

 October 28-29, 2025
 Orlando, FL

**TRANSPORTATION
SYMPOSIUM**

4th Street Median Modification Safety Project FPIN: 439401-1

Tina Russo, LCI 395
Andrew Gray, PE, RSP2I

Transportation Symposium
Website


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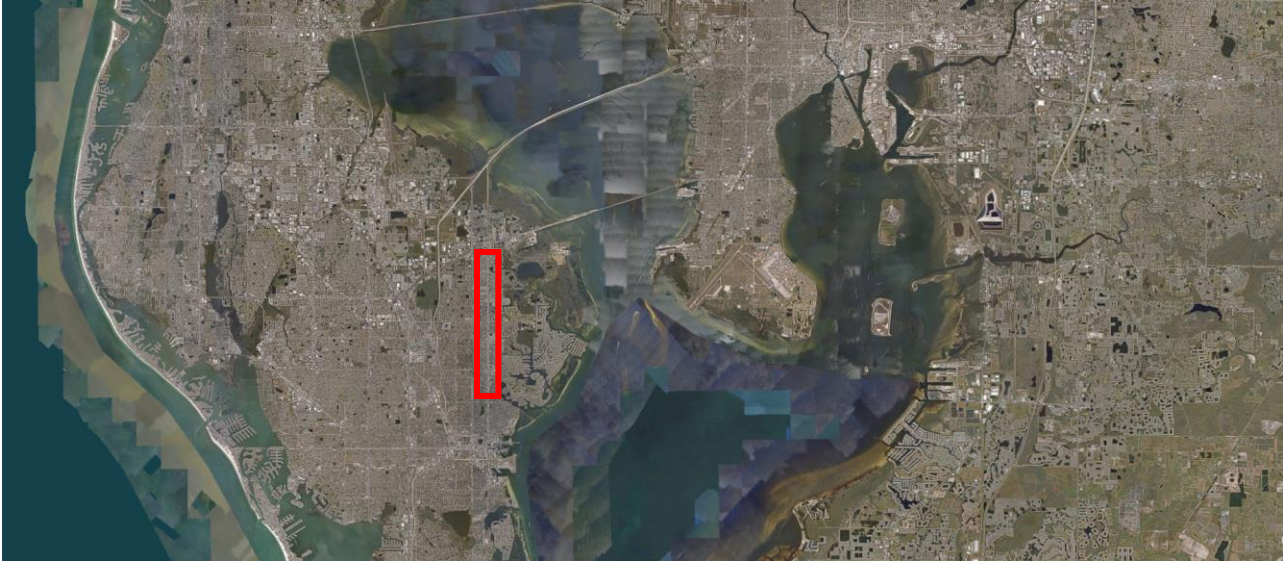


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Agenda

- Project Goals & Background
- Midblock Pedestrian Signals
- Proven Safety Countermeasures
- Education & Outreach
- Behavioral Analysis
- Lessons Learned

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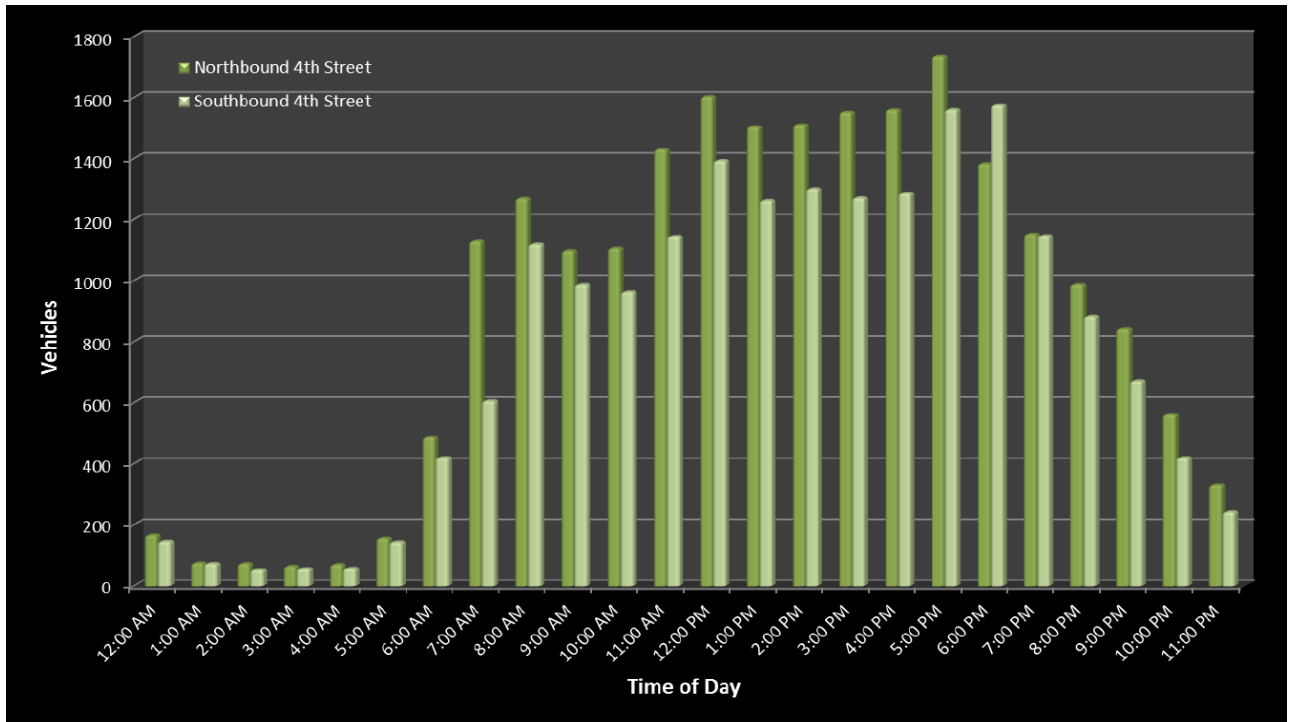
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Project Goals

