Department of Engineering and Public Works





Meeting Agenda

- ➤ Palm Beach County Comprehensive Plan Background & History of Road Network
- ➤ Five-Year Road Program Funding Sources and Projects
- ➤ Traffic Signals Study and Justification
- **≻**Questions

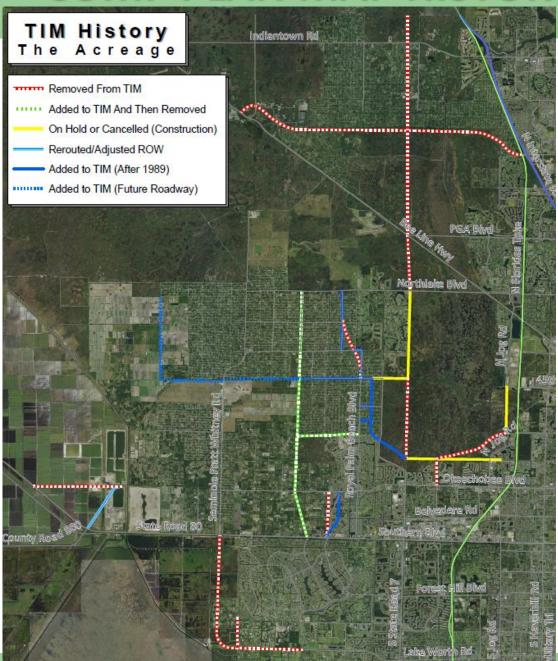


Comp Plan Background and History

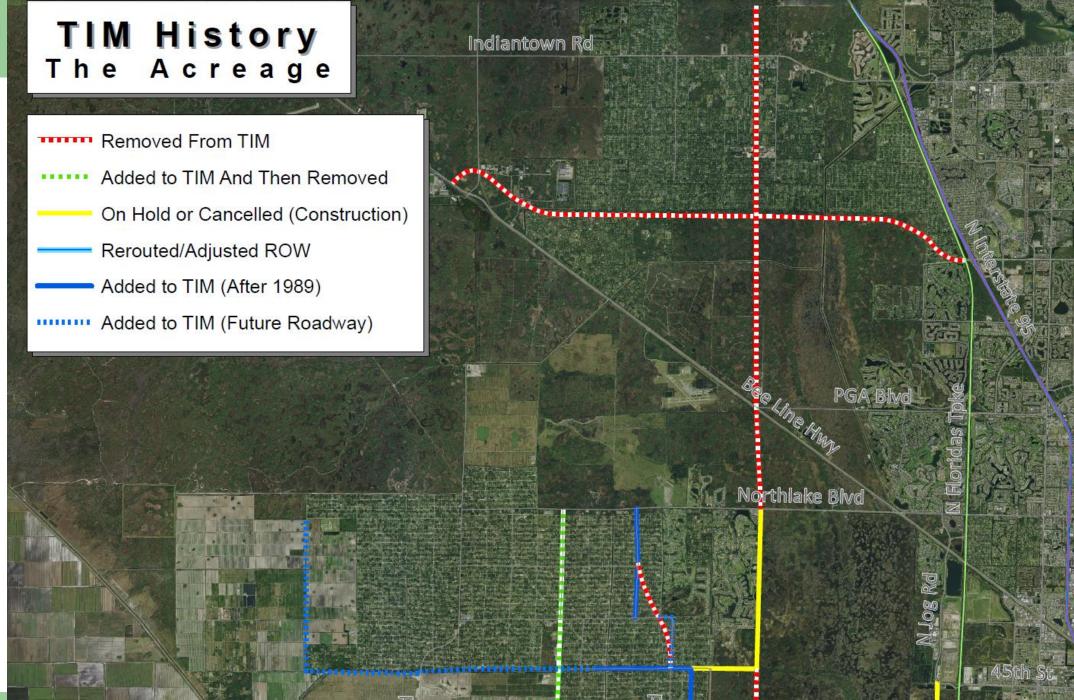
- Thoroughfare Right-of-Way Identification Map (TIM) in Comp Plan preserves road R/W, identifies network of roads required to meet traffic demands
- ➤TIM originated in 1989 amendments over time added, subtracted, revised R/W widths and alignments

