



CMF / CRF Details

CMF ID: 5302

Install centerline rumble strips on roads with existing shoulder rumble strips

Description: Install centerline rumble strips on roads with existing shoulder rumble strips

Prior Condition: Shoulder Rumble Strips Only

Category: Roadway

Study: [Performance Analysis of Centerline and Shoulder Rumble Strips Installed in Combination in Washington State, D. Olson, M. Sujka, and B. Manchas, 2013](#)

Star Quality Rating:



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

Crash Modification Factor (CMF)

Value: 0.353

Adjusted Standard Error:

Unadjusted Standard Error: 0.105

Crash Reduction Factor (CRF)

Value: 64.7 (This value indicates a **decrease** in crashes)

Adjusted Standard Error:

Unadjusted Standard Error:

Applicability

Crash Type: Head on,Sideswipe

Crash Severity: All

Roadway Types: Not specified

Number of Lanes: 2

Road Division Type:

Speed Limit:

Area Type: Rural

Traffic Volume:

Time of Day: Not specified

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: 2002 to 2010

Municipality:

State: WA

Country:	
Type of Methodology Used:	3
Sample Size Used:	Crashes
Before Sample Size Used:	29 Crashes
After Sample Size Used:	18 Crashes

Other Details	
Included in Highway Safety Manual?	No
Date Added to Clearinghouse:	Dec-02-2013
Comments:	Exposure is VMTBefore MVMT = 242.42After MVMT = 428.57Crash type is total crossover crashes

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