

# Install Wider Edgelines (4 In to 6 In)



Wider edgelines involve increasing the standard width of pavement edge markings from 4 inches to 6 inches.

## Implementation Strategy

### How and Where to Apply

- This treatment is typically applied on rural highways, curves, and corridors with high rates of lane departure crashes or low ambient lighting.
- It is particularly effective on roads with narrow shoulders, minimal lighting, frequent wet pavement conditions, or high nighttime travel volumes.
- Best suited for rural highways and multilane roads to improve visibility; not suited for narrow urban streets where space and maintenance are concerns.

### Use in a Safe System Approach

Wider edgelines support the Safe System Approach by enhancing visibility and lane guidance, accommodating human mistakes and vulnerability to reduce crash risks for fatigued or distracted drivers.

### Key Stakeholders

State DOTs, MPOs, engineering consultants, construction contractors, safety advocacy groups.

### Proactive Implementation

Agencies can proactively implement wider edgelines through systemic safety programs, particularly in corridors identified through crash data analysis or road safety audits. They are also a cost-effective safety enhancement to incorporate into routine resurfacing projects.

## Countermeasure Overview

**Objective:** Keep vehicles from encroaching on the roadside.

**Strategy:** Provide enhanced pavement markings.

## Targeted Solution



### CONTRIBUTING FACTORS

- Reduced visibility
- Driver inattention/distraction



### TARGET CRASH TYPE

- Run-off road



### ROAD FACILITY TYPE

- Rural two-lane highways



### AREA TYPE

- Rural

## Safety Linkage



### NCHRP 500 Series

Run-off Road



### 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

## Selected Related Countermeasures

- CM1** Edge-line rumble warnings
- CM2** Night-visible lane delineation
- CM3** Augmented curve alignment signage

**Cost:** \$ (Low)

**Service Life:** 5 years

**Benefit-Cost Ratio:** 25.0:1

Wider Edgelines. Source: FHWA.

37%

Reduces all types of crashes and K, A, B, C severities on rural two-lane roads (CMF ID: 4737)

16%

Reduces all types of crashes and K, A, B, C severities on rural two-lane roads (CMF ID: 4796)

### Resources

- FHWA Manual on Uniform Traffic Control Devices (MUTCD), Section 3A.06: Widths of Longitudinal Lines
- FHWA Handbook for Roadway Safety Infrastructure Improvements

