



CMF / CRF Details

CMF ID: 3399

Install edgeline rumble strips on roadways with a shoulder width less than 5 feet

Description:

Prior Condition: Roadway with no rumble strips and a shoulder width less than 5 feet

Category: Roadway

Study: [NCHRP Report 641: Guidance for the Design and Application of Shoulder and Centerline Rumble Strips, Torbic et al., 2009](#)

Star Quality Rating:



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

Crash Modification Factor (CMF)

Value: 0.96

Adjusted Standard Error:

Unadjusted Standard Error: 0.1554

Crash Reduction Factor (CRF)

Value: 4 (This value indicates a **decrease** in crashes)

Adjusted Standard Error:	
Unadjusted Standard Error:	15.54

Applicability

Crash Type:	Run off road
Crash Severity:	K (fatal),A (serious injury),B (minor injury),C (possible injury)
Roadway Types:	Not Specified
Number of Lanes:	
Road Division Type:	Divided by Median
Speed Limit:	
Area Type:	Rural
Traffic Volume:	4956 to 31692 <i>Average Daily Traffic (ADT)</i>
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:	1997 to 2006
Municipality:	

State:	MN, MO, PA
Country:	U.S.A.
Type of Methodology Used:	Regression cross-section
Sample Size Used:	Crashes

Other Details	
Included in Highway Safety Manual?	No
Date Added to Clearinghouse:	Mar-21-2011
Comments:	The authors collected data on thru lanes and speed limits but did not provide those data in the report (see p. 50).

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

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