



PALM BEACH
Transportation
Planning Agency

VISION
2050

VISION 2050

LONG RANGE TRANSPORTATION PLAN





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Prepared For



Prepared By



INTRODUCTION

The **Palm Beach Transportation Planning Agency (TPA)** is the designated Metropolitan Planning Organization (MPO) serving all of Palm Beach County, Florida. An MPO is a federally mandated agency led by a Governing Board of elected officials, which provide a collaborative and unified local voice for setting current and future federally and state-funded transportation investments.

This **Long Range Transportation Plan (LRTP)** provides a 25-year planning outlook that leads investment and decision-making today to accomplish the TPA's vision tomorrow. It is a cooperative planning process between partner agencies to create a collective vision with prioritized projects to meet the current and future mobility needs of Palm Beach County and the region.



To learn more about the TPA, visit PalmBeachTPA.org/About.

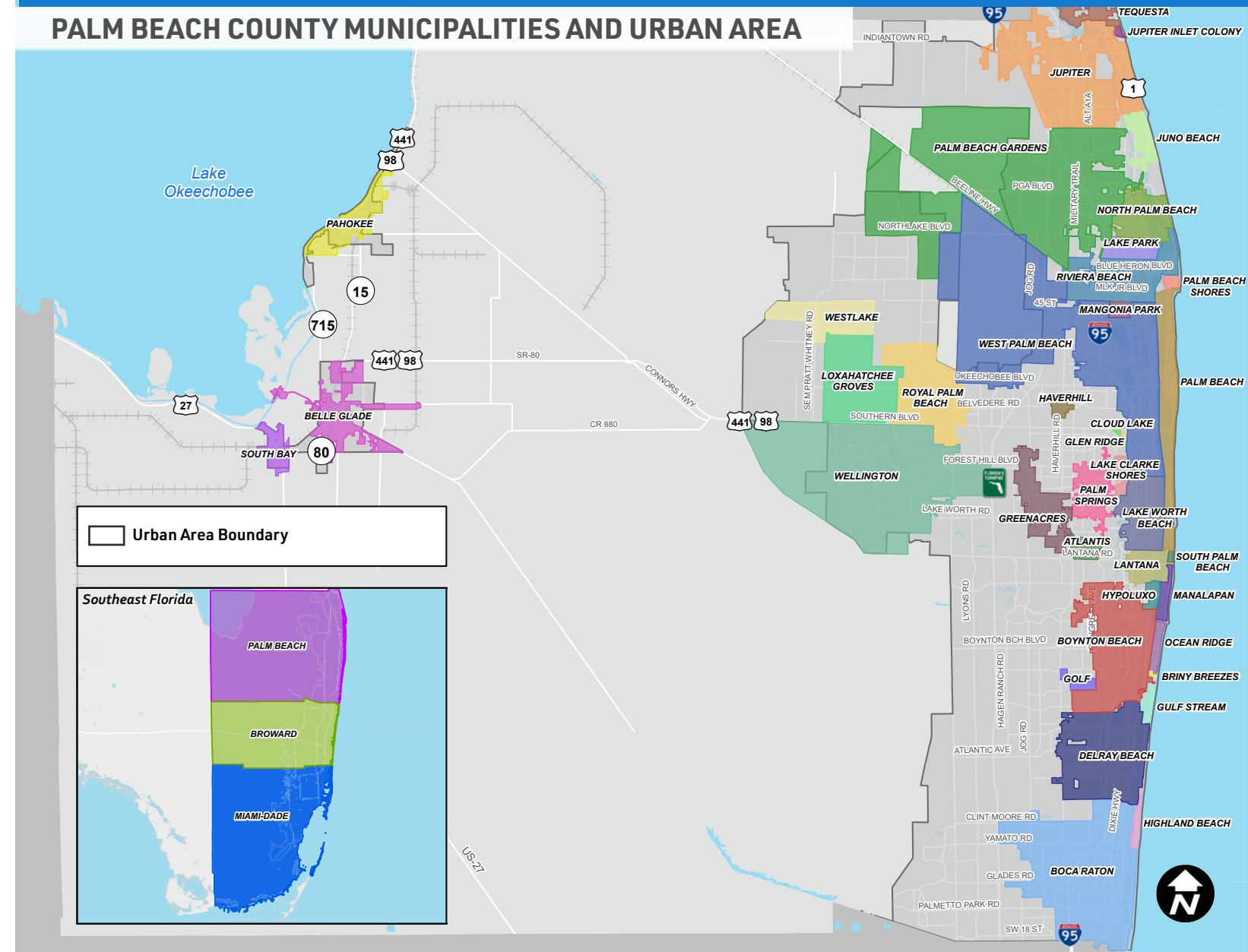
MISSION

To collaboratively plan, prioritize and fund the transportation system.

VISION

A safe, efficient and connected multimodal transportation system.

PALM BEACH COUNTY MUNICIPALITIES AND URBAN AREA





What is the Vision 2050 Long Range Transportation Plan?

For urbanized areas to be eligible for federal and state funds, MPOs must maintain an LRTP covering at least 20 years that is updated every five (5) years. The purpose of the LRTP is to encourage and promote the safe and efficient management, operation, and development of a surface transportation system that serves the mobility needs of people and freight, fosters economic growth and development and takes into consideration resiliency needs while minimizing transportation-related fuel consumption and air pollution (23 U.S.C. 134).

A Shared Transportation Vision

The Plan is a collaborative process that brings together the ideas, studies, plans, strategies, and actions identified by transportation providers and communities within the region. The Plan integrates all modes of transportation, prioritizing investments spanning from today into the year 2050.

A Fiscally Constrained Plan

The Plan must demonstrate fiscal constraint, which means the plan provides a balanced budget of project implementation and operating costs against available revenue sources ([Appendix I](#)). The Plan focuses on approval of federal and state funding sources, but also includes local funding sources for reference.

The Plan programs federal and state funding directly prioritized by the TPA, but also includes additional federal and state funded projects for TPA consistency approval.



What is in the Plan?

Introduction and Context

Describes the purpose of the plan, partnering agencies, and the current and future transportation system.

Public Participation

Describes stakeholder and public outreach of the transportation planning process and summarizes current needs and desires of Palm Beach County residents.

System Performance and Targets

Evaluates the state of the transportation system, focusing on federal performance requirements. This also includes goals, objectives, and strategies to reach the Vision.

Multimodal Needs and Priorities

Analyzes and identifies needs and trends of all transportation modes, including non-motorized and emerging technology. Also includes a call for projects for state and local agencies. Projects are evaluated and prioritized based on achieving the Goals and Objectives of the LRTP.

Financial Resources and Cost Feasible Plan

Federal and state funding is programmed to identified programs and projects. The Plan must present a balanced budget.

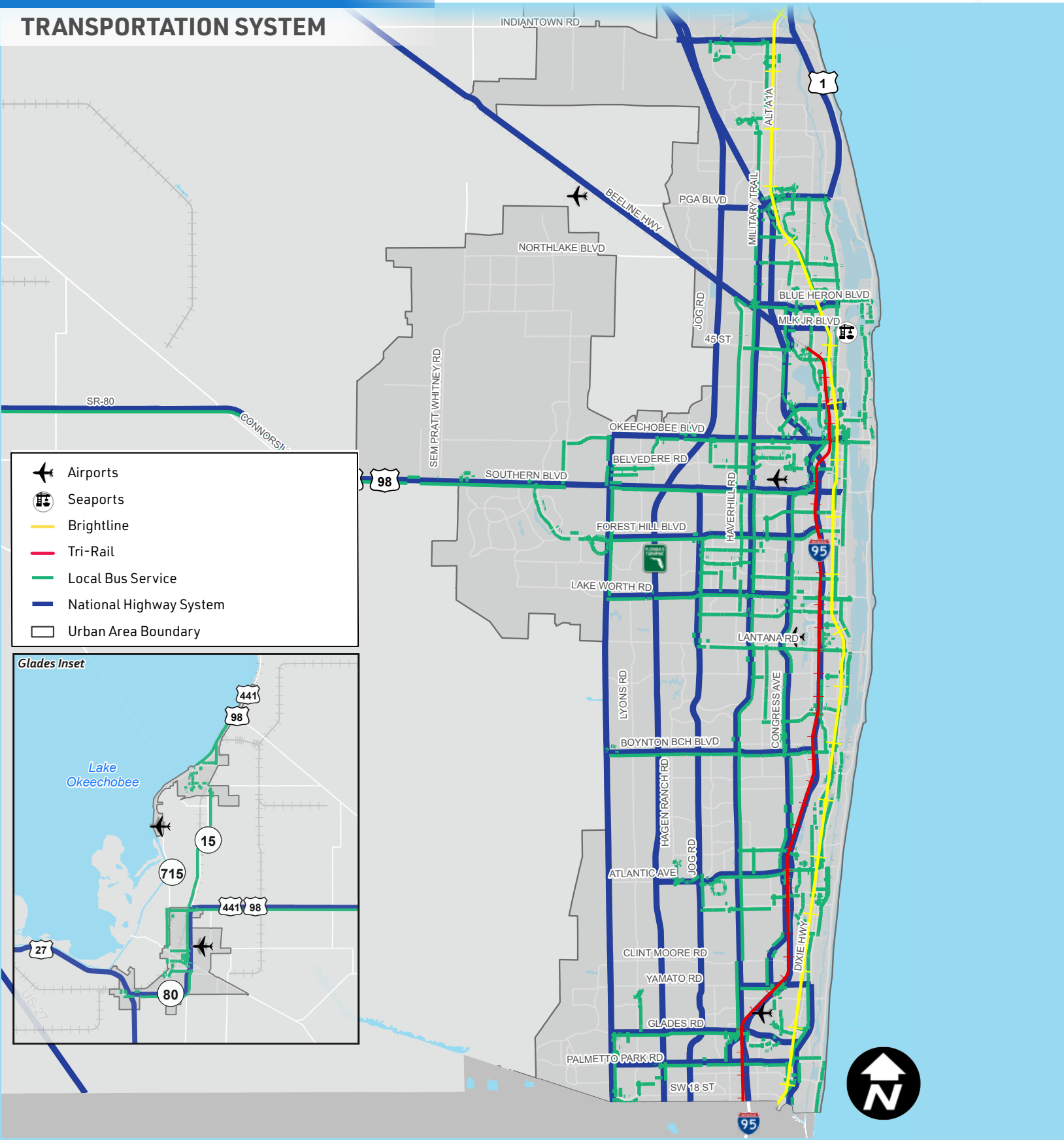
Implementation Plan

The Plan identifies strategies to accomplish the projects within the Cost Feasible Plan, but also other projects that are "Illustrative." The Illustrative projects are supported by the TPA but may not have funding available.



CONTEXT

TRANSPORTATION SYSTEM



ROADWAYS

3,919 total centerline miles
1,286 miles of **PALM BEACH COUNTY** owned roads
432 miles of **FDOT-OWNED** roads
45 miles of **FLORIDA TURNPIKE**
2,156 miles of **LOCALLY OWNED** roads

TRAFFIC SIGNALS

1,070+ signals
450+ miles of fiber optic cable
138 signals
22 signals

LOCAL TRANSIT

24% **RIDERSHIP GROWTH** from 2022 to 2023 nearly 100% recovered from COVID-19
31 routes
2,920 stops
28,500 **DAILY RIDERS** in 2023
across **31 ROUTES** & **2,920 STOPS**

19 **PARK & RIDE LOTS**

PARATRANSIT

600+ **EMPLOYEES**
400+ **contract PARATRANSIT EMPLOYEES**

PASSENGER RAIL

RTA **SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY**
Tri-Rail Commuter Rail
73.5 mile **SERVICE AREA**
19 **STATIONS** 6 in PBC

AMTRAK
PUBLIC INTERCITY RAIL at Tri-Rail stations, including West Palm Beach & Delray Beach

brightline
PRIVATE INTERCITY RAIL
2 stations in PBC
6 total from Orlando to Miami
223,117 **MONTHLY RIDERSHIP** (April 2024)

Florida East Coast Railway
CSX
RTA **SOUTH FLORIDA REGIONAL TRANSPORTATION AUTHORITY**

AIRPORTS

Palm Beach County General Aviation Airport (F45) RELIEVER AIRPORT
Palm Beach County Park Airport (LNA) RELIEVER AIRPORT
PALM BEACH COUNTY GLADES AIRPORT (PHK) RECREATIONAL AIRPORT
Boca Raton Airport
Belle Glade State Municipal Airport

PALM BEACH INTERNATIONAL (PBI) AIRPORT
8 million **PASSENGERS** between May 2023-May 2024
15 Domestic/International **AIRLINES**
200+ daily **NON-STOP ARRIVALS**

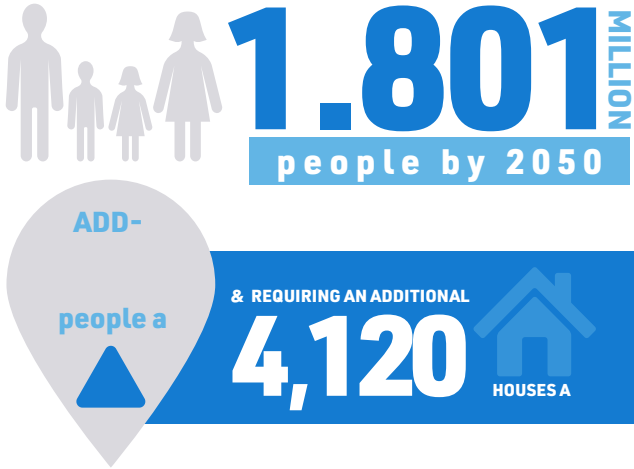
PORT OF PALM BEACH

PORT of Palm Beach
4th busiest **CONTAINER PORT** in Florida
8th busiest **CONTAINER PORT** in the US
412,000+ **CRUISE PASSENGERS** in 2023
80% of **CARGO EXPORTED**
SUPPLIES 60% of everything consumed in the Bahamas

Tomorrow

As the population continues to grow at roughly 12,000 people a year, communities will need to plan ahead to support additional housing and transportation options. Rapidly evolving technologies have the potential to impact future transportation and improve safety as traffic volumes increase and the need for expanded high-capacity transportation options arises. These technologies can provide solutions that address the challenges of congestion and enhance the overall transportation experience. Intelligent Transportation Systems (ITS) can provide real time information to drivers and transportation agencies which will optimize traffic flow, reduce congestion, and enhance safety. Similarly, autonomous vehicles can communicate with each other and share

data on traffic conditions, accidents, and hazards. They also use Artificial Intelligence (AI) to make split second decisions, reducing likelihood of human error and accidents. The support for electric vehicles (EVs) continues to grow, which will help to significantly reduce emissions and improve air quality. They can benefit from improved battery technology, allowing further driving ranges and faster charging times, which helps support their adoption. Implementation of these technologies will require collaboration, and potential challenges like cybersecurity and infrastructure adaptation will need to be considered. The Palm Beach TPA is at the forefront of embracing these technologies into the future for the benefit of our transportation network.



169 days ABOVE 90°F in 2050 compared to 84 days (1976-2005) National Integrated Heat Health Information System by 2040

SEA LEVEL IS PROJECTED TO RISE 10 to 17 inches above the 2000 mean sea level.

Vehicle Miles Traveled

EXISTING	PALM BEACH COUNTY		2050	% Change	TRI-COUNTY REGION	
	33,000,000	42,000,000			124,000,000	157,000,000

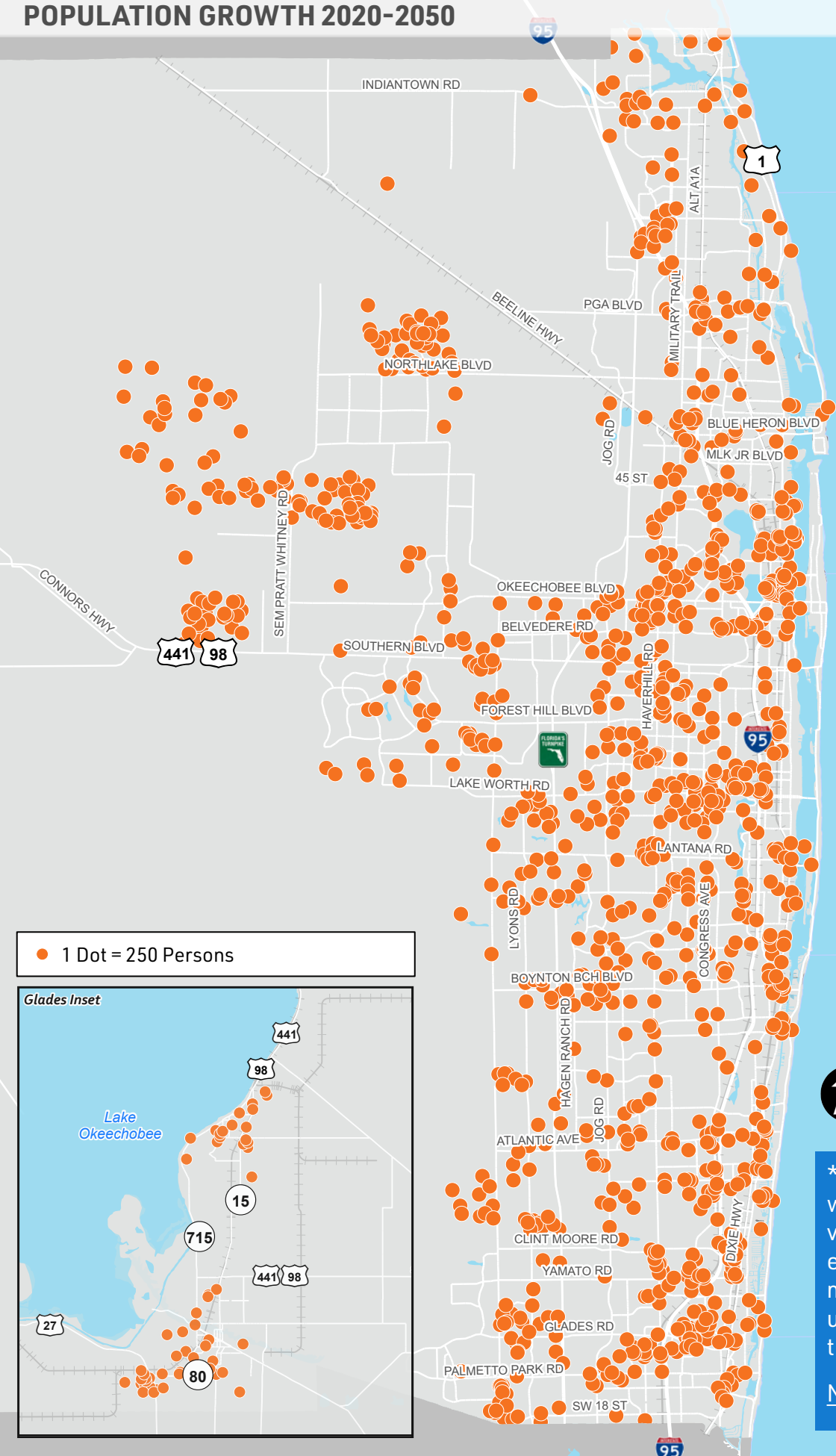
Vehicle Hours Traveled

EXISTING	PALM BEACH COUNTY		2050	% Change	TRI-COUNTY REGION	
	900,000	1,300,000			3,600,000	6,900,000

Congested Speed¹

PALM BEACH COUNTY		TRI-COUNTY REGION	
EXISTING		2050	
37	34	32	23
% Change		% Change	
-12%	-34%		
¹ (VMT/VMH)			

POPULATION GROWTH 2020-2050



Ridership Transit

UNLINKED PASSENGER TRIPS (UPT)*

EXISTING
PALM BEACH COUNTY
38,000
TRI-COUNTY REGION
403,000

2050
PALM BEACH COUNTY
70,000
TRI-COUNTY REGION
415,000

% Change
PALM BEACH COUNTY
84%
TRI-COUNTY REGION
48%

*The number of passengers who board public transportation vehicles. Passengers are counted each time they board vehicles no matter how many vehicles they use to travel from their origin to their destination.

