

Centerline RUMBLE STRIPE Fact Sheet

Noise Concerns

- One of the designed intents of CLRS is to get the driver's attention through noise; this can be disturbing to residences near CLRS.
- SDDOT CLRS guidelines allow flexibility in gapping rumbles near residences.
- SDDOT has developed its own sinusoidal (mumble) strip designs that have significant reductions in external nuisance noise.

The SDDOT started initiating standalone shoulder rumble strip projects in 2010. Since these installations, SDDOT has seen a 20% reduction in fatal and serious injury run-off-road.



Centerline Rumble Stripes (CLRS) are grooved patterns in the pavement placed on the centerline that provide both an audible warning and a physical vibration to alert drivers that they are leaving the driving lane.



CLRS are a proven low-cost safety improvement to reduce target crash types. Target crashes for CLRS are head-on, sideswipe opposing, and run-off-road left – statewide there were 263 fatal and serious injury crashes of these types on rural two-lane state highways between 2021 and 2025. This accounts for 17% of all fatal and serious injury crashes on state highways.



The [2024 South Dakota Strategic Highway Safety Plan](#) (SHSP) identifies CLRS as a priority safety strategy for reducing head-on vehicle collision with a 60% reduction of this crash type in South Dakota.



SDDOT implemented CLRS guidelines in 2016 to reduce lane departure crashes systemically and proactively.



The guidelines recommend that CLRS be placed on rural, undivided roadways with daily traffic greater than 500 vehicles.



Lane departure crashes occur on all types of roadways; however, there are some common factors that were used to determine roads covered in the guidelines:

- **Driver related** – Young drivers, fatigued and drowsy drivers, distracted driving, and higher speeds.
- **Road and environmental related** – Two-lane, undivided roads, rural, high speed roads, high traffic volumes, horizontal and vertical curves.