Florida Department of TRANSPORTATION



District 7 Safety Engineering: Safety Trends + Office Overview

TARGET ZERO

Regional CTST Summit - 2026

Florida Department of TRANSPORTATION

Safety Office Structure



Safety Office – Past Structure



Safety Office – Current Structure



Traffic Operations Structure



District 7 Traffic Safety Team



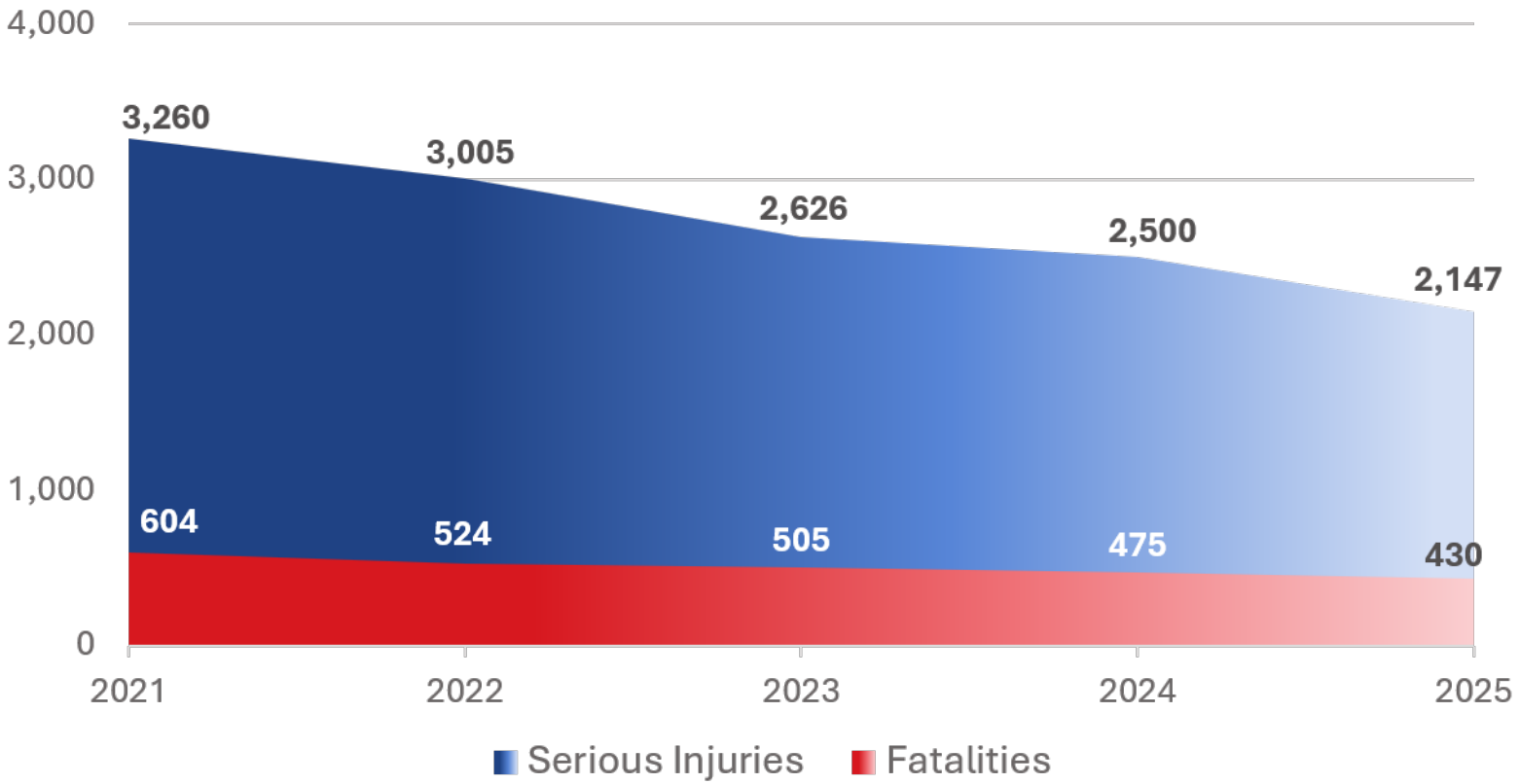
Florida Department of TRANSPORTATION



District 7 Safety Trends

Measuring Progress Towards Target Zero

District 7 Five-Year Crash Trends



Since 2021, **fatalities** in District 7 are down **29%**

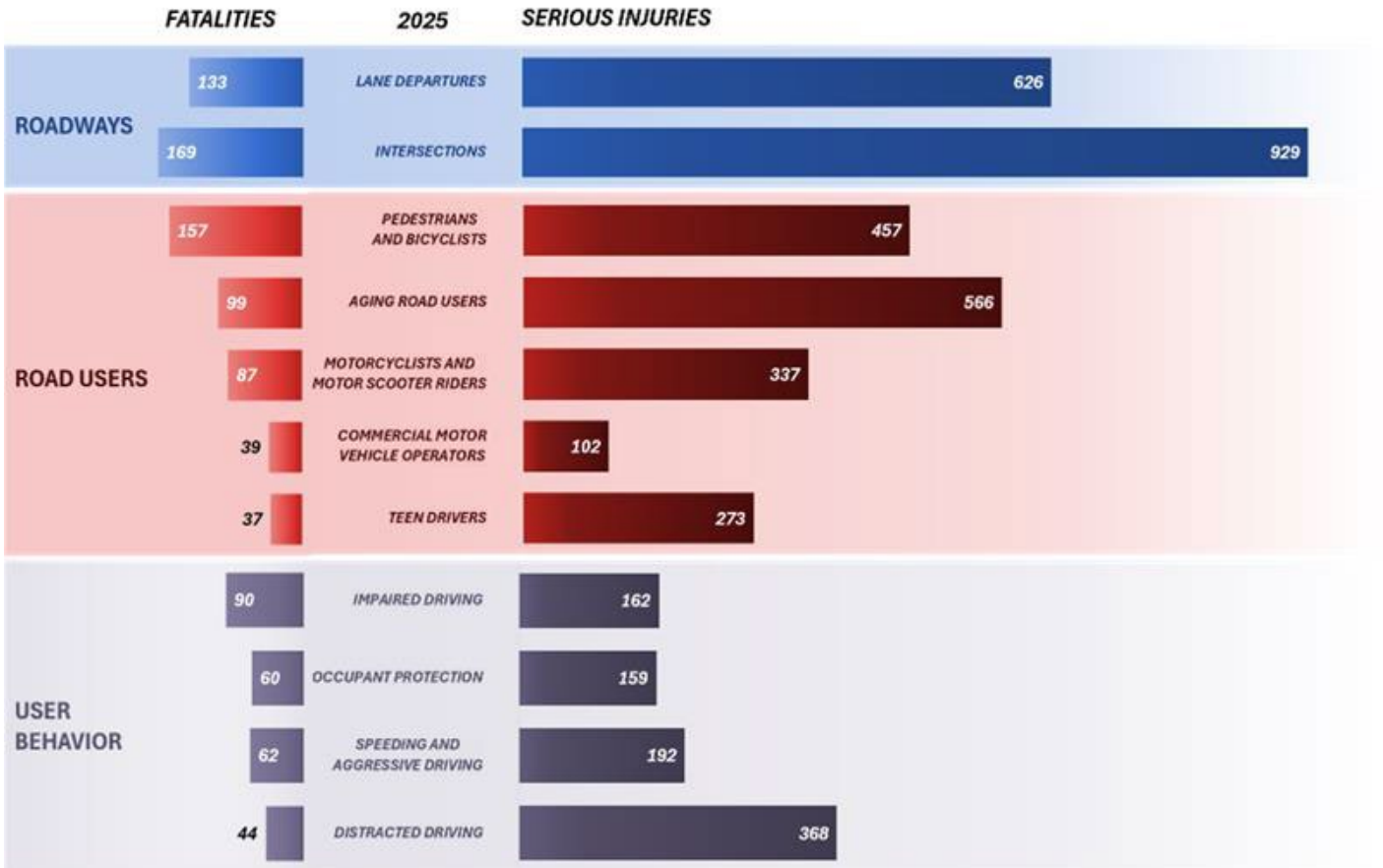
outpacing the 21% statewide decline

