



# CMF / CRF Details

CMF ID: 10446

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

Star Quality Rating:

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

## Crash Modification Factor (CMF)

Value: 0.73

Adjusted Standard Error:

Unadjusted Standard Error: 0.061

## Crash Reduction Factor (CRF)

Value: 27 (This value indicates a **decrease** in crashes)

Adjusted Standard Error:

Unadjusted Standard Error: 6.1

## Applicability

<b>Crash Type:</b>	All
<b>Crash Severity:</b>	All
<b>Roadway Types:</b>	All
<b>Number of Lanes:</b>	2
<b>Road Division Type:</b>	Undivided
<b>Speed Limit:</b>	
<b>Area Type:</b>	Rural
<b>Traffic Volume:</b>	
<b>Time of Day:</b>	All

*If countermeasure is intersection-based*

<b>Intersection Type:</b>	
<b>Intersection Geometry:</b>	
<b>Traffic Control:</b>	
<b>Major Road Traffic Volume:</b>	
<b>Minor Road Traffic Volume:</b>	

**Development Details**

<b>Date Range of Data Used:</b>	2012 to 2018
<b>Municipality:</b>	
<b>State:</b>	MN
<b>Country:</b>	
<b>Type of Methodology Used:</b>	7
<b>Sample Size Used:</b>	

## Other Details

<b>Included in Highway Safety Manual?</b>	No
<b>Date Added to Clearinghouse:</b>	Aug-14-2020
<b>Comments:</b>	This CMF is for Total crashes.

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