Palm Beach County:
Strategic Planning
& Performance Management

Growing Our Infrastructure for Today and Tomorrow

INFRASTRUCTURE
CROSS DEPARTMENTAL TEAM

Team

Gary Sypek & Jerry Allen – Airports ~ Bud Cheney & Tessa Wattley – Housing and Economic Sustainability ~ Jackie Binns & Scott Marting – Risk Management ~ Ernie Pena-Roque & Glenn Jergensen – Tourist Development Council ~ Bob Hamilton & Jean Matthews – Parks and Recreation ~ Doug Wise & Khurshid Mohyuddin – Planning, Zoning, and Building ~ Ali Bayat & John Acton – Water Utilities ~ Jim McNamara & Tim Calhoun – Fire Rescue ~ David Ricks & Motasem Al-Turk – Engineering

Megan Houston & Jake Leech – Office of Resilience ~ Elizabeth Prior – Libraries ~ Clinton Forbes, Christian Londono & Steve Anderson – Palm Tran ~ Ruth Moguillansky & Chrystal Mathews – Office of Community Revitalization ~ Isami Ayala-Collazo & Eric McClellan – Facilities Development & Operations

Strategic Priority: Infrastructure

"To provide the needed structures, systems and services that establish the foundation required to enhance the quality of life of every resident."

Infrastructure Goals:

1. **Increase resiliency and sustainability of infrastructure**

2. **Continue to preserve existing infrastructure and deliver new infrastructure that conforms to the latest industry standards**

3. **Create safe, healthy, and attractive neighborhoods and communities**

4. **Increase <u>multimodal travel</u> opportunities with safe and efficient transportation services**

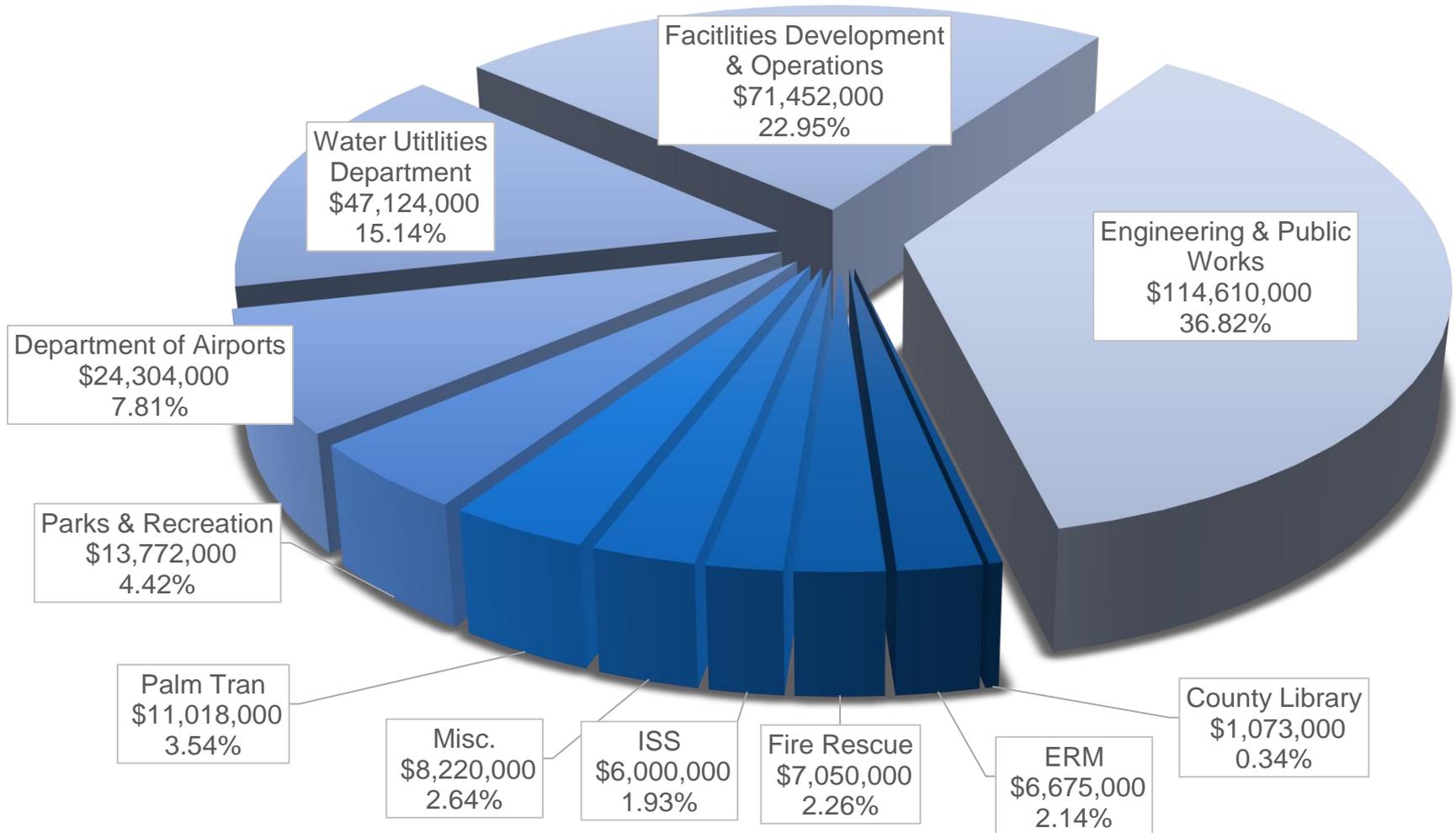5. **Increase connectivity and safety through <u>complete streets</u>**

Countywide Capital Funding

(in $1,000)

4
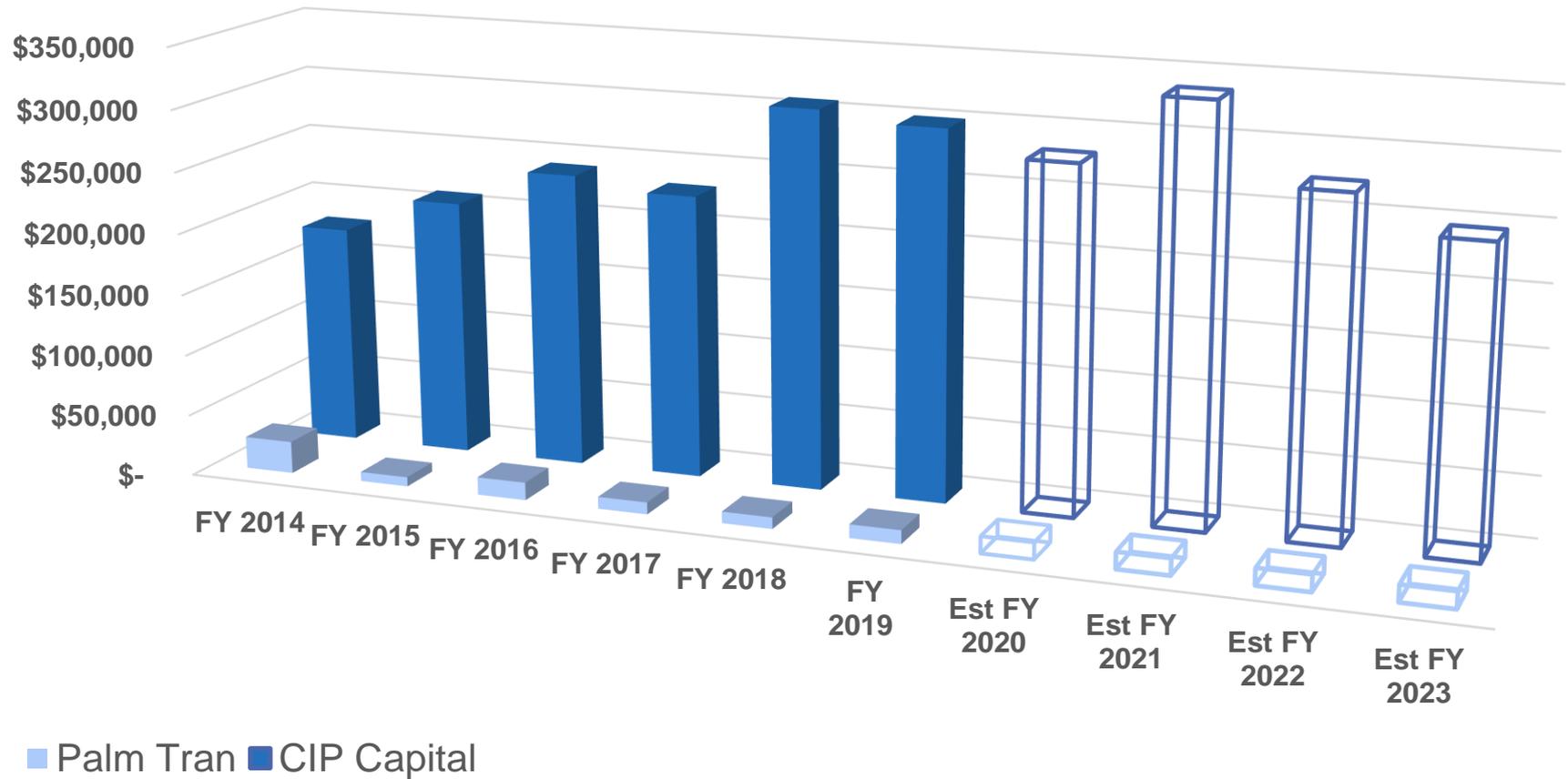
FY 2019 DEPARTMENT CAPITAL FUNDING
$311,298,000