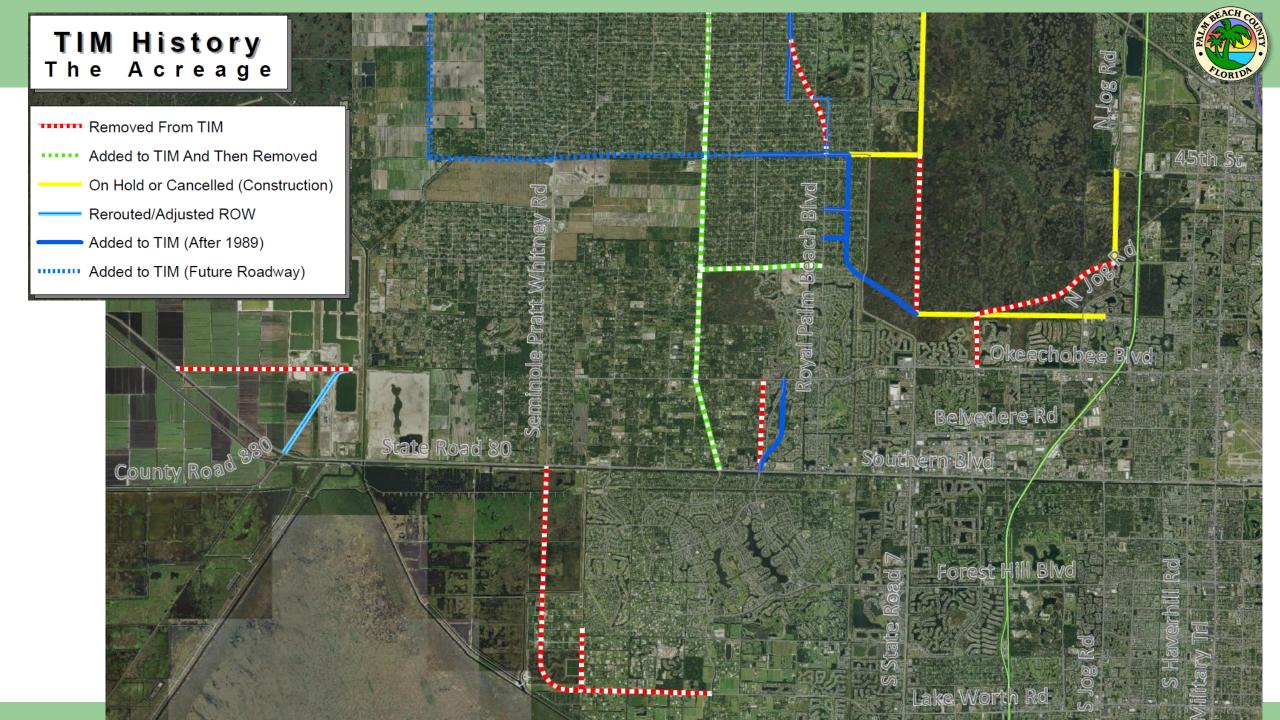


COMP PLAN MAP HISTORY











Comprehensive Plan - Western Communities

> Roadway Links Deleted from TIM

- E Road/40th Ave N (SR 80/Southern Blvd to Northlake Blvd)
- ❖ 40th Street North (E Road to RPB Blvd)
- Folsom Road (Crestwood Blvd to Okeechobee Blvd)
- Royal Palm Beach Blvd (Orange Blvd to Northlake Blvd)
- SR 7 (Northlake Blvd to Martin County Line)
- Sansburys Way (Okeechobee Blvd to Roebuck Rd)
- Lake Worth Rd (South Shore Blvd to SR 80/Southern Blvd)
- Flying Cow Road (Lake Worth Rd to SR 80/Southern Blvd)
- Donald Ross Rd (SR 710/Beeline Hwy to Jog Road)
- PGA Blvd (Seminole Pratt Whitney Rd to SR 710/Beeline Hwy)