National Transit Database Glossary



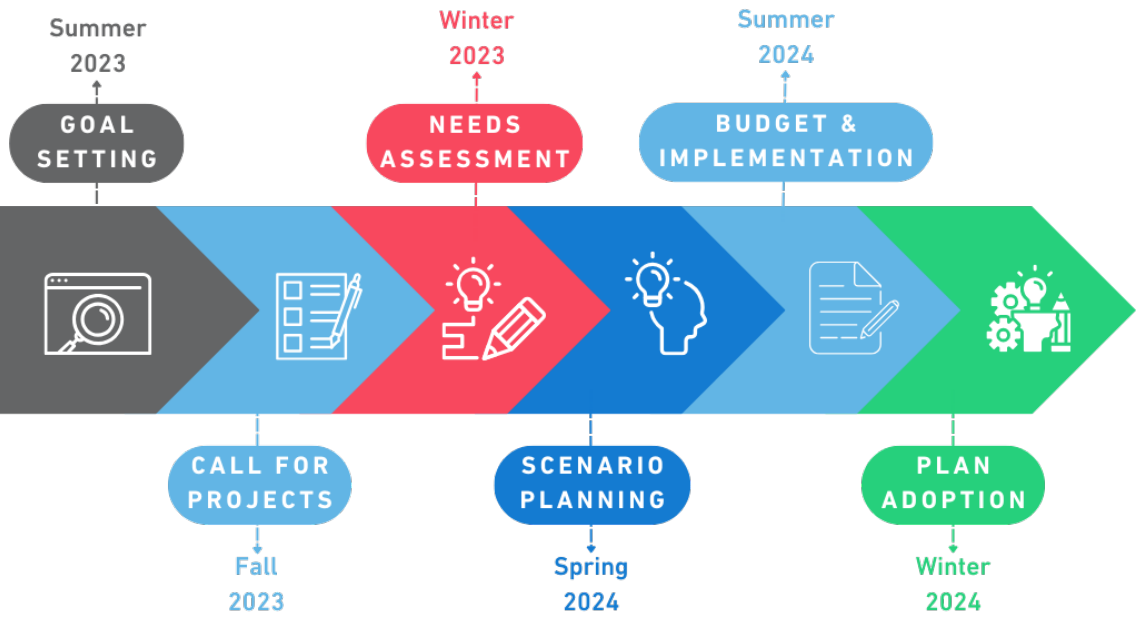
PUBLIC PARTICIPATION

Public participation helps shape the development of the LRTP. Through a diverse array of outreach tools, the TPA gathered feedback on what the public would like to see regarding transportation in Palm Beach County now and into the future. This included listening to communities from Jupiter to Boca Raton and from West Palm Beach to the Glades. The TPA focused citizen outreach efforts on surveys and online mapping of needs while stakeholder efforts focused on project solicitation and review of the transportation projects.

Public participation started with outreach regarding goal setting. The public was asked: *What is important to them now and what may be important 25 years into the future?*

After municipalities and other transportation partners shared input during the Call for Projects, the general public along with other community stakeholders reviewed submitted projects to voice their support or provide feedback on additional needs that were missing.

The public then had the opportunity to review the draft LRTP document and share input on the plan as a whole.

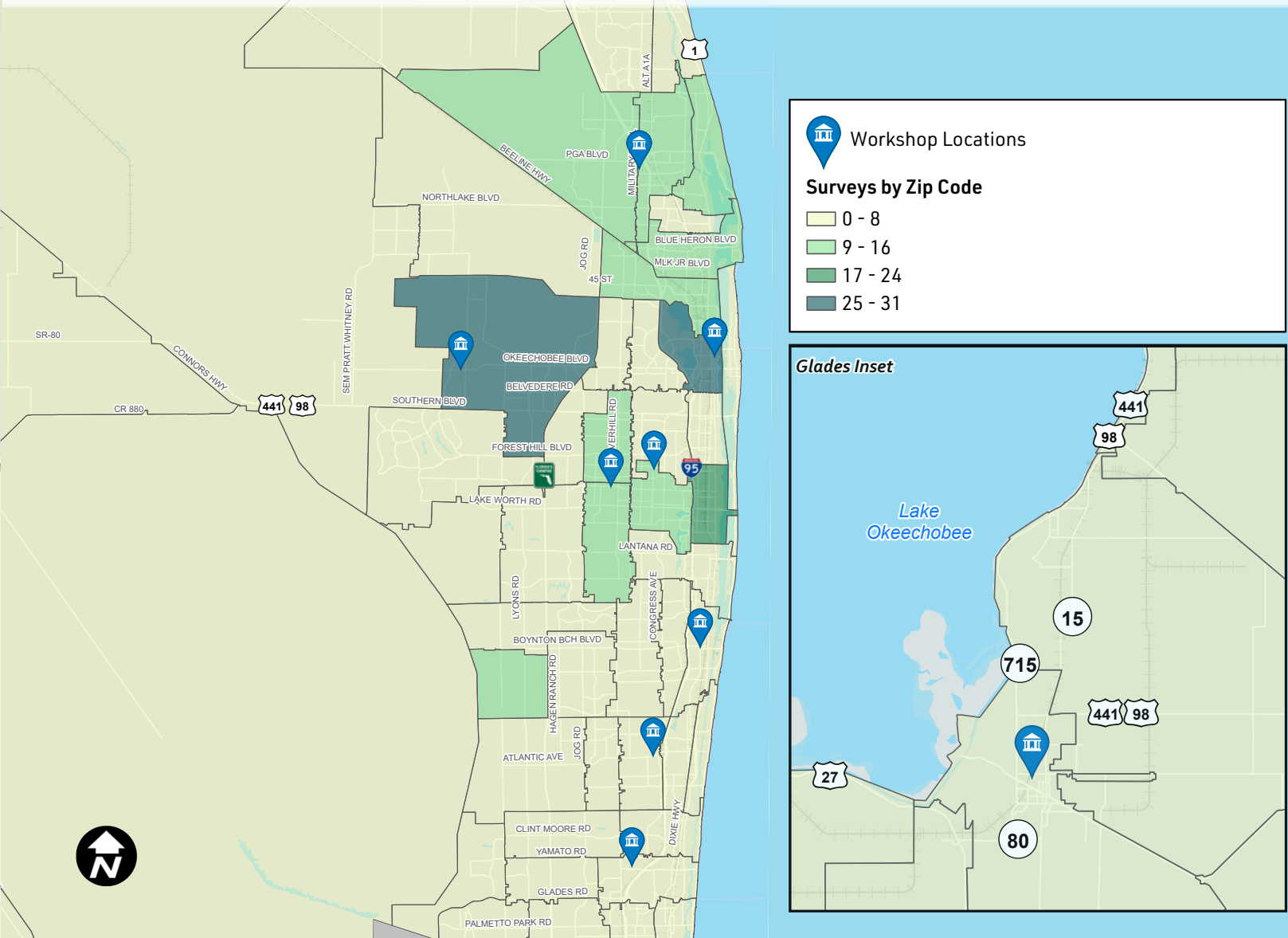


Outreach Tools

The TPA used many tools to reach as many individuals, communities, stakeholders and interest groups as possible during the LRTP process. This included:

- Social media
 - Facebook (includes boosted and promoted content)
 - Instagram
 - X (formerly Twitter)
 - LinkedIn
- PalmBeachTPA.org
- Printed materials
- Transportation Tuesday biweekly newsletter
- Press release shared with local news media
- Virtual and in-person workshops
- Presentations to community groups, TPA advisory committees and Governing Board
- Statistically significant, random-sample Community preference survey of Palm Beach County voters
- Community preference survey on the TPA's website
- Comment and Public Input Map

VISION 2050 WORKSHOP LOCATIONS AND SURVEY RESPONSES BY ZIPCODE



GOALS, OBJECTIVES, AND PERFORMANCE

Goals and Objectives give direction to the planning and prioritization decisions to reach the Vision. Performance-Based Planning, including the use of federally required Performance Measures, allows the TPA to track the progress towards achieving the Vision with the limited financial resources available in the LRTP.

The Goals below include an overview, the specific objectives to achieve, and notable federal performance measures the TPA is required to set targets for.



SAFE

The TPA is committed to Vision Zero, with the principle that any death or serious injury on a roadway is unacceptable. In 2019, the TPA formally adopted a Vision Zero Action Plan to make measurable steps towards reducing and ultimately eliminating these types of crashes. Fourteen municipalities have also committed to Vision Zero. The TPA is committed to Vision Zero, with the principle that any death or serious injury on a roadway is unacceptable.

Objective S.1: Eliminate transportation-related serious injuries and fatalities.

Objective S.2: Support regional adoption of safety policies and plans.

Objective S.3: Support emergency management functions including evacuation, response, and post-disaster recovery.

Objective S.4: Enhance the safety and security of transit, rail, and other multimodal facilities.

- FEDERAL PERFORMANCE MEASURES**
 - ▶ Fatalities
 - ▶ Fatal Crash Rate
 - ▶ Serious Injuries
 - ▶ Serious Injury Rate
 - ▶ Non-motorized Fatalities and Serious Injuries
 - ▶ Palm Tran Fixed Route and Paratransit Safety

- ADDITIONAL INDICATORS**
 - ▶ Rail Fatalities



EFFICIENT

The TPA supports people-focused objectives which include efficiency of modes and non-motorized users. Efficiency measures the reliability and productivity of the transportation system. Traditionally, the efficiency of the system was measured by vehicle travel time and the congestion of a roadway. The TPA has shifted to a more people-focused objective, integrating efficiency of modes and non-motorized users.

Objective E.1: Provide more efficient use and operation of the transportation system.

Objective E.2: Address capacity constraints of the existing transportation system.

Objective E.3: Improve public transit, micromobility, and transportation service reliability, efficiency, and convenience.

Objective E.4: Address the economic barrier of automobile ownership and dependence with transportation options.

Objective E.5: Incentivize reduced travel demand during peak periods.

- FEDERAL PERFORMANCE MEASURES**
 - ▶ % of reliable person-miles traveled on the Interstate system
 - ▶ % of reliable person-miles traveled on the Non-Interstate NHS
 - ▶ Truck Travel Time reliability on the Interstate system

- ADDITIONAL INDICATORS**
 - ▶ Palm Tran On-Time Performance (new)
 - ▶ Households (or Population) served by High-frequency transit (new)
 - ▶ Transit vs. Car Average Commute Time
 - ▶ Tri-Rail and Palm Tran Passenger Trips per Revenue Hour



CONNECTED

The TPA strives to provide infrastructure that allows citizens to safely, efficiently, and comfortably connect to the places they live, work, play, and learn. The TPA’s Complete Streets Design Guidelines encourage separated bicycle facilities and wider sidewalks whenever possible to promote safe connections for non-motorized users of all ages and abilities.

Objective C.1: Provide a range of interconnected transportation options to improve mobility for all residents, workers, and visitors.

Objective C.2: Fill gaps in multimodal transportation facilities.

Objective C.3: Deploy connected technology to enhance traffic operations.

Objective C.4: Increase availability of transportation information to support trip decision-making.

Objective C.5: Improve intermodal links that support freight and tourism.

INDICATORS

- ▶ Tier 1 network completeness index
- ▶ % complete of Connector Corridors on the 561 Network and NHS (new)
- ▶ Total mileage on the Federal Aid network that is Tier 1 and Tier 2 Level of Traffic Stress (LOS) for ped and bike.
- ▶ Centerline mileage of federal aid eligible roadways that include:
 - ▶ Sidewalks
- ▶ Percentage of federal aid eligible mileage with:
 - ▶ Bike Facilities within 3 mi. of a Transit Hub or School
 - ▶ Pedestrian Facilities within 1 mi. of a Transit Hub or School
- ▶ Pedestrian Facilities within ¼ mile of Traditionally Underserved Communities



MULTIMODAL

The TPA works to provide low-stress transportation options to help reduce reliance on single occupancy vehicle trips, thereby reducing congestion, preserving the environment, and promoting community health. The TPA also supports economic vitality through freight and goods movement. Improving connectivity between major trucking and freight routes, rail, ports, and distribution centers will increase the ability to provide goods and products inside and outside the region. Making it easier for residents and visitors to walk, bike or take transit to their destinations can help stimulate the local economy by creating savings on transportation costs and promoting more foot traffic to support local businesses.

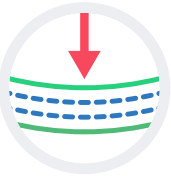
Objective M.1: Develop a transportation system that improves regional accessibility and mobility for all users, including the movement of goods.

Objective M.2: Accommodate low-stress travel by sustainable modes.

Objective M.3: Enhance multimodal options in urban centers with persistent congestion.

INDICATORS

- ▶ Total % of commuter mode split that is not drive-alone
- ▶ Annual tonnage of freight for:
 - ▶ Port of Palm Beach
 - ▶ Palm Beach International



RESILIENT

The TPA integrates the preservation of Palm Beach County's infrastructure, environment, and quality of life into the planning process. Both US DOT and FDOT also prioritize the preservation of our current transportation system and environment. FDOT and TPA are required to set performance targets for the current pavement and bridges while Palm Tran and SFRTA are required to set preservation targets for transit assets.

The consequences associated with sea level rise include direct physical impacts such as coastal inundation of inland areas, increased frequency of flooding in vulnerable coastal areas, and increased flooding in interior areas due to impairment of the region's stormwater infrastructure. Without significant planning and investments to mitigate our current impact on climate change and be able to adapt to a changing climate, the transportation system will be less secure, poorer quality, and become more costly.

- Objective R.1:** Protect critical infrastructure from future disruptions due to climate impacts.
- Objective R.2:** Promote compact, walkable, mixed-use development and redevelopment opportunities that encourage a range of transportation options and improved public health.
- Objective R.3:** Ensure equity is factored into programming, planning and design.
- Objective R.4:** Reduce the carbon footprint of the transportation system.

ADDITIONAL INDICATORS

- At-threat facilities improved (new)
- Alternative fuel (including EV charge) corridor coverage (new)
- Daily fuel use per person
- Daily Vehicle Miles Traveled per Person
- % Electric Vehicles in Rubber-Tire Transit Fleet

FEDERAL PERFORMANCE MEASURES

- Bridges in Good Condition
- Bridges in Poor Condition
- Interstate Pavements in Good Condition
- Interstate Pavements in Poor Condition
- Non-Interstate NHS pavements in Good Condition
- Non-Interstate NHS pavements in Poor Condition
- Palm Tran 60ft Articulated Buses Exceeding Useful Life
- Palm Tran 40ft Buses Exceeding Useful Life
- Palm Tran Cutaway Buses Exceeding Useful Life
- Palm Tran Maintenance Vehicles and Facilities Exceeding Useful Life
- Tri-Rail Rolling Stock Exceeding Useful Life
- Tri-Rail Other Vehicles Less than 2.5 on 5-point scale
- Tri-Rail Rail track restrictions (slow orders)
- Tri-Rail maintenance and Support Vehicles > 8 years old



Guidance and Plans

The transportation planning process is guided by federal and state laws and plans. The LRTP also integrates plans from regional and local partners, creating a continuing, cooperative, and comprehensive planning process. The LRTP is required to be consistent with the federal, state, and local planning processes to the maximum extent feasible.

Federal

- Infrastructure Investment and Jobs Act (IIJA), 2021
- Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) Planning Emphasis Areas, 2021

State

- FDOT Planning Emphasis Areas, 2021
- Florida Transportation Plan (FTP)
- Strategic Intermodal System (SIS) Policy Plan
- Strategic Highway Safety Plan (SHSP)
- Highway Safety Improvement Program (HSIP)
- Transportation Asset Management Plan, 2022

Regional

- 2045 Southeast Florida Regional Transportation Plan (RTP)
- Southeast Florida Regional Climate Change Compact Action Plan
- Tri-Rail Transit Asset Management Plan

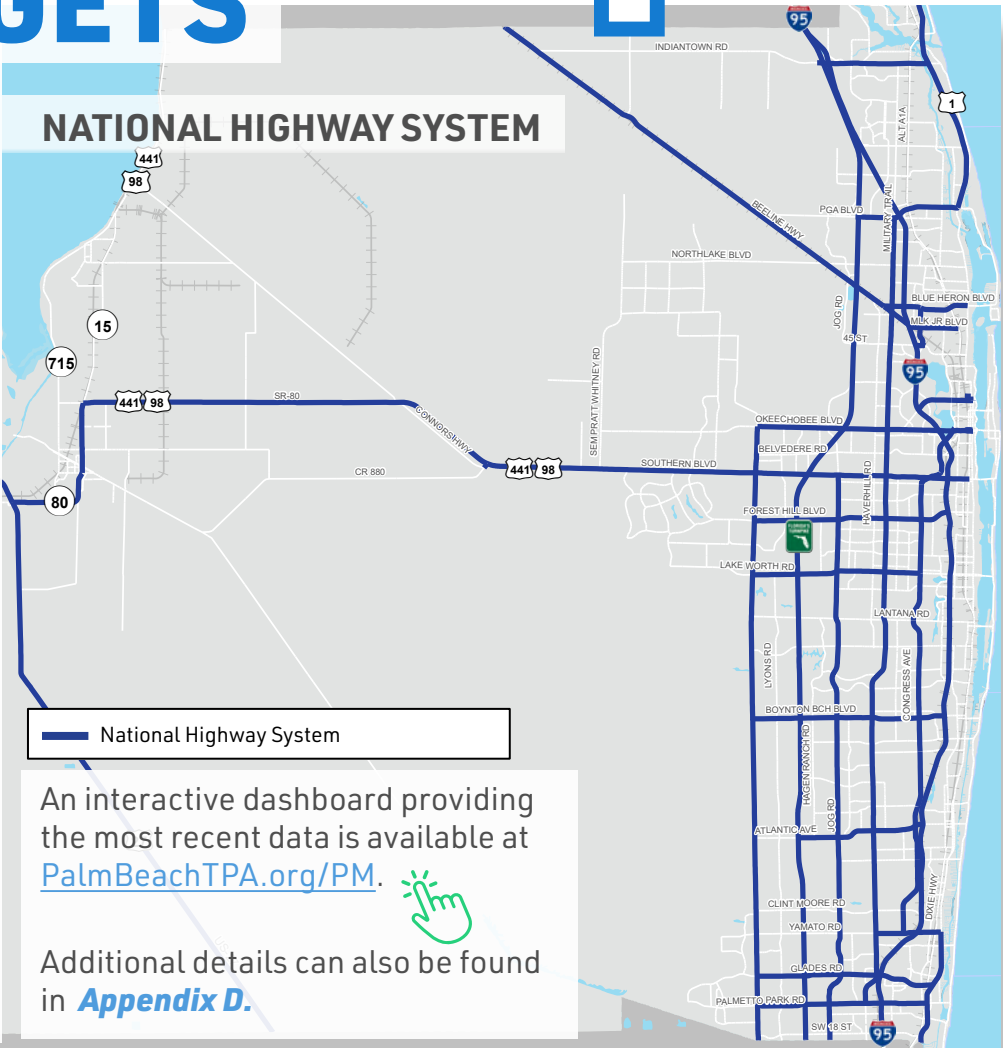
Local

- Palm Beach County and local municipalities Comprehensive Plans
- Palm Tran Transit Development Plan (TDP)
- Palm Tran Public Transportation Agency Safety Plan
- Palm Tran Transit Asset Management Plan

SYSTEM PERFORMANCE AND TARGETS

Federal transportation law requires state DOTs and MPOs to implement Transportation Performance Management (TPM), a strategic approach to making investment and policy decisions to achieve performance goals. TPM uses past performance levels and forecasted conditions to measure progress toward strategic goals as a means to guide investments.

The TPA is required to coordinate and set targets after the adoption of FDOT’s targets, and the targets set by the public transportation providers. Targets are set on either one, two, or four-year cycles, and are incorporated in the transportation planning process of the TPA.