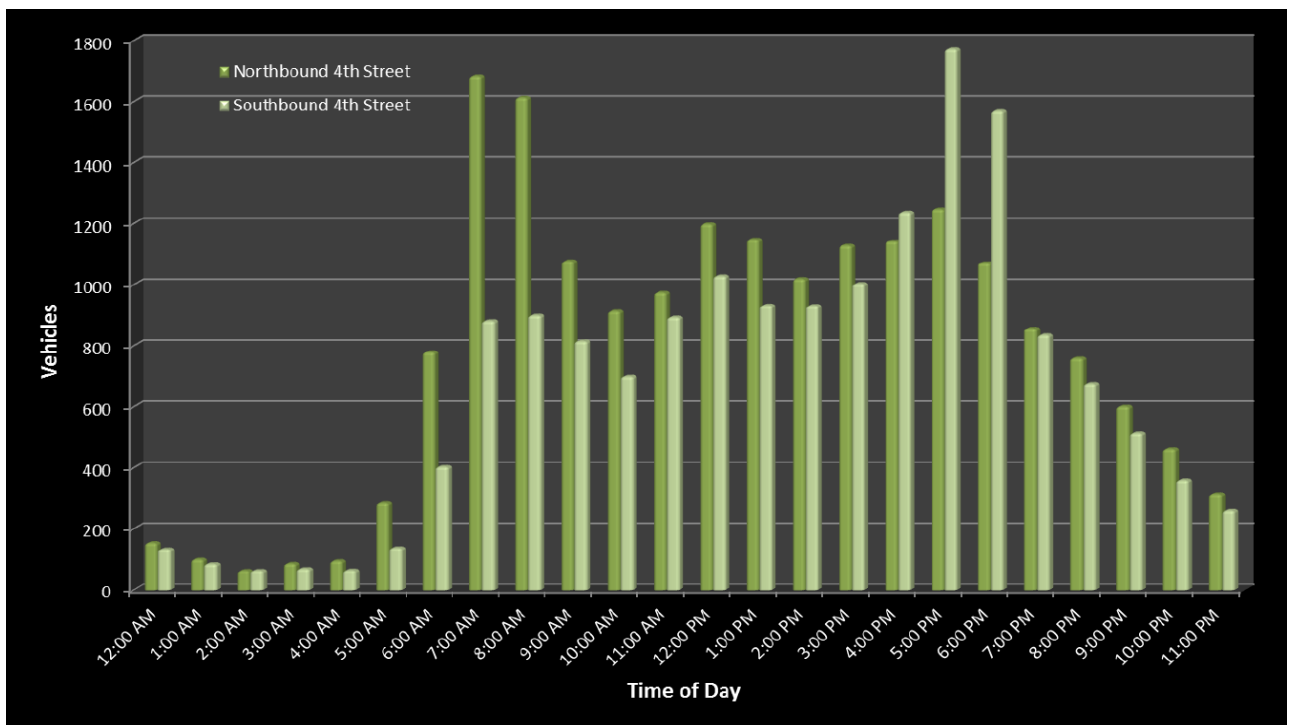
- Implement the comprehensive access management plan
- Reduce collisions at unsignalized median openings
 - Focus on right-angle and left-turn crashes resulting in fatal and serious injuries
- Improve safety and operations for pedestrian and bicyclists
 - Add midblock crosswalks
- Improve traffic conditions with operational improvements

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Pre Construction Crash Summary

Travel Mode	Fatal	Incapacitating Injury	Non-Incapacitating Injury	Possible Injury	No Injury	Total
Pedestrian	0	5	3	3	0	11
Bicycle	0	1	9	5	1	16
Total	0	6	12	8	1	27

Travel Mode	Daytime	Night with Street Lights	Total
Pedestrian	5	6	11
Bicycle	14	2	16
Total	19	8	27

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Corridor Access Management



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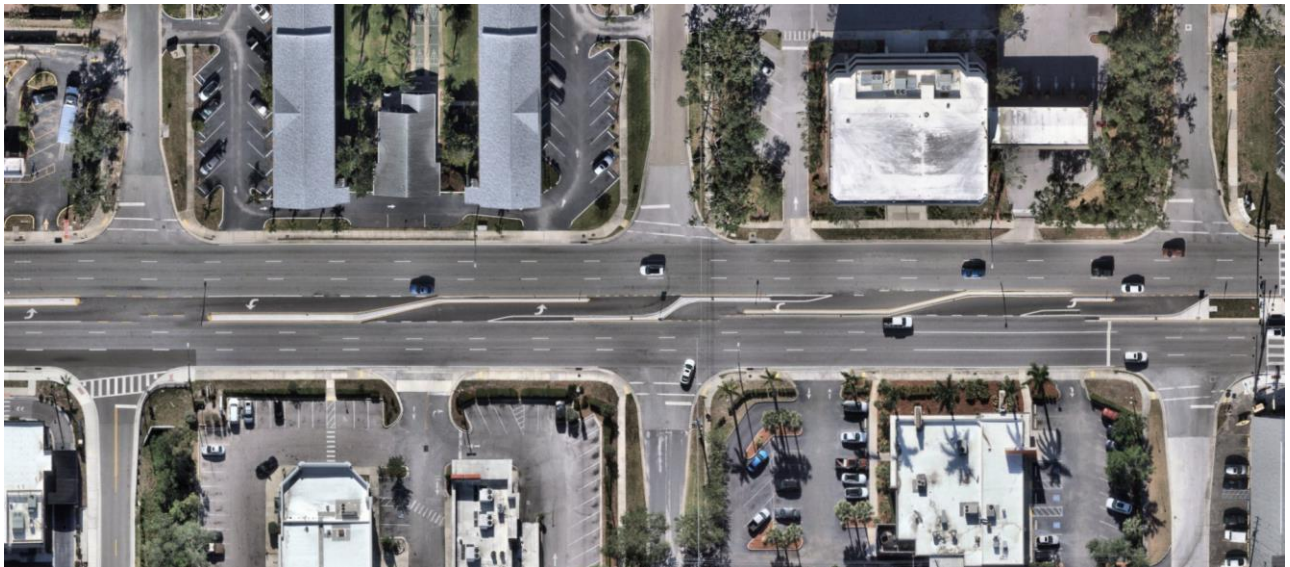
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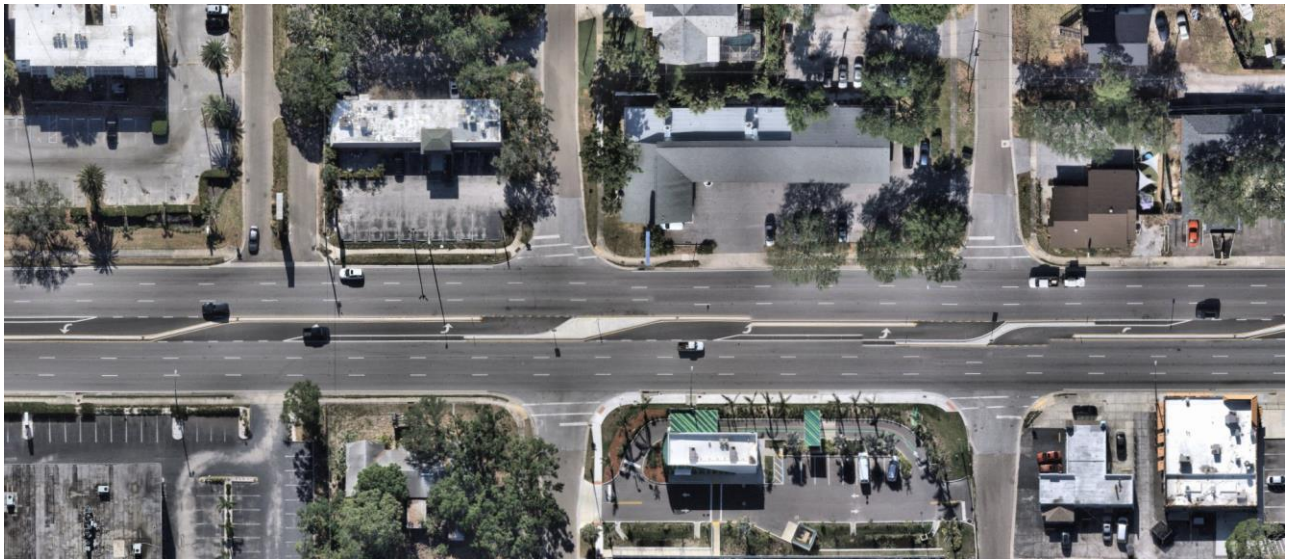
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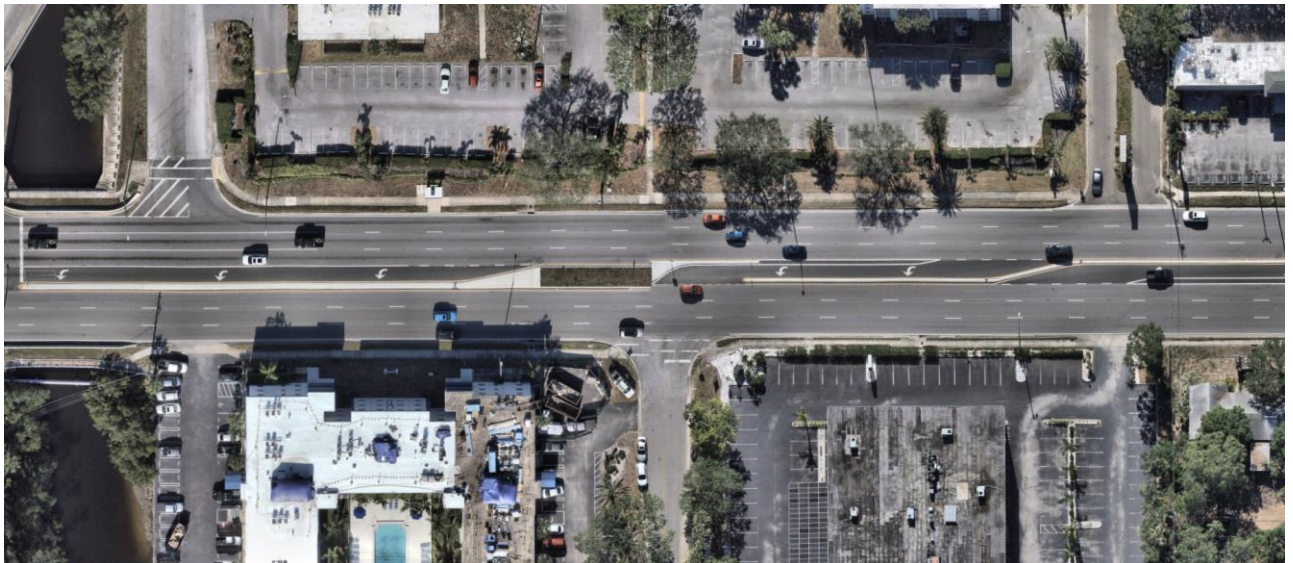
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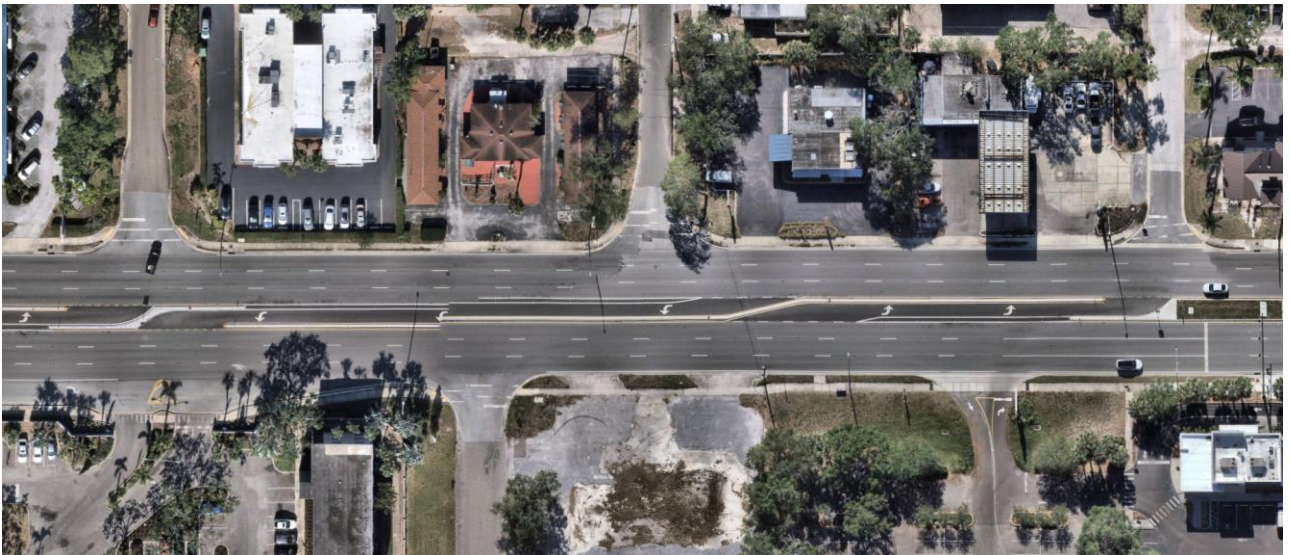
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Midblock Pedestrian Signals