Since 2021, **serious injuries** in District 7 are down **34%**

outpacing the 23% statewide decline

*Based on Signal 4 Analytics Data as of 7/15/2026

District 7 Emphasis Area Trends



MAJOR MOVERS

Compared with the 2020-2024 annual average, 2025 saw:

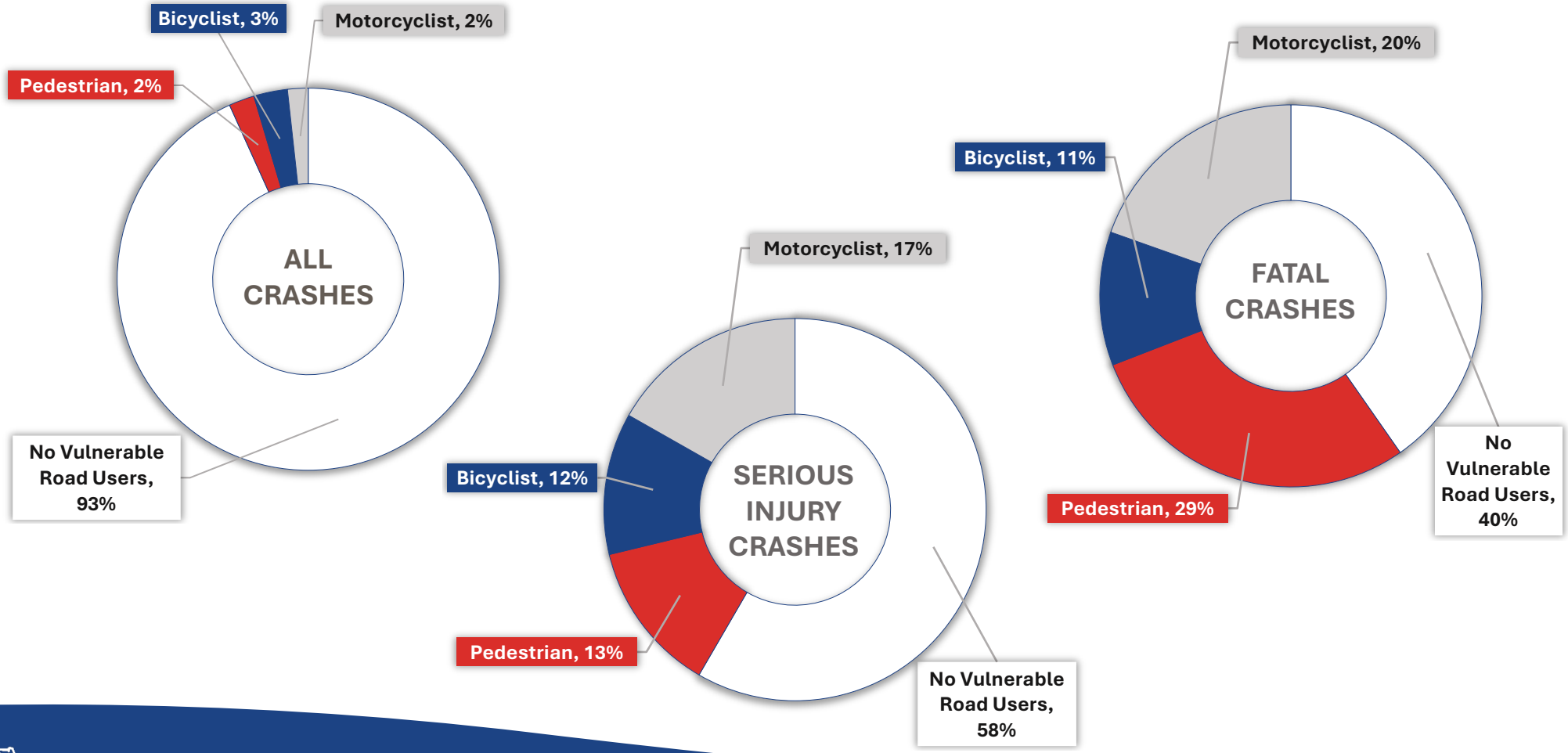
30% fewer lane departure serious injuries and fatalities

26% fewer intersection-related serious injuries and fatalities

38% fewer impaired-driving serious injuries and fatalities

39% fewer serious injuries and fatalities involving unrestrained occupants

Vulnerable Road Users (VRUs)



Pedestrian/Bicyclist Crash Trends

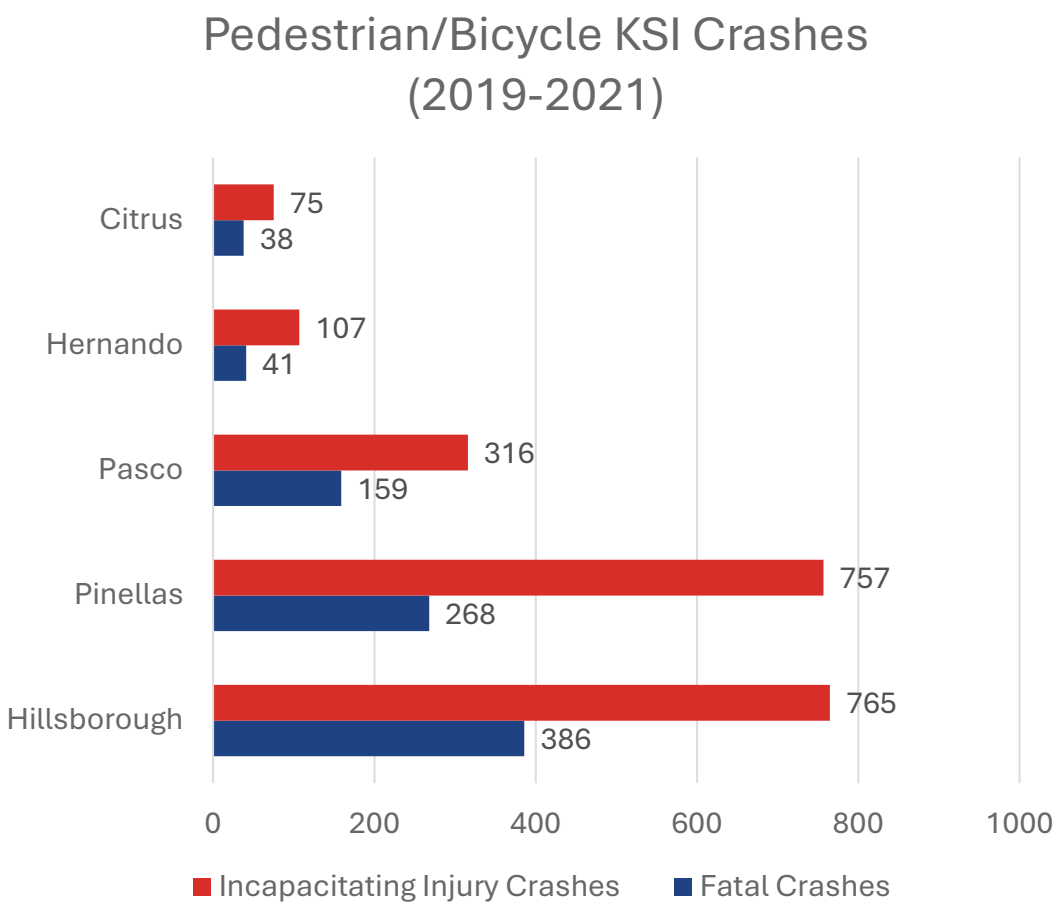
1/6 ***bike/ped crashes resulted in a fatality or serious injury***