Facitlities Development & Operations
$71,452,000
22.95%

Water Utitlities Department
$47,124,000
15.14%

Engineering & Public Works
$114,610,000
36.82%

Department of Airports
$24,304,000
7.81%

Parks & Recreation
$13,772,000
4.42%

Palm Tran
$11,018,000
3.54%

Misc.
$8,220,000
2.64%

ISS
$6,000,000
1.93%

Fire Rescue
$7,050,000
2.26%

ERM
$6,675,000
2.14%

County Library
$1,073,000
0.34%

Major Infrastructure Departments

Engineering & Public Works

- 3,500 lane miles of paved roads and over 21 miles of canals/ditches
- Over 300 bridges
- Over 1,200 signals
- Operating and maintaining 475 miles of fiber-optic communications network
- 50% of all lane miles of the major roadway system (remaining 50% by the state)

Facilities Development & Operation

- 767 total buildings
- 11.5M square feet
- Over $33M annual electricity and water bills

Water Utilities Department

- Serves 585,000 PBC residents
- Over 4,200 miles of water, wastewater, and reclaimed pipe and 900 lift stations
- 8 water and wastewater treatment plants, 4 Operation Centers and 2 Wetlands

Major Infrastructure Departments, Cont'd

Department of Airports

- Responsible for operation, maintenance, and development of one medium-hub commercial service airport (PBI) and three general aviation airports
- More than 4,500 acres of airside and landside facilities
- Over 6.7M passengers handled annually at PBI
- Economic impact of more than $5.7 Billion to the region

Parks & Recreation

- 125 playgrounds, 132 sports fields, 5 nature centers, 7 pools, 93 golf holes, 8 performing art/community centers, 31 boat ramps, 396 campsites
- 6,087 acres of developed park property with 110 park and recreational facilities
- Our 85 developed parks serve millions of residents and visitors annually, 6-8 million annual visitors to County beaches

Palm Tran

- 32 Fixed-Route bus routes operated with 143 buses
- On-demand Para-transit service (Connection) operated with 237 vehicles
- Operations from 3 separate facilities and 2,800 bus stops
- Transporting over 10 million passengers per year

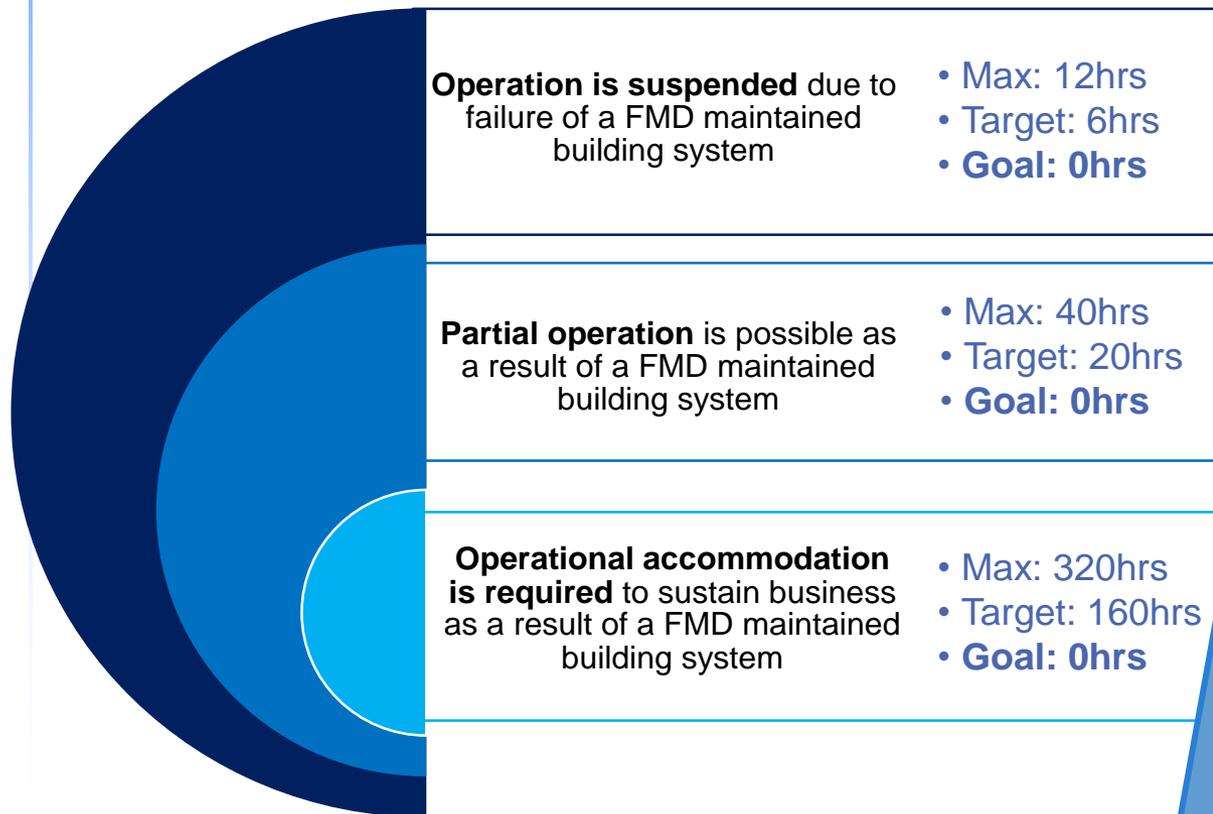# Goal 1. Increase resiliency and sustainability of infrastructure

Strategies

- **Maintain continuity of facility service by responding and adapting to changes**

- **Launch Facilities Development and Operations' (FD&O) "EnergyCAP" utility benchmarking software that will provide detailed, interdepartmental access to facility energy and water consumption, cost, and greenhouse gas emissions analytics**

- **Continue to measure greenhouse gas emissions and recommend mitigation strategies**

- **Implement and refine the Resilience Action Plan that includes facility resiliency and sustainability goals**

- **Continue to assess renewable energy opportunities within the County**

- **Streamline climate change adaptation planning for County facilities through resource development and training**

Goal 1. Increase resiliency and sustainability of infrastructure
Metric: Keep County Facilities Operational and Maintain Level of Service during and after interruptions to routine operations*

*Based on business hours per month for FD&O managed building(s) or facility(s) countywide only

Operation is suspended due to failure of a FMD maintained building system
- Max: 12hrs
- Target: 6hrs
- **Goal: 0hrs**

Partial operation is possible as a result of a FMD maintained building system
- Max: 40hrs
- Target: 20hrs
- **Goal: 0hrs**

Operational accommodation is required to sustain business as a result of a FMD maintained building system
- Max: 320hrs
- Target: 160hrs
- **Goal: 0hrs**

How are we doing so far?
July 2019
0hrs of operation suspended
0hrs of partial operation
60hrs accommodations were required for operation

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Goal 1. Increase resiliency and sustainability of infrastructure
Metric: Reduce facility energy and water use intensity

LED Lights

Throughout Parks

Sustainable Buildings

Acreage Library
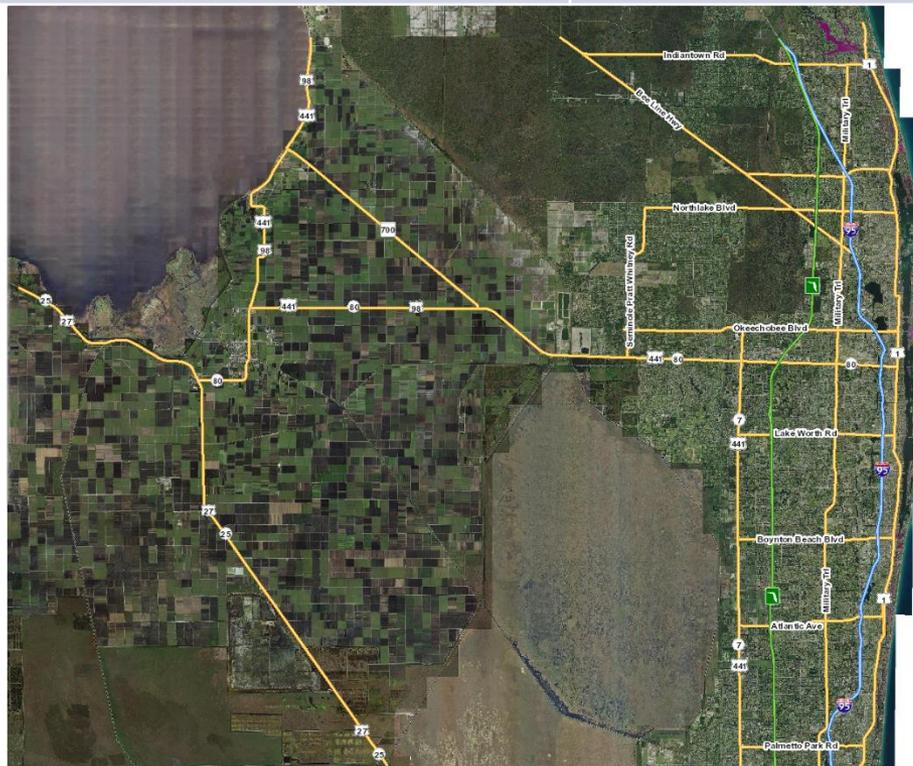
Solar Panels

Mounts Botanical Garden

S. Regional Water Reclamation Facility

Goal 1. Increase resiliency and sustainability of infrastructure
Metric: Ensure consistent planning and designing for sea level rise and extreme weather events

Year	Typical Capital Projects	"Critical" Capital Projects
2030	10 inches	12 inches
2060	26 inches	34 inches
2100	61 inches	81 inches

Impacts across entire County

Likely to be inundated at 3 feet of sea level rise
May be inundated at 3 feet of sea level rise

GIS Link

Goal 1. Increase resiliency and sustainability of infrastructure
Metric: Ensure consistent planning and designing for sea level rise and extreme weather events

