



STEP

Safe Transportation for Every Pedestrian

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U.S. Department of Transportation
Federal Highway Administration



6,283

“...the most deaths since 1990.” -NHTSA

- 2018 FARS Data
- Photo Source: North Carolina Vision Zero, ncvisionzero.org

“Every Day Counts” (EDC)

- ✓ **enhance roadway safety**
- ✓ shorten the project delivery process
- ✓ reduce congestion
- ✓ improve environmental sustainability

STEP

Safe Transportation for Every Pedestrian

5th Round (2019-2020)



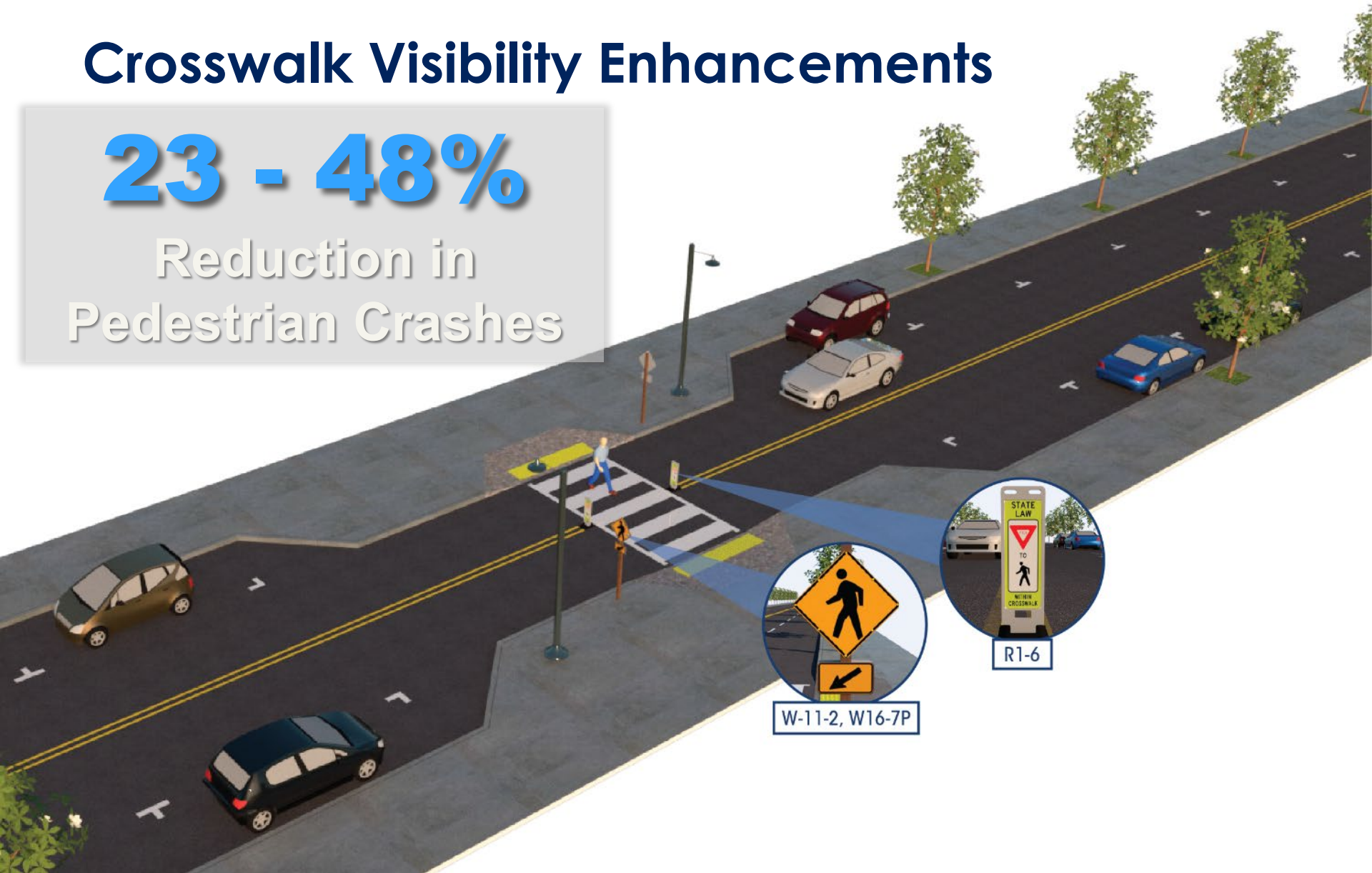


The Spectacular Seven

Crosswalk Visibility Enhancements

23 - 48%

Reduction in
Pedestrian Crashes



Raised Crosswalks



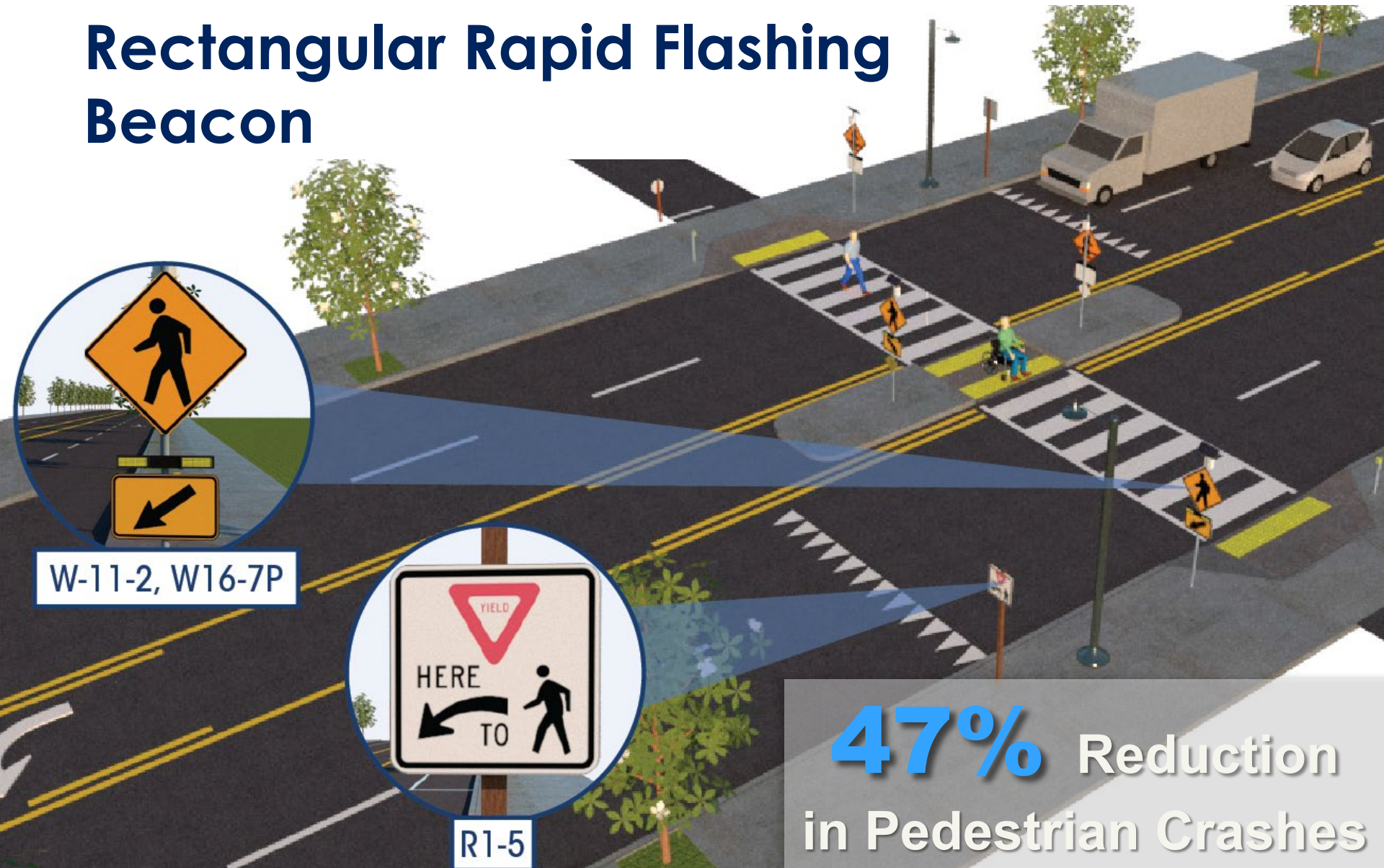
45% Reduction
in Pedestrian Crashes

Pedestrian Refuge Islands



32% Reduction
in Pedestrian Crashes

Rectangular Rapid Flashing Beacon



Pedestrian Hybrid Beacons (PHB)



