# Transverse Rumble Strip

Raised or grooved patterns placed perpendicular across a lane to alert drivers through noise and vibration of upcoming hazards and encourage speed reduction.

# Implementation Strategy

#### How and Where to Apply

- Installed perpendicular across the full lane width at locations such as rural stop-controlled intersections, curves, pedestrian crossings, and work zones.
- Installed during road resurfacing or as retrofits using materials like thermoplastic, milled asphalt, or epoxy, transverse rumble strips help reduce approach speeds and improve driver reaction times at critical decision points.
- The **FHWA** states that this marking can be useful in work-zones, "Temporary transverse rumble strips can alert drivers approaching a work zone to the need to slow down or stop."

Use in a Safe System Approach Centerline rumble strips support the SSA by providing sensory feedback through noise and vibration, they help accommodate human limitations such as inattention and fatigue, reducing the likelihood and severity of crashes.

**Key Stakeholders** State DOTs, local law enforcement agencies

### **Proactive Implementation**

Transverse rumble strips should be installed at high-risk locations during resurfacing or new construction before crashes occur. This includes using materials optimized for durability and visibility, strategically spacing strips to create effective deceleration cues, and combining them with enhanced signage and pavement markings. Implementation is guided by traffic data and integrated within broader safety programs like the SSA.

#### Countermeasure Overview

Objective: Keep vehicles from encroaching on the roadside

Strategy: Install mid-lane rumble

## **Selected Related Countermeasures**

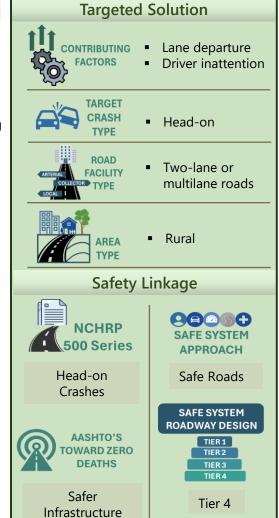
- **Shoulder Rumble Strips** 
  - Centerline Rumble Strips
  - **Edgeline Rumble Strips**

Cost: \$ (low)

**Service Life:** <1 years

Benefit-Cost Ratio: 3.7 to

66.7



Source: <u>Transverse Rumble Strips</u>



Alerts drivers to hazards and encourages speed reduction through vibration and noise.



#### Resources

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

