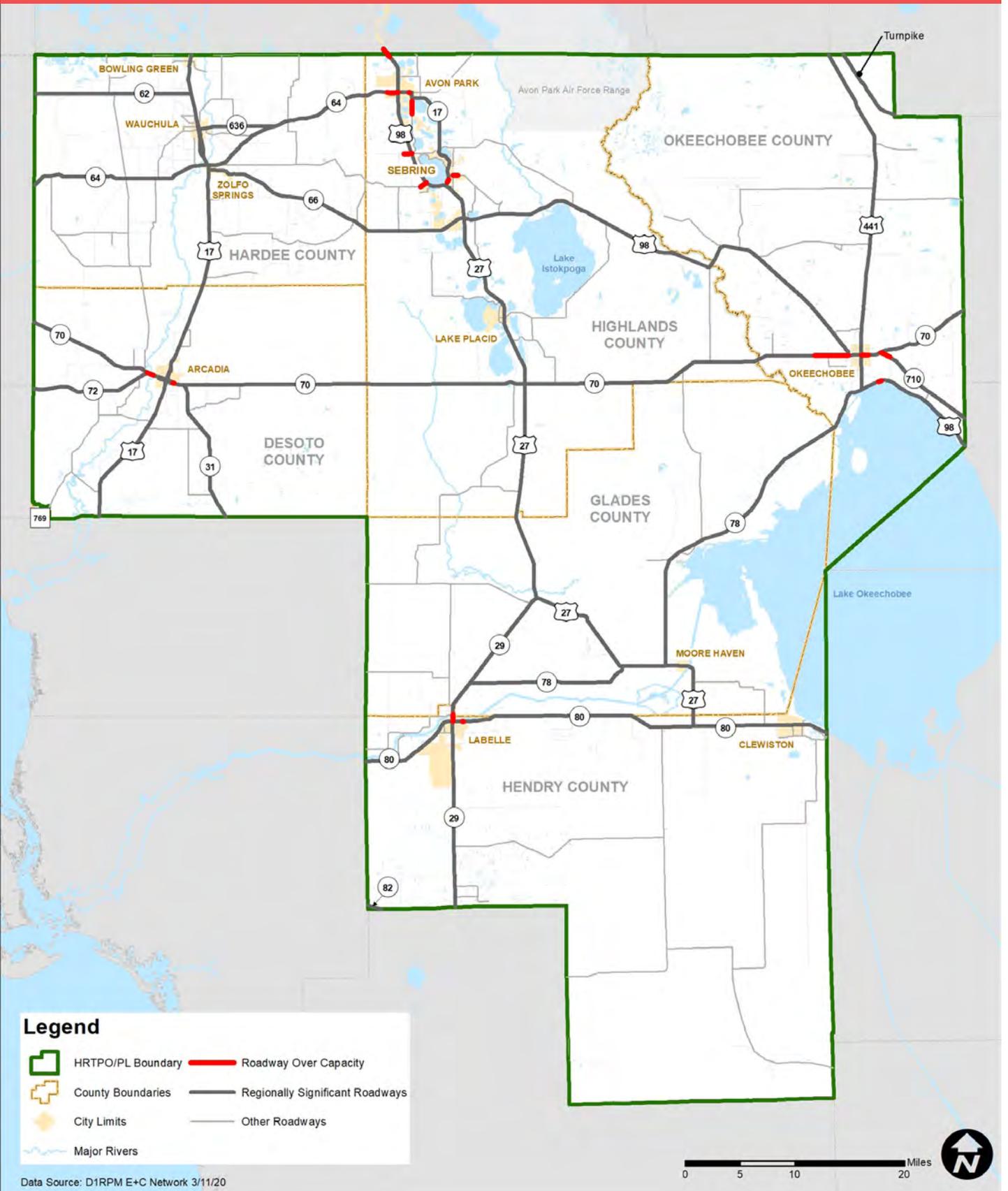
57%

Future Conditions

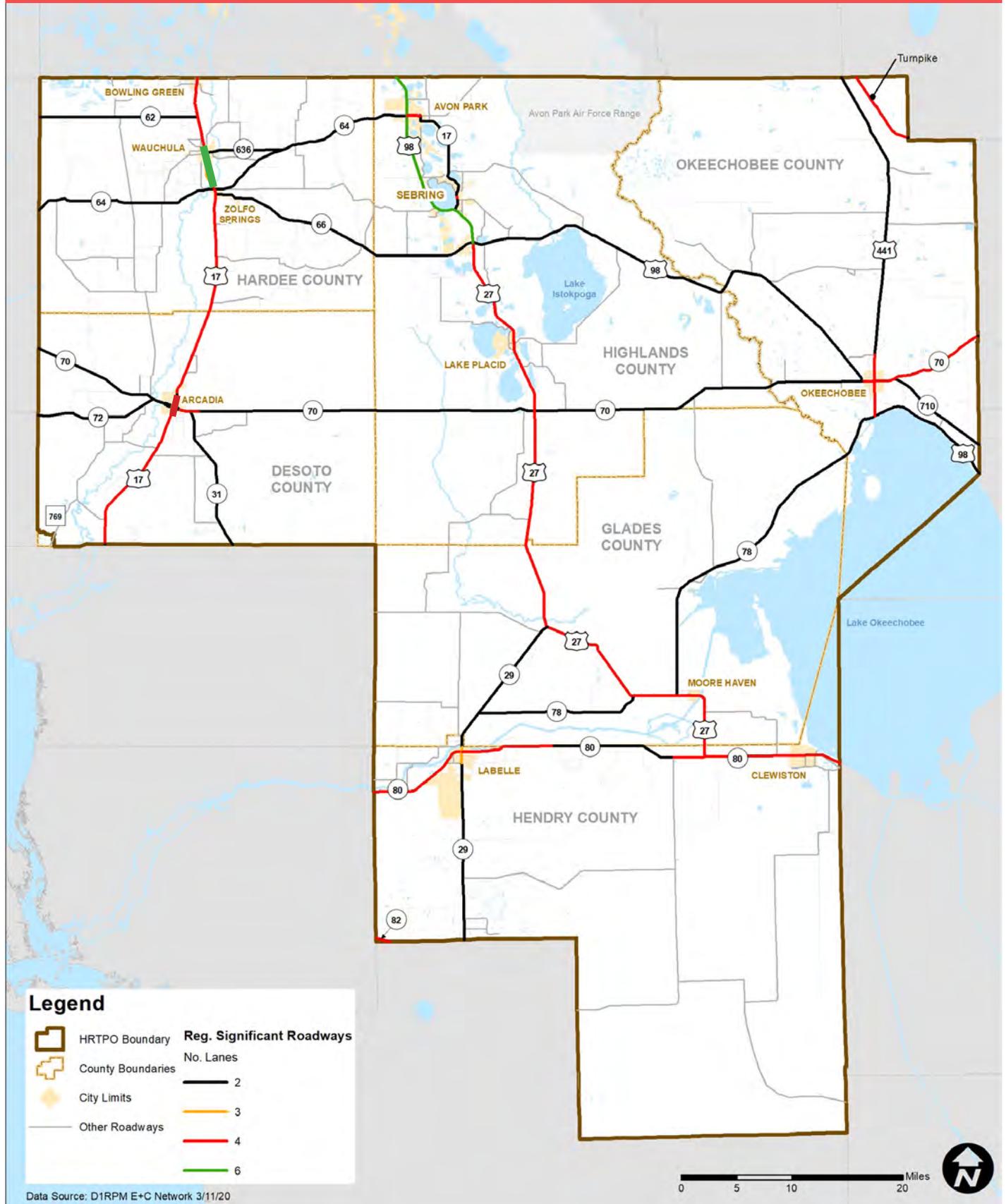
The travel forecasting model used for analyzing future roadway volumes for the HRTPO Long Range Transportation Plan is known as the District One Regional Planning Model or D1RPM. Using the model and currently available data committed projects in the region, preliminary projections for 2045 roadway volumes were made. These projections are based on detailed population and employment projections from the Heartland 2060 socio-economic data. HRTPO Regional Roadway Network segments projected to operate over capacity in 2045 based on model projections are depicted below in the map series "Roadways Operating Over Capacity (2045)". The future lanes on the HRTPO Regional Roadway Network are depicted on the Future Number of Lanes map.

In 2045, 4.58 miles of the Regional Roadway Network are expected to be over capacity ratio 1.0. Most roadways are 1.2 v/c or less which means lower cost Congestion Management projects may provide acceptable operating conditions. From 2015 to 2045, there is expected to be a decrease of 6.22 miles of over capacity roadways, a 57% decrease.

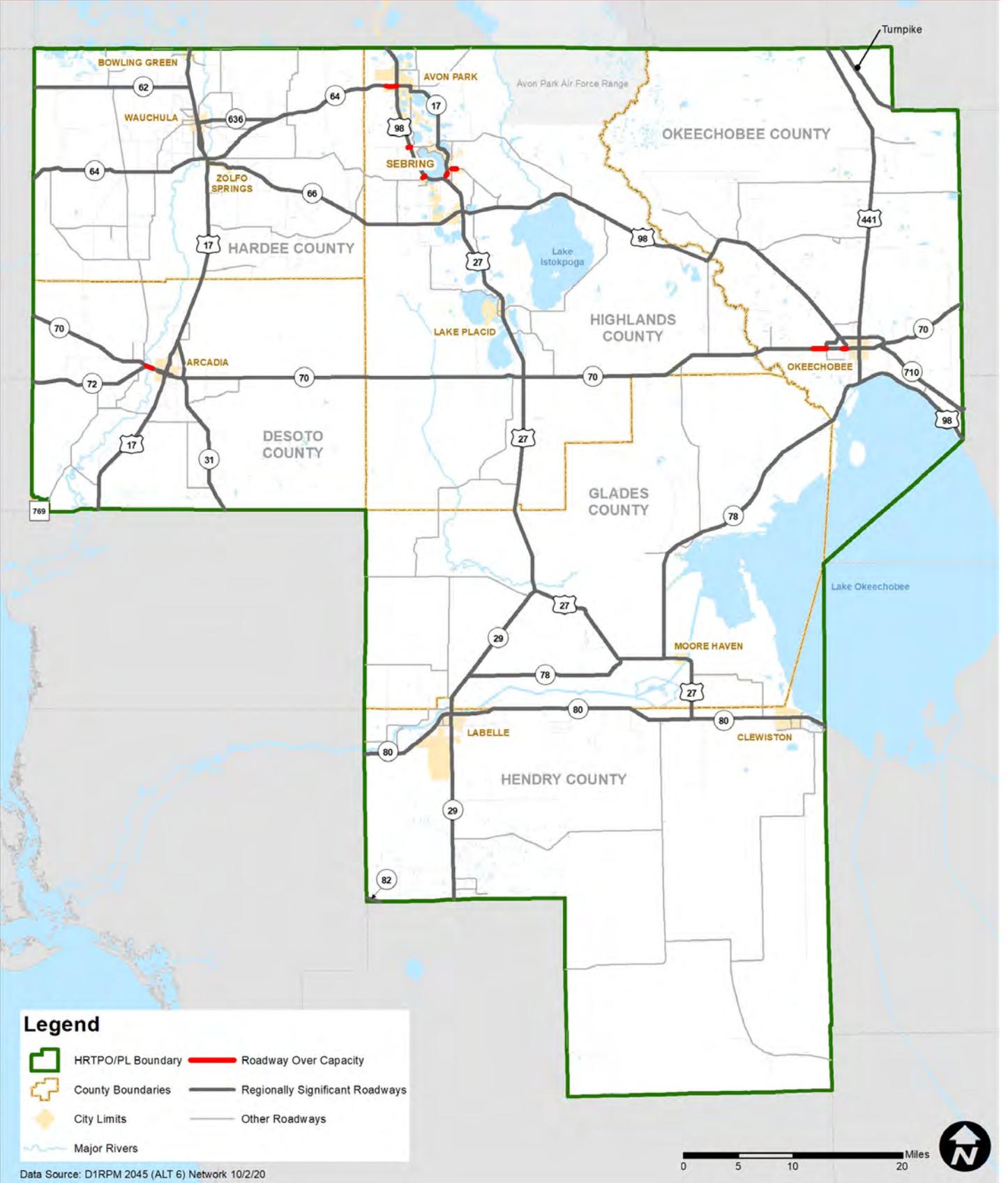
Current Conditions of the HRTPO Regional Roadway Network (2015)



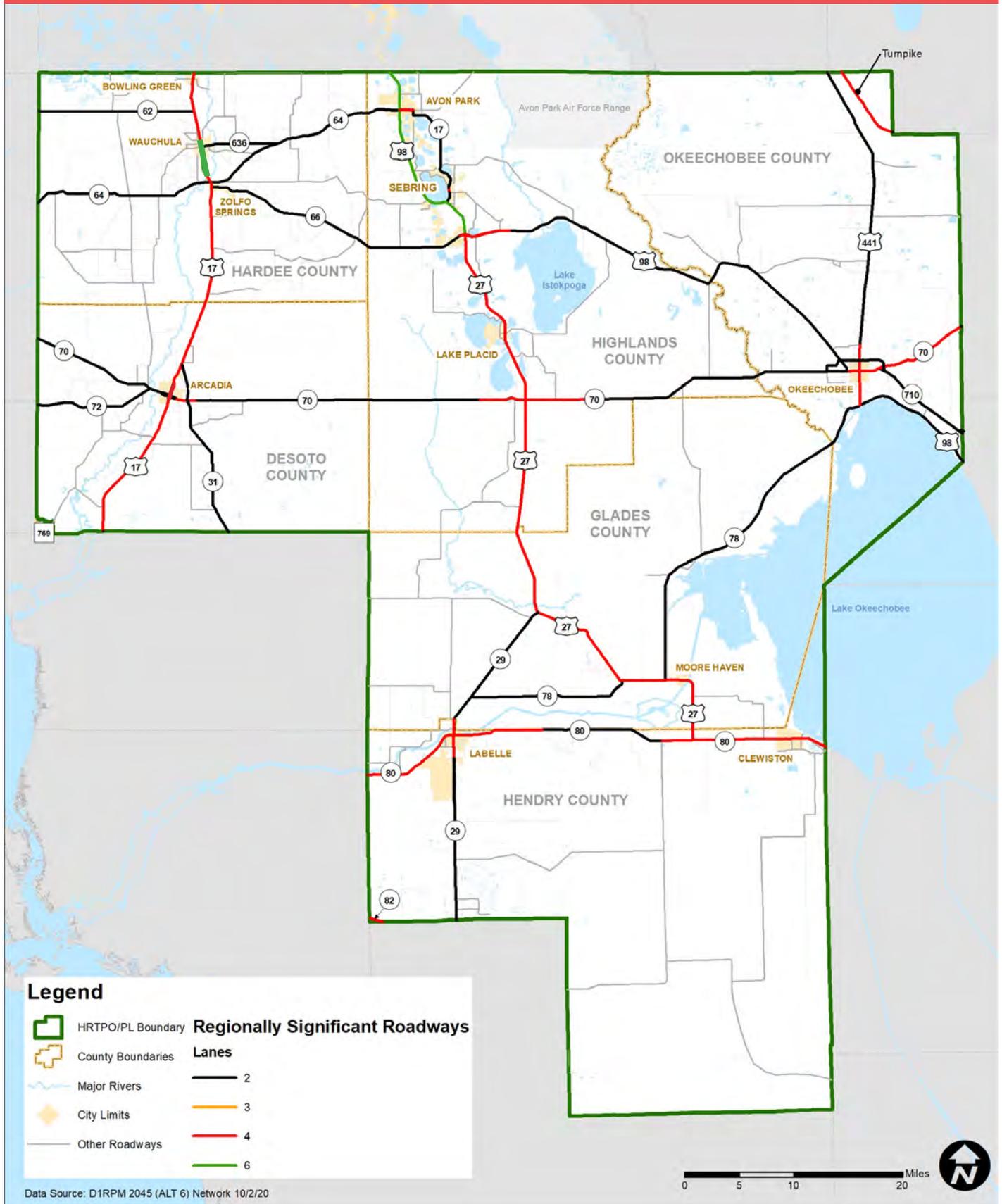
Current Number of Lanes (2015)



Future Conditions of the HRTPO Regional Roadway Network (2045)



Future Number of Lanes (2045)



Setting Priorities

Non-Strategic Intermodal System

Projects were identified based on non SIS roadways experiencing volumes exceeding capacity in 2045. A set of evaluation criteria to determine the comparative need for adding capacity projects was developed by the TAC, CAC and HRTPO Board. These criteria were developed in support of the goals and objectives as well as the Vision and Mission Statements for the HRTPO which guides the LRTP development.

Evaluation Criteria for Capacity Projects was used as a tool for priority ranking of non-SIS projects in the LRTP and will be used in the annual project priorities submitted for consideration in development of the FDOT Five Year Work Program and subsequent inclusion in the Transportation Improvement Program (TIP). Projects identified to date were included in the Cost Feasible Plan. Additional projects will be evaluated as they are identified and the LRTP will be amended to include those projects.

Roadway Capacity Project Evaluation Criteria for Non-SIS Projects include:

- » Project status
- » Safety
- » Existing congestion
- » Sociocultural effects/environmental justice/ Environmental impact
- » Emergency evacuation route
- » Regional freight corridor
- » Access to major activity or employment centers
- » Provide reliable and efficient transportation options
- » Multimodal connectivity

HRTPO Priority Projects (Non-SIS)

**US 98
US 27 to East of Airport Rd
2 to 4 lanes**

**Kings Highway
Charlotte County Line to Peace River St
2 to 4 lanes**

**SR 31 Extension
SR 70 to US 17
New Road**

**SR 710
US 98 to SR 70
New Road**

**SR 710
US 441 to US 98
New Road**

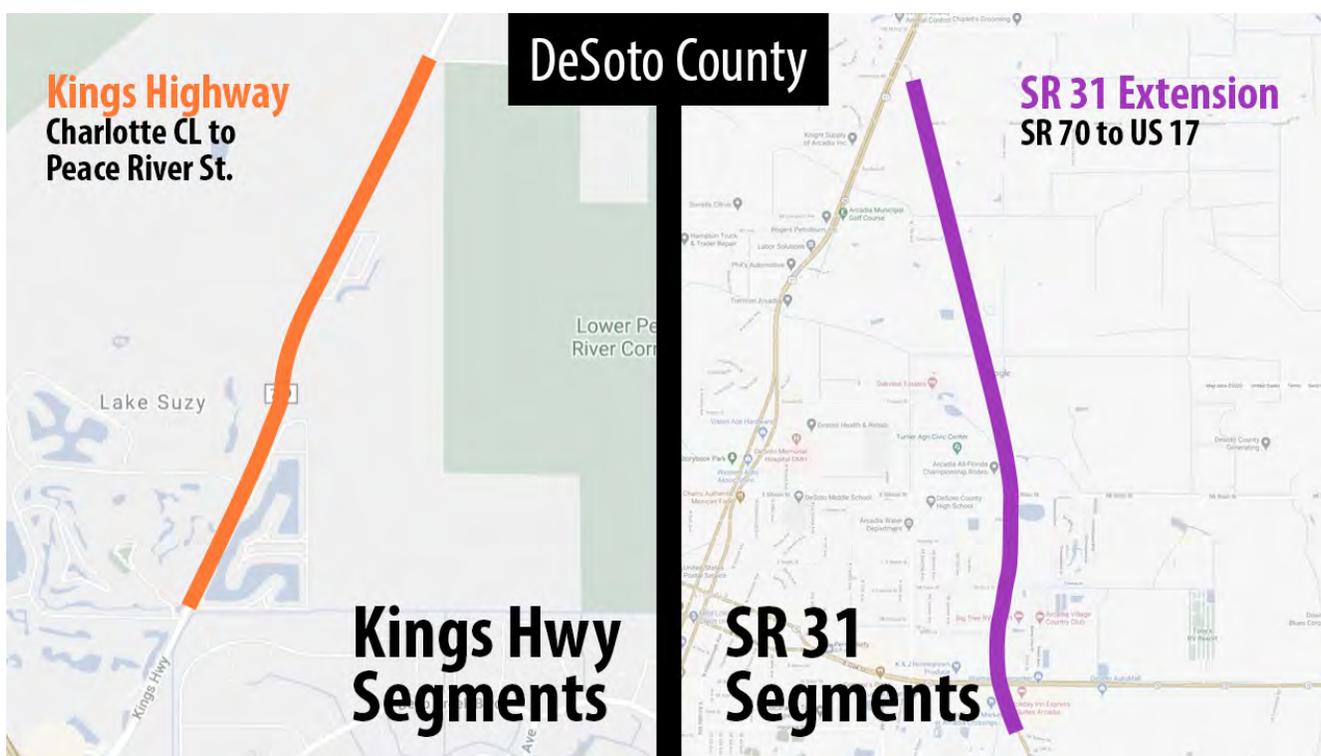
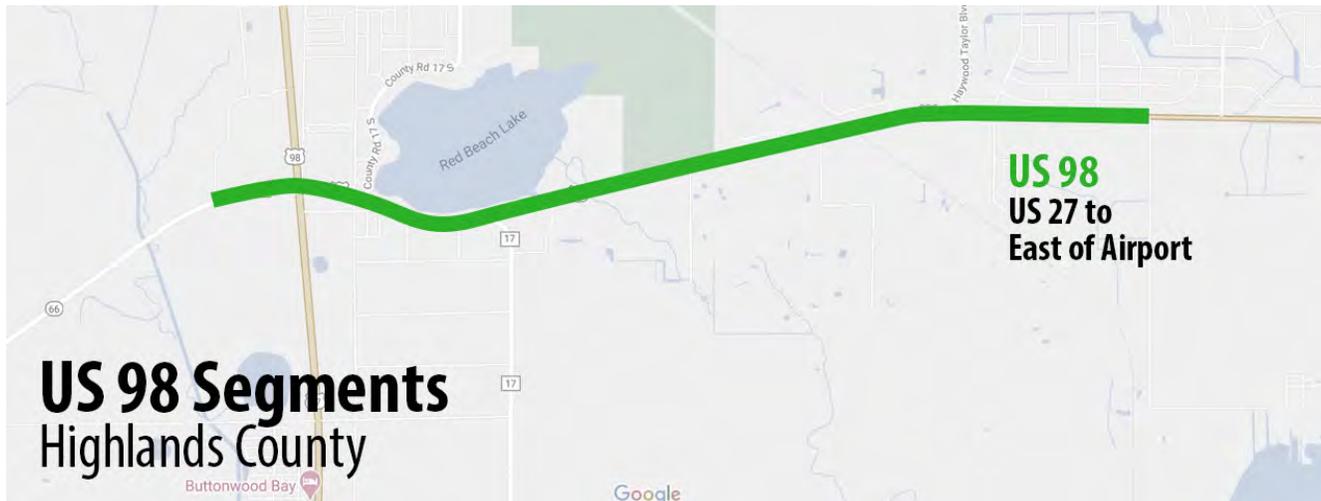
Non-Strategic Intermodal System Facilities on the Regional Roadway Network

US 98 • SR 62 • SR 66 • SR 72 • SR 78 • SR 663



Learn More: The HRTPO Evaluation Criteria for non-SIS capacity projects including weighting factors and rating points can be found in Appendix G.

HRTPO Priority Projects (Non-SIS)



Strategic Intermodal System

In the six county Heartland region, the Regional Roadway Network is made up of primarily US and SR routes designated as part of the Strategic Intermodal system (SIS). The State of Florida Department of Transportation (FDOT) programs SIS projects and available revenue for SIS funding. Because SIS projects represent virtually all of the needed transportation capacity projects identified as over capacity for 2045 in the Heartland, the Strategic Intermodal System Funding Strategy, Long Range Cost Feasible Plan 2029-2045, 2018 Edition was used to determine the cost feasible projects shown in the following section on below. Funded improvements have identified construction funding by 2045. Partially funded improvements do not have identified construction funding with the timeframe of the plan.

