



CMF / CRF Details

CMF ID: 7242

Install shoulder rumble strips

Description:

Prior Condition: No shoulder rumble strips

Category: Shoulder treatments

Study: [NCHRP Report 794: Median Cross-Section Design for Rural Divided Highways, Graham et al., 2014](#)

Star Quality Rating:

Stars

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

Crash Modification Factor (CMF)

Value: 0.476

Adjusted Standard Error:

Unadjusted Standard Error: 0.151

Crash Reduction Factor (CRF)

Value: 52.39 (This value indicates a **decrease** in crashes)

Adjusted Standard Error:

Unadjusted Standard Error: 15.11

Applicability

Crash Type: Other

Crash Severity: All

Roadway Types: Principal Arterial Other Freeways and Expressways

Number of Lanes: 4

Road Division Type: Divided by Median

Speed Limit:

Area Type: Rural

Traffic Volume:

Time of Day: Day

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: 2001 to 2005

Municipality:

State: CA

Country: USA

Type of Methodology Used: 7

Sample Size Used:	
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Other Details	
Included in Highway Safety Manual?	No
Date Added to Clearinghouse:	Nov-01-2015
Comments:	This CMF applies to other median-related crashes on four-lane freeways with rigid barriers.

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