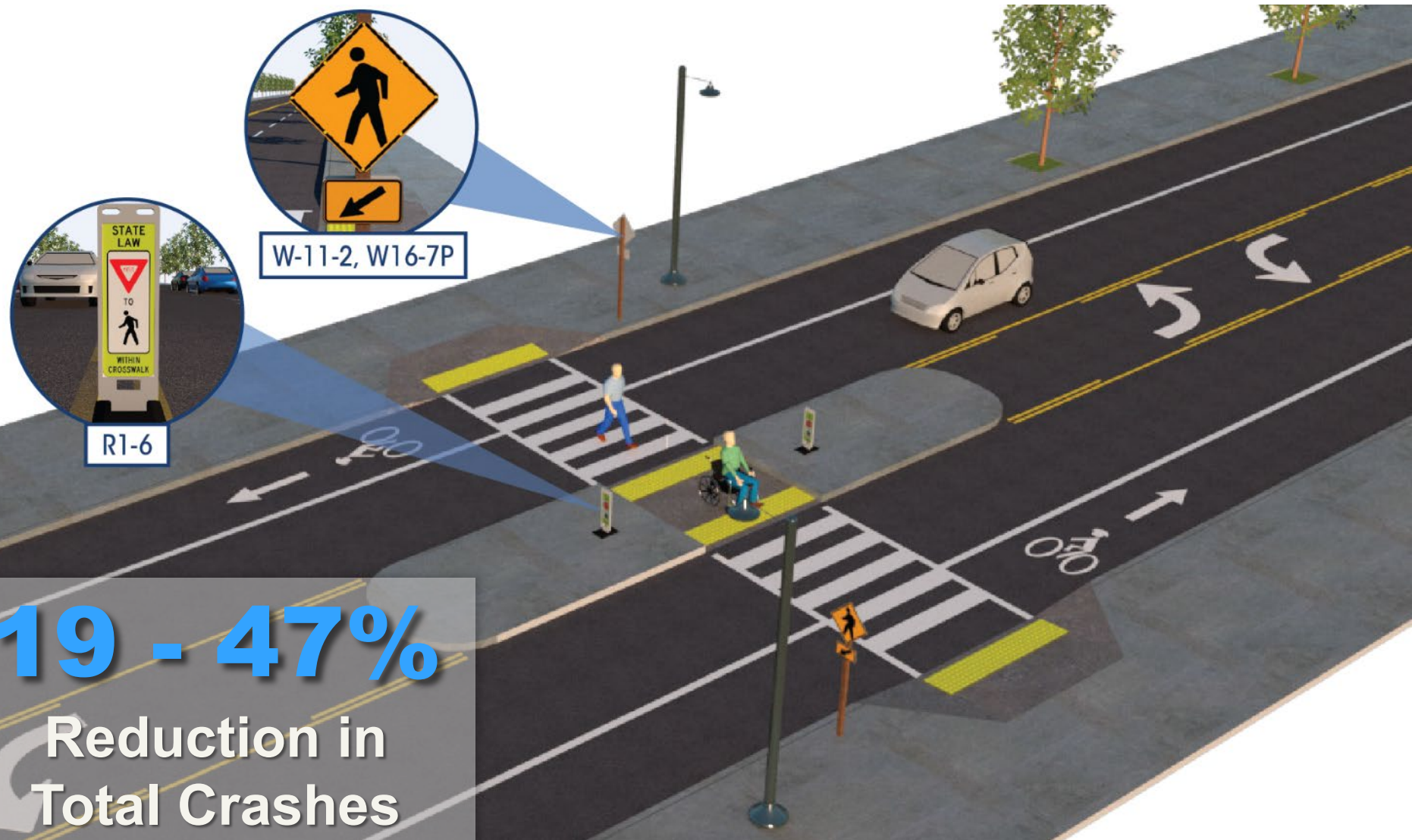
55% Reduction in
Pedestrian Crashes



Road Diet: Before



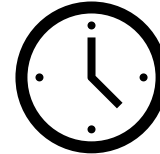
Road Diet: After



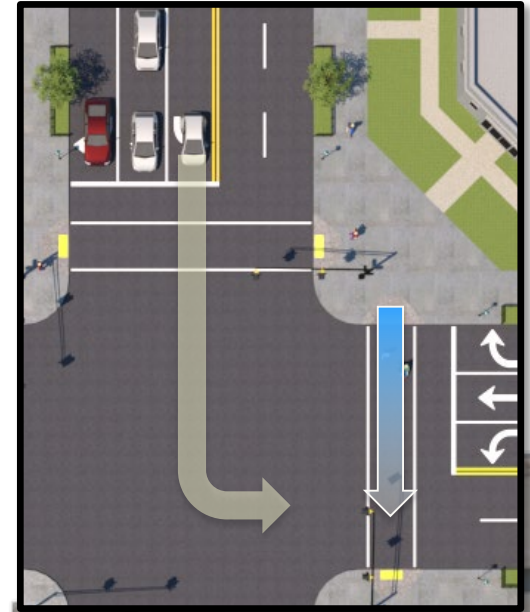
19 - 47%

Reduction in
Total Crashes

Leading Pedestrian Interval



3+ Second
Advance Start



59% Reduction