49% of KSI crashes occurred in **non-daylight** conditions

19% of KSI crashes occurred at **signalized** intersections

65% of **fatal** crashes occurred at **midblock** locations

53% of KSI crashes occurred on roads posted at **40 mph or higher**



Lane Departure Crash Trends

34% ***of total fatal and severe injury crashes in District Seven***

50% off-system



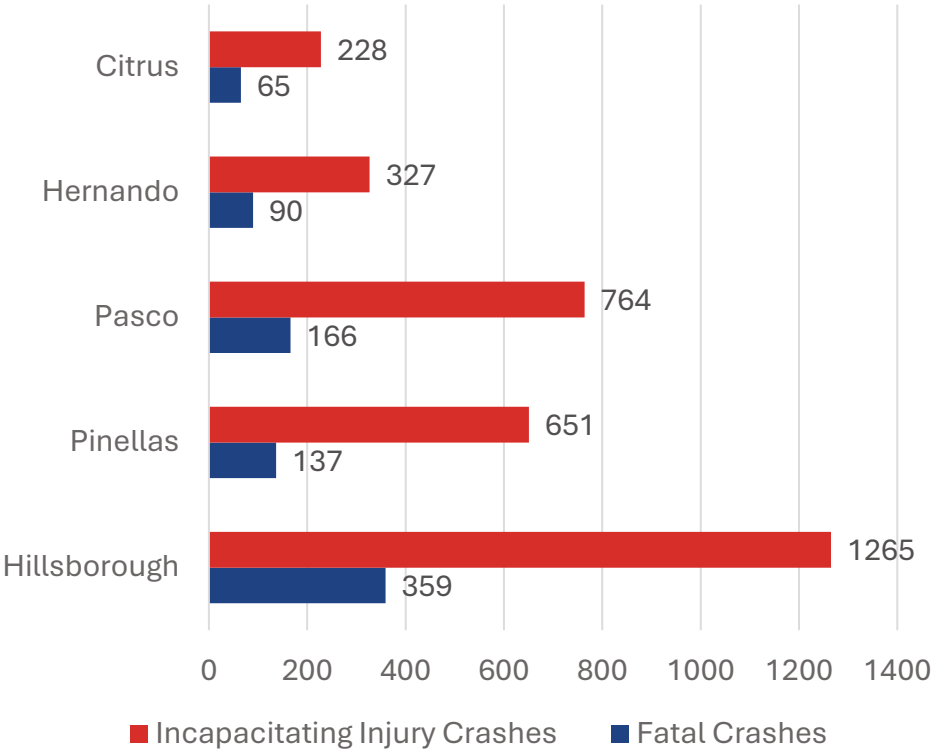
58% of KSI crashes occurred in **non-daylight** conditions

45% of KSI crashes occurred on **two-lane roadways**

83% on undivided roadways

75% off-system

31% of KSI crashes were **alcohol-related**



Motorcycle and Motor Scooter Crash Trends

1/4 ***motorcycle/motor scooter crashes resulted in a fatality or serious injury***

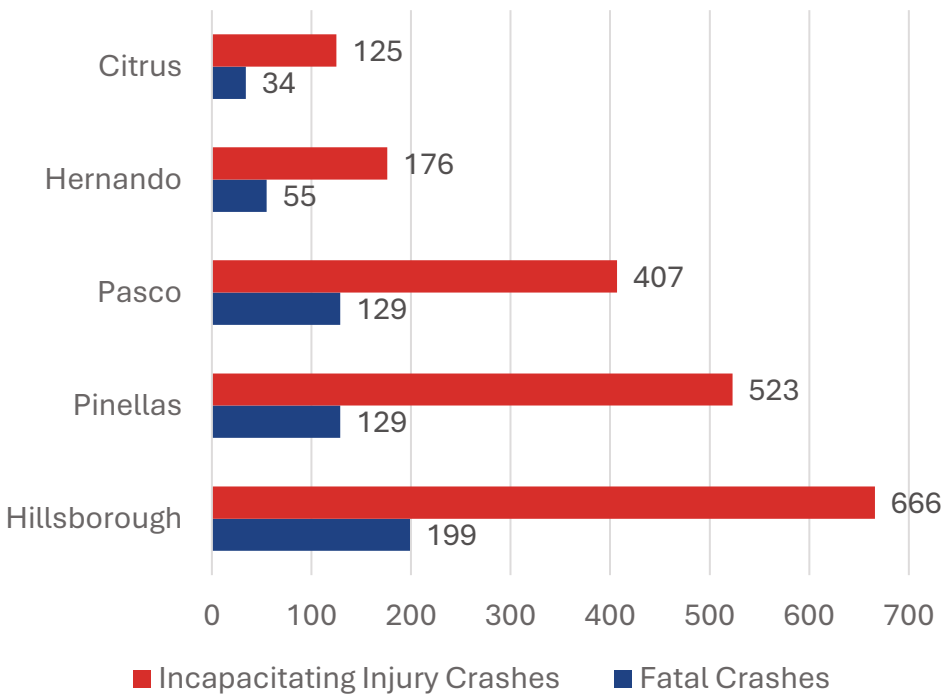
43% of KSI crashes occurred in **non-daylight** conditions

