



## 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:**

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

### 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>	

<b>Other Details</b>	
<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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