

Performance-Based Planning

This chapter provides and documents the policy direction and performance-based planning approach for the transportation network and systems within the Palm Beach TPA planning area. In compliance with federal and state regulations, the TPA established a set of goals, objectives, performance measures, and targets to provide a basis for performance-based planning that will best serve the community and environment, today and into the future. These goals, objectives, performance measures, and targets are consistent with the guidance of current Federal transportation planning requirements established in the Fixing America's Surface Transportation (FAST) Act and continued by the Infrastructure Investment and Jobs Act (IIJA). The performance-based planning for Vision 2050 is also consistent with the Florida Transportation Plan (FTP).

Development of the Goals and Objectives

Goals and objectives for Vision 2050 were developed based on federal, state, and local guidance including the requirements highlighted within the following sections.

Vision 2050 Goals and Objectives

Goals and objectives reflecting the vision of the planning area were developed at the outset of the planning process. The goals are shown below in **Figure 1** with their related objectives listed on the following pages. The following pages detail the objectives that tie directly to the identified Federal transportation performance measures.



Figure 1. Vision 2050 Goals







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

Strategy S.1a: Implement the TPA Vision Zero Action Plan and Complete Streets Policy.

<u>Strategy S.1b</u>: Identify and prioritize projects on the High Injury Network.

Strategy S.1c: Address transportation barriers in historically disadvantaged communities.

Strategy S.1d: Leverage innovation and technology with demonstrated safety benefits.

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

<u>Strategy S.2a</u>: Establish and enact Vision Zero and Complete Streets policies & plans. <u>Strategy S.2b</u>: Utilize a Safe System decision-making framework in planning & design.

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

<u>Strategy S.3a</u>: Consider projects that maintain or enhance evacuation routes.

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

Strategy S.4a: Improve existing rail grade crossings with a crash history.

<u>Strategy S.4b</u>: Improve bus terminals and stop areas.

Strategy S.4c: Develop microtransit and mobility hubs throughout the county.

Current Measures	Measures for Consideration	
Fatalities	Safety Projects along the HIN	
Fatal Crash Rate	Tactical interventions in HIN	
Serious Injuries	Partner safety resolutions and action plans	
Serious Injury Rate	Plans reviewed through FDOT ERC	
Non-motorized Fatalities and Serious Injuries	Equity based projects programmed	
Rail Fatalities	Rail crossings improved	
Palm Tran Fixed Route & Paratransit Safety	Rail crossings grade separated	







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

<u>Strategy E.1a</u>: Repurpose existing road space to support economic development, safety and mobility for all users.

<u>Strategy E.1b</u>: Implement Transportation Systems Management & Operation (TSM&O) along congested corridors, with priority to non-urban centers.

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

<u>Strategy E.2a</u>: Identify strategies to improve traffic operation at bottlenecks in the transportation system.

<u>Strategy E.2b</u>: Add or expand facilities for sustainable modes.

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

<u>Strategy E.3a</u>: Prioritize transit frequency and reliability with technology. Strategy E.3b: Provide real-time transportation information & displays.

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

Strategy E.4a: Study and improve transit operations.

<u>Strategy E.4b</u>: Provide first-mile and last-mile travel solutions.

<u>Strategy E.4c</u>: Prioritize transportation opportunity in infill or key growth areas that support new workforce and affordable housing.

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

<u>Strategy E.5a</u>: Leverage transportation demand management (TDM) tools & programs to redistribute demand across space and time.

Current Measures to be Continued	Measures for Consideration
% of reliable person-miles traveled on the Interstate system	Corridors or Routes improved
% of reliable person-miles traveled on the Non- Interstate NHS	Households (or Population) served by High-frequency transit
Truck Travel Time reliability on the Interstate system	Households (or Population) within First-mile and Last-mile service areas
Transit vs. Car Average Commute Time	Trips taken via alternatives
Tri-Rail Passenger Trips per Revenue Hour	Mobility service area coverage





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

<u>Strategy C.1a</u>: Address the unique needs of the elder population, people with disabilities, and those unable to drive.

<u>Strategy C.1b</u>: Provide a complete, comfortable network of accommodations for walking, bicycling and micromobility access.

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

Strategy C.2a: Construct the Tier 1 bike/ped network.

Strategy C.2b: Improve accessibility between transit or schools and surrounding land uses.

