

STEP Safe Transportation for
Every Pedestrian



States' Experience with STEP

SASHTO Meeting
August 19, 2019



U.S. Department of Transportation
Federal Highway Administration

STEP

Safe Transportation for Every Pedestrian

LIVE



HOSTS

Dan Hinton
FHWA

Marc Start
AECOM

GUESTS

Trenda McPherson
Florida DOT

Hanna Cockburn
North Carolina DOT

Jack Anninos
Georgia DOT



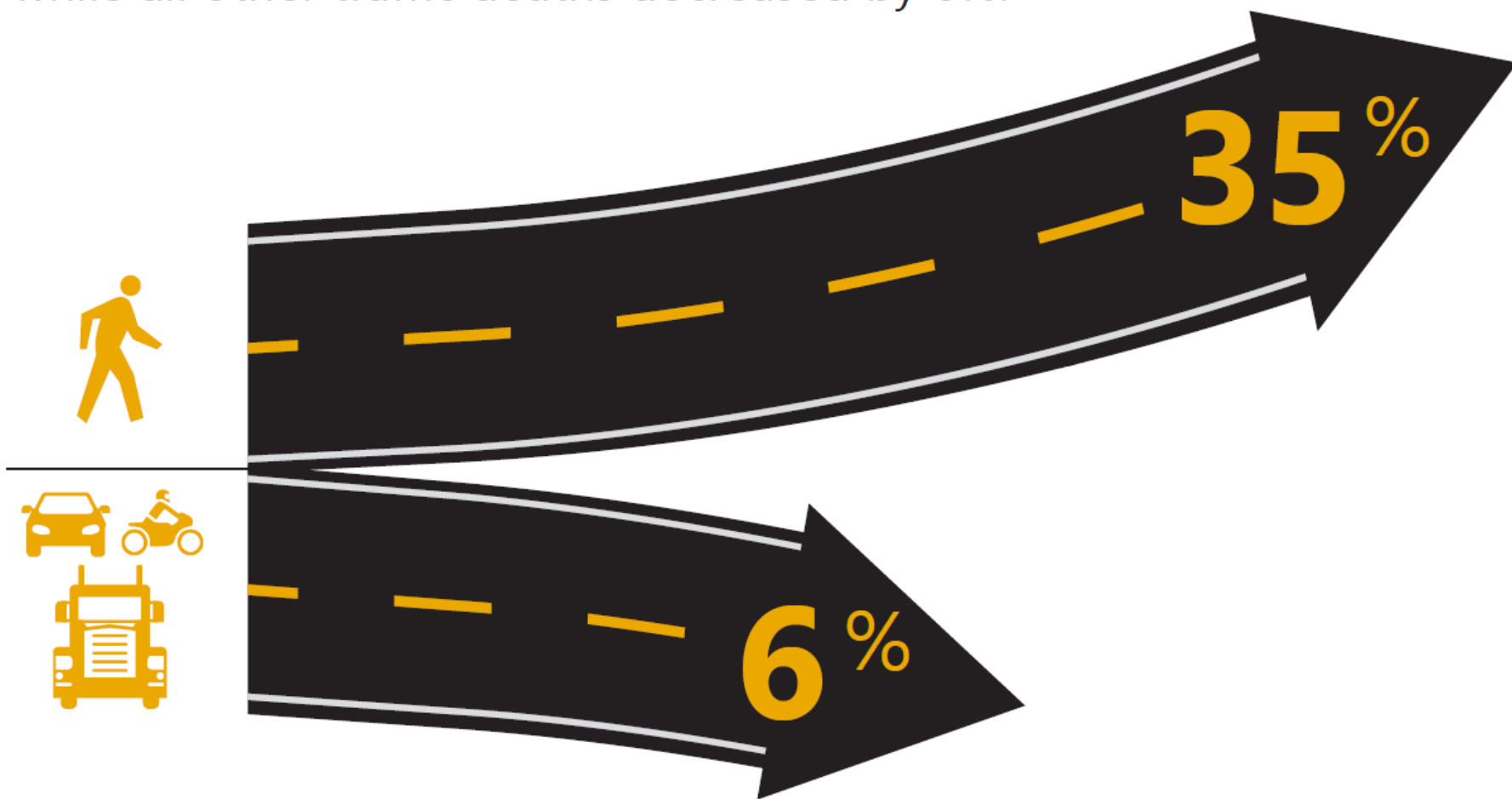


Source: FHWA



Source: FHWA

Pedestrian fatalities increased 35% from 2008-2017,
while all other traffic deaths decreased by 6%.