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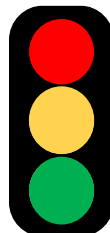
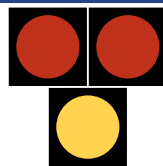
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Midblock Pedestrian Signals Vs. Pedestrian Hybrid Beacon

- Both Midblock Pedestrian Signals (MPS) and Pedestrian Hybrid Beacons (PHB) enhance pedestrian safety at midblock crossings by stopping traffic when activated, but each use different signal head configurations on the mast arm.



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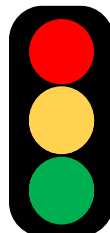
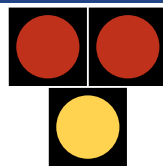
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Midblock Pedestrian Signals Vs. Pedestrian Hybrid Beacon

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Crash Reduction Factor Comparison

Crash Type (Fatal & Serious Injury)	Pedestrian Hybrid Beacon Crash Reduction Factor	Midblock Pedestrian Signal Crash Reduction Factor*
All Crashes	25%	34%
Pedestrian Crashes	45%	45%
Rear End Crashes	29%	31%

*NCHRP Report 1030 "Safety at Midblock Pedestrian Signals"

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U.S. Department of Transportation
Federal Highway Administration

Manual on Uniform Traffic Control Devices (MUTCD)



MUTCD Home
Site Map

Knowledge

Overview
Evolution of the MUTCD
Who Uses the MUTCD
MUTCD Current Edition
Color Specifications
Amendment Process
Experimentations
Standard Highway Signs (SHS) Publication
FAQs

Resources

MUTCD Team
23 CFR 655
Official Rulings
Interim Approvals
Interpretations Issued by FHWA
State MUTCDs & TCD Info
Related Links
Federal Register
Policy Statements
Previous Editions of the MUTCD
Publications

Resources

[Resources](#) > [Official Rulings](#)

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Details for Request 4(09)-79

Request Type: Experiment
Requesting Agency: Florida DOT
State: FL
Date of Request: 10/14/2020
Topic: Midblock Pedestrian Signals
Affected Portions of 2009 MUTCD: Part 4
FHWA Ruling: Experiment Approved 11/23/2020, Progress Report 9/8/2021, 8/26/2022
Approval Status: Approved
Keywords: Pedestrian Signals| Pedestrians| Traffic Control Signals

Contact Information:
Name: Alan El-Urfali
Address: Florida Department of Transportation State Traffic Engineering and Operations 605 Suwannee St, M.S. 36 Tallahassee, FL 32399-0450
Phone: 850-410-5416
E-mail: Alan.El-Urfali@dot.state.fl.us

FHWA

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United States Department of Transportation - Federal Highway Administration

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Crosswalk Visibility Enhancements



