



Implementation of Flashing Yellow Arrow (FYA) for Left Turns in Palm Beach County



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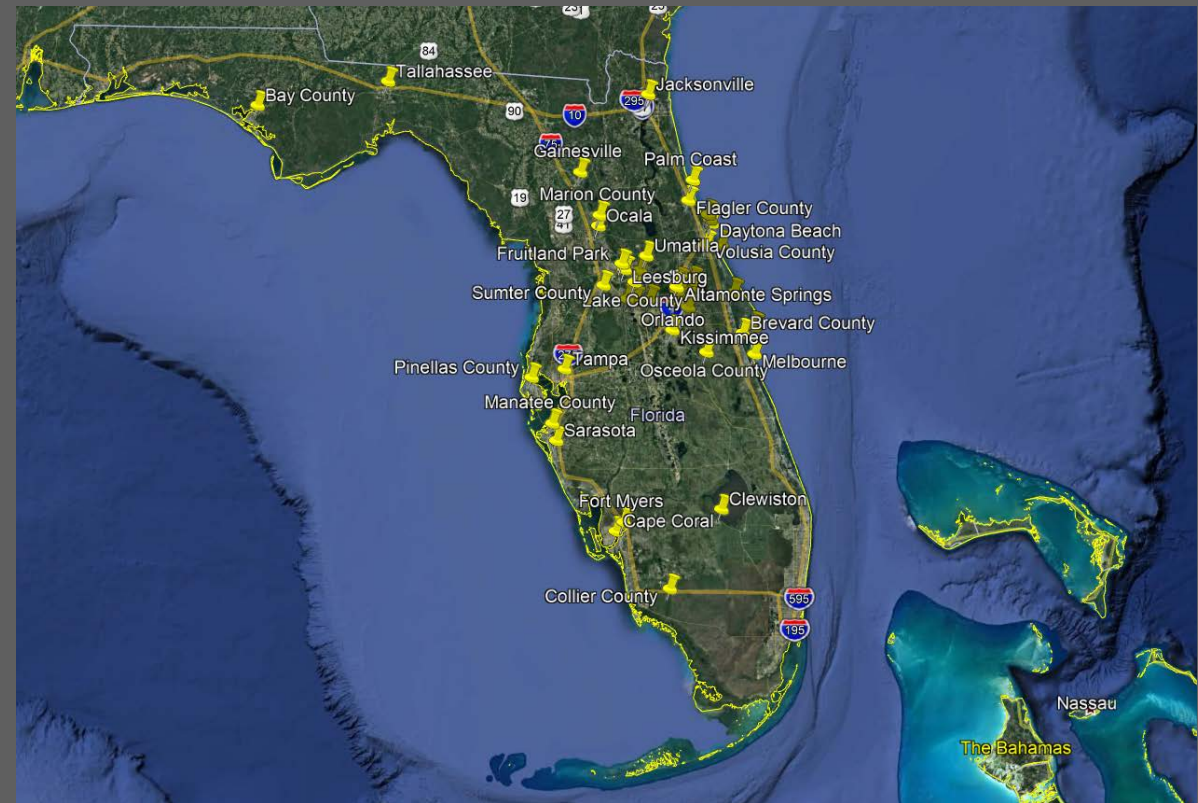
PRESENTATION OVERVIEW

[FDOT Video on FYA](#)

1. What is the Flashing Yellow Arrow (FYA)?
2. What are the benefits of the FYA?
3. Overview of phase 1 of FYA deployment in Palm Beach County
4. Next Steps

FLASHING YELLOW ARROW DEPLOYMENTS

- Included in the 2009 edition of the MUTCD
- Deployed in all States
- Implemented in many cities and counties throughout Florida
- Is a standard in FDOT D7, Pinellas County, and in other States such as Georgia, South Carolina and Virginia