Source: NHTSA Fatality Analysis Reporting System

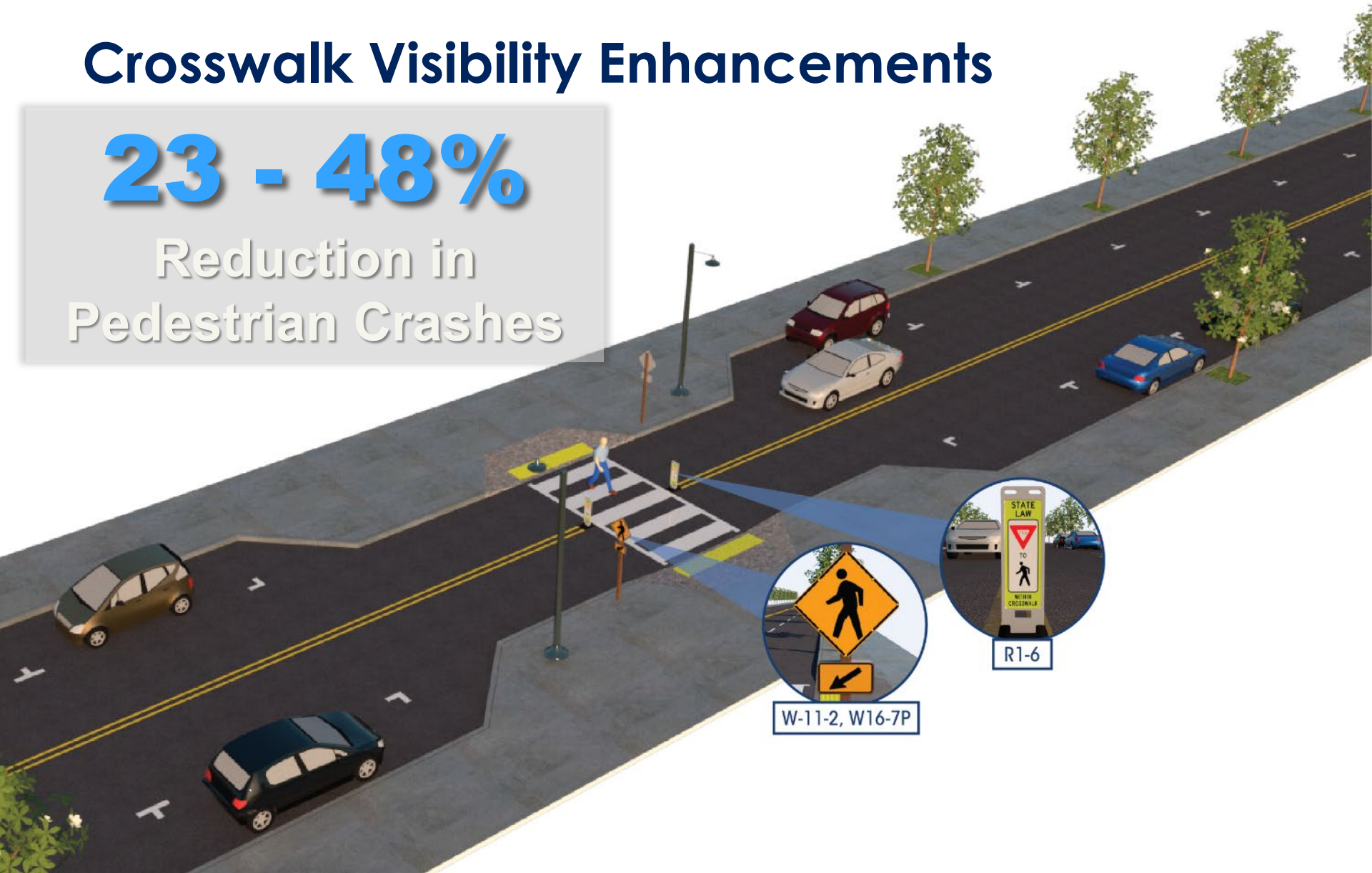


The Spectacular Seven

Crosswalk Visibility Enhancements

23 - 48%

Reduction in
Pedestrian Crashes



Raised Crosswalks



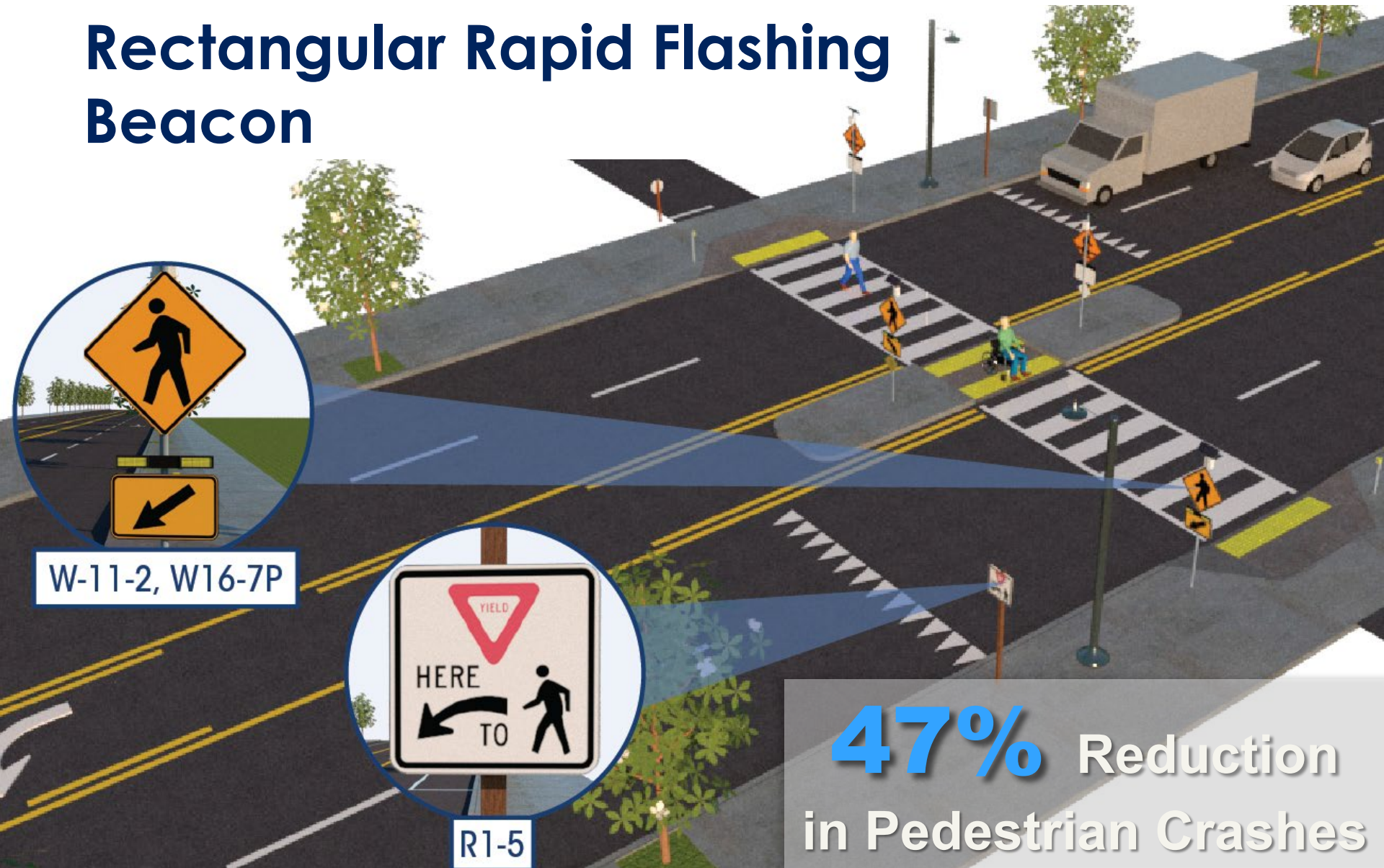
45% Reduction
in Pedestrian Crashes

Pedestrian Refuge Islands



32% Reduction in Pedestrian Crashes

Rectangular Rapid Flashing Beacon



W-11-2, W16-7P

YIELD
HERE
TO

R1-5

47% Reduction
in Pedestrian Crashes

RRFB Video IA-21 Flash Pattern



Pedestrian Hybrid Beacons (PHB)



55% Reduction in
Pedestrian Crashes

Pedestrian Hybrid Beacons (PHB)