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

<u>Strategy C.3a</u>: Implement emergency vehicle preemption & transit signal and freight priority.

<u>Strategy C.3b</u>: Deploy innovative connectivity and monitoring technologies across a complete communications network.

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

<u>Strategy C.4a</u>: Provide real time transit, micromobility or other alternative transportation data.

Strategy C.4b: Integrate information of all service options under a common platform.

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

Strategy C.5a: Target bottlenecks accessing intermodal ports.

Current Measures to be Continued	Measures for Consideration
Centerline mileage of federal aid eligible roadways that	
include:	
Separated bike lanes	
 Shared Use Paths of 10ft or more 	Tier 1 network completeness
 8 to 9 ft Paved Pathways 	index
Buffered Bike Lanes	
Designated Bike Lanes	
Sidewalks	
Percentage of federal aid eligible mileage with:	Transit/School connectivity index
 Bike Facilities within 3 mi. of a Transit Hub 	Corridors connected
• Pedestrian Facilities within 1 mi. of a Transit Hub	Intersections connected
 Pedestrian Facilities within 2 mi of Elementary 	Transit stops/stations connected
Schools	Freight/Passengers moved
Pedestrian Facilities within 1/4 mile of Traditionally	On domand use data
Underserved Communities	





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

<u>Strategy M.1a</u>: Identify and prioritize projects that increase commuter mode split for walking, bicycling, and transit.

<u>Strategy M.1b</u>: Expand mobility service options in dense activity centers and active corridors.

Strategy M.1c: Enhance connectivity between activity centers via alternative modes.

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

<u>Strategy M.2a</u>: Provide separation between vehicular traffic and facilities for walking, bicycling or micromobility travel.

Strategy M.2b: Improve comfort for transit riders with shelter and other amenities.

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

<u>Strategy M.3a</u>: Implement complete and comfortable networks of sidewalks and bike lanes.

Strategy M.3b: Support first-mile and last-mile transportation services.

Current Measures to be Continued	Measures for Consideration
Commuter Mode Split: • Walking • Biking • Transit	Low-stress pedestrian/bicycle facilities provided
 Annual tonnage of freight for: Port of Palm Beach Palm Beach International Airport 	Mobility service area coverage
	Corridors w/ frequent & reliable transit



Goal – Resilien

Objective R.1: Protect critical infrastructure from future disruptions due to climate impacts.

Strategy R.1a: Harden or sustainably replace at-risk critical infrastructure.

<u>Strategy R.1b</u>: Right size transportation infrastructure to reduce future risk and carrying cost.

<u>Strategy R.1c</u>: Prioritize improvements along evacuation routes that enhance preparation for or response to extreme weather events.

Objective R.2: Promote compact, walkable, mixed-use development and redevelopment opportunities that encourage a range of transportation options and improved public health.

Strategy R.2a: Support transit-oriented development in infill or key growth areas.

Strategy R.2b: Avoid projects with adverse environmental impacts.

<u>Strategy R.2c</u>: Cultivate livable transportation environments that are safe, comfortable and vibrant.

Objective R.3: Ensure equity is factored into programming, planning and design.

<u>Strategy R.3a</u>: Identify and eliminate transportation barriers affecting low income and minority populations.

<u>Strategy R.3b</u>: Ensure that projects do not disproportionately burden historically disadvantaged communities.

Objective R.4: Reduce the carbon footprint of the transportation system.

<u>Strategy R.4a</u>: Leverage federal best practices such as buy local.

Strategy R.4b: Incentivize purchasing of alternate fuel vehicles.

Strategy R.4c: Deploy electric vehicle charging infrastructure.

<u>Strategy R.4d</u>: Incentivize a shift from driving alone to travel via alternative transportation options.

Current Measures to be Continued	Measures for Consideration
Bridges in Good Condition	At-threat facilities improved
Bridges in Poor Condition	Corridor EV-charging station
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	





Current Measures to be Continued	Measures for Consideration
Tri-Rail Rail track restrictions (slow orders)	
Tri-Rail maintenance & Support Vehicles > 8 years old	
Daily fuel use per person	
Daily Vehicle Miles Traveled per Person	
% Electric Vehicles in Rubber-Tire Transit Fleet	
% Federal-Aid Network susceptible to inundation by 1.2' sea level rise and	
storm surge	
% Federal-Aid Network susceptible to inundation by 1% storm event	

Alignment with Federal Criteria and State Plans

Goals and objectives for Vision 2050 were developed based on federal, state, and local guidance including the requirements highlighted within the following sections.