All Roads Safety (PM1) Performance Targets

Target Year 2024	
Fatalities	0
Serious Injuries	0
Rate of Serious Injuries per 100M vehicle miles travelled (VMT)	0
Rate of Fatalities per 100M VMT	0
Nonmotorized Fatalities and Serious Injuries	0

System Performance and Freight (PM3) Performance Targets

Target Year 2025	
Person-miles on the interstate highway system that are reliable	75%
Person-miles on the non-interstate national highway system that are reliable	60%
Truck travel time reliability index on the interstate highway system	2.00

Pavement and Bridge Condition (PM2) Performance Targets

Target Year 2025	
Percent of NHS bridges classified as in Good Condition by deck area	50 %
Percent of NHS bridges classified as in Poor Condition by deck area	5 %
Percent of Interstate pavements in Good Condition	60 %
Percent of Interstate pavements in Poor Condition	5 %
Percent of non-Interstate NHS pavements in Good Condition	40 %
Percent of non-Interstate NHS pavements in Poor Condition	5 %

Transit Asset Performance Measures Targets

Percentage of assets that meet or exceed useful life for		2022 Target
Palm Tran		
Vehicles - Articulated Bus		≤10%
Vehicles - Fixed Route Bus		≤10%
Vehicles - Paratransit Bus		≤10%
Vehicles - Paratransit Van		≤0%
Equipment - Automobiles		≤20%
Equipment - Trucks		≤20%
Facilities		≤0%
South Florida Regional Transportation Authority		
Rolling Stock - locomotives, coach cars, self-propelled cars (> 39 years old)		≤25%
Rolling Stock - cutaway buses (>10 years old)		≤25%
Equipment - Support & Maintenance Vehicles (> 8 years old)		≤56%
Equipment - Other Vehicles (<2.5 on 1-5 scale)		≤56%
Passenger Terminals (<2.5 on 1-5 scale)		≤5%
Maintenance Facilities (<2.5 on 1-5 scale)		≤5%
Administrative Offices (<2.5 on 1-5 scale)		≤5%
Rail fixed-guideway track with performance restrictions		≤3.5%

Transit Safety Performance Measures and Targets

Target Year 2025		Target Year 2025	
Fixed Route Bus		Paratransit (Palm Tran Connection)	
Number of Fatalities	0	Number of Fatalities	0
Fatality Rate per 100k VRM	0	Fatality Rate per 100k VRM	0
Number of Injuries	63	Number of Injuries	34
Injury Rate per 100k VRM	0.9	Injury Rate per 100k VRM	0.4
Number of Safety Events	43	Number of Safety Events	32
Safety Event Rate per 100k VRM	0.6	Safety Event Rate per 100k VRM	0.3
Mean distance between mechanical failures	14,000	Mean distance between mechanical failures	7,700

TRANSPORTATION PLANNING PROCESS

The LRTP coordinates local and regional transportation priorities by prioritizing funding for projects. The LRTP creates the fiscally constrained gameplan to implement projects from 2025 out to 2050. The following steps outline the LRTP planning process for how a project moves through idea generation to planning and programming.

1. Identify a Current or Future Need (Multimodal Needs)

The multimodal needs originate from a variety of sources, including: LRTP Needs Analysis; Citizen/Stakeholder Ideas; Mobility or Safety Studies; Local Capital Improvement Plans; and Walk Bike Safety Audits.

As needs are identified, consideration is given to:

- Alignment with goals and objectives
- Transportation facility owner
- Community support
- Competing needs
- High-level social and environmental impacts

2. Study Options and Finding a Solution

Once needs are established, studies are undertaken to find solutions. This typically occurs as a Feasibility Study, or sometimes in greater detail through a Project Development & Environment Study (PD&E). Many of the needs in the LRTP have funding identified for a Study. Other projects may have already undergone a Feasibility Study and are ready for programming the design and construction of the project.

Studies can answer the following questions:

- Are there social and environmental impacts?
- Is right-of-way acquisition required an impact to utilities?
- What is the cost?
- Who will construct the project?
- Is there community support?
- Is there facility owner support?
- Who will maintain the operations and maintenance after completion?

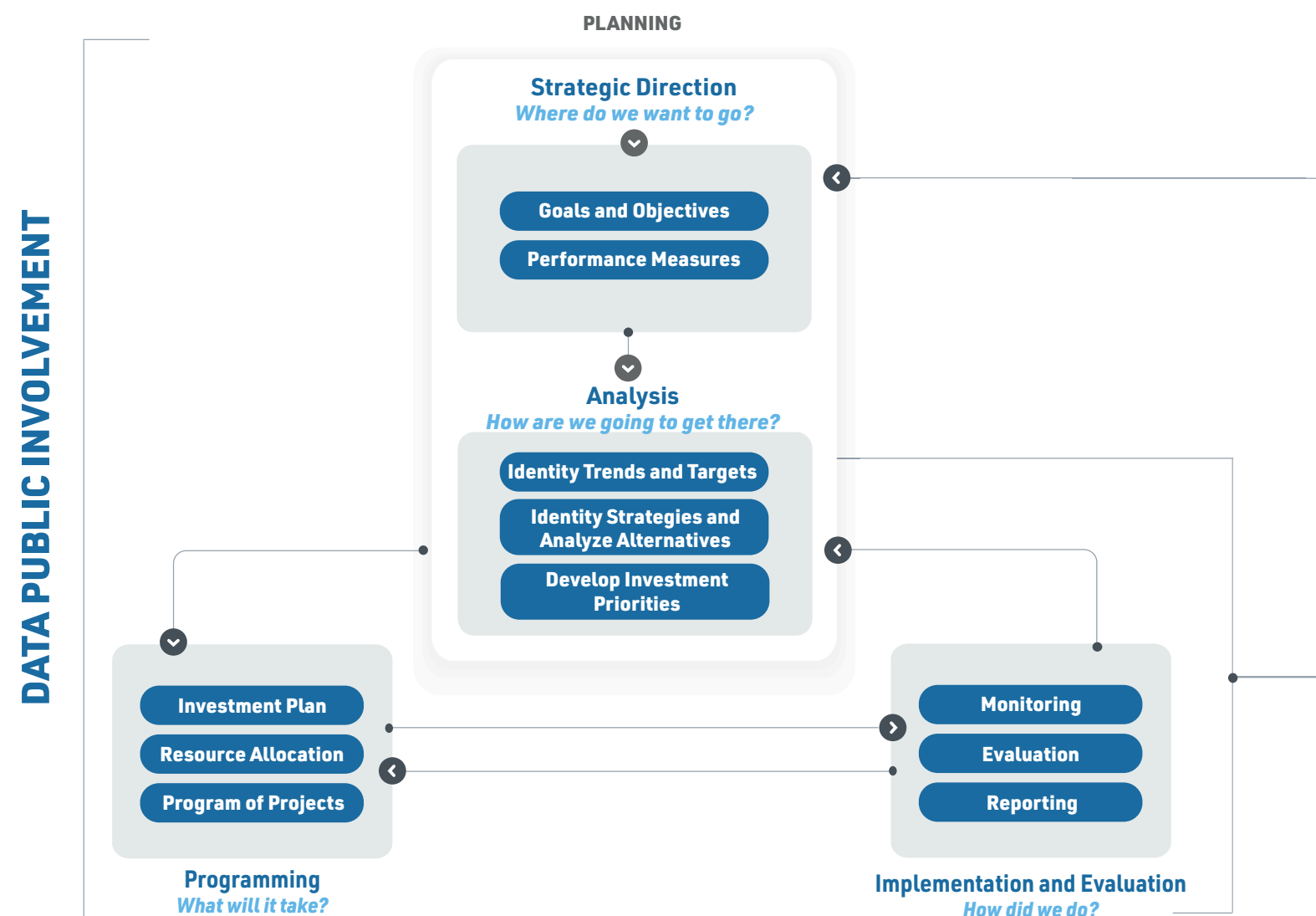
3. TPA Support and Determining a Funding Source (Cost Feasible and Unfunded Needs)

Once the proposed solution is established, the TPA can support the project and determine eligible federal and state funding, either through direct TPA prioritization of funding or through TPA support of pursuing available discretionary grants. If a need or project does not align with the TPA's vision or if a project scope is not well defined, the TPA may keep the project in the LRTP as a "Local Desire", which means the TPA does not support the Project's pursuit of federal or state funding.

4. Programming Projects in the Transportation Improvement Program (TIP)

The TIP is the current five-year programming of federal and state funds. Project phases that are supported by the TPA (adopted into the LRTP) begin to be programmed into the TIP annually. Programming depends on available funding and the production schedule of the project.

FRAMEWORK FOR PERFORMANCE BASED PLANNING AND PROGRAMMING



MULTIMODAL NEEDS

The transportation system is responsible for moving people, goods and services across a variety of modes. The transportation system in Palm Beach County has been predominantly developed for the motor vehicle. However, the system must account for all users and how they engage with the system, whether it be through retrieving their goods through delivery services, providing safe routes to school, or by creating a business environment for all to succeed.

As part of the development of the LRTP, an assessment of the multimodal needs within the County was conducted to help guide future decision making. Needs are established from a variety of ways, including analysis conducted in the LRTP process, through studies completed by the TPA or partner agencies, or through general public and partner agency ideas.

The following outlines existing conditions, how the system is currently being used, and what projects will be needed moving forward to achieve its transportation goals by 2050. Additional information is included in [Appendix B](#), and the detailed Multimodal Needs Report and the methodology used to identify projects by type can be found in [Appendix E](#).

The Multimodal Needs of the Vision 2050 Plan include:

- ▶ Active Transportation
- ▶ Transit
- ▶ Road Capacity
- ▶ Freight
- ▶ Electric and Alternative Fuel
- ▶ Emerging Technology and Intelligent Transportation
- ▶ Operations and Maintenance
- ▶ Resilience



Active Transportation

Active Transportation is the use of the transportation system by any mode where the user transports by their own power. Historically, this has been by walking, using a bicycle, or a similar wheeled device. As technology advances, methods of Active Transportation grow. The increase of micromobility devices, such as electrified conventional mobility devices like bikes, scooters, skateboards, and others yet to be thought of have begun to transform the affordability and utility of active transportation. Now, people can travel further on these devices with limited exertion, without previous barriers users faced. Micromobility devices have also increased the complexity of public right-of-ways as they have quickly entered the same environments used by people walking and bicycling without much deference to design.

Palm Beach County's active transportation network is limited and needs to be improved to be future ready for new devices and technologies when they arrive. Access to destinations and residences by safe, comfortable, and convenient active transportation modes encourages more people to travel by means other than driving by themselves.

Low-stress networks of complete streets are the foundation of an active transportation system. Providing people with the ability to walk, bike, scooter, or otherwise transport themselves by their own power or via an electrified device provides new choices for people to consider in their transportation choices. Network redundancy and comfort offers options for various skills. Complete Streets are streets with facilities that are

designed and operated to enable safe access for users of all ages and abilities, including pedestrians, bicyclists, transit riders, and motorists. Complete streets are context sensitive and respond to adjacent land uses.

Low-Stress: a place where the intended design user is able to comfortably and conveniently access destinations, regardless of skill, ability, or demographic background

Active Transportation relies on the thoughtful, complete implementation of complete networks of Complete Streets. These streets must be low-stress for vulnerable road users, comfortable enough for even the young and elderly to use without concern from friends and family.

Projects identified in the Vision 2050 plan must be low-stress facilities to accommodate a wide range of users. Additional attention should be directed to intersections, traffic control, clear path, and reduced conflict points from non-active transportation.

Several needs were identified related to active transportation (specifically pedestrian and bicycle) by evaluating the FDOT VRU assessment, the tiered Pedestrian Network developed by the TPA, level of traffic stress, the SUN Trails Network, and the East Coast Greenway.

Level of Traffic Stress

Low-stress bicycle and pedestrian streets are designed with adaptability in mind, making them future-ready for evolving forms of micromobility. By prioritizing safety, accessibility, and efficiency, these streets offer a versatile infrastructure that can accommodate a range of existing and future transportation devices. Features such as protected bike lanes, wide sidewalks, traffic calming measures, reduced or low risk conflict zones, and clearly defined space for different speed users make it easy for people to move through urban environments on bicycles, scooters, skateboards, and other devices. As the variety of personal transportation modes continues to expand, these streets can seamlessly integrate new options without major redesigns, fostering a flexible and inclusive urban area.

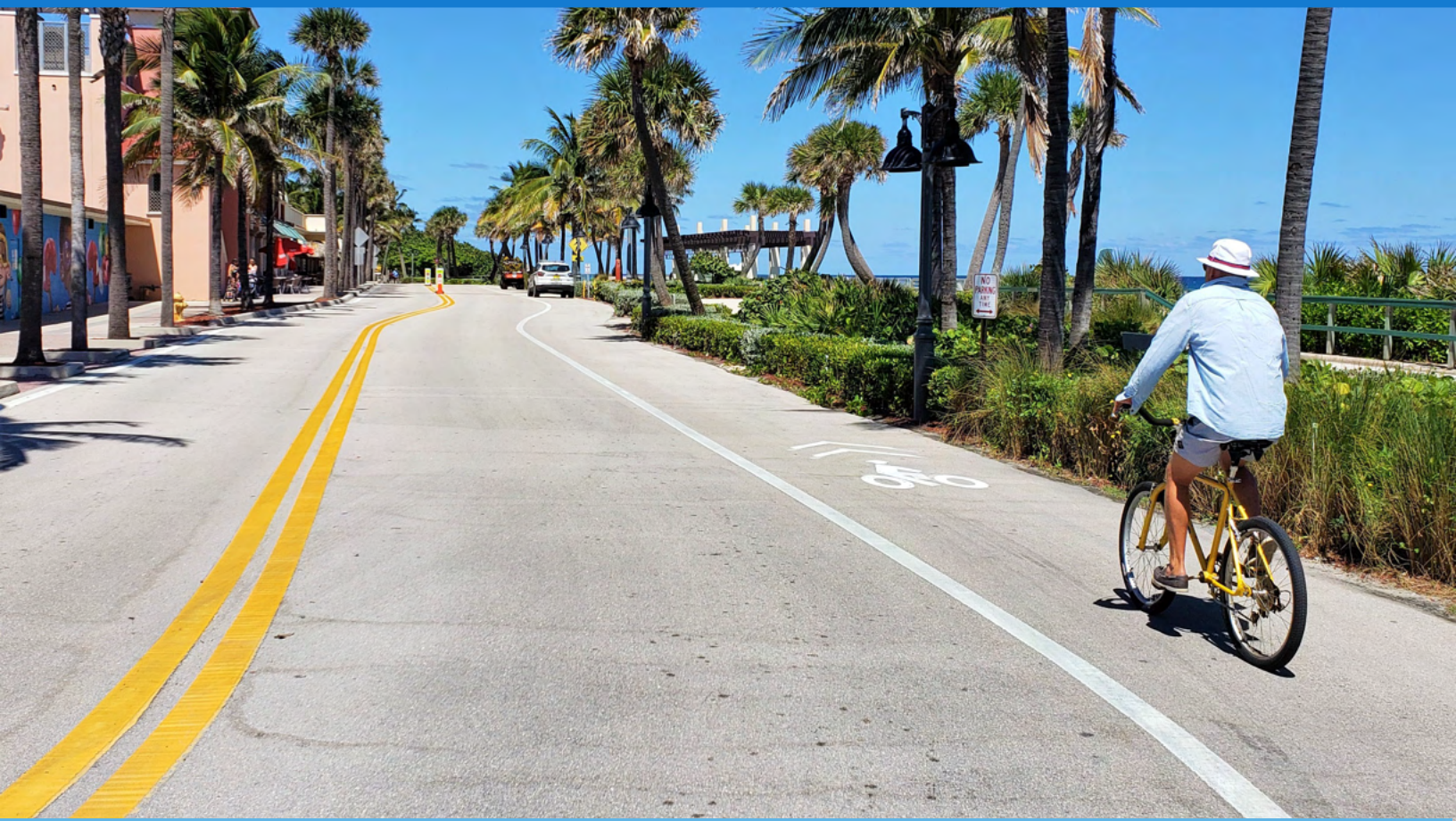
One of the key reasons low-stress streets are future-ready is their emphasis on shared spaces and multimodal infrastructure. They are built to accommodate different speeds and types of vehicles, making it easier to incorporate new micromobility devices as they emerge. Whether it's electric scooters, e-bikes, or even devices that have yet to be invented, low-stress streets ensure safe and efficient movement by reducing conflict points between different modes of transportation. This adaptability makes them an essential component of cities that want to stay ahead of transportation trends, allowing for the integration of technology and innovation without sacrificing safety or usability.

Looking forward 25 years, it's clear that urban mobility will continue to evolve, with new devices and technologies reshaping how people move. Low-stress bicycle and pedestrian streets are designed to accommodate not just today's devices but also those of the future. The incorporation of smart technologies, such as sensors and dynamic traffic control, can enhance these streets' ability to manage diverse traffic efficiently. As cities adapt to electric-powered micromobility, autonomous personal vehicles, and even hybrid forms of transportation, low-stress streets will remain a foundation for future-proof urban design, promoting sustainable, safe, and accessible transportation for all users.

The tables represent Level of Traffic Stress (LTS) scoring based on roadway separation from vehicles, traffic volumes, number of lanes, and speed limits. In general, a lower LTS score indicates higher comfortability and safety for pedestrians and bicyclists than a higher score. Roadways scored as LTS 1 typically include roadways with further separation from vehicles, lower traffic volumes, less lanes, and lower speed limits. Facilities scored as LTS 4 include roadways with less separation from vehicles, higher traffic volumes, more lanes, and higher speed limits. Those classified as 2 or 3 fall somewhere in the middle.

Pedestrian Facility and Posted Speed Limit													
Number of Travel Lanes	Vehicle Volumes	Both Sides of the Street				One Side of the Street				No Dedicated Walkway			
		≤ 25 mph	30 mph	35 mph	≥ 40 mph	≤ 25 mph	30 mph	≥ 35 mph	≥ 40 mph	≤ 25 mph	30 mph	≥ 35 mph	≥ 40 mph
2-3 Lanes	≤ 3k	1	1.5	2	2	1.5	2	2.5	3	2.5	3	3.5	3.5
	3k - 10k	1.5	2	2	2.5	2	2.5	2.5	3	3	3.5	3.5	4
	≥15k	2	2	2.5	2.5	2.5	2.5	3	3	3.5	3.5	4	4
4-5 Lanes	≤ 15k	2.5	2.5	3	3	3	3.5	3.5	3.5	4	4	4	4
	15k-25k	2.5	3	3	3.5	3.5	3.5	4	4	4	4	4	4
	≥25k	3	3	3.5	3.5	4	4	4	4	4	4	4	4
6+ Lanes	All AADTs	3	3.5	3.5	4	4	4	4	4	4	4	4	4

Number of Travel Lanes		Bicycle Facility and Posted Speed Limit												
		No Bicycle Facility (Mixed Traffic Streets)				Street with Designed Bike Lanes (4-5 ft.)			Street with Buffered Bike Lanes (6-8 ft.)			Street with Separated Bike Lanes		
		≤ 25 mph	30 mph	35 mph	≥ 40 mph	≤ 30 mph	35 mph	≥ 40 mph	≤ 30 mph	35 mph	≥ 40 mph	≤ 30 mph	35 mph	≥ 40 mph
2-3 Lanes	≤ 3k	1.5	2	2.5	3	1.5	2	2.5	1	1.5	2	1	1	1
	3k - 10k	2	2.5	3	3.5	2	2.5	3	1	1.5	2	1	1	1
	≥15k	2.5	3	3.5	4	2.5	3	3.5	1.5	2	2.5	1	1	1.5
4-5 Lanes	≤ 15k	3	3.5	4	4	2.5	3	3.5	2	2.5	3	1	1	1.5
	15k-25k	3.5	4	4	4	3	3.5	4	2.5	3	3.5	1	1.5	2
	≥25k	4	4	4	4	3.5	4	4	3	3.5	4	1.5	2	2
6+ Lanes	All AADTs	4	4	4	4	3.5	4	4	3.5	4	4	2	2	2



Micromobility

Micromobility is defined by the FHWA as any small, low-speed, human or electric-powered transportation device, including bicycles, scooters, electric-assist bicycles, electric scooters (e-scooters), and other small, lightweight, wheeled conveyances. Micromobility has grown rapidly across many cities nationwide, proving to be a desirable and beneficial form of transportation for many users as it can reduce competition for roadway capacity, create more comfortable travel environments for the surrounding community, and improve public health. Leveraging these benefits is dependent on providing a safe transportation environment with a complete and connected network of dedicated facilities.

The North American Bikeshare and Scootershare Association (NABSA) 2022 State of the Industry Report illustrated a rise in shared micromobility ridership across North America equal to pre-pandemic levels. In addition, more cities across North America with existing systems recorded shared micromobility ridership than ever before. The report shows that 74 million pounds of carbon dioxide emissions were offset by shared micromobility that replaced car trips. Surveys conducted by NABSA show that 37% of shared micromobility trips replace a car trip, and findings from the American Micromobility Panel report indicate 10% of users were influenced to delay purchase of a household vehicle due to bikeshare access, while 3% of users surveyed sold or got rid of their vehicle due to their use of bikeshare.

Designing bicycle and micromobility improvements requires a holistic approach that considers ADA accessibility, level of traffic stress, Vision Zero/High Injury Network (HIN) principles, and Complete Streets Design Guidelines. This approach ensures that improvements are made for users of all ages and abilities, while determining and prioritizing the safety needs of active transportation users.





Places for People to Walk

At the foundation of the transportation system is the person who walks either by choice or because they lack the means to move by other modes. People in Palm Beach County want to feel safe while walking in the area they live, work, and play, while also being comfortable on their journey. People need to be able to walk to access other modes of the transportation system, combining trips as part of a non-drive alone strategy.