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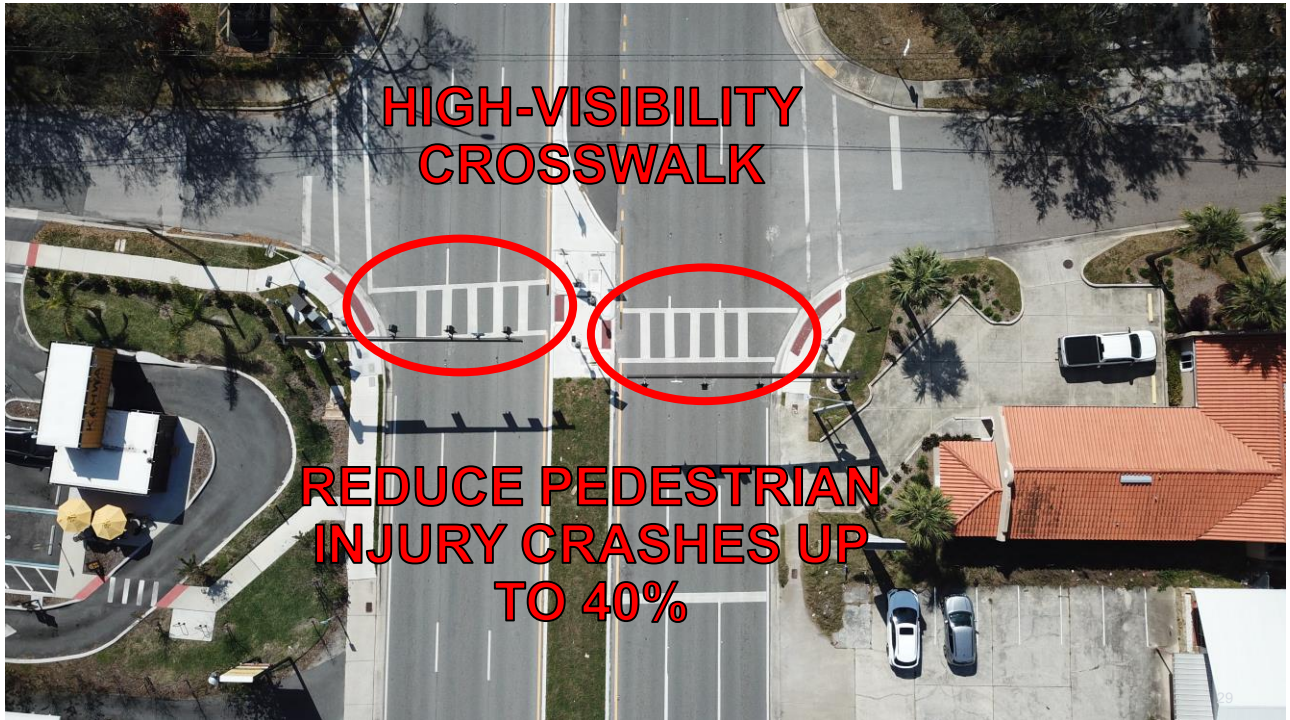


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Leading Pedestrian Interval



- Gives pedestrians the opportunity to **establish their presence** in the crosswalk at an intersection **3-7 seconds** before vehicles are given a green indication.
 - Enhanced safety for pedestrians who may be slower to start into the intersection
 - Increased visibility
 - Reduced conflicts
- **Can reduce pedestrian-vehicle crashes by 13% at intersections**
- Low implementation cost



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Median and pedestrian refuge islands can reduce overall crossing length and exposure to vehicle traffic, and can reduce pedestrian crashes up to **56%**

**PROVEN SAFETY COUNTERMEASURES
MEDIAN & REFUGE ISLANDS**

U.S. Department of Transportation
Federal Highway Administration

Learn more at:
<https://highways.dot.gov/safety/proven-safety-countermeasures>

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Education & Outreach

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FLORIDA DEPARTMENT OF TRANSPORTATION • DISTRICT 7
US 92 (4th STREET NORTH) MIDBLOCK PEDESTRIAN SIGNALS

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**ATTENTION DRIVERS:****SEE THIS | DO THIS**

	GO Drive the speed limit and stay alert for pedestrians
	Prepare to STOP
	STOP for pedestrians in crosswalk
	STOP! Only proceed when no pedestrians are in the crosswalk

**ATTENTION PEDESTRIANS:****SEE THIS | DO THIS**

	PUSH BUTTON Wait for walk signal before entering crosswalk
	CROSS Watch for cars
	FINISH CROSSING Do not enter crosswalk

AlertTodayFlorida.com
Funded by FDOT

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Behavioral Analysis

34th Ave

Post Construction

11/2024



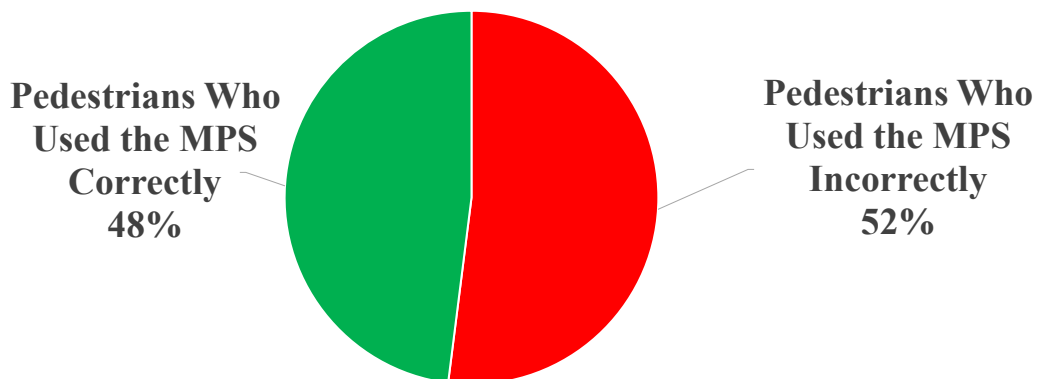
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MPS Usage