Infrastructure Investment and Jobs Act (IIJA)

Infrastructure Investment and Jobs Act (IIJA) is current Federal transportation legislation. IIJA largely carries forward MPO requirements from the FAST Act. The ten (10) Planning Factors from the FAST Act are listed below.

1. Support the **economic vitality** of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.

2. Increase the **safety** of the transportation system for motorized and non-motorized users.

3. Increase the **security** of the transportation system for motorized and non-motorized users.

4. Increase accessibility and mobility of people and freight.

5. Protect and enhance the **environment**, promote **energy** conservation, improve **quality of life**, and promote consistency between transportation improvements and state and local growth and economic development patterns.

6. Enhance the **integration and connectivity** of the transportation system, across and between modes, for people and freight.

7. Promote efficient system management and operation.

8. Emphasize the **preservation** of the existing transportation system.

9. Improve the **resiliency and reliability** of the transportation system and reduce or mitigate stormwater impacts of surface transportation.

10. Enhance **travel and tourism**.

Need to discuss the new recommendations related to the interrelationship between Housing and Transportation.

Consistency between the goals of Vision 2050 and the planning factors from the FAST Act is shown in **Table 1**.





8 | Page





Table 1. Vision 2050 LRTP Goals and Federal Planning Factors Comparison

				FAST	Act Plai	nning Fa	octors			
LRTP Goals	Economic Vitality	Safety	Security	Accessibility and Mobility	Environment, Energy, and Quality of Life	Integration and Connectivity	System Management and Operations	System Preservation	Resilience and Reliability	Travel and Tourism
Safe		\checkmark	\checkmark							
Efficient	\checkmark						\checkmark		\checkmark	
Connected				\checkmark	\checkmark	\checkmark				\checkmark
Multimodal				\checkmark				\checkmark	\checkmark	\checkmark
Resilient	\checkmark				\checkmark		\checkmark	\checkmark	\checkmark	

Florida Transportation Plan (FTP)

The Florida Transportation Plan (FTP) is the overarching statewide plan guiding Florida's transportation future. The plan was created by, and provides direction to, the Florida Department of Transportation (FDOT) and all organizations that are involved in planning and managing Florida's transportation system, including statewide, regional, and local partners, including the Palm Beach TPA. The FTP Policy Element is Florida's long-range transportation plan as required by both state and federal law and this element points toward a future transportation system that embraces all modes of travel, innovation, and change. These goals, as outlined in the May 2022 FTP Vision Element, are:

- 1. Safety and security for residents, visitors, and businesses
- 2. Agile, resilient, and quality transportation infrastructure
- 3. Connected, efficient, and reliable mobility for people and freight
- 4. Transportation choices that improve accessibility and equity
- 5. Transportation solutions that strengthen Florida's economy
- 6. Transportation solutions that enhance Florida's communities
- 7. Transportation solutions that enhance Florida's environment

Regarding related state plans, MPOs must also incorporate any performance targets that may be included in the Statewide Freight Plan and Asset Management Plan. Current guidance from





FDOT indicates that no additional performance targets will be included in these plans. A matrix showing consistency between the goals of Vision 2050 and the planning factors from the FTP is shown in **Table 2**.

		Florida Transportation Plan Goals						
LRTP Goals	Safety and Security	Infrastructure	Mobility	Transportation Choices	Economy	Communities	Environment	
Safe	\checkmark					\checkmark		
Efficient			\checkmark		\checkmark			
Connected			\checkmark	\checkmark		\checkmark		
Multimodal				\checkmark				
Resilient		\checkmark					\checkmark	

Table 2. Vision 2050 LRTP Goals and State FTP Goals Comparison

Federal Guidance

The U.S. Secretary of Transportation established criteria for evaluation of the new performancebased planning processes. This included the identification of specific performance measures that all states and each Metropolitan Planning Organization (MPO), like the Palm Beach TPA, must evaluate. The process required FDOT to develop appropriate performance targets for these measures and to monitor the progress made toward achieving the targets. This also requires MPOs in the State of Florida to either accept and support FDOT's performance targets or establish, formally adopt, and monitor their own performance targets. FDOT is providing performance data for all targets and MPOs have the option for using the data or developing their own. FDOT is also establishing targets in each category and MPOs have the option to select the same target or choose their own.