Year	Typical Capital Projects	"Critical" Capital Projects
2030	10 inches	12 inches
2060	26 inches	34 inches
2100	61 inches	81 inches

Example of typical County impact

Likely to be inundated at 3 feet of sea level rise

May be inundated at 3 feet of sea level rise

GIS Link

Goal 2. Continue to preserve existing infrastructure and deliver new infrastructure that conforms to the latest industry standards

Strategies

- Appropriately prioritize repair and replacement needs of existing infrastructure investments when developing funding plans for new capital construction

- Identify, fund, and implement capital improvement needs in a timely manner so as to preserve the value of past investments and introduce new facilities to meet local demand

- Continuously integrate new and emerging technologies for capital projects during the planning and development stage

- Sustain communication between and amongst departments, vendors, customers, and industry professionals to keep abreast of trends, opportunities, and techniques that are applicable to public infrastructure investments

- Approach infrastructure repair, maintenance, and delivery with considerations of a long-range planning horizon, as opposed to current cost basis alone

- Complete ongoing Surtax projects on-time and on-budget. These projects help sustain our existing infrastructure

Goal 2. Continue to preserve existing infrastructure and deliver new infrastructure that conforms to the latest industry standards
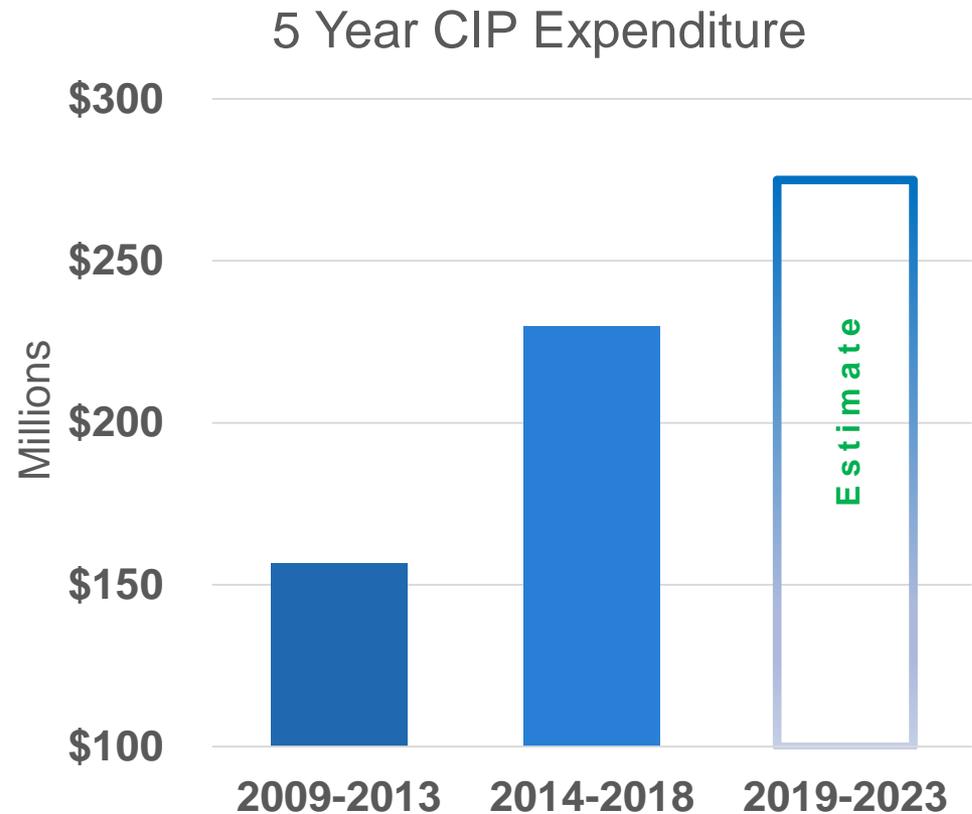**Metric:** On Schedule Implementation of Capital Improvement Program (WUD)

Strategic Sustainability Plan

Infrastructure Master Plan

Capital Improvement Program (CIP)

Level of Service Improvements

Regulatory Compliance

Environment

Resiliency

Population Growth

Operation Reliability

Goal 2. Continue to preserve existing infrastructure and deliver new infrastructure that conforms to the latest industry standards
Metric: On Schedule Implementation of Capital Improvement Program (WUD)

- Current capital improvement program was adopted in 2014

- Annual capital expenditure has significantly increased

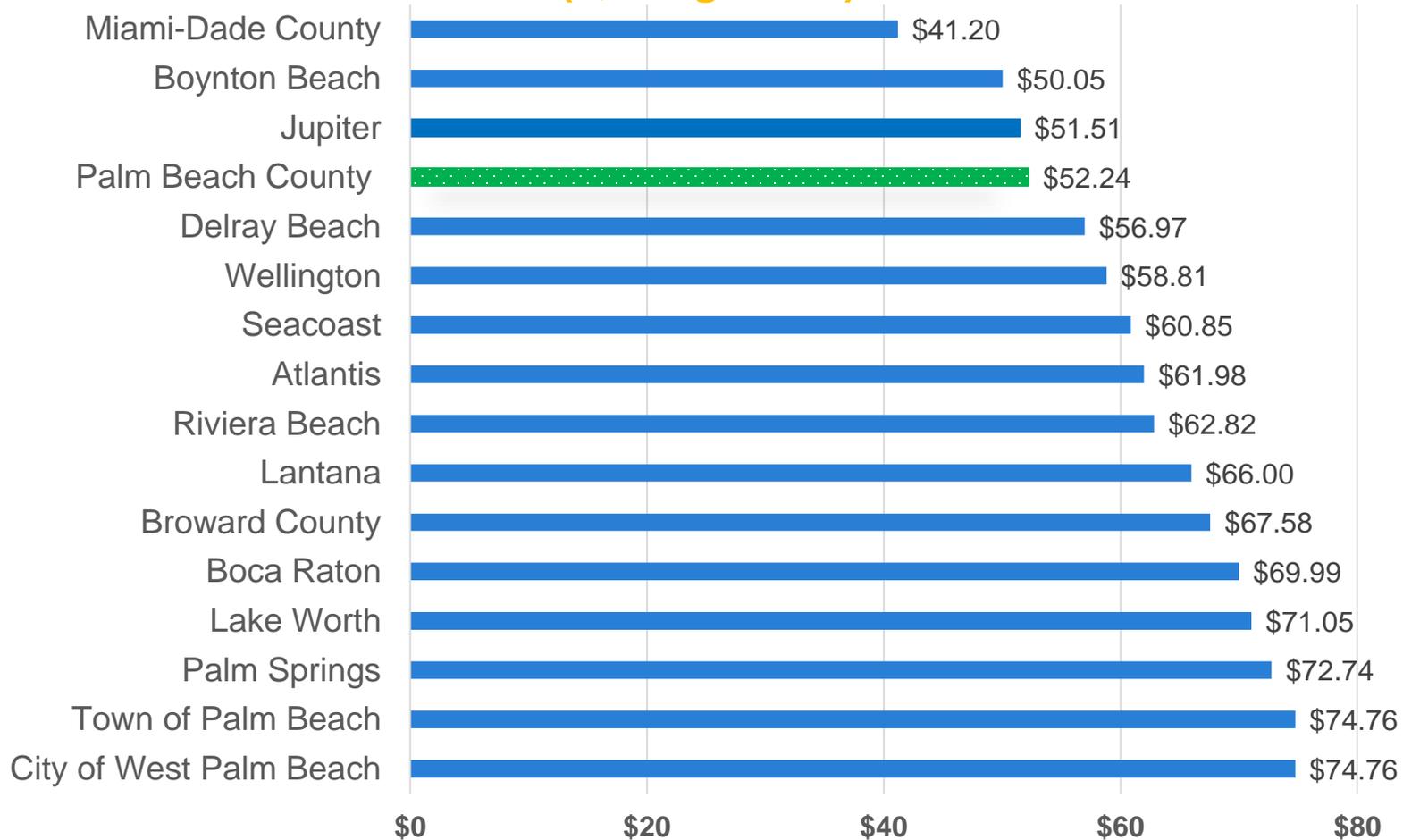- New "Integrated Master Plan" project is initiated which will prepare next capital improvement program

5 Year CIP Expenditure

Millions

	2009-2013	2014-2018	2019-2023

(Estimate)

Goal 2. Continue to preserve existing infrastructure and deliver new infrastructure that conforms to the latest industry standards
Metric: On Schedule Implementation of Capital Improvement Program (WUD)

Residential Customer's Monthly Bill Comparison

(5,000 gallons)

Location	Monthly Bill
Miami-Dade County	$41.20
Boynton Beach	$50.05
Jupiter	$51.51
Palm Beach County	$52.24
Delray Beach	$56.97
Wellington	$58.81
Seacoast	$60.85
Atlantis	$61.98
Riviera Beach	$62.82
Lantana	$66.00
Broward County	$67.58
Boca Raton	$69.99
Lake Worth	$71.05
Palm Springs	$72.74
Town of Palm Beach	$74.76
City of West Palm Beach	$74.76

Goal 3. Create safe, healthy, and attractive neighborhoods and communities

Strategies

- Implement road safety plan to reduce vehicle, bicycle, and pedestrian crashes

- Assess existing infrastructure and service delivery needs in residential neighborhoods located in unincorporated Palm Beach County with a focus on underserved Countywide Community Revitalization Team (CCRT) neighborhoods.

- Use infrastructure improvements strategically to improve neighborhood safety and wellbeing

- Improve transit stops (shelters, benches) and explore assessing developers to provide maintenance support

Goal 3. Create safe, healthy, and attractive neighborhoods and communities
Metric: Crash Summary

YEAR	2014	2015	2016	2017	2018
Total Crashes*	32,479	36,506	35,415	34,929	32,488
Change from prior year	N/A	12%	-3%	-1%	-7%
Bicycle & Pedestrian Crashes*	914	947	899	956	716
Change from prior year	N/A	4%	-5%	6%	-25%

*Data reflects Palm Beach County maintained roadways only, which includes all municipalities but excludes State freeway systems.

