

Install Automated Speed Camera at Signalized Intersection



Automated speed cameras installed at signalized intersections improve safety and help enforce speed limits.

Implementation Strategy

How and Where to Apply

- Install automated speed enforcement cameras at signalized intersections with a documented history of speeding-related crashes.
- These systems detect speeding vehicles and issue citations by mail, providing continuous and unbiased enforcement.
- Best for multilane intersections with high pedestrian activity or crash clusters; not for low-volume rural sites, non-speeding areas, or where costs outweigh benefits.

Use in a Safe System Approach

Automated speed cameras strengthen the Safe Speeds element of the Safe System Approach by ensuring continuous compliance. By addressing unsafe speed at high-risk locations, they help reduce crash frequency and severity, supporting the principle that deaths and serious injuries are unacceptable.

Key Stakeholders

State DOTs, MPOs, law enforcement agencies, consultants, advocacy groups.

Proactive Implementation

Use crash and speed data to identify intersections with excessive speeds or repeated violations. Prioritize locations with vulnerable road users (e.g., near schools or transit hubs) or high crash severity. Combine deployment with visible signage and community education campaigns to increase compliance and public support.

Countermeasure Overview

Objective: Improve efficiency and effectiveness of speed enforcement efforts.

Strategy: Implement automated speed enforcement.

Selected Related Countermeasures

- CM1** Red-light running cameras
- CM2** High-visibility signal heads and backplates
- CM3** Leading pedestrian intervals

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

Service Life: 10 years

Targeted Solution



CONTRIBUTING FACTORS

- Drivers disregarding traffic signals



TARGET CRASH TYPE

- Speeding



ROAD FACILITY TYPE

- N/A



AREA TYPE

- Urban
- Suburban

Safety Linkage



NCHRP 500 Series

Speeding-related Crashes

SAFE SYSTEM APPROACH

Safer Speeds

SAFE SYSTEM ROADWAY DESIGN



AASHTO'S TOWARD ZERO DEATHS

Improved Safety management

TIER 1
TIER 2
TIER 3
TIER 4

Tier 4

ASE cameras. Source: FHWA.

32%

Reduces crashes of all types and K, A, B, C severities in urban and suburban areas (CMF ID : 6882)

24%

Reduces speed-related crashes and A, B, C severities across all area types (CMF ID: 4673)

Resources

- [Evaluating the Effectiveness of Urban Speed Cameras on Traffic Safety in a Period of Dramatic Change](#)
- [Improving Guidance for Speed Safety Camera](#)