1
Blank for
drivers



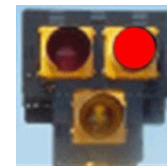
2
Flashing
yellow



3
Steady yellow



4
Steady red



5
Wig-Wag



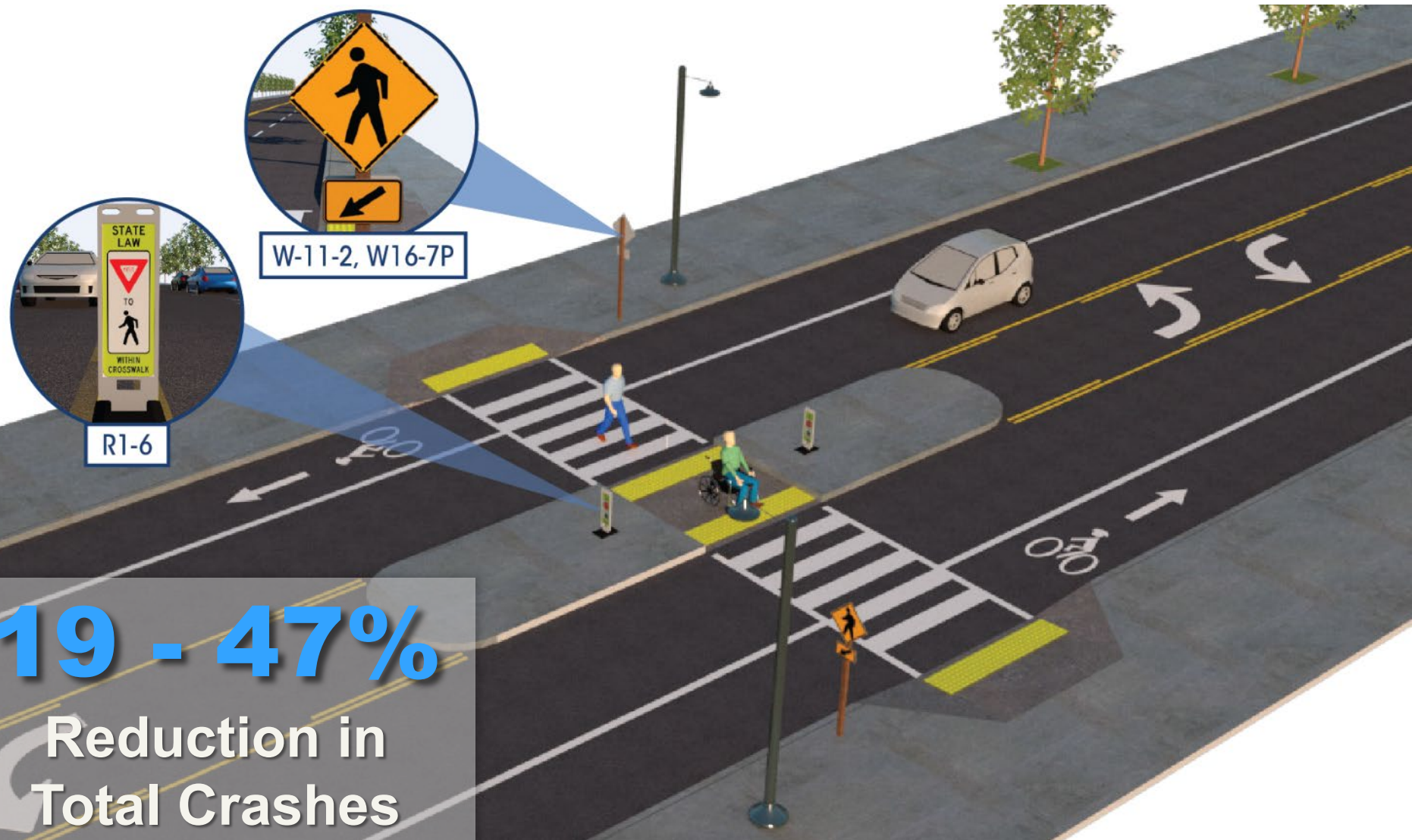
Return
to 1



Road Diet: Before



Road Diet: After



Leading Pedestrian Interval



3+ Second
Advance Start

59% Reduction
in Pedestrian Crashes

Where you walk, what do you see?



OR



Florida's Bicycle/Pedestrian Focused Initiative



Trenda McPherson
State Bicycle Pedestrian Safety Program Manager
Florida Department of Transportation
August 19, 2019

Revolutionizing How We THINK About Transportation



Intermodal systems improve the safety, mobility, and accessibility of ***ALL*** road users.

Especially those who are the most vulnerable.



Revolutionizing How We THINK About Transportation



Orlando, FL

By Defining Walking and Biking as Transportation Options, not Alternatives.

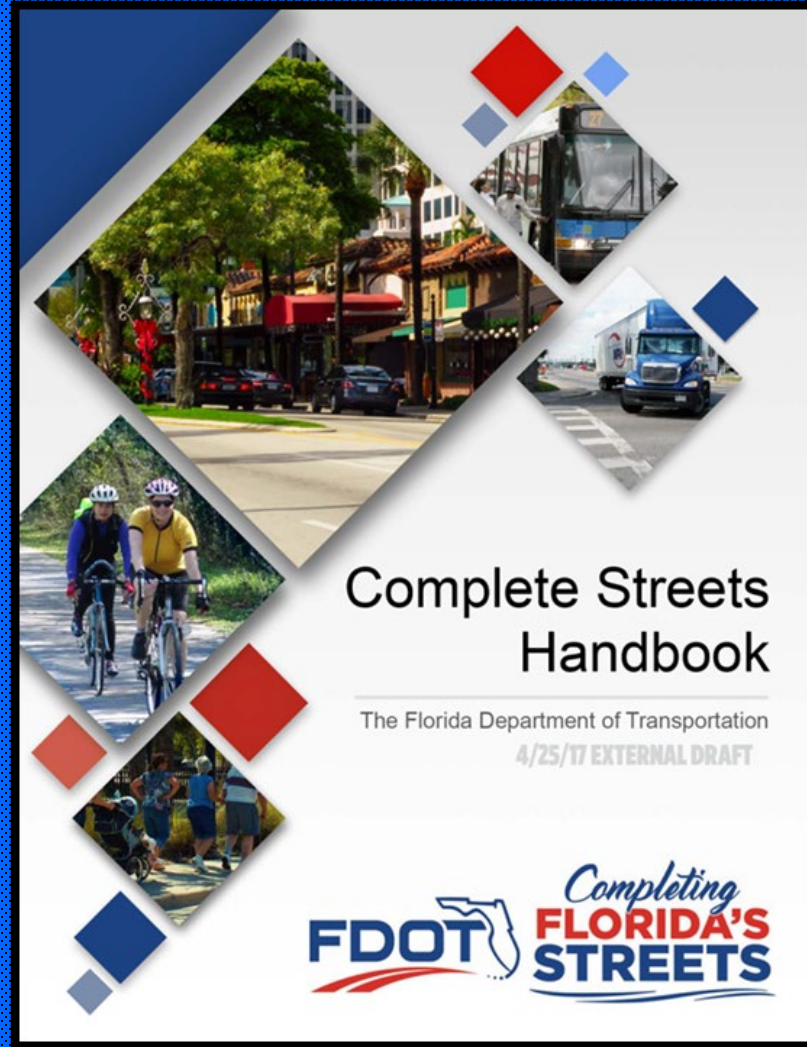
Revolutionizing How We THINK About Transportation