Goal 3. Create safe, healthy, and attractive neighborhoods and communities

Future Metrics:

- Total miles of pavement marking installed, per year

- Surtax supported conversions of street lights over 10 year period (over 200 completed FY 2019)

- Value of Park projects completed, per year

- Miles of water, wastewater or reclaimed pipes installed/ replaced/ rehabbed, per year

- Miles of roads paved/repaired

- Percentage of lane miles that are considered Complete Streets

Goal 4. Increase multimodal travel opportunities with safe and efficient transportation services

Strategies

- **Expansion of Palm Tran's fixed-route network**

- **Assess options for improved transit technology (e.g. fare payment, informational signage)**

- **Explore additional funding partnerships (public, private partnerships, transportation network companies, colleges, employers, etc.)**

- **Improve efficiency of the County's transportation network with the use of technology**

Goal 4. Increase multimodal travel opportunities with safe and efficient transportation services
Metric: Improve Palm Tran On-Time Performance
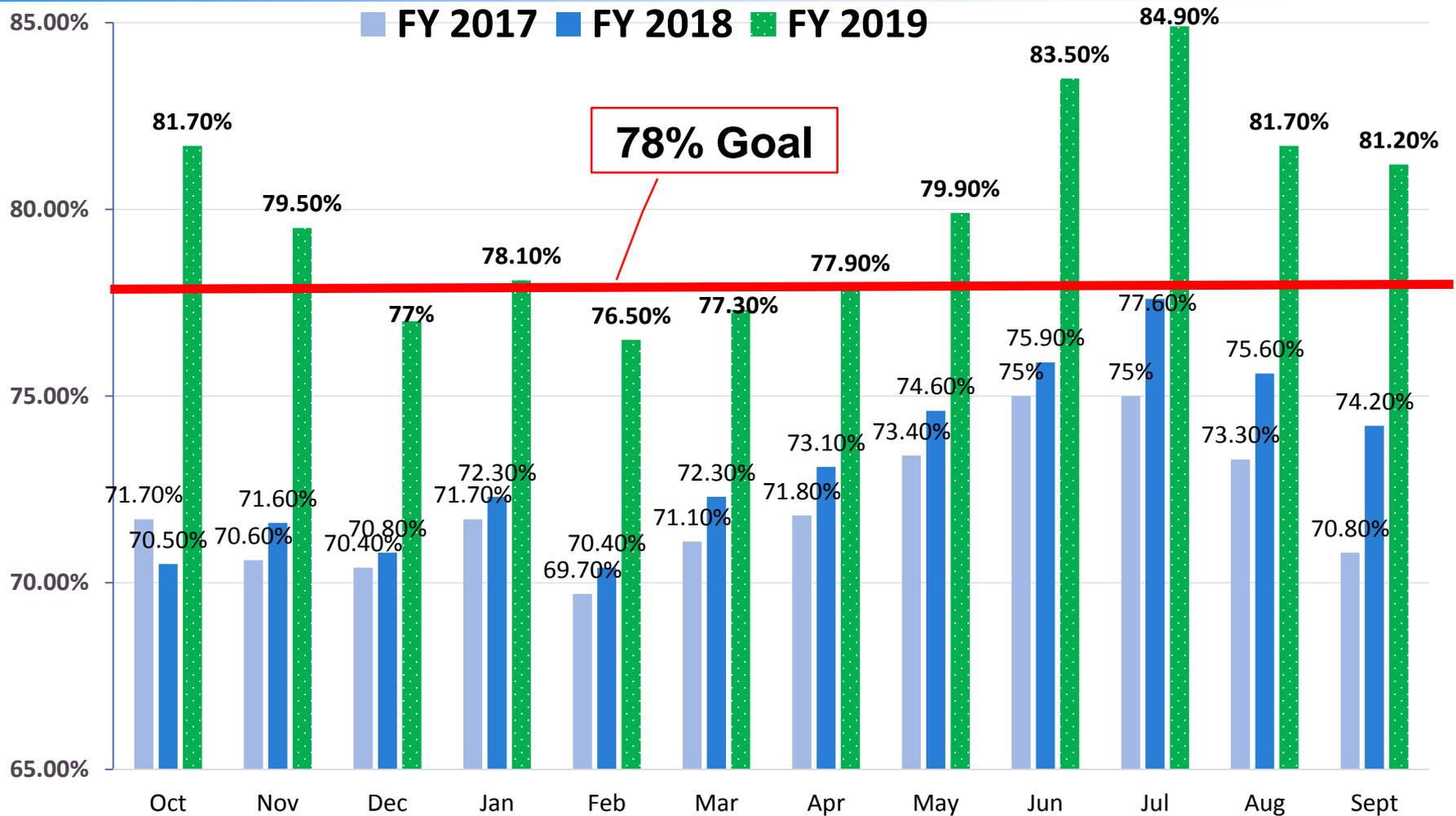
The on-time performance improvement in FY2019 is due to the implementation of the RPM (Route Performance Maximization) on September 30, 2018.

Goal 4. Increase multimodal travel opportunities with safe and efficient transportation services
Metric: Increase Palm Tran Total Ridership
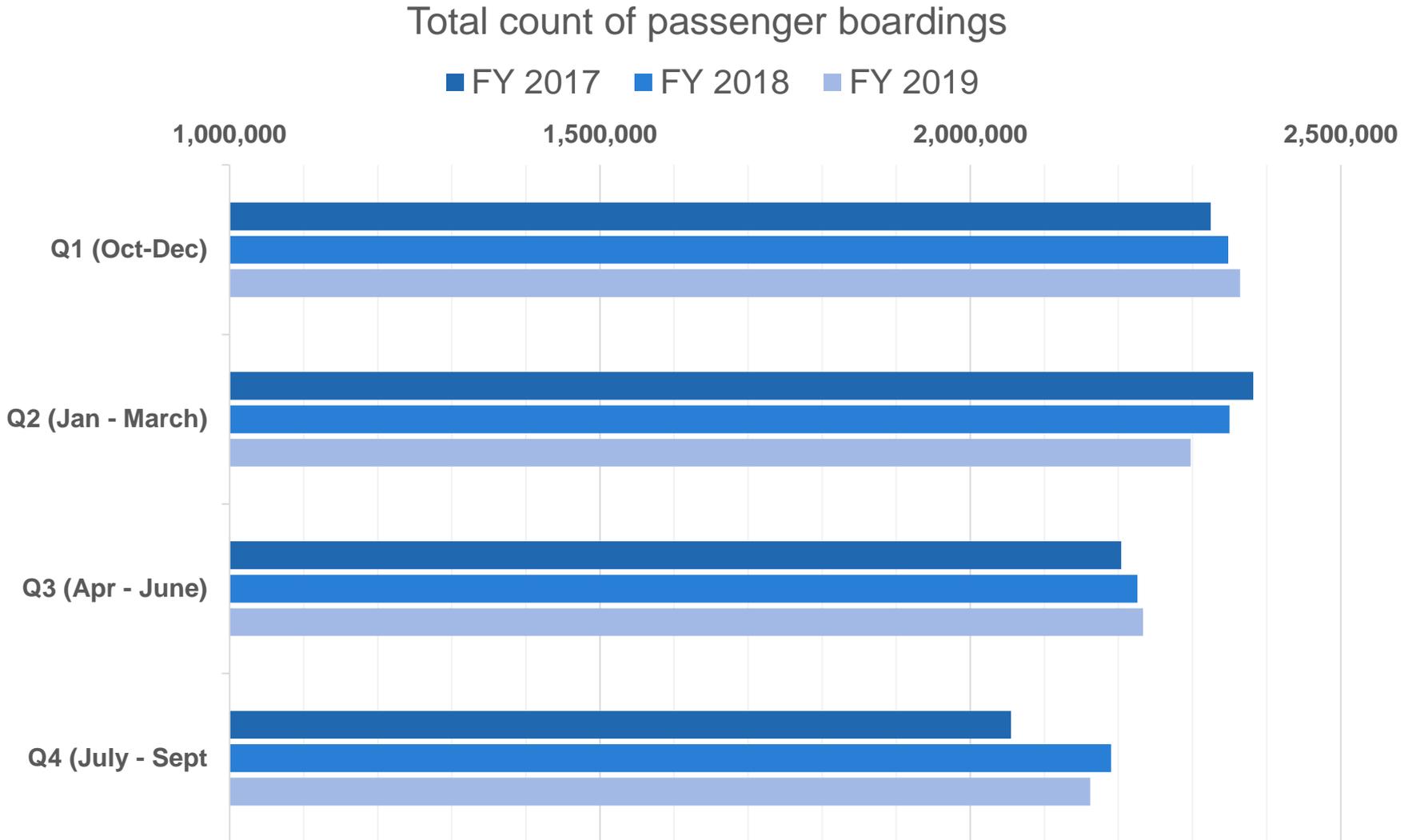
Total count of passenger boardings

