

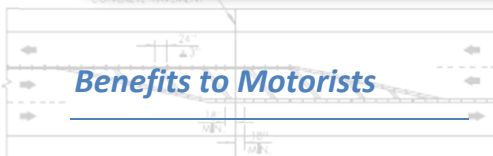
Oklahoma ranks 17th in the nation for the number of centerline highway miles at 12,300, falling just behind states like California and New York. That's a lot of miles to cover when traveling, and collisions can occur — some with fatal results.

The Oklahoma Department of Transportation (ODOT), through the use of new safety devices and public education, seeks to reduce the loss of life on state highways. There were 229 fatalities on undivided rural Oklahoma highways due to centerline crossover crashes from 2013 to 2015, the most recent years statistics are available.

### Center Line Rumble Strips

Oklahoma highways offer many safety features, but this fiscal year ODOT is adding a new safety device to its tool kit in an effort to save lives. Center Line Rumble Strips (CLRS) are rectangular milled, or raised, areas of pavement along highway center lines that generate a physical vibration in the vehicle cabin when tires

drive over them. The vibration and noise is intended to alert inattentive drivers that their vehicles are leaving the travel lanes. The strips provide notice that corrective action is needed to avoid oncoming traffic. The pavement devices are similar to shoulder rumble strips but differ somewhat in spacing and size.



A recent study published by Michigan Department of Transportation found a 47 percent reduction in centerline crossover

collisions and a 51 percent reduction in fatal crashes in a two-year period.

Some benefits of CLRS are:

- Assist drivers to stay within their lanes of travel;
- Reduce number of head-on and opposite-direction sideswipe collisions;
- Increase pavement marking visibility at night and during inclement weather.

### Do Rumble Strips Cause Noise?

Three sources typically cause the majority of highway traffic noise — truck exhaust stacks, vehicle engines, and tires interacting with pavement — according to the Federal Highway Administration. It's true that tires hitting CLRS will make a small amount of noise, but testing by ODOT has shown it will not be greater than other noise generators already impacting state highways.

BASIS OF PAYMENT		
4.1.7	RUMBLE STRIP - CENTERLINE FINISH	1.7
4.1.9 (C)	RUMBLE STRIP - CENTERLINE PCC-CON	1.7

## Upcoming Projects

**ODOT** will install 16 CLRS projects in 2017 statewide at an estimated cost of \$2.5 million. Additional areas will be added annually per funding availability.

These safety devices will be installed along undivided two-lane rural state highways and priority will be given to areas with the highest potential benefit.

## Conclusion

While testing shows that CLRS will add a different noise experience to nearby residents, these devices are not anticipated to add more sound than other existing highway noise generators. For example, the noise is not expected to be louder than heavy truck traffic passing by residential areas on state highways.

Each project design will take noise into consideration, especially for any nearby

residential areas, and **ODOT** will work to minimize those impacts to residents.

**ODOT** believes the life-saving benefits of these safety devices will be invaluable to motorists.



Oklahoma Department of Transportation  
Traffic Engineering Division  
200 N.E. 21st Street  
Oklahoma City, OK 73105-3204  
Tel: 405-521-2861  
[www.odot.org](http://www.odot.org)

**“The mission of the Oklahoma Department of Transportation is to provide a safe, economical, and effective transportation network for the people, commerce and communities of Oklahoma.”**



**CENTER LINE  
RUMBLE  
STRIP  
(CLRS)**