Safety: Safety for all users is FDOT's top priority. Roadways with context-appropriate speeds can result in reduced fatalities and serious injuries.

www.floridacompletestreets.org

The **Complete Streets** approach considers the mobility, convenience, accessibility, and safety of all road users, and places an emphasis on the most vulnerable users of a given roadway.



Economic Development:

A Complete Streets approach connects communities and supports Florida's existing economic centers, employment centers, and visitor destinations by striving to provide the highest level of multimodal infrastructure in these core areas.

Quality of Life:

A Complete Streets approach helps to align transportation decisions with land use, resulting in quality places. Where transportation investments support a community's quality of life.

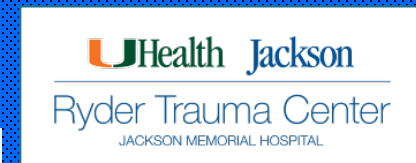
Revolutionizing How We THINK About Transportation



Strategic Alliances



St. Lucie Transportation
Planning
Organization



Revolutionizing How We THINK About Transportation



Tallahassee, Florida



Ft. Lauderdale, Florida

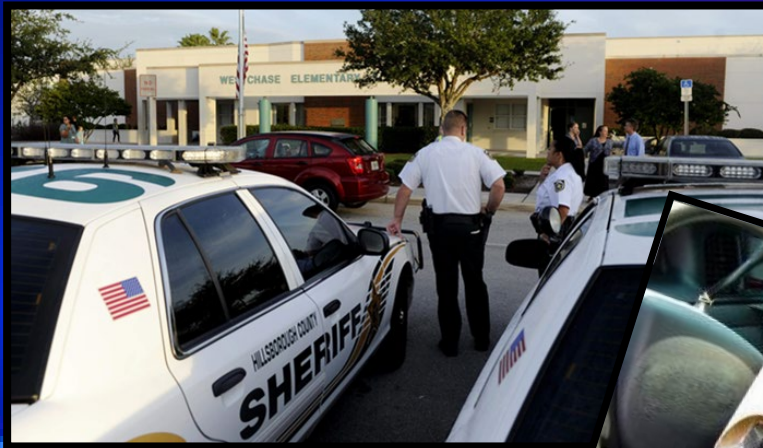


Delray Beach, Florida

Revolutionizing How We THINK About Transportation



High Visibility Enforcement



Revolutionizing How We THINK About Transportation




HOW TO USE AN RRFB

(Rectangular Rapid Flashing Beacon)

Pedestrians and Bicyclists

 Press the button to activate the RRFB signals; the lights will begin to flash indicating to motorists a pedestrian is ready to cross.

Pedestrians

1. Make eye contact with motorists to be sure traffic is yielding before entering the crosswalk.
2. Walk defensively, scanning both directions to be sure motorists see you.
3. Always scan the road while crossing making sure all vehicles have stopped.

Bicyclists


1. Obey all traffic signs and signals.
2. When using the crosswalk, follow the pedestrian rules.
3. When using the travel lane, ride in the direction of traffic and always yield to pedestrians.

www.AlertTodayFlorida.com


Pedestrian and Bicycle Safety Grassroots Efforts









Safe Mobility at Intersections



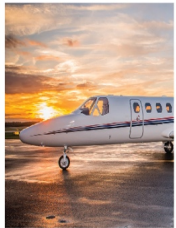

HOW TO USE THE PEDESTRIAN HYBRID BEACON



DRIVERS SEE THIS	DO THIS
	GO!
	SLOW DOWN (Pedestrian has activated the push button)
	Prepare to STOP
	STOP! For Pedestrian
	STOP! Proceed with Caution if Clear