34% of KSI crashes were **lane departure** related

25% of KSI crashes were **left-turn** crashes

*52% were at **uncontrolled locations***

58% of KSI crashes occurred on roads posted at **45 mph or higher**



Intersection Crash Trends

44% of KSI crashes occurred at **signalized** intersections

*40% were **left-turn related***

*24% involved **red-light running***

22% of KSI crashes occurred at **stop sign controlled** intersections

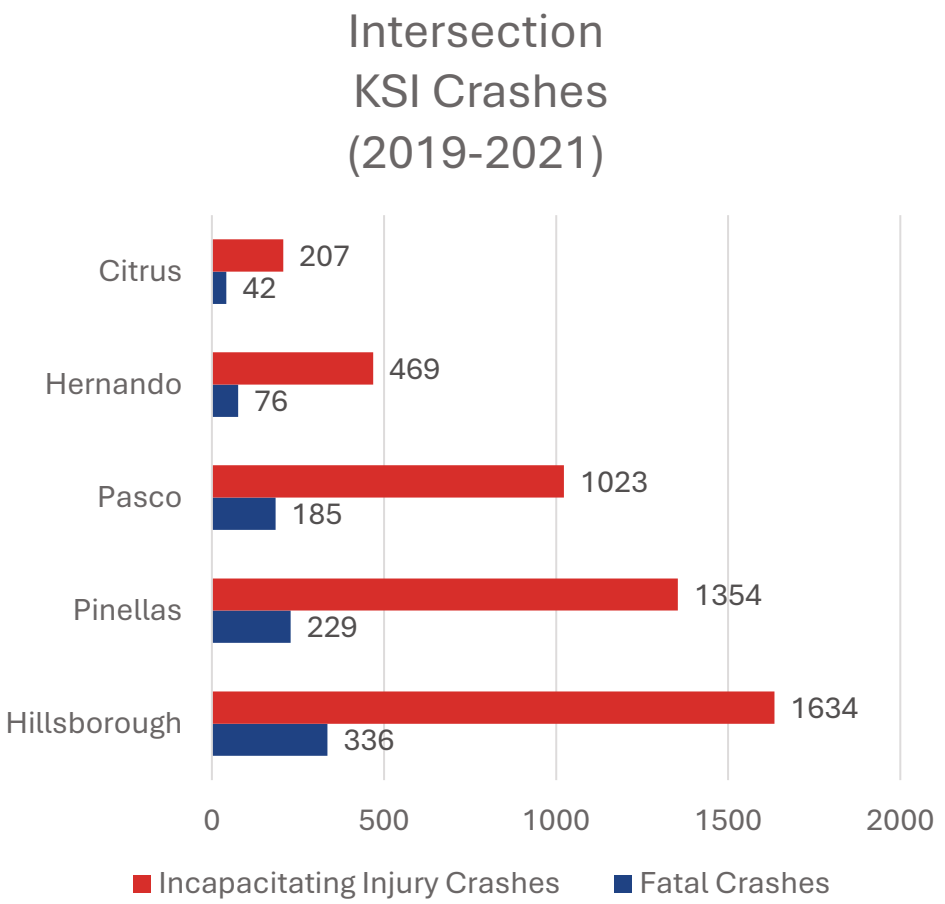
74% off system

31% of KSI crashes occurred on at locations **without traffic control**

*53% on roadways **without a raised median***

25% of **fatal** crashes involved a **pedestrian or bicyclist**

*55% occurred in **non-daylight** conditions*

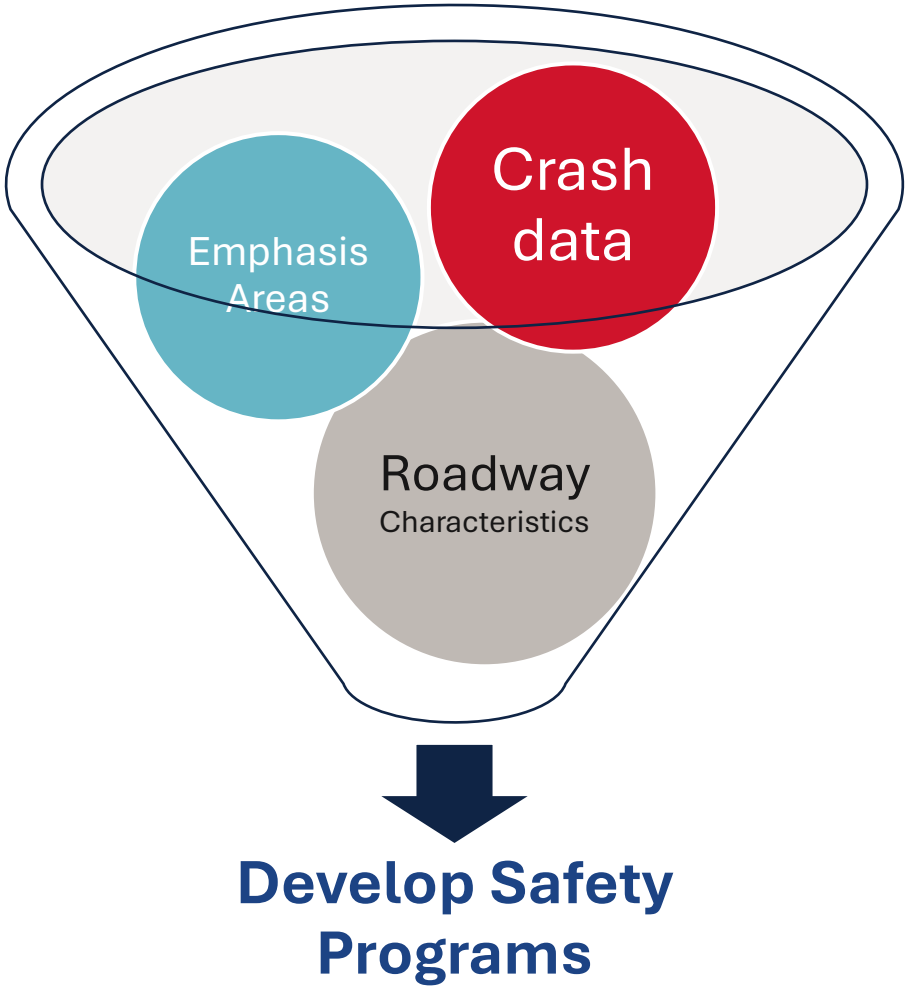




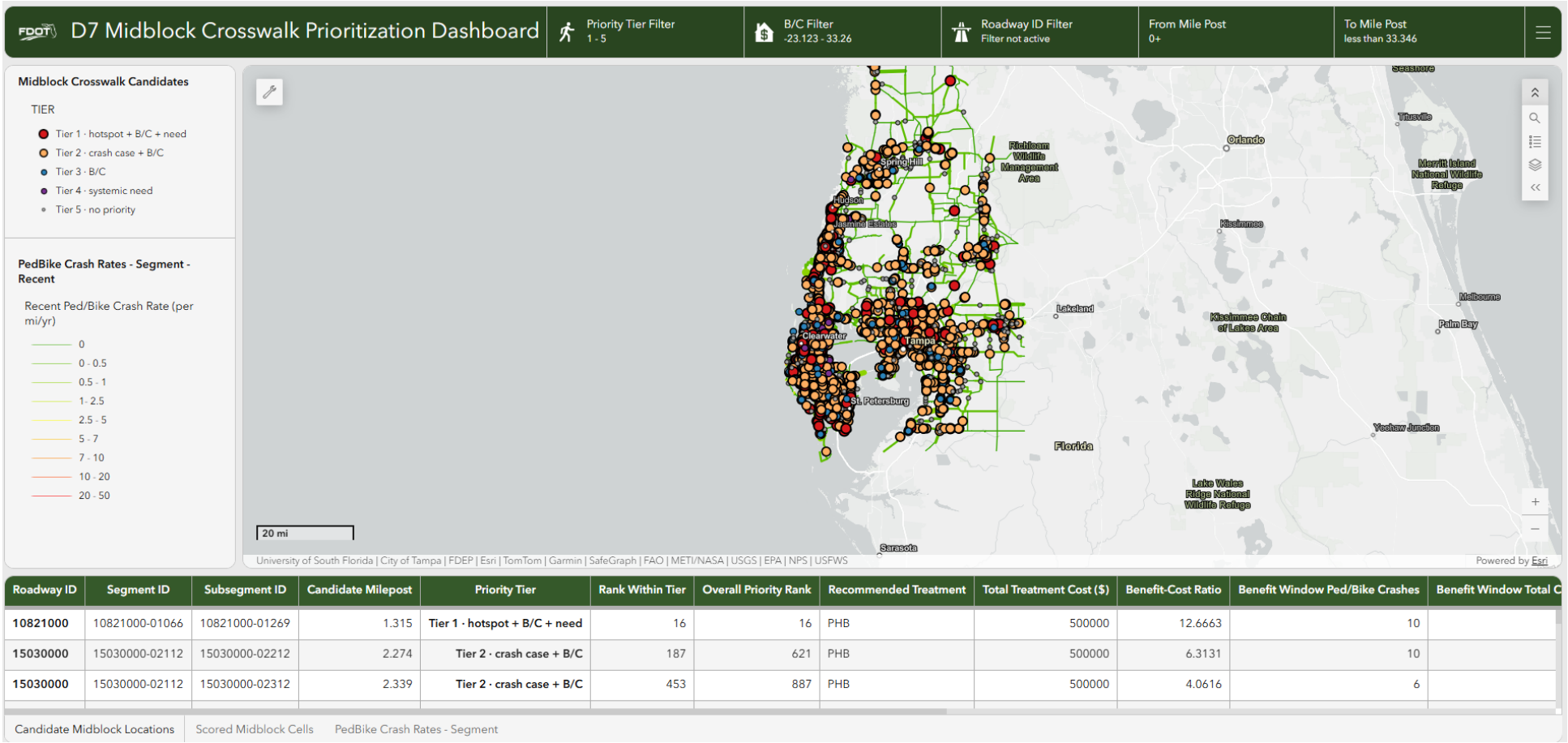
Safety Office Programs

