



# Transportation Plan Update

Multimodal Desires Plan  
May 2019



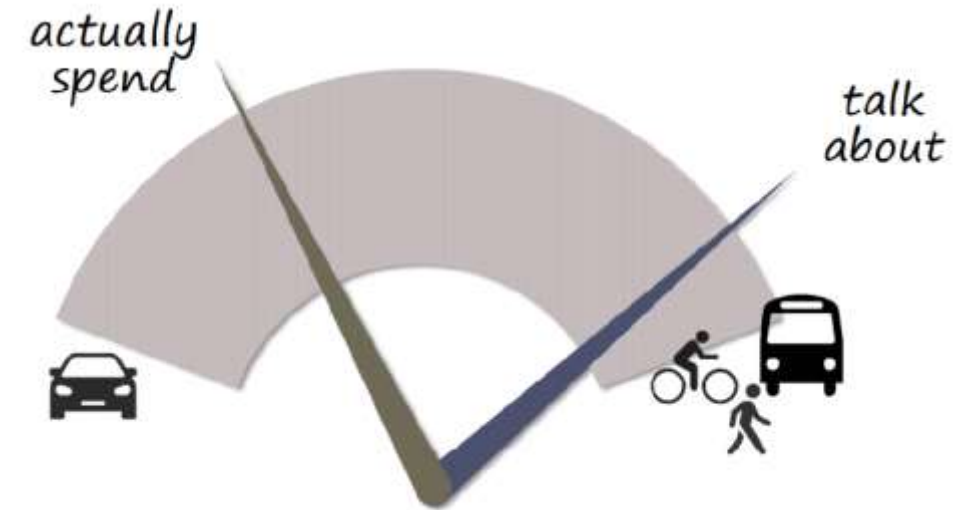
# Multimodal Forecasting

Vision: A **safe, efficient, connected** and **multimodal** transportation system



# Highlighted Objectives - Make No Small Plans

Objective	2018 Value	2045 Target
Cut Daily Fuel Use (gal per person)	1.3	< 1
Cut Daily VMT per person	28.4	< 20
Eliminate traffic-related fatalities and serious injuries	1,344	0
Cut transit travel time vs. drive alone	1.97	< 1.5
Increase transit passengers per revenue hour	18	40
Build more ped/bike facilities (miles)	1,743	2,530
Grow Walk/Bike/Transit commuter mode split	4%	30%



*Infrastructure is Destiny*



# Overview

## ■ Pedestrian and Bicycle

- Prioritize investment in high propensity areas that address social equity and level of stress (LTS)

## ■ Transit

- Designate premium network based on pop/job density, transit propensity and social equity
- Dense, linear and walkable Corridors

## ■ Roadways and Freight

- Move cars/trucks on SIS Network
- Construct/widen limited other state roadways
- Construct/widen county/city roadways where land use and demand prioritizes car travel