Cities and Counties that have FYA

BENEFITS OF FLASHING YELLOW ARROW FOR LEFT TURNS

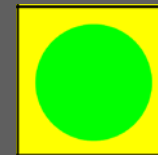
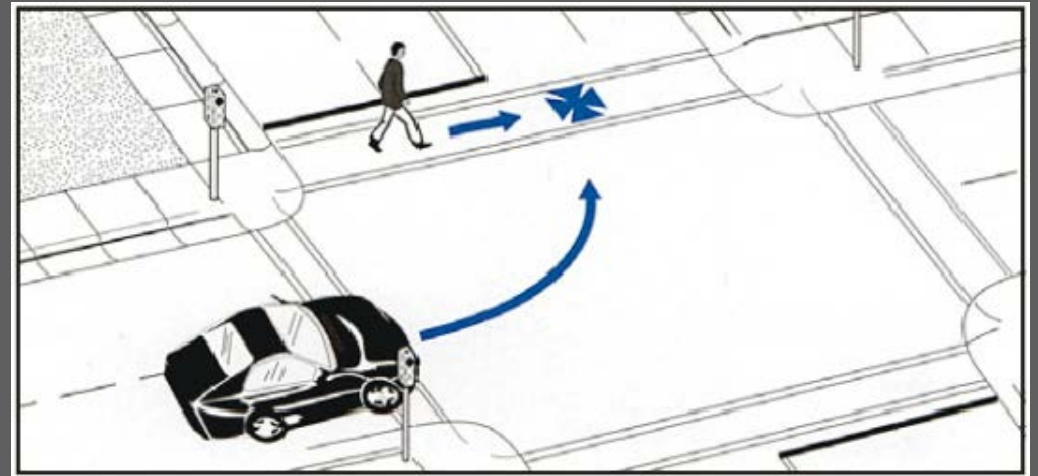
Road Capacity Benefits

- **Additional options for signal phasing patterns**
 - Provides more opportunities for left turns that are currently prohibited because of shared signal head
 - **Improves signal synchronization**
- Provides the option for **protected left turn based on time of day**
 - Time of day protected left based on crash history, volumes

BENEFITS OF FLASHING YELLOW ARROW FOR LEFT TURNS

Safety Benefits

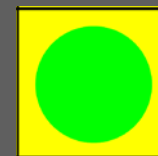
- FYA found to have a **high level of understanding** and correct response by left turn drivers
- **Improves pedestrian safety in crosswalks**
- FHWA has established **the FYA reduces crashes**
- Provides flexibility to not allow permissive left turns during times with higher probability for left turn crashes
- FYA is in alignment with TPA and other municipalities' Vision Zero



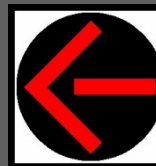
vs.



No Ped call



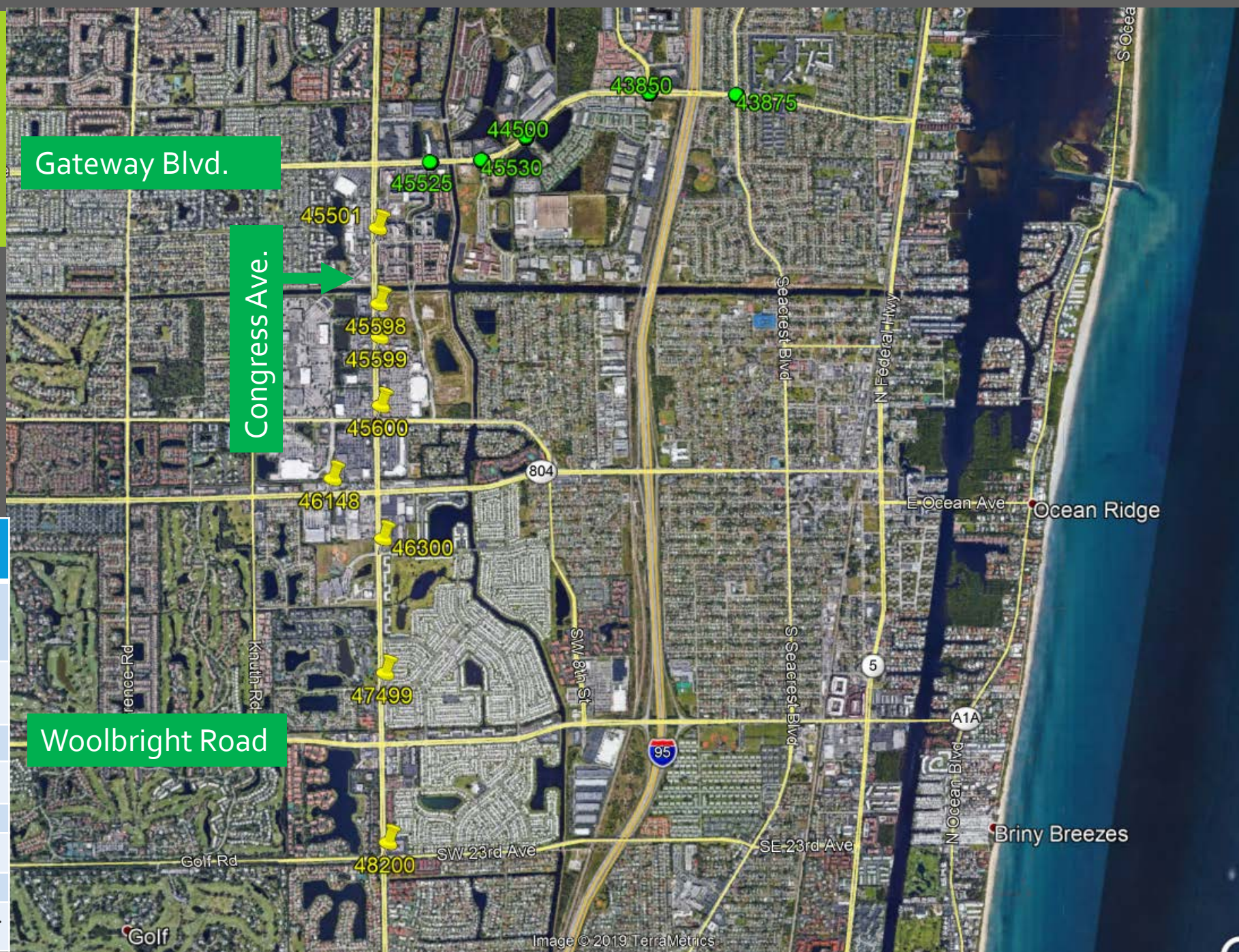
vs.