Overview of Statewide Performance Measures and Targets

Listed below are the performance measures and statewide targets that FDOT has established. FDOT worked in collaboration with the MPOs and providers of public transportation to establish these statewide targets.

Safety. Florida shares the national traffic safety vision "Toward Zero Deaths," and formally adopted its own version of the national vision, "Driving Down Fatalities," in 2012. FDOT and





its traffic safety partners are committed to eliminating fatalities and reducing serious injuries with the understanding that the death of any person is unacceptable and based on that, zero is the target for all the safety performance measures.

Pavement Condition. The pavement condition performance measures assess pavement conditions based on the international roughness index (IRI), cracking, rutting (for asphalt pavements), and faulting (for jointed concrete pavements). For asphalt and jointed concrete pavements, a 0.1-mile segment is considered in good condition if all three metrics are rated Good; if two or more metrics are considered poor, the condition is Poor. The federal rule requires a new methodology be used to measure rut depth and cracking that has not been historically used by FDOT. In consideration of the differences in the data collection requirements used by FDOT and those mandated by the rule, as well as other unknowns associated with the new required processes, initial 2- and 4-year targets were established.

Bridge Condition. The bridge condition performance measures for the percent of deck area classified as Good and Poor is determined using National Bridge Inventory (NBI) condition ratings for deck, superstructure, substructure, and culvert. Condition is determined by the lowest rating of these items using a scale of 1 to 9. If the NBI rating is 1 to 4, the bridge is classified as Poor; NBI rating 7 to 9, the bridge is Good. Bridges rated below 7 but above 4 are classified Fair; however, there is no related Federal Highway Administration (FHWA) performance measure associated with that rating. Considering the differences in criteria, initial 2- and 4-year targets were established.

System Performance. The travel time reliability metric is calculated for each segment of the National Highway System (NHS), weighted by volume and occupancy. Data is collected in 15-minute segments during four total time periods and is reported as the "percent of reliable person-miles traveled." The segment is considered reliable if the reliability ratio is below 1.50 during all time periods. Freight movement is assessed by calculating truck travel time reliability ratio using data from five total time periods. The higher the ratio value, the less reliable the segment.

Palm Beach TPA Performance Measures

The Palm Beach TPA recognizes the importance of linking goals, objectives, and investment priorities to stated performance objectives, and that establishing this link is critical to the achievement of national transportation goals and statewide and regional performance targets. As such, the LRTP directly reflects the goals, objectives, performance measures, and targets as they are described in other public transportation plans and processes.

Palm Beach TPA Performance Targets

FDOT is required to establish statewide targets for the required performance measures and TPAs/MPOs have the option to support the statewide targets or adopt their own. Based on this information the TPA has adopted the following transportation performance measure targets. Local Transit Agencies must also adopt performance targets in their Transit Asset



Management (TAM) Plan and the TPA must consider including the TAM targets in the LRTP and TIP updates.

Performance Measures	Calendar Year 2023 Florida Performance Target
Number of fatalities	0
Rate of fatalities per 100 million VMT	0
Number of serious injuries	0
Rate of serious injuries per 100 million VMT	0
Number of non-motorized fatalities and non-motorized serious injuries	0

Table 3. Statewide Highway Safety (PM1) Performance Targets

Table 4. Pavement and Bridge Condition (PM2) Performance Targets

Performance Measures	Calendar Year 2023 Florida Performance Target
% of NHS Bridges in good condition (by deck area)	50%
% of NHS Bridges in poor condition (by deck area)	10%
% of Pavement on the interstate system in good condition	60%
% of pavement on the interstate system in poor condition	5%
% of pavement on non-interstate NHS in good condition	40%
% of pavement on non-interstate NHS in poor condition	5%

Table 5. System Performance and Freight (PM3) Performance Targets

	Calendar Year 2023
Performance Measures	Florida Performance Target
Person-miles on the interstate highway system that are	
reliable	75%
Person-miles on the non-interstate national highway	
system that are reliable	50%
Truck travel time reliability index on the interstate	
highway system	1.75