Strategic Intermodal System Facilities on the Regional Roadway Network

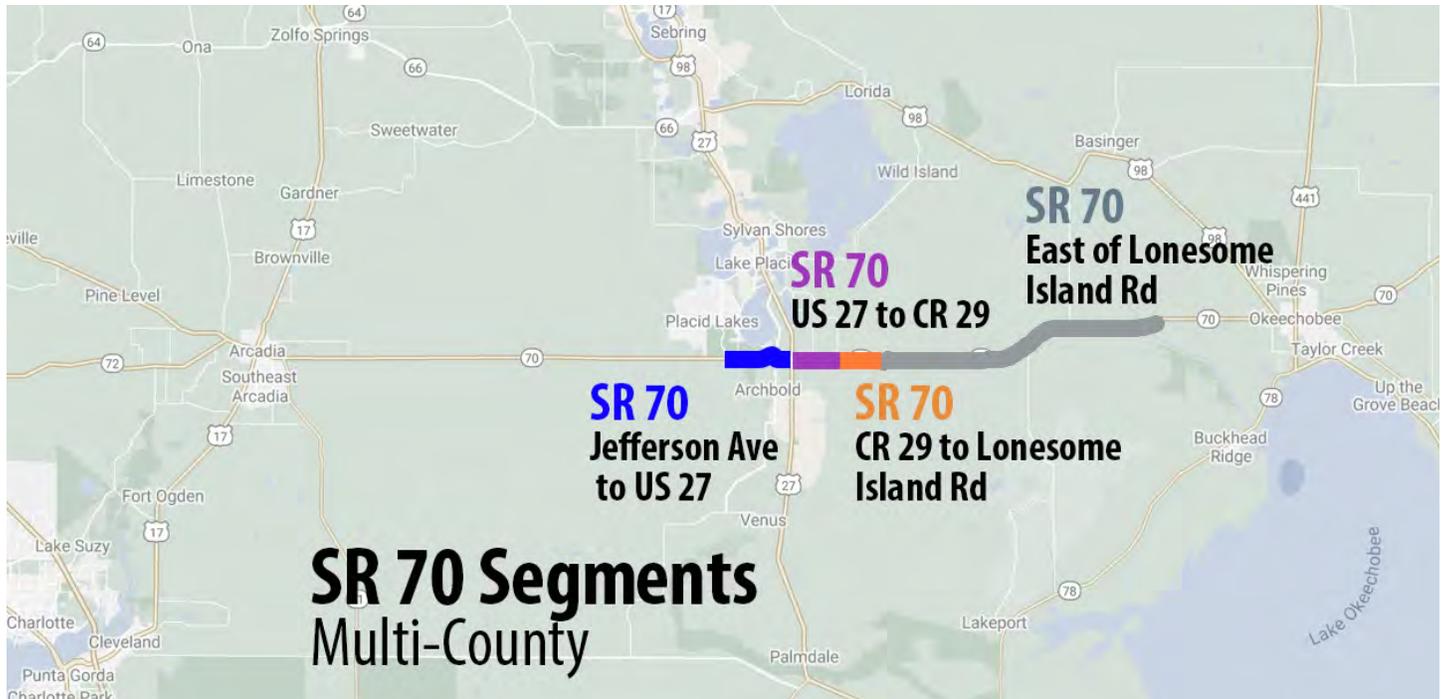
**US 17 • US 27 • SR 29 • SR 31 • SR 64 • SR 70 • SR 80
SR 82 • SR 91 (Florida's Turnpike) • US 441 • SR 710**

Funded SIS Improvements			
Facility	From	To	Description
SR 29	CR 80A (Cowboy Way)	CR 731 (Whidden Road)	Widen to 4 lanes
SR 70	Jefferson Ave	US 27	Widen to 4 lanes
SR 710	US 441	L-63 Canal	New Roadway (4 lanes)
SR 710	E. of L-63 Canal	Sherman Woods Ranches	Widen to 4 lanes
SR 710	Sherman Woods Ranches	Okeechobee / Martin County Line	Widen to 4 lanes
Partially Funded SIS Improvements Identified for PD&E and Design in the SIS Long Range Cost Feasible Plan 2029-2045			
Facility	From	To	Description
SR 70	Manatee County Line	West of Peace River (American Legion Rd)	Widen to 4 lanes
US 17	Palmetto St	SR 70/Hickory St	Highway Capacity
US 17	SR 70/Hickory St	SR 35/DeSoto Ave	Highway Capacity
SR 70	East of SR 31	Jefferson Avenue	Widen to 4 lanes
SR 64	US 17	SR 636	Widen to 4 lanes
SR 64	Old Town Creek Rd. / CR 671 / Parnell Rd.	Hardee / Highlands County Line	Widen to 4 lanes
US 27	Palm Beach / Hendry County Line	SR 80	Freight Capacity
SR 64	Hardee / Highlands County Line	US 27	Widen to 4 lanes
US 27	Glades / Highlands County Line	SR 70	Widen to 6 lanes
US 27	South of Skipper Rd.	US 98	Widen to 6 lanes
SR 70	NW 38th Terrace	US 98	Widen to 4 lanes
US 98 / US 441	18th Terrace	38th Ave.	Widen to 4 lanes

Although SIS designated roadways are typically prioritized through the Florida SIS Plan, the 2045 LRTP looks to advance improvements on SR 70 with available Other Arterials (OA) funding. The HRTPO, it's committees, and many community stakeholders have expressed that SR 70 is the highest priority in the region.

SR 70 Improvements Funded With OA Funds				
Facility	From	To	Description	Funded Phases
SR 70	US 27	CR 29	Widen to 4 lanes	PE, ROW, CST
SR 70	CR 29	Lonesome Island Rd	Widen to 4 lanes	PE, ROW, CST
SR 70	East of Lonesome Island Rd	38th Terrace	Safety Improvements and/or PD&E	Safety/PD&E

Funded SIS Improvements

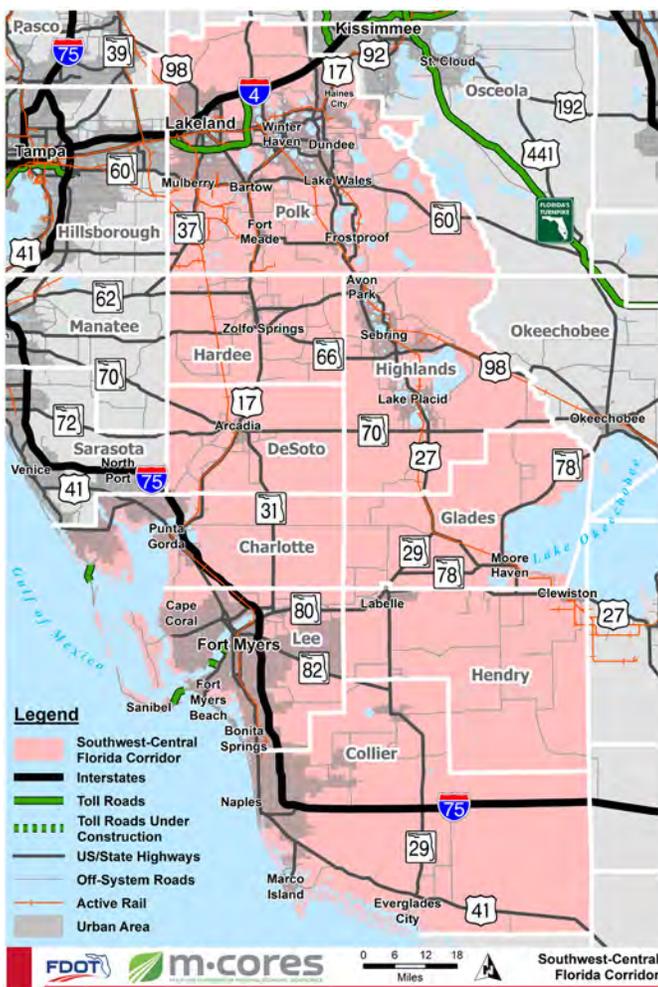


Multi-Use Corridors of Regional Economic Significance (M-CORES)

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) was 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 Southwest-Central Florida Corridor study area spans nine (9) counties, from Collier County to Polk County, as shown in the map. The HRTPO area is part of the Southwest-Central Florida Corridor study area.

The HRTPO, will coordinate all M-CORES related analyses with FDOT for consistency purposes. The proposed projects within the Southwest-Central Florida Corridor will be tolled facilities and will be part of the Florida's Turnpike system and the Strategic Intermodal System (SIS). FDOT worked with the Southwest-Central Florida Corridor Task Force to develop purpose and need, guiding principles, and potential paths/courses. HRTPO is a member of the Southwest-Central Florida Corridor Task Force and is actively engaged in pertinent aspects of planning and corridor analysis through the Task Force and other project development activities.

The Southwest-Central Florida Connector Final Task Force Report was submitted to the Legislature on November 15, 2020.



Learn More: The LRTP Considerations of the M-CORES Southwest-Central Florida Corridor can be found in Appendix H. The Southwest to Central Florida Task Force Report is included in as a Technical Support Document to the 2045 LRTP and available at www.hrtpo2045.org

Automated, Connected, Electric, and Shared-Use Vehicle Impacts in Future Planning

Metropolitan areas, across the nation and around the world, are facing a technology revolution that could fundamentally change how people and goods move from place to place. This seismic shift in transportation and mobility, will bring new opportunities and challenges. Automated, Connected, Electric and Shared-use (ACES) vehicles are expected to make travel safer and more efficient, and greatly improve mobility, particularly for older adults and other underserved populations. ACES could also have adverse consequences, such as longer commutes, increased traffic, higher vehicle costs or create an even wider gap in mobility through access and use of transportation technology. In rural areas with long stretches of roadways without adequate broadband and/or cellular access, ACES may have slower absorption than in urban areas of the region.

The shift to AV use is typically driven by planning and operational improvement goals such as:

- » **Safety – striving to reduce the estimated 94% of crashes due to driver error**
- » **Mobility – providing critical mobility options for people with disabilities, seniors, and children**
- » **Reliability – increase travel time reliability through use of connected platooning**

The 2045 LRTP included an exercise where the market penetration of CAVs was considered. It was agreed that given the uncertainty of the market penetration for automated and connected vehicles, it was not possible to select a single scenario to advance with the 2045 Plan. The TPO will regularly evaluate how the transportation network may be impacted by ACES as new projects are considered for future funding.

Considerations for the Heartland Region:

- Availability of Charging Stations
- Automation in Freight Movement
- Broadband Infrastructure and ITS

TECHNOLOGY IS CHANGING IN THE U.S. AND GLOBALLY

FULLY ELECTRIC VEHICLES

are projected to represent



(Source: U.S. Energy Information Administration)

The number of

SHARED VEHICLE TRIPS HAS INCREASED



(Source: Uber)

In 2018

SHARED MICROMOBILITY

options accounted for



(Source: National Association of City Transportation Officials)



Learn More: The ACES Planning Report is included in as a Technical Support Document to the 2045 LRTP and available at www.hrtpo2045.org.

Congestion Management Process

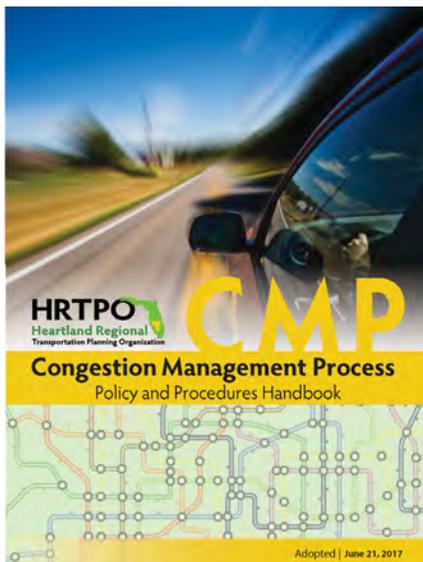
A vibrant congestion management process can serve a valuable role in addressing the region's transportation needs as funding levels limit the number of new large scale projects which can be planned and constructed and transportation safety is the most important planning consideration. Maintenance of a Congestion Management Process (CMP) is a requirement for all MPOs under Florida Statue 339.175 (6)(c)1 and for MPOs in Transportation Management Areas (TMAs) under federal law. Consistent with the guidance from the Final Rule on the CMP, the intent of the CMP process is to:

“address congestion through a process that provides safe and effective integrated management and operation of the multimodal transportation system.”

The HRTPO CMP was adopted by the Board on June 21, 2017. The CMP is divided into two parts, the HRTPO Policies and Procedures Manual, and the HRTPO Transportation Trends Report. The Adopted Policies and Procedures Manual is a Federally compliant CMP, where the Transportation Trends Report presents the actual data measured in support of the HRTPO CMP process. The Transportation Trends Report is maintained and published as a separate document, as it will be frequently updated. Both the HRTPO Policies and Procedures Manual, and the HRTPO Transportation Trends Reports are available online with LRTP Technical Support Documentation.

The Congestion Management Process Policy and Procedures Handbook is updated every five years following the update of the LRTP and programmed in the Unified Planning Work Program in 2022.

Congestion Management improves traffic operations and safety through the use of either strategies that reduce travel demand or the implementation of operational improvements. The improvements can be implemented in a relatively short time frame (within 5-10 years) compared to more traditional capacity improvements, such as adding additional travel lanes, which can take more than 10 years to implement and cost significantly more. Projects identified through the CMP process may also be added to future updates of the LRTP should they require additional funding or a longer time frame for implementation. The 2045 LRTP Cost Feasible Plan identifies set-aside funds to fund congestion management.

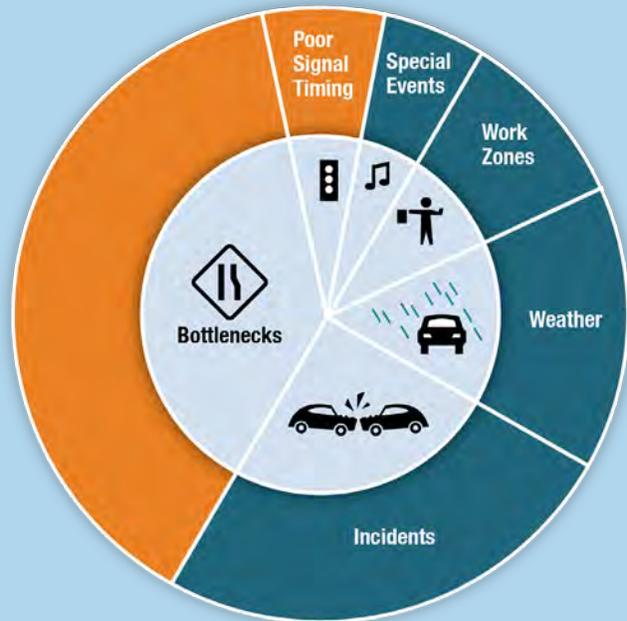


Learn More: The Congestion Management Plan and Transportation Trend Reports are included as Technical Support Documents to the 2045 LRTP and available at www.hrtpo2045.org

Causes of Congestion

The process of congestion management begins by understanding the cause of the problem. Six major causes of congestion are identified:

- **Bottlenecks**
- **Traffic Incidents**
- **Work Zones**
- **Bad Weather**
- **Poor Traffic Signal Timing**
- **Special Events**



Tier 1



Strategies to Reduce Person Trips or Vehicle Miles Traveled

Tier 2



Strategies to Shift Automobile Trips to Other Modes

Tier 3



Strategies to Shift Trips from SOV to HOV Auto/Van

Tier 4



Strategies to Improve Roadway Operations

Tier 5



Strategies to Add Capacity

Toolbox of Strategies

The CMP uses a strategy toolbox with multiple tiers of strategies to support the congestion strategy or strategies for congested corridors. Following an approach used by other TPOs and promoted by FHWA, the toolbox of congestion mitigation strategies is arranged so that the measures at the top take precedence over those at the bottom. The toolbox is presented below.

The “top-down” approach promotes the growing sentiment in today’s transportation planning arena and follows FHWA’s clear direction to consider all available solutions before recommending additional roadway capacity.

Transportation Demand Management Strategies:

- » Land Use/Growth Management Strategies
- » Public Transit Strategies
- » Non-Motorized Transportation Strategies
- » Intelligent transportation Systems (ITS) Strategies
- » Incident Management Strategies
- » Access Management Strategies
- » Corridor Preservation/Management Strategies

Chapter 10 | Funding Plan

The development of the Cost Feasible Plan (CFP) is the accumulation of long range transportation plan activities including identification of transportation needs, public involvement, project prioritization, and allocation of available revenues. In accordance with federal statute, longstanding FDOT policy, and leadership by the Metropolitan Planning Organization Advisory Council (MPOAC), and the Office of Policy Planning the Revenue Forecast is developed and provided to each MPO/TPO that is consistent and also applied to the development of the FDOT Strategic Intermodal System (SIS) Highway Cost Feasible Plan.

FDOT developed a long-range revenue forecast through 2045 which is largely based upon recent federal legislation (e.g., the FAST Act²) and changes in multiple factors affecting state revenue sources and current policies. This 2045 forecast incorporates (1) amounts programmed for FYs 2018 through 2022, (2) the impact of objectives and investment policies, and (3) the Statutory Formula (equal parts of population and 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.

Historically, transportation investments have relied on various federal, state, and local sources. Federal funding for transportation comes from highway excise taxes on motor fuel (gas taxes) and truck-related taxes on truck tires, sales of trucks and trailers, and heavy vehicle use. State funding in Florida uses five sources to fund the State Transportation Trust Fund (STTF) including fuel tax, motor vehicle fees, documentary stamps, rental car surcharges, and aviation fuel tax.

The 2045 Revenue Forecast Handbook, published in July 2018, documents how the 2045 revenue forecast was developed and provides guidance for using this forecast information. FDOT's estimates for the HRTPO are included in the 2045 Revenue Forecast for Sebring-Avon Park Metropolitan Area and found in Appendix I of this document. For the purpose of the HRTPO 2045 LRTP, these estimates were summarized in the tables below. Estimates include funding for federal and state highways and metropolitan and regional programs. Local revenues are not accounted for in the revenue forecast and therefore are not included in this LRTP since the transportation needs identified in this plan are focused on the regional roadway network and there are no reliable reoccurring local revenues to support capacity improvements.

Sebring-Avon Park Metropolitan Area Revenue Forecast FY 2020 - FY 2045 (Millions of Year of Expenditure Dollars)						
Capacity Programs	2020	2021-2025	2026-2030	2031-2035	2036-2045	Total* 2020-2045
Other Arterials Construction & ROW	\$11.51	\$84.43	\$102.56	\$110.65	\$230.24	\$539.39
Transit	\$4.59	\$25.5	\$32.22	\$35.22	\$73.37	\$170.83
Total Revenue	\$16.10	\$109.94	\$145.87	\$145.87	\$303.61	\$710.22

*May not add due to rounding

Districtwide Funding Sources** Revenue Forecast FY 2020 - FY 2045 (Millions of Year of Expenditure Dollars)						
Funding Program	2020	2021-2025	2026-2030	2031-2035	2036-2045	Total* 2020-2045
Transportation Regional Incentive Program (TRIP)	\$3.1	\$21.9	\$32.7	\$36.4	\$74.6	\$168.8
Transportation Alternatives (<200,000 population)	\$0.55	\$2.73	\$2.73	\$2.73	\$5.46	\$14.20
Transportation Alternatives (Any area)	\$3.45	\$17.25	\$17.25	\$17.25	\$34.49	\$89.67

*May not add due to rounding

**Districtwide: FDOT - District 1; Charlotte, Collier, DeSoto, Glades, Hardee, Hendry, Highlands, Lee, Manatee, Okeechobee, Polk and Sarasota Counties

Funding Programs

The federal and state funding programs available to fund projects in the HRTPO region are described below.

SIS Highways Construction & ROW

The Strategic Intermodal System (SIS) Construction and Right of Way (ROW) Program is for construction improvements and associated right of way on SIS highways (i.e. Interstate, Turnpike, other toll roads, and other facilities designed to serve interstate and regional commerce including SIS Connectors). Florida's SIS consists of the state's largest and most strategic transportation facilities, including major air, space, water, rail, and highway facilities critical to Florida's economic competitiveness and quality of life. SIS facilities are the state's highest statewide priority for transportation capacity improvements.

SIS Highways Construction and Right of Way revenues are programmed by FDOT, based on the SIS Funding Strategy, and are incorporated into the HRTPO 2045 Long Range Transportation Plan.

Other Arterial Construction & ROW

The Other Arterial Construction and Right of Way (ROW) Program (now known as Other Roads Construction & ROW) is for improvements on the State Highway System (SHS) that are not SIS facilities. This program also includes funding for the Economic Development Program, the County Incentive Grant Program (CIGP), the Small County Road Assistance Program (SCRAP), and the Small County Outreach Program (SCOP).

Transit Program

The Transit Program provides state technical and operating/capital assistance to transit, paratransit, and ridesharing systems.

Transportation Alternatives Program

The Transportation Alternatives Program (TAP), authorized under the Moving Ahead for Progress in the 21st Century Act (MAP-21), provides funding for programs and projects defined as transportation alternatives: including on- and off-road pedestrian and bicycle facilities; infrastructure projects for improving non-driver access to public transportation and enhanced mobility; community improvement activities; environmental mitigation; recreational trail program projects; safe routes to school projects; and projects for planning, designing, or constructing boulevards and other roadways largely in the right-of-way of former Interstate System routes or other divided highways.

Transportation Regional Incentive Program (TRIP)

The Transportation Regional Incentive Program (TRIP) encourages regional planning by providing state matching funds for improvements to regionally significant transportation facilities. Regionally significant transportation projects may be eligible for TRIP funds if they function as part of an integrated transportation system and are consistent with local government comprehensive plans and the SIS.

State Highway System Operations and Maintenance Program

The State Highway System (SHS) Operations and Maintenance (O&M) Program is a FDOT "Non-Capacity" Program designed to support and maintain the state transportation system. Projects in this program may include: safety, resurfacing, bridge, product support, operations and maintenance, and administration.

HRTPO 2045 Cost Feasible Plan

							Project Cost in Year of Expenditures (in thousands)											
							Committed Funding 2021-2025			Future Funding 2026-2030			Future Funding 2031-2035			Future Funding 2036-2045		
County	Facility	From	To	Description	Full Project Cost in PDC	Funding Source	Design	ROW	CST	Design	ROW	CST	Design	ROW	CST	Design	ROW	CST
Other Arterials (OA) Funded Projects (Now known as Other Roads Construction & ROW)																		
DeSoto	CR 769 (Kings Hwy)	Charlotte CL	Peace River Street	Widen to 4 lanes	\$39,717	State and Federal	\$3,250				\$3,945	\$41,555						
DeSoto	SR 31	SR 70	US 17	New Roadway (2 lanes)	\$33,218	State and Federal	\$4,350				\$7,280				\$31,479			
Highlands	SR 70 ¹	US 27	CR 29	Widen to 4 lanes	\$28,009	State and Federal				\$5,940				\$6,200				\$37,925
Highlands	SR 70 ¹	CR 29	Lonesome Island Rd	Widen to 4 lanes	\$45,798	State and Federal				\$6,600				\$6,200				\$71,750
Highlands	US 98	US 27	Airport Rd	Widen to 4 lanes	\$53,219	State and Federal		\$8,340			\$7,176	\$47,509						
Highlands	W College Dr	Memorial Dr	US 27	Add Lanes and Reconstruct	\$7,851	State and Federal			\$7,851									
Okeechobee	SR 710	US 98	US 441	New Roadway (4 lanes)	\$47,390	State and Federal	\$2,080			\$9,082				\$9,424	\$53,367			
Okeechobee	SR 710	US 70	SR 98	New Roadway (4 lanes)	\$51,130	State and Federal				\$8,908				\$11,284				\$74,743
Okeechobee	CR 714/Martin Hwy ²	E of SR 710	Okeechobee County	Roadway Realignment	\$9,332	State and Federal				\$4,145	\$5,987	\$3,592						
Set aside for Congestion Management					\$12,000	State and Federal				\$1,320			\$1,550					\$20,500
Set aside for Complete Streets & Trails					\$12,000	State and Federal				\$1,320			\$1,550					\$20,500
Set aside for SR 70 E of Lonesome Island to NW 38th Terrace Safety and/or PD&E in Select Locations ³					\$4,000	State and Federal							\$6,200					
Fully Funded Strategic Intermodal System (SIS) Projects																		
Hendry	SR 29	CR 80A (Cowboy Way)	CR 731 (Whidden Rd)	Widen to 4 lanes	\$138,108	State and Federal		\$9,812										\$232,540
Highlands	SR 70	Jefferson Ave	US 27	Widen to 4 lanes	\$36,509	State and Federal				\$8,580				\$6,200				\$39,588
Okeechobee	SR 710	US 441	L-63 Canal	New Roadway (4 lanes)	\$62,326	State and Federal		\$7,055			\$9,313				\$77,674			
Okeechobee	SR 710	E. of L-63 Canal	Sherman Woods Ranches	Widen to 4 lanes	\$33,288	State and Federal	\$50				\$9,313				\$39,588			
Okeechobee	SR 710	Sherman Woods Ranches	Okeechobee / Martin CL	Widen to 4 lanes	\$57,974	State and Federal	\$6,550							\$13,831				\$85,811

PDC: Present Day Cost
YOE: Year of Expenditure
Design: Includes Project Development and Environment (PD&E) and Preliminary Engineering (PE)
ROW: Right-of-Way
CST: Construction
CL: County Line

Full Investment Costs in Year of Expenditure Dollars in the Heartland Region (in thousands)				
Other Arterials (OA) Total	\$25,871	\$155,916	\$127,408	\$225,418
Allocated Transit Total	\$25,500	\$32,220	\$35,220	\$73,300
Strategic Intermodal System (SIS) Total	\$23,467	\$27,205	\$137,293	\$369,600
Total	\$74,838	\$215,341	\$299,921	\$668,318

Other Arterials (OA) Revenue Forecast and LRTP Funded Projects					
	2021-2025	2026-2030	2031-2035	2036-2045	All Years
OA ROW and CST LRTP Funded Phases⁴	\$16,191	\$111,531	\$121,208	\$225,418	\$527,880
OA ROW and CST Revenue Forecast⁵	\$84,430	\$102,560	\$110,650	\$230,240	\$474,348
Balance	\$68,239	(\$8,971)	(\$10,558)	\$4,822	\$53,532

¹The HRTPO will use OA funds to ensure the continued funding of priority SR 70 projects. If SIS funds become available in a future SIS plan for these priority projects, the HRTPO will reprogram the OA funds.