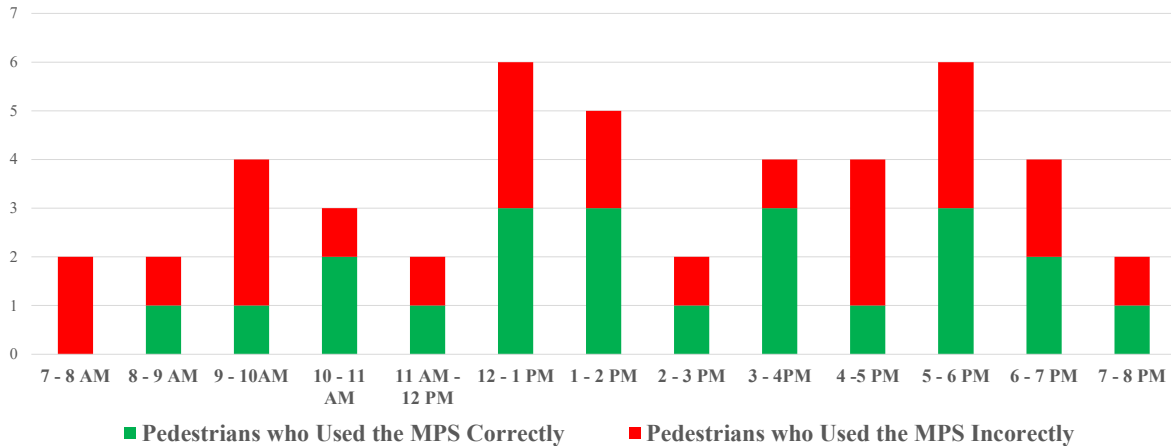


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Pedestrian Behavior

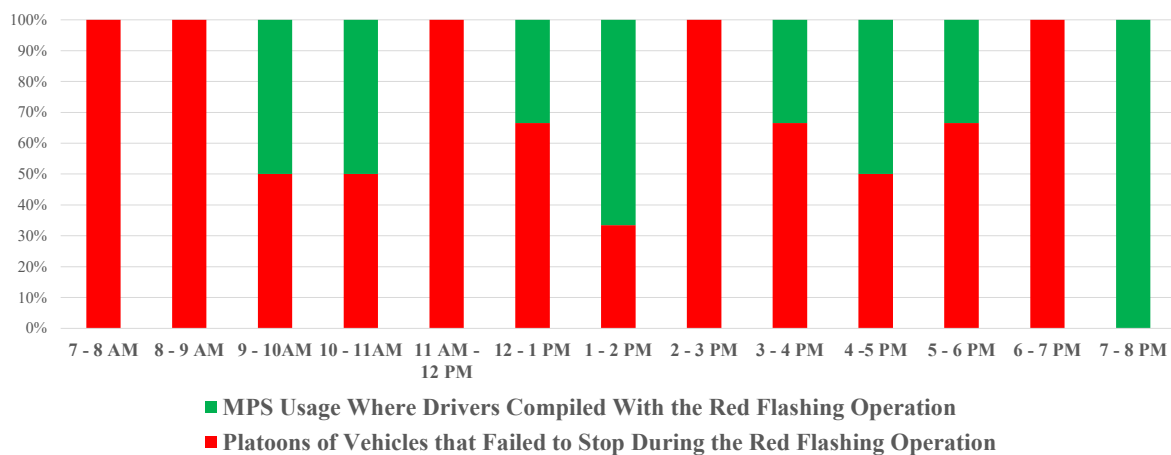


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MPS Usage Vs. Driver Behavior




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Behavioral Analysis 70th Ave Before and After 4/2023 vs 3/2025

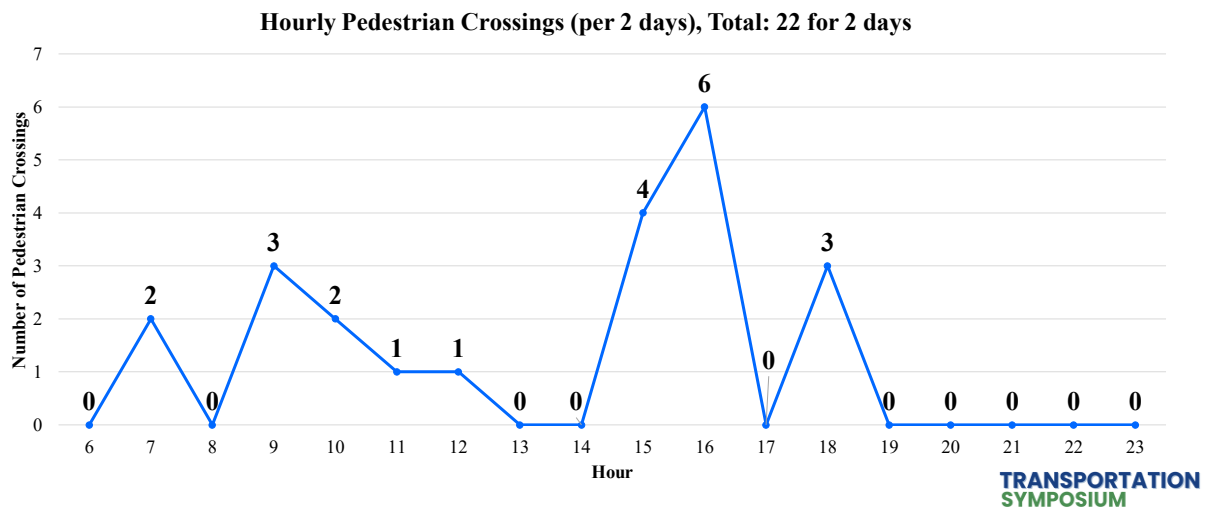
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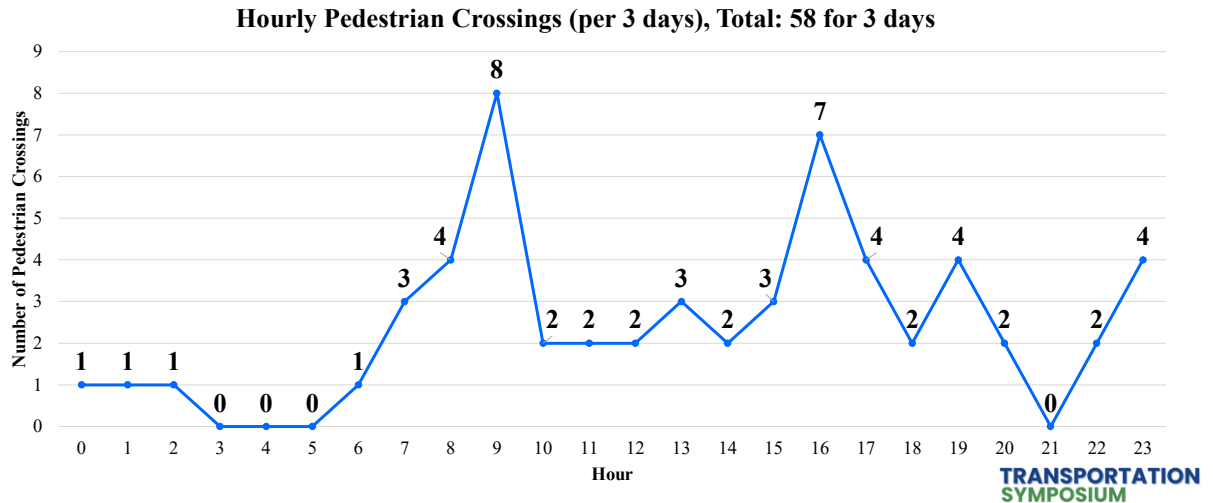
Before – Unprotected Pedestrian Crossings by Hour



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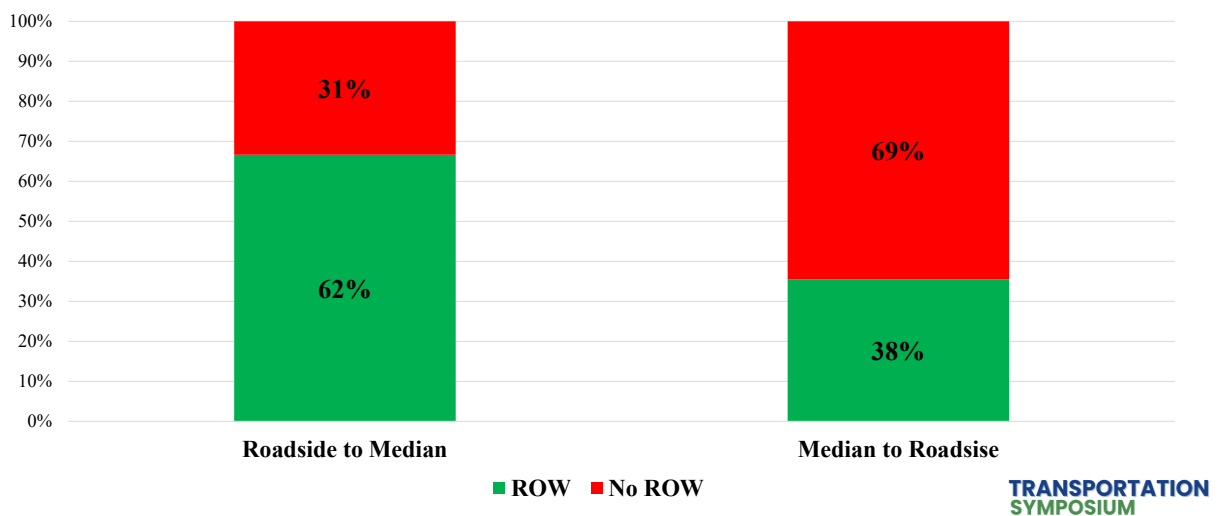
After – Pedestrian Crossings by Hour