Comprehensive Plan – Western Communities

➤ Roadway Link Additions to the TIM

- ❖ 60th St N (190th St. N to SR 7 Extension)
- ❖ 190th St N (60th Street N to north terminus)
- Coconut Blvd (Orange Blvd to Northlake Blvd)
- Orange Grove Blvd (Royal Palm Beach Blvd to SR 7)

> Roadway Right-of-Way Width Reductions to the TIM

- Roebuck Road (SR 7 Extension to Jog Road)
- Roebuck Road (Jog Road to Haverhill Road)
- ❖ Northlake Blvd (PBC Municipal Golf Club to SR 7)



CONSTRUCTION PROJECTS CANCELLED OR ON HOLD

- SR 7 Extension from Okeechobee Blvd to Northlake Blvd
- Roebuck Road from SR 7 Extension to Jog Road
- ❖ Jog Road from Roebuck Road to 45th Street



FIVE YEAR ROAD PROGRAM FUNDING

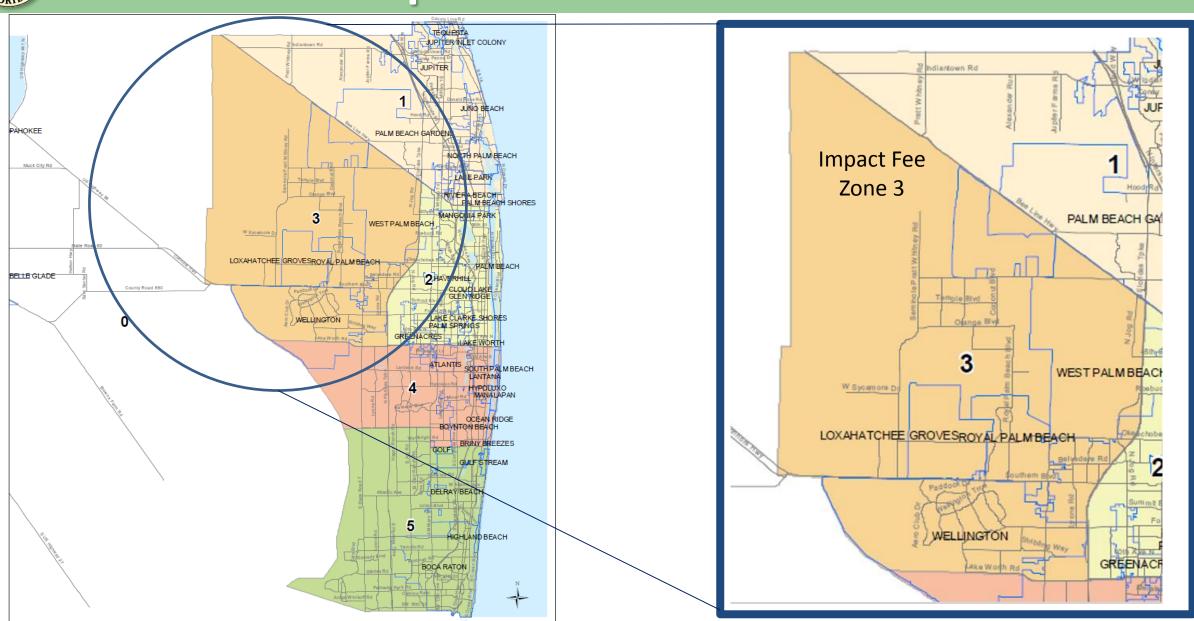
THE FIVE YEAR ROAD PROGRAM WAS ESTABLISHED BY ORDINANCE 85-40 TO SET FORTH THE ROAD PROJECTS TO BE FUNDED, DESIGNED AND CONSTRUCTED BY THE COUNTY WITHIN THE NEXT FIVE YEARS.

