

Pedestrians accounted for **15%** of all roadway fatalities in the US in 2015.<sup>1</sup>

**66%** of pedestrian fatalities occurred at uncontrolled and non-intersection locations.<sup>1</sup>

<sup>1</sup>NHSTA FARS, "2015 Motor Vehicle Crashes: Overview," (2016). <https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812318>

The Federal Highway Administration (FHWA) is working to reduce pedestrian fatalities and injuries at uncontrolled crossing locations through Safe Transportation for Every Pedestrian (STEP). STEP is part of the fourth round of Every Day Counts (EDC-4), and its extensive outreach and technical assistance activities are promoting cost-effective countermeasures with known safety benefits to State and local transportation agencies nationwide.

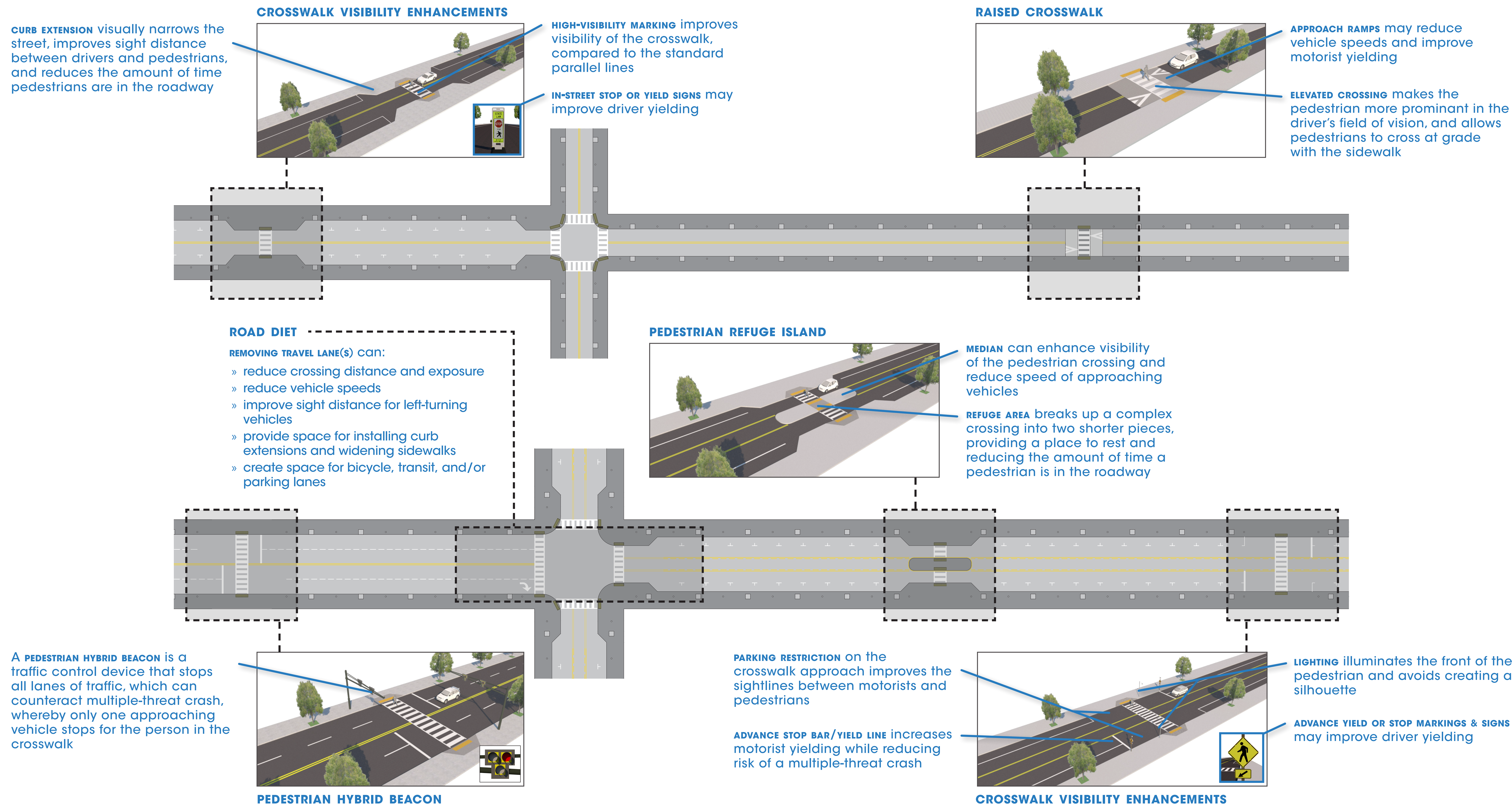
The STEP program focuses on crossing treatments designed to improve pedestrian safety at uncontrolled crossing locations. FHWA is promoting five countermeasures and their associated benefits through STEP.

Most of the STEP countermeasures have been evaluated for their effectiveness to reduce pedestrian crash rates. Where available, the Crash Reduction Factor (CRF) is reported for each countermeasure below, based on national transportation safety studies. The CRF is the expected percent reduction in the number of pedestrian crashes after implementing a countermeasure. Please consult PEDSAFE, the Pedestrian Safety Guide and Countermeasure Selection System (<http://www.pedbikesafe.org>), for more information about CRFs and guidance for application of these countermeasures to various roadway and safety conditions.



Phoenix, AZ. Credit: Mike Cynecki

## 5 Proven Countermeasures



Drawings not to scale

### CROSSWALK VISIBILITY ENHANCEMENTS CRF: 25–48%\*

Crosswalk visibility enhancements are added features that increase the prominence of crosswalks and pedestrians to oncoming drivers, such as lighting, warning signage, or varied crosswalk markings. Common examples include using a ladder design for the crosswalk markings (instead of two parallel lines) and installing in-street warning signage.

### RAISED CROSSWALK CRF: not available

Raised crosswalks span the width of a roadway at a crossing point, often at mid-block crossings. These raised speed tables calm vehicular traffic and create a level crossing at sidewalk height for pedestrians.

### PEDESTRIAN REFUGE ISLAND CRF: 32%

Pedestrian refuge islands are raised islands within a street, located at intersections or mid-block crossings. Pedestrian refuge islands break up a complex crossing into two shorter crossings and separate motor vehicle and pedestrian crossing movements.

### PEDESTRIAN HYBRID BEACON (PHB) CRF: 55%

PHBs are pedestrian-activated warning devices designed for higher speed, multilane roadways. PHBs are typically installed at the side of the road or on mast arms over uncontrolled midblock pedestrian crossings. When activated, the device displays a sequence of flashing yellow, steady yellow, solid red (pedestrians get a walk symbol; drivers must stop), and flashing red (pedestrians finish crossing; drivers stop and proceed once the roadway is clear).

### ROAD DIET CRF: 29%

Road Diets reconfigure existing roadways by reducing the number of vehicular travel lanes. This frees up space for pedestrian refuge islands, curb extensions, bicycle lanes, or other features that improve conditions for pedestrians. The most common type of Road Diet involves converting a four-lane, undivided roadway to two through lanes and a center two-way left-turn lane.

\*Advanced Yield or Stop marking and signs have been found to reduce pedestrian crash risk by 25%. High-visibility crosswalk markings have been shown to reduce pedestrian crashes by up to 48%. Parking restrictions on crosswalk approaches are proven to reduce pedestrian crashes by 30%. The addition of overhead lighting is proven to reduce total injury crashes by 28%.

#### STEP Contacts

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