# Pedestrian & Bicycle Desires Plan

# Pedestrian and Bicycle Desires Plan Methodology

## ■ Priority Areas

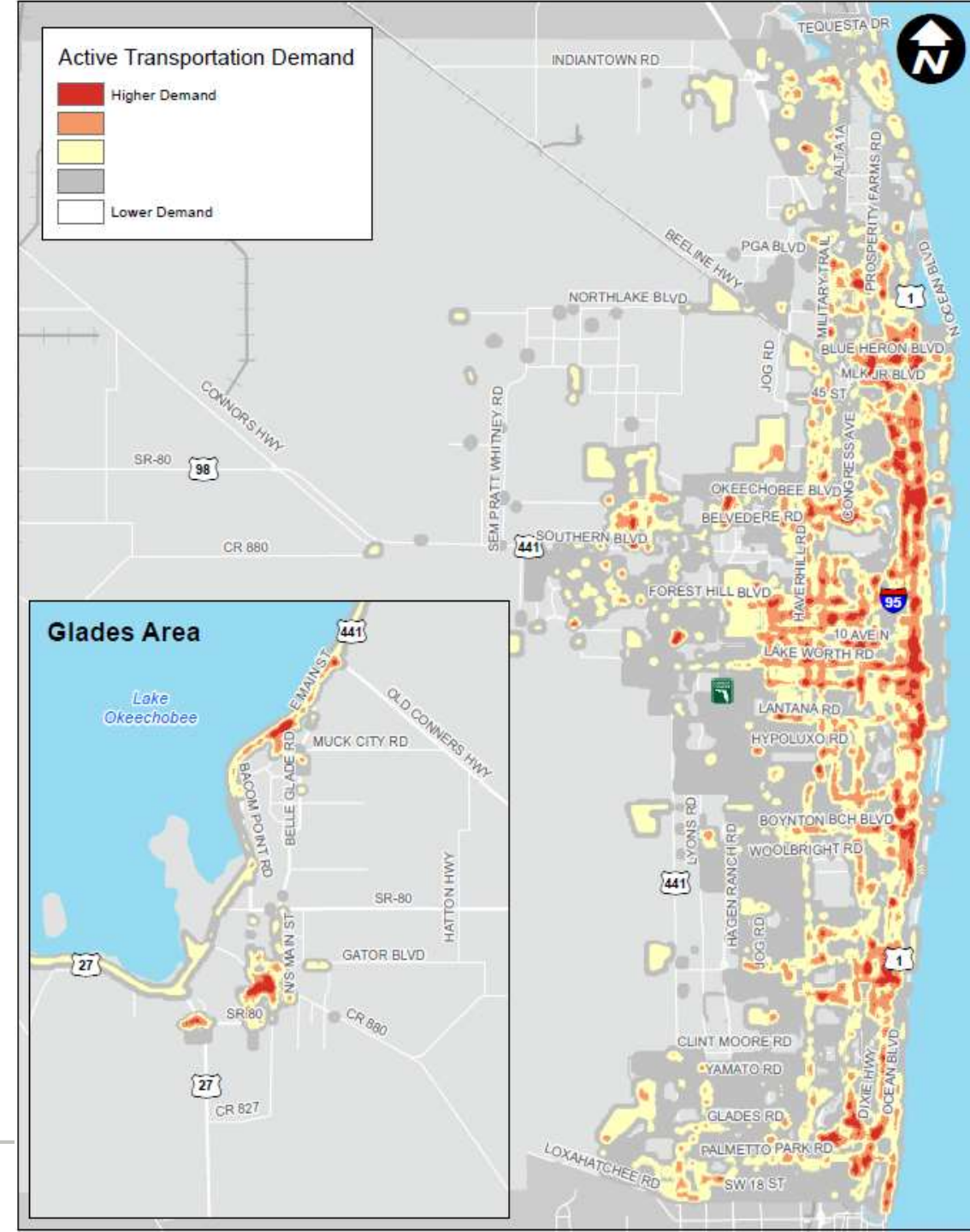
- Highest active transportation demand (*propensity for walking and biking*)
- Highest concentration of vulnerable populations
- Connections to premium transit corridors

## ■ Pedestrian and Bicycle supply analysis

- Level of Traffic Stress (LTS) (*comfort level for able-bodied people*)
- Considers active facility type, vehicle speed, travel lanes and volumes