Places for people to walk are derived from the context of the surrounding area and need the following to seriously consider walking as an option for the public:

- Direct path without substantial detour
- Frequent low-stress crossing locations to access spontaneous destinations
- Reduced number of conflict points
- Pedestrian scaled lighting
- Shade and rest areas
- Access to other modes to complete trips

Pedestrian and bicycle accommodation needs were assessed by analyzing safety, efficiency, and connectedness. The FDOT’s Vulnerable Road User (VRU) Safety Assessment for pedestrian and bicycle segments were used to identify areas with the greatest safety needs. To achieve connectedness, all sidewalk gaps on the TPA’s Tier 1 Pedestrian Network will be closed. Where sidewalk gaps remain, controlled crossings of Federal Aid eligible roadway segment will be provided, allowing user access to sidewalks or pathways where the sidewalk discontinues.

The TPA’s planning area is comprised of

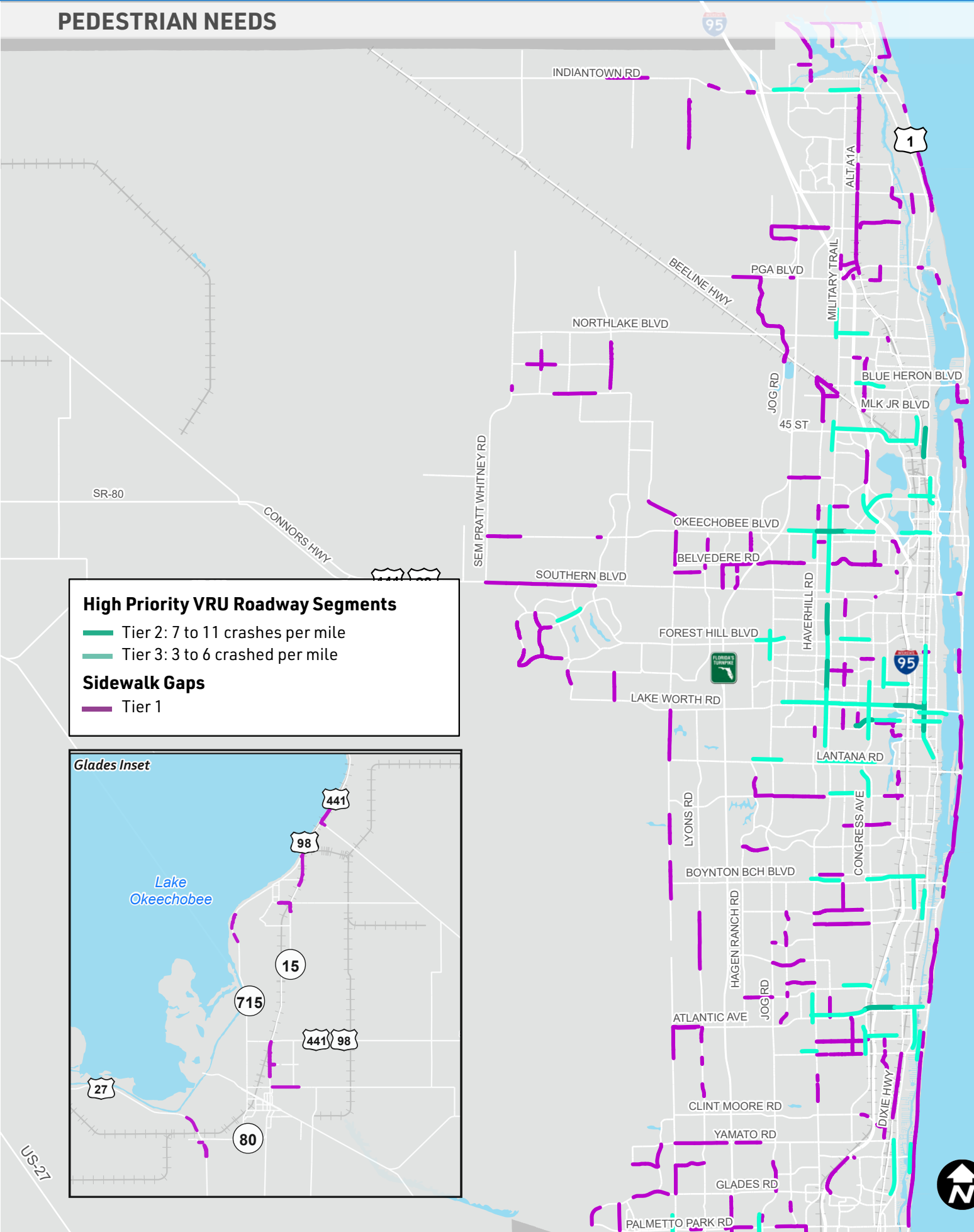
1,548 miles

OF SIDEWALKS, PATHS, TRAILS, OR SHARED PATHS.

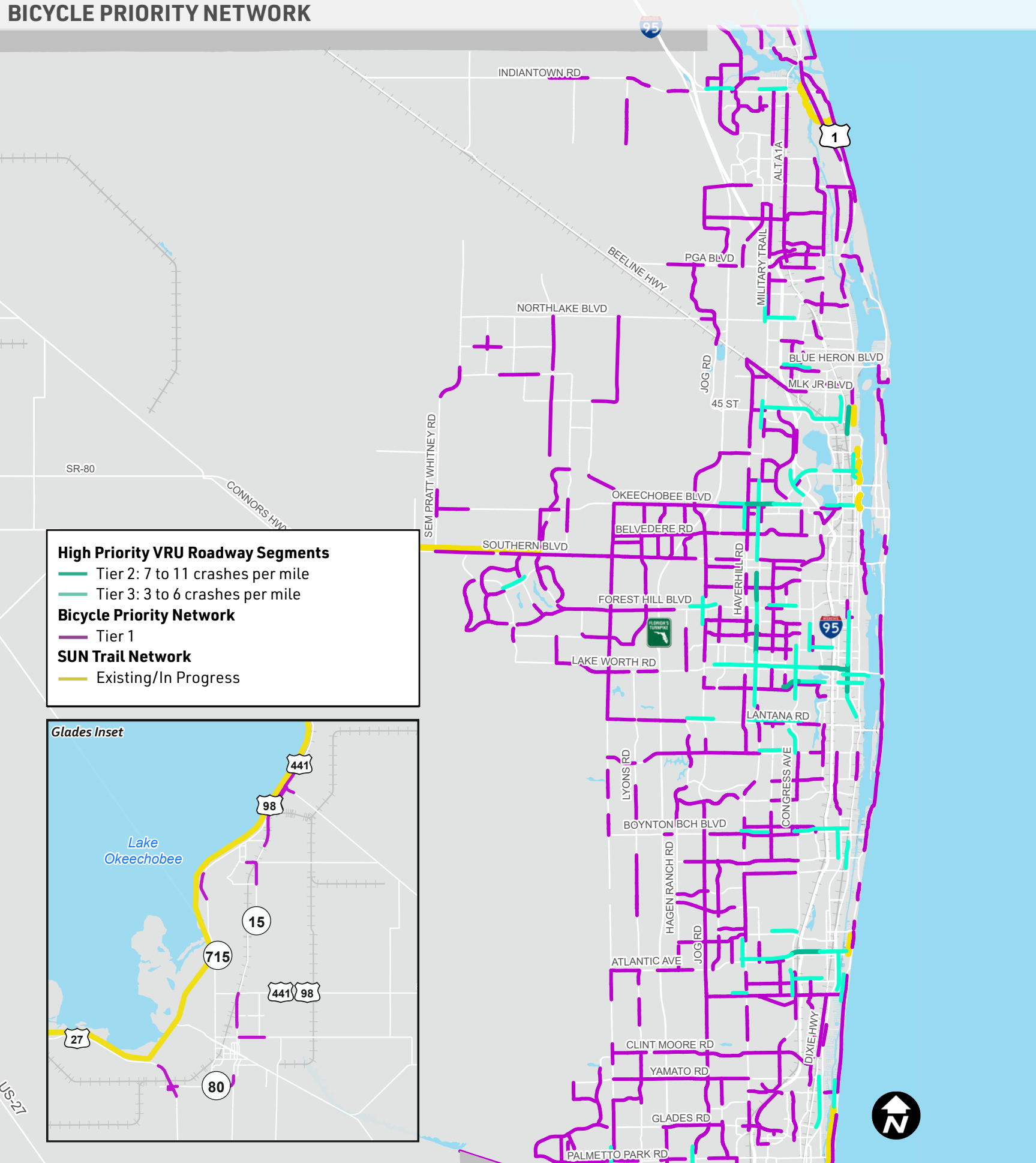
THE FEDERAL AID ELIGIBLE NETWORK (FAEN)

is the only location where the TPA can attribute major capital dollars to projects.

NON-FAEN ROADS are eligible for Transportation Alternatives Project funding but the program is not funded well enough to meet all the non-FAEN needs.



BICYCLE PRIORITY NETWORK



Transit Services

Public transit helps move people more efficiently than cars, especially during rush hours when the roads are most crowded. Transit can include various types of services, such as buses on regular roads or buses and trains running on special, dedicated routes. As roads get more congested, using transit in these dedicated lanes allows more people to travel efficiently. Transit also provides an affordable option for those who cannot afford a car or are unable to drive.

Today's transit services lay the groundwork for a future transit network that is even more efficient and accessible. Ridership grows when different services work together to create a system that's simple and reliable. Plus, having a strong transit network helps the county qualify for grants that can improve services and reduce the number of people driving alone.

In recent years, transit services have expanded beyond just fixed bus routes and services for people with disabilities (paratransit). There are now multiple ways to get around, creating a "transportation toolbox" that includes:

Network Company (TNC) Zones: In designated areas, people can access discounted fares for ride-hailing services like Uber and Lyft, through vouchers provided by the county.

On-Demand Ride Zones: Palm Tran and other local agencies offer ride-hailing services within limited areas, usually around 6 square miles.

Paratransit: A shared-ride service for residents with special needs, available countywide. This service, traditionally provided by small buses, now also includes ride-hailing options to reduce costs.

Fixed Route Bus and Train: Long-established bus and train services now offer more frequent trips, with buses and trains arriving every 15 to 20 minutes, making transit a more reliable option.

Express Services: These connect key hubs or areas with heavy traffic. For example, Palm Tran runs an express bus between Port St. Lucie and Palm Beach County, and the South Florida Regional Transportation Authority (SFRTA) runs an express Tri-Rail train from West Palm Beach to Miami.

First Mile / Last Mile Solutions: To make transit convenient, it's important for people to have easy ways to get to and from bus or train stops. This might include bike or scooter rentals in areas where it's safe and practical to use them.

This vision requires long-term funding for operations, maintenance, and major projects. Palm Beach County's Transit Development Plan identifies future opportunities which will require additional funds.



Additional infrastructure investments in transit signal priority, queue jumps, and dedicated space for transit operations will vastly improve transit service and create more opportunities to ride transit in Palm Beach County.

How to Improve Transit

Enhancing Transit for the Future in Palm Beach County

Palm Beach County has the potential to move thousands of current and future residents, visitors, and employees by public transportation instead of having them drive in single-passenger cars causing congestion.

1. Increase Frequency to Meet Rider Expectations

For public transit to be reliable, buses and trains need to run more often. No one wants to rely on a bus that only comes every 30 minutes, especially if transfers between different routes are needed. To attract more riders, transit should aim for a service frequency of 15 minutes or less, making it a more convenient option.

2. Improve Safety and Off-Bus Amenities

People need safe, well-designed streets and easy access to transit stops for the system to work. Without safe places to cross busy streets, many won't use public transit. Adding more shelters at bus stops is also essential, as the county currently has far fewer shelters than needed for its number of stops. While Palm Beach County buses are equipped with advanced technology, the streets need to support riders before they even board the bus. Enhancing the rider experience will encourage more people to use transit, which in turn will justify further improvements.

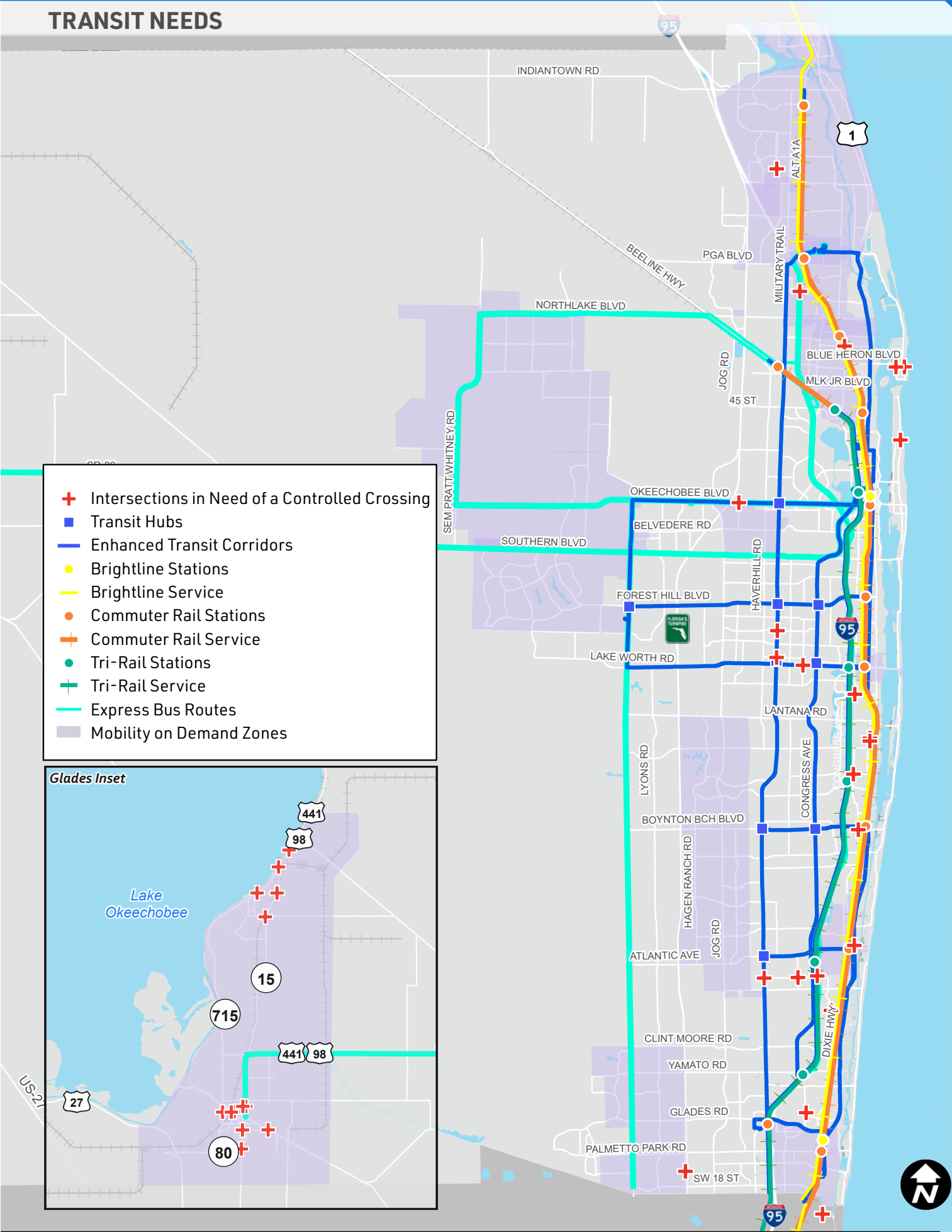
3. Prioritize Spending on Transit Enhancements

Traffic signals and intersections need to be upgraded to help buses move more efficiently through congested areas. For example, bus priority at traffic signals and creating dedicated lanes or "queue jumps" at intersections would reduce delays. The county already has some funds set aside for these types of improvements but needs to focus on putting them to use.

4. Stay Flexible with New Technologies

New technologies are changing public transit around the world, and Palm Beach County should be ready to adapt. This could include new types of vehicles like rubber-tired or hybrid light rail, autonomous buses, or vehicles powered by alternative fuels, all of which can reduce costs and improve service. Staying open to these innovations will help the county build a future-ready transit system that benefits everyone.

TRANSIT NEEDS





Roadway Capacity

Roadway widenings and reconstructions develop out of the long-range planning documents of FDOT and Palm Beach County. Substantial consideration of project need and expanding low-stress multimodal capacity must be included in every project for the TPA to support a roadway widening or extension project. Roadway widenings and extensions are complex and may include large right-of-way and environmental impacts. These regionally significant projects typically require detailed Project Development and Environmental (PDE) to ensure the project is developed with consideration of current engineering standards, project costs, and minimization of social and environmental impacts, while involving the public throughout the entire study process.

The Congestion Management Process defined in CFR 450.322 (d)(4) (i.-v.) requires that additional roadway capacity through widening projects be pursued after a series of other considerations including demand management, traffic operations, public transportation, and ITS infrastructure. Thus, other multimodal solutions and strategies must be contemplated prior to widening roads. Furthermore, many of the roadways are already constrained by existing right-of-way limits or geographic constraints, exhausting the ability to expand single occupancy vehicle capacity.

The other sections of the LRTP needs analysis focus on these strategies, including signal technology, inclusion of other modes of transportation to reduce single occupant vehicles (SOV), and other operational improvements. The remaining available capacity projects identified within this plan should seek to provide a complete capture of needs, with specific emphasis on active transportation and complete streets, emerging technology, and resilience.

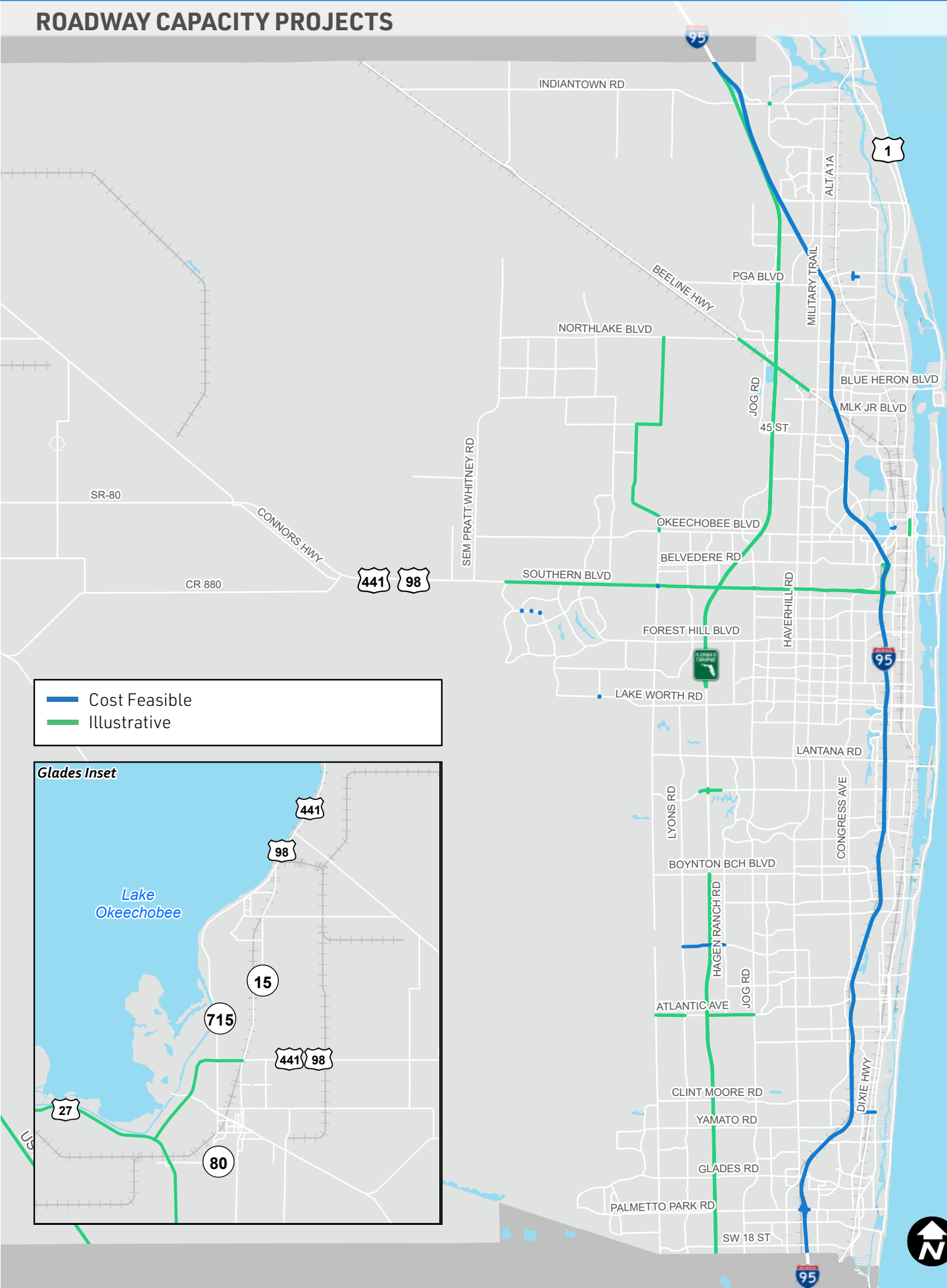
There are two substantial agencies working on this type of project Countywide and in the Region.