NORTH CAROLINA Department of Transportation



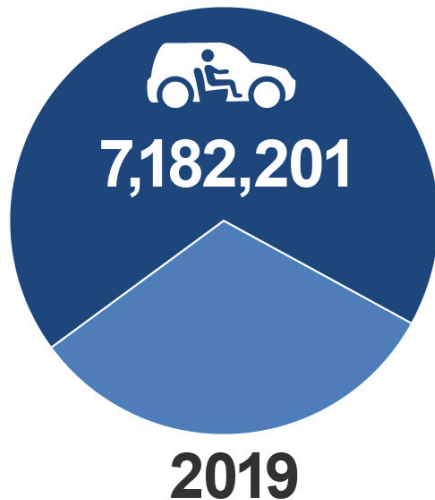
Strategies to Improve Pedestrian Safety in NC

Hanna Cockburn, AICP
Director of Integrated Mobility
North Carolina Department of Transportation
August 2019

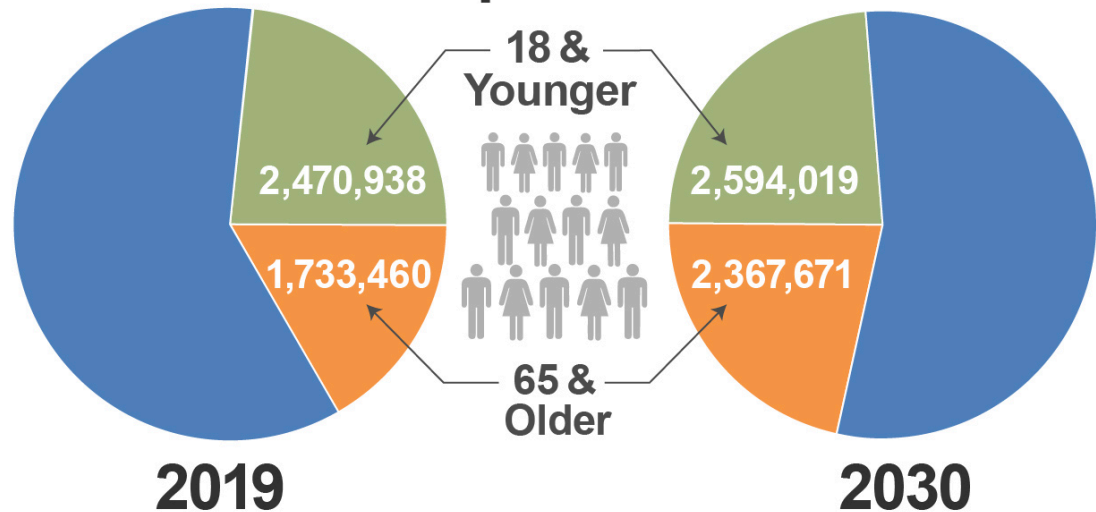
Why? North Carolina's Population is Changing