FUNDING SOURCES

- •IMPACT FEES
- PROPORTIONATE SHARE
 - GAS TAXES
- •INFRASTRUCTURE SALES TAX
- FDOT AGREEMENTS AND MISCELLANEOUS AGREEMENTS



Impact Fee Areas – Zone 3





FIVE YEAR ROAD PROGRAM – WESTERN COMMUNITIES AREA FUNDING

IMPACT FEE AREA 3

- FY2019 Projected Impact Fees: \$3.9 Million
- FY2020 FY2023 Projected Impact Fees: \$2,516,000 Annually

TOTAL Proportionate Share Funds Available: \$1,838,981

TOTAL Expenditure for Area FY2019 - FY2023: \$75,480,000

- \$59,628,000 of that total expenditure to be funded by **Gas Tax** (Transportation Improvement Fund)



Developer Prop Share Example

- Developer A wants to build 1,000 homes on Southern Blvd
- Southern Blvd will be over capacity

Scenario 1: Project generated traffic causes road failure

- Existing capacity (4L) = 2,000; Existing traffic = 1,900, therefore existing roadway is under capacity without project traffic
- Project A traffic = 300
- Total w/Project = 2,200; roadway is now over capacity, caused by Project
- The road needs to be widened to 6 lanes
- So if the Developer pays Prop Share for the widening from 4 lanes to 6 lanes, the project is considered to have met Traffic Concurrency and receives TPS (Traffic Performance Standards) approval