# Pedestrian and Bicycle Priority Areas

- Active transportation propensity
- Concentration of vulnerable populations





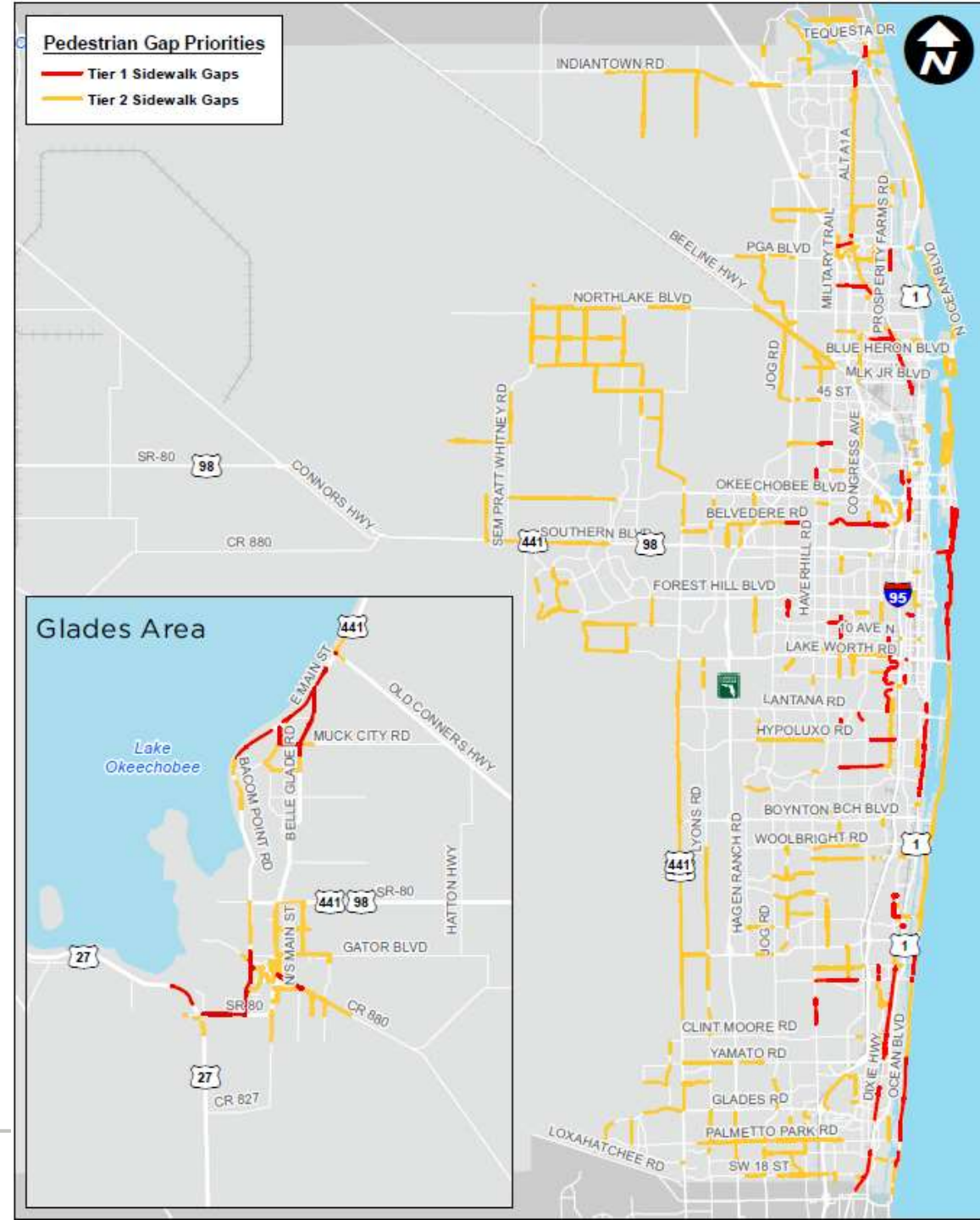
# Pedestrian and Bicycle Level of Traffic Stress

		Pedestrian Facility and Posted Speed Limit											
Vehicle Lanes	Vehicle Volumes	No Dedicated Walkway				One side of the street				Both sides of the street			
		<= 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	< 3K	2.5	3	3.5	3.5	1.5	2	2.5	3	1	1.5	2	2
	3K-10K	3	3.5	3.5	4	2	2.5	2.5	3	1.5	2	2	2.5
	> 10K	3.5	3.5	4	4	2.5	2.5	3	3	2	2	2.5	2.5
4-5	< 15K	4	4	4	4	3	3.5	3.5	3.5	2.5	2.5	3	3
	15K-25K	4	4	4	4	3.5	3.5	4	4	2.5	3	3	3.5
	> 25K	4	4	4	4	4	4	4	4	3	3	3.5	3.5
6+	All ADTs	4	4	4	4	4	4	4	4	3	3.5	3.5	4

		Bicycle Facility and Posted Speed Limit												
Vehicle Lanes	Vehicle Volumes	No Bicycle Facility (mixed traffic)				Designated Bike Lanes (4-5 ft)			Buffered Bike Lanes (6-8 ft)			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	< 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
	> 10K	2.5	3	3.5	4	2.5	3	3.5	1.5	2	2.5	1	1	1.5
4-5	< 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+	All ADTs	4	4	4	4	3.5	4	4	3.5	4	4	2	2	2

# Pedestrian Desires Plan

- **Tier 1 Sidewalk Gaps**
  - Missing sidewalks in priority areas
- **Tier 2 Sidewalk Gaps**
  - All other sidewalk gaps
- **Additional LRTP Focus Areas**
  - Improved streetscape/furnishing zone
  - Enhanced crosswalks
  - Additional mid-block crossings