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Crossing Right of Way by Stages



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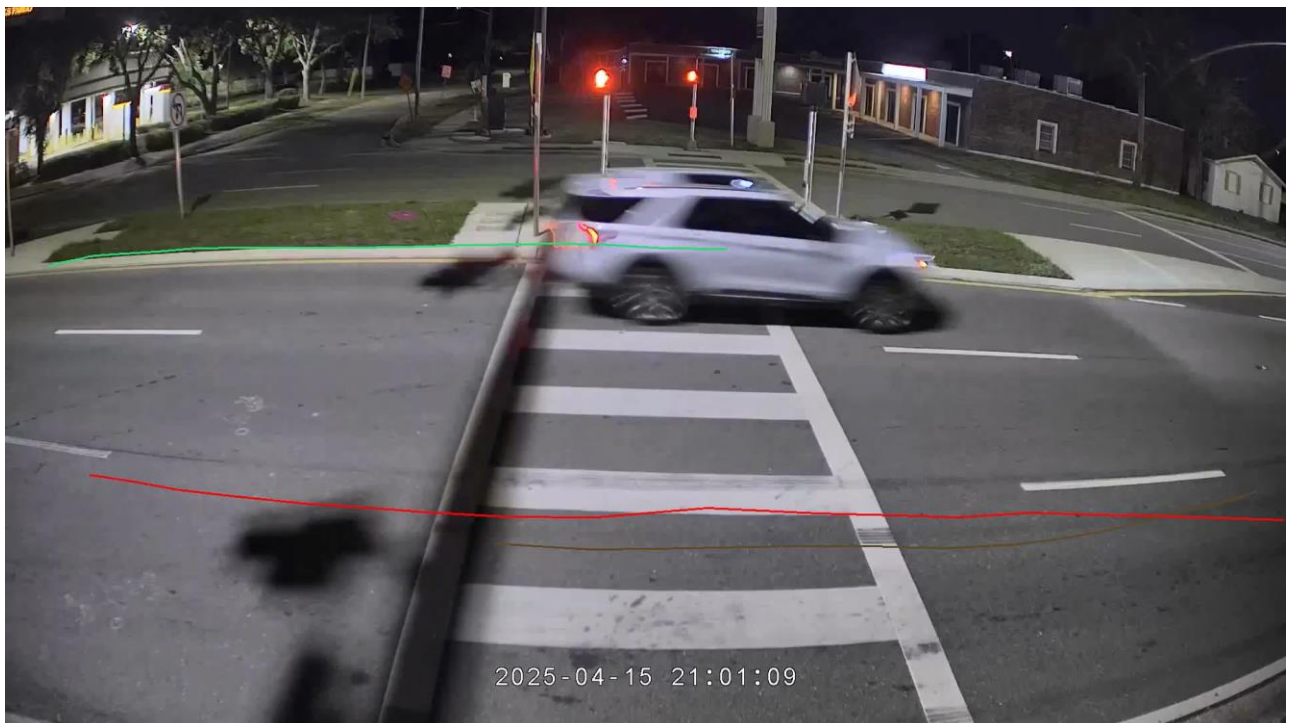
Surrogate Safety Data: Near Miss Events

- A pedestrian is nearly struck by a vehicle, but no collision occurs
- Identified by Post-Encroachment Time
 - The time difference between a pedestrian and a vehicle passing the potential conflict point
- **High Risk < 1.5s**
- **Medium Risk = 1.5s – 3s**
- **Low Risk = 3s – 5s**

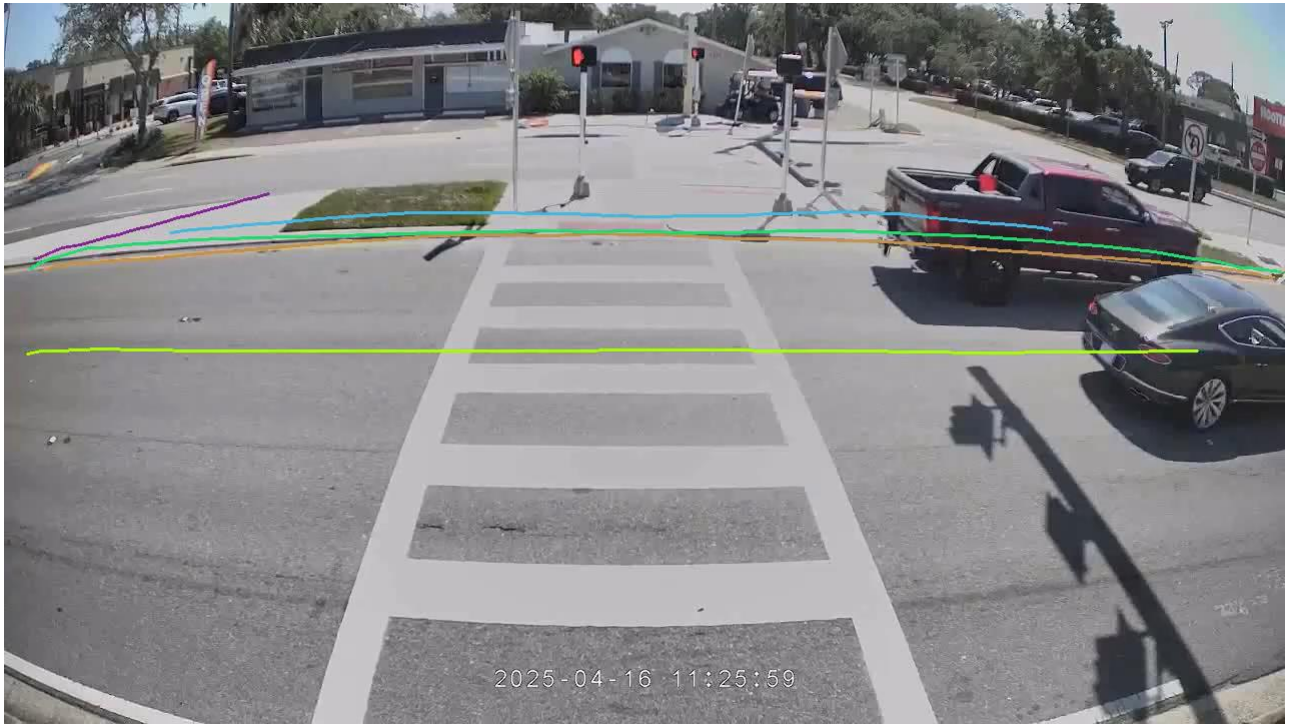
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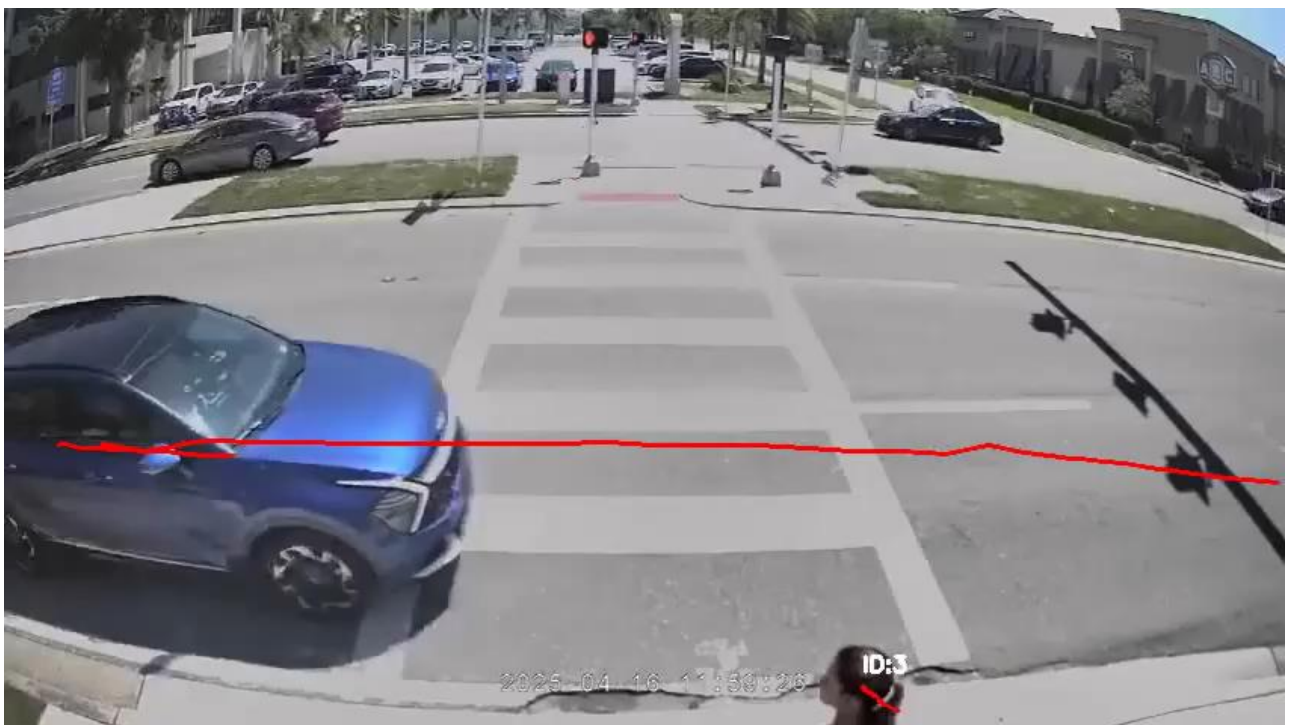
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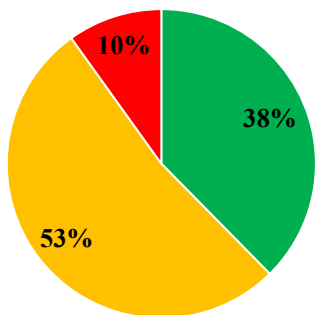
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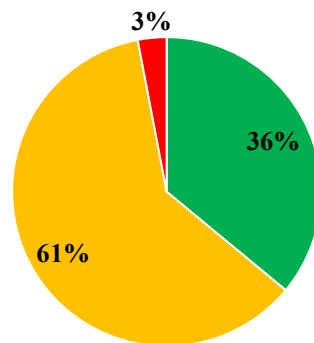
Near Miss Events

