DEFINITIONS

Centerline Rumble Strips [CLRS]

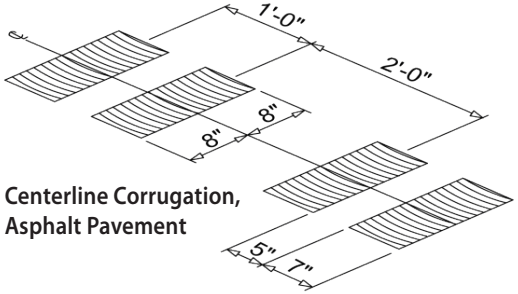
Grooves applied on the centerline to alert inattentive drivers of potential danger.

Centerline Lane Departure Crashes

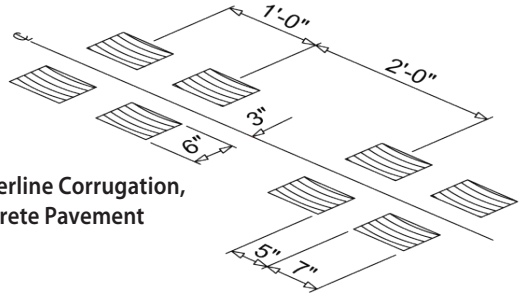
Crashes that include head-on, opposite sideswipe, and run-off-the-road left.

Milled Rumble Strips

Grooves cut into new or existing asphalt and concrete pavement surfaces. *Depth: 3/8 to 1/2 inches*



Centerline Corrugation, Asphalt Pavement



Centerline Corrugation, Concrete Pavement

MDOT is always working on improving highway safety for all drivers and other road users. Research shows CLRS are one of the best countermeasures to mitigate lane departure crashes, which often result in high severity injury or fatality.

TZD Toward Zero Deaths®

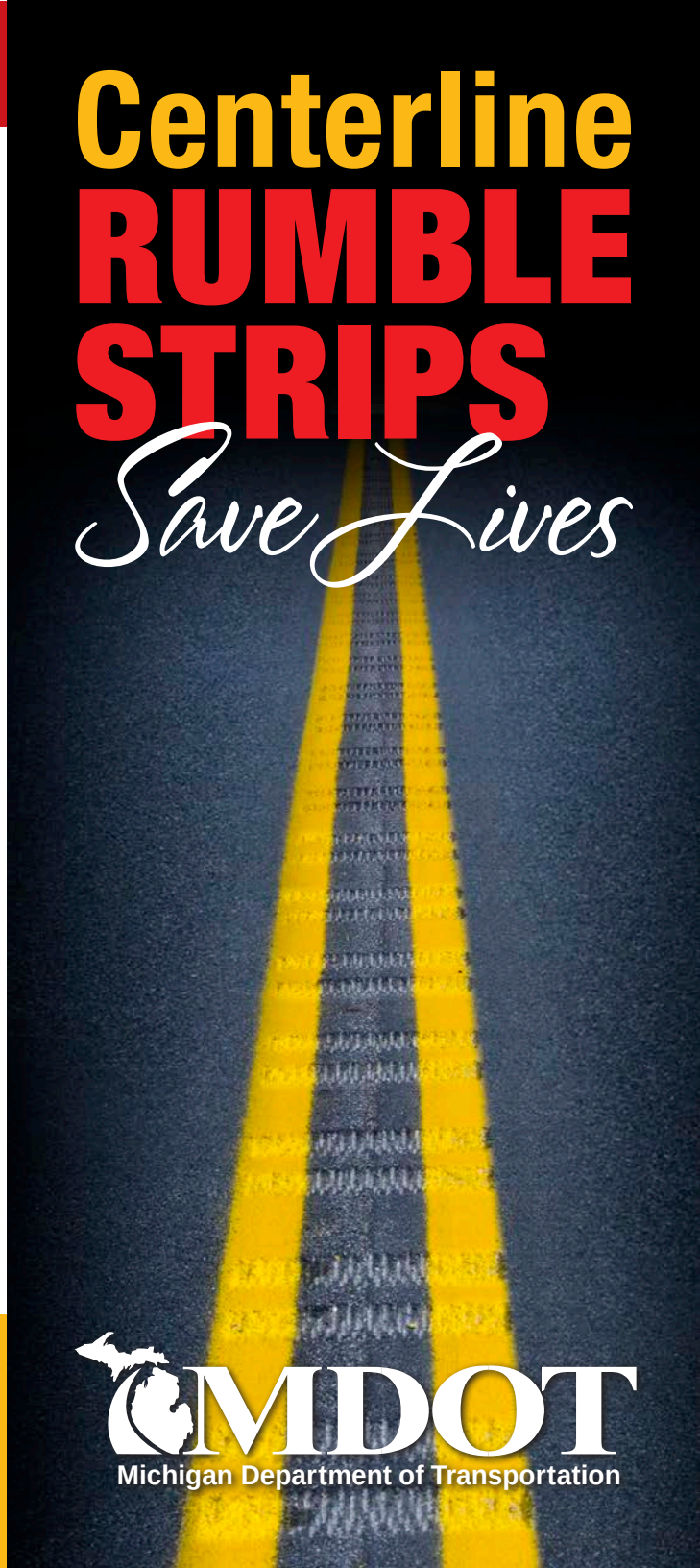
For more information:

www.michigan.gov/rumblestrips

MDOT Michigan Department of Transportation

MDOT: Providing the highest quality integrated transportation services for economic benefit and improved quality of life.

Centerline RUMBLE STRIPS *Save Lives*



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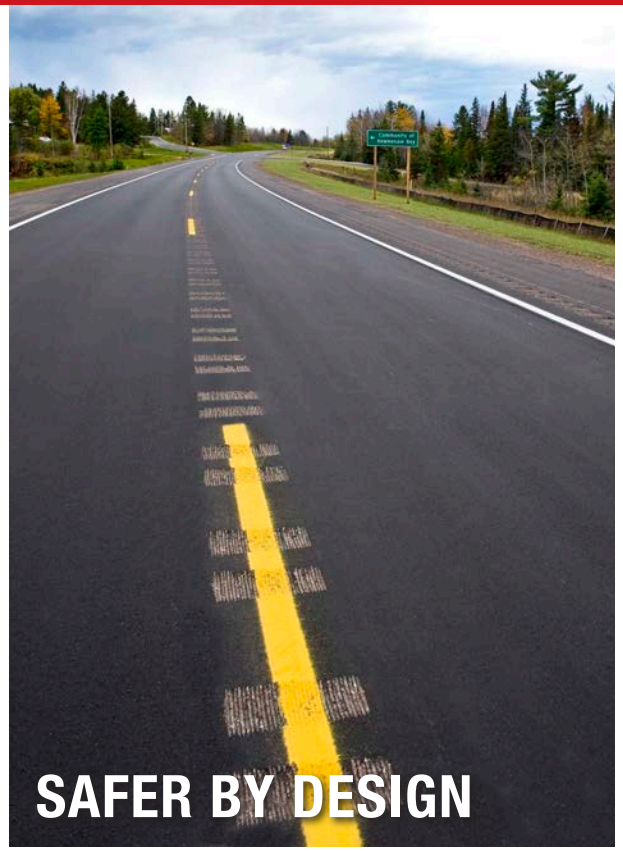
CENTERLINE RUMBLE STRIPS [CLRS] *Save Lives*



The Michigan Department of Transportation (MDOT) performed a three-year statewide centerline rumble strips (CLRS) installation initiative from 2008 through 2010 on 5,400 miles of rural non-freeway highways, excluding intersections and developed areas.

Rumble strips are used to alert inattentive drivers (distracted, drowsy, unfocused, etc.) and minimize drifting over center or edge lines with both a physical and audible warning.

www.michigan.gov/rumblestrips

CLRS Benefits

- Reduces lane departure crashes (i.e., head-on, opposite sideswipe, opposite direction run-off-the-road).
- Reduces fatal and severe injury crashes. Improves safe recovery instances.
- Improves vehicular placement within the lane, which prevents centerline crossovers.
- In inclement weather with poor or limited visibility, assists drivers to maintain proper lane position.
- Assists maintenance trucks (i.e., snowplows, salt trucks) during winter conditions to identify the centerline.

CLRS Performance

Rumble strips can be ground or cut into both concrete and asphalt pavements. CLRS are installed on rural two-lane and four-lane highways where the posted speed limit is 55 mph.

A comprehensive study of the impact of CLRS installation on high-speed two-lane rural and four-lane highways in Michigan demonstrated significant crash, injury, and fatality reductions that are cost effective. The before and after impact on crashes on two-lane highways in Michigan demonstrated:

- 50 percent reduction in head-on crashes
- 55 percent reduction in opposite sideswipe crashes
- 46 percent reduction in run-off-the-road crashes
- 51 percent reduction in fatal crashes
- 41 percent reduction in incapacitating injury crashes
- 49 percent reduction in non-incapacitating injury crashes
- 45 percent reduction in possible injury crashes
- 48 percent reduction in property damage-only crashes