# Bicycle Level of Stress, Types of Cyclists

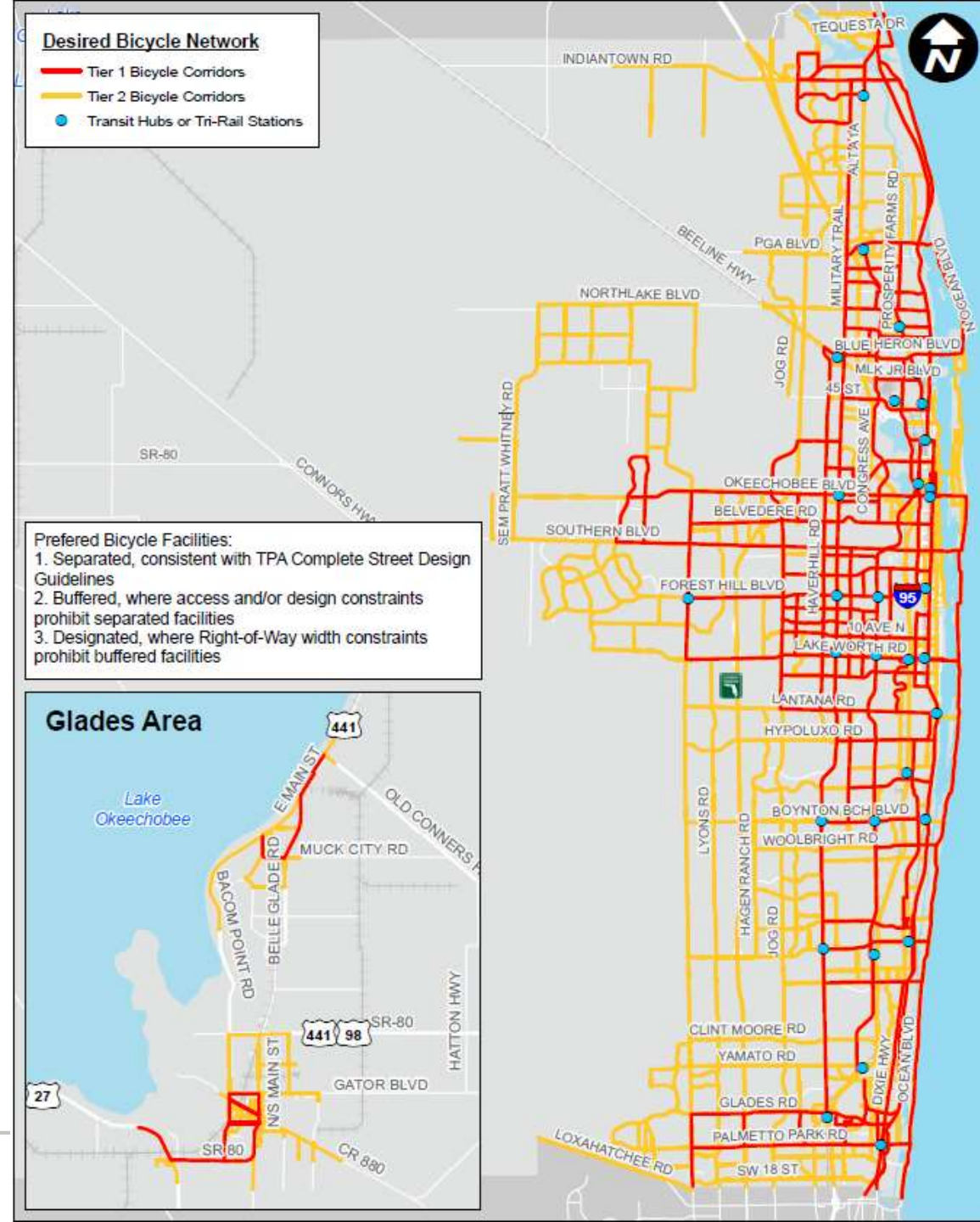
- **LTS 1 - All Ages and Abilities**
  - Require separated facilities
- **LTS 2 - 51% of Population**
  - Interested but concerned
  - Separated facilities on 4+ lane roads
- **LTS 3 - 5% of Population**
  - Enthused and confident
  - Buffered facilities on 4+ lane roads
- **LTS 4 - 7% of Population**
  - Strong and Fearless
  - Designated facilities on 4+ lane roads





# Bicycle Desires Plan

- **Tier 1 Bicycle Corridors**
  - Focus investment in priority areas
- **Tier 2 Bicycle Corridors**
  - All other urbanized area segments
- **Preferred Bicycle Facilities**
  - Separated wherever possible
  - Buffered, where separated not possible
  - Designated, where buffered not possible