NC's current population of 10,524,548 is expected to top 11M by 2030

Active Drivers

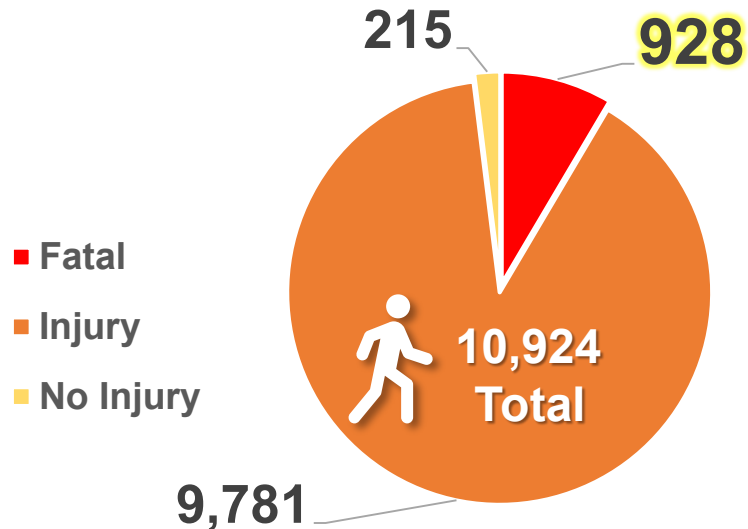


Population



Why? Pedestrian Crashes are Rising

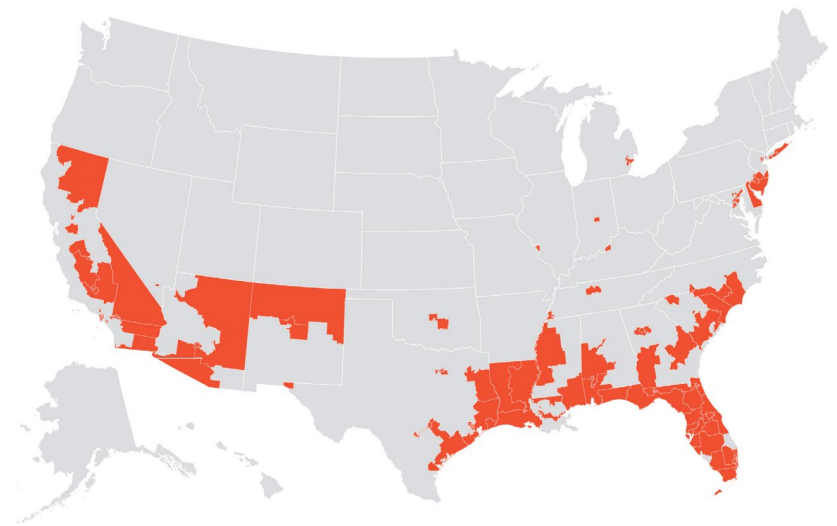
Pedestrian Crashes, 2013-2017



Source: NCDOT Crash Statistics

NC 7th highest total pedestrian fatalities by state

100 Most Dangerous Congressional Districts for Pedestrians



Source: Smart Growth America, 2019

Education: Complete Streets

Collaborative Approach to Advance Complete Streets

In 2019...

- 6 day-long workshops
- 226 Attendees
 - State DOT
 - Local Government
 - Advocates
- Focus
 - Working together
 - Understanding process



Enforcement: W4M NC

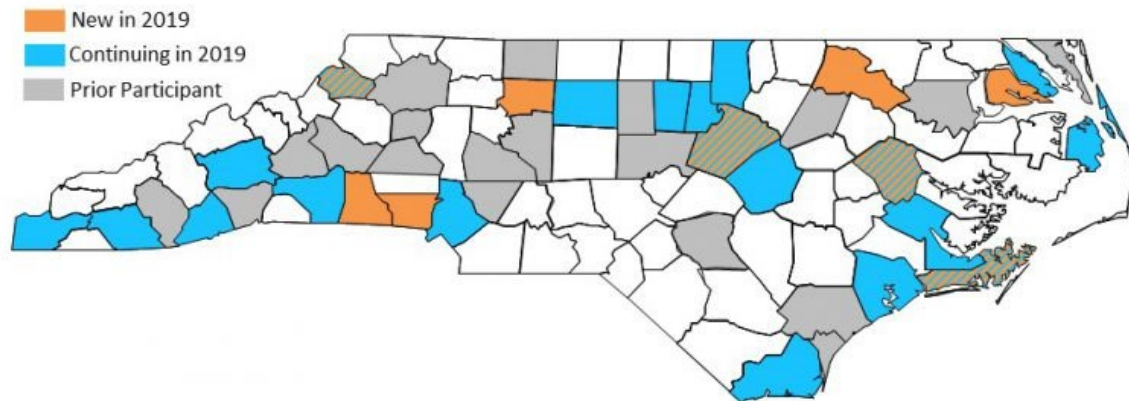


In 2019...

- 7 half-day and full-day law enforcement training sessions
- 5 community action-planning workshops
- 39 participating communities, 187 participants

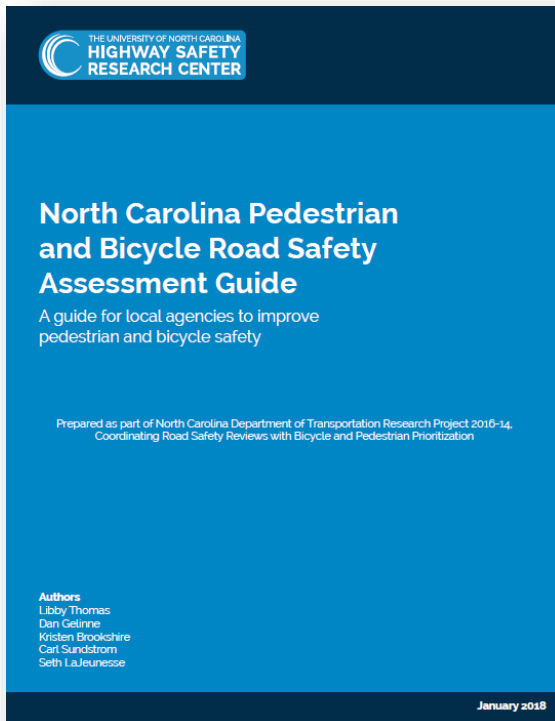
2018 Evaluation...