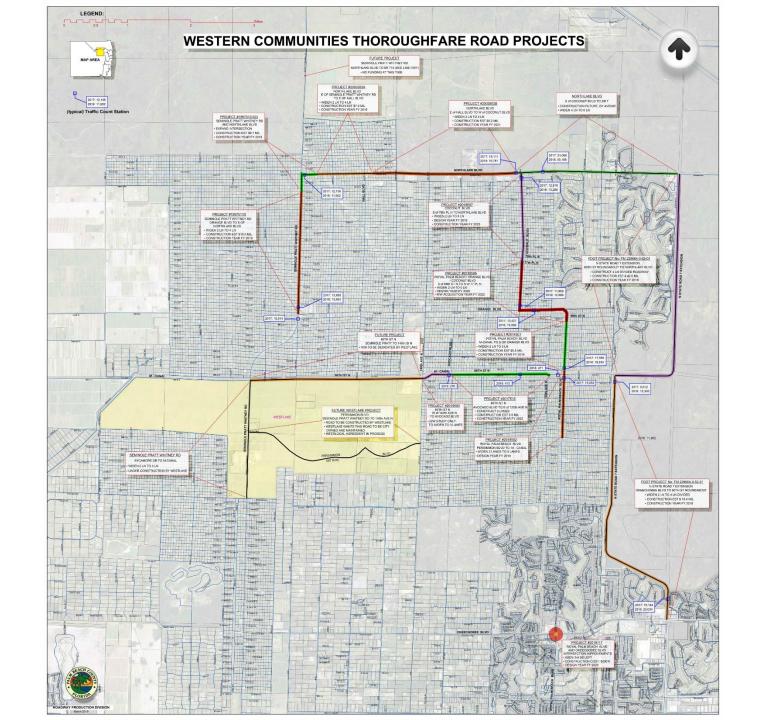


Line Items - Annual Update - Adopted - December 18, 2018

FIVE-YEAR ROAD PROGRAM – Western Communities Area Projects

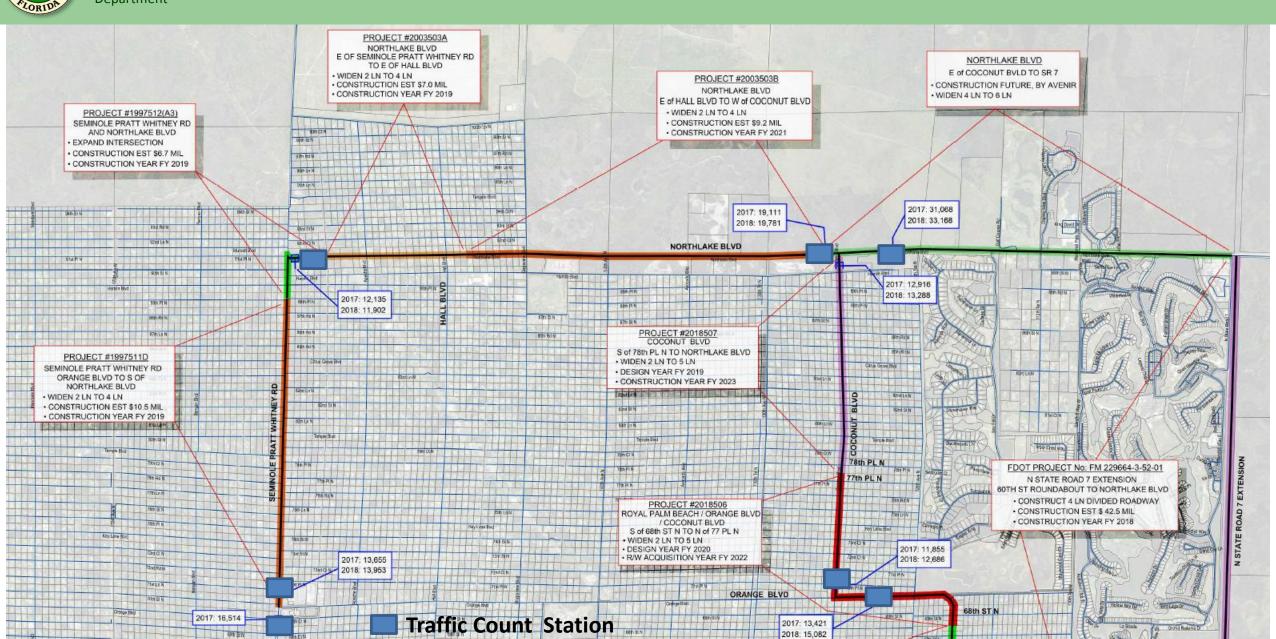
(\$ in 1,000s)

	·	FY 2019		019	FY 2020		FY 2021		FY 2022		FY 2023		
	PROJECT	LIMITS	DESCRIPTION	Cost	Phase	Cost	Phase	Cost	Phase			Cost	Phase
1	60th St. N.	W. of 140th Ave. to Avocado Blvd.	Study	10	S/D	1,000	S/D/R			100	D/R/ M		
2	60th St. N.	Avocado Blvd. to E. of 120th Ave. N.	1.6 mi. 3L			200	R/M			7,000	С		
3	Coconut Blvd	S. of 78th Place North to S. of Northlake Blvd.	1.3 mi. 5 L	1,400	D/R			1,500	R			5,100	С
4	NORTHIAKE KIVO	E. of Seminole Pratt Whitney Rd. to E. of Hall Blvd.	1.0 mi, 4 L	7,000	С								
5	Northlake Blvd.	E. of Hall Blvd. to Coconut Blvd.	2.4 mi, 4 L	1,000	С	3,000	С	5,200	С				
6	KOVAL PAIM BEACH BIVO.	N. of Persimmon Blvd. to N. of M Canal	1.1 mi. 5 L	1,500	D/R			950	R/M				
7	Royal Palm Beach Blvd.	M Canal to S. of Orange Blvd.	1.0 mi, 5 L	5,500	С								
8	Orange Blvd / Coconut	S. of 68th St. N. to N. of 77th Place North	1.6 mi, 5 L	10	D	2,000	D/R			400	R	3,000	R
9	Seminole Pratt Whitney Rd.	Orange Blvd. to S. of Northlake Blvd.	1.8 mi, 4/6 L	10,500	С								
10	Seminole Pratt Whitney Rd.	Northlake Blvd.	Intersection Improvements	6,700	С								
	D=Design; R=Right-of-Way;	M=Mitigation; C=Construction											