FDOT focuses on building out the capacity of the Strategic Intermodal System (SIS) – Florida's high priority network of transportation facilities important to the state's economy and mobility. The projects are programmed into the statewide SIS Cost Feasible Plan that ultimately makes its way into the statewide MPOs' Cost Feasible Plans, such as the TPA's Vision 2050.

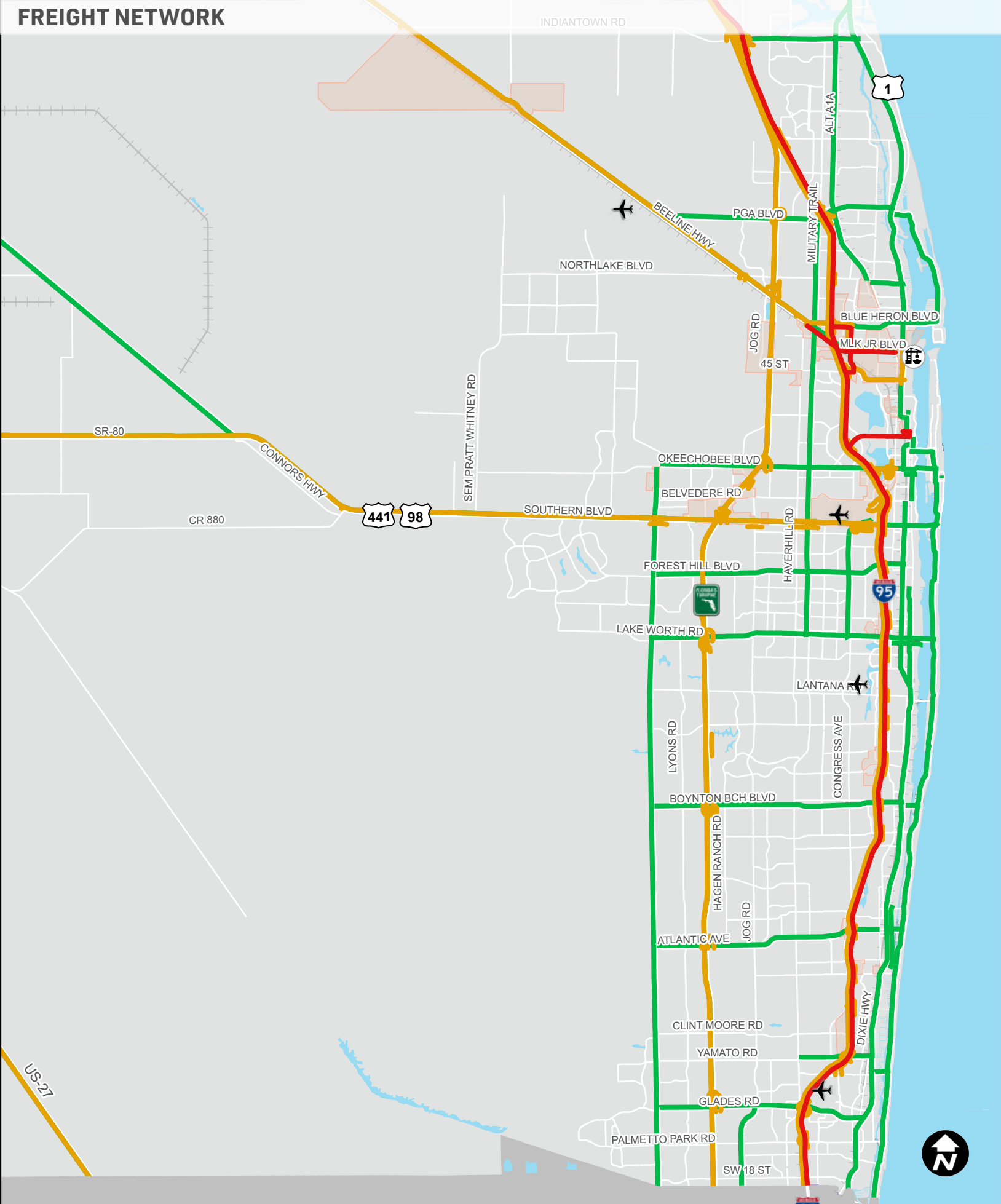
Palm Beach County focuses on building out the capacity of the Throughfare Right-of-Way Identification Map adopted in the County's Comprehensive Plan. The map only indicates the ultimate right-of-way widths and future corridor needs, it does not include the number of travel lanes. Many projects submitted by Palm Beach County add travel lanes, with the intent to meet the County's Roadway Typical Sections, based on available right-of-way.

Palm Beach County Roadway projects identified in the TPA's Vision 2050 LRTP were submitted by the County for inclusion as needs but may not necessarily be constructed in the 2050 timeframe. Many of the lane addition projects are included in the "Desires" list and are not formally supported by the TPA for pursuing federal and state funding for their construction.

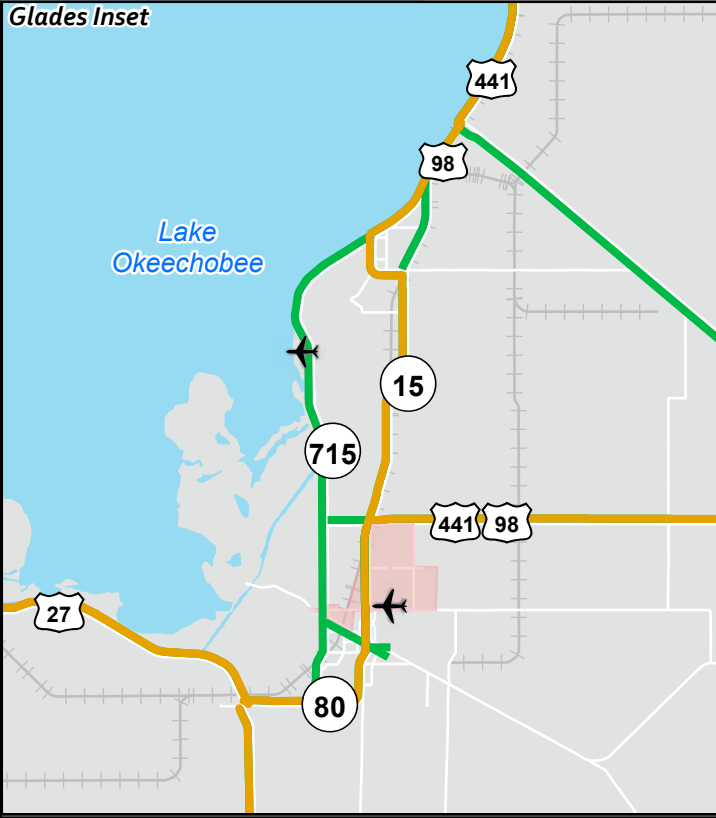
ROADWAY CAPACITY PROJECTS



FREIGHT NETWORK



- Seaports
- Airports
- National Highway Freight Network
- Strategic Intermodal System (SIS)
- State Highway System (SHS)
- Freight Activity Areas



Freight

The regional roadway network and freight activity areas, or distribution areas, supports most freight tonnage within the region to support commerce in South Florida.

Freight Network Designations include those identified in the National Highway Freight Network, Florida's SIS, State Roads, and specified functional classification roadways, and local designations in comprehensive plans. Additionally, freight activity areas are common distribution hubs generally located within industrial districts or otherwise freight intensive land uses.

Additional study of the freight network and areas is a need in Palm Beach County to identify routes and activity areas, and conduct more analysis to identify true network needs to support the region. More information and data is located in [Appendix E](#).



Electric and Alternative Fuel

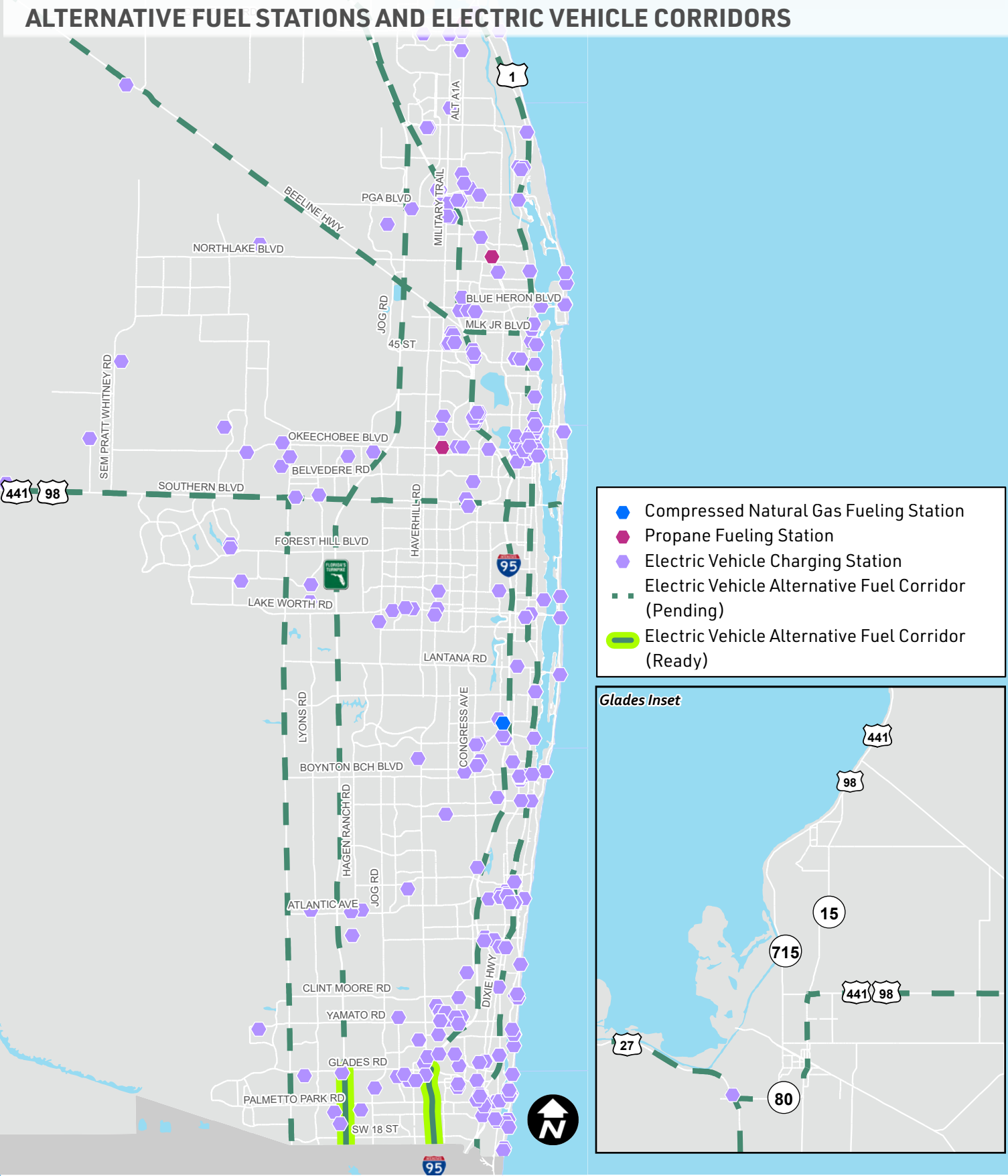
The 2050 LRTP resiliency goals include protecting critical infrastructure from climate impacts and reducing the carbon footprint of transportation projects.

The U.S. Department of Transportation Federal Highway Administration (FHWA) designates a national network of alternative fuel corridors (AFCs). These AFCs then become eligible for grants to fund the construction of alternative fuel stations. The national networks apply to several alternative fuel sources including electric vehicles (EVs), hydrogen, propane, and natural gas.

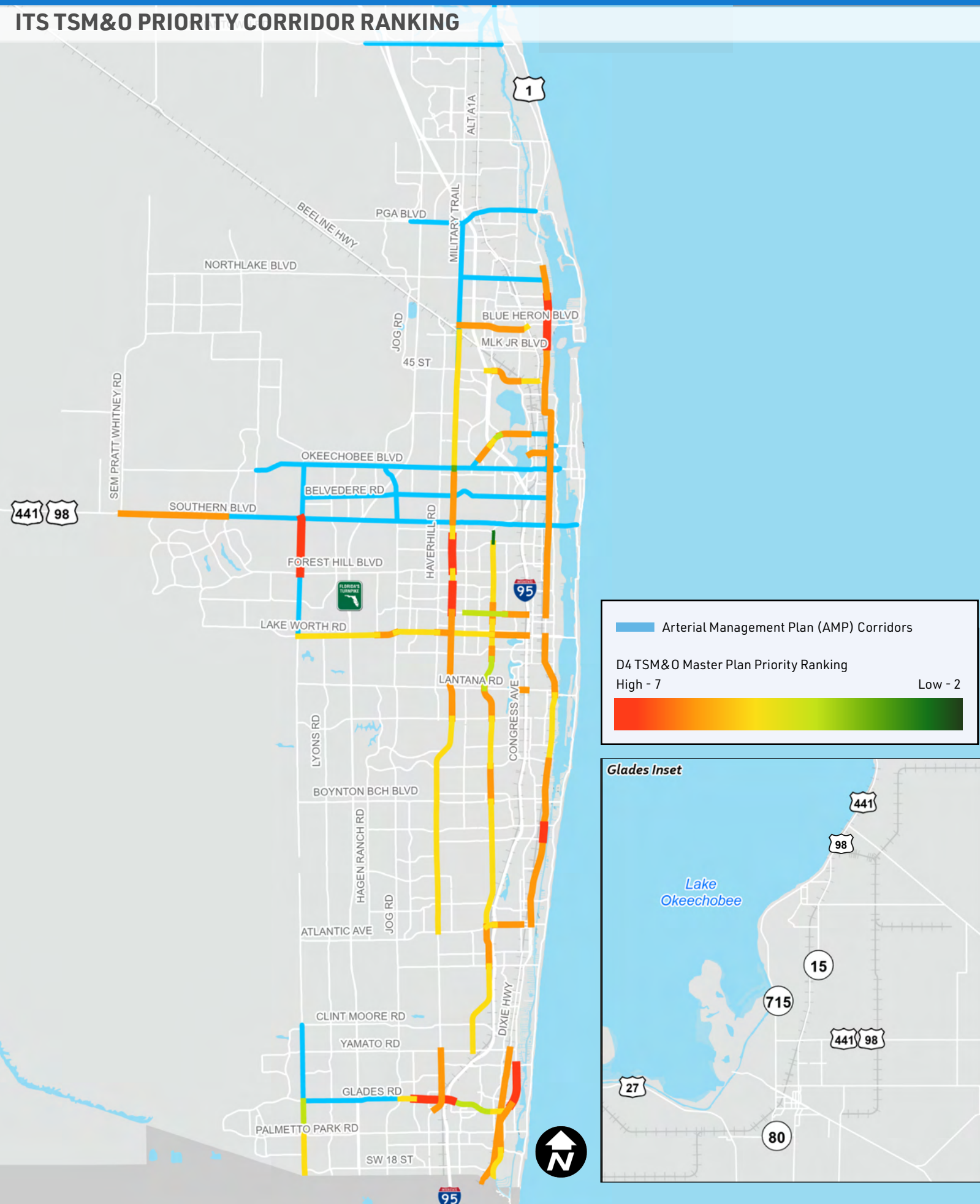
Each fuel type has specific requirements to designate an AFC as pending or ready. A designation of ‘pending’ indicates that the corridor does not meet the minimum criteria for alternative fuel spacing, siting, and capacity. A ‘ready’ designation indicates corridors have met the minimum fuel station requirements and are either no longer eligible for grant funds or have a lower priority for additional grant-funded fueling infrastructure.

This table provides a summary of AFC designations in PBC:

Alternative Fuel	Pending Status	Ready Status	Ready Criteria	Notes
EV	- I-95 - Florida Turnpike/ SR 91 - US1 - SR710 - SR80 - US441	N/A	Public DC Fast Charging, no greater than 50 miles between one station and the next on the corridor, and no greater than 5 miles off the highway. Additionally, each DC Fast Charging site should have both J1772 combo (CCS) and CHAdeMO connectors. Because Tesla stations are proprietary, we are unable to include them.	There are 285 public EV charging stations in Palm Beach County. There are no stations that meet the EV AFC Ready Criteria.
Compressed Natural Gas (CNG)	- I-95 - Florida Turnpike/ SR 91	N/A	Public, fast fill, 3,600 psi CNG stations no greater than 150 miles between one station and the next on the corridor, and no greater than 5 miles off the highway.	There are no public CNG stations in Palm Beach County.
Propane	US1	I-95	Public, primary propane stations no greater than 150 miles between one station and the next on the corridor, and no greater than 5 miles off the highway.	There are two public propane fueling stations in Palm Beach County.
Liquid Natural Gas	SR710	Florida Turnpike/ SR91	Public LNG stations no greater than 200 miles between one station and the next on the corridor, and no greater than 5 miles off the highway.	There are no LNG AFCs in Palm Beach County. There are no public LNG stations in Palm Beach County. There are two in Florida – one in Ocala and one in Jacksonville.
Hydrogen	SR80	N/A	Public, hydrogen stations no greater than 100 miles between one station and the next on the corridor, and no greater than 5 miles off the highway.	There are no hydrogen designated AFCs in Palm Beach County. Currently, the only hydrogen AFCs in Florida are in the Jacksonville area. There are no public hydrogen fueling stations in Florida.



ITS TSM&O PRIORITY CORRIDOR RANKING



Emerging Technology, ITS and Urban Air Mobility

Technology is playing an increasing role in enhancing how traditional modes of travel are used, as well as creating new ways to connect people, goods, and places. This type of technology is often referred to as Transportation Systems Management and Operations, or TSM&O. New and emerging technologies are expanding beyond traditional TSM&O goals to create new ways to connect and travel.

A technology matrix was developed to assess TSM&O strategies as well as emerging technologies in Palm Beach County, since many of these applications have overlapping goals, funding, and operational responsibility. To determine if technologies should receive public funding, it is important to think about whether they address or connect more than one mode of travel, enhance regional connectivity, enhance travel safety, or focus on policy and regulatory support.

Several needs were identified related to emerging technology and ITS by evaluating key regional routes that can be improved through monitoring and connected technologies and TSM&O deployment.

Intelligent Transportation Systems technologies can provide real-time information about traffic conditions, weather conditions, and potential hazards, all of which contribute to increased safety, reduced congestion, and increased efficiency and mobility.

The Palm Beach County ITS Group is responsible for the design, operations, and maintenance of the County's ITS infrastructure, which includes CCTV cameras, fiber optic communications network, travel time detectors, arterial dynamic messaging signs, and video vehicle detection systems. The TSM&O software program is responsible for developing systems that ensure a seamless network of ITS functions along Florida's major transportation corridors. The Code of Federal Regulations includes ITS technologies related to regional ITS architecture as an effective strategy within the Congestion Management Process. In turn, the ITS Group is working on incorporating future technological enhancements, including transit signal priority for priority networks, to support current efforts from the County to improve traffic efficiency.

A priority score was calculated for each segment as the sum of its traffic, safety, and transit scores. Segments with the highest combined needs for traffic, safety, and transit improvements received the highest priority.

Urban Air Mobility (UAM) is an emerging technology that uses air travel for short-distance trips. UAM is designed to operate most effectively in urban areas by circumventing significant congestion issues faced by ground transportation. Concepts are typically based around the utilization of electric vertical takeoff and landing (eVTOL) aircraft, which envisions a network of electric, roughly helicopter-sized aircraft that would operate in coordination with the existing transportation network.



Operations and Maintenance

Maintenance responsibility for roadways and bridges resides with the facility owner. Funding is first set aside to meet maintenance responsibilities before the programming of new capacity projects.

Federal and state maintenance policies are focused on performance based decision making. Because statewide transportation system needs exceed available funding, investment and project programming decisions are strategic, focusing on meeting performance measure criteria.

The State and TPA are federally required to adopt performance targets for road and bridge assets on the National Highway System (NHS), with FDOT’s Asset Management Plan guiding the process.

