

# Install Centerline Rumble Strips



Centerline rumble strips on straight sections of undivided highways alert drivers who unintentionally drift due to distraction or drowsiness.

## Implementation Strategy

### How and Where to Apply

- Install centerline rumble strips on straight, undivided rural highways where there's a higher risk of head-on, sideswipe, or run-off-road crashes due to driver inattention.
- Centerline rumble strips are milled into the pavement during resurfacing or as a retrofit to warn drifting drivers through tactile vibration and audible noise signals.
- The **FHWA** states that this marking can be used "Center line rumble strips are a proven safety countermeasure shown to reduce head-on and opposite-direction sideswipe crashes on two-lane rural roads"

### Use in a Safe System Approach

Centerline rumble strips support the SSA by providing tactile and audible warnings to drifting drivers, enabling early corrective action and reducing head-on and run-off-road crashes on undivided highways.

### Key Stakeholders

State DOTs, local law enforcement agencies

### Proactive Implementation

For center line applications, milled rumble strips are preferred for their effectiveness and ease of installation. The recommended dimensions (7" wide, 16" long, 0.5" deep) provide optimal noise and vibration. Since center line strips produce more in-vehicle noise than shoulder strips, they can be effective at shallower depths.

## Countermeasure Overview

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

**Strategy:** Install shoulder rumble strips

## Selected Related Countermeasures

- CM1** Shoulder Rumble Strips
- CM2** High-Visibility Pavement Markings
- CM3** Enhanced Curve Delineation

**Cost:** \$ (low)

**Service Life:** 10 years

**Benefit-Cost Ratio:** 75:1

## Targeted Solution



### CONTRIBUTING FACTORS

- Reduced visibility
- Driver inattention



### TARGET CRASH TYPE

- Single Vehicle
- Sideswipe
- Head-on



### ROAD FACILITY TYPE

- All
- Not specified
- Principal Arterial Other



### AREA TYPE

- All

## Safety Linkage



### NCHRP 500 Series

Run-off Road

### SAFE SYSTEM APPROACH

Safe Roads

### SAFE SYSTEM ROADWAY DESIGN

TIER 1

TIER 2

TIER 3

TIER 4

Tier 4



### AASHTO'S TOWARD ZERO DEATHS

Safer Infrastructure

## Safety Benefits

67%

An effective safety device on undivided high-speed roads, reducing frontal and opposite-direction crashes<sup>1</sup>

37%

Helps prevent head-on, sideswipe, and opposite-direction run-off-the-road collisions

<sup>1</sup> CMF ID: 5399

<sup>2</sup> CMF ID: 3355

### Resources

- FHWA Longitudinal Rumble Strips
- Centerline rumble strips on secondary highways
- Traffic safety bulletin 20-07: rumble strip guidelines

Install Centerline Rumble Strips Source: [ohud.com](http://ohud.com)