Before



■ Low Risk ■ Medium Risk ■ High Risk

After



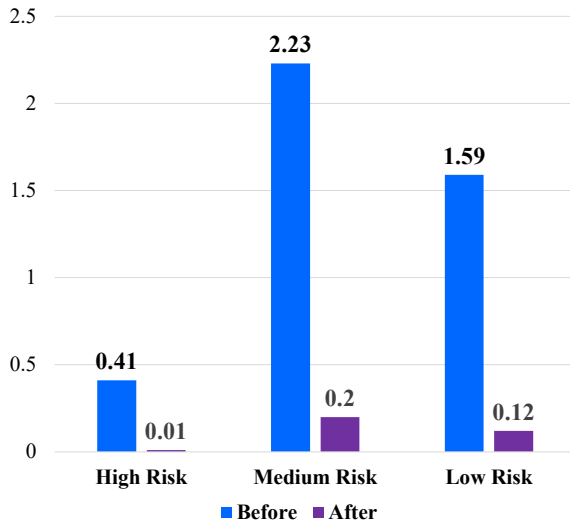
■ Low Risk ■ Medium Risk ■ High Risk

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Comparison of Near Miss Event Rates



$$\text{Rate} = \frac{N. \text{ of near miss events}}{\text{Ped Volume}}$$

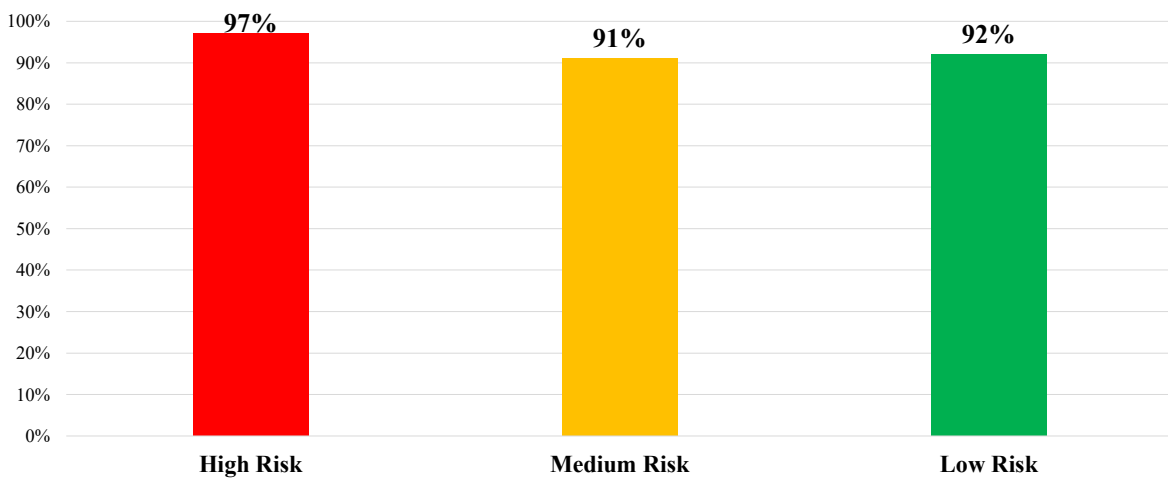
- Before = 4/15 & 4/19/2023
- After = 3/25-3/27/2025
- The “after” near miss rates are much lower than the “before” rates

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Near Miss Rate Reduction with Midblock Pedestrian Signal



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PINELLAS COUNTY

Woman wanted for her alleged role in St. Pete hit-and-run that left another woman dead

Kathy Repke, 62, was killed in June while she was crossing the street inside a marked crosswalk.



