



CMF / CRF Details

CMF ID: 6968

Install centerline and shoulder rumble strips

Description: Milled or rolled rumble strips.

Prior Condition: There are no existing rumble strips

Category: Roadway

Study: [Safety Evaluation of Centerline Plus Shoulder Rumble Strips, Persaud et al., 2015](#)

Star Quality Rating:



[\[View score details\]](#)

Crash Modification Factor (CMF)

Value: 0.975

Adjusted Standard Error:

Unadjusted Standard Error: 0.046

Crash Reduction Factor (CRF)

Value: 2.5 (This value indicates a **decrease** in crashes)

Adjusted Standard Error:

Unadjusted Standard Error: 4.6

Applicability

Crash Type: All

Crash Severity: All

Roadway Types: Not specified

Number of Lanes: 2

Road Division Type: Undivided

Speed Limit:

Area Type: Rural

Traffic Volume: 782 to 25796 *Annual Average Daily Traffic (AADT)*

Time of Day: All

If countermeasure is intersection-based

Intersection Type:

Intersection Geometry:

Traffic Control:

Major Road Traffic Volume:

Minor Road Traffic Volume:

Development Details

Date Range of Data Used:

Municipality:

State: PA

Country:	USA
Type of Methodology Used:	Before/after using empirical Bayes or full Bayes
Sample Size Used:	

Other Details	
Included in Highway Safety Manual?	No
Date Added to Clearinghouse:	Nov-01-2015
Comments:	CMF for total crashes (all types and all severity levels) excludes intersection-related and animal crashes.

This site is funded by the U.S. Department of Transportation Federal Highway Administration and maintained by the University of North Carolina Highway Safety Research Center

The information contained in the Crash Modification Factors (CMF) Clearinghouse is disseminated under the sponsorship of the U.S. Department of Transportation in the interest of information exchange. The U.S. Government assumes no liability for the use of the information contained in the CMF Clearinghouse. The information contained in the CMF Clearinghouse does not constitute a standard, specification, or regulation, nor is it a substitute for sound engineering judgment.