FY 2017   FY 2018   FY 2019

Goal 4. Increase multimodal travel opportunities with safe and efficient transportation services
Metric: Total Annual Traffic Delay Costs due to Congestion
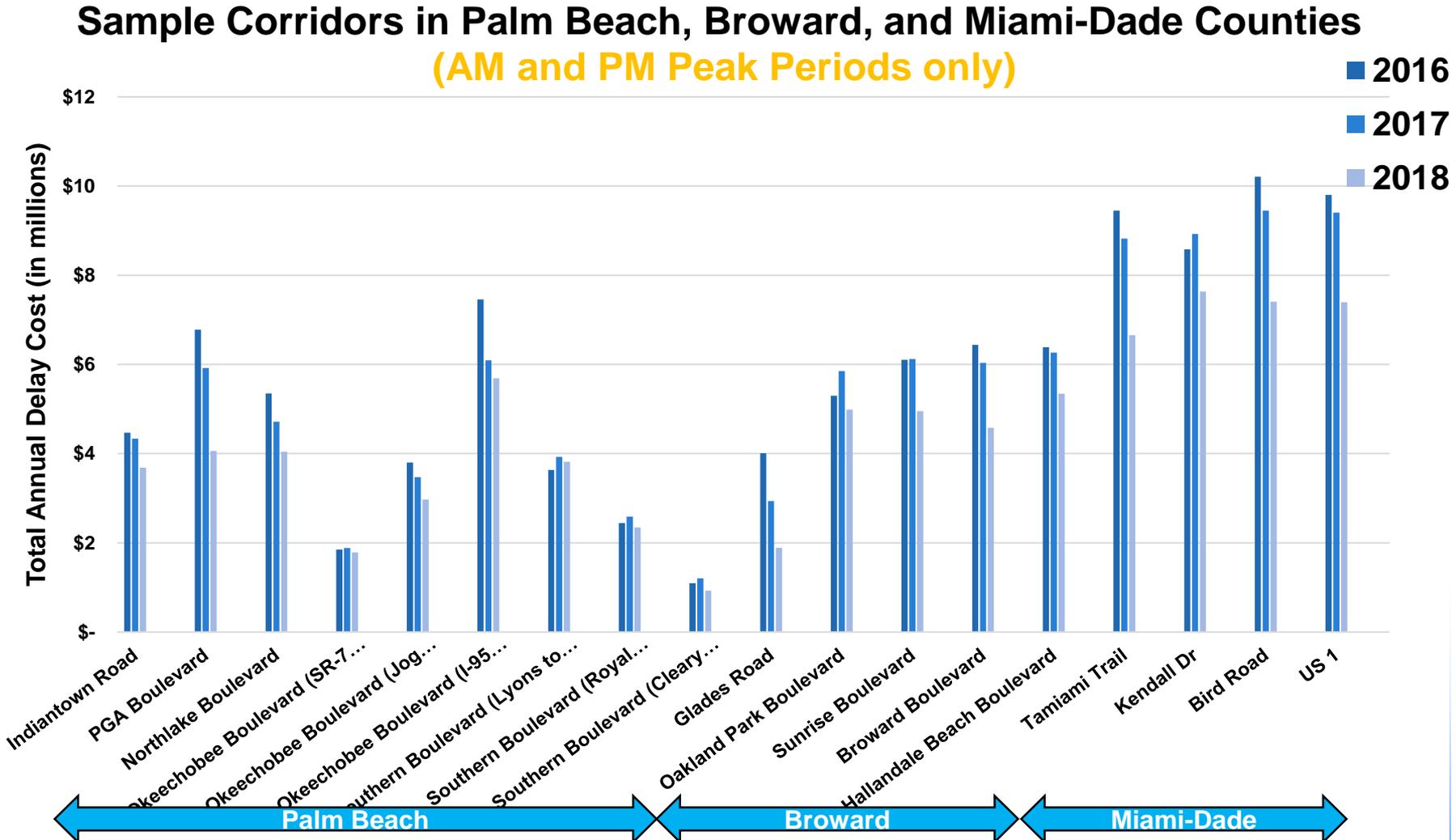
Sample Corridors in Palm Beach, Broward, and Miami-Dade Counties
(AM and PM Peak Periods only)

Goal 4. Increase multimodal travel opportunities with safe and efficient transportation services
Metric: Average Travel Time per Mile on Certain Major Corridors

Eastbound Morning Peak Period

Westbound Afternoon Peak Period

Average Travel Time/Mile (Minutes)

Legend:
- Palm Beach County
- Broward County
- Miami-Dade County

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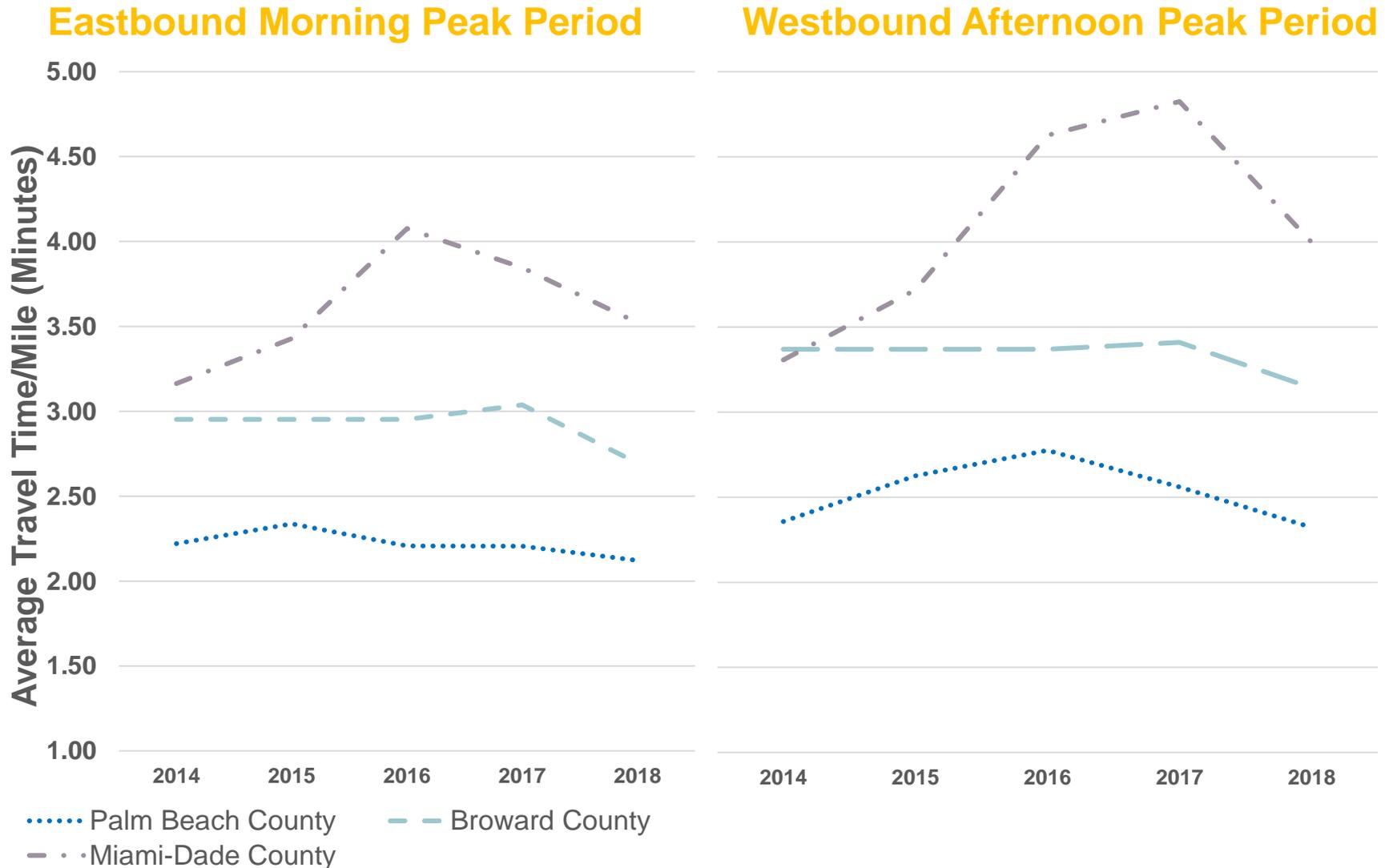
Goal 5. Increase connectivity and safety through complete streets

Strategies

- Support a well-connected transportation network that includes transit, bicycle, and pedestrian options

- Work with municipalities, Palm Beach County Schools and Sherriff on areas where sidewalks are needed in unincorporated areas. Seek grants from Transportation Planning Agency

- Install bike lanes on road resurfacing projects within existing County right-of-way

- Sidewalks and bike lanes are both a component of the Roadway design, which follows the Florida Greenbook standards (updated 6/2018) and County has updated its Roadway Typical Sections accordingly

Gathering Spaces   Biking   Motor Vehicles   Transit   Bus Stop   Walking

25
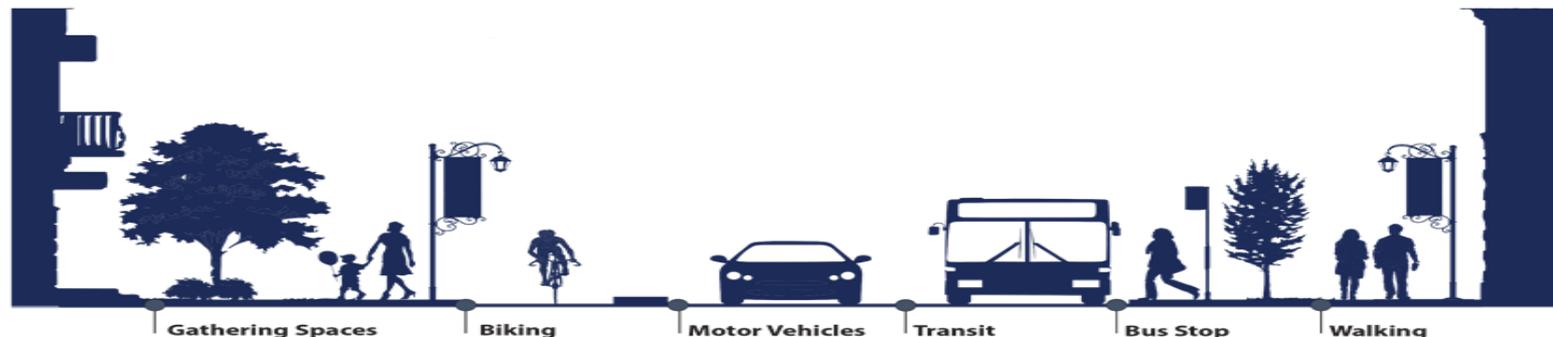
Goal 5. Increase connectivity and safety through complete streets