Safety Programs

- Evaluate crash trends
- Identify crash hot spots
- GIS analysis
- Prioritize potential project locations



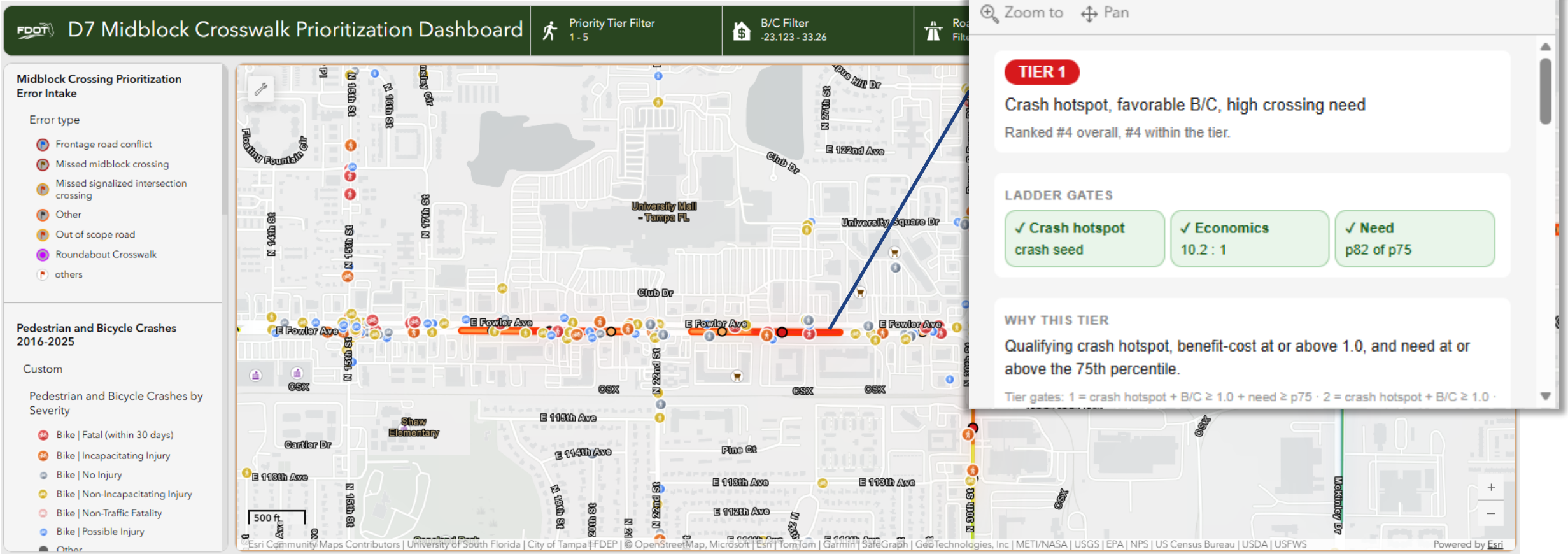
Midblock Prioritization Tool



Roadway ID	Segment ID	Subsegment ID	Candidate Milepost	Priority Tier	Rank Within Tier	Overall Priority Rank	Recommended Treatment	Total Treatment Cost ($)	Benefit-Cost Ratio	Benefit Window Ped/Bike Crashes	Benefit Window Total C
10821000	10821000-01066	10821000-01269	1.315	**Tier 1 · hotspot + B/C + need**	16	16	PHB	500000	12.6663	10	
15030000	15030000-02112	15030000-02212	2.274	**Tier 2 · crash case + B/C**	187	621	PHB	500000	6.3131	10	
15030000	15030000-02112	15030000-02312	2.339	**Tier 2 · crash case + B/C**	453	887	PHB	500000	4.0616	6	

Candidate Midblock Locations | Scored Midblock Cells | PedBike Crash Rates - Segment