Roads

FDOT routinely collects data for all state owned and non-state NHS roadways. The state is federally required to utilize standardized national criteria for assessing pavement condition. Other non-state owned roadways are maintained by roadway owner which may adhere to a specific roadway resurfacing lifecycle schedule.

Owner	Total Centerline Miles		
	All Public Roads	Federal-aid eligible	NHS
FDOT	477	476	321
County	1,286	530	73
Local/Other	2,156	236	1
Total	3,919	1,242	395

Bridges

Although maintenance responsibility remains with the facility owner, inspection and ratings of bridges is performed by FDOT consultants following the Structures Inspection Program. This program identifies critical bridge safety deficiencies and other non-critical deficiencies. By correcting non-critical deficiencies, the structure’s service life is lengthened, total maintenance costs are reduced, and the public receives a better return on their investment.

Owner	All Bridges	Federal-aid eligible	NHS
FDOT and Other State Agencies	273	261	186
County	221	186	34
Local/Other	92	30	0
Total	586	474	220





Resilience

The 2050 LRTP includes resiliency related goals to help guide future project priorities and funding decisions with potential impacts related to a changing climate in mind. Resiliency regarding transportation is the capacity of the system to withstand damages from climate impacts, be incorporated during development and redevelopment, and reduce the carbon footprint of transportation projects. All previously discussed needs and future projects need to consider potential future climate impacts and how that can affect the transportation system in Palm Beach County.

Sea level rise, shoreline erosion, storm surge, flooding, and fire are increasingly challenging the integrity of the transportation system.

The FDOT's Resiliency Action Plan includes a vulnerability assessment that (1) identified potential impacts of flooding, storm surge, and sea level rise to the State Highway System (SHS), (2) developed tiers to prioritize SHS segments within geographic areas that may experience impacts, and (3) compiled a project list for improvements in the high- and medium-priority geographic areas. Planning or project development and environmental (PD&E) studies may be performed to obtain more detailed information on potential impacts of hazards on prioritized SHS segments.

Palm Beach County Office of Resilience offers multiple ways to combat these climate challenges. The Coastal Resilience Partnership (CRP) of Southeast Palm Beach County was formed in 2019 to work on completing a joint climate change vulnerability assessment. This assessment summarized and assessed various threats to the climate and as well as assets at risk due to climate change.

Property Assessed Clean Energy (PACE) financing is available to property owners to help fund energy efficiency and renewable energy projects on their property. The County also has permitted 887 separate solar installations community-wide and is recognized as a SolSmart Gold community.

The Southeast Florida Climate Compact aims to reduce regional greenhouse gas emissions and build climate resistance. Their RCA Plan 3.0 recommends ensuring equitable distribution of benefits of transit-oriented developments and supporting first and last mile pedestrian and bicycle connections.

To achieve the resiliency related goals, the LRTP also discusses the use of alternative fuel corridors, EV infrastructure, and operations and maintenance of existing infrastructure.



Call for Projects

In addition to the identified needs that came out of the multimodal needs plan, the TPA conducted a "Call for Projects" to allow local partners to submit projects for consideration in the LRTP. These are included in the preliminary projects list. The list includes a variety of projects that range from those which are early in the planning process with little committed funding to those that may be partially funded and have passed through some phases of the typical project phases including feasibility study, PD&E, or design. The full list of these projects is included in [Appendix F](#).

Project categories include:

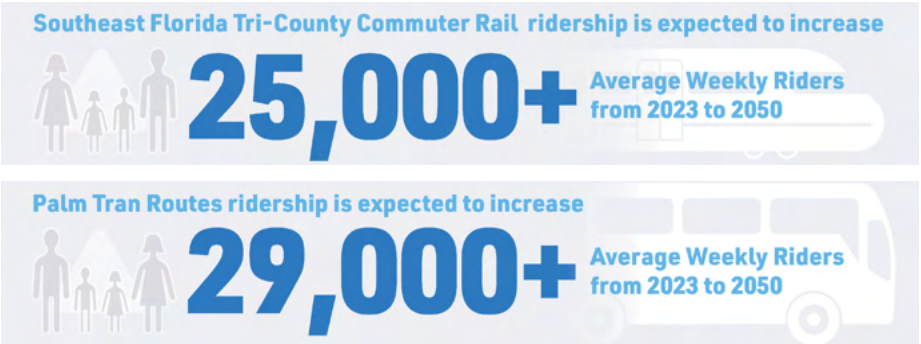
- **Candidate Project:** Project with strong alignment to Goals and Objectives that will be considered for TPA support and inclusion in Vision 2050
- **Illustrative Project:** TPA supported projects that cannot be funded by available revenues. Projects with this status currently reflect rural transportation needs of regional nature that will be included for future state or county implementation.
- **Other Local Projects Submitted ([Appendix L](#)):** Project requests that may lack strong alignment with Goals and Objectives, and may also not address regional transportation needs. These individual projects are not included as TPA priorities nor are they eligible for state/federal funds. They have the potential to be reevaluated with regard to the TPA's support, based on clarification of the proposed transportation improvement.

The Palm Beach TPA uses a performance-based approach to identify candidates. It is crucial to consider mutually supportive outcomes that align with Goals, Objectives, and Performance Measures, while also incorporating a systematic approach to safety, leveraging technology, and regional emphasis.

Scenario Planning

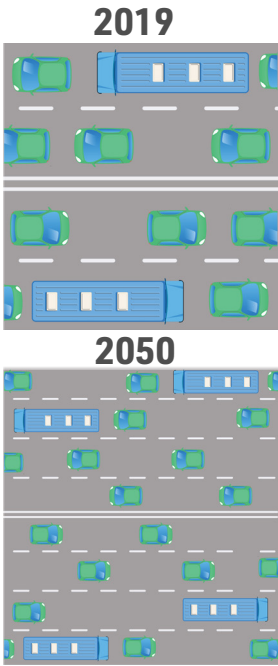
Transit Desires Plan

The TPA 2050 LRTP team used the Federal Transit Administration Simplified Trips on Project Software (STOPS) for Palm Beach County (PBC) to develop ridership forecasts for the Transit Desires Plan. The modeled plan includes premium transit services offered in the 561 Plan corridors, new express buses, new local bus routes, improvements to the existing local bus service frequencies, and Palm Beach International Airport (PBI) to Palm Beach Intermodal Transfer Center (ITC) connector. The commuter rail service expansion includes two additional stations on Tri-Rail within the current service alignment, Tri-Rail VA Hospital extension, and Tri-Rail Coastal Link (TRCL) service along the Florida East Coast (FEC) Railroad existing corridor. The team also performed sensitivity analyses ([Appendix G](#)) to understand the transit demand impacts of uncertainties in future automobile congestion levels, local bus network assumptions, and level of assumed transit facility



Technology Scenario

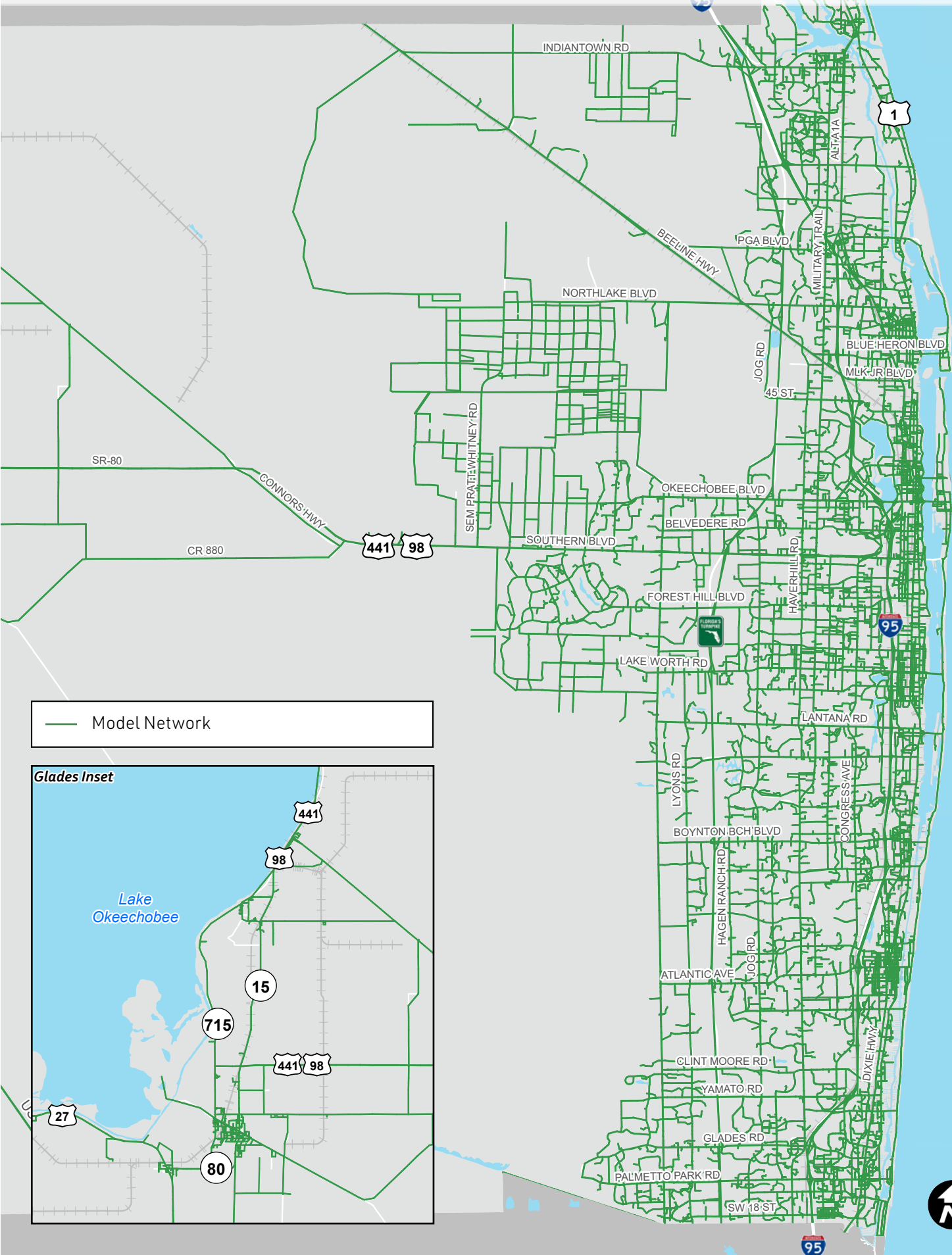
The TPA 2050 LRTP team developed a technology scenario that modeled and quantified the impacts of (some level of) adoption of automated vehicles (AV) and connected vehicles (CV) technology on travel demand by 2050. It is expected that with the adoption of AV/CV, the roadway capacities (in terms of vehicle flows per hour per lane a roadway can accommodate) will increase. To account for a high degree of uncertainty regarding the effects of the technology, the LRTP team modeled two AV/CV scenarios using Southeast Florida Regional Planning Model version 9 (SERPM9) with the following assumptions on the roadway capacities - (1) Alternative 1: 50% increase in capacity on expressways and 33% increase in capacity on all other roadways, and (2) Alternative 2: 25% increase in capacity on expressways and 15% increase in capacity on all other roadways. The results from the AV/CV scenarios indicate that the with the adoption of AV/CV and expected increase in roadway capacities, the congestion level on roadways within Palm Beach County in 2050 will be similar to the 2019 congestion levels even with the continued population and employment growth in the county.



Commute Scenario

The TPA 2050 LRTP team modeled the commute scenario using the Southeast Florida Regional Planning Model version 9 (SERPM9) based on expectations that both the work-from-home and the telecommuting will continue to be at a higher level than prior to the COVID pandemic. Overall, the assumption is that 31% of the workers will have some kind of work-from-home or telecommuting arrangement (compared to 14% before the pandemic) in 2050. The model results (modeled independently without any AV/CV adoption assumption) suggest that even with the higher (compared to pre-COVID levels) expected work from home and telecommuting trend, the reduction in overall vehicle trips within Palm Beach County will be small and hence the improvement in roadway congestion levels will be limited. This is because commute travel represents only 14% of all travel that occurs in the Southeast Florida region.

SERPM 9 NETWORK USED FOR SCENARIO PLANNING



FINANCIAL RESOURCES

Introduction

Federal and state law require the LRTP to include a financial plan that indicates how projects will be built using reasonably expected available revenues. The following section provides a breakdown of how revenues are generated from various sources out to the year 2050.

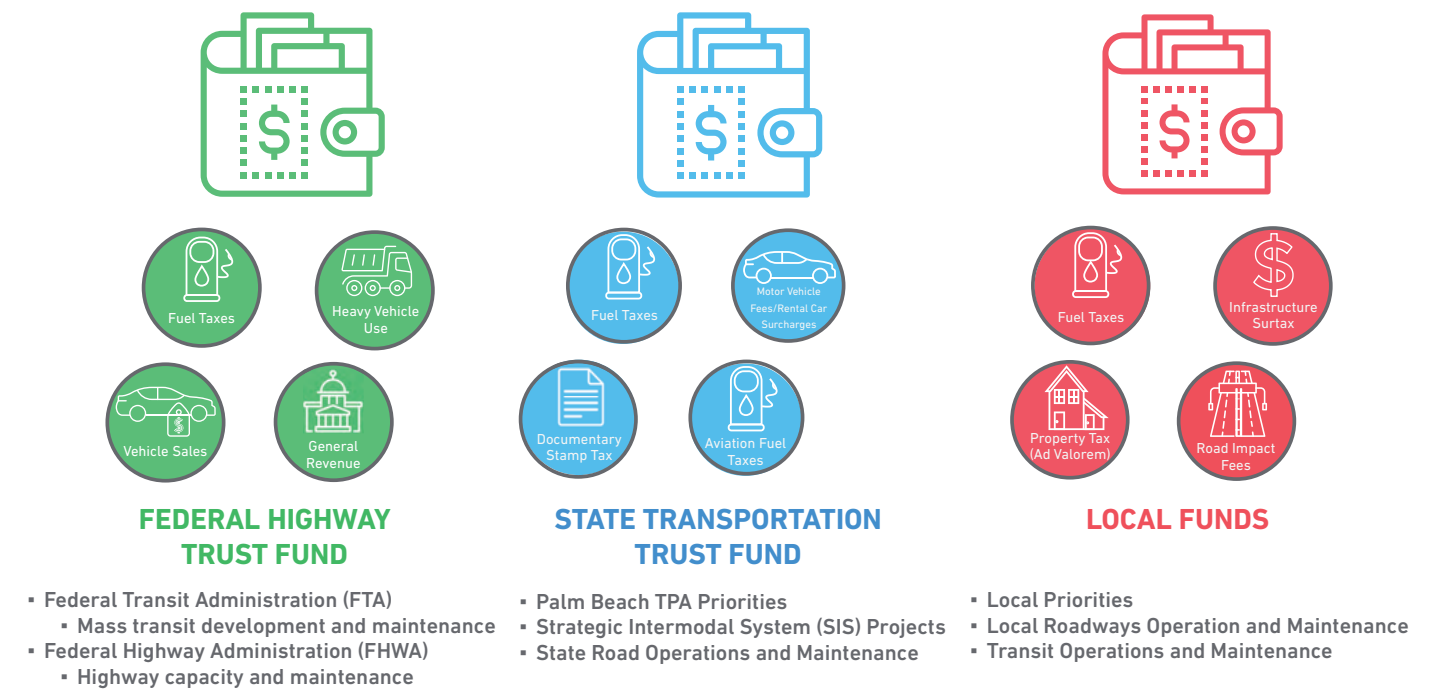
The federal and state revenue projections are consistent with FDOT’s 2050 Revenue Forecast Handbook. Local funding sources are also included for informational purposes to provide greater transparency on total funding invested towards transportation within Palm Beach County.

Detailed information regarding specific program details and funding eligibility can be found in the FDOT’s *2050 Revenue Forecast Handbook* and will be cited as appropriate in this document.

Funding Sources

Federal Funding

Federal funds are dependent on legislation related to transportation that is passed by Congress and signed by the President into law. The federal legislation appropriates funding based on needs, by formula (population), and also through competitive discretionary programs. The federal funding projections provided in the LRTP to establish fiscal constraint tends to be formula-based. As of 2021, the Infrastructure Investment and Jobs Act Funding (IIJA) is estimated to allocate approximately \$13.5 billion to the State of Florida over the five-year period from FY 2022 through FY 2026. As part of this revenue forecast for the Palm Beach TPA 2050 LRTP, the following federal funding sources were considered and incorporated:



State Funding

The following revenue sources are typically considered in the development of the revenue forecast as they contribute to the State Transportation Trust Fund (STTF).

- State Highway Motor Fuel Taxes
- Motor Vehicle License Related Fees
- Tourism-Based Taxes (Rental Car Surcharges)
- Documentary Stamp Taxes

The majority of state funded revenue typically comes from the fuel tax. As the state transitions to alternative fuel sources and EVs in the future, the revenue gained from this source will likely diminish.

Local Funding

Local funding sources evaluated for the local revenue forecasts include the following:

- Gas Taxes
- General Fund
- Impact Fees

Projection Methodology

Federal and State Funds

For each LRTP update, FDOT provides Palm Beach TPA with an estimate regarding state and federal funds combined. This estimate is available in the Florida Department of Transportation 2050 Revenue Forecast Handbook. Revenues for federal and state funding sources were grouped into the following categories to provide a clearer picture of allocation and responsible agencies:

- TPA Program Estimates
- Discretionary Programs (Informational)
- FDOT Program Estimates
- FDOT Operations and Maintenance

SIS Funds

The projected SIS revenues are based on the specific projects in two FDOT Plans:

- Strategic Intermodal System Long Range Cost Feasible Plan, FY 2035 to 2050

Turnpike Funds

The projected Turnpike funds are based on specific projects in the Florida Turnpike Enterprise’s Palm Beach County Major Project List.

Local Funds

Local funds were projected based on historic trends and documents obtained from local governments and agencies related to budgeting, impact fees, and other local taxes.

Funding Projections

A full breakdown of funding projections for each section is provided in [Appendix H](#), the 2050 Financial Resources Report.

Federal and State Funds

TPA Program Estimates

The TPA has more direct programming responsibility over these sources. Funding sources included in the estimates include Surface Transportation Block Grant – Urbanized Areas (SU), Transportation Alternatives – Urbanized (TALU), Estimated Transportation Alternatives – Any Area (TALT) – Districtwide amount available to Palm Beach County, State Highway System (non-SIS), and State Highway System (non-SIS) SHS Product Support.

Discretionary Programs

Several federal, state, and local funding programs are classified as “discretionary” and only include those reoccurring programs administered regionally at the state level. The purpose of this section is to note that these funding sources are relevant but can vary throughout planning. Projections for other roads (Non-SIS, Non-SHS), Product Support for other roads (Non-SIS, Non-SHS), TRIP, State New Starts, SUN Trail, and Highway Safety Improvement Program (HSIP) are included.

FDOT Operations and Maintenance

Consistent with Metropolitan Planning Organization Advisory Council (MPOAC) Guidelines, FDOT and FHWA agreed that each 2050 LRTP will meet FHWA expectations if it contains planned FDOT expenditures to operate and maintain SHS facilities at the FDOT District level. For the district estimates, FDOT identified federal and state funds allocated to the resurfacing, bridge, and operations and maintenance programs

SIS Expenditures

FDOT District Four provided the SIS projects (descriptions, phases, costs) for inclusion from the SIS Cost Feasible Plan. Additional unfunded SIS Projects are listed as Illustrative.

Florida’s Turnpike Enterprise Expenditures

These estimates are based on the Turnpike’s Major Project List for Palm Beach County and include widening North of Atlantic Ave/SR 806 to North of L-30 Canal, widening North of L-30 Canal to North of Boynton Beach Blvd/SR 804, and interchange improvement at Glades Road/ SR808.