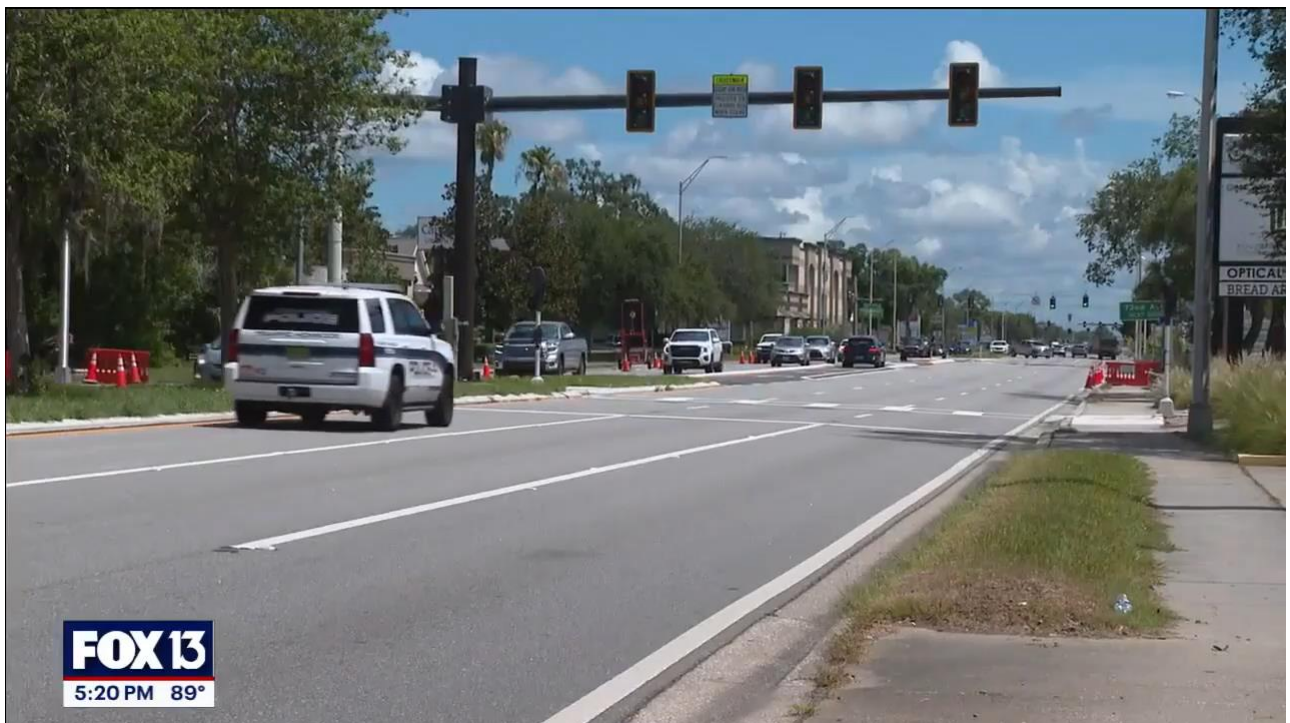
▶ ROSALYN FULLER

SEARCH FOR WOMAN IN DEADLY HIT-AND-RUN CRASH

10 TAMPA BAY'S 5:09 90°

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11201 North McKinley Drive
Tampa, FL 33612

MEMORANDUM

DATE: January 29, 2025

TO: Resident Construction Engineers, Design Project Managers, Consultant Engineers, Construction Engineering and Inspection (CEI), In-House Designers and Project Administrators

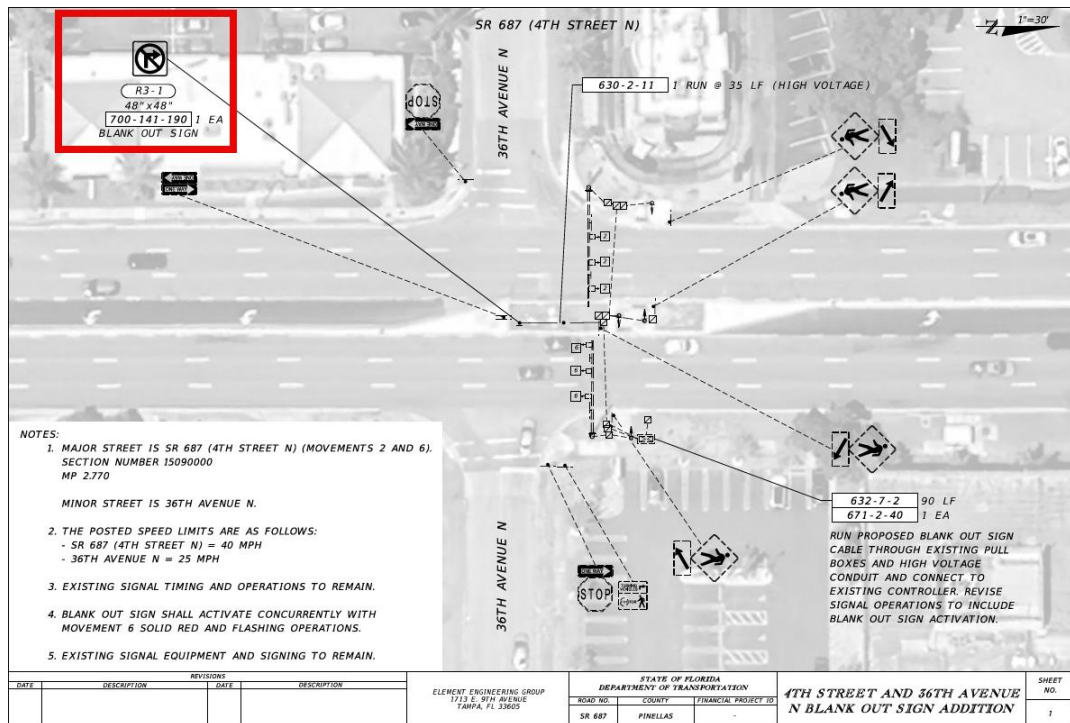
FROM: Ping (Peter) Hsu, P.E., District Safety Administrator ^{PH}
Allan Urbonas, P.E., District Design Engineer ^{AU}
Ronald Chin, P.E., District Traffic Operations Engineer ^{RC}
Conrad Campbell, P.E., District Construction Engineer ^{CC}

COPIES: David W. Gwynn, P.E., District Secretary
Francis Lewis, P.E., Director of Transportation Operations
Justin Hall, P.E., Director of Transportation Development

SUBJECT: Supplemental Temporary Traffic Control (TTC) Guidelines for Major Traffic Control Device Installation or Modifications.

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Adjusting MPS Timing Operation

- The time required to cross on leg is 30 seconds and only one leg can be activated at a time
 - This resulted in pedestrians waiting in the median while the phase for the first leg ended before the next leg would start
- Because of the delay, pedestrians we're not complying with signal and crossing the second leg when a gap appeared
- After the pedestrian had crossed the second leg, the signal would cycle, forcing vehicles to stop for a pedestrian that had already crossed the street
- After coordination with the city, the northbound and southbound movements will operate separately, removing the pedestrian delay

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Crash Reduction

- **23% reduction** in corridor pedestrian/bicycle crashes
 - 8-month period before vs. after construction
- Post-Construction
 - One crash involving bicycles or pedestrians attempting to cross midblock
 - **No fatal or serious injury** bicycle or pedestrian crashes

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Key Takeaways

- Project success in enhancing safety and mobility
- Importance of...
 - **Innovation** -> Midblock Pedestrian Signals
 - **Evaluation** -> Pedestrian and driver behavior
 - **Adaptability** -> Blocking curb ramps, no right turn blank out signs
 - **Public Education and Outreach** -> PSA, mailings, geofencing, on street engagement
- Model for future urban corridor safety projects

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Safety Message

**DRIVE
SOBER
OR
GAME
OVER**

You only have one life.



FLHSMV

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Contact Us

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DEADLINE



Please be sure to **certify your attendance** before leaving this event or no later than **Friday, November 21st**, in order to receive PDH/CEC. Detailed instructions are available on the Transportation Symposium website.

Transportation Symposium
Website



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