in Pedestrian Crashes

Resources

Revised June 2018



U.S. Department of Transportation
Federal Highway Administration



Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations

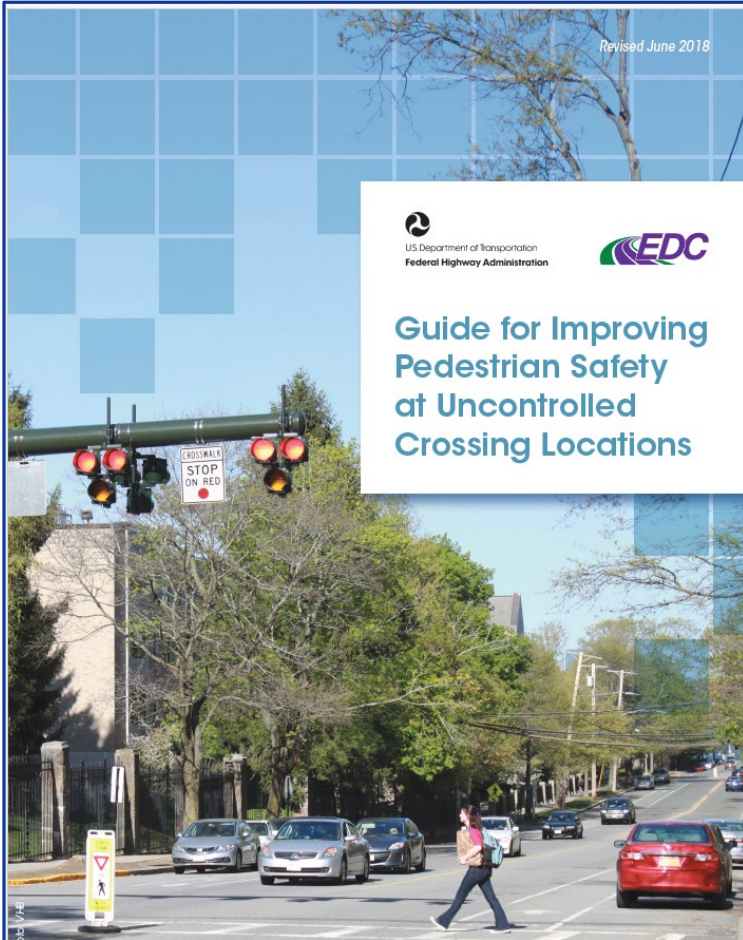


Table 1. Application of pedestrian crash countermeasures by roadway feature.