²CR-714/Martin Highway realignment project to enhance safety is one of top priority projects (Tier 1) for Martin MPO and shown as funded in 2026-2030 in the Martin in Motion, 2045 LRTP.

Appendix A: Technical Support Documents

The following documents supported the development of the 2045 LRTP and are available to view or download at www.hrtpo2045.org

Regional Overview

- Heartland 2060 Revisited, 2020
- FDOT Strategic Intermodal System Policy Plan, 2016
- Florida Transportation Plan: Vision Element, 2020
- Florida Transportation Plan: Policy Element, 2020
- Florida Transportation Plan: Performance Element, 2020

Public Involvement and Consultation

- HRTPO Public Participation Plan, 2018
- HRTPO Limited English Proficiency Plan, 2017

Modal Options

- HRTPO Highlands Transit Plan, 2017
- FDOT Heartland Rural Mobility Plan, 2018
- HRTPO DeSoto, Hardee, Highlands, and Okeechobee Transportation Disadvantaged Service Plan, 2020
- HRTPO Glades and Hendry Transportation Disadvantaged Service Plan, 2020
- The Community Air Mobility Initiative, What is Urban Air Mobility?, 2020
- HRTPO Bicycle and Pedestrian Safety Plan, 2019
- FDOT District One Freight Mobility and Trade Study, 2016

Roadway Needs Plan

- HRTPO Congestion Management Plan, 2017
- HRTPO Transportation Trend Report, 2017
- M-CORES Southwest-Central Florida Connector Task Force Final Report, 2020
- FDOT Highway Safety Improvement Program, 2019
- FDOT 2021 - 2025 Strategic Highway Safety Plan (SHSP), 2021
- FDOT Complete Streets Implementation Plan, 2015
- FDOT Context Classification Guide, 2020
- FDOT Guidance for Assessing Planning Impacts and Opportunities of Automated, Connected, Electric, and Shared-Use Vehicles, 2018

Funding Plan

- HRTPO Transportation Improvement Program, 2021/21-2024/25
- Strategic Intermodal System (SIS) 2029-2045 Long Range Cost Feasible Plan (PDC), 2018

Appendix B: 2045 Goals and Foundational Guidance

2045 Goals



The HRTPO must develop an LRTP that addresses no less than a 20-year planning horizon. The intent and purpose of the LRTP is to encourage and promote the safe and efficient management, operation, and development of a cost-feasible intermodal transportation system that will serve the mobility needs of people and freight; the system should also foster economic growth and development, while minimizing transportation-related fuel consumption, air pollution, and greenhouse gas (GHG) emissions. The LRTP must include long and short-range strategies consistent with Federal, State, and local goals and objectives.

Consistent with the Mission and Vision Statements, the goals of the LRTP provide a framework for the plan. The proposed 2045 goals, measures, and targets build on the adopted 2040 plan and fully include the HRTPO adopted FHWA measures and targets. Each of the six goals work together to guide the development of improvements and priorities as the region moves towards 2045. The ever-changing technological advances are a cross-cutting topic across all goals and modes in the LRTP.

Developing clear goals is critical to any planning process. Developing measures to track progress is equally important. The planning process for the LRTP required developing strategies for managing, operating, maintaining, and financing the Heartland's transportation system, and selecting investments in such a way as to advance the Heartland's regional vision. Consequently, the transportation planning process included the development of goals to support the regional vision and provide direction for investment and policy decisions. The goals and objectives developed to guide the LRTP are consistent with The Fixing America's Surface Transportation (FAST) Act which carried forward many planning initiatives from the Moving Ahead for Progress in the 21st Century Act (MAP-21), the Florida Transportation Plan (FTP), and various local, state, regional and modal plans and programs. Performance-based planning provides an opportunity to measure whether the goals are being met, and to what extent.

Matrix of HRTPO Goals and Federal Planning Factors	Support Economic Vitality	Increase Safety and Security	Increase Accessibility and Mobility	Protect and Enhance the Environment	Enhance the Integration and Connectivity	Improve Efficiency	Emphasize Preservation	Improve resiliency and mitigate stormwater	Enhance travel and tourism
Safe									
Connected									
Quality									
Equitable									
Accessible									
Resilient									

2045 Long Range Transportation Plan Goals

Safe

- To achieve a significant reduction in traffic fatalities and serious injuries on all public roads.
 - » Reduce all crashes, fatalities and serious injuries for all modes of travel.
 - » Number of Fatalities – All Public Roads
 - » Fatality Rate per 100 million Vehicle Miles Traveled (VMT) – All Public Roads
 - » Number of Serious Injuries – All Public Roads
 - » Serious Injury Rate per 100 million VMT – All Public Roads
 - » Number of Combined Non-Motorized Fatalities and Serious Injuries – All Public Roads
- Promote projects in high crash locations - (locations with the highest number of crashes)
- Provide safe and reliable options during an emergency
 - » Over capacity roadway miles on evacuation routes
- Increase the security of the transportation system for motorized and non-motorized users

Connected

- Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight
- Plan for and design multimodal transportation systems providing mobility options which are accessible by all users
- Improve connectivity between major activity centers in the Heartland Region
- Provide a comprehensive transportation network for dependable and reliable transportation options
- Reduce congestion
- Promote system reliability
- Increase mobility choices throughout the county
 - » Percentage of non-revenue vehicles met or exceeded Useful Life Benchmark
 - » Percentage of revenue vehicles met or exceeded Useful Life Benchmark
 - » Percentage of facilities with a condition rating below 3.0 on the FTA Transit Economic Requirements Model Scale

Quality

- To maintain the highway infrastructure asset system in a state of good repair.
 - » Non-Interstate National Highway System (NHS) Pavement in Good Condition
 - » Non-Interstate NHS Pavement in Poor Condition
 - » NHS Bridge Deck Area in Good Condition
 - » NHS Bridge Deck Area in Poor Condition
- Coordinate land use and transportation planning decisions to support modal choice
- Support multimodal facilities that are user friendly, encourage mobility, and promote healthy and active lifestyles
- Enhance travel and tourism
- Promote efficient system management and operation

Equitable

- Promote proactive and early public involvement and provide diverse opportunities to maximize public participation
- Provide for the needs of the general populations including the Transportation Disadvantaged (TD) and improve the coordination of TD services with other modes of transportation

Accessible

- Reduce traffic congestion and delay.
 - » Percent of person-miles traveled on the non-Interstate NHS that are reliable
- Preserve existing transportation facilities.
- Improve goods movement access and connections to port, rail, airport, and intermodal logistics facilities.
- Improve access and connections to major activity centers.
- Increase the accessibility and mobility of people and for freight.
- Optimize the utilization of existing transportation facilities.
- Coordinate transportation investments to maximize opportunities and benefits.

Resilient

- Reduce the vulnerability and increase the resilience of critical infrastructure to the impacts of climate and events.
- Preserve infrastructure (sustainability and resilience)
- To improve the National Highway Freight Network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development.
- Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.
- Minimize and mitigate air and water quality impacts of transportation facilities, services and operations
- Protect and preserve the environment.
- Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation.
- Maintain consistency with the Heartland 2060: Building a Resilient Region Plan, and other applicable regional plans.
- Develop coordinated transportation and land use policies that promote economic vitality by enhancing mobility options.

Foundational Guidance

Federal

The 2045 LRTP has been developed to ensure compliance with the requirements of MAP-21, FAST Act requirements applicable at the time of the plan amendment adoption, and includes a performance-based approach to the transportation decision-making process. The FAST Act continues many of the previous requirements contained in SAFETEA-LU and MAP-21, including eight planning factors that illustrate the need for Metropolitan Transportation Plans to recognize and address the relationship between transportation, land use, and economic development as well as two new factors addressing resiliency and reliability and tourism.

The federal planning factors form the cornerstone for the 2045 LRTP and include:

- Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.
- Increase the safety of the transportation system for motorized and non-motorized users.
- Increase the security of the transportation system for motorized and non-motorized users.
- Increase accessibility and mobility of people and freight.
- Protect and enhance the environment, promote energy conservation, improve quality of life, and promote consistency between transportation improvements and state and local growth and economic development patterns.
- Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.
- Promote efficient system management and operation.
- Emphasize the preservation of the existing transportation system.
- Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation
- Enhance travel and tourism.

Federal Guidance

MAP-21 was the first transportation legislation enacted since 2005 and provided an updated policy and programmatic framework for investments to guide the growth and development of the country's vital transportation infrastructure. The FAST Act was signed into law on December 3, 2015, and supersedes MAP-21 while maintaining a focus on performance based planning. MAP-21 was intended to create a streamlined, performance-based, and multimodal program that addressed the needs of the national transportation system, as outlined in the National Goals, noted below. MAP-21 updates many of the highway, transit, bike, and pedestrian programs and policies established since the original multimodal transportation legislation, the Intermodal Surface Transportation Efficiency Act (ISTEA) enacted in 1991.

National Goals

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

MAP-21 funds and directly impacts the transportation planning activities of MPOs/TPOs and requires the following to be addressed:

- » The long range plan must describe the performance measures and targets used in assessing system performance and progress in achieving the performance targets.
- » The Transportation Improvement Program (TIP) must also be developed to make progress toward established performance targets and include a description of the anticipated achievements.

Performance-Based Planning and Programming (PBPP)

The purpose of the LRTP document is to document the processes, data, and analyses used to make transportation investment decisions. The LRTP pulls together information from a variety of sources, and serves as the basis for future actions. All LRTPs provide a long-range plan for the transportation system, investments, and policies. Long range transportation planning processes deployed under the FAST Act are required to incorporate performance goals, measures, and targets along with reporting on the overall effectiveness of performance-based planning.

Performance-based planning and programming should build on successful planning efforts. Existing tools such as state pavement and bridge management systems, transit agency asset management plans, and complementary planning processes such as the Strategic Highway Safety Plan (SHSP), Congestion Management Process (CMP), Transit Development Plan (TDP) and other similar efforts provide a strong foundation for performance-based planning and programming. The potential benefits from a performance-based planning and programming process include helping to guide resource allocation decisions in a constrained funding environment. However, it is recognized that a performance-based process alone, without sufficient resources, will not drive better performance results over the long term. A performance-based approach can help communicate needs and explain why performance may decline in the future.

Lessons for effective implementation of a PBPP approach include from the Federal Highway Administration's Performance Based Planning and Programming Guidebook and White Paper (September 2013):

- » Use measures that matter-Rather than identifying hundreds of measures, it is often preferable to identify a limited set of key measures to best support goals and objectives, guide investment decisions, and evaluate progress.
- » Engage the public and stakeholders-Public engagement is critical to identify the issues that residents care about most. Some organizations have chosen to go beyond standard measures such as traffic delay and pavement condition, and to ask questions such as which types of congestion are most problematic and what types of risk factors are most important in managing assets, in order to identify goals and objectives. In addition, keep the public and stakeholders in mind when developing measures to ensure that they are easy to understand and resonate.
- » Build on required performance-based approaches-Such as State Asset Management Plans, State Strategic Highway Safety Plans (SHSPs), MPO Congestion Management Processes (CMPs), Transit Agency Asset

Management Plans, and Transit Agency Safety Plans.

- » Communicate successes, constraints, and trade-offs-It may not always be feasible to improve system performance, but information on expected performance outcomes of different options helps to inform decision-making. This information can inform not only where and how to prioritize funding, but can help make the case for the needs for additional funding. Scenario planning is an approach that greatly enhances agencies' ability to evaluate the anticipated impacts of various investment packages.
- » Coordinate and collaborate broadly-Effective PBPP involves coordination within agencies and across agencies so the State DOTs, MPOs, nonmetropolitan planning organizations (also referred to as Rural Planning Organizations or Regional Transportation Planning Organizations (hereafter "RTPOs")), and transit agencies are coordinated in the development of goals, objectives, performance measures, and targets. It also involves coordination with a wide range of partners, including local governments, the business community, freight communities, law enforcement, economic development, and others;
- » Link planning to programming- This linkage, between the LRTP and the TIP/STIP, is key for all transportation agencies. This linkage is key for all transportation agencies. Economic tools, project prioritization processes, and related approaches that build on performance information can inform project selection and show the link between programs of projects and intended performance outcomes; and,
- » Provide context for performance results-A recent trend in performance management has been to develop dashboards and other data visualization techniques. These tools are helpful for communicating data; however, using a simplified approach to reporting data could create a risk for misinterpretation. It is important to tell a story and combine data with an explanation of performance results.

State of Florida

Strategic Intermodal System Plan

The Florida Transportation Plan (FTP) is the statewide long-range transportation plan for all of Florida. The FTP defines Florida's future transportation vision and identifies goals, objectives, and strategies to accomplish that vision. The HRTPO's 2045 LRTP is required by Florida statutes to be consistent with the goals, objectives, and strategies identified in the FTP. The FTP consists of three elements:

- » The Vision Element contains trends, uncertainties, and themes that will shape the future of transportation in Florida over the next 50 years;
- » The Policy Element contains goals and objectives to guide the Florida Department of Transportation and partners toward the vision; and
- » The Implementation Element contains key actions to be undertaken by FDOT and its partners over the next 5 to 25 years.

The HRTPO is actively engaged with FDOT during the development of the FTP. FTP policies that will guide future investments in Florida's transportation system will be integrated into the HRTPO's LRTP.

2060 Florida Transportation Plan Goals:

- » Economic Competitiveness- Invest in transportation systems to support a prosperous, globally competitive economy;
- » Community Livability- Make transportation decisions to support and enhance livable communities;
- » Environmental Stewardship- Make transportation decisions to promote responsible environmental stewardship;
- » Safety and Security- Provide a safe and secure transportation system for all users;
- » Maintenance and Operations-Maintain and operate Florida's transportation system proactively; and,
- » Mobility and Connectivity- Improve mobility and connectivity for people and freight.

Regional

Heartland 2060: Building A Resilient Region

The six counties of the Heartland have been a part of a dozen years of grassroots efforts to work together with partners to build a resilient region to deal with the challenges and opportunities of education, work force and economic development; environment and natural resources; community resources including a healthy community; and transportation and land use. The partnership has explored the relationship of transportation and affordable housing; the relationship of potential transportation facilities and impact avoidance on natural resources and wildlife; and the relationship of transportation and economic development, including education and talent pipeline. A key outcome of Heartland 2060 was the need for an ongoing cooperative, continuing, and comprehensive regional transportation planning process and a long range transportation plan for the Heartland. The initial development of the 2040 LRTP and this 2045 update is an integral part of the continuing work to build a resilient and livable Heartland region.

The need for mobility, and for the various transportation services and modes to connect, is vitally important to all residents and visitors in the region. This is especially true for older adults, people with disabilities, lower incomes, and those who live in households with no vehicles and who have fewer transportation options. While development of this Plan is a major milestone for the region, future transportation plans, programs and initiatives will provide opportunities to enhance and expand multimodal mobility options, improve connectivity and accessibility, address infrastructure and other issues that impact transportation choices for people and goods traveling in and through the Heartland region. Supported by the Vision and Mission statements and Goals, the LRTP seeks to guide the region's transportation system needs, priorities, plans, and investments.

Heartland Rural Mobility Plan, 2018

The Heartland Rural Mobility Plan (HRMP) was initiated in 2007 by the Florida Department of Transportation. The study area for the HRMP included the six counties that comprise the HRTPO, along with the four communities of Belle Glade, Pahokee and South Bay in Palm Beach County, and Immokalee in Collier County. Geographically, it included approximately 5,000 square miles and a diverse population of about 300,000 with a wide range of mobility needs. It mirrored the South Central Florida Rural Area of Critical Economic Concern (RACEC), which is now known as a Rural Area of Opportunity (RAO). The HRMP, supported by the Florida Department of Transportation (FDOT) Districts One and Four, represented a comprehensive planning approach that was developed around five (5) major goals: promote mobility within the Heartland region; support the region's economic development opportunities; provide coordination between the region's land-use development and promotion of smart growth; promote mobility from the Heartland to other regional destinations; and, coordinate regional mobility governance, planning, and funding.

The HRMP coordination and implementation is staffed by the Central Florida Regional Planning Council (CFRPC) in partnership with the Florida Department of Transportation (FDOT) District One. This coordination between stakeholders and service providers, as well as connecting disadvantaged residents of the Heartland region to transportation services, seeks to improve efficiency in all programs and operations while increasing mobility options for the entire Heartland region. In 2018, the plan was updated to reflect the current demographics of the region.

Heartland Regional Transportation Planning Organization Plans

The HRTPO provides a forum for local elected officials and transportation experts to work together on regional transportation issues. As charged by federal law, the HRTPO Board develops a transportation plan that gives consideration to Technical Advisory Committee, Citizen Advisory Committee and public input before adopting the LRTP or other plans for the Heartland Region.

The following HRTPO Plans inform and provide a foundation for the 2045 LRTP:

Public Involvement and Consultation

- HRTPO Public Participation Plan, 2018
- HRTPO Limited English Proficiency Plan, 2019

Modal Options

- HRTPO Highlands Transit Plan, 2017
- HRTPO DeSoto, Hardee, Highlands, and Okeechobee Transportation Disadvantaged Service Plan, 2020
- HRTPO Glades and Hendry Transportation Disadvantaged Service Plan, 2020
- HRTPO Bicycle and Pedestrian Safety Plan, 2019

Roadway Needs Plan

- HRTPO Congestion Management Plan, 2018
- HRTPO Transportation Trend Report, 2018
- HRTPO Transportation Trend Report - Safety Element, 2019

Local Plans

The 2045 LRTP is also guided by transportation priorities identified by the local governments that make up the HRTPO. Such priorities are identified in local government comprehensive plans and other planning documents including but not limited to: both the City of Arcadia's and Hardee County's Bicycle and Pedestrian Master Plans, the Hendry County Comprehensive Pathways Plan, and the Highlands County Parks and Recreation Trails Map. The local government comprehensive plans have policies to ensure coordination and consistency with the LRTP.

Appendix C: System Performance Report

Heartland Regional Transportation Planning Organization System Performance Report for the 2045 Long Range Transportation Plan

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 MPOs must apply a transportation performance management approach in carrying out their federally required transportation planning and programming activities. The process requires the establishment and use of a coordinated, performance-based approach to transportation decision-making to support national goals for the federal-aid highway and public transportation programs.

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

In accordance with the Planning Rule, the Heartland Regional Transportation Planning Organization 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 LRTP. The System Performance Report evaluates the condition and performance of the transportation system with respect to required performance targets, and reports on progress achieved in meeting the targets in comparison with baseline data and previous reports. For MPOs that elect to develop multiple scenarios, the System Performance Report also must include an analysis of how the preferred scenario has improved the performance of the transportation system and how changes in local policies and investments have impacted the costs necessary to achieve the identified targets.²

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

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

The Heartland Regional Transportation Planning Organization 2040 Long-Range Transportation Plan was adopted on March 16, 2016. The Heartland Regional Transportation Planning Organization 2045 Long-Range Transportation Plan is being developed and will be adopted on March 10, 2021. Per the Planning Rule, the System Performance Report for the Heartland Regional Transportation Planning Organization is included for the required Highway Safety (PM1), Bridge and Pavement (PM2), System Performance (PM3), and Transit Asset Management, and Transit Safety targets.

HIGHWAY SAFETY MEASURES (PM1)

Effective April 14, 2016, the FHWA established five highway safety performance measures³ 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.

FDOT publishes statewide safety performance targets in the HSIP Annual Report that it transmits to FHWA each year. Current safety targets address calendar year 2021. For the 2020 HSIP annual report, FDOT established statewide at “0” for each performance measure to reflect Florida’s vision of zero deaths.

The Heartland Regional Transportation Planning Organization adopted/approved safety performance targets on January 20, 2021. Table 3.1 indicates the areas in which the MPO is expressly supporting the statewide target developed by FDOT, as well as those areas in which the MPO has adopted a target specific to the MPO planning area.

Table 3.1. Highway Safety (PM1) Targets

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

Statewide system conditions for each safety performance measure are included in Table 3.2, along with system conditions in the Heartland Regional Transportation Planning Organization metropolitan planning area. 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.

Table 3.2. Highway Safety (PM1) Conditions and Performance

Performance Measures	Florida Statewide Baseline Performance (Five-Year Rolling Average)				HRTPO and Florida 2021 Performance Targets
	2012-2016	2013-2017	2014-2018	2015-2019	
Number of Fatalities	2,688.2	2,825.4	2,972.0	3,110.6	0
Rate of Fatalities per 100 Million VMT	1.33	1.36	1.39	1.43	0
Number of Serious Injuries	20,844.2	20,929.2	20,738.4	20,166.4	0
Rate of Serious Injuries per 100 Million VMT	10.36	10.13	9.77	9.29	0
Number of Non-Motorized Fatalities and Non-Motorized Serious Injuries	3,294.4	3,304.2	3,339.6	3,401.8	0

Baseline Conditions

After FDOT set its Safety Performance Measures targets in 2018, both FDOT and the HRTPO established 2017 Baseline Safety Performance Measures. To evaluate baseline Safety Performance Measures, the most recent five-year rolling average (2013-2017) of crash data and VMT were utilized. Table 3-2 presents the Baseline Safety Performance Measures for Florida and the HRTPO.

Table 3-2 Baseline Safety Performance Measures

Performance Measure	Florida	HRTPO
Number of Fatalities	2,685.6	66.8
Number of Serious Injuries	20,830.0	390.0
Fatalities per 100 Million VMT	1.3	2.24
Serious Injury Rate per 100 Million VMT	10.2	12.90
Number of Non-Motorized Fatalities and Non-Motorized Serious Injuries (Avg.)	3,253.0	33.4

Source: FDOT 2017 FHWA Performance Measures per MPO

In 2020, FHWA completed an assessment of target achievement for FDOT’s 2018 safety targets, based on actual five-year averages for each measure for 2014-2018. Per FHWA’s PM1 rule, a state has met or made significant progress toward its safety targets when at least four of the targets have been met or the actual outcome is better than the baseline performance. Based on FHWA’s review, Florida did not make significant progress toward achieving its safety targets. Both the total number of fatalities and the fatality rate increased. The total number of serious injuries has begun to decline on a five-year rolling average basis, while the serious injury rate has declined steadily over this timeframe. Based on these trends, Florida is making progress towards achieving the targets established for serious injuries but not yet for fatalities or non-motorized users. As required by FHWA, FDOT developed an HSIP Implementation Plan to highlight additional strategies it will undertake in support of the targets. The HSIP Implementation Plan documents Florida’s HSIP funding and project decisions for the upcoming fiscal year to meet or make significant progress toward meeting its safety performance targets in subsequent years.

As documented in the HSIP Implementation Plan, Florida received an allocation of approximately \$155 million in HSIP funds during the 2018 state fiscal year from July 1, 2018 through June 30, 2019, and fully allocated those funds to safety projects. FDOT used these HSIP funds to complete 391 projects, which address the safety categories of intersections, lane departure mitigation, pedestrian and bicyclist safety, and other programs representing emphasis areas in Florida’s Strategic Highway Safety Plan (SHSP).

