



CMF / CRF Details

CMF ID: 10447

Install centerline and shoulder rumble strips

Description: Milled or rolled rumble strips.

Prior Condition: *No Prior Condition(s)*

Category: Roadway

Study: [Rectangular Rumble Strip Safety Evaluation, Storm et al., 2020](#)



Star Quality Rating:	<input type="text" value="4 Stars"/> [View score details]
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Crash Modification Factor (CMF)

Value:	0.68
Adjusted Standard Error:	
Unadjusted Standard Error:	0.087



Crash Reduction Factor (CRF)

Value:	32 (This value indicates a decrease in crashes)
Adjusted Standard Error:	
Unadjusted Standard Error:	8.7



Applicability

Crash Type:	Other
Crash Severity:	All
Roadway Types:	All
Number of Lanes:	2
Road Division Type:	Undivided
Speed Limit:	
Area Type:	Rural
Traffic Volume:	
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:	2012 to 2018
Municipality:	
State:	MN
Country:	
Type of Methodology Used:	7
Sample Size Used:	

Other Details

Included in Highway Safety Manual?	No
Date Added to Clearinghouse:	Aug-14-2020
Comments:	This CMF is for Single Vehicle Run Off Road (SVROR) crashes.

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