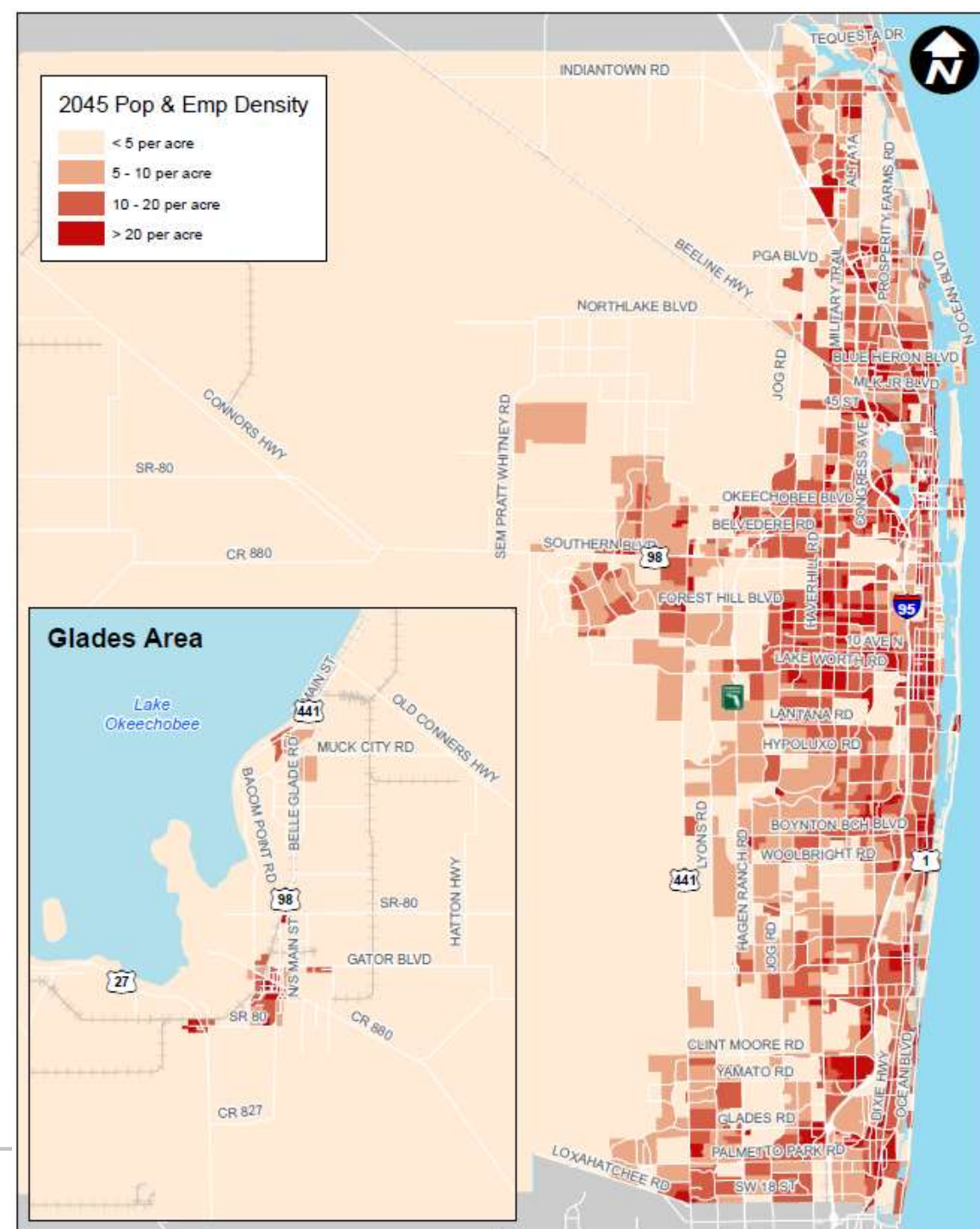




# Transit Desires Plan

# Transit Desires Plan Methodology

- **Dense**
  - People density, transit propensity, social equity
- **Linear**
  - Highest existing transit ridership to maximize efficiency
- **Walkable**
  - Complement with ped/bike infrastructure for first/last mile



# Premium Transit Types

*Frequent service, limited stops, branded vehicles and stations, level boarding, off-board fare payment, transit signal priority*