Midblock Prioritization Tool

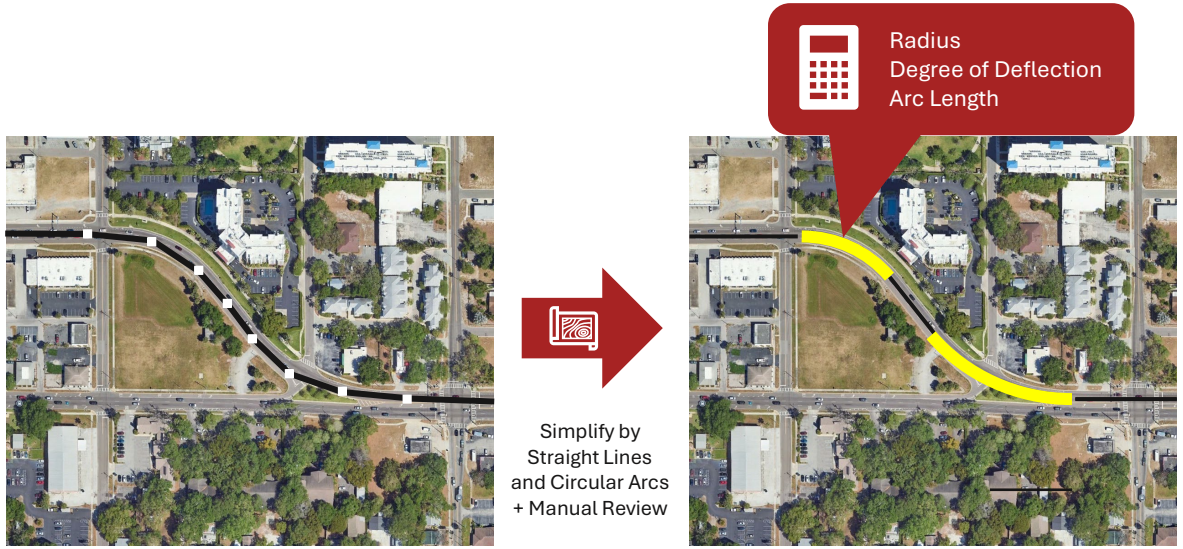


Roadway ID	Segment ID	Subsegment ID	Candidate Milepost	Priority Tier	Rank Within Tier	Overall Priority Rank	Recommended Treatment	Total Treatment Cost ($)	Benefit-Cost Ratio	Benefit Window Ped/Bike Crashes	Benefit Window Total C
10821000	10821000-01066	10821000-01269	1.315	**Tier 1 · hotspot + B/C + need**	16	16	PHB	500000	12.6663	10	
15030000	15030000-02112	15030000-02212	2.274	**Tier 2 · crash case + B/C**	187	621	PHB	500000	6.3131	10	
15030000	15030000-02112	15030000-02312	2.339	**Tier 2 · crash case + B/C**	453	887	PHB	500000	4.0616	6	

Lane Departure: Horizontal Curves

1 Curve Inventory

- GIS process to isolate 750 curves on on-system arterials



2 Data Fusion

- **Crash Data**
  - Crash Types and Severities
  - Roadway Surface and Lighting Conditions
- **Friction Data**
  - Pavement Friction and Cross Slopes
- **Roadway Attributes**
  - Posted Speed, AADT, and Context Classification



Curve Attributes

Crash Data

Friction Data

Roadway Attributes

Horizontal Curves

3 Curve Prioritization

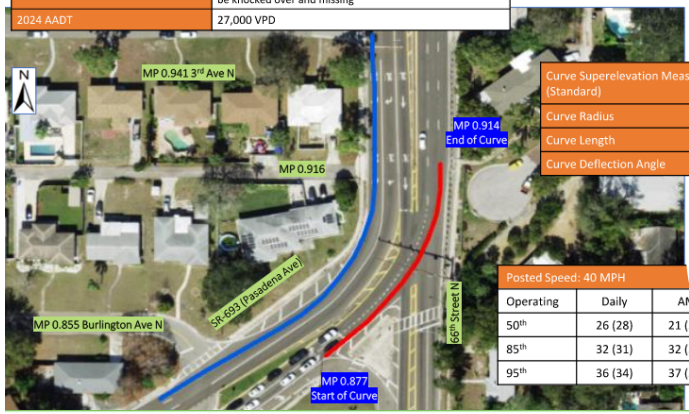
- Based on crash history
- Emphasis placed on severe crashes
- Factors in traffic volumes on curves to account for exposure

4 Diagnosis & Implementation

- Review of crashes, existing conditions, field observations
- Recommendations developed during monthly review meetings
- Concept plans, cost estimates and implementation approach

Pinellas County – SR-693 (Pasadena Ave) from Burlington Ave to 3rd Ave N
(15 230 000 from MP 0.877 to MP 0.914)
Existing Conditions Table

Access Management	Class 07	Functional Classification	Urban Principal Arterial Other
Context Classification	C4	Typical Section Description	Four (4) lane divided roadway with two (2) 11-foot lanes for northbound and 13-foot lanes for southbound; 16-foot raised grass median transitions to a 9-foot painted median with flexible delineators; 9-13 foot outside paved shoulder transitions to 2-foot outside paved shoulder; 5' sidewalk transitions to 7' sidewalk
Lighting & Lighting Statistics	Yes, LED; Avg Horizontal FC: 0.685; Illumination Uniformity Ratios (Avg/Min: 3.5:1; Max/Min: 12.5:1)	Existing Land Use	Residential
Pedestrian and Bike Facilities	Marked crosswalk southeast of curve along 66th Street; sidewalks (5-7') along east and west side of SR 693	Historical Review	Resurfacing completed in 2024
Within Urban Boundary	Yes		
Existing Lane Departure Countermeasures	Guardrail; Horizontal curve signage with advisory speed plaque; Chevron signs with retroreflective strips along outside of curve, chevron signs appear to be blown/knocked out of alignment. Flexible delineators in gore area appear to be knocked over and missing		
2024 AADT	27,000 VPD		



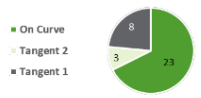
Curve Superelevation Measured (Standard)	0.062 (0.10
Curve Radius	22
Curve Length	195 ft
Curve Deflection Angle	

Posted Speed: 40 MPH

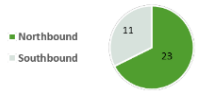
	Operating	Daily	AM	MD	
50th	26 (28)	21 (28,		(28)	24
85th	32 (31)	32 (32)			32
95th	36 (34)	37 (36)			36 (36)

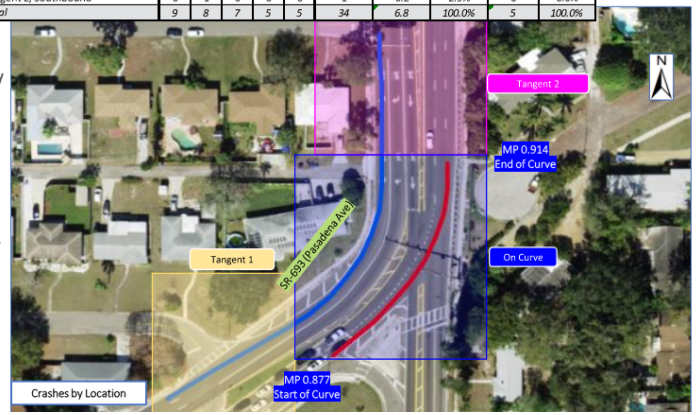
Pasadena Avenue; Section: 15 230 000 from MP 0.877 to 0.914		Years					5 - Year Total	Mean Crashes per Year	% All Crashes	Severe Crashes	% Severe Per All Severe Crashes
		2019	2020	2021	2022	2023					
Curve Crashes, By General Location	Tangent 1	1	2	1	1	3	8	1.6	23.5%	0	0.0%
	Tangent 2	1	1	0	1	0	3	0.6	8.8%	0	0.0%
	On Curve	7	5	6	3	2	23	4.6	67.6%	5	100.0%
	Total	*9*	*8*	*7*	*5*	*5*	*34*	*6.8*	*100.0%*	*5*	*100.0%*
Crashes By General Location and Direction	On Curve, Northbound	3	4	6	2	2	17	3.4	50.0%	5	100.0%
	On Curve, Southbound	4	1	0	1	0	6	1.2	17.6%	0	0.0%
	Tangent 1, Northbound	1	1	0	0	2	4	0.8	11.8%	0	0.0%
	Tangent 1, Southbound	0	1	1	1	1	4	0.8	11.8%	0	0.0%
	Tangent 2, Northbound	1	0	0	1	0	2	0.4	5.9%	0	0.0%
	Tangent 2, Southbound	0	1	0	0	0	1	0.2	2.9%	0	0.0%
	Total	*9*	*8*	*7*	*5*	*5*	*34*	*6.8*	*100.0%*	*5*	*100.0%*

