



Install Advanced Yield or Stop Markings and Signs

Pavement and roadside markings/signs guiding drivers to stop/yield earlier to improve pedestrian visibility and safety at crossings.

Implementation Strategy

How and Where to Apply

- Install at multilane uncontrolled crossings with limited pedestrian visibility, frequent near-crosswalk stops, or poor driver yielding history.
- FHWA identifies advance stop/yield markings as a Proven Safety Countermeasure to reduce multiple-threat crashes and improve pedestrian safety at uncontrolled locations
- Advanced yield or stop markings aren't needed on low-volume or well-controlled roads, where visibility is clear, or where parking blocks sight lines unless restrictions are applied.

Key Stakeholders

State DOTs, MPOs, local government, engineering consultants, pedestrian advocacy groups and community associations.

Proactive Implementation

Advanced yield or stop markings can be added cost-effectively during maintenance, restriping, or resurfacing projects. Priority should be given to multilane roads, school zones, and corridors with pedestrian conflicts, while pairing the treatments with education and enforcement to strengthen driver yielding and improve pedestrian safety.

Use in a Safe System Approach

This countermeasure supports the Safe System Approach by improving Safer Roads and Safer People. It proactively reduces the likelihood and severity of pedestrian crashes by increasing driver awareness and reaction time in crossing situations.

Countermeasure Overview

Objective: Improve sight distance at unsignalized intersections.

Strategy: Clear sight triangles on stop- or yield-controlled approaches to intersections.

Selected Related Countermeasures

- CM1** Rectangular Rapid Flashing Beacons (RRFBs)
- CM2** Curb Extensions (Bulb-outs)
- CM3** Pedestrian Hybrid Beacons (PHBs)

Cost: \$ (Low)

Service Life: 15 years

Targeted Solution



CONTRIBUTING FACTORS

- Reduced visibility
- Driver inattention/distraction
- Failure to stop or yield



TARGET CRASH TYPE

- Failure to Yield000



ROAD FACILITY TYPE

- Minor Arterial



AREA TYPE

- Urban
- Suburban

Safety Linkage



NCHRP 500 Series

Signalized Intersections



AASHTO'S TOWARD ZERO DEATHS

Safer Infrastructure

SAFE SYSTEM APPROACH

Safe Roads

SAFE SYSTEM ROADWAY DESIGN

TIER 1
TIER 2
TIER 3
TIER 4

Tier 4

Advanced Yield or Stop Markings and Signs. Source: FHWA.

25%

Reduces vehicle-pedestrian crashes of all severities on urban and suburban minor arterial roads (CMF ID: 9017)

11%

Reduces crashes of all types and all severities on urban and suburban minor arterial roads (CMF ID: 9018)

Resources

- Crosswalk Visibility Enhancement
- Advance yield markings and drivers' performance in response to multiple-threat scenarios at mid-block crosswalks, NIH.

