

Safe Transportation for Every Pedestrian (STEP)

What is Safe Transportation for Every Pedestrian (STEP)?

The systemic application of cost-effective countermeasures with known safety benefits can help reduce pedestrian fatalities at both uncontrolled and signalized crossing locations.

Pedestrians account for over 17.5 percent of all fatalities in motor vehicle traffic crashes, and the majority of these deaths occur at uncontrolled crossing locations (such as non-intersections) or at intersections with no traffic signal or STOP sign. Cost-effective countermeasures with known safety benefits can help reduce pedestrian fatalities in these scenarios.

FHWA promoted the following safety countermeasures through EDC-4 and EDC-5:

Rectangular Rapid Flash Beacons (RRFBs) are active or passive amber LEDs that use an irregular flash pattern at mid-block or uncontrolled crossing locations.

Leading Pedestrian Intervals (LPIs) at signalized intersections allow pedestrians to walk usually 3 to 4 seconds before vehicles get a green signal to turn left or right.

Road Diets can reduce vehicle speeds, limit the number of lanes pedestrians cross, and create space to add new pedestrian facilities.

Pedestrian Hybrid Beacons (PHBs) provide positive stop control in areas without the high pedestrian traffic volumes that typically warrant signal installation.

Pedestrian Refuge Islands provide a safe place to stop at the midpoint of the roadway before crossing the remaining distance.

Raised Crosswalks can reduce vehicle speeds.



Countermeasures with known safety benefits can help reduce pedestrian fatalities. Photo credit FHWA

Crosswalk Visibility Enhancements, such as crosswalk lighting and enhanced signage and marking, help drivers detect pedestrians—particularly at night.

BENEFITS

Improved Safety. Countermeasures are available that offer proven solutions for reducing pedestrian fatalities at uncontrolled and signalized crossing locations.

Targeted Investment. By focusing on pedestrian crossing locations, agencies can address a significant national safety problem.

Enhanced Quality of Life. Improving crossing opportunities boosts quality of life for pedestrians of all ages and abilities.

WHAT NJ HAS DONE

At the inception of EDC-5 in January 2019, the NJ STIC characterized its current stage of innovation implementation for STEP as “Assessment.” This means that the state and local governments are assessing the performance of, and process for, advancing STEP countermeasures and preparing for full deployment to improve crossings. The NJ STIC has set as its goal the institutionalization of STEP activities by December 2020.

NJDOT’s work on STEP began with EDC-4 and continues to progress during EDC-5:

Developed an Action Plan for Implementing Pedestrian Crossing Countermeasures at Uncontrolled Locations. For this collaborative effort, NJDOT and FHWA reviewed existing practice and policies impacting crossings and recommended actions for targeting specific safety countermeasures to help reduce the number and rate of pedestrian crashes, fatalities, and injuries on NJ highways.

Devised Recommendations Following STEP Guidance for Implementing Lower-Cost Countermeasures. The recommended countermeasures can be deployed based on specific needs, have a proven record of reducing crashes, and include underutilized innovations that can have an immediate impact.

Held Local Safety Peer Exchanges. Supported in part through a STIC Incentive Funding Grant, FHWA and NJDOT held a series of three Local Safety Peer Exchanges to highlight local initiatives that demonstrate best practice in addressing traffic safety. These full-day events brought together representatives of NJDOT, FHWA, counties, municipalities, and Metropolitan Planning Organizations (MPOs) to discuss project prioritization, substantive safety, and use of a systemic safety approach.

Participants discussed plans for, and experience with, implementation of FHWA pedestrian safety countermeasures. A summary report documents the event’s proceedings, including presentations, workshop activities, and key observations.



NJDOT held three Local Safety Peer Exchange events, December 2017 (pictured), June 2018, and March 2019. Photo credit: FHWA

WHAT’S NEXT?

The action plan will inform and be incorporated into the future strategies developed in the NJ 2020 Strategic Highway Safety Plan (SHSP). The SHSP is a data-driven, multi-year comprehensive plan that establishes statewide goals, objectives, and key emphasis areas, integrating the four E’s of highway safety—engineering, education, enforcement and emergency response. NJDOT intends to update the Pedestrian Safety Action Plan after the 2020 update of the SHSP to ensure the vision and goals align with the program.

RESOURCES

FHWA EDC-5 Safe Transportation for Every Pedestrian (STEP)

https://www.fhwa.dot.gov/innovation/everydaycounts/edc_5/step2.cfm

FHWA Proven Safety Countermeasures

<https://safety.fhwa.dot.gov/provencountermeasures>

FHWA STEP Program

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

Make Your Mark: Highway Safety Improvement Program Local Safety Peer Exchanges

<https://www.njdottechtransfer.net/make-your-mark/>

NJDOT STEP Innovative Initiatives

<https://www.njdottechtransfer.net/step/>

NJDOT Safety Countermeasures Training and Education Videos

<https://www.njdottechtransfer.net/NJDOT-safety-countermeasures-training-videos>