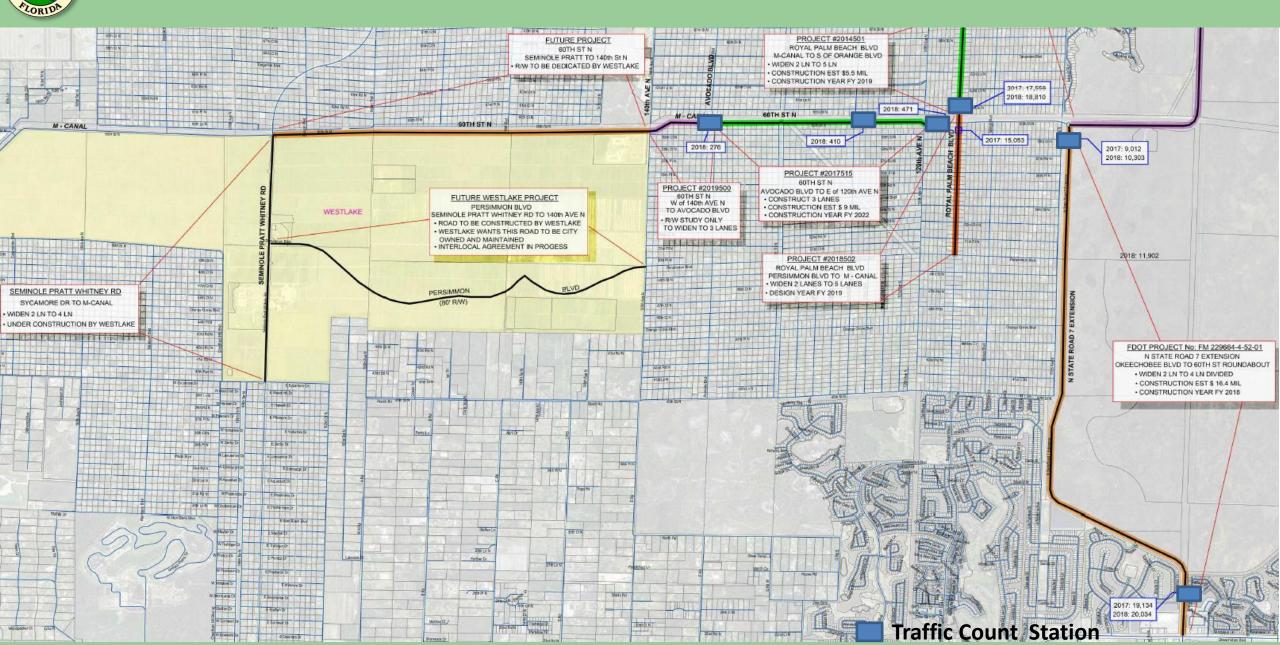


Western Communities Area Projects – North of 60th Street North





Western Communities Area Projects – Westlake and 60th Street North Vicinity





Infrastructure Sales Tax Projects (FY19 to FY23) – Western Communities Area

RESURFACING PROJECTS

- Okeechobee Blvd from Royal Palm Beach Blvd to Wildcat Way (FY20)
- Folsom Rd from Crestwood Blvd to Okeechobee Blvd (FY21)
- Crestwood Blvd from Folsom Rd to Okeechobee Blvd (FY21)

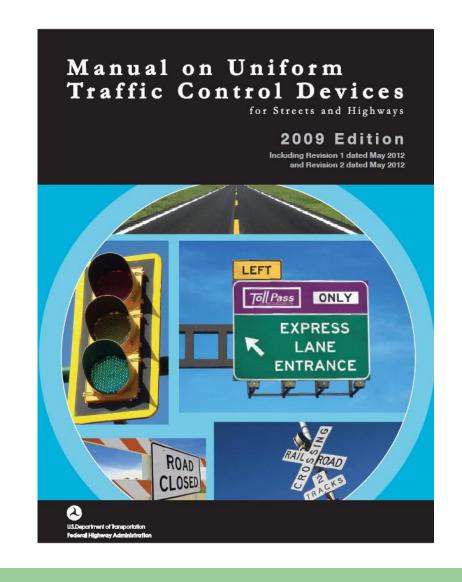
REPLACING HIGH PRESSURE SODIUM STREETLIGHTS TO LEDS