## Light Rail Transit (LRT)



Primarily operates in  
dedicated rail lanes

## Bus Rapid Transit (BRT)



Primarily operates in  
dedicated bus lanes

## BRT Lite

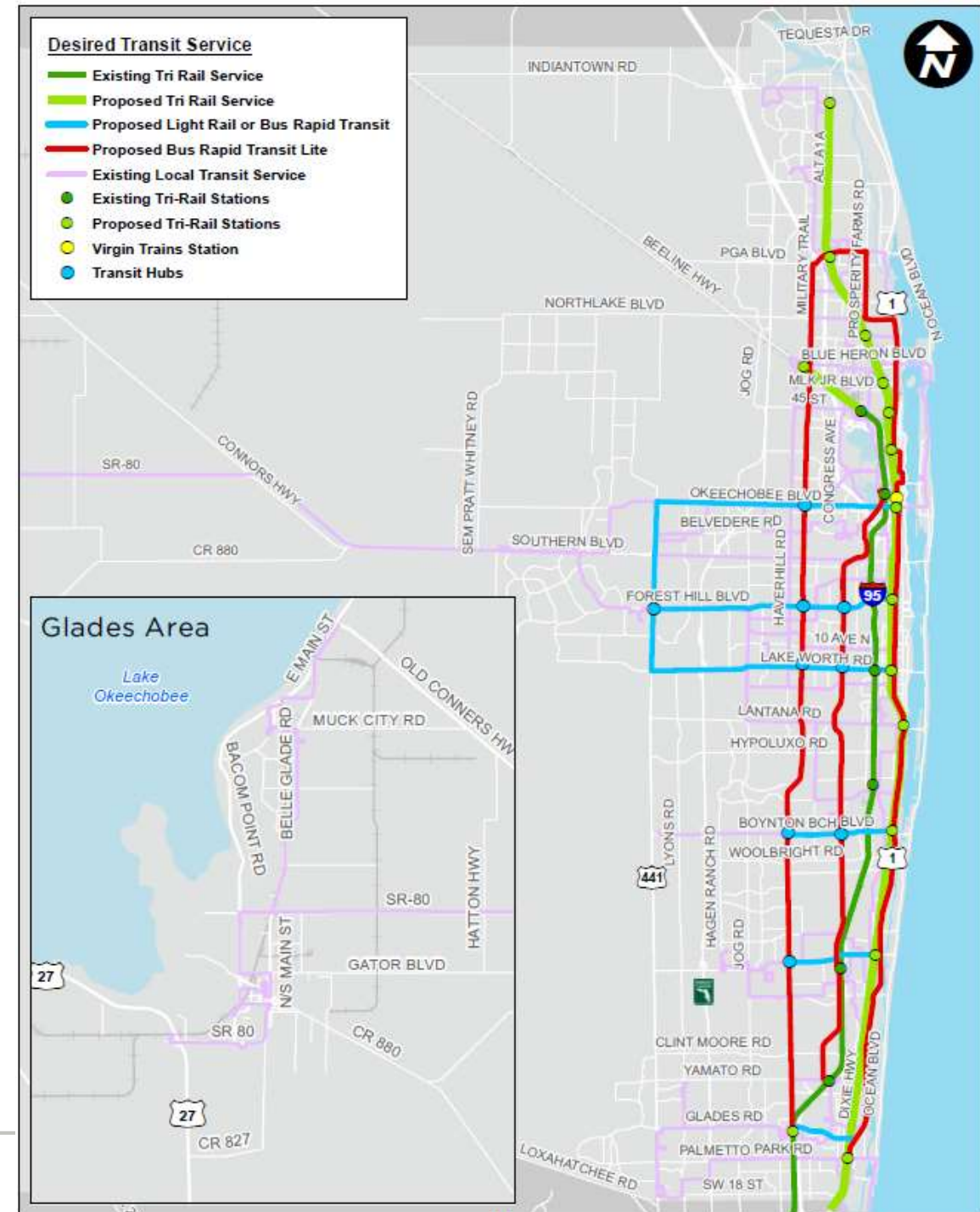


Primarily operates in  
mixed traffic



# Premium Transit Desires Plan - \$5.2B

- Five (5) N/S Corridors
  - Commuter Rail: Tri-Rail, Coastal Link
  - BRT Lite: US 1, Congress, Military
- Six (6) E/W Corridors - LRT/BRT
  - Okeechobee, Forest Hill, Lake Worth,
  - Boynton Beach, Atlantic, Glades
- Corridor Evaluation System
  - Factored Ridership - 40%
  - Population and Employment Near Stops - 30%
  - Corridor Work Trips - 20%
  - Population and Employment Growth - 10%





# Commuter Rail Highlights

- Tri-Rail Coastal Link - WPB to Jupiter
- Tri-Rail Coastal Link - Miami to WPB
- Tri-Rail Extension to VA Hospital
- New Tri-Rail Station in Boca Raton
  - Military Trail S of Glades Road



# Transit Corridors already prioritized by TPA

- **Tri-Rail Coastal Link** from West Palm Beach to Jupiter
- **US-1** from Palmetto Park Rd (Boca Raton) to PGA Blvd (Gardens Mall)
- **Okeechobee Blvd** from SR 7/Forest Hill Blvd (Wellington Mall) to West Palm Beach Intermodal Center