Lane Departure Crashes by General Location



Lane Departure Crashes by Direction



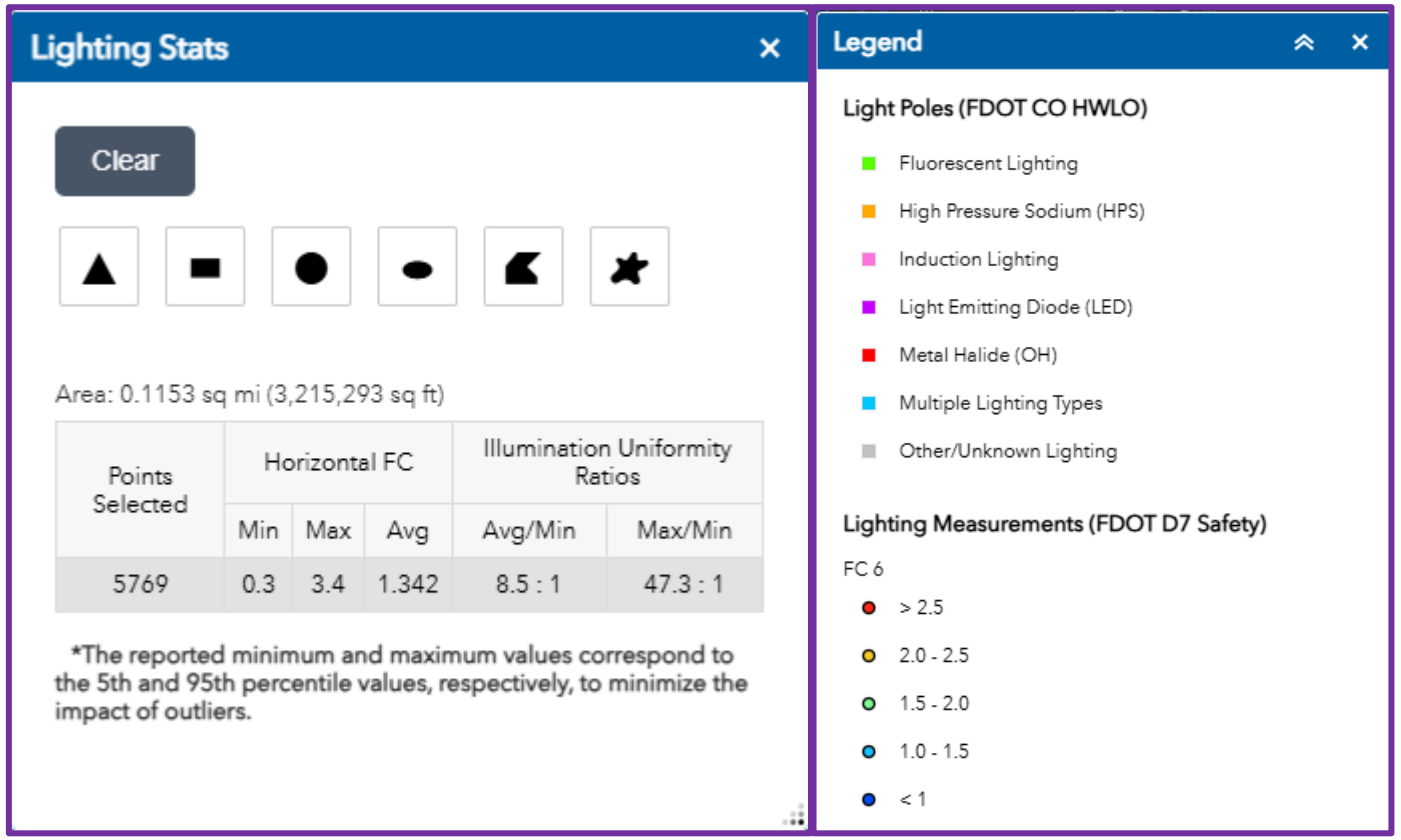


Lighting Level Analysis Tool

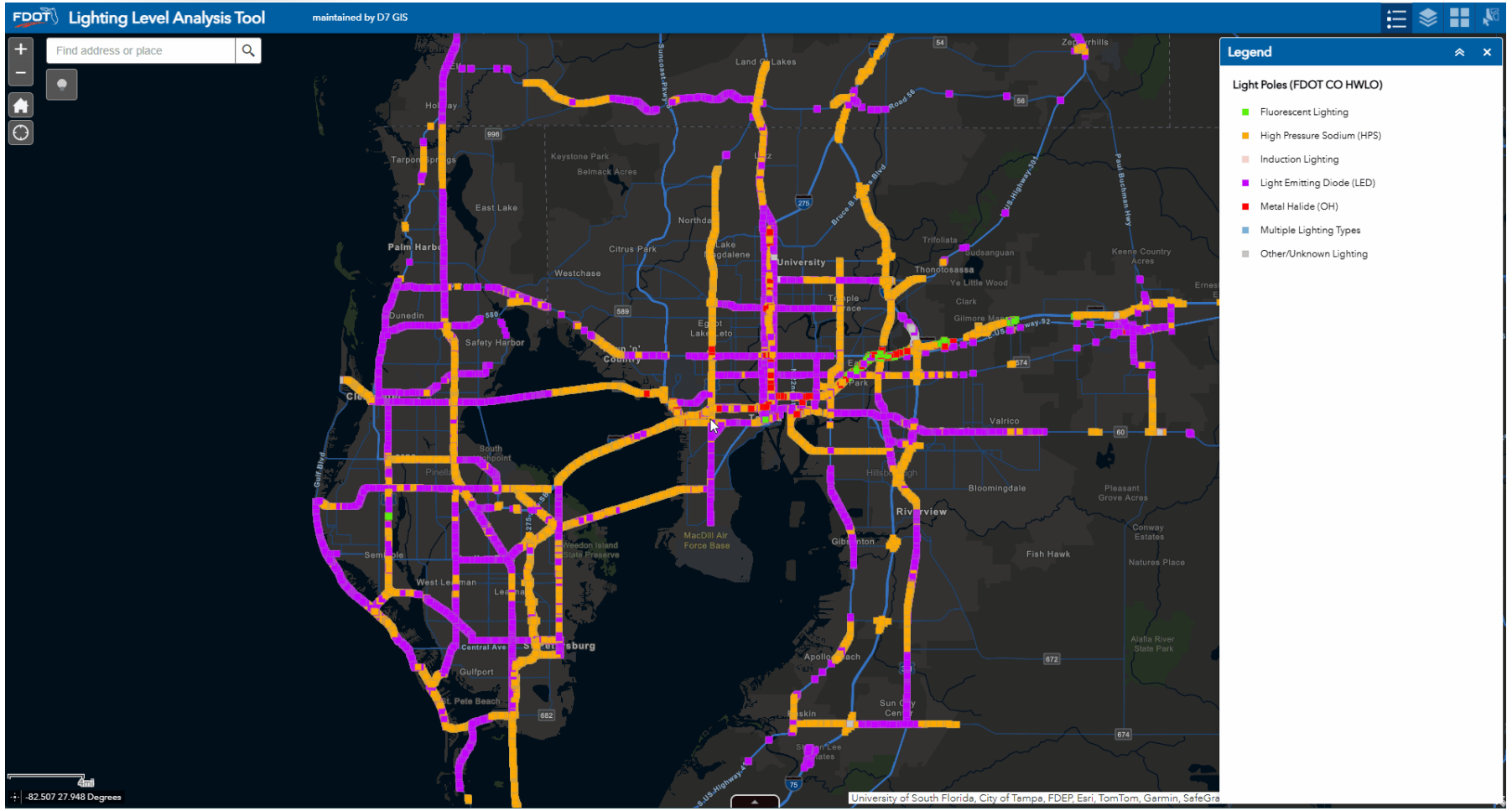
Lighting Research

D7 + CUTR Project:

