

## Install an intersection conflict warning system (ICWS) with a combination of overhead and advanced post mounted signs (various messages) and flashers



Intersection Conflict Warning Systems (ICWS) using a combination of overhead-mounted and post-mounted flashers are dynamic traffic control devices designed to alert drivers of potential vehicle conflicts at unsignalized intersections.

### Implementation Strategy

#### How and Where to Apply

- Apply at unsignalized intersections with frequent angle crashes or limited sight distance, especially in rural or high-speed areas (>45 mph).
- Use where post-mounted flashers alone are insufficient due to skewed geometry, wide cross-sections, or complex sight lines.
- The **FHWA** states "Intersection Conflict Warning Systems (ICWS) are proven safety countermeasures that alert drivers to the presence of vehicles on conflicting approaches at unsignalized intersections. These systems can significantly reduce the frequency and severity of angle crashes by improving driver awareness"

#### Use in a Safe System Approach

Supports the Safe System Approach by enhancing Safer Intersections and Safer People. ICWS systems proactively alert drivers to cross traffic and reduce the potential for severe crashes caused by delayed gap acceptance or poor visibility

#### Key Stakeholders

State and Local Departments of Transportation (DOTs), Traffic Engineers and Planners.

#### Proactive Implementation

Agencies should identify high-risk intersections through crash history, geometry assessments, and operating speeds. Installing dual ICWS before crash thresholds or MUTCD signal warrants are reached allows for earlier intervention. Prioritizing rural and multilane corridors enhances equity in safety investments and addresses areas often underserved in infrastructure upgrades.

### Countermeasure Overview

**Objective:** Improve driver awareness of intersections as viewed from the intersection approach

**Strategy:** Install larger regulatory and warning signs at intersections

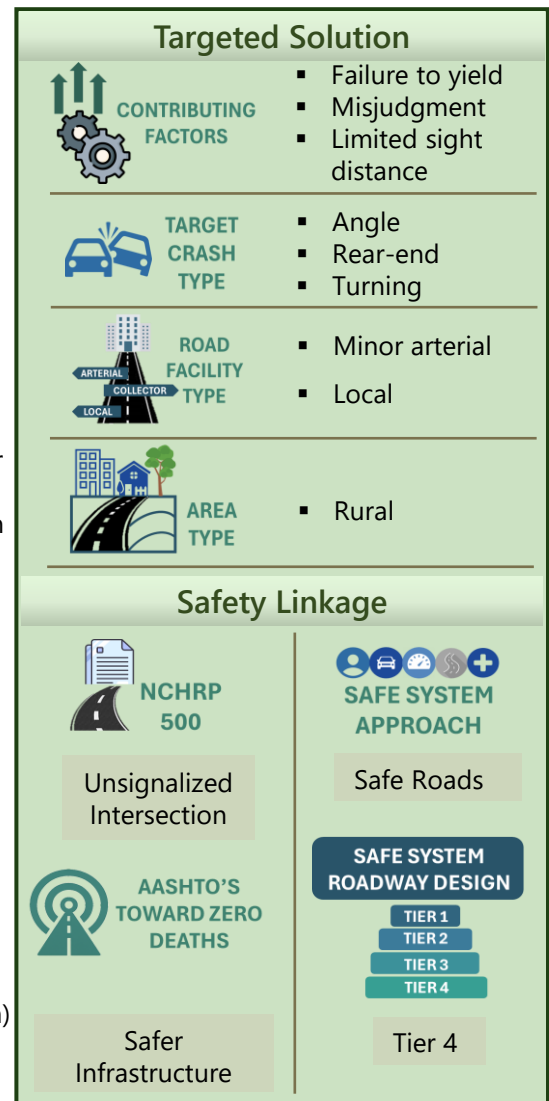
### Selected Related Countermeasures

- CM1** Advance Intersection Warning Signs with Flashing Beacons
- CM2** Skewed Intersection Realignment
- CM3** Dynamic Minor-Road Stop Sign Enhancements

**Cost:** \$ (Moderate to High)

**Service Life:** 10 years

**Benefit-Cost Ratio:** 27:1



Street Lighting . Source: [eco ledmart](#)

30%

Reduce all crashes for all types roads <sup>1</sup>

30%

Reduce angle crashes for rural roads <sup>2</sup>

<sup>1</sup> CMF ID: 8474

<sup>2</sup> CMF ID: 8476

#### Resources

- [FHWA: Safety Evaluation of Intersection](#)
- [NCHRP Report 841. Development of Crash Modification Factors](#)
- [FHWA: Proven Safety Countermeasures](#)

