

Curb Extensions and Pedestrian Refuge Islands

Description

Pedestrians have the greatest risk of being struck down by a motor vehicle when they are crossing the street. Curb extensions and pedestrian refuge islands both work to reduce roadway crossing distances for people, allowing them to safely and more quickly reach the opposite side.

These safety designs are low-cost, increasing the opportunity for widespread implementation.

How it Works

Pedestrian refuge islands are protected spaces placed in the road, mid-way between opposite sidewalks, allowing pedestrians to cross in two stages. At each stage, people crossing the road only need to look in one direction for road traffic. This improves safety by simplifying the act of crossing.

Curb extensions are improvements that place the sidewalk further into the roadway. This reduces the total width of roadway that pedestrians and cyclists must cross. It also helps to physically align crossing pedestrians and cyclists with drivers' sight lines, which increases the visibility of these road users and encourages them to make eye contact with drivers.

Curb extensions and refuge islands also make vehicle lanes physically narrower, which has the potential to slow down motor vehicle traffic.

Studies have shown that:

- Raised refuge islands have reduced vehicle-pedestrian crashes by 46% at marked crosswalks and by 39% at unmarked crosswalks; and
- Drivers are more likely to yield to pedestrians when the person is crossing from a curb extension.

Best results occur when:

- Curb extensions and pedestrian refuge islands are implemented jointly with safe crosswalk signalization (page 23);
- Refuge islands are wide enough to accommodate wheelchairs and bicycles, and provide enough room to protect people from being sideswiped by passing vehicles; and
- Such designs are implemented in areas with many children or older adults, as these individuals tend to walk slower and are more exposed at road crossings.