FDOT’s State Safety Office works closely with FDOT districts and regional and local traffic safety partners to update the HSIP annually. Historic, risk-based, and predictive safety analyses are conducted to identify appropriate proven countermeasures to reduce fatalities and serious injuries associated with Florida’s SHSP emphasis areas, resulting in a list of projects that reflect the greatest needs and are anticipated to achieve the highest benefit. While these projects and the associated policies and standards may take years to be implemented, they are built on proven countermeasures for improving safety and addressing serious crash risks or safety problems identified through a data-driven process. Florida continues to allocate all available HSIP funding to safety projects. FDOT’s HSIP Guidelines provide detailed information on this data-driven process and funding eligibility.

Trends Analysis

The process used to develop the TPO’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 L RTP and TIP.

The TPO uses crash data tracking fatalities and serious injuries in the HRTPO to analyze past trends and identify regional safety issues. Tracking these measures will help to estimate the effectiveness of future TPO transportation investment, as reflected in the TIP. Table 3-3 shows the changes in Safety Performance Measures for the HRTPO from 2013 through 2017. The measures shown in Table 3-3 were calculated by following the same methodology as that used to calculate the baseline conditions.

Table 3-3 Trends of HRTPO Safety Performance Measures 2013-2017

Performance Measure	2009-2013	2010-2014	2011-2015	2012-2016	2013-2017
Number of Fatalities	57.6	55.8	57.4	60.6	66.8
Number of Serious Injuries	331.2	310.4	299.8	341.8	390.0
Fatalities per 100 Million VMT	2.053	1.996	2.025	2.099	2.235
Serious Injuries per 100 Million VMT	11.785	11.089	10.577	11.744	12.899
Number of Non-Motorized Fatalities and Non-Motorized Serious Injuries (Avg.)	32.4	35.0	33.2	32.4	33.4
VMT (100 MVMT)	4.89	5.03	5.43	5.16	5.18

Source: FDOT 2017 FHWA Performance Measures per MPO

Coordination with Statewide Safety Plans and Processes

The Heartland Regional Transportation Planning Organization 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 Heartland Regional Transportation Planning Organization 2045 Long-Range Transportation Plan 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).

- Florida's Strategic Highway Safety Plan (SHSP), published in March 2021, specifically embraces Target Zero and identifies strategies to achieve zero traffic deaths and serious injuries. The SHSP was updated in coordination with Florida's 27 MPOs and the Florida's Metropolitan Planning Organization Advisory Council (MPOAC). The SHSP development process included review of safety-related goals, objectives, and strategies in MPO plans. 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. Florida's transportation safety partners have focused on reducing fatalities and serious injuries through the 4Es of engineering, education, enforcement, and emergency response. To achieve zero, FDOT and other safety partners will expand beyond addressing specific hazards and influencing individual behavior to reshaping transportation systems and communities to create a safer environment for all travel. The updated SHSP calls on Florida to think more broadly and inclusively by addressing four additional topics, which could be referred to as the 4Is: information intelligence, innovation, insight into communities, and investments and policies
- The HSIP is a core Federal-aid program with the purpose to achieve a significant reduction in traffic fatalities and serious injuries on all public roads. The program is managed by the Central Office with District staff performing project activities such as conducting safety studies, project scoping, public involvement, and coordinating with production staff on programming safety projects. To be eligible for HSIP funds, safety improvement projects must address a SHSP emphasis area, be identified through a data-driven process, and contribute to a reduction in fatalities and serious injuries
- Transportation projects are identified and prioritized with the MPOs and non-metropolitan local governments. Data are analyzed for each potential project, using traffic safety data and traffic demand modeling, among other data. The FDOT Project Development and Environment Manual requires the consideration of safety when preparing a proposed project's purpose and need, and defines several factors related to safety, including crash modification factor and safety performance factor, as part of the analysis of alternatives. MPOs and local governments consider safety data analysis when determining project priorities.

L RTP Safety Priorities

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

The L RTP identifies safety needs within the metropolitan planning area and provides funding for targeted safety improvements. The Heartland Regional TPO has developed a project selection process whereby projects are evaluated based on criteria that reflects the HRTPO's vision and mission, as well as adopted goals, objectives, and targets of the Long-Range Transportation Plan.

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

The HRTPO 2045 L RTP emphasizes the TPO's commitment to safety through the goals identified in the plan. One of the L RTP's goals is to Increase Safety, which includes the following objectives:

- To achieve a significant reduction in traffic fatalities and serious injuries on all public roads.
 - Reduce all crashes, fatalities and serious injuries for all modes of travel.
 - Number of Fatalities – All Public Roads
 - Fatality Rate per 100 million Vehicle Miles Traveled (VMT) – All Public Roads
 - Number of Serious Injuries – All Public Roads
 - Serious Injury Rate per 100 million VMT – All Public Roads
 - Number of Combined Non-Motorized Fatalities and Serious Injuries – All Public Roads
- Promote projects in high crash locations - (locations with the highest number of crashes)
- Provide safe and reliable options during an emergency
 - Over capacity roadway miles on evacuation routes
- Increase the security of the transportation system for motorized and non-motorized users.

There are numerous projects listed in the 2045 LRTP that will help improve safety of the HRTPO 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 reconstruction projects. For a complete list of projects, please see the Heartland Regional Transportation Planning Organization 2045 LRTP.

PAVEMENT AND BRIDGE CONDITION MEASURES (PM2)

Pavement and Bridge Condition Performance Measures and Targets Overview

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

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

The four pavement condition measures represent the percentage of lane-miles on the Interstate and non-Interstate NHS that are in good condition or poor condition. The PM2 rule defines NHS pavement types as asphalt, jointed concrete, or continuous concrete. 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.

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

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

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

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

Pavement and Bridge Condition Baseline Performance and Established Targets

This System Performance Report discusses the condition and performance of the transportation system for each applicable target as well as the progress achieved by the MPO in meeting targets in comparison with system performance recorded in previous reports. Because the federal performance measures are new, performance of the system for each measure has only recently been collected and targets have only recently been established. Accordingly, this first Heartland Regional Transportation Planning Organization 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 4.1 presents baseline and 2019 performance for each PM2 measure for the State and for the MPO planning area as well as the two-year and four-year targets established by FDOT for the State.

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

Performance Measures	Statewide (2017 Baseline)	Statewide 2019 Actual	Statewide 2-year Target (2019)	Statewide 4-year Target (2021)	HRTPO (2017 Baseline)	HRTPO 2019 Actual
Percent of Interstate pavements in good condition	67.5%	68.0%	n/a	≥60%	n/a	n/a
Percent of Interstate pavements in poor condition	0.01%	0.5%	n/a	<5%	n/a	n/a
Percent of non-Interstate NHS pavements in good condition	44.0%	41.0%	≥40%	≥40%	35.5%	42.4%
Percent of non-Interstate NHS pavements in poor condition	0.5%	0.3%	<5%	<5%	0.3%	0.2%
Percent of NHS bridges (by deck area) in good condition	67.7%	65.6%	≥50%	≥50%	82.44%	81.8%
Percent of NHS bridges (by deck area) in poor condition	1.2%	0.5%	<10%	<10%	0%	0%

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.

The Heartland Regional Transportation Planning Organization agreed to support FDOT’s pavement and bridge condition performance targets on June 19, 2019. By adopting FDOT’s targets, the Heartland Regional Transportation Planning Organization agrees to plan and program projects that help FDOT achieve these targets.

The Heartland Regional Transportation Planning Organization 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

Heartland Regional Transportation Planning Organization 2045 LRTP reflects the goals, objectives, performance measures, and targets as they are described in other state and public transportation plans and processes, including the Florida Transportation Plan (FTP) and the Florida Transportation Asset Management Plan.

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

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

- Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.
- Plan for and design multimodal transportation systems providing mobility options which are accessible by all users.
- Improve connectivity between major activity centers in the Heartland Region.
- Provide a comprehensive transportation network for dependable and reliable transportation options
- Reduce Congestion
- Promote System Reliability
- Increase mobility choices throughout the region and counties
 - Percentage of non-revenue vehicles met or exceeded Useful Life Benchmark
 - Percentage of revenue vehicles met or exceeded Useful Life Benchmark
 - Percentage of facilities with a condition rating below 3.0 on the FTA Transit Economic Requirements Model Scale
- To maintain the highway infrastructure asset system in a state of good repair.
 - Non-Interstate NHS Pavement in Good Condition
 - Non-Interstate NHS Pavement in Poor Condition
 - NHS Bridge Deck Area in Good Condition NHS
 - NHS Bridge Deck Area in Poor Condition NHS
- Coordinate land use and transportation planning decisions to support modal choice.
- Support multimodal facilities that are user friendly, encourage mobility, and promote healthy and active lifestyles.
- Enhance travel and tourism.
- Promote efficient system management and operation

SYSTEM PERFORMANCE, FREIGHT, AND CONGESTION MITIGATION & AIR QUALITY IMPROVEMENT PROGRAM MEASURES (PM3)

System Performance/Freight/CMAQ Performance Measures and Targets Overview

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

National Highway Performance Program (NHPP)

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

National Highway Freight Program (NHFP)

3. Truck Travel Time Reliability index (TTTR);

Congestion Mitigation and Air Quality Improvement Program (CMAQ)

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

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

LOTTR is defined as the ratio of longer travel times (80th percentile) to a normal travel time (50th percentile) over all applicable roads during four time periods (AM peak, Mid-day, PM peak, and weekends) that cover the hours of 6 a.m. to 8 p.m. each day. The LOTTR ratio is calculated for each roadway segment, essentially comparing the segment with itself. Segments with LOTTR ≥ 1.50 during any of the above time periods are considered unreliable. The two LOTTR measures are expressed as the percent of person-miles traveled on the Interstate or non-Interstate NHS system that are reliable. Person-miles 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.

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

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

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

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

PM3 Baseline Performance and Established Targets

The System Performance Report discusses the condition and performance of the transportation system for each applicable PM3 target as well as the progress achieved by the MPO in meeting targets in comparison with system performance recorded in previous reports. Because the federal performance measures are new, performance of the system for each measure has only recently been collected and targets have only recently been established. Accordingly, this Heartland Regional Transportation Planning Organization LRTP System Performance Report highlights performance for the baseline period, which is 2017, and for 2019. 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 5.1 presents baseline and 2019 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.

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

Performance Measures	Statewide (2017 Baseline)	Statewide 2019 Actual	Statewide 2-year Target (2019)	Statewide 4-year Target (2021)	HRTPO (2017 Baseline)	HRTPO 2019 Actual
Percent of person-miles on the Interstate system that are reliable	82.2%	83.4%	≥75.0%	≥70.0%	n/a	n/a
Percent of person-miles on the non-Interstate NHS that are reliable	84.0%	87.0%	n/a	≥50.0%	>99%	100%
Truck travel time reliability index (TTTR)	1.43	1.45	≤1.75	≤2.00	n/a	n/a

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

FDOT collects and reports travel time data to FHWA each year to track performance and progress toward the reliability targets. The percentage of person-miles that are reliable increased from 2017 to 2019 on both the Interstate and non-Interstate NHS. The truck travel time reliability index declined slightly between the 2017 baseline and 2019. For each measure, the 2019 actual performance exceeded the applicable two-year targets. In early 2021, FHWA determined that FDOT made significant progress toward each of the two-year targets.

The Heartland Regional Transportation Planning Organization agreed to support FDOT's PM3 targets on June 19, 2019. By adopting FDOT's targets, the HRTPO agrees to plan and program projects that help FDOT achieve these targets.

The HRTPO 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 Heartland Regional Transportation Planning Organization LRTP reflects the goals, objectives, performance measures, and targets as they are described in other state and public transportation plans and processes, including the Florida Transportation Plan (FTP) and the Florida Freight Mobility and Trade Plan.

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

The Heartland Regional Transportation Planning Organization 2045 LRTP seeks to address system reliability and congestion mitigation through various means, including capacity expansion and operational improvements.

TRANSIT ASSET MANAGEMENT MEASURES

Transit Asset Performance

On July 26, 2016, FTA published the final Transit Asset Management (TAM) 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 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 6.1 below identifies performance measures outlined in the final rule for transit asset management.

Table 6.1. FTA TAM Performance Measures

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

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

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

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

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

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

The TAM rule defines two tiers of public transportation providers based on size parameters. Tier I providers are those that operate rail service or more than 100 vehicles in all fixed route modes, or more than 100 vehicles in

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

A total of 19 transit providers participated in the FDOT Group TAM Plan and continue to coordinate with FDOT on establishing and reporting group targets to FTA through the National Transit Database (NTD) (Table 6.2). These are FDOT’s Section 5311 Rural Program subrecipients. The Group TAM Plan was adopted in October 2018 and covers fiscal years 2018-2019 through 2021-2022. Updated targets were submitted to NTD in 2021.

Table 6.2. Florida Group TAM Plan Participants

District	Participating Transit Providers	
1	Central Florida Regional Planning Council ¹	
2	Suwannee Valley Transit Big Bend Transit ¹ Baker County Transit Nassau County Transit	Ride Solution Levy County Transit Suwannee River Economic Council
3	Tri-County Community Council Big Bend Transit ¹ Gulf County ARC	Calhoun Transit Liberty County Transit JTRANS Wakulla Transit
4	<i>No participating providers</i>	
5	Sumter Transit Marion Transit	
6	Key West Transit	
7	<i>No participating providers</i>	

¹The Central Florida Regional Planning Council now handles transit service in DeSoto County, so DeSoto-Arcadia Regional Transit no longer included in the list of providers. Good Wheels, Inc. is no longer in business.

All transit agencies within the Heartland region are categorized as Tier II agencies and are participating in the FDOT Group Transit Asset Management Plan. The MPO has the following Tier II providers operating in the region:

- Central Florida Regional Planning Council

On November 28, 2018, the HRTPO agreed to support the transit asset targets identified in the FDOT Group Transit Asset Management Plan, thus agreeing to plan and program projects in the TIP that will, once implemented, make progress toward achieving the transit targets.

The Central Florida Regional Planning Council is part of the Group TAM Plan for Fiscal Years 2018/2019-2022/2023 developed by FDOT for Tier II providers in Florida and coordinates with FDOT on reporting of group targets to NTD. The FY 2019 asset conditions and 2020 targets for the Tier II providers are shown in Table 6.2.

The statewide group TAM targets are based on the condition of existing transit assets and planned investments in equipment, rolling stock, infrastructure, and facilities over the next year. 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 during the next fiscal year.

As required by FTA, FDOT will update this TAM Plan at least once every four years. FDOT will update the statewide performance targets for the participating agencies on an annual basis and will notify the participating transit agencies and the MPOs in which they operate when the targets are updated.

Table 6.3. FDOT Group Plan Transit Asset Management Targets for Tier II Providers

Asset Category - Performance Measure	Asset Class	FY 2020 Asset Conditions	FY 2021 Performance Target
Revenue Vehicles			
Age - % of revenue vehicles within a particular asset class that have met or exceeded their Useful Life Benchmark (ULB)	Automobile	28.6%	≤28%
	Bus	17.0%	≤16%
	Cutaway Bus	14.1%	≤14%
	School Bus	100%	≤75%
	Mini-Van	26.6%	≤26%
	SUV	18.2%	≤18%
	Van	47.9%	≤47%
Equipment			
Age - % of equipment or non-revenue vehicles within a particular asset class that have met or exceeded their Useful Life Benchmark (ULB)	Non Revenue Automobile	66.7%	≤66%
	Trucks and other Rubber Tire Vehicles	7.1%	≤7%
Facilities			
Condition - % of facilities with a condition rating below 3.0 on the FTA Transit Economic Requirements Model (TERM) Scale	Passenger/Parking Facilities	0%	≤0%
	Administration/Maintenance Facilities	0%	≤0%

TAM Performance

Key findings of the Group TAM Plan include the following:

- Approximately 27 percent of all inventoried assets have met or exceeded their useful life.
- The asset inventory includes a total of 752 revenue vehicles with an average age of 5.5 years, of which 271 (or 35 percent) have met or exceeded their useful life.
- Based on the investment prioritization, vehicles that are rated poor or marginal in the cutaway class and the van class will be prioritized for replacement.

The Heartland Regional Transportation Planning Organization recognizes the importance of linking goals, objectives, and investment priorities to stated performance objectives, and that establishing this link is critical to the achievement of national transportation goals and statewide and regional performance targets. As such, the L RTP directly reflects the goals, objectives, performance measures, and targets as they are described in other public transportation plans and processes, including the Transportation Disadvantaged Service Plans and the Heartland Rural Mobility Plan, and the current Heartland Regional Transportation Planning Organization 2045 Long Range Transportation Plan.

To support progress towards TAM performance targets, transit investment and maintenance funding in the 2045 L RTP totals \$170 million, approximately 24% percent of total L RTP funding. Improving the State of Good Repair (SGR) of capital assets is an overarching goal of this process.

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

Transit Safety Performance Measures

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

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.

The HRTPO planning area does not include any transit agencies that are required to implement Transit Safety Performance Measures.

Appendix D: Environmental Mitigation

Avoidance of Environmental and Natural Systems Impacts

As part of the Heartland 2060 cooperative effort, the concept of avoidance of impacts to the environment and natural systems in construction of new and expanded transportation infrastructure was established. To accomplish this, an extensive database was developed for the Heartland Region. This information is detailed in the reports contained in the appendix section of this plan available at www.hrtpo2045.org. Identified new and/or expanded roadways were proposed for locations outside of wetlands, floodplains, and prime habitat for endangered or threatened animal species. Traversing or crossings of these areas, as well as prime wildlife corridors, were minimized. When proposed transportation projects may impact these environmental or natural systems, the use of mitigation strategies will be used in the project development process.

This appendix includes maps identifying potential areas of avoidance and mitigation for each of the six Heartland counties including wetlands, lakes, and water features, tribal lands, state parks, military operating areas, and designated conservation areas. The maps also include the The Lake Wales Ridge, a low ridge running for about 150 miles south to north in Central Florida. The greater part of the Ridge is in Highlands County and Polk County. The Lake Wales Ridge originated as a series of sand islands, formed at a time more than a million years ago during the Pleistocene epoch. It is believed that these sand islands, known as "Florida's ancient islands", formed when sea level was higher than today. The Lake Wales Ridge in its natural state is mostly composed of scrub, which provides a home for many unique species including threatened and endangered plant and animal species such as the gopher tortoise, sand skink, Florida scrubjays, Garrett's mint, and scrub plum.

Historically the Lake Wales Ridge has supported citrus groves and small towns. Since the 1970's it has grown rapidly in population and now contains the area of Highlands County designated as the Sebring-Avon Park Urbanized Area. To the east of the Lake Wales Ridge is the 107,000 acre Avon Park Air Force Range which is the Air Force's largest primary training range east of the Mississippi River.

Threatened and Endangered Species in the Heartland

County	Group	Common Name	Scientific Name	Status
DeSoto	Birds	Florida Scrub-Jay	<i>Aphelocoma coerulescens</i>	Threatened
DeSoto	Birds	Crested Caracara	<i>Caracara cheriway</i>	Threatened
DeSoto	Mammals	West Indian Manatee	<i>Trichechus manatus</i>	Threatened
DeSoto	Reptiles	American Alligator	<i>Alligator mississippiensis</i>	Threatened
DeSoto	Reptiles	Eastern Indigo Snake	<i>Drymarchon couperi</i>	Threatened
DeSoto	Plants & Lichens	Edison's ascyrum	<i>Hypericum edisonianum</i>	State Endangered
DeSoto	Plants & Lichens	lowland loosestrife	<i>Lythrum flagellare</i>	State Endangered
DeSoto	Plants & Lichens	sleeping beauty waterlily	<i>Nymphaea jamesoniana</i>	State Endangered
DeSoto	Plants & Lichens	toothed maiden fern	<i>Thelypteris serrata</i>	State Endangered
DeSoto	Birds	Florida Sandhill Crane	<i>Antigone canadensis pratensis</i>	State Threatened
DeSoto	Birds	Little Blue Heron	<i>Egretta caerulea</i>	State Threatened
DeSoto	Birds	Tricolored Heron	<i>Egretta tricolor</i>	State Threatened
DeSoto	Plants & Lichens	giant orchid	<i>Pteroglossaspis ecristata</i>	State Threatened
DeSoto	Plants & Lichens	redmargin zephyrlily	<i>Zephyranthes simpsonii</i>	State Threatened
DeSoto	Reptiles	Gopher Tortoise	<i>Gopherus polyphemus</i>	State Threatened
Glades	Birds	Red-cockaded Woodpecker	<i>Dryobates borealis</i>	Endangered
Glades	Birds	Snail Kite	<i>Rostrhamus sociabilis</i>	Endangered
Glades	Mammals	Florida Panther	<i>Puma concolor coryi</i>	Endangered
Glades	Plants & Lichens	Okeechobee gourd	<i>Cucurbita okeechobeensis</i>	Endangered
Glades	Birds	Florida Scrub-Jay	<i>Aphelocoma coerulescens</i>	Threatened
Glades	Birds	Crested Caracara	<i>Caracara cheriway</i>	Threatened
Glades	Birds	Wood Stork	<i>Mycteria americana</i>	Threatened

County	Group	Common Name	Scientific Name	Status
Glades	Mammals	West Indian Manatee	Trichechus manatus	Threatened
Glades	Reptiles	American Crocodile	Crocodylus acutus	Threatened
Glades	Reptiles	Eastern Indigo Snake	Drymarchon couperi	Threatened
Glades	Plants & Lichens	cutthroatgrass	Coleataenia abscissa	State Endangered
Glades	Plants & Lichens	Edison's ascyrum	Hypericum edisonianum	State Endangered
Glades	Plants & Lichens	lowland loosestrife	Lythrum flagellare	State Endangered
Glades	Birds	Florida Sandhill Crane	Antigone canadensis pratensis	State Threatened
Glades	Birds	Florida Burrowing Owl	Athene cunicularia floridana	State Threatened
Glades	Birds	Little Blue Heron	Egretta caerulea	State Threatened
Glades	Birds	Tricolored Heron	Egretta tricolor	State Threatened
Glades	Plants & Lichens	redmargin zephyrlily	Zephyranthes simpsonii	State Threatened
Glades	Reptiles	Gopher Tortoise	Gopherus polyphemus	State Threatened
Hardee	Plants & Lichens	pygmy fringe tree	Chionanthus pygmaeus	Endangered
Hardee	Plants & Lichens	Florida goldenaster	Chrysopsis floridana	Endangered
Hardee	Plants & Lichens	Florida blazing star	Liatris ohlingerae	Endangered
Hardee	Plants & Lichens	Britton's beargrass	Nolina brittoniana	Endangered
Hardee	Plants & Lichens	Lewton's polygala	Polygala lewtonii	Endangered
Hardee	Plants & Lichens	Small's jointweed	Polygonella myriophylla	Endangered
Hardee	Birds	Florida Scrub-Jay	Aphelocoma coerulescens	Threatened
Hardee	Birds	Crested Caracara	Caracara cheriway	Threatened
Hardee	Birds	Wood Stork	Mycteria americana	Threatened
Hardee	Plants & Lichens	Florida bonamia	Bonamia grandiflora	Threatened
Hardee	Reptiles	American Alligator	Alligator mississippiensis	Threatened
Hardee	Reptiles	Eastern Indigo Snake	Drymarchon couperi	Threatened
Hardee	Plants & Lichens	spurred neottia	Eltroplectris calcarata	State Endangered
Hardee	Plants & Lichens	tropical ironwood	Eugenia confusa	State Endangered
Hardee	Plants & Lichens	thick-leaved water-willow	Justicia crassifolia	State Endangered
Hardee	Plants & Lichens	Gulf Coast Florida lantana	Lantana depressa var. sanibelensis	State Endangered
Hardee	Birds	Florida Sandhill Crane	Antigone canadensis pratensis	State Threatened
Hardee	Birds	Little Blue Heron	Egretta caerulea	State Threatened
Hardee	Birds	Tricolored Heron	Egretta tricolor	State Threatened
Hardee	Plants & Lichens	pinewoods bluestem	Andropogon arctatus	State Threatened
Hardee	Plants & Lichens	hartwrightia	Hartwrightia floridana	State Threatened
Hardee	Plants & Lichens	nodding pinweed	Lechea cernua	State Threatened
Hardee	Plants & Lichens	giant orchid	Pteroglossaspis ecristata	State Threatened
Hardee	Plants & Lichens	redmargin zephyrlily	Zephyranthes simpsonii	State Threatened
Hardee	Reptiles	Gopher Tortoise	Gopherus polyphemus	State Threatened
Hendry	Birds	Snail Kite	Rostrhamus sociabilis	Endangered
Hendry	Mammals	Florida Panther	Puma concolor coryi	Endangered
Hendry	Birds	Florida Scrub-Jay	Aphelocoma coerulescens	Threatened
Hendry	Birds	Crested Caracara	Caracara cheriway	Threatened
Hendry	Birds	Wood Stork	Mycteria americana	Threatened
Hendry	Mammals	West Indian Manatee	Trichechus manatus	Threatened
Hendry	Reptiles	Eastern Indigo Snake	Drymarchon couperi	Threatened