Funding Group	FY 25-29 ²	FY 30-35	FY 36-40	FY 41-50	FY 30-50 Total
TPA Program Estimates (in millions)					
Surface Transportation Block Grant - Urbanized Area (SU)	120.01	111.07	92.21	184.41	387.69
Transportation Alternatives - Urbanized (TALU)	15.60	20.20	16.84	33.69	70.73
Transportation Alternatives - Any Area (TALT) - Districtwide	30.24	36.85	30.75	61.50	129.10
Palm Beach County Estimated Allocation ¹	8.84	13.47	11.24	22.47	47.18
State Highway System (Non-SIS)	162.97	67.79	60.49	123.14	251.42
State Highway System (Non-SIS) SHS Product Support	7.2	14.91	13.31	27.09	55.31
Total	314.62	227.44	194.09	390.8	812.33
State and Regional Discretionary Programs (in millions)					
Other Roads (Non-SIS, Non-SHS)	15.6	32.58	30.1	61.28	123.96
Other Roads (Non-SIS, Non-SHS) Product Support	3.43	7.17	6.62	13.48	27.27
Transportation Regional Incentive Program ³ (Districtwide)	45.63	54.59	48.22	98.36	201.17
Palm Beach County Estimated Allocation ¹	16.33	19.98	17.62	35.94	73.54
State New Starts (Statewide)	300.89	341.10	300.6	613.21	1254.91
Shared-Use Nonmotorized Trail (Statewide)	125.00	150.00	125.00	250.00	525.00
Local Highway Safety Program (HSIP) (Districtwide)	102.85	110.01	91.03	182.05	383.09
Palm Beach County Estimated Allocation ¹	34.66	40.19	33.26	66.52	139.97
Total	70.02	99.92	87.60	177.22	364.74
FDOT Operations and Maintenance (in millions)					
District SHS Resurfacing, Bridge, and O&M (Districtwide)	1636.75	1813.14	1537.82	3125.74	6476.10
Palm Beach County Estimated Allocation ¹	625.33	662.26	561.88	1142.06	2,366.20
Total	625.33	662.26	561.88	1,142.06	2,366.20
SIS/Turnpike	2,214.70	690.73	1308.86	621.5	2,621.09

¹ Projected funding that may be available to Palm Beach County is based on the proportion of the County’s population to the total population within FDOT District 4 according to 2020 Census Bureau population estimates (37%). This is for reference and does not indicate that the funding is committed to Palm Beach County.

² This column refers to the TPA’s currently adopted Transportation Improvement Program (TIP) for Present-Day Costs.

³ This program is prioritized by Southeast Florida Transportation Council (SEFTC)



COST FEASIBLE PLAN & TPA PRIORITIES

Vision 2050 is required to include a financial plan that establishes “Cost Feasible” transportation priorities, or those projects that can reasonably be expected to be completed based on available revenues through the horizon year of 2050. This Cost Feasible Plan reflects the TPA’s priorities for expenditures of Federal and State funds in Palm Beach County.

Additional transportation priorities that are supported by the TPA but cannot be completed based on available financial resources may be included for “Illustrative” purposes. These projects may require additional planning by local partners or the TPA to become eligible for funding. Those that are fully planned and supported may require discretionary funding to advance to implementation.

Although the LRTP is primarily focused on the planning and prioritization of federal and state dollars, the financial section also documents local government investments, to the degree that information is made available to the TPA. These are reported to provide the full cost of transportation within Palm Beach County, including local government investments.

Programming Time Bands

The Cost Feasible Plan programs available funding over the following programming time bands:

- FY 25-29 (the TPA's currently adopted Transportation Improvement Program (TIP))
- FY 30-35
- FY 36-40
- FY 41-50

The first five years of the LRTP are consistent with the TPA’s TIP. Projects in the TIP are moving through implementation and may experience more refined project cost estimates. Changes to phases and costs are periodically updated in the LRTP.

Projects are sorted into time bands based on TPA priority, funding availability, and feasibility. However, priorities and production schedules are continuously shifting, and it is not uncommon for project phases to shift year to year. These changes will be captured in amendments or modifications to the tables.

Programming Phases

Project Development & Environmental ¹ (PDE)	Preliminary Engineering (PE)	Right-of-Way (ROW)	Construction (CST)	Operations (OPS) ²
Environmental and engineering review process to determine a preferred design	Detailed design of a project	The aquisition of property, if required	Full construction of a project, or for the purchase of capital (i.e. transit vehicles)	The required annual commitment to operations

¹For the purposes of the Cost Feasible Plan, funding may show under the PDE phase although it may just be a high-level planning study.
²This is for informational purposes to provide an understanding of ongoing operations costs.

Fiscally Constrained Plan

The Fiscally Constrained Plan is categorized into the following sections:

TPA Supported Projects – supported by the TPA for federal and state funding

TPA Priorities – projects directly prioritized using TPA attributable federal and state funding.

Strategic Intermodal System (SIS) – TPA support projects prioritized by FDOT and Florida Turnpike using federal, state, and Turnpike funding. These projects originate out of and are consistent with the SIS Plan.

Illustrative Projects – TPA supported projects that are not “Cost Feasible.” These are projects that align with TPA Goals and Objectives but may not have cost estimates, may not have available funding for implementation, and may not have funding for ongoing operations and maintenance. These projects have the support of the TPA to pursue federal and state discretionary grants.

Seaport and Airport Projects – specific projects carried out by Seaport and Airport partner agencies. Projects may or may not have a full cost estimate. These projects have the support of the TPA to pursue federal and state discretionary grants.

Maintenance Projects – this list includes a generalized total cost for ongoing operations and maintenance of the transportation system with federal and state funds, but also includes specific line items for larger-scale maintenance projects. These projects have the support of the TPA to pursue federal and state discretionary grants.

Other Local Projects Submitted during the Call for Projects ([Appendix K](#)) – projects submitted through partner agencies or identified in other plans that are provided for reference but are not formally supported by the TPA for federal and state funding. However, these projects may be administered and funded with local funding.

If a local project seeks federal or state funding, the project will need to be amended into one of the TPA Support Projects lists.

COST FEASIBLE TPA TABLE SUMMARY (IN THOUSANDS)

	FY 25-29	FY 30-35	FY 36-40	FY 41-50	Total	Unfunded (includes illustrative)
TPA Revenues	\$434,499	\$244,230	\$208,080	\$418,770	\$1,305,579	
TPA Prioritized Expenditures	\$410,062	\$162,333	\$148,734	\$298,030	\$1,019,158	\$5,178,304
TA Set- Aside	\$24,437	\$33,674	\$28,080	\$5,616	\$91,807	
Balance		\$48,223	\$31,266	\$115,124	\$194,614	

COST FEASIBLE SIS TABLE SUMMARY (IN THOUSANDS)

	FY 25-29	FY 30-35	FY 36-40	FY 41-50	Total	Unfunded (includes illustrative)
FDOT Expenditures	\$433,384	\$282,509	\$286,143	\$2,847,432	\$3,849,468	\$10,055,690
Turnpike Expenditures	\$1,195,700	\$745,041	\$-	\$-	\$1,940,741	\$4,007

TPA PRIORITIES - COST FEASIBLE

				Present Day Costs (FY24) [in thousands]							FY 25-29				FY 30-35				FY 36-40				FY 41-50					
Project Name	L RTP#	FM#	Description	PDE	PE	ROW	CST	Total	O&M	Previous	PDE	PE	ROW	CST	PDE	PE	ROW	CST	PDE	PE	ROW	CST	PDE	PE	ROW	CST	CF Total	Unfunded
Federal Hwy Intersection Improvements @ 20th Street	BOC0024		Complete Streets - Safety, traffic signals	\$67	\$400		\$2,599	\$3,065							\$89	\$532						\$4,184					\$4,804	
Flagler Dr Complete Street from Gregory Place to 59th Street	WPB0051		Complete Streets - Roadway modification, landscaping, bicycle lanes, sidewalks, safety	\$569	\$3,416		\$22,203	\$26,189							\$757	\$4,543						\$35,747					\$41,048	
Gardens Pkwy Complete Street from Alt A1A to Prosperity Farms Rd	PBG0012	TBD	Complete Streets - Pathway, bicycle lanes	\$105	\$631		\$4,103	\$4,840				\$5		\$4,620													\$4,625	\$105
Grapeview Blvd from Key Lime Blvd to 60th St and Key Lime Blvd from Hall to M-1 Canal	TA-21-3	4490021	Complete Streets - Shared use path, pathway											\$1,658													\$1,658	
Greenbriar Blvd from Aero Club Drive to Greenview Shored Blvd.	LI-20-4	4482991	Complete Streets - Bicycle lanes				\$2,453	\$2,453			\$5			\$2,421													\$2,426	
Greenbrier Dr Complete Street from Davis Rd to Congress Ave	PS0002		Complete Streets - Sidewalk, bicycle lanes	\$36	\$217		\$1,411	\$1,665							\$48												\$48	\$1,628
Greenview Shores Blvd from Binks Forest Dr to Wellington Tr	LI-19-6	4460821	Complete Streets - Bicycle lanes				\$1,258	\$1,258			\$5			\$1,253													\$1,258	
Hamlin Blvd from Hall Blvd to Grapeview Blvd; Grapeview Blvd from Hamlin Blvd to Citrus Grove Blvd; Citrus Grove Blvd from Hall Blvd to Avocado Blvd	TA-22-1	4507871	Complete Streets - Shared use path, pathway											\$1,300													\$1,300	
Holly Dr Complete Street from N. Military Trail to Lighthouse Dr	PBG0015		Complete Streets - Widen sidewalk, crosswalks, grade separated pedestrian bridge	\$37	\$221		\$1,435	\$1,692											\$59								\$59	\$1,656
Hood Rd Complete Street from Jog Rd to Alt A1A	PBG0009		Complete Streets - Shared use path, bicycle lanes, sidewalk	\$200	\$1,202		\$7,816	\$9,219							\$267												\$267	\$9,019
ITID Pathways along 140th Ave N from Orange St to 61st St N and 61st St N from 140th Ave N to the M-1 Canal	TA-23-5	TBD	Complete Streets - Pathway									\$5		\$526													\$531	
ITID Pathways along 140th Ave N, Temple Blvd, and Hall Blvd	LI-23-1	TBD	Complete Streets - Shared use path, pathway				\$5,369	\$5,369										\$7,141									\$7,141	
Kyoto Gardens Dr Complete Street from N Military Trail to Fairchild Gardens Ave	PBG0002		Complete Streets - Intersection reconstruction, roundabout, shared use path, bicycle lanes, lane narrowing	\$73	\$440		\$2,860	\$3,373											\$118								\$118	\$3,300
Lake Ave Complete Street from Belvedere Rd and Southern Blvd	WPB0056		Complete Streets - Lane narrowing, landscaping, bicycle lanes, safety	\$67	\$404		\$2,629	\$3,101											\$109								\$109	\$3,033
Lake Ida Rd Intersection Improvements @ N Congress Ave	DEL0008		Complete Streets - Pedestrian, bicycle, accessibility, safety	\$56	\$336		\$2,184	\$2,576											\$90	\$541		\$3,517					\$4,148	
Lilac St from North Military Trl to Plant Dr	TA-23-4	TBD	Complete Streets - Shared use path, pathway, crosswalk									\$5		\$1,144													\$1,149	
Linton Blvd Intersection Improvements @ S Congress Ave	DEL0010		Complete Streets - Pedestrian, bicycle, accessibility, safety	\$56	\$336		\$2,184	\$2,576							\$74	\$447		\$2,905									\$3,427	
Mercer Ave Complete Street from Belvedere Rd to Australian Ave	WPB0060		Complete Streets - Maintenance, curb relocation, drainage, landscaping, ADA	\$3,735	\$22,409		\$145,658	\$171,802							\$4,967												\$4,967	\$168,067
Military Trl (SR 809) Complete Street from C-17 Canal to Donald Ross Rd	PBG0018		Complete Streets - Widen sidewalks, shared use paths, crosswalks, sidewalk, ADA, bicycle boulevard	\$258	\$1,546		\$10,048	\$11,852											\$415								\$415	\$11,594
Military Trl (SR 809) Shared Use Path from Town Center Mall to Spanish River Park	BOC0039		Complete Streets - Shared use path	\$250				\$250							\$333												\$333	
Mizner Blvd Complete Street from S Federal Hwy to N Federal Hwy	BOC0034		Complete Streets - Complete Streets: Multimodal Accommodations	\$66	\$398		\$2,589	\$3,054											\$107								\$107	\$2,988

TPA PRIORITIES - COST FEASIBLE

				Present Day Costs (FY24) [in thousands]						FY 25-29					FY 30-35				FY 36-40				FY 41-50					
Project Name	L RTP#	FM#	Description	PDE	PE	ROW	CST	Total	O&M	Previous	PDE	PE	ROW	CST	PDE	PE	ROW	CST	PDE	PE	ROW	CST	PDE	PE	ROW	CST	CF Total	Unfunded
Northlake Blvd Complete Street from PBG City limits to Congress Ave	PBG0016		Complete Streets - Sidewalk widening, shared use path, crosswalks	\$107	\$639		\$4,155	\$4,900							\$142											\$142	\$4,794	
NW 2nd Ave Complete Street from E Palmetto Park Rd to NW 67th St	BOC0038		Complete Streets - Protected bicycle lanes	\$281	\$1,685		\$10,951	\$12,917											\$452							\$452	\$12,636	
NW 6th Way from South of NW 38th Drive/Circle to Spanish River Blvd	TA-23-1	TBD	Complete Streets - Shared use path, intersection modifications									\$5		\$969												\$974		
Okeechobee Gateway from West of Australian Ave to the ICWW	TPA0014		Complete Streets - Corridor Study	\$2,000				\$2,000							\$2,000											\$2,000		
Old Dixie Hwy Complete Street from Linton Blvd to SE 10th St	DEL0004		Complete Streets - Corridor Study	\$34	\$205		\$1,333	\$1,572							\$45	\$273									\$2,146		\$2,464	
Old Okeechobee Rd Complete Street from Mercer Ave to Parker Ave	WPB0061		Complete Streets - Maintenance, roadway, sidewalks, ADA, protected bicycle lanes, crosswalks	\$33	\$196		\$1,272	\$1,500															\$65			\$65	\$1,468	
Palm Beach Lakes Complete Street from Okeechobee Blvd 7th Street	WPB0055		Complete Streets - Roadway, landscaping, sidewalk, bicycle lanes, safety, ADA, resilience	\$141	\$843		\$5,481	\$6,464											\$226							\$226	\$6,324	
Palmetto Park Road Complete Street from SW 3rd Ave to A1A	BOC0030		Complete Streets - Corridor study	\$89	\$535		\$3,479	\$4,104							\$119											\$119	\$4,015	
Parker Ave Complete Street from Belvedere Rd to Okechobee Blvd	WPB0062		Complete Streets - Roadway, landscaping, sidewalk, bicycle lanes, safety, ADA, resilience	\$71	\$428		\$2,783	\$3,283											\$115							\$115	\$3,212	
PGA Blvd (SR 876) Complete Street from Beeline Hwy to Prosperity Farms Rd	PBG0013		Complete Streets - Shared use path, buffered bicycle lane, widen sidewalk, crosswalks	\$852	\$5,110		\$33,213	\$39,175											\$1,371							\$1,371	\$38,323	
Prosperity Farms from 800' N of Northlake Blvd to Donald Ross Rd	LI-21-2	4498471	Complete Streets - Bicycle Lanes				\$7,700	\$7,700			\$5			\$5,975												\$5,980		
Quadrille Blvd Complete Street from Okeechobee Blvd to N Dixie Hwy	WPB0044		Complete Streets - Roadway, landscaping, sidewalk, bicycle lanes, safety, ADA, resilience	\$65	\$389		\$2,530	\$2,984							\$86											\$86	\$2,919	
Shenondoah Rd Complete Street from Military Trl to Village Blvd	WPB0053		Complete Streets - Roadway, landscaping, sidewalk, bicycle lanes, safety, ADA, resilience	\$50	\$298		\$1,934	\$2,281															\$99			\$99	\$2,232	
South East Coast St and S. H Street	LI-20-3	4483541	Complete Streets - Traffic operations, bicycle lanes				\$7,889	\$7,889				\$5		\$7,884												\$7,889		
Spruce Ave from 36th St to 40th St	TA-23-3	TBD	Complete Streets - Bicycle lanes, sidewalks, ADA, crosswalks, safety, lighting									\$5		\$1,578												\$1,583		
SR 7 Complete Street from PBC Line to SR 80 (Southern Blvd)	FDOT0125		Complete Streets - Corridor study	\$300				\$300							\$399											\$399		
SR 7 from Glades Rd to Bridgebrook Dr	MP-21-4	4476701	Complete Streets - Resurfacing, bicycle lanes				\$11,749	\$11,749						\$11,749												\$11,749		
SR 715 from Hatcher Rd to Paul Rardin Park, SR 715 from Airport Rd to SW 14th St	MP-20-5	4479451	Complete Streets - Sidewalk				\$2,030	\$2,030				\$378														\$378	\$2,030	
Summit Blvd Complete Street from Jog Rd to Parker Ave	WPB0048		Complete Streets - Corridor study	\$658	\$3,945		\$25,645	\$30,248											\$1,059							\$1,059	\$29,590	
SW 10th Ave Complete Street from Linton Blvd to SW 10th St	DEL0007		Complete Streets - Corridor study	\$34	\$205		\$1,333	\$1,572											\$55							\$55	\$1,538	
SW 18th St from Military Trl to Addison Ave	TA-22-5	TBD	Complete Streets - Shared use path, sidewalks, crosswalks											\$1,565												\$1,565		
Temple Blvd, Hall Blvd, 140th Ave Speed Tables	LI-22-7	4507951	Complete Streets - Seminole Speed Tables				\$627	\$627				\$5		\$526												\$531		
US 1 Complete Street from 59th St to Northlake Blvd	2045-TPA021.B	4383862	Complete Streets - Reconstruct as 4 lanes with multimodal improvements							\$2,307				\$12,380												\$12,380		

TPA PRIORITIES - COST FEASIBLE

[illegible]

STATE PRIORITIES/STRATEGIC INTERMODAL SYSTEM - COST FEASIBLE

Project Name	LRTP#	FM#	Description	Present Day Costs (FY24) [in thousands]						Previous	FY 25-29				FY 30-35				FY 36-40				FY 41-50				CF Total	Unfunded
				PDE	PE	ROW	CST	Total	O&M		PDE	PE	ROW	CST	PDE	PE	ROW	CST	PDE	PE	ROW	CST	PDE	PE	ROW	CST		
Southern Blvd (SR 80) Intersection Improvements @ SR 7	2045-SIS028	4378681	Road Capacity - Interchange Modification: Lane Addition - Turn Lanes		\$5	\$408	\$9,555	\$9,968		\$1,507		\$5	\$408	\$9,576													\$9,989	
Southern Blvd (SR 80) Highway Capacity from West of Binks Forest Drive to West of Royal Palm Beach Blvd	FDOT0104	4427831	Highway Capacity - Multimodal (potentially widen 6L to 8L)	\$1,500	\$2,587	\$37,377	\$29,021	\$70,485										\$2,415						\$5,173	\$37,377		\$44,965	\$29,021
Turnpike Interchange Consruction @ Hypoluxo Rd	TPKE0015	4397411	Road Capacity - New Interchange				\$2,000	\$2,000				\$2,000															\$2,000	\$2,000
Turnpike Lane Addition from Beeline Hwy to PGA Blvd	TPKE0009	4157481	Road Capacity - Lane Addition: 4L to 8L, includes Beeline Hwy and PGA Blvd interchanges			\$5,232	\$224,115	\$229,347				\$600	\$5,232	\$224,115													\$229,947	
Turnpike Lane Addition from Broward County Line to North of Glades Rd	TPKE0001	4182145	Road Capacity - Lane Addition and TSM&O: Auxiliary Lanes				\$97,042	\$97,042						\$151,814													\$151,814	
Turnpike Lane Addition from North of Atlantic Ave to North of L-30 Canal	TPKE0004	4371691	Road Capacity - Lane Addition: 6L to 10 L w/ Thru Lanes		\$2,747	\$7,355	\$104,140	\$114,242		\$9,965		\$2,747	\$7,355					\$138,506									\$148,608	
Turnpike Lane Addition from North of Boynton Beach Blvd to Southern Blvd	TPKE0006	4061435	Road Capacity - Lane Addition: 4L to 6L				\$280,995	\$280,995		\$306,917				\$4,300													\$4,300	
Turnpike Lane Addition from North of Glades Rd to North of L-38 Canal	TPKE0002	4171321	Road Capacity - Lane Addition: 6L to 10L w/ Thru Lanes			\$574	\$272,932	\$273,506				\$8,000	\$574	\$250,364													\$258,938	
Turnpike Lane Addition from North of L-30 Canal to North of Boynton Beach Blvd	TPKE0005	4371694	Road Capacity - Lane Addition: 6L to 10L w/ Thru Lanes, includes Boynton Beach Blvd interchange		\$2,977		\$105,312	\$108,289				\$2,977						\$140,065									\$143,042	
Turnpike Lane Addition from North of L-38 Canal to North of Atlantic Ave	TPKE0003	4171324	Road Capacity - Lane Addition: 6L to 10 L w/ Thru Lanes, includes Atlantic Ave interchange		\$4,650		\$129,701	\$134,351				\$4,650		\$129,701													\$134,351	
Turnpike Lane Addition from North of Okeechobee Blvd to Beeline Hwy	TPKE0008	4061436	Road Capacity - Lane Addition: 4L to 8L				\$134,452	\$134,452		\$10,162		\$600		\$134,452													\$135,052	
Turnpike Lane Addition from Indiantown Rd to Martin County Line	TPKE0013	4462181	Road Capacity - Lane Addition: 4L to 6L				\$2,007	\$2,007			\$2,007																\$2,007	\$2,007
Turnpike Lane Addition from Southern Blvd to Okeechobee Blvd	TPKE0007	4061438	Road Capacity - Lane Addition: 4L to 8L , includes Jog Rd and Okeechobee Blvd interchanges				\$263,712	\$263,712		\$438				\$263,712													\$263,712	
Turnpike Lane Addition from North of PGA Blvd to North of Indiantown Rd	TPKE0010	4157484	Road Capacity - Lane Addition: 4L to 8 L, includes Indiantown Rd interchange		\$500		\$350,729	\$351,229				\$500						\$466,470									\$466,970	
US 27 Freight Capacity from Broward County Line to Evercane Rd (Hendry County)	2045-SIS034		Freight - Capacity	\$2,000	\$39,341	\$16,189	\$413,075	\$470,606															\$2,000				\$2,000	\$468,606
Beeline Hwy (SR 710) ITS from Blue Heron Blvd to Congress Ave	2045-SIS001	TBD	Signals - Intersection & TSMO Improvements		\$1,295		\$13,014	\$14,309								\$1,722							\$20,953				\$22,675	
Beeline Hwy (SR 710) ITS from Congress Ave to Martin County Line	SIS0004		Signals - TSMO		\$2,300			\$2,300																\$4,600			\$4,600	
Southern Blvd (SR 80) ITS from US 27 to I 95	FDOT0105	4480121	Intelligent Transportation System - Corridor Management		\$1,576		\$17,687	\$19,263								\$1,576										\$37,107	\$38,683	
US 27 ITS from Broward County Line to South of SW 2nd St (South Bay)	FDOT0107	4462341	ITS retrofit		\$819		\$9,456	\$10,274											\$820							\$19,838	\$20,658	
US 27 ITS from Krome Ave (Miami-Dade County) to Evercane Rd (Hendry County)	FDOT0108		ITS Corridor Management - TSMO	\$2,217			\$25,612	\$27,829										\$2,217								\$53,733	\$55,950	