1. Horizontal lighting assessment for all currently lit segments, based on the most recent light pole data. (2026)
2. Vertical lighting assessment at a select number of undetermined locations, high-crash intersections, and midblock crossings. (2026-27)
3. Part II: Continue the vertical pilot (2027 and beyond)



Lighting Level Analysis Tool



Lighting Prioritization Dashboard

Arterial Corridor Lighting Prioritization Dashbo…

Roadway ID:	County:	Risk Sco…	Lighting Level:	Lighting Type:	Mean Foot Candle	Lighting Uniformity	Lights Per Mile
No category selec…	No county selec…	0 - 5	No category selec…	No category selec…	No category selec…	No category selec…	No category selec…

Maximum Foot Candle of Selected Corridors

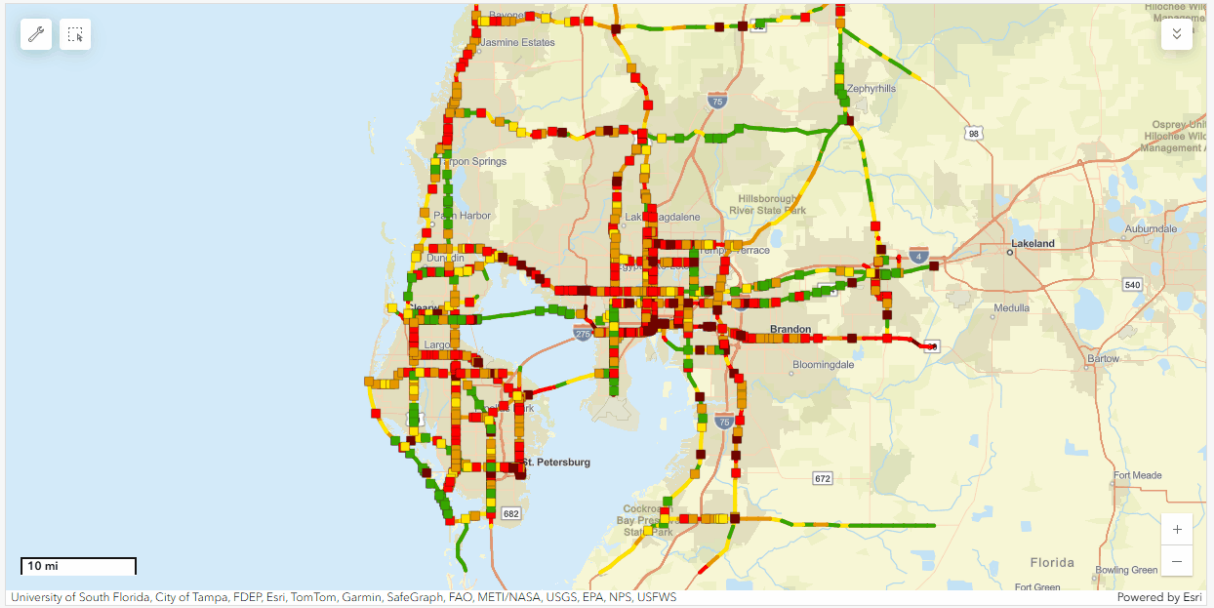
8.59

Mean Foot Candle of Selected Corridors

1.13

Minimum Foot Candle of Selected Corridors

0.14



Lighting Prioritization September 2025

Signalized Intersections

Lighting Risk Category

- Very High Risk (3.0-5.0)
- High Risk (2.5-3.0)
- Moderate Risk (2.0-2.5)
- Low Risk (1.5-2.0)
- Very Low Risk (0-1.5)

Signal to Signal Corridors

Lighting Risk Category

- Very High Risk
- High Risk
- Moderate Risk
- Low Risk
- Very Low Risk
- Unknown

Roadway #	County	Lighting Risk Score	Lighting Risk Category	Lighting Threshold Category	Prioritization Category	Lighting Uniformity	Max Foot Candle	Mean Foot Candle	Min Foot Candle	Begin MP	End MP	Night Crash %
10080000	Hillsbor…	4.20	Very High Risk	No Lighting	Segment without Lighting (Lighting Level Measurements Excluded from Score)					0.98	0.98	
15240000	Pinellas	4.00	Very High Risk	No Lighting	Segment without Lighting (Lighting Level Measurements Excluded from Score)	0.27	4.63	1.44	0.26	3.33	3.33	
15090000	Pinellas	3.83	Very High Risk	No Lighting	Segment without Lighting (Lighting Level Measurements Excluded from Score)	0.17	7.24	1.41	0.26	0.32	0.38	
10330000	Hillsbor…	3.80	Very High Risk	No Lighting	Segment without Lighting (Lighting Level Measurements Excluded from Score)					4.65	4.66	
15090000	Pinellas	3.80	Very High Risk	No Lighting	Segment without Lighting (Lighting Level Measurements Excluded from Score)					0.81	0.90	
10110000	Hillsbor…	3.78	Very High Risk	No Lighting	Segment without Lighting (Lighting Level Measurements Excluded from Score)		0.14	0.14	0.14	23.50	23.74	
10340000	Hillsbor…	3.67	Very High Risk	No Lighting	Segment without Lighting (Lighting Level Measurements Excluded from Score)	0.19	3.25	0.74	0.15	3.31	3.32	
10060000	Hillsbor…	3.67	Very High Risk	No Lighting	Segment without Lighting (Lighting Level Measurements Excluded from Score)	0.28	3.85	1.32	0.33	19.24	19.27	

Corridors (sorted by risk score) | Corridors (sorted by county) | Signalized Intersections (sorted by risk score) | Signalized Intersections (sorted by county) | Light Poles

Highway Safety Improvement Program (HSIP)

- **Federal-aid** program
- **Reduce fatalities + serious injuries**
- **Public roads** – including non-state-owned facilities
- **D7 Safety** has been partnering with local agencies to deliver HSIP projects for **20+ years**



HISP Projects

- Traffic signals
- Median modifications
- Roundabouts
- Intersection improvement
- Pedestrian safety improvements
- Vibratory pavement markings.

HSIP Safety Material Equipment Purchases

- **$350,000 per year**
- Off-system purchases require:
  - data-driven, studies (if applicable)
  - list of locations
  - history of correctable crashes
- **Local agencies** responsible for installation and maintenance
- Must be on APL and BABA compliant



Safety Material Equipment Purchases

- Speed feedback signs
- RRFB (Rectangular Rapid Flashing Beacons)
- Bright sticks
- City posts or Delineators for median channelization
- Blinker- Dynamic Curve Warning System
- LED Stop Signs (if applicable)
- Flashing Beacon (single or Dual) for stop ahead or at intersection (if applicable)
- R10-15 Turning vehicle Yield to Pedestrians
- Rebounder R1-6a, STOP for Pedestrians