County	Group	Common Name	Scientific Name	Status
Hendry	Snails & Allies	Stock Island Tree Snail	<i>Orthalicus reses reses</i>	Threatened
Hendry	Plants & Lichens	cutthroatgrass	<i>Coleataenia abscissa</i>	State Endangered
Hendry	Plants & Lichens	coastal vervain	<i>Glandularia maritima</i>	State Endangered
Hendry	Plants & Lichens	Gulf Coast Florida lantana	<i>Lantana depressa</i> var. <i>sanibelensis</i>	State Endangered
Hendry	Plants & Lichens	Small's flax	<i>Linum carteri</i> var. <i>smallii</i>	State Endangered
Hendry	Plants & Lichens	lowland loosestrife	<i>Lythrum flagellare</i>	State Endangered
Hendry	Plants & Lichens	Florida spiny-pod	<i>Matelea floridana</i>	State Endangered
Hendry	Plants & Lichens	hand fern	<i>Ophioglossum palmatum</i>	State Endangered
Hendry	Plants & Lichens	coastal hoary-pea	<i>Tephrosia angustissima</i> var. <i>curtissii</i>	State Endangered
Hendry	Birds	Florida Sandhill Crane	<i>Antigone canadensis pratensis</i>	State Threatened
Hendry	Birds	Florida Burrowing Owl	<i>Athene cunicularia floridana</i>	State Threatened
Hendry	Birds	Little Blue Heron	<i>Egretta caerulea</i>	State Threatened
Hendry	Birds	Tricolored Heron	<i>Egretta tricolor</i>	State Threatened
Hendry	Mammals	Mangrove Fox Squirrel	<i>Sciurus niger avicennia</i>	State Threatened
Hendry	Plants & Lichens	Piedmont jointgrass	<i>Coelorachis tuberculosa</i>	State Threatened
Hendry	Plants & Lichens	pineland jacquemontia	<i>Jacquemontia curtissii</i>	State Threatened
Hendry	Plants & Lichens	giant orchid	<i>Pteroglossaspis ecristata</i>	State Threatened
Hendry	Plants & Lichens	banded wild-pine	<i>Tillandsia flexuosa</i>	State Threatened
Hendry	Plants & Lichens	redmargin zephyrlily	<i>Zephyranthes simpsonii</i>	State Threatened
Hendry	Reptiles	Gopher Tortoise	<i>Gopherus polyphemus</i>	State Threatened
Highlands	Birds	Florida Grasshopper Sparrow	<i>Ammodramus savannarum floridanus</i>	Endangered
Highlands	Birds	Red-cockaded Woodpecker	<i>Dryobates borealis</i>	Endangered
Highlands	Mammals	Florida Panther	<i>Puma concolor coryi</i>	Endangered
Highlands	Plants & Lichens	pygmy fringe tree	<i>Chionanthus pygmaeus</i>	Endangered
Highlands	Plants & Lichens	Florida goldenaster	<i>Chrysopsis floridana</i>	Endangered
Highlands	Plants & Lichens	perforate reindeer lichen	<i>Cladonia perforata</i>	Endangered
Highlands	Plants & Lichens	short-leaved rosemary	<i>Conradina brevifolia</i>	Endangered
Highlands	Plants & Lichens	Avon Park rabbit-bells	<i>Crotalaria avonensis</i>	Endangered
Highlands	Plants & Lichens	Garrett's scrub balm	<i>Dicerandra christmanii</i>	Endangered
Highlands	Plants & Lichens	scrub mint	<i>Dicerandra frutescens</i>	Endangered
Highlands	Plants & Lichens	wedge-leaved button-snakeroot	<i>Eryngium cuneifolium</i>	Endangered
Highlands	Plants & Lichens	Highlands Scrub hypericum	<i>Hypericum cumulicola</i>	Endangered
Highlands	Plants & Lichens	Florida blazing star	<i>Liatris ohlingerae</i>	Endangered
Highlands	Plants & Lichens	Britton's beargrass	<i>Nolina brittoniana</i>	Endangered
Highlands	Plants & Lichens	Lewton's polygala	<i>Polygala lewtonii</i>	Endangered
Highlands	Plants & Lichens	Florida jointweed	<i>Polygonella basiramia</i>	Endangered
Highlands	Plants & Lichens	Small's jointweed	<i>Polygonella myriophylla</i>	Endangered
Highlands	Plants & Lichens	scrub plum	<i>Prunus geniculata</i>	Endangered
Highlands	Plants & Lichens	chaffseed	<i>Schwalbea americana</i>	Endangered
Highlands	Plants & Lichens	Carter's warea	<i>Warea carteri</i>	Endangered
Highlands	Plants & Lichens	scrub ziziphus	<i>Ziziphus celata</i>	Endangered
Highlands	Birds	Florida Scrub-Jay	<i>Aphelocoma coerulescens</i>	Threatened
Highlands	Birds	Crested Caracara	<i>Caracara cheriway</i>	Threatened
Highlands	Birds	Wood Stork	<i>Mycteria americana</i>	Threatened

County	Group	Common Name	Scientific Name	Status
Highlands	Plants & Lichens	Florida bonamia	Bonamia grandiflora	Threatened
Highlands	Plants & Lichens	scrub pigeon-wing	Clitoria fragrans	Threatened
Highlands	Plants & Lichens	scrub buckwheat	Eriogonum longifolium var. gnaphalifolium	Threatened
Highlands	Plants & Lichens	paper-like nailwort	Paronychia chartacea var. chartacea	Threatened
Highlands	Reptiles	American Alligator	Alligator mississippiensis	Threatened
Highlands	Reptiles	Eastern Indigo Snake	Drymarchon couperi	Threatened
Highlands	Reptiles	Blue-tailed Mole Skink	Plestiodon egregius lividus	Threatened
Highlands	Reptiles	Sand Skink	Plestiodon reynoldsi	Threatened
Highlands	Plants & Lichens	sand butterfly pea	Centrosema arenicola	State Endangered
Highlands	Plants & Lichens	highlands goldenaster	Chrysopsis highlandsensis	State Endangered
Highlands	Plants & Lichens	cutthroatgrass	Coleataenia abscissa	State Endangered
Highlands	Plants & Lichens	spurred neottia	Eltroplectris calcarata	State Endangered
Highlands	Plants & Lichens	tropical ironwood	Eugenia confusa	State Endangered
Highlands	Plants & Lichens	scrub spurge	Euphorbia roscens	State Endangered
Highlands	Plants & Lichens	Edison's ascyrum	Hypericum edisonianum	State Endangered
Highlands	Plants & Lichens	thick-leaved water-willow	Justicia crassifolia	State Endangered
Highlands	Plants & Lichens	pine pinweed	Lechea divaricata	State Endangered
Highlands	Plants & Lichens	yellow fringeless orchid	Platanthera integra	State Endangered
Highlands	Plants & Lichens	scrub bluestem	Schizachyrium niveum	State Endangered
Highlands	Plants & Lichens	scrub stylisma	Stylisma abdita	State Endangered
Highlands	Plants & Lichens	toothed maiden fern	Thelypteris serrata	State Endangered
Highlands	Birds	Florida Sandhill Crane	Antigone canadensis pratensis	State Threatened
Highlands	Birds	Florida Burrowing Owl	Athene cucularia floridana	State Threatened
Highlands	Birds	Little Blue Heron	Egretta caerulea	State Threatened
Highlands	Birds	Tricolored Heron	Egretta tricolor	State Threatened
Highlands	Birds	Southeastern American Kestrel	Falco sparverius paulus	State Threatened
Highlands	Plants & Lichens	Ashe's savory	Calamintha ashei	State Threatened
Highlands	Plants & Lichens	many-flowered grass-pink	Calopogon multiflorus	State Threatened
Highlands	Plants & Lichens	Piedmont jointgrass	Coelorachis tuberculosa	State Threatened
Highlands	Plants & Lichens	hartwrightia	Hartwrightia floridana	State Threatened
Highlands	Plants & Lichens	nodding pinweed	Lechea cernua	State Threatened
Highlands	Plants & Lichens	narrowleaf naiad	Najas filifolia	State Threatened
Highlands	Plants & Lichens	giant orchid	Pteroglossaspis ecristata	State Threatened
Highlands	Plants & Lichens	banded wild-pine	Tillandsia flexuosa	State Threatened
Highlands	Plants & Lichens	redmargin zephyrlily	Zephyranthes simpsonii	State Threatened
Highlands	Reptiles	Gopher Tortoise	Gopherus polyphemus	State Threatened
Highlands	Reptiles	Short-tailed Snake	Lampropeltis extenuata	State Threatened
Highlands	Reptiles	Pine Snake	Pituophis melanoleucus	State Threatened
Okeechobee	Birds	Florida Grasshopper Sparrow	Ammodramus savannarum floridanus	Endangered
Okeechobee	Birds	Snail Kite	Rostrhamus sociabilis	Endangered
Okeechobee	Mammals	Florida bonneted bat	Eumops floridanus	Endangered
Okeechobee	Birds	Florida Scrub-Jay	Aphelocoma coerulescens	Threatened
Okeechobee	Birds	Crested Caracara	Caracara cheriway	Threatened

County	Group	Common Name	Scientific Name	Status
Okeechobee	Birds	Wood Stork	Mycteria americana	Threatened
Okeechobee	Mammals	West Indian Manatee	Trichechus manatus	Threatened
Okeechobee	Reptiles	Eastern Indigo Snake	Drymarchon couperi	Threatened
Okeechobee	Reptiles	American Alligator	Alligator mississippiensis	Threatened
Okeechobee	Plants & Lichens	cutthroatgrass	Coleataenia abscissa	State Endangered
Okeechobee	Plants & Lichens	pine pinweed	Lechea divaricata	State Endangered
Okeechobee	Plants & Lichens	lowland loosestrife	Lythrum flagellare	State Endangered
Okeechobee	Plants & Lichens	celestial lily	Nemastylis floridana	State Endangered
Okeechobee	Plants & Lichens	hand fern	Ophioglossum palmatum	State Endangered
Okeechobee	Birds	Florida Sandhill Crane	Antigone canadensis pratensis	State Threatened
Okeechobee	Birds	Florida Burrowing Owl	Athene cunicularia floridana	State Threatened
Okeechobee	Birds	Little Blue Heron	Egretta caerulea	State Threatened
Okeechobee	Birds	Tricolored Heron	Egretta tricolor	State Threatened
Okeechobee	Birds	Southeastern American Kestrel	Falco sparverius paulus	State Threatened
Okeechobee	Plants & Lichens	many-flowered grass-pink	Calopogon multiflorus	State Threatened
Okeechobee	Plants & Lichens	large-flowered rosemary	Conradina grandiflora	State Threatened
Okeechobee	Plants & Lichens	Florida beargrass	Nolina atopocarpa	State Threatened
Okeechobee	Plants & Lichens	giant orchid	Pteroglossaspis ecristata	State Threatened
Okeechobee	Plants & Lichens	redmargin zephyrlily	Zephyranthes simpsonii	State Threatened
Okeechobee	Reptiles	Gopher Tortoise	Gopherus polyphemus	State Threatened

Mitigation of Environmental and Natural Impacts

Transportation projects can significantly impact many aspects of the environment including wildlife and their habitats, wetlands, and groundwater resources. In situations where impacts cannot be completely avoided, mitigation or conservation efforts are required. Environmental mitigation is the process of addressing damage to the environment caused by transportation projects or programs. The process of mitigation is best accomplished through enhancement, restoration, creation and/or preservation projects that serve to offset unavoidable environmental impacts.

The HRTPO is committed to minimizing and mitigating the negative impacts of transportation projects on the natural and built environment in order to preserve and enhance the quality of life. In the State of Florida, environmental mitigation for transportation projects is completed through a partnership between the TPOs/MPO, FDOT, and state and federal environmental resource and regulatory agencies, such as the Water Management Districts (WMDs) and the Florida Department of Environmental Protection (FDEP). These activities are directed through Section 373 Florida Statutes (F.S.), which establishes the requirements for mitigation planning as well as the requirements for permitting, mitigation banking, and mitigation requirements for habitat impacts. Under this statute FDOT must identify projects requiring mitigation, determine a cost associated with the mitigation, and place funds into an escrow account within the Florida Transportation Trust Fund. State transportation trust funds are programmed in the FDOT work program for use by the WMDs to provide mitigation for the impacts identified in the annual inventory.

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

Project development shall include identification of stormwater impact minimization and mitigation. Particular attention will look at avoidance of water quality impacts to surface waters or aquifer recharge areas. Where impacts are unavoidable, stormwater mitigation shall look at creative ways to enhance the natural and built environment such as improving degraded wetlands, enhancing public lands or parks, or providing wildlife habitat areas.

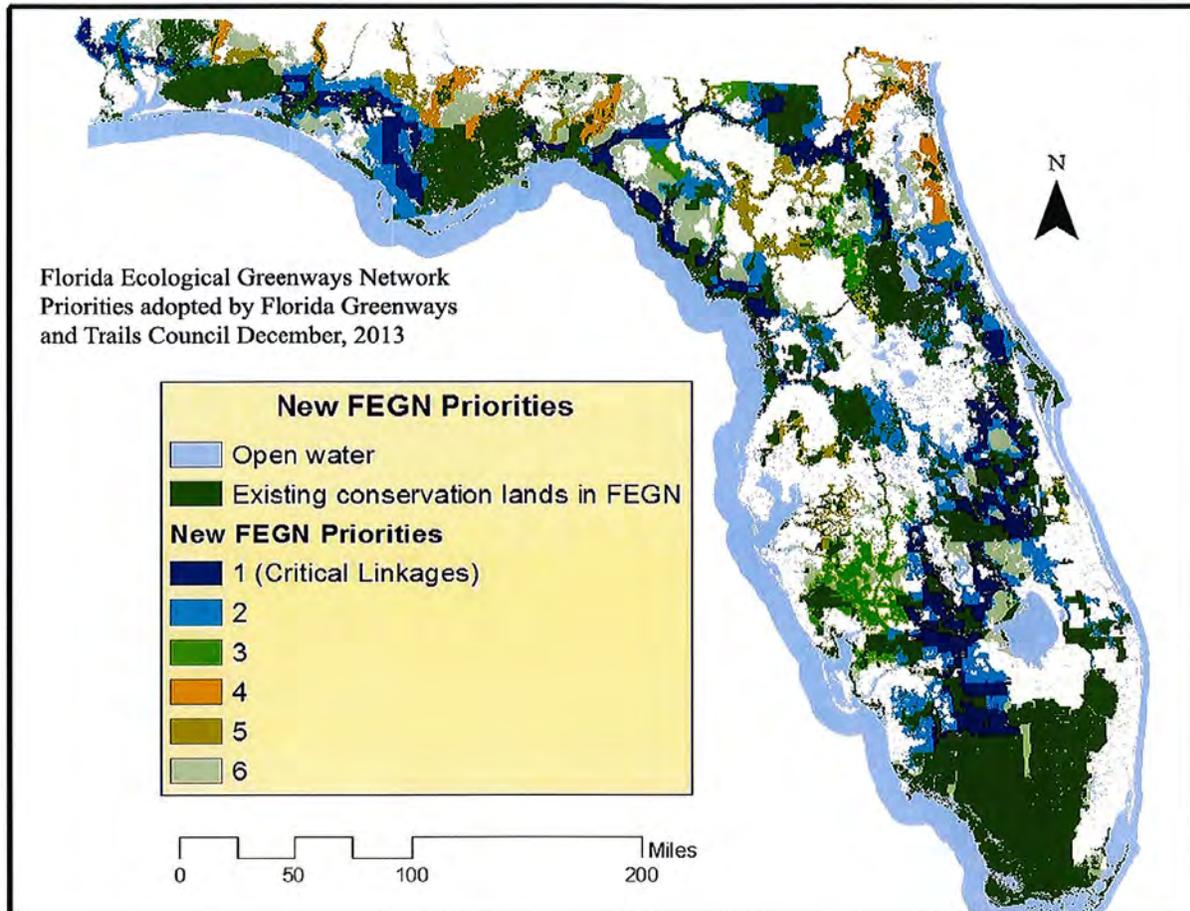
When addressing mitigation there is a general rule to avoid all impacts, minimize impacts, and mitigate impacts when unavoidable. This rule can be applied at the planning level, when TPOs/MPOs are identifying areas of potential environmental concern due to the development of a transportation project.

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

The HRTPO convened a gathering of diverse environmental and agricultural stakeholders to discuss a regional outlook for the LRTP update. Significant input surrounding the value of landscape protection as opposed to piecemeal approaches to protection and mitigation were discussed. With the development of new statistical methods i.e. mesh size (meff), managers are able to compare various designs and/or scenarios in order to quantify the level of landscape fragmentation. This process could be employed in the decision making process ensuring the most favorable ecological outcome possible.

Roadway lighting was also discussed as the ecology of healthy natural areas depend on natural light to a significant degree. There are certain sensitivities to noise and light, when added to light pollution as a whole, have the potential to affect a greater number of species and processes. In addition, light has the potential to affect phytoplankton communities which form the basis of the food chain in Florida's large number of lakes. Taken as a whole, it's easy to see how these items can combine to negatively impact a much greater area than may have been expected.

The impacts of roadway design are not just an ecological concern as they also impact agriculture and its viability as a primary economic driver in Florida. With agricultural lands also serving as part of the state's natural water infrastructure it is important to not only look at the traditional impacts associated with wetlands, habitat, and connectivity. To date, there still lacks a comprehensive understanding of how best to manage Florida's significant sheet flow. Balancing the needs of water and wildlife in relation to roadways and transportation networks require a vast understanding of potential effects and while all negative impacts will not be avoided, there are opportunities for minimizing said effects.



Efficient Transportation Decision Making (ETDM)

In addition to the process outlined in the Florida Statutes and implemented by the TPO/MPO and its partner agencies, the Efficient Transportation Decision Making (ETDM) process is used for seeking input on individual qualifying long range transportation projects allowing for more specific commentary. This provides assurance that mitigation opportunities are identified, considered and available as the plan is developed and projects are advanced. Through these approaches, the State of Florida along with its TPO/MPO partners ensures that mitigation will occur to offset the adverse effects of proposed transportation projects.

The ETDM process creates a connection between land use, transportation and environmental resource planning through proactive and interactive agency involvement. The purpose of the ETDM process is to improve the efficiency of making transportation decisions by integrating transportation, land use, social, economic and environmental considerations early in the project development process. ETDM provides the opportunity to proactively determine fatal flaws associated with a planning concept well before the study phase of project development.

As indicated in the FDOT's MPO Program Management Handbook and ETDM Manual, the ETDM planning screen process is to be conducted for all major capacity projects prior to their inclusion in the Cost Feasible Plan. Major projects are defined as new roadway construction, the addition of lanes to an existing roadway, public transportation projects, new bridge construction or bridge widening, new interchanges, major interchange modifications, or other major improvements as outlined specifically in the ETDM manual. Early input received in the planning screen enables transportation planners to make more informed decisions on the feasibility of a proposed project.

- Some of the benefits realized from the planning screen process include:
- Refinement of the initial project concept and project's purpose and need
- Early identification of potential avoidance, minimization, and mitigation opportunities
- Identification of issues to be addressed during the project development and environment (PD&E) phase
- Refinement of the scope of services for the PD&E study
- Creation of documentation and support information which may be carried forward into the PD&E phase
- Improvement of project cost estimates
- Consideration of resource management plans and community values
- Advancement of technical studies, if appropriate

Prior to the plan development process, the projects in the identified Roadway Project Groups 1 through 3 (Needs Plan), had already undergone either the planning and/or programming screening as a result of FDOT's project identification in the Strategic Intermodal System (SIS) plans, or inclusion in the FDOT Five Year Work Program. Proposed capacity projects that are identified as needs in the TPO's adopted LRTP that have not yet been subject to PD&E studies are eligible for the ETDM planning screen process. In addition to involvement in the ETDM process, the TPO will be engaged in all PD&E studies within the TPO's planning area for facilities on the Regional Roadway System or local systems.

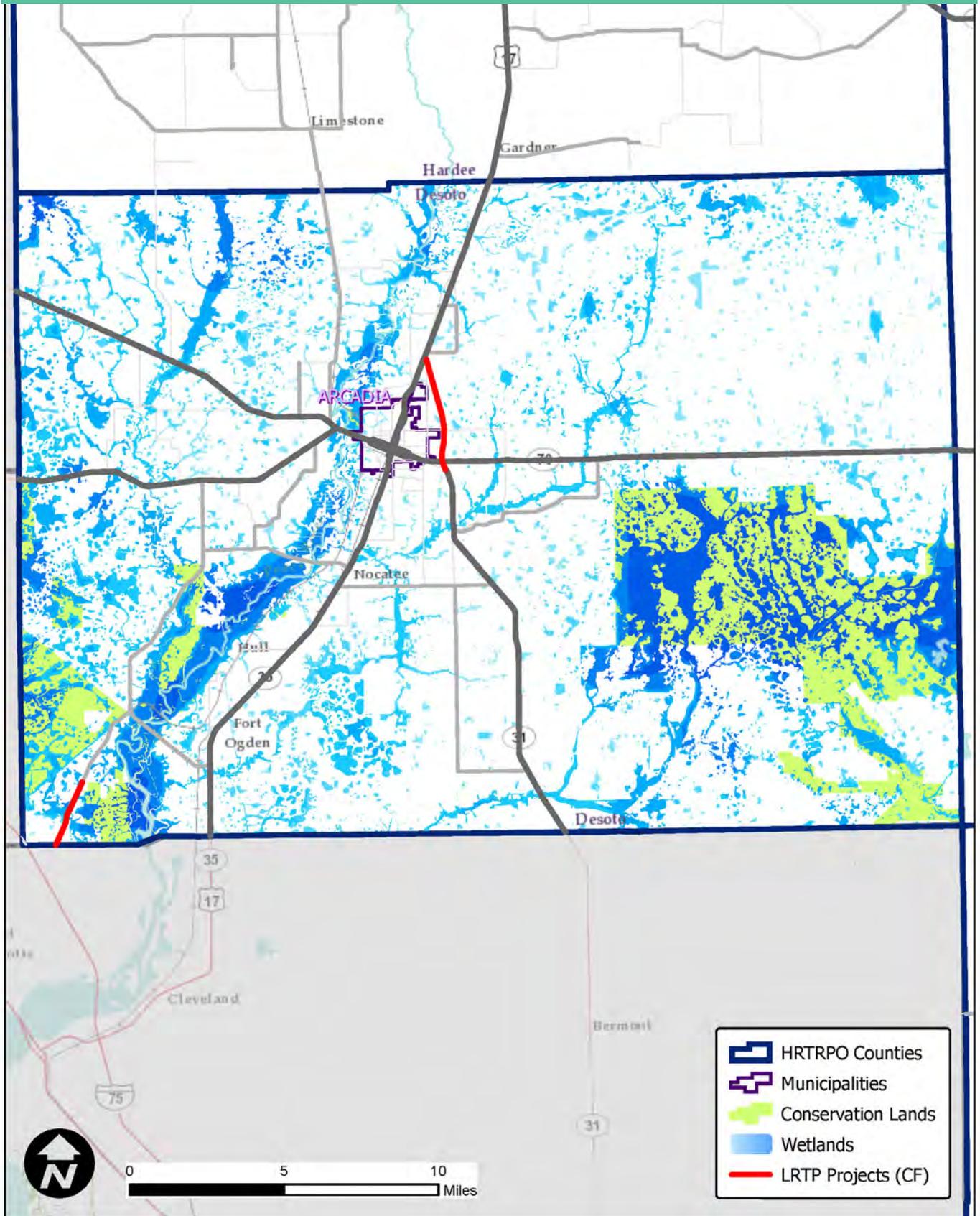
Potential Areas of Avoidance and Mitigation Maps

The Potential Areas of Avoidance and Mitigation Maps are sourced from the Florida Natural Areas Inventory (FNAI) GIS database updated in September 2020. The stated mission of the Florida Natural Areas Inventory is to collect, interpret, and disseminate ecological information critical to the conservation of Florida's biological diversity. FNAI's database and expertise facilitate environmentally sound planning and natural resource management to protect the plants, animals, and communities that represent Florida's natural heritage.