Metric: Implementation of County Pathway Program

Completion Year

Miles
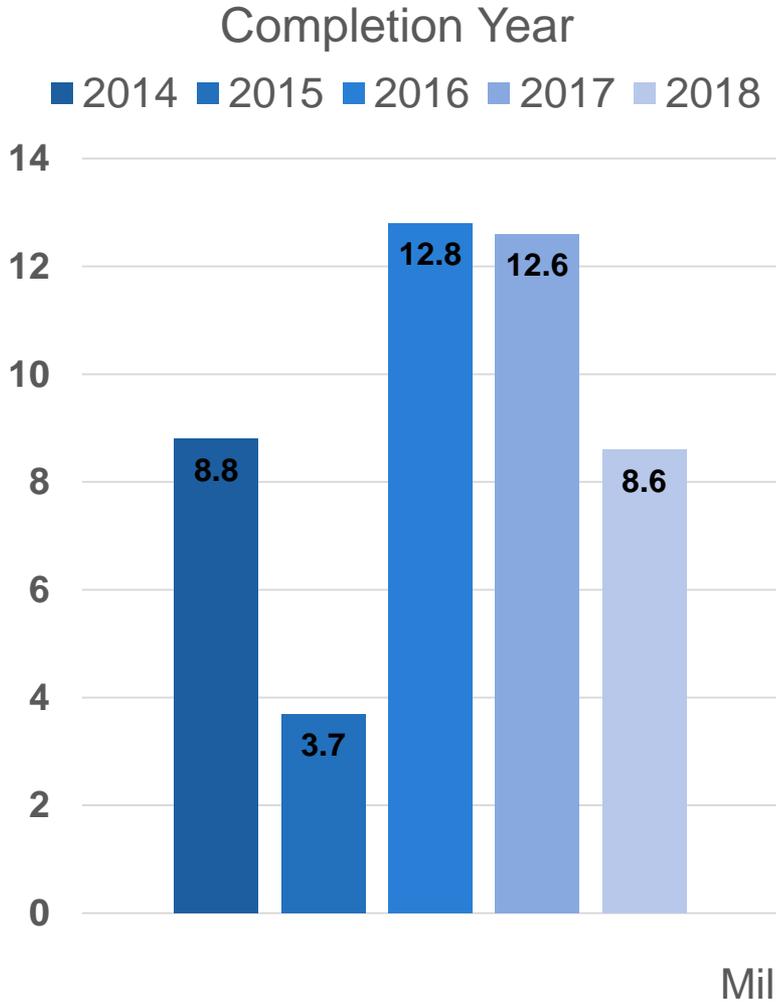
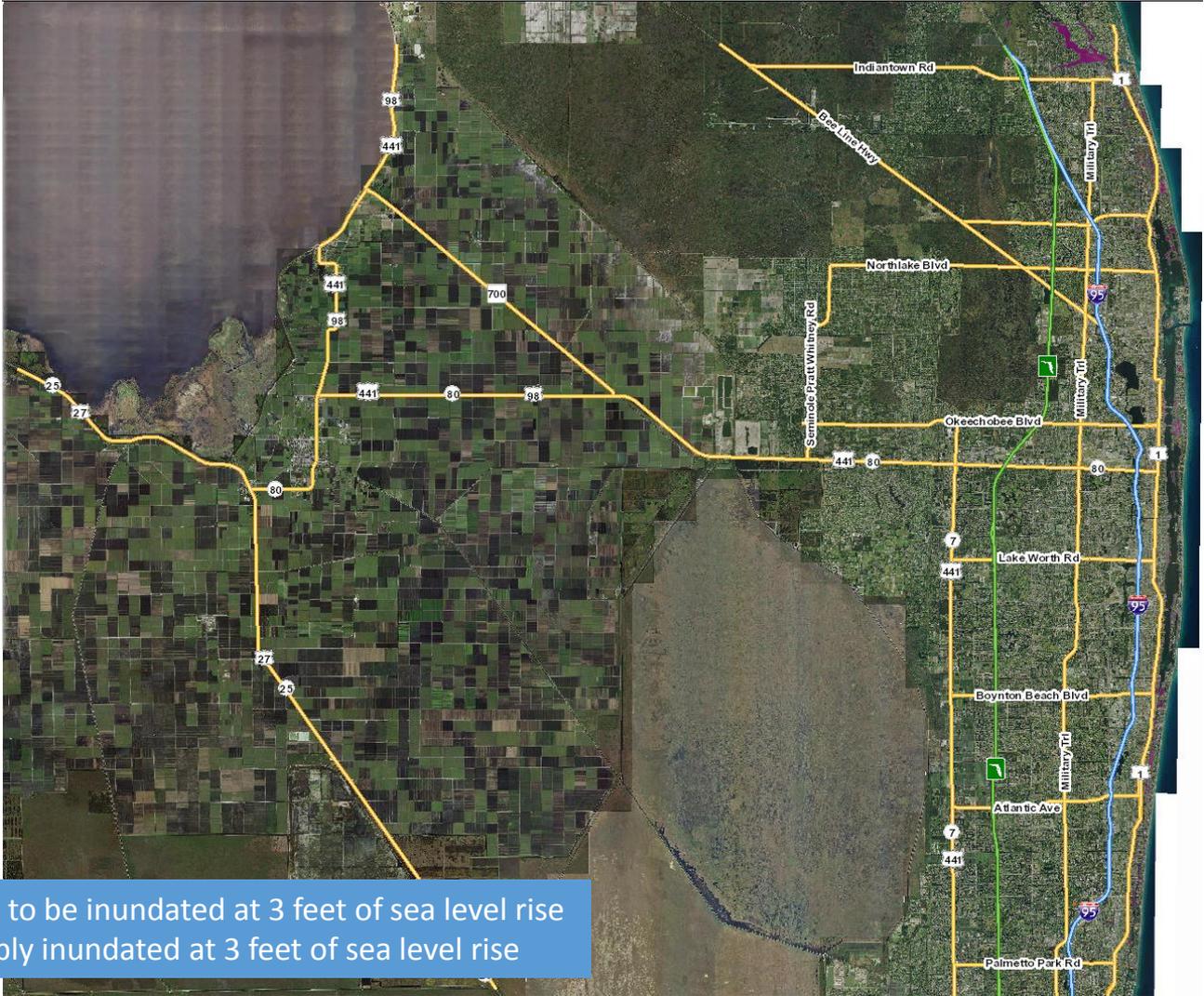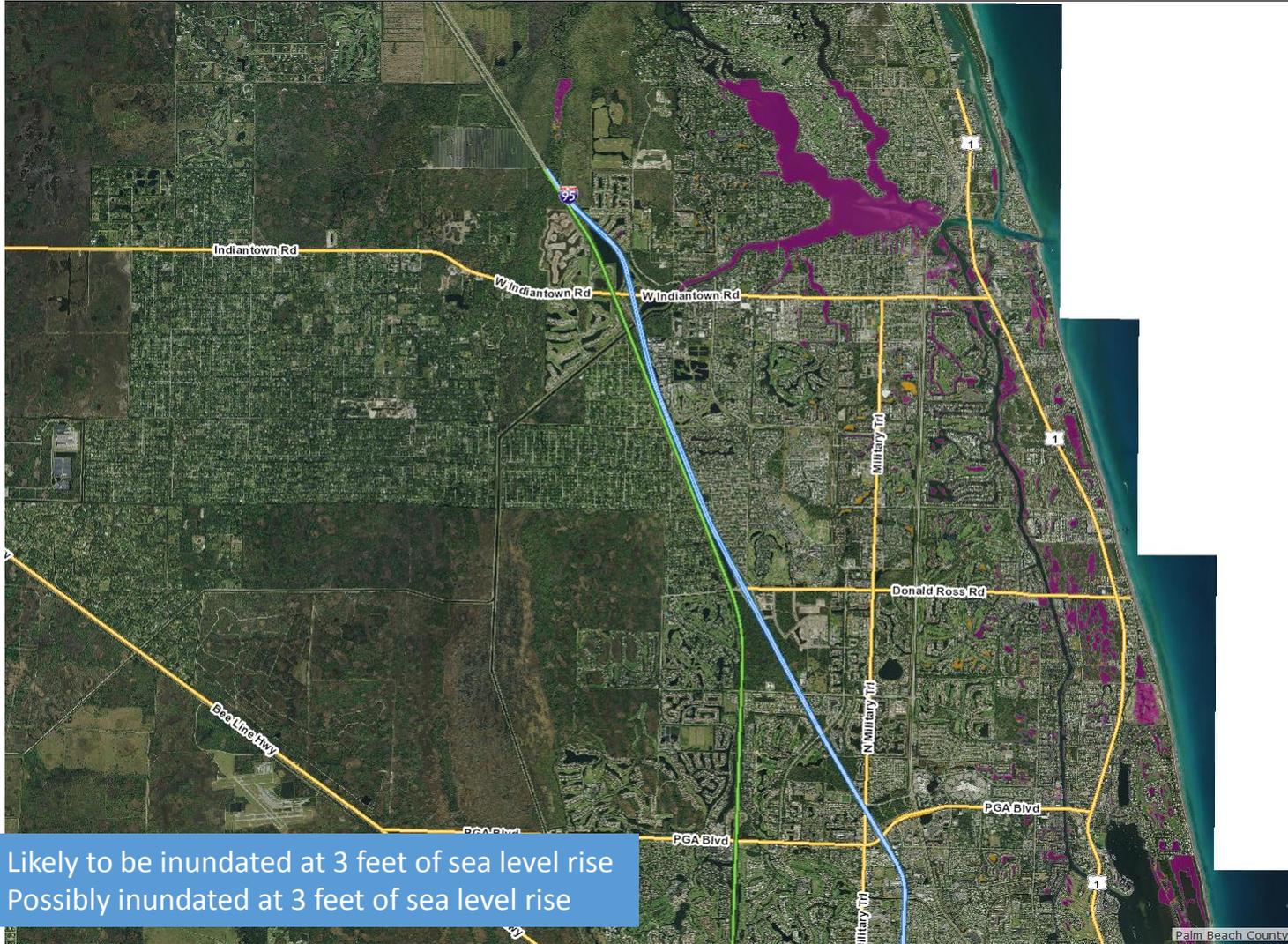## Metric: Bike Lanes Added or Refurbished
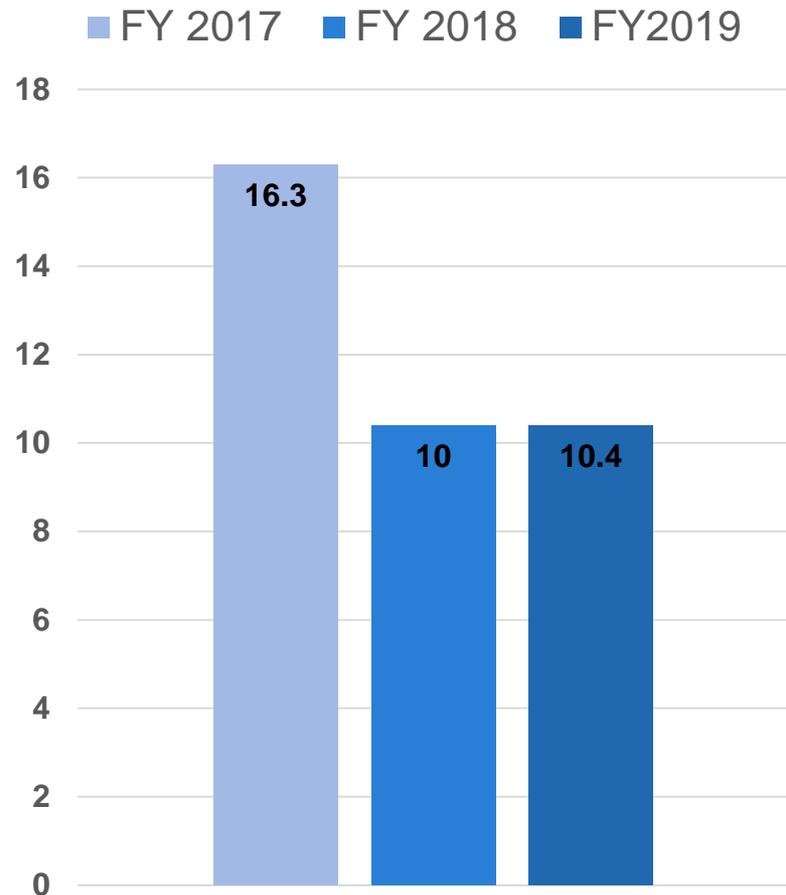
Next Steps

