

Install Wider Longitudinal Pavement Markings



Wider pavement markings improve lane visibility and reduce roadway departure crashes.

Implementation Strategy

How and Where to Apply

- Wider edge and centerline markings are most effective on rural roads with a high risk of lane departure or limited visibility.
- They can be implemented during resurfacing, restriping, or safety improvement projects.
- According to **FHWA** guidance, wider markings are beneficial where maintaining lane discipline and driver guidance is critical, especially in low-light or low-contrast conditions.

Use in a Safe System Approach

This treatment supports Safer Roads and Safer Vehicles by enhancing visual guidance and lane discipline. Wider markings improve driver awareness, compensate for vision limitations at night or in rain, and provide an additional margin for error before a roadway departure occurs.

Key Stakeholders

Traffic safety and pavement engineers
State and local roadway agencies

Proactive Implementation

Agencies can proactively install wider markings on corridors identified through systemic safety analysis, especially on road segments with narrow lanes, curves, or a history of roadway departure crashes. Wider markings can also be bundled with low-cost countermeasures like rumble strips and safety edge treatments for greater benefit.

Countermeasure Overview

Objective: Keep vehicles from encroaching on the roadside

Strategy: Provide enhanced pavement markings

Selected Related Countermeasures

- CM1** Rumble strips or rumble stripes
- CM2** Rumble strips or rumble stripes
- CM3** Rumble strips or rumble stripes

Cost: \$ (low)

Service Life: 5 years

Targeted Solution



CONTRIBUTING FACTORS

- Reduced visibility
- Driver inattention



TARGET CRASH TYPE

- Run-off-road



ROAD FACILITY TYPE

- All



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

Safety Benefits

29%

Reduce total rural crashes¹

23%

Reduce run-off-road crashes²

¹ CMF ID: 10643

² CMF ID: 10645

Resources

- [MUTCD Chapter 3A.06: Functions, widths, and Patterns of Longitudinal Pavement Markings](#)
- [FHWA Pavement Making Width](#)

Pavement Markings. Source: [Marking](#)