Multiple road segments along Seminole Pratt Whitney Road



Manual on Uniform Traffic Control Devices (MUTCD)

- The MUTCD contains the national standards governing all traffic control devices.
- The MUTCD is the law governing all traffic control devices and has been adopted by the State of Florida
- Provides guidelines for when a traffic signal is to be installed





The 9 Signal Warrants of the MUTCD

- 1. Eight-Hour Vehicular Volume
- 2. Four-Hour Vehicular Volume
- 3. Peak-Hour
- 4. Pedestrian Volume
- 5. School Crossing
- 6. Coordinated Signal System
- 7. Crash Experience
- 8. Roadway Network
- 9. Intersection Near a Grade Crossing



Factors Considered in Determining if a Traffic Signal is Justified

An Engineering study of the traffic conditions at the location shall be performed, considering:

- Number and type of lanes
- Traffic volumes on all intersection approaches
- Existing speed limits
- Crash History
- Age of drivers



Crashes: January 1 – February 15, 2019

PALM BEACH COUNTY SHERIFF'S OFFICE (PBSO)

19-021127	1/1/19	9:26	Northlake Blvd/Bee Line Hwy
19-021316	1/1/19	21:08	Hall Blvd / Northlake Blvd
19-022008	1/3/19	17:28	Northlake Blvd / Bee Line Hwy
19-022666	1/5/19	14:45	Seminole Pratt Whitney / Northlake Blvd
19-024686	1/11/19	13:18	Northlake Blvd / Grapeview Blvd
19-027126	1/18/19	7:37	Seminole Pratt Whitney / Northlake Blvd
19-030910	1/29/19	5:53	Northlake Blvd / Coconut Blvd
19-033613	2/5/19	8:45	Coconut Blvd / Northlake Blvd
19-035875	2/11/19	7:16	Approx. 13300 Northlake Blvd



Crashes: January 1 – February 15, 2019 (continued)

WEST PALM BEACH POLICE DEPARTMENT

- 1/31/2019 at N. State Road 7 and Northlake Blvd
- 1/11/2019 at Northlake Blvd. and Shoppes of Ibis

PALM BEACH GARDENS POLICE DEPARTMENT

Northlake Blvd. from Charleston Oaks west to Grapeview Blvd

- 1900038218: January 2019 No Injuries
- 1900058629: January 2019 No Injuries
- 1900084311: February 2019 Fatal and Non-Incapacitating (vehicle vs. the lumber truck)
- 1900091013: February 2019 2-non-incapacitating injuries



How is the study conducted?

- 24-hour machine approach volume counts during typical weekday
- 2 peak-hour manual turning movement counts
- Generally right turn traffic is not considered for signal warrant
- PBC includes percent of right turn equal to senior citizen population
- Volume thresholds to meet during each of the highest 8 hours
 - Single-Lane approach, no right turn volumes included = 53 vehicle per hour
 - 2 or more lanes, portion of rights included = 70 vehicles per hour



Northlake Blvd and Bay Hill Drive

The range of the number of counted vehicles during each of the highest 8 hours:

- 101-146 vehicles per hour total
- 95-124 vehicles per hour turned right
- 6–22 vehicles per hour turned left
- 35-60 vehicles per hour combined left/right

Threshold for left turn only = 53 vehicles per hour Thresholds for combined left/right = 70 vehicles per hour

 No crashes in the last 12 months (period ending 11/30/2018) susceptible to correction by a traffic signal

CONCLUSION: SIGNAL **NOT** WARRANTED



Florida Statute Regulating Signal Installation

- PBC owns and maintains Northlake Blvd
- The segment fronting the Bay Hill Estates annexed by PBG
- State Law gives municipalities original traffic control jurisdiction over county roads, including installation of signals
- State Statute gives counties authority to regulate their roads as provided in County's ROW Permitting Ordinances
- State Law requires both counties and municipalities to comply with the FDOT standards when warranting signals
- FDOT has authority to investigate any nonconforming devices and direct their removal