- **Identify overarching goals to ensure high quality, sustainable and resilient infrastructure services to community**

- **Establish key performance indicators that support the goals**

- **Align County department projects to reduce overall infrastructure related costs and interruptions to the community**

- **Assess existing infrastructure and service delivery needs in residential neighborhoods located in unincorporated Palm Beach County with a focus on underserved CCRT neighborhoods**

- **Develop strategies and an implementation plan to address existing deficiencies and ways to fund needed capital improvement**

- **Continue working with County GIS teams to develop mapping showing Capital Projects from many different sources (County, Municipalities, TPA, etc.) which will result in improved planning, costs reductions, and better dissemination of information between Departments and the Public**
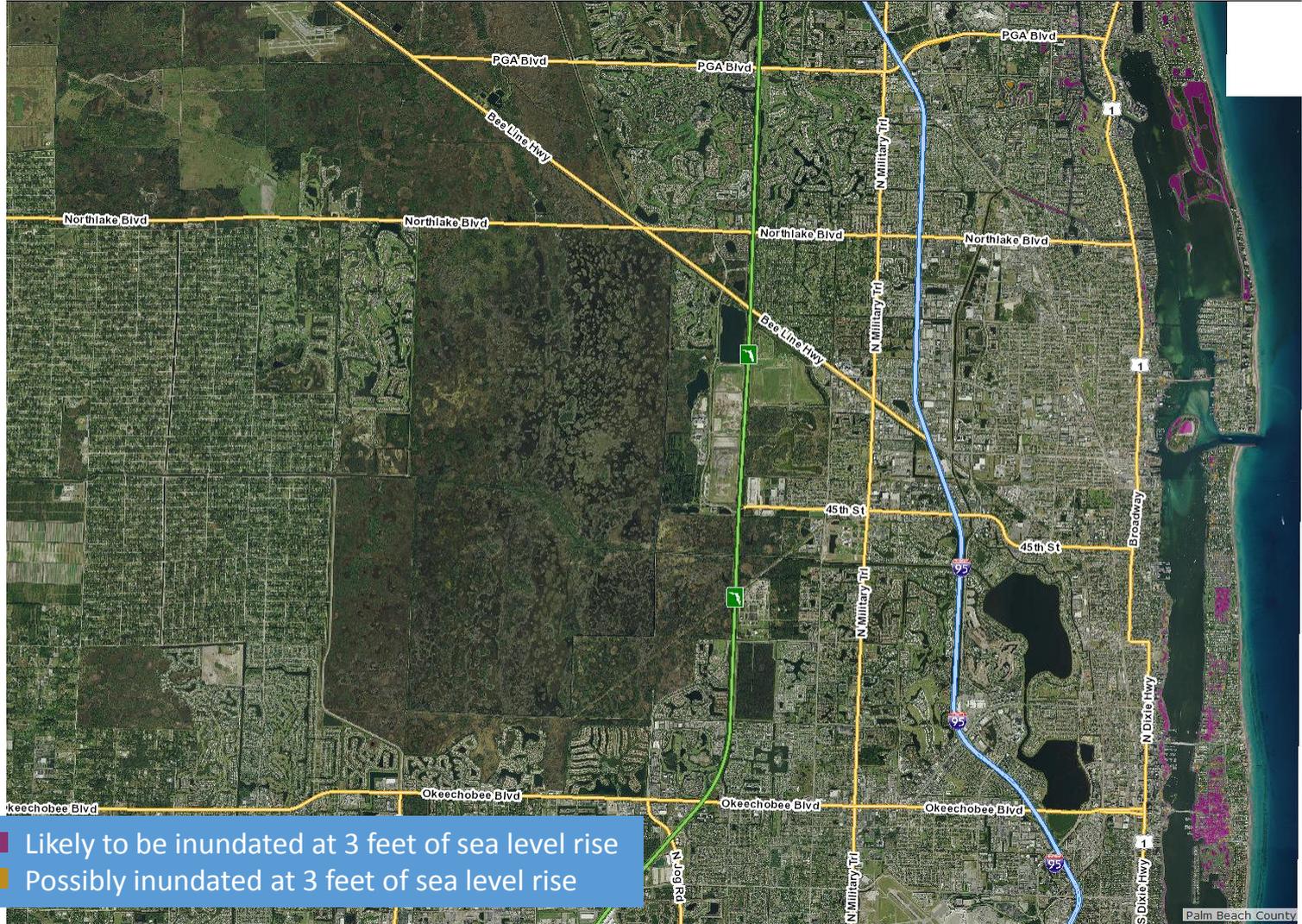
Thank you