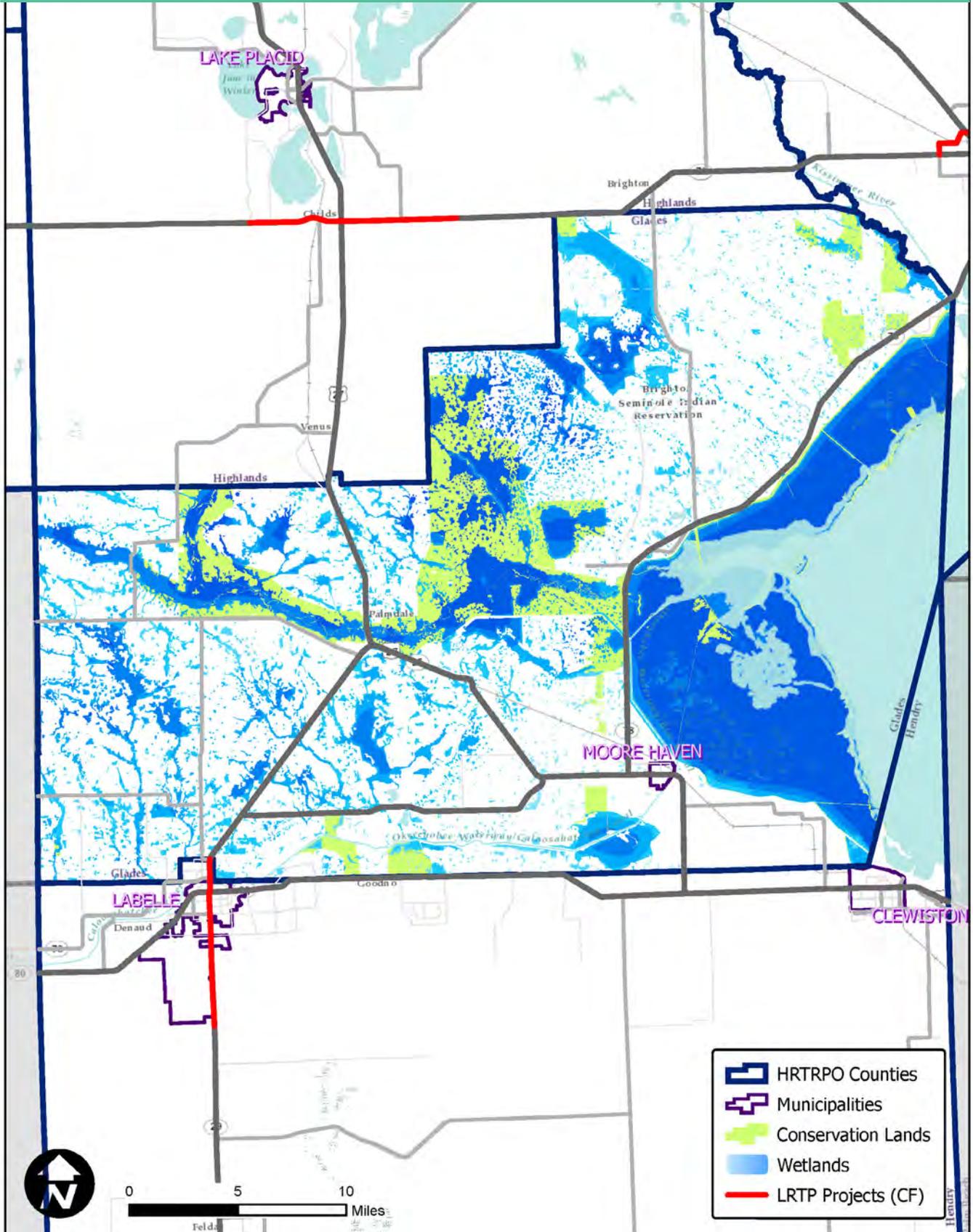
FNAI is the primary source for information on Florida's conservation lands. The Inventory database includes boundaries and statistics for over 2,600 federal, state, local, and private managed areas, all provided directly by the managing agencies. National parks, state forests, wildlife management areas, local and private preserves are examples of the managed areas included. Functional wetlands are defined as those in a more natural state and the prioritization is based on overlap with Land Use Intensity index and FNAI Potential Natural Areas.

Mapped Florida Conservation Lands (FLMA) and Functional Wetlands indicating areas where transportation projects should use avoidance and mitigation measures are shown by county. Cost feasible projects are conceptually shown on the following maps to indicate general areas where natural and environmental areas could be impacted.

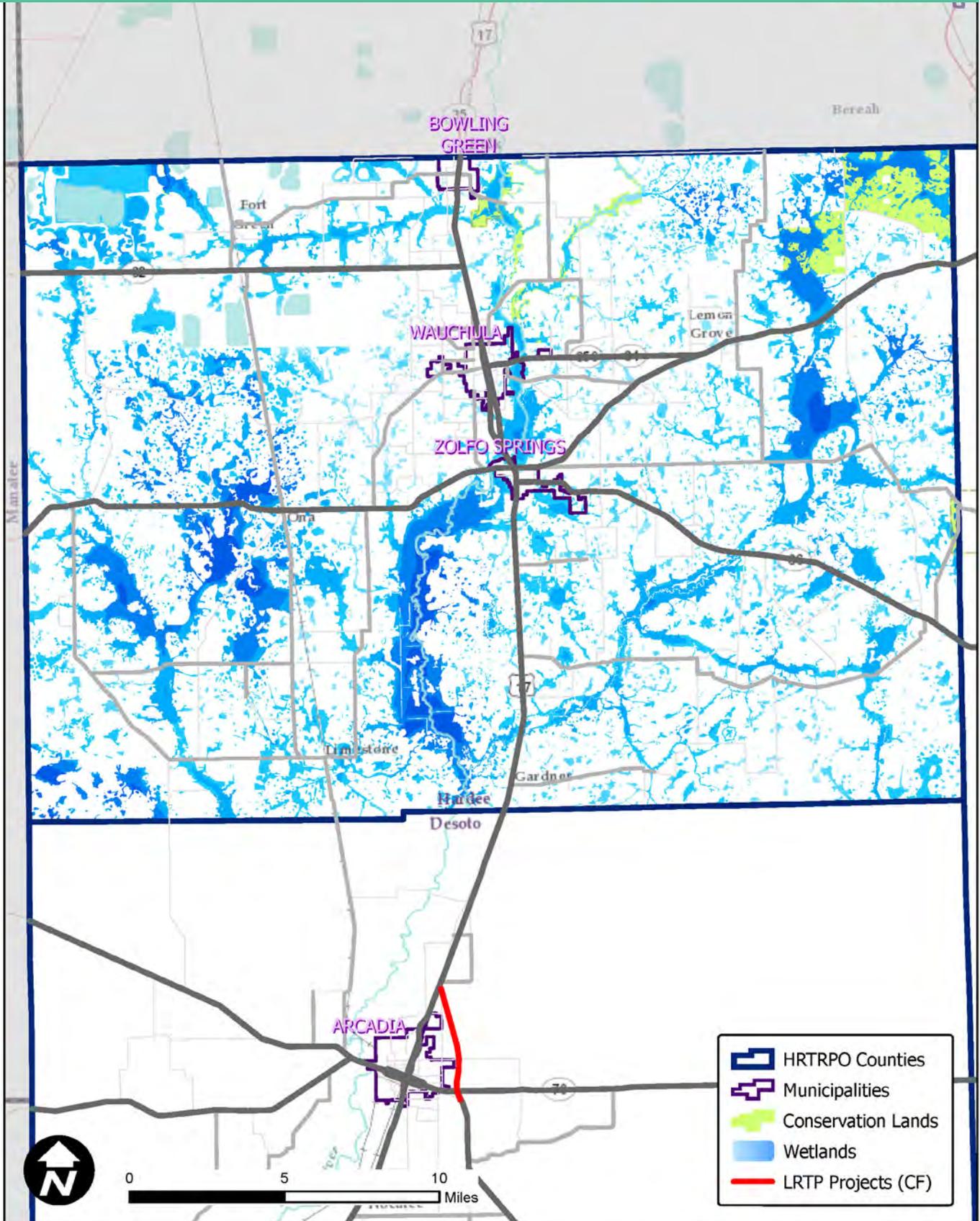
Potential Areas of Avoidance and Mitigation DeSoto County



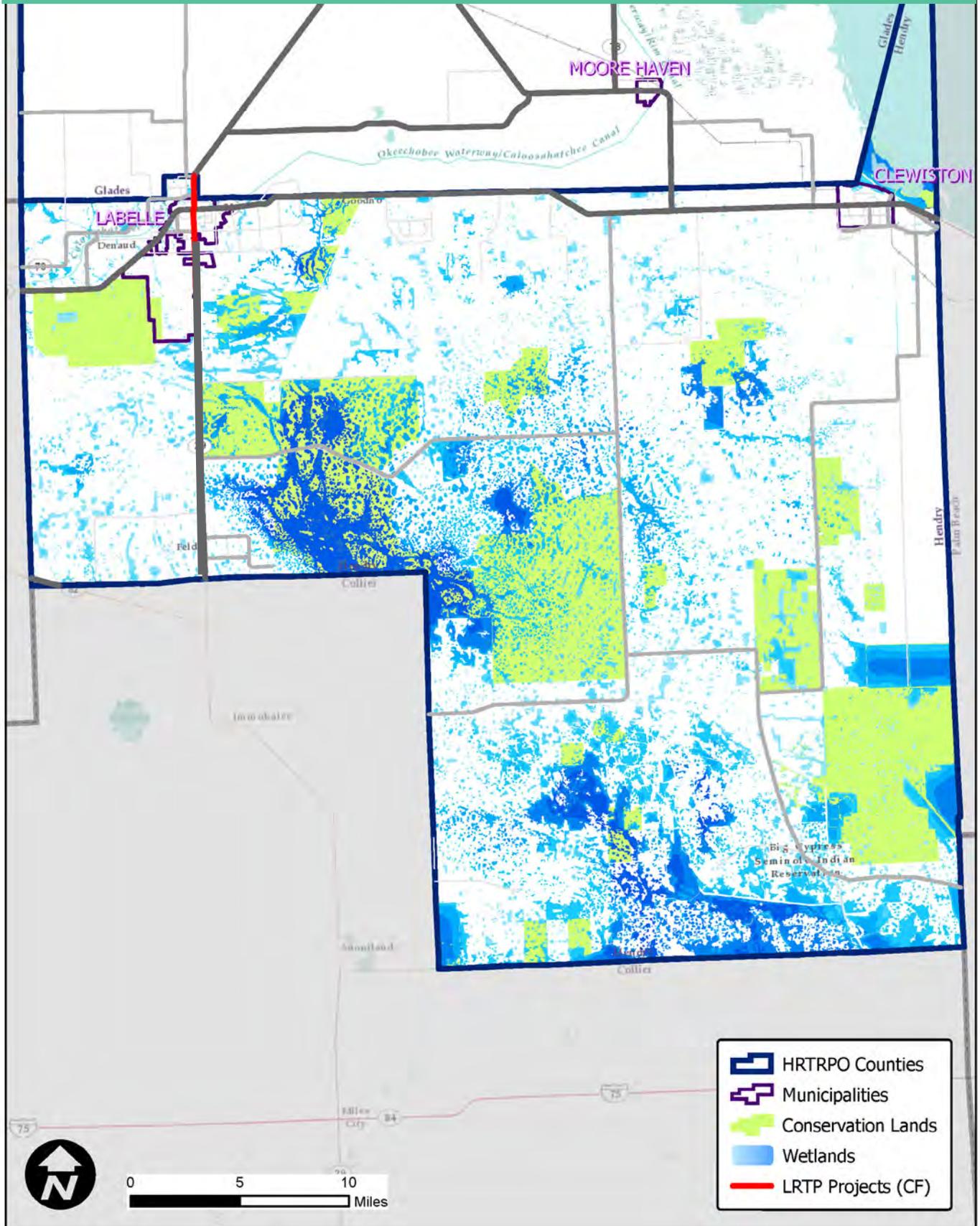
Potential Areas of Avoidance and Mitigation Glades County



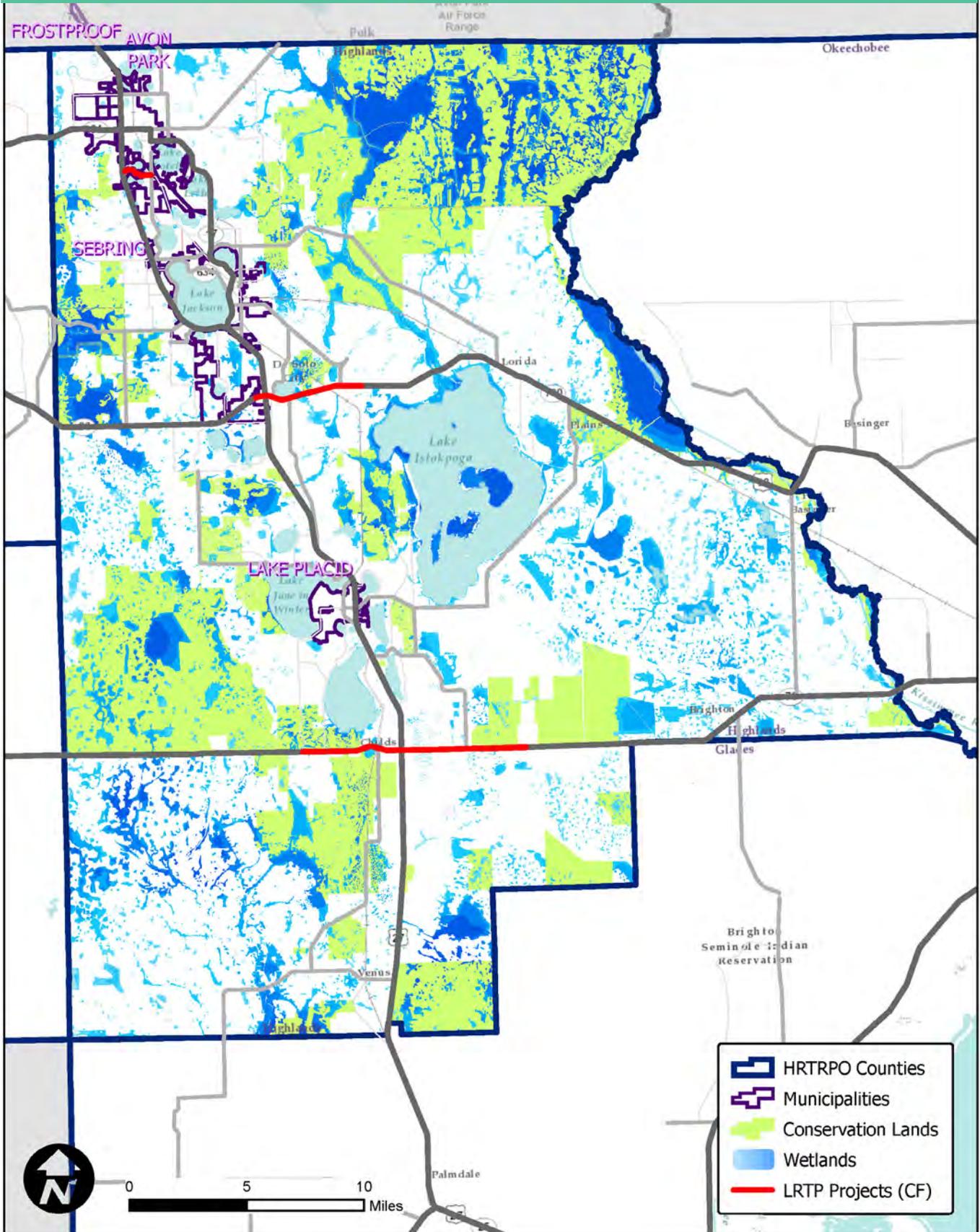
Potential Areas of Avoidance and Mitigation Hardee County



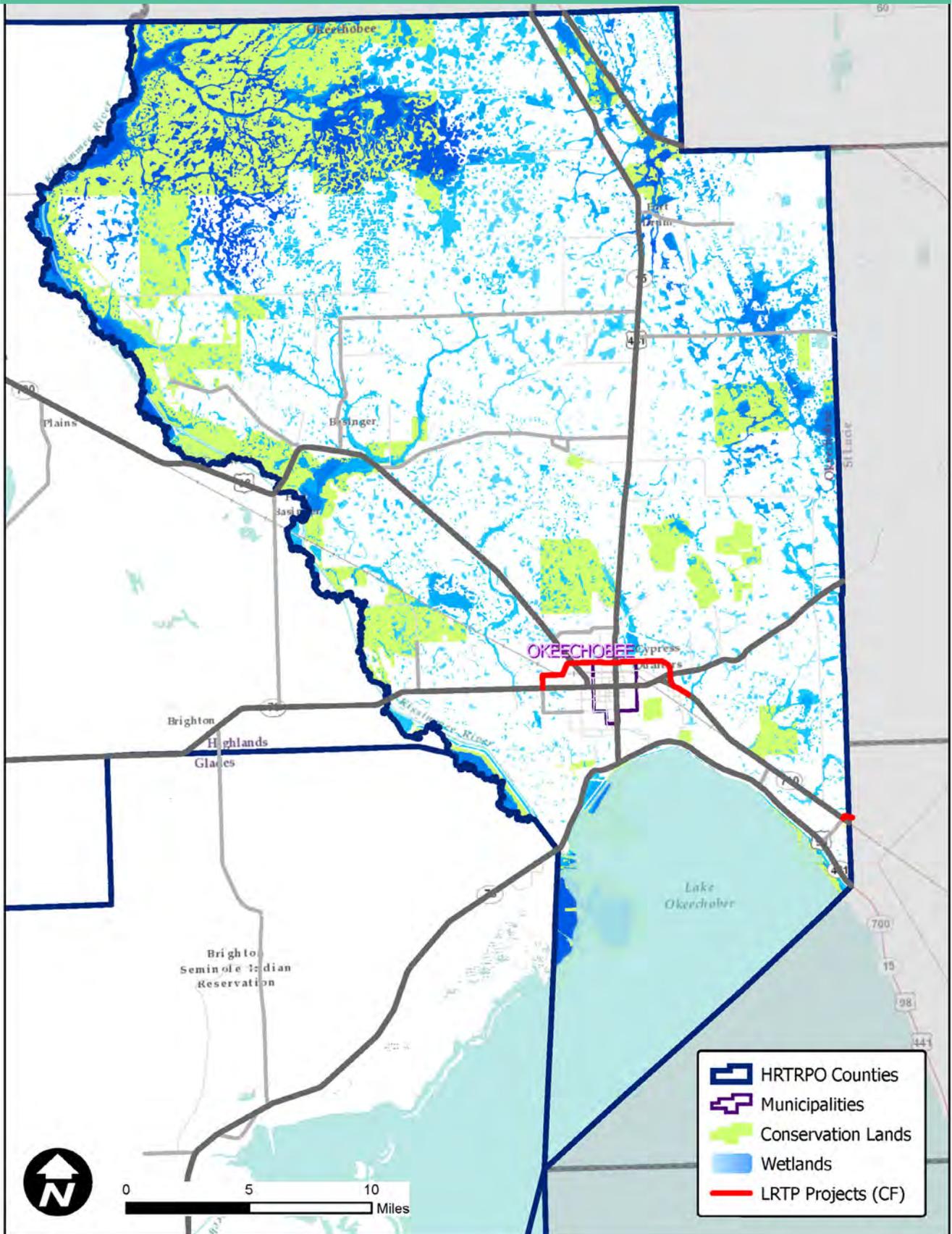
Potential Areas of Avoidance and Mitigation Hendry County



Potential Areas of Avoidance and Mitigation Highlands County



Potential Areas of Avoidance and Mitigation Okeechobee County



Appendix E: Public Participation, Consultation, and Comments and Responses

In this Appendix:

- **2045 Long Range Transportation Plan Public Participation Plan**
- **Summary of Public Participation Activities**
- **Summary of Comments Received on the 2045 Long Range Transportation Plan**

2045 Long Range Transportation Plan Public Participation Plan

The HRTPO must develop a Long Range Transportation Plan (LRTP) that addresses no less than a 20-year planning horizon. The intent and purpose of the LRTP is to encourage and promote the safe and efficient management, operation, and development of a cost-feasible intermodal transportation system that will serve the mobility needs of people and freight; the system should also foster economic growth and development, while minimizing transportation-related fuel consumption, air pollution, and greenhouse gas (GHG) emissions. The LRTP must include long and short-range strategies consistent with Federal, State, and local goals and objectives. The HRTPO's 2045 LRTP is due by March 16, 2021.

On November 28, 2019, the HRTPO adopted a Public Participation Plan (PPP). While the PPP provides guidelines used by the HRTPO to inform and gather input from residents, communities, and interest groups, the goal of the 2045 Long Range Transportation Plan Public Participation Plan is to specifically address the details related to LRTP stakeholder engagement, methods, and timeline.

MPOs are required to develop and use a documented Public Participation Plan that defines a process for providing reasonable opportunities to be involved in the metropolitan transportation planning process to 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 cash-out 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. [23 C.F.R. 450.316(a)]

In developing the LRTP and TIP, the MPO should consult with agencies and officials responsible for other planning activities within the MPA that are affected by transportation (including State and local planned growth, economic development, tourism, natural disaster risk reduction, environmental protection, airport operations, or freight movements) or coordinate its planning process (to the maximum extent practicable) with such planning activities. In addition, the MPO shall develop the LRTPs and TIPs with due consideration of other related planning activities within the metropolitan area. [23 C.F.R. 450.316(a) (3)(b)]

Public Participation during the development of the LRTP is a key component. Meaningful and effective public involvement brings a diverse set of views into the discussion and improves decision making by generating ideas for how the transportation system may be improved. Public engagement efforts will follow the guidance outlined in the PPP to ensure "full and open access" as the LRTP is developed.

- **Phase one:** We'll seek opinions on the vision for a future transportation system.
- **Phase two:** We'll seek more specific public input and feedback based on a handful of potential scenarios for the year 2045.

The HRTPO has identified four objectives and related techniques that will be used to ensure that decisions regarding public transportation incorporate public participation and feedback:

- **Early and Often:** Outreach should be comprehensive, providing many options for how a person can get involved.
- **Inclusive:** Everyone is welcome to participate in the 2045 Plan process. We want to make sure participants are as diverse as our region; therefore, we make a concerted effort to reach identified stakeholders and traditionally underserved communities.
- **Utilizing Plain Language and Visualization:** We strive to communicate using plain language and visualization tools so that all can 1) Find what they need; 2) Understand what they find; and 3) Use what they find to meet their need.
- **Maximize Online and Virtual Engagement:** Online and virtual engagement is a cost-effective way to connect with individuals from all areas of the region.

The following matrix identifies the involvement and information techniques that will be used throughout the LRTP process to ensure “full and open access”. The HRTPO’s efforts will aim to engage stakeholders, the general public, and traditionally underserved communities.