# Roadway and Freight Desires Plan

# Roadway and Freight Projects - \$7.6B

## ■ Strategic Intermodal System

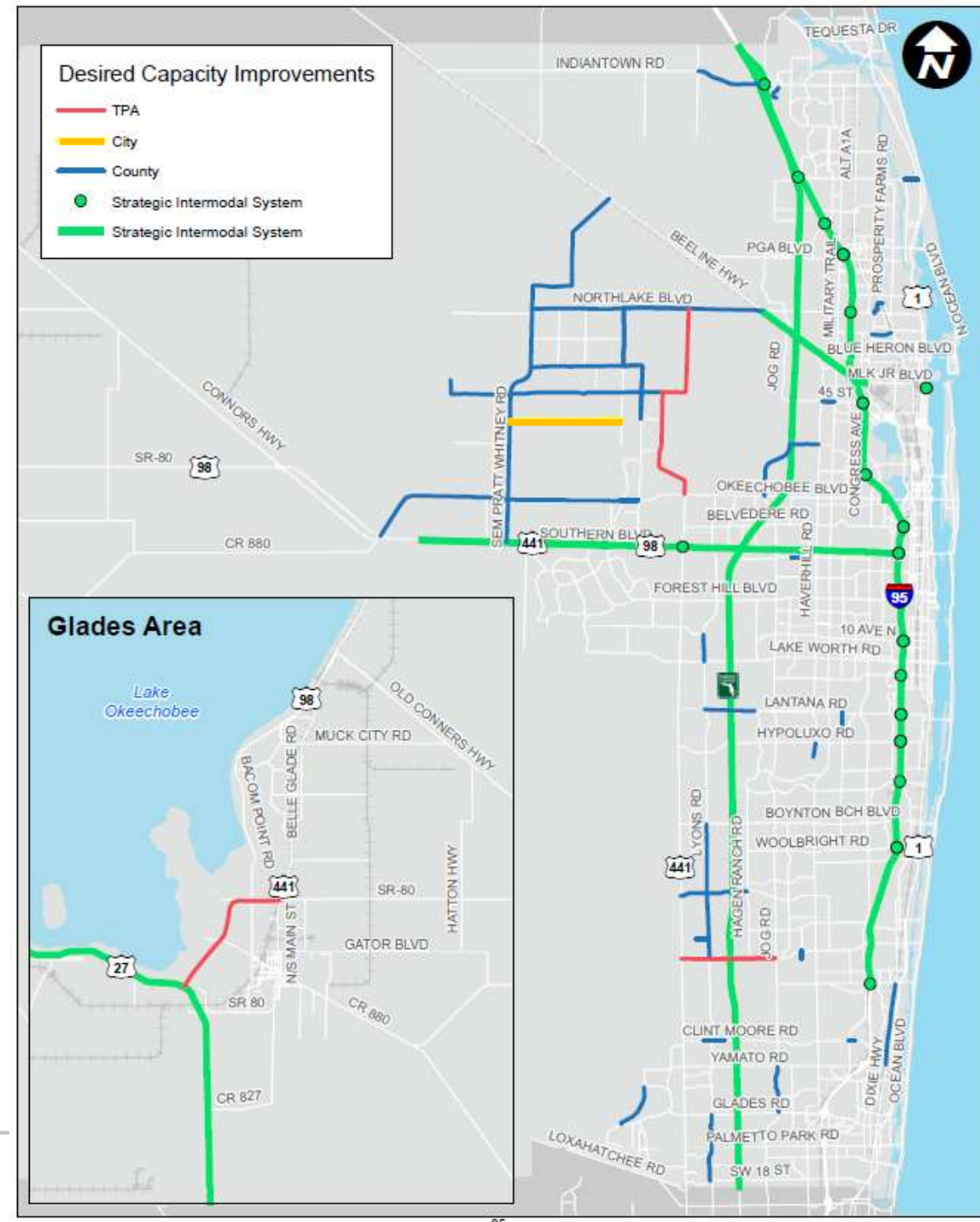
- 35 projects, \$6.9B total cost

## ■ TPA Roadway Projects

- 6 projects, \$209M total cost

## ■ County Capacity Projects

- 48 projects, \$442M total cost

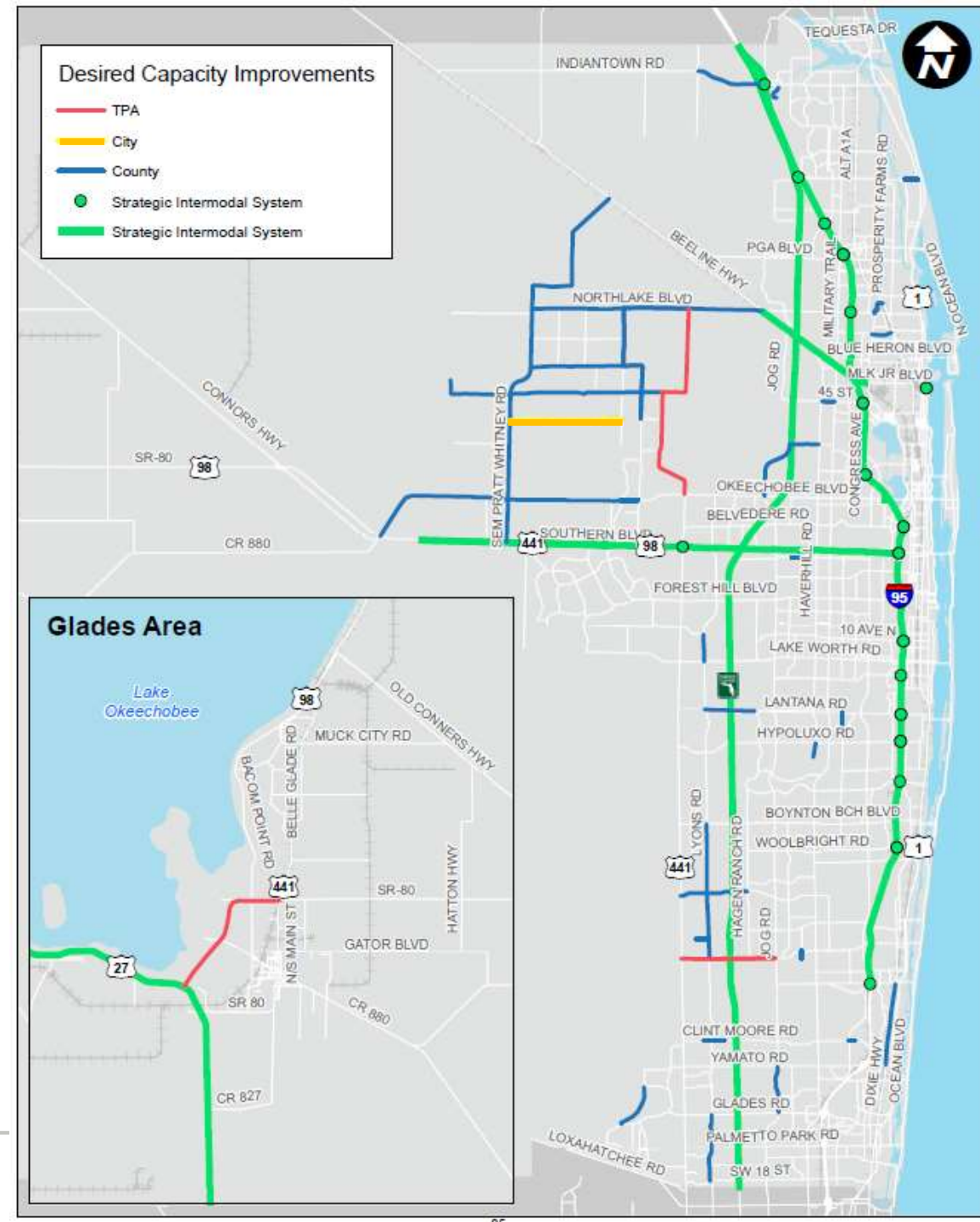




# SIS Projects - \$6.9B

- Based on SIS Cost Feasible Plan
  - Adopted by FDOT in 2018
- I-95 Managed Lanes, 16 interchanges - \$2.8B
- Turnpike Managed Lanes - \$1.9B
- SR 80 4L elevated expressway - \$1.2B
- US 27 widen for truck-only lanes - \$0.6B

TPA role: Endorse/Modify/Reject



# TPA Projects- \$208M

## ■ Capacity Projects

- SR 7 extension and widening
- Atlantic Ave widening
- US 27 Connector - new road
- Hooker Hwy widening



# PBC Projects - \$442M

- Central County
- Agricultural Reserve
- Southwest Unincorporated Area





# LRTP Schedule



# Schedule

Activity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct
Existing Conditions										
Goals, Objectives, Measures			★							
Multimodal Forecasting and Desires Plan					★					
Revenue Estimating and 10-year Plan						★				
Revenue Forecasting and 25-year Plan							★			
Scenario Planning and Implementation Plan									★	
Final Adoption										★

★ Governing Board Presentation

# Thank you!