Ped Call

INITIAL PHASE LOCATIONS

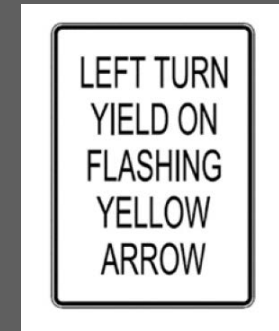
- 8 intersections along Congress Avenue
- 22 4-section signal heads with arrows (protected permissive)
- 2 3-section signal head with arrows (permissive only)



Signal ID #	E/W Roadway	N/S Roadway
45501	Catalina Dr./Renaissance Dr.	Congress Ave
45598	Boynton Beach (BB) Mall D	Congress Ave
45599	BB Mall E	Congress Ave
45600	Old Boynton Rd	Congress Ave
46300	Ocean Dr	Congress Ave
47499	SW Congress Blvd	Congress Ave
48200	Golf Rd	Congress Ave
46148	Boynton Beach Blvd.	Winchester Park Blvd.

PURPOSE OF THE INITIAL PHASE

- Determine design and implementation schedule needs of the FYA in Palm Beach County
- Determine cost of implementation
- Update Palm Beach County standards to include FYA
- Use phase 1 as a baseline to coordinate with FDOT and the TPA for planning and funding future deployments
 - Plan to seek TPA grants and FHWA safety grants to fund future phases



IMPLEMENTATION

Public Outreach

Published informational video, tip card and press release on Engineering & Public Works Department webpage

- Shared press release, informational video and tip card with the news media
- Deployed Changeable Message Signs as part of activation

Activate phase 1 FYA over 3 weekends in November / December, 2019

FLASHING YELLOW ARROW SIGNAL | **WHAT YOU NEED TO KNOW**

Palm Beach County will be activating **Flashing Yellow Arrow (FYA)** left turn traffic signals at eight traffic signalized intersections along and in the vicinity of Congress Avenue between Golf Road and Gateway Boulevard. Although the FYA traffic signal has been used nationwide for over 10 years, including in over 100 locations in Florida, the FYA traffic signal is new to Palm Beach County.

WHAT IS FLASHING YELLOW ARROW?
A new traffic signal that means you can turn left if there is a safe gap in traffic.

LEFT TURN YIELD ON FLASHING YELLOW ARROW

FYA is coming NOV/DEC 2019

SEE THIS	DO THIS
	Turn left.
	Prepare to stop or complete your left turn.
	Turn left provided there is a safe gap in vehicle and pedestrian traffic.
	Stop.

SIGNAL DISPLAY: CURRENT VS. NEW

CURRENT → **NEW**

The diagram shows two scenarios. In the first, a left-turn signal changes from a green arrow to a flashing yellow arrow. In the second, a left-turn signal changes from a red arrow to a flashing yellow arrow. In both cases, the right-turn signal remains red.

NEXT STEPS

Design Standards

The FYA for left turns is now a standard design feature in Palm Beach County

- Existing signals are also converted when left turn signal phasing is modified
- Consideration for conversion of existing protected-only single-lane left turn signals to protected /permissive with FYA

Seeking funding for countywide conversion:

- Two independent projects / applications for signals on SHS and County roads
- Total of more than 900 signalized intersections

QUESTIONS?