- **12.8% reduction in pedestrian crashes in participating counties**

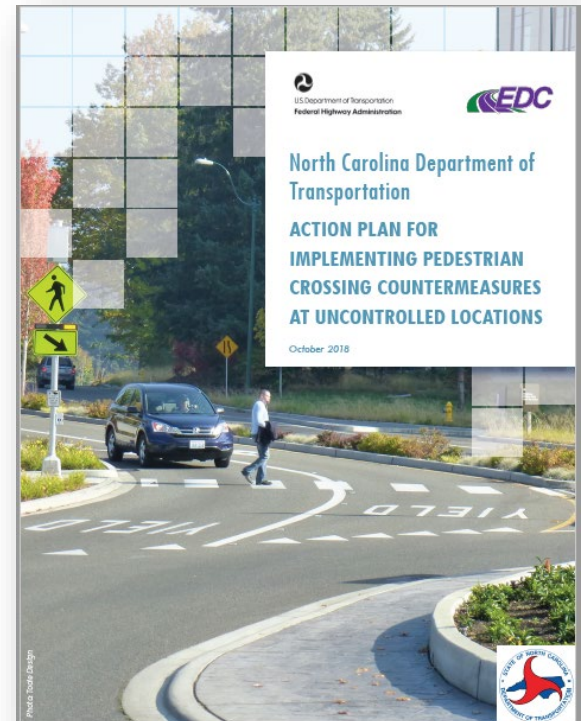


Engineering: Plans & Guides

*Action Plan for Implementing
Pedestrian Crossing Counter Measures
at Uncontrolled Intersections (2018)*



*NC Pedestrian and Bicycle Road
Safety Assessment Guide (2018)*





Take a STEP Through Georgia

SASHTO 2019 Savannah, GA

**Jack Anninos, GDOT
State Bicycle & Pedestrian Engineer**



Pedestrian Safety Action Plan

STRATEGIES

- Data
- Planning & Policy
- Infrastructure Projects
- Education, Enforcement, & Outreach
- Funding

GDOT

GOHS

PEDS

MPOS

COUNTIES
&CITIES

PSTT

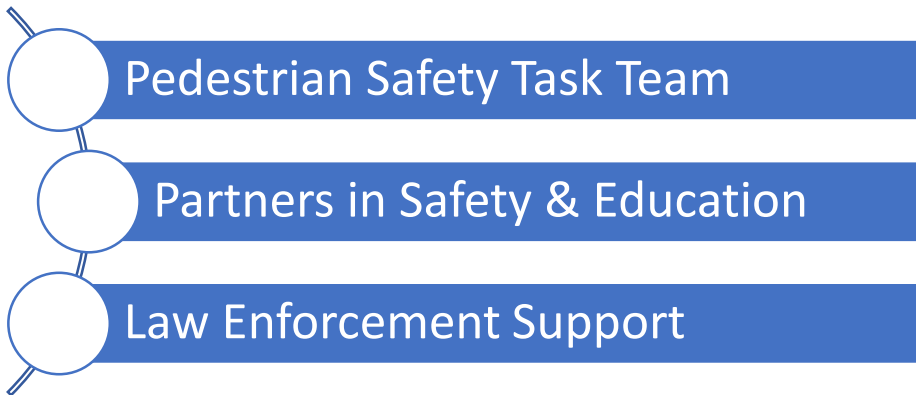
Pedestrian Streetscape Guide

- STEP Countermeasures
- Context Sensitivity
- Create Comprehensive Toolbox Approach
- Clear and Updated Graphics
- Developed with Multidisciplinary team



Building a Sense of Culture

- **Statewide Pedestrian and Bicycle Initiatives**
- **GDOT Coordination with Safety Partners**
- **Pedestrian and Bicycle safety should be incorporated into all of our daily operations**



Resources

https://safety.fhwa.dot.gov/ped_bike/step/resources/

Pedestrian Hybrid Beacon (PHB)

SAFE TRANSPORTATION
FOR EVERY PEDESTRIAN
COUNTERMEASURE TECH SHEET

VIDEOS



A Pedestrian Hybrid Beacon head consists of lenses above a single yellow lens. Unlike the PHB rests in dark until a pedestrian or pushbutton or other form of detection. When the beacon displays a sequence of flash lights that indicate the pedestrian walk it is safe for drivers to proceed (see figure).

The PHB is often considered for installation

SAFE TRANSPORTATION FOR EVERY PEDESTRIAN CASE STUDY



Publicly-Supported Road Diet Reduces Speeds in Alexandria

Alexandria Department of Transportation and Environmental Services

KEY ELEMENTS:



Public support



Speed reduction

Community members can provide valuable insights into pedestrian safety on their streets, adding support to local projects such as the King Street Road Diet in Alexandria, Virginia. The City of Alexandria's Complete Streets policy requires that city maintenance and capital projects improve the transportation network for all users, so when a 1.8 mile segment of King Street was slated for resurfacing, the city had an opportunity to address longstanding community concerns and seek feedback on design options for improving the corridor.

This section of King Street has a bus line, residences, multiple churches, a community center, and a high school. A

stops, and upgraded curb ramps. Staff also presented options for more comprehensive corridor improvements such as a Road Diet, buffered bike lanes, new crosswalks, vehicle turning restrictions, and crosswalk visibility enhancements. In addition to dedicated space for bicyclists and shorter, safer pedestrian crossings at seven locations, the city also identified driver benefits from slower vehicle speeds, increased sight distance, and the addition of a center turn lane.