TPA PRIORITIES - ILLUSTRATIVE PROJECTS

[illegible]

TPA PRIORITIES - ILLUSTRATIVE PROJECTS

[illegible]

TPA PRIORITIES - ILLUSTRATIVE PROJECTS

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IMPLEMENTATION PLAN

Implementing transportation projects through 2050 must focus on creating adaptable, multimodal systems that enhance safety for non-motorists while providing flexible options for all travelers. The rapid growth of micromobility, such as e-scooters and e-bikes, alongside more traditional non-motorist travel like walking and bicycling, calls for an infrastructure that prioritizes safety over any other priority. Protected bike lanes, pedestrian-focused street design, and smart intersections are crucial to reducing conflicts between motorists and vulnerable road users. As new technologies emerge, transportation systems must be nimble enough to incorporate features like real-time data for traffic management and autonomous vehicle technology to enhance safety and reduce the risk of crashes, especially for those who share the road with cars.

The future of transportation also hinges on coordinated efforts to provide a range of travel options that can reduce congestion while maintaining personal choice. As the Palm Beaches grows, simply expanding roadways is not a sustainable solution to congestion; instead, robust public transit systems must evolve to offer viable alternatives. This includes high-frequency bus routes, light rail, and innovative solutions like autonomous shuttles and smart transit systems that dynamically adjust to rider demand. By creating seamless connections

between transit, micromobility options, and pedestrian pathways, travelers can move freely without relying on personal vehicles. However, it's equally important to maintain driving as an option for those who choose while not sacrificing the ability to develop active transportation networks. This is also true where transit options may not be as convenient or where personal vehicle use remains necessary for specific needs.

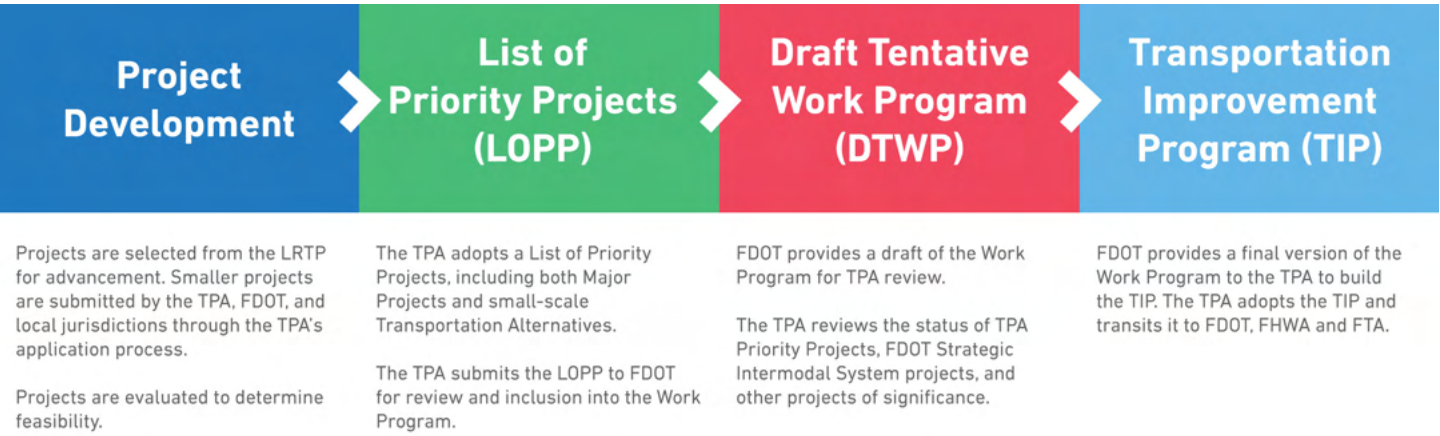
The evolution of transportation systems through 2050 will require tactical planning that accommodates both new technology and the diverse needs of travelers. Transit solutions should be designed to relieve congestion by encouraging a shift toward shared mobility and active transportation while still preserving driving as a viable option. Autonomous vehicles, shared ride services, and intelligent traffic management systems can reduce the strain on urban streets, while expanded public transit networks provide reliable alternatives for those looking to avoid congestion. At the same time, by offering safe, dedicated infrastructure for non-motorists and micromobility users, planners can ensure that streets remain equitable spaces for all, balancing sustainability, safety, and personal choice in transportation.

Prioritizing Projects for Implementation

The Vision 2050 LRTP serves as the guiding document and pipeline for implementing the 5-Year Transportation Improvement Program (TIP). Each year, projects are vetted for inclusion into the List of Priority Projects (LOPP). The list is formally reviewed by the advisory committees and approved by the Governing Board.

Projects make it into the LOPP based on their alignment with LRTP Goals and Objectives and "project readiness". Project readiness includes providing supportive information covering:

- Agency constructing the project
- Engineering-level cost estimate
- Community support
- Facility owner support
- Funding ongoing operations and maintenance



Getting Projects Built with TPA Funding

The **Transportation Alternatives (TA) Program** annually prioritizes smaller-scale non-motorized projects submitted by local agencies. Typically, minor projects like resurfacings or maintenance projects can include minor upgrades to enhance the multimodal nature of a corridor through this program. For example, a stormwater project could seek funding through the TPA to expand sidewalks, bike lanes, shared-use paths, or other capital improvements to ensure that the street is only reconstructed once. This saves the community heartache by only mobilizing traffic construction operations once, while also saving costs by combining capital projects. These projects typically last 3-5 years project submittal to final construction.

Projects ideas are submitted annually and based on their small size, are not required to be line items in the LRTP Cost Feasible Plan. The LRTP Cost Feasible and Illustrative Lists will be reviewed annually to identify projects that may be well-suited for implementation through the TA Program.

Major projects that are more transformative projects for communities such as lane repurposing, major capacity increases, complete streets, or other intensive construction efforts. These are facilitated through a major initiative with many project partners, including partner jurisdictions. The projects generally have at least a 5 year timeframe for implementation. They are identified as line-item projects within the LRTP. These projects will be reviewed annually in order to determine they prioritization and feasibility to move into implementation in the 5-year Transportation Improvement Program (TIP).

Getting Projects Built with Discretionary Funding

Projects in the Cost Feasible Plan and Illustrative List are supported by the TPA for both federal and state discretionary funding. See the Financial Resources section for some of the more common State and regional discretionary programs. In addition to the discretionary grants listed in this LRTP, millions of dollars are available through competitive State and Federal transportation grants. Federal grant information is available at transportation.gov/grants.

Similar to other projects in the List of Priority Projects (LOPP), projects seeking discretionary funding should display "project readiness." In fact, many of the projects in the LOPP are reviewed for potential discretionary funding.

Active Transportation - Corridor Based Improvements for Complete Streets Networks

The realization of complete streets networks requires an implementation framework where active transportation improvements should be included on all public works projects. Opportunities to improve rights-of-ways across many jurisdictions are evolving rapidly, inclusive of both tactical urbanism projects with quick build solutions, to tools to separate people from motor vehicles. When these opportunities are utilized, the resultant framework is a baseline for a future ready system for micromobility, economic development, and new means to move throughout Palm Beach County.

The TPA has identified 3 tiers of priority for the Federal Aid Eligible Roadway Network to consider for both people walking and people bicycling. These corridors should be considered in tandem with data developed through the FDOT Vulnerable Road User Safety Study, TPA High Injury Network, and locally adopted comprehensive roadway safety plans (also known as Vision Zero Action Plans).



The three tiers provide a mechanism to score higher project needs to greater emphasis. Tier 1 projects may be suitable for major project funding and should receive higher scores than a tier 2 or 3. Additionally, Tier 1 projects typically involve multiple partners, such as the FDOT and a city, or the County and many partners.

Finally, projects should strive to be effective in reducing the stress active transportation users face. Reducing the level of traffic stressed for people walking and bicycling is critical to building a equitable, business-friendly, future ready urban area. The aim for active transportation infrastructure projects should be to provide facilities where families of all ages, abilities, and identities are comfortable using them. TPA Resources available for implementing active transportation and complete streets networks include:

Policy Resources

- Complete Streets Model Policy** – used to identify the context and appropriate steps to addressing street improvements and addressing land use and transportation through a complementary lens.
- Complete Streets Design Guidelines** – A resource document used to identify the appropriate transportation systems based on surrounding context.
- Vision Zero** – The TPA has a number of resources helpful in implementing and creating vision zero areas, including policy and media information, crash data, and how to develop an action plan.

Funding Resources

- TPA funding programs** – the TA and Major projects funding is approximately \$50M annually, distributed through the TPA’s Priority Projects List.
- Funding program reviews** – TPA staff frequently discuss available funding with FDOT, Federal, and private partners to deliver grant opportunities to meet local jurisdictional needs
- Support** – The support of the local MPO is critical to receiving funding. As a partner, the agency has prioritized providing support to communities through documenting support for projects

Technical Resources

- Roadway Safety Audits** – the TPA facilitates walking and bicycling safety audits for the purposes of identifying capital projects to implement through the TPA’s funding programs.
- Planning support** – the TPA can provide planning support to the development of project concepts for implementation on the Federal Aid Eligible network. Typically, this is performed either by in-kind support or formally through a planning assistance request.
- Public engagement** – Events held by partner agencies typically can also receive TPA assistance in providing safety materials and information relate to the transportation system.

Transit

Vision 2050 builds upon the initial 561 vision in the 2045 Plan. Since then, the major corridors have been further studied and new transit concepts have been developed to create both a short term and long term vision for implementing transit, accounting for local operations and maintenance resource availability.

Corridor Development – Learning from US-1, Okeechobee Boulevard, and Countywide Needs

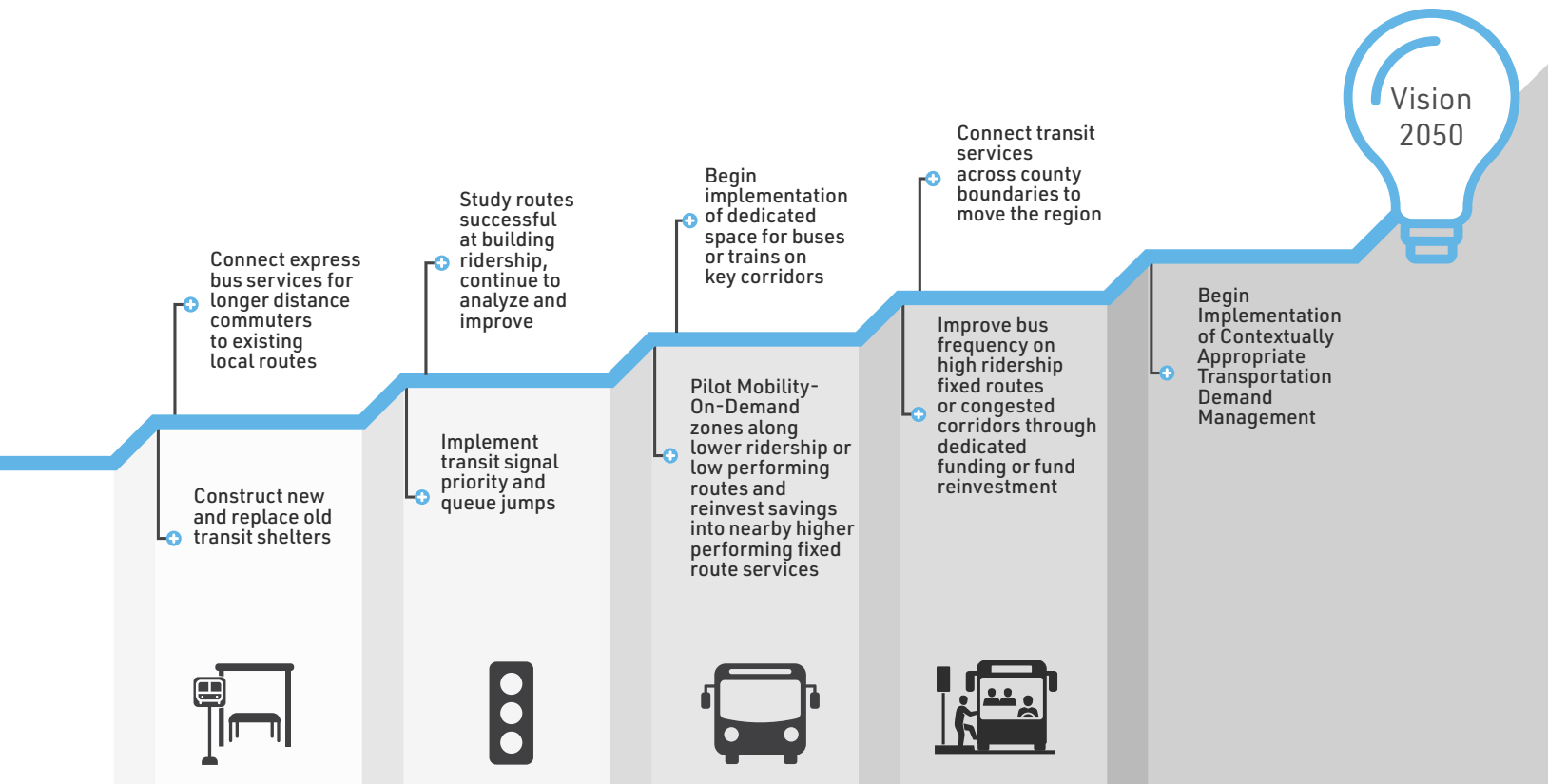
The TPA has made substantial strides in implementing the US-1 Multimodal Corridor Study (MCS) with both transit improvements for frequency and with shelters, and on the Okeechobee Boulevard and SR-7 MCS.

When communities and partners invest in the system, ridership typically grows at a rate faster than vehicles using the corridors. These areas have seen substantial ridership increases as communities begin to offer new transit services through mobility-on-demand zones and improve public rights-of-ways.

The existing 561 network serves 1,179,120 people and 725,650 jobs. Many of the corridors are still in need of enhancement. The need to move these people in the future will be ever present.

Short Term Implementation Framework – Building Ridership on the Core 561 Network

The steps below outline a partnership driven process to build ridership on fixed route services, improving air quality, reducing congestion, and creating a better performing system. Each 561 and service area presents unique opportunities and challenges, and requires a different implementation pathway. Nevertheless, the goal is the same, to create an enhanced transit system that makes public transit an option for everyone in Palm Beach County.



Long Term Implementation Plan – Expanding the 561 Vision for the Palm Beaches and the Region

With implementation of just a few corridors and minor implementation projects transit ridership grew by at least 25% on corridors. This equates to thousands of new daily riders across the Palm Tran System. Additionally, express train pilots launched by SFRTA Tri-Rail have shown promise, bringing over 200 daily riders on an express train to Maimi Intermodal Center from the region daily.

With the foundation of the short term implementation across the 561 network, more premium services and enhanced transit projects are likely to be implemented. New regional commuter rail on the Florida East Coast Railway, Light Rail, Streetcar, Express Bus, Bus Rapid Transit (BRT), and countywide BRT lite services are envisioned to connect residents to jobs, services, and recreational areas.

Additionally, the investment in short term infrastructure for fixed route public transportation can frequently be used to reduce the cost of long term implementation. For example, BRT lite or BAT Lanes can reduce costs for BRT implementation with dedicated guideways and station areas being spread out over time.



Emerging Technology and Intelligent Transportation Systems

Intelligent transportation systems to address congestion and travel time reliability are prioritized for the National Highway System, Emergency Evacuation Routes, major transit corridors, and other routes that may be identified in the District 4 TSM&O Master Plan.

The Five-Year Transportation Improvement Program (TIP) has programmed the following:

- Intersection hardening and signal upgrades for Boca Raton and Palm Beach County.
- Okeechobee Blvd smart traffic systems from I-95 into downtown West Palm Beach
- Transit Signal Priority along US 1, Okeechobee Blvd, and Lake Worth Rd.

Future investments outside of the TIP include Transit Signal Priority and smart traffic signal technology for major corridors including Boynton Beach Blvd, Congress Ave, Forest Hill Blvd, and Military Trl. FDOT has also identified US 27 and Beeline Hwy for smart signal and connected vehicle technology.

Along with the funding provided by the TPA, federal discretionary grants provide opportunities for smart signals and other technology to advance priority corridors.

Road Capacity

Strategic Intermodal System (SIS) roadway widenings with managed lanes on I-95 are currently under construction and will continue to be built out to 2050.

Paid for predominantly with local funding, including gas taxes and impact fees, the County will widen and extend the thoroughfares identified in the Thoroughfare Right of Way Identification Map.



Freight

The SIS facilities being expanded are major freight routes. Additional freight corridors will be further studied in the next few years, including a US 27 connector bypass in the Glades Region (#FDOT0083) and freight rail capacity expansion along US 27 (#FDOT0091), which is a collaborative study being prioritized by all Southeast Florida Transportation Council (SEFTC) partners.

Once studied and a preferred alternative is selected for freight projects, multiple discretionary opportunities at the regional, state, and federal level are available.

Electric and Alternative Fuel

The federal government has provided funding to substantially advance alternative fuel investment. Key priority fuel corridors are designated for implementation. Although not specifically referenced as projects within the Cost Feasible Plan or Illustrative list, the TPA supports the implementation of the corridor, and will seek to specifically add projects to the LRTP once identified.

Resilience

The FDOT continues to identify and integrate various resilience/adaptation strategies and improvements through its planning for the transportation system, project development process, and operation and maintenance of FDOT facilities. The FDOT Resilience Action Plan provides an initial framework for studying state roads and bridges at risk of flooding. Specific projects from the plan are included in the LRTP project lists. Examples of adaptation approaches are stormwater and drainage improvements, roadway elevation, and stabilization.

Local resiliency projects are also included for future study and implementation. Traffic signal hardening is programmed for both Palm Beach County and Boca Raton. Riviera Beach identified reconstruction for A1A on Singer Island from Pine Point Rd to John D MacArther State Park.



APPENDICES:

- A. LRTP Checklist
- B. Existing Conditions
- C. Public Involvement
 - PIP
 - Survey and Involvement Summary
- D. Goals and Objectives, Performance Measures, and Targets
- E. Multimodal Needs Development
- F. Call for Projects
- G. Scenario Development
- H. Financial Resources
- I. Revenue Forecast Handbook
- J. Archived Project Records
- K. Other Local Projects Submitted during the Call for Projects
- L. Environmental Review and Efficient Transportation Decision Making (ETDM)

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2050