Bay Hill Estates Signal Payment

- The Bay Hill Estates developer required to fund a signal if warranted within 24 months of the notice of the issuance of the final certificate of occupancy.
- Payment of \$300,000 was made June 2013.
- Notice of the issuance of the final certificate of occupancy received June 2016, setting up the 24-month period for signal warrant.
- Signal was <u>not</u> warranted and \$300,000 payment returned to developer in August 2018.



QUESTIONS

Seminole Pratt Whitney Rd North Extension Alternatives



FUTURE EXTENSION OF SEMINOLE PRATT WHITNEY ROAD TO SR 710/BEELINE HIGHWAY

ALTERNATIVE A

- Due North of Northlake Blvd
- Turns east n of 100th Lane N
- Turns north along east side of Mecca
- Turns northeast along C-18 Canal to SR 710/Beeline Highway

NOTE: The original north/south alignment of Seminole Pratt Whitney Rd (thru Mecca and Unit 11) was discontinued as a viable alternative following road construction and Scripps development permits were challenged and denied.

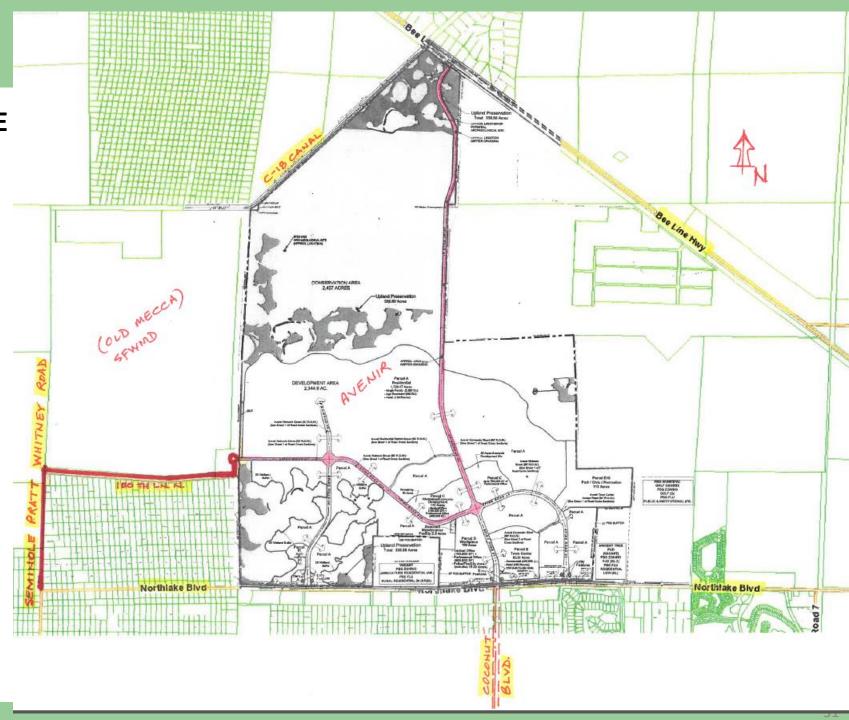




PRATT WHITNEY ROAD TO SR 710/BEELINE HIGHWAY

ALTERNATIVE B

- Due North of Northlake Blvd
- Turns east n of 100th Lane N
- Connect at east side of Mecca to future road within Avenir development
- Turns north (Coconut Blvd extension) thru Avenir to SR 710/Beeline Highway





FUTURE EXTENSION OF SEMINOLE PRATT WHITNEY ROAD TO SR 710/BEELINE HIGHWAY

ALTERNATIVE C

- East on Northlake Blvd to Coconut Blvd
- Turns north (Coconut Blvd extension) on future road thru Avenir to SR 710/Beeline Highway