Roadway Configuration	Posted Speed Limit and AADT								
	Vehicle AADT <9,000			Vehicle AADT 9,000–15,000			Vehicle AADT >15,000		
	≤30 mph	35 mph	≥40 mph	≤30 mph	35 mph	≥40 mph	≤30 mph	35 mph	≥40 mph
2 lanes (1 lane in each direction)	1 2 4 5 6	1 5 6 7 9	1 5 6 7 9	1 4 5 6 7 9	1 5 6 7 9	1 5 6 7 9	1 4 5 6 7 9	1 5 6 7 9	1 5 6 9
3 lanes with raised median (1 lane in each direction)	1 2 3 4 5	1 3 5 7 9	1 3 5 7 9	1 3 4 5 7 9	1 3 5 7 9	1 3 5 7 9	1 3 4 5 7 9	1 3 5 7 9	1 3 5 9
3 lanes w/o raised median (1 lane in each direction with a two-way left-turn lane)	1 2 3 4 5 6 7 9	1 3 5 6 7 9	1 3 5 6 7 9	1 3 4 5 6 7 9	1 3 5 6 7 9	1 3 5 6 7 9	1 3 4 5 6 7 9	1 3 5 6 7 9	1 3 5 6 9
4+ lanes with raised median (2 or more lanes in each direction)	1 3 1 3 5 5 7 8 9 7 8 9	1 3 5 7 8 9	1 3 5 8 9	1 3 5 7 8 9	1 3 5 7 8 9	1 3 5 8 9	1 3 5 7 8 9	1 3 5 8 9	1 3 5 8 9
4+ lanes w/o raised median (2 or more lanes in each direction)	1 3 1 3 5 6 5 6 7 8 9 7 8 9	1 3 5 6 7 8 9	1 3 5 6 8 9	1 3 5 6 7 8 9	1 3 5 6 7 8 9	1 3 5 6 8 9	1 3 5 6 7 8 9	1 3 5 6 8 9	1 3 5 6 8 9

Given the set of conditions in a cell,

- # Signifies that the countermeasure is a candidate treatment at a marked uncontrolled crossing location.
- Signifies that the countermeasure should always be considered, but not mandated or required, based upon engineering judgment at a marked uncontrolled crossing location.
- Signifies that crosswalk visibility enhancements should always occur in conjunction with other identified countermeasures.*

The absence of a number signifies that the countermeasure is generally not an appropriate treatment, but exceptions may be considered following engineering judgment.

- 1 High-visibility crosswalk markings, parking restrictions on crosswalk approach, adequate nighttime lighting levels, and crossing warning signs
- 2 Raised crosswalk
- 3 Advance Yield Here To (Stop Here For) Pedestrians sign and yield (stop) line
- 4 In-Street Pedestrian Crossing sign
- 5 Curb extension
- 6 Pedestrian refuge island
- 7 Rectangular Rapid-Flashing Beacon (RRFB)**
- 8 Road Diet
- 9 Pedestrian Hybrid Beacon (PHB)**

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 flashing lights that indicate the pedestrian walk it is safe for drivers to proceed (see figure 1).

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

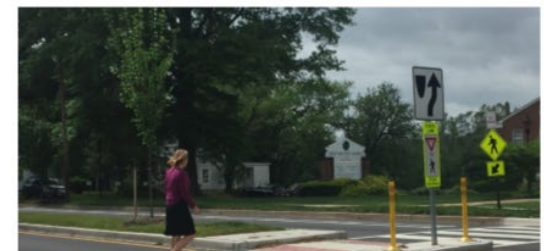


Speed reduction

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.



Thanks!

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