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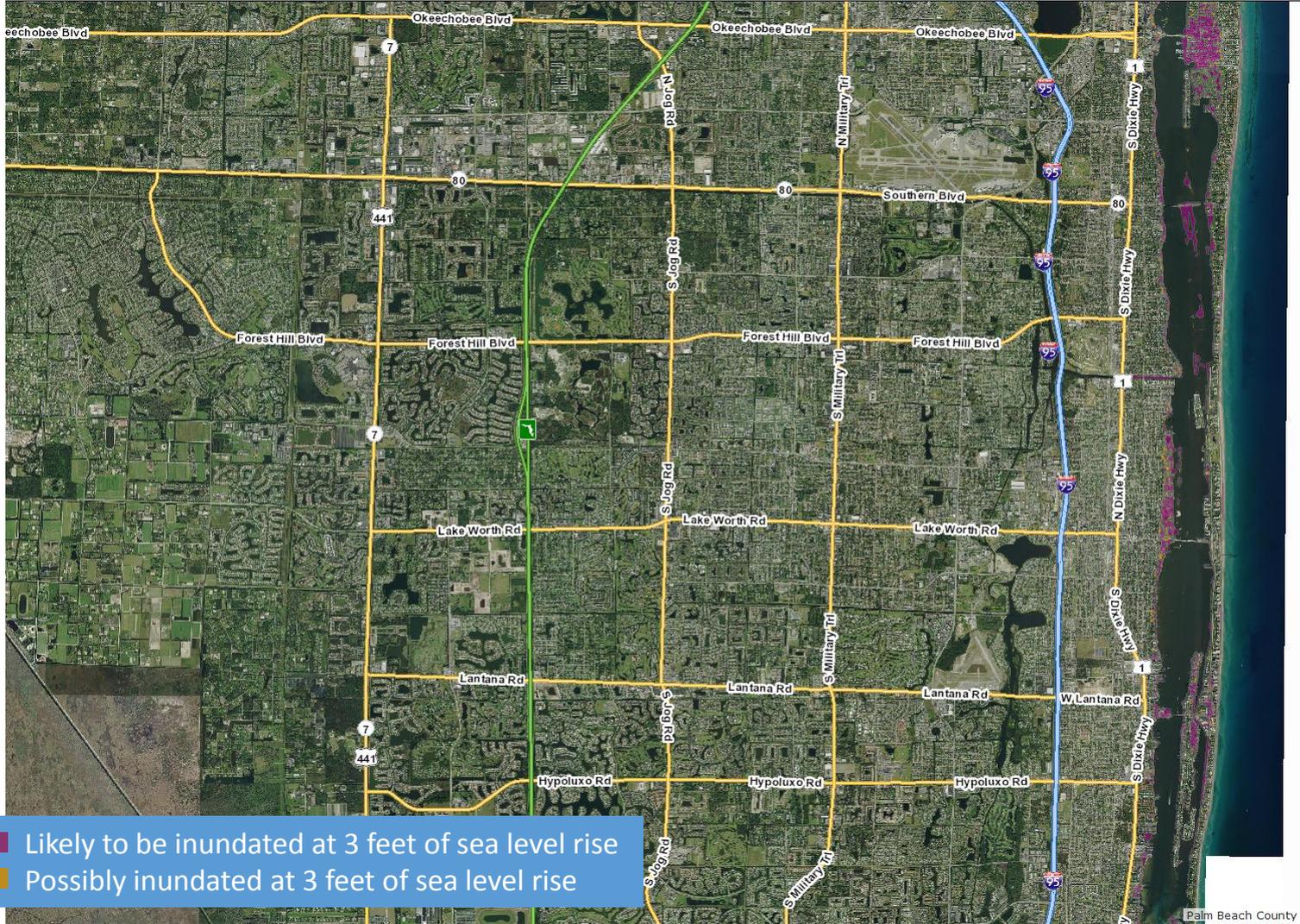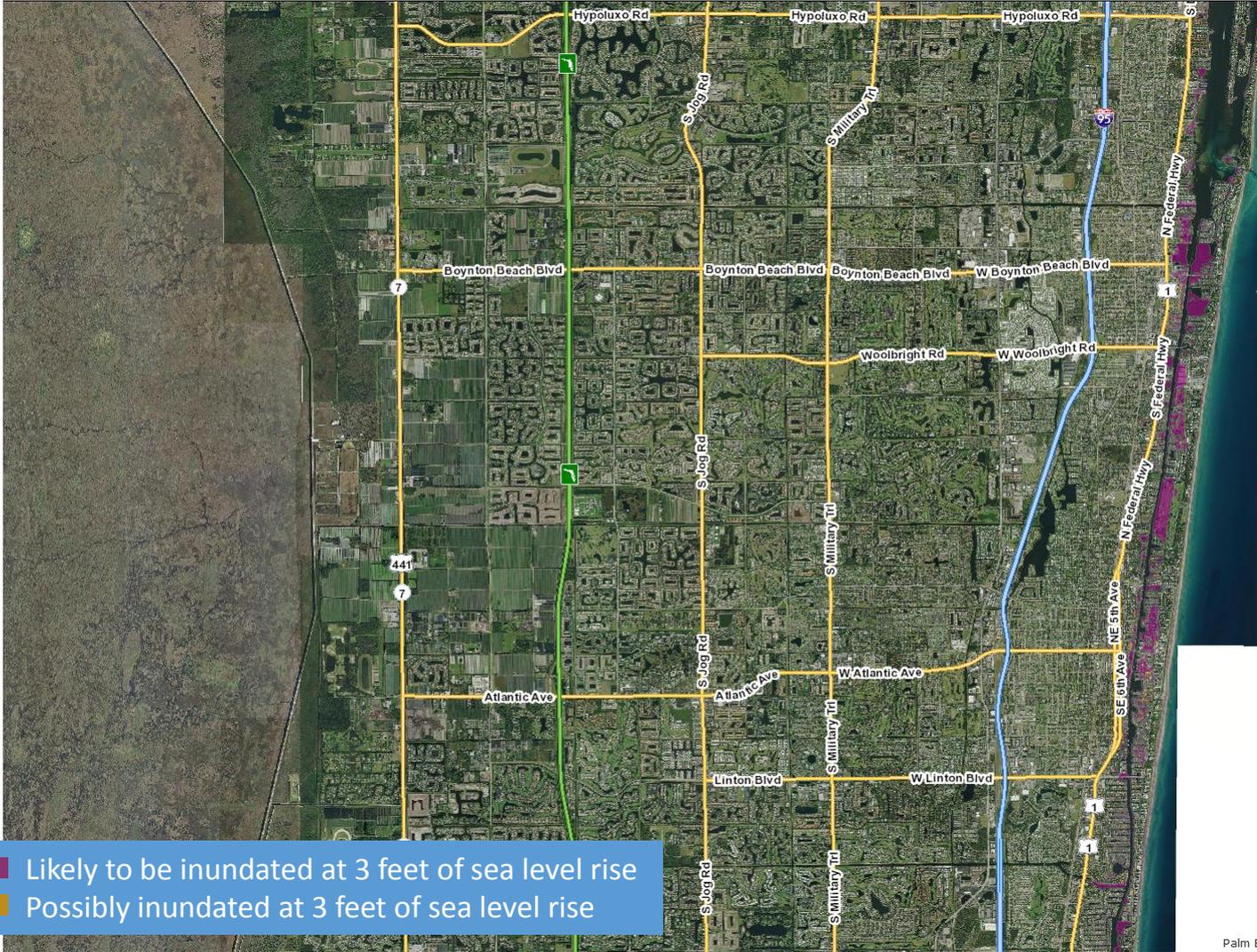Possibly inundated at 3 feet of sea level rise
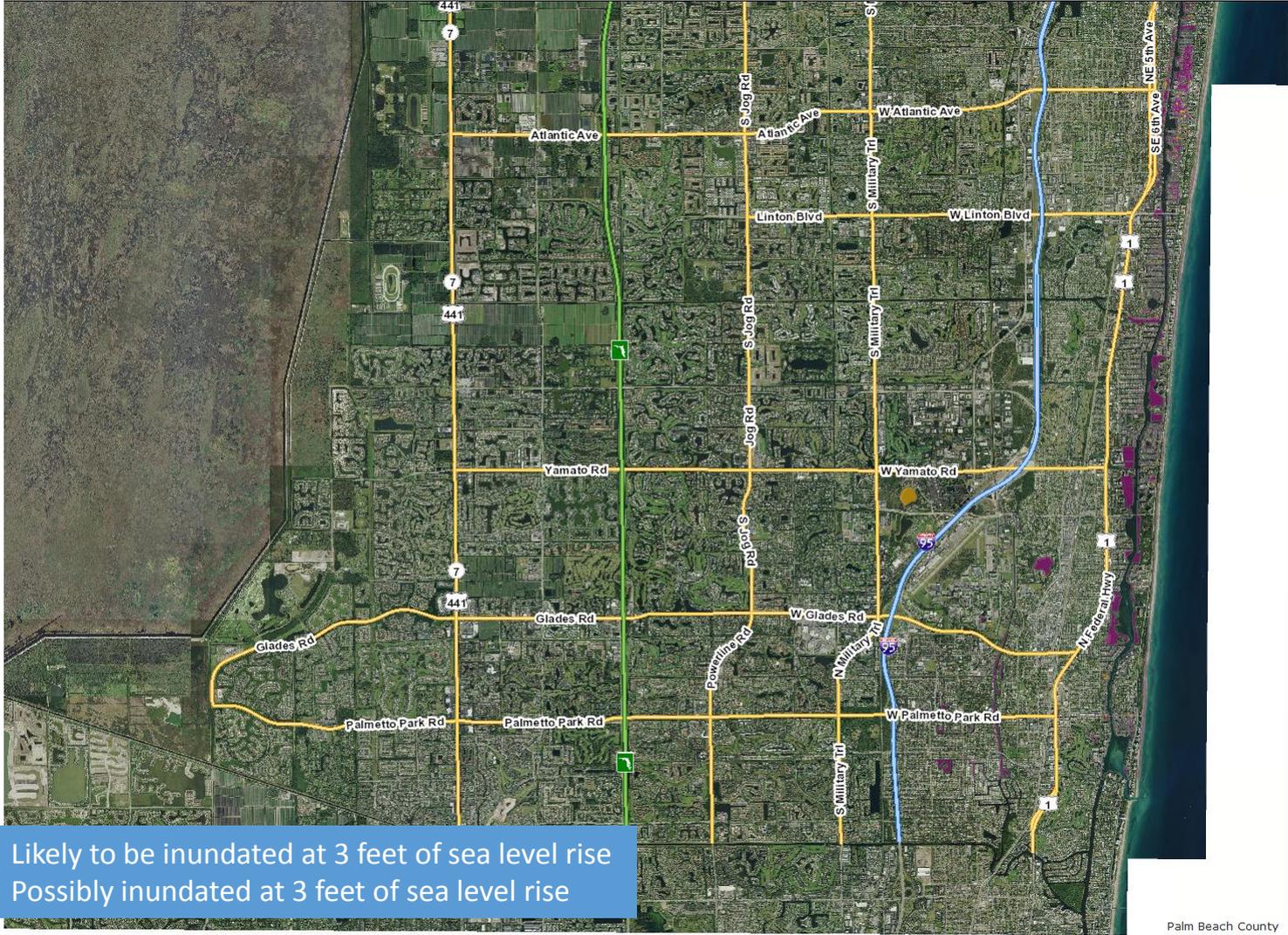
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