<i>Opportunities to educate, solicit input, and integrate feedback into the LRTP from the public and stakeholders in the process</i>	2045 LRTP Phases and Timeline			
	September 2019 – June 2020 Phase 1: The vision for a future transportation system		July 2020 – January 2021 Phase 2: Options and Draft Plan	
Project Team Meetings	Kick-off and review meetings with the TPO staff			
Identity of LRTP	Develop and implement a identity for the LRTP process that is easily identifiable and aids in the communication of the purpose of the plan.			
Project mailing list	Email contacts and all in consultative process will be used for email blasts throughout the plan development.			
HRTPO Website	Technical reports, community workshop and meeting schedules, surveys or questionnaires, and other appropriate items will be posted on the HRTPO’s website.			
Advertisements	The general public will be notified about public meetings through e-mail via the project mailing list, the HRTPO websites, flyers, and social media with at least seven (7) days’ notice.			
Updates to the HRTPO Board and Citizen and Technical Advisory Committees	HRTPO Board and committees will review and provide comment throughout the planning process.			
Heartland 2060 Summits and Survey				
Stakeholder Interviews				
Presentations of Draft Report				
Public Comments	As received	As received	As received	30 Day Period after Presentation of Draft Plan
Notification to agency stakeholders for solicitation of input and feedback	As received	As received	As received	30 Day Period after Presentation of Draft Plan

The stakeholder database will be updated throughout the public involvement process. To be added to the list, please contact the HRTPO. At a minimum will include the following entities:

Boards and Committees

HRTPO Board
Citizens Advisory Committee
Technical Advisory Committee
Transportation Disadvantaged Local Coordinating Board for
Glades and Hendry Counties
Transportation Disadvantaged Local Coordinating Board for
DeSoto, Hardee, Highlands, and Okeechobee Counties

Community, Service, and Health Organizations

Avon Park Community Redevelopment Agency
Bicycle & Pedestrian Advocacy Groups
CareerSource Heartland
CareerSource Southwest Florida
Center for Independent Living Gulf Coast
Central Florida Health Care
Civic Involvement Organizations
Community Transportation Coordinator (MV Transportation)
Disability Advocacy Groups
Downtown Sebring
Economic Council of Okeechobee
Environmental Advocacy Groups
Faith-based Organizations
Florida Heartland Economic Region of Opportunity (FHRO)
Glades County Economic Development Council, Inc.
Hardee County Economic Development Council
Heartland Library Cooperative
Hendry County Economic Development Council
Hendry County Libraries
Highlands County Citrus Growers Association
Highlands County Economic Development Commission
Main Street Wauchula
NuHope Eldercare Services, Inc.
Okeechobee Chamber of Commerce
Older Adult Advocacy
Social Service Organizations
School Districts
South Florida State College

Local and Tribal Governments

Big Cypress Indian Reservation
Brighton Seminole Indian Reservation
City of Arcadia
City of Avon Park
City of Clewiston
City of LaBelle
City of Moore Haven
City of Okeechobee
City of Sebring
City of Wauchula
Town of Bowling Green
Town of Lake Placid
Town of Zolfo Springs
DeSoto County Board of County Commissioners
Glades County Board of County Commissioners
Hardee County Board of County Commissioners
Hendry County Board of County Commissioners
Highlands County Board of County Commissioners
Okeechobee County Board of County Commissioners

State and Federal Agencies

Federal Aviation Administration (FAA)
Federal Highway Administration (FHWA)
Federal Transit Administration (FTA)
Florida Commission for the Transportation Disadvantaged (CTD)
Florida Department of Environmental Protection (FDEP)
Florida Department of Health (FDOH)
Florida Department of Transportation (FDOT)
Florida Farm Bureau Federation
U.S. Army Corps of Engineers
U.S. Department of Agriculture
U.S. Department of Defense
U.S. Department of Transportation (USDOT)
U.S. Fish and Wildlife Service
U.S. Department of the Interior (DOI)
Florida Department of Agriculture & Consumer Services
Enterprise Florida
Florida Department of Economic Opportunity

Environmental Organizations

1000 Friends of Florida
Archbold Biological Station
Avon Park Air Force Range Outdoor Recreation Area
Conservancy of Southwest Florida
Conservation Trust for Florida
Craig Park Recreation Association
DeSoto County Gun Club
Ducks Unlimited
Florida BASS Federation
Florida Community Trust
Florida Cracker Trail Association
Florida Trail Association
Friends of the Everglades
Green Horizon Land Trust
Highlands Hammock State Park
Highlands Soil and Water Conservation District
Keep Highland County Beautiful, Inc
National Wild Turkey Association
Paynes Creek State Park
Paynes Creek Preservation Alliance
Ridge Trails Association
The Audubon Society
The Everglades Coalition
The Florida Panther Society
The Nature Conservancy
Trust for Public Land-Florida
Okeechobee Soil and Water Conservation District
Archbold Biological Station

Planning and Operating Partners

Central Florida Regional Planning Council (CFRPC)
Charlotte County – Punta Gorda MPO
Collier MPO
Continuing Florida Aviation System Planning Process (CFASPP) for
the Central Florida Region
Lee MPO
Martin MPO
MetroPlan Orlando
Palm Beach TPA
Polk TPO
Sarasota/Manatee MPO
Sebring Airport Authority
Southwest Florida Regional Planning Council (SFRPC)
St. Lucie MPO

Summary of Public Participation Activities

Board and Committee Participation

Throughout the development of the LRTP the Citizens Advisory Committee (CAC), Technical Advisory Committee (TAC), and the HRTPO Board reviewed and provided feedback components of the plan as it was developed at the following public meetings:



TAC	August 19, 2020
CAC	August 27, 2020
HRTPO	September 16, 2020
TAC	October 21, 2020
CAC	October 29, 2020
HRTPO Workshop	December 16, 2020
HRTPO	January 20, 2021
TAC	February 17, 2021
CAC	February 25, 2021

Heartland 2060

Heartland 2060-Revisited: Building a Resilient Region is a grassroots engagement of seven inland Florida counties based upon the collaboration of the current and future influences of economic development/education/workforce, transportation/land use, natural resources/agriculture, and community assets/health care. The project brought community leaders together from the public and private sectors in order to think and plan in a new way: Collaboration and communication in the midst of a pandemic which severely impacted traditional engagement processes; and building a vision for a region instead of concentrating on individual municipalities or corridors. The regional visioning process enables a big picture for the economic health of a vast population in terms of success in businesses as well as the economic quality of life of residents. While updating the long term vision, the project had to be addressed in innovative ways in order to engage the public, which led to a more accurate assessment of the needs and desires of the Heartland community, as well as bringing leaders and residents together to envision a future for all. Although the circumstances provided challenges, it became a more effective and collaborative process. The public is more aware of the project than may have been possible using traditional processes and community leaders can apply these principles on a more broad level as well as within their individual communities. The following events and activities supported this plan:

- September 20, 2019 Summit** The September summit had 133 participants. When asked if their community was prepared for the future 74 percent said no, and 26 percent said yes. Technology and Development was identified as the trend that gives participants the most hope for the future of the Heartland region, while the greatest concern was education and infrastructure. Looking at the future workforce 38 percent of participants believe that the region's residents will most likely be working in their local communities, while 37 percent believe they will be working from home. The most significant industry for the future of the heartland was identified as logistic and distribution and technology coming in second. Participants identified challenges for the workforce including the changing of skills requirements and the availability of a skilled workforce. Other concerns identified by the participants were water supply, ensuring natural systems function well in perpetuity, growth in population and economy, protecting the environment and water resources, the worsening of the transportation in the region, education, funding and the need for smart growth.

Consultative Partner Think Tanks

Consultative partners participated in three virtual think tank sessions to discuss the goals and projects proposed in the 2045 LRTP.

November 30, 2020 | Environmental Partners Think Tank Themes and Comments:

- Consideration of new roads on landscape connectivity including watersheds, open lands, and mesh size
- Landscape size required for viable agriculture
- Protection of habitat and water recharge provided by agricultural lands
- Value of conservation easements to protection of environment and as an economic driver
- Sound and light pollution impacts on the natural environment

December 3, 2020 | Health and Human Services Partners Think Tank Themes and Comments:

- Enhanced transit services are needed to serve seniors, individuals with disabilities, and economically disadvantaged individuals
- There are opportunities in expanded shared-ride services, especially if they are accessible vehicles
- Critical need for transit beyond health care needs

December 3, 2020 | Economic Development Partners Think Tank

- Multi-modal transportation options will create opportunities including public transportation options
- Availability of broadband infrastructure will be critical and “Dig Once” policies should be considered
- There is opportunity for remote workers to move into the Heartland, but broadband is required
- Charging stations for electronic vehicles is required to enhance tourism.
- New opportunities in Urban Air Mobility can impact economic opportunities once regulatory issues are clarified

Interviews

Over 30 interviews were held virtually and included healthcare, social services, workforce, non-profit, and faith-based stakeholders. The list of stakeholders, including the organization name, the county served, and meeting contact, is shown below.

Health Council of Southeast Florida/Lake Okeechobee	Safe Place and Rape Crisis Center (SPARCC)
Rural Health Network (LORHN)	DeSoto Memorial Hospital
Central Florida Health Care	Epilepsy Florida - Okeechobee County
Central Florida Health Care	DeSoto County
Samaritan’s Touch Care Center	DeSoto Cares Homeless Services
United Way of Lee, Hendry, Glades & Okeechobee	Okeechobee County
Hope Healthcare	Goodwill of Southwest Florida
Our Village Okeechobee	Red Lion Jobs, Inc.
CareerSource Southwest Florida	Arcadia Housing Authority
Florida Community Health Center	Florida Community Health Center
Florida Community Health Center	Peace River Center
Hardee Help Center	Champion for Children Foundation
United Way of Central Florida	Catholic Charities
Highlands County - Healthy Families, Veterans Services, Community Programs, and Children’s Advocacy Center	Tri-County Human Services
All Faiths Food Bank	Agricultural and Labor Program (ALPI)

The following themes on rural regional mobility challenges, needs, and opportunities emerged:

- There are limited travel options throughout the region, including low personal vehicle ownership.
- There is limited awareness of available public transit options, such as the CTC or DART in DeSoto County, including misconceptions on eligibility and usage.
- People often need rides outside of the region to Tampa, Fort Myers, or West Palm Beach for critical medical services, grocery shopping, and employment and educational opportunities.
- People without transportation must rely on family or friends to get around, often paying high prices for rides.
- Cross-sector partnerships are vital to improving access to public transit information, including assistance with registering with the CTC for service.
- Provide travel education and resources to build awareness of existing transportation services and how to access them.

Virtual Open House and Survey

A virtual open house and survey resulted in 146 survey responses on the draft plan.

HRTPO
Heartland Regional
Transportation Planning Organization

2045
L R T P
Long Range Transportation Plan

2045 Long Range Transportation Plan
Virtual Open House

We invite you to join us for a Virtual Open House on **February 23** from **4 PM** to **6 PM** to learn more about the Long Range Transportation Plan.

Please join my meeting from your computer, tablet or smartphone:
<https://global.gotomeeting.com/join/662283421>

You can also dial in using your phone: 646-749-3122 | Access Code: 662-283-421

Can't make it?
You can still submit a comment!
Learn more and view the plan at www.HRTPO2045.org
Provide your feedback until **February 25, 2021**.

For more information contact:
Heartland Regional Transportation Planning Organization
863-534-7130 - info@heartlandregionaltpo.org
www.heartlandregionaltpo.org

Public participation is solicited without regard to race, color, national origin, sex, age, disability, religion or family status. Persons requiring accommodation under the Americans with Disabilities Act (ADA) or language translation, free of charge should contact Marybeth Soderstrom, HRTPO Title VI Liaison, 863-534-7130 (voice), or via Florida Relay Service 711, or by emailing msoderstrom@crfpc.org at least three days prior to the event.

HRTPO
Heartland Regional
Transportation Planning Organization

2045
L R T P
Long Range Transportation Plan

Plan de Transporte de Largo Alcance 2045
Casa Abierta Virtual

Lo invitamos a unirse a nosotros para una Casa Abierta Virtual el **23 de febrero de 4 p.m. a 6 p.m.** para obtener más información sobre el Plan de Transporte de Largo Alcance (LRTP).

Únase a la reunión desde su computadora, tableta o teléfono inteligente:
<https://global.gotomeeting.com/join/662283421>

También puede marcar con su teléfono: 646-749-3122 | Código de acceso: 662-283-421

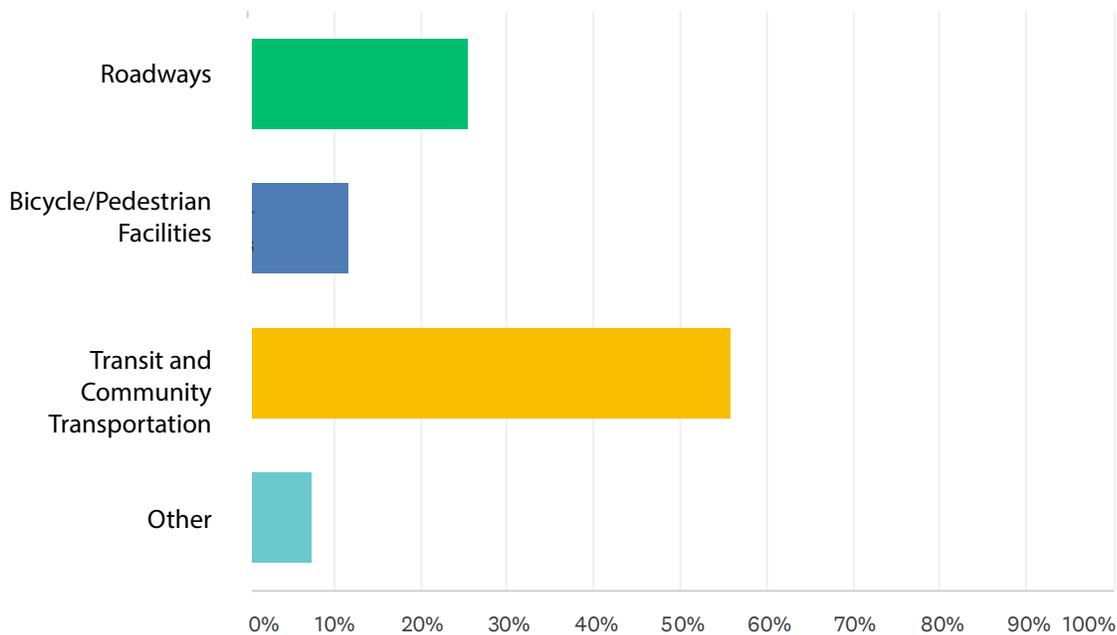
¿No puedes unirte a nosotros?
Aún puede proporcionar sus comentarios.
Obtenga más información y vea el plan en www.HRTPO2045.org
Comentarios se aceptan hasta el 25 de febrero.

Para mas informacion contacte:
Heartland Regional Transportation Planning Organization
863-534-7130 - info@heartlandregionaltpo.org
www.heartlandregionaltpo.org

Se solicita la participación pública sin distinción de raza, color, nacionalidad, edad, sexo, religión, discapacidad o estado familiar. Personas que requieran adaptaciones bajo la Ley de Estadounidenses con Discapacidades (ADA) o servicios de traducción, sin cargo, deben comunicarse con Marybeth Soderstrom, Enlace del Título VI de HRTPO, por teléfono al 863-534-7130, o por el servicio Transmisión de la Florida 711, o por correo electrónico a msoderstrom@crfpc.org al menos tres (3) días antes del evento.

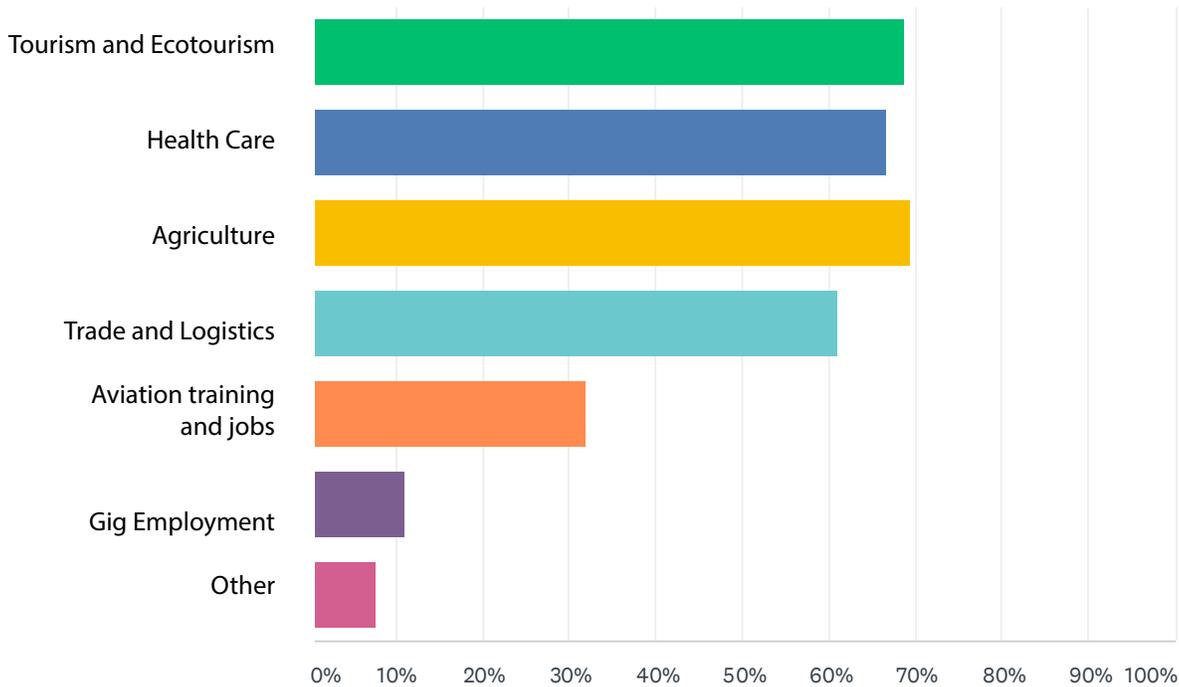
Q1 Which needs the most improvement?

Answered: 145 Skipped: 1



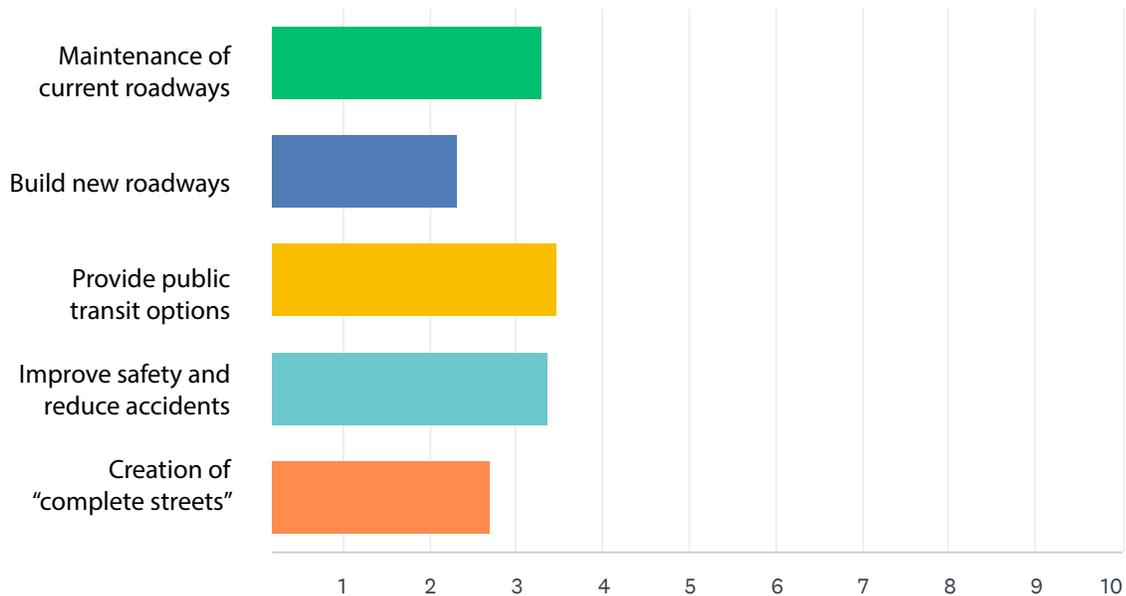
Q2 As we think about the future, select all of the industries you think will help ensure a resilient and adaptable economy for your community?

Answered: 144 Skipped: 2



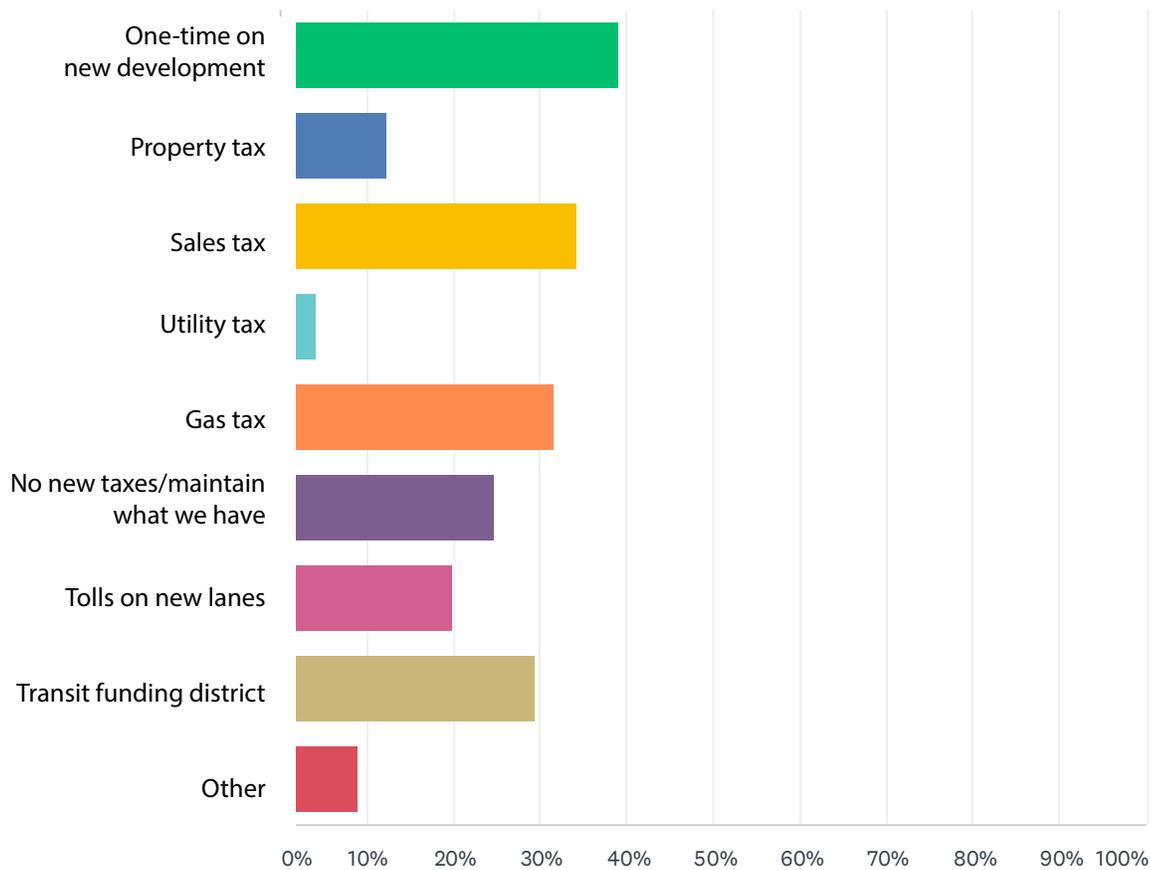
Q3 How would you prioritize funding for future transportation improvements?

Answered: 146 Skipped: 0



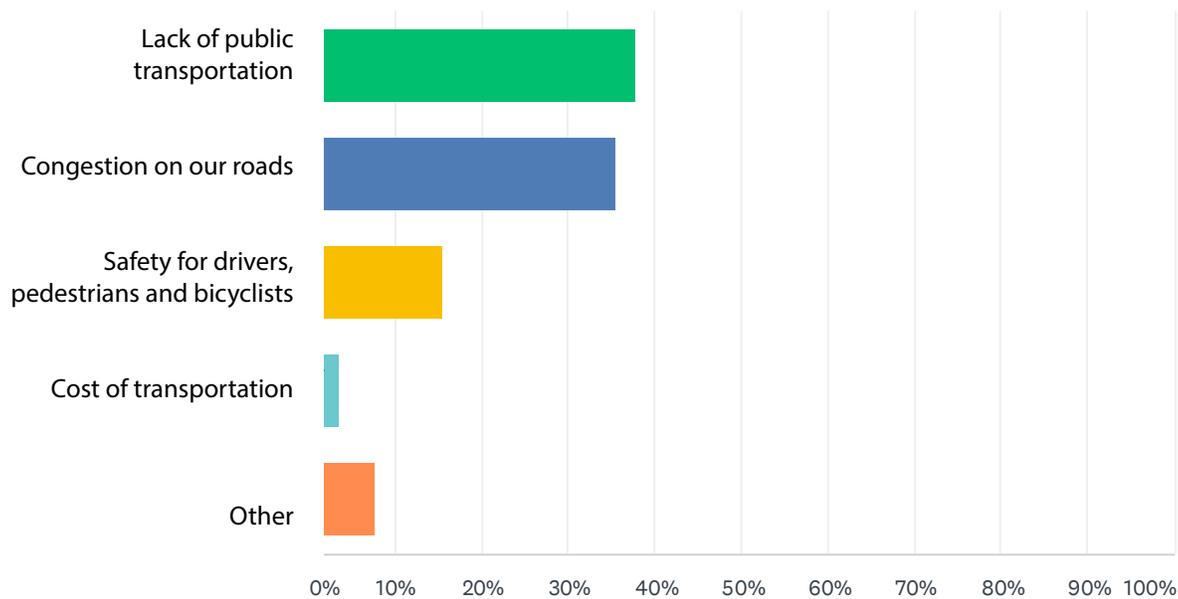
Q4 How should we pay for our transportation needs? (Pick all that apply)

Answered: 146 Skipped: 0



Q5 What are the biggest challenges to future travel in the Heartland?

Answered: 143 Skipped: 3



Summary of Comments Received on the 2045 Long Range Transportation Plan for the Heartland Regional Transportation Planning Organization

Below are the comments that were received during the public comment period from January 25 – February 25, 2021 on the Draft 2045 Long Range Transportation Plan (LRTP) for the Heartland Regional Transportation Planning Organization (HRTPO) dated January 25, 2021. Additional comments related to minor clarifications or editorial edits are not cited below but were incorporated to the maximum extent feasible in the revised text.

Comment Provided By:	Summary of Comment:	Response:
Robbie Chartier, Okeechobee County resident	Without a sustainable revenue source our state and its communities will not be able to afford to maintain the transportation system into the future. Gas Tax is a good source but reliant on consumer use. When more fuel efficient or alternative fuels (electric) become more prevalent, the current gas tax system will not be able to sustain the cost of maintaining the roads in the future.	Thank you for your comment.
	More opportunities to reduce the number of vehicles on the roads and the roads to be bicycle and pedestrian friendly. This includes proper lighting.	The draft 2045 LRTP includes the goals of Safe and Connected, and the Cost Feasible Plan identifies set-aside funding for both complete streets and trails. The HRTPO's Bicycle and Pedestrian Safety Plan supports these ongoing efforts to provide safe modal choices in the region.
Mike Willingham, Sebring Airport	Urban Air Mobility is an emerging opportunity in the region and its inclusion in the Plan supports the identified goals of Connected and Quality.	A discussion of Urban Air Mobility is now included in the Plan in Chapter 6, Modal Options.
Gaylin Thomas, Highlands County resident	I hope the emphasis and consideration of ways to create and preserve the greenways, includes improving the wildlife corridor and habitats of native species. Until Avon Park's Main Street is reduced to a single lane and bike lane the downtown will never realize its potential as a vibrant downtown. Heavy industrial traffic needs to be redirected to the truck route CR-17A so the downtown can become a walking area again. The value of the greenspace from Hwy 27 east to CR-17A is lost to the tractor trailers speeding through Main Street. To create a greater quality of life in Avon Park, please consider helping downtown come back to life instead of being part of the problem.	Thank you for your comments. Preservation of greenways and wildlife corridors and habitats of native species are all considerations of environmental mitigation in chapter 4. The draft 2045 LRTP includes the goals of Safe, Connected, and Quality, and the Cost Feasible Plan identifies set-aside funding for complete streets. Project criteria will be identified by the HRTPO Board and Committees in future years to identify future candidate projects.

Donna Doubleday, CareerSource Heartland	Please identify the data source used for the square mileage area by county.	The square miles by county is inclusive of total land and water, with the original source U.S. Geological Survey.
	Employment Growth Projections appear to drop in 2030, throughout all 6 counties. Is this based on historical trends?	The employment estimates were generated by REMI, which uses models based on historical data. The Projections are long-term projections intended to capture structural change in the economy, not cyclical fluctuations. The REMI data is amended to reflect the BEBR Medium/High population projections. To align with the population data from the same sources and to demonstrate the long-term nature of the projections more accurately, we have updated the table to just reflect the base year, 2045, and 2060.
Florida Department of Transportation, District 1	Other Arterials Construction & ROW is now called "Other Roads Construction & ROW." See page A-11 in FDOT Revenue Forecasting Guidebook, July 3, 2018. Please see page 95 of the LRTP.	Note added to refer to new term.
	Identify funding in the TIP. If portion of the project is in the TIP, that amount should not be counted towards the allocated funds since TIP funds are already committed. Identify/show large capacity projects in the TIP.	The Cost Feasible Plan (CFP) was updated to note "Committed Funding" in the first five years of the plan. All large capacity projects in the TIP are included in the (CFP).
	Check totals for 2026-2030 – design and ROW/CST, and for 2036-2030 – ROW/CST.	Verified totals and added notes to clarify what amounts are included.
	Stay within the allocated revenues and allowable ranges.	Projects costs are within the +10% range by time band and under the total revenue forecast.
	How are the allocated transit funds going to be spent? Can the TDP be tied into the LRTP? For example, the TDP has capital for buses and "other" beginning in 2022.	Text added to Transit section in Chapter 6 to indicate how transit funding could be allocated.

Appendix F: Transportation Modeling

Development of the District One Regional Planning Model

Regional travel demand models examine the movement of persons and vehicles within a study area and are an integral part of transportation investment and management decisions. The HRTPO worked with District One FDOT for evaluation of future travel demand using the District 1 Regional Planning Model (D1RPM).

The Florida Department of Transportation (FDOT) - District One announced the release of the District One Regional Planning Model (version 2.0) on January 29, 2021. This traffic forecasting model is used by all the six District MPOs/TPOs (Polk, Sarasota-Manatee, Charlotte-Punta Gorda, Lee, Collier, and Heartland) for the 2045 Long Range Transportation Plans and is available at FSUTMS Online, covering all 12 counties in the District One region. A portion of Osceola County, adjacent to NE Polk County, is also included. As part of the 2045 LRTP update, the D1RPM has allowed each MPO/TPO to test a series of transportation alternatives to the regional roadway network based on future estimates of population and employment and other data used to assess future regional travel demand.

Below is the link to FSUTMS Online to download the model:

www.fsutmsonline.net

The model upload contains the 2015 base year model validation, the 2023 Existing plus Committed (E+C) model network and the 2045 Cost Feasible (CF) Long Range Transportation Plan model. Also included in the upload are the following technical memoranda: TM-1, the executive summary; TM-2, the model validation; and TM-3, the technical resource manual and a number of geographic information files.

Appendix G: HRTPO Evaluation Criteria

As referenced in the Plan, Evaluation Criteria for Capacity Projects will be used as a tool for priority ranking of non-SIS projects in both the LRTP as well as the annual project priorities submitted for consideration in development of the FDOT five-year Work Program and subsequent inclusion in the Transportation Improvement Program (TIP). This criteria was developed by the Technical Advisory Committee of the HRTPO, reviewed by the Citizens Advisory Committee, adopted by the HRTPO on March 16, 2016 and amended on November 1, 2017.

evaluation **CRITERIA FOR CAPACITY**

L RTP Goals	Evaluation Criteria for Capacity Projects	Criteria Scoring
Improve Safety	Safety	
	Roadway with no serious injuries/fatal crashes in past 5 years (depending on data availability)	0
	Roadway with 1 or more serious injuries/fatal crashes in past 5 years (depending on data availability)	15
	Emergency Evacuation Routes*	
	Not a designated evacuation route	0
	Is a designated evacuation route	15
Provide Reliable and Efficient Options	Project Status	
	Not programmed for Capital Improvement Program (CIP) or Transportation Improvement Program (TIP)	0
	Preliminary Engineering or Project Development & Environment and/or alignment study phase programmed in TIP	8
	Right-of-Way acquisition and/or construction programmed in TIP	15
	Provide reliable and efficient options	
	No reuse of existing investment	0
	Preserves existing investment	3
	Optimizes reuse of existing investment	5
	Existing Congestion Level	
	0.0 to 0.7 Volume / Capacity ratio (V/C)	0
0.71 to 0.99 V/C	10	
1.0 and above V/C	20	
Create Quality Places	Sociocultural effects/Environmental Justice/Environmental Impact	
	Potential negative impact on environment or environmental justice area	0
	No impact to environment or environmental justice area	3
	Potential positive impact on environmental justice area and no environmental impact	5
Support Economic Development	Regional Freight Corridor**	
	Not on HRTPO Regional Roadway Network or Regional freight corridor	0
	Is on HRTPO Regional Roadway Network	5
	Is a Regional freight corridor	10
	Access to Major Activity or Employment Centers	
	No direct access to activity or employment center	0
	Improves access to activity or employment center	5
Provides access to a new activity or employment center	10	
Connect Local Areas and Provide Choices	Multimodal Connectivity	
	No multimodal improvement	0
	Bicycle and/or sidewalk improvement	3
	Access to transit improvement	5

*Evacuation routes are from the Statewide Regional Evacuation Study (SRES)

**Regional freight corridor as designated in the FDOT District One Freight Mobility and Trade Study, October 2015

Appendix H: LRTP Considerations of the M-CORES Southwest-Central Florida Corridor

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; energy distribution; autonomous, connected, shared, and electric vehicle technology; other transportation modes, such as shared-use non-motorized trails, freight and passenger rail, and public transit; mobility as a service; availability of a trained workforce skilled in traditional and emerging technologies; protection or enhancement of wildlife corridors or environmentally sensitive areas; and protection or enhancement of primary springs protection zones and farmland preservation. Additional information is available at www.floridamcores.com.

Southwest-Central Florida Corridor Study Area

The Southwest-Central Florida Corridor study area spans nine (9) counties, from Collier County to Polk County, as shown in the map. The HRTPO area is part of the Southwest-Central Florida Corridor study area.

LRTP Considerations

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

MPOs 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.

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

The proposed projects within the Southwest-Central Florida Corridor will be tolled facilities and will be part of the Florida's Turnpike system and the Strategic Intermodal System (SIS). The projects will be included in the LRTP and TIP/ STIP in accordance with guidance provided in the FDOT MPO Program Management Handbook. FDOT is working with the Southwest-Central Florida Corridor Task Force to develop purpose and need, guiding principles, and potential paths/ courses. HRTPO is a member of the Southwest-Central Florida Corridor Task Force and is actively engaged in pertinent aspects of planning and corridor analysis through the Task Force activities. The Task Force will submit its evaluation report to the Governor, the President of the Senate, and the Speaker of the House of Representatives by November 15, 2020. As the Program progresses to Project Development and Environment (PD&E), design and construction phases, FDOT will identify projects, prepare cost estimates, and coordinate with HRTPO to add identified projects into the LRTP and TIP. Subject to the economic and environmental feasibility statement requirements of Section 337.25, F.S., projects

may be funded through Turnpike revenue bonds or right-of-way and bridge construction bonds or financing by the Florida Department of Transportation Financing Corporation; by advances from the State Transportation Trust Fund; with funds obtained through the creation of public-private partnerships; or any combination thereof. FDOT also may accept donations of land for use as transportation rights-of-way or to secure or use transportation rights-of-way for such projects in accordance with Section 337.25, F.S. To the maximum extent feasible, construction of the M-CORES projects will begin no later than December 31, 2022, and the corridors will be open to traffic no later than December 31, 2030.

The Southwest-Central Florida Connector Task Force Final Report was submitted to the Legislature on November 15, 2020. This report is included in the Technical Appendix.

Appendix I: 2045 Revenue Forecast

Office of Policy Planning

July 14, 2018

2045 REVENUE FORECAST HEARTLAND REGIONAL TPO WITH STATEWIDE, DISTRICTWIDE AND COUNTY-SPECIFIC PROJECTIONS

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 state programs for this metropolitan area, for FDOT Districts, and for Florida as whole are included. This includes state and federal funds that “flow through” the FDOT 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 Office of Policy Planning (OPP) provides projections of future available funding to Florida’s 27 MPOs. This data is known as the Revenue Forecast. Consistent data is being applied to the development of the FDOT Strategic Intermodal System (SIS) Highway Cost Feasible Plan.

The department 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. This 2045 forecast incorporates (1) amounts contained in the department’s work program for FYs 2018 through 2022, (2) the impact of the department’s objectives and investment policies, and (3) the Statutory Formula (equal parts of population and 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 (in word processing or portable document format) 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 state 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

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 <http://www.fdot.gov/comptroller/pdf/GAO/RevManagement/Tax%20Primer.pdf>. The financial information handbook is prepared by the Office of Economic and Demographic Research, part of the Florida Legislature; it is available at <http://edr.state.fl.us/Content/local-government/reports/lghih17.pdf>.

This forecast features county level estimates for major FDOT 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 doesn't match county boundaries, the FDOT District will determine appropriate funding totals for that MPO. OPP is available for consultation and support, and Districts are asked to share their method and results with our office. However, final responsibility rests with the appropriate District.

There is a long-term goal to focus planning on metropolitan areas which do not correspond to county or city boundaries. In some cases, analyses and plans are based on census designated urbanized areas (UZAs). But for most sources of funding, it is more practical to define geographic areas by county boundaries.

This forecast does not break down SIS Highway expenditures to the county or District level. SIS Highway expenditures are addressed in the SIS Cost Feasible Plan (CFP), which is under preparation by the FDOT Systems Implementation Office.⁴ Districts always inform MPOs of projects that are proposed to be included in the CFP, and, conversely, CFP projects need to be included in the appropriate MPO LRTP(s) to receive federal funding.

This Forecast lists funding for FDOT programs designed to support, operate, and maintain the state transportation system. The FDOT has set aside sufficient funds in the 2045 Revenue Forecast for these programs, referred to as "non-capacity programs" here, 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 County, District or Statewide estimates for other funding categories that are of particular interest to the 27 Florida 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 not added). The forecast estimates revenues from federal, state, and Turnpike sources included in the Department's 5-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 state fiscal years (FYs) 2019 through 2028. Estimates of federal revenue sources were based on the Department's Federal Aid Forecast for FYs 2018 through 2027. Assumptions about revenue growth are shown in Table 1:

⁴ Formerly known as the Systems Planning Office.

Table 1
Revenue Sources and Assumptions

Revenue Sources	Years	Assumptions*
State Taxes (includes fuel taxes, tourism-driven sources, vehicle-related taxes and documentary stamps taxes)	2019-2028	Florida REC Estimates; these average in the range from 2.5% to 3.0% per year
	2029-2045	Annual 1.93% increase in 2029, gradually decreasing to -0.44% in 2045
Federal Distributions (Total Obligating Authority)	2018-2027	FDOT Federal Aid Forecast
	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

* Note all growth rates show nominal, or year of expenditure, 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 state, federal and Turnpike revenues is shown in Table 2. The 2045 Revenue Forecast Guidebook contains inflation factors that can be used to adjust project costs expressed in “present day cost” to “year of expenditure” dollars.

Table 2
Forecast of Revenues
2045 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 2021 through 2025)

Major Revenue Sources	Time Periods (Fiscal Years)					26-Year Total ² 2020-2045
	2020 ¹	2021-2025 ¹	2026-2030	2031-2035	2036-2045	
Federal	2,353 28%	10,884 24%	11,878 23%	12,108 21%	24,217 20%	61,440 22%
State	5,263 62%	27,311 61%	34,040 65%	38,164 66%	80,399 66%	185,178 65%
Turnpike	814 10%	6,572 15%	6,688 13%	7,861 14%	16,518 14%	38,453 13%
Total²	8,430	44,768	52,606	58,133	121,134	285,071

¹ Based on the FDOT Adopted Work Program for 2018 through 2022.

² Columns and rows sometimes do 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 July 1, 2017 Adopted Work Program for 2018 through 2022. The forecast of funding levels for FDOT programs for 2020-2045 was developed based on the corresponding Program and Resource Plan (PRP), which includes the Adopted Work Program and planned funding for fiscal years 2023-2026. This Revenue 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 Metropolitan Planning Organization Advisory Council Policy and Technical Committee on July 13, 2017.

The Revenue Forecast entails long-term financial projections for support of long-term planning. The forecast is delivered well in advance of the 5-year LRTP adoption schedule, roughly 18 months in advance of the first required adoption. This forecast is considered satisfactory for the remainder of the 5-year cycle; in other words, it is useful for MPOs whose adoptions come at the end of the cycle, about 3½ years after the first MPOs. 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 FDOT 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 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 (TALU) funds are projected based on current population estimates. These 2 categories only apply to federally designated TMAs; 15 of the State’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.⁵ For planning purposes, transit program funds were divided between Districts and counties according to population.

⁵ The statutory formula is 50% population and 50% motor fuel tax collections.

TABLE 3
Major Capacity Programs Included in the 2045 Revenue Forecast
and Corresponding Program Categories in the Program and Resource Plan (PRP)

2045 Revenue Forecast Programs	PRP Program Categories
<p><u>SIS Highways Construction & ROW</u> - 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).</p>	<p>Interstate Construction Turnpike Construction Other SIS Highway Construction SIS Highway Traffic Operations SIS Highway Right of Way (ROW) SIS Advance Corridor Acquisition</p>
<p><u>Other Arterial 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 Transportation Regional Incentive Program (TRIP), and the County Incentive Grant Program (CIGP).</p>	<p>Arterial Traffic Operations Construction County Transportation Programs Economic Development Other Arterial & Bridge Right of Way Other Arterial Advance Corridor Acquisition</p>
<p><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.</p>	<p>Airport Improvement Land Acquisition Planning Discretionary Capacity Improvements</p>
<p><u>Transit</u> - Technical and operating/capital assistance to transit, paratransit, and ridesharing systems.</p>	<p>Transit Systems Transportation Disadvantaged – Department Transportation Disadvantaged – Commission Other; Block Grants; New Starts Transit</p>
<p><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.</p>	<p>Rail/Highway Crossings Rail Capacity Improvement/Rehabilitation High Speed Rail Passenger Service</p>
<p><u>Intermodal Access</u> - Improving access to intermodal facilities, airports and seaports; associated rights of way acquisition.</p>	<p>Intermodal Access</p>
<p><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.</p>	<p>Seaport Development</p>
<p><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).</p>	<p>Other State Highway Construction Other State Highway ROW Other Roads Construction Other Roads ROW Other SIS Highway Construction SIS Highway ROW</p>

Table 4
Statewide Capacity Program Estimates
State and Federal Funds from the 2045 Revenue Forecast (Millions of Dollars)

Major Programs	Time Periods (Fiscal Years)					26-Year Total ²
	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	885	6,483	7,918	8,550	17,783	41,618
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	4,068	24,731	27,284	30,100	62,684	148,868
Statewide Total Forecast	8,430	44,768	52,606	58,133	121,134	285,071

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

² Columns and rows sometimes do not equal the totals due to rounding.

Estimates for the Other Roads and Transit program categories for this metropolitan area are included in Table 5.

Table 5
County Level Capacity Program Estimates
State and Federal Funds from the 2045 Revenue Forecast (Millions of Dollars)

Estimates for the Heartland Regional Transportation Planning Organization

Capacity Programs*	Time Periods (Fiscal Years)					26-Year Total
	2020	2021-25	2026-30	2031-35	2036-45	2020-2045
Other Roads Construction & ROW	11.51	84.43	102.56	110.65	230.24	539.39
Transit	4.59	25.50	32.16	35.22	73.37	170.83
Total - Main Programs	16.10	109.94	134.71	145.87	303.61	710.22

* Estimates for 2018 through 2022 are contained in the FDOT Adopted Work Program.

Other Roads estimates do not include projected funding for the TRIP program of the Federal TMA program (SU Fund Code).

^ Transit estimates do not include projected funding for the Florida New Starts program.

A few programs fund capacity projects throughout the state on a competitive 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 5 years ago. Also, amounts for the federally funded TMA program (Fund Code SU) are provided in Table 6, and not included in Table 5. Neither TRIP, Florida New Starts or TMA funds are included above.

Table 6
Transportation Management Area (TMA) Funds Estimates
(Known as SU Funds in FDOT Work Program)
Federal Funds from the 2045 Revenue Forecast (Millions of Dollars)

Heartland Metropolitan Area (Defined as DeSoto, Glades, Hardee, Hendry, Highlands, and Okeechobee Counties)	Time Periods (Fiscal Years)					26-Year Total
	2020	2021-25	2026-30	2031-35	2036-45	2020-2045
TMA/SU Funds	N/A	N/A	N/A	N/A	N/A	N/A

Projects which would be partially or entirely funded by TRIP or FL New Starts cannot be counted as “funded” in LRTPs. This is because there is no guarantee of any specific project receiving TRIP or FL New Starts funding in the future. Both programs are competitive, and only a small percentage of potentially eligible projects receive funding. However, these projects can be included in LRTPs as “illustrative” projects.⁶ 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. Conditional estimates of TRIP funds by District are in Table 7. Statewide estimates of FL New Starts funds are in Table 8.

The FAST Act continued funding for Transportation Alternatives projects. Categories impacting MPOs include funds for (1) Transportation Management Areas (TALU funds); (2) areas with populations greater than 5,000 up to 200,000 (TALL funds), and (3) any area of the state (TALT funds). Estimates of Transportation Alternatives Funds are shown further below in Table 9.

Table 7
Districtwide Transportation Regional Incentive Program Estimates
State Funds from the 2045 Revenue Forecast (Millions of Dollars)

FDOT District	5-Year Period (Fiscal Years)					26-Year Total ²
	2020 ¹	2021-25	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

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

² Columns and rows sometimes do not equal the totals due to rounding.

⁶ Other projects for which funding is uncertain may also be included as illustrative projects.

Table 8
Transit - Florida New Starts Program Estimates
State Funds from the 2045 Revenue Forecast (Millions of Dollars)

Statewide Program	Time Periods (Fiscal Years)					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

Table 9
Transportation Alternatives Funds Estimates
Federal Funds from the 2045 Revenue Forecast (Millions of Dollars)

Heartland Metropolitan Area (Defined as DeSoto, Glades, Hardee, Hendry, Highlands, and Okeechobee Counties)	Time Periods (Fiscal Years)					26 Year Total ¹
	2020 ¹	2021-25	2026-30	2031-35	2036-45	2020-2045
TALU (Urban); Funds for TMA	N/A	N/A	N/A	N/A	N/A	N/A
TALL (<200,000 population); Entire FDOT District	0.55	2.73	2.73	2.73	5.46	14.20
TALT (Any Area); Entire FDOT District	3.45	17.25	17.25	17.25	34.49	89.67

¹ Rows sometimes do not equal the totals due to rounding.

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 state highway system: safety, resurfacing, bridge, product support, operations and maintenance, and administration. Table 10 includes a description of each non-capacity program and the linkage to the program categories used in the Program and Resource Plan.

County level estimates are not needed for these programs. Instead, FDOT has included sufficient funding in the 2045 Revenue Forecast to meet the following statewide objectives and policies:

- **Resurfacing program:** Ensure that 80% of state highway system 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 standard on the state highway system;
- **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.

The Department has reserved funds in the 2045 Revenue Forecast to carry out its responsibilities and achieve its objectives for the non-capacity programs on the state highway system.

TABLE 10
Major Non-Capacity Programs Included in the 2045 Revenue Forecast
and 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 State Highway System 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 state highway system. In addition, not less than 15% of the amount of 2009 federal bridge funds must be expended off the federal highway system (e.g., on local bridges not on the State Highway System).	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
<u>Operations & Maintenance</u> - Activities to support and maintain transportation infrastructure once it is constructed and in place.	Operations & Maintenance Traffic Engineering & Operations Toll Operations Motor Carrier Compliance
<u>Administration and Other</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). The “Other” category consists primarily of debt service.	Administration Fixed Capital Outlay Office Information Systems Debt Service

District and metropolitan area. Table 11 identifies the statewide estimates for non-capacity programs. About \$136 billion (48% of total revenues) is forecast for non-capacity programs.

Table 11
Statewide Non-Capacity Expenditure Estimates
State and Federal Funds from the 2045 Revenue Forecast (Millions of Dollars)

Major Categories	Time Periods (Fiscal Years)					26-Year Total ¹
	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
Statewide Total Forecast	4,923	23,013	25,576	27,089	55,650	136,251

¹ Columns and rows sometimes do not equal the totals due to rounding.

Table 12 contains District-wide estimates for State Highway System (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.

Table 12
State Highway System Existing Facilities Estimates by District
State and Federal Funds from the 2045 Revenue Forecast (Millions of Dollars)

Major Programs	Time Periods (Fiscal Years)					26-Year Total ¹
	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

Note: Includes Resurfacing, Bridge, and Operations & Maintenance Programs.

¹ Columns and rows sometimes do 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 FY2028 are for planning purposes, and no undue reliance should be placed on these projections. Such amounts are generated and shared by the FDOT Office of Policy Planning (OPP) for purposes of accountability and transparency. They 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 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.

2045

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