



CMF / CRF Details

CMF ID: 7216

Increase median shoulder width

Description: Increase median shoulder width

Prior Condition: Median shoulder with unspecified width

Category: Shoulder treatments

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

Star Quality Rating:



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

Crash Modification Factor (CMF)

Value: 1.051

Adjusted Standard Error:

Unadjusted Standard Error: 0.013

Crash Reduction Factor (CRF)

Value: -5.08 (This value indicates an **increase** in crashes)

Adjusted Standard Error:

Unadjusted Standard Error:	1.32
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Applicability

Crash Type:	Fixed object
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:	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:	2000 to 2004
Municipality:	
State:	NC

Country:	USA
Type of Methodology Used:	Regression cross-section
Sample Size Used:	

Other Details	
Included in Highway Safety Manual?	No
Date Added to Clearinghouse:	Nov-01-2015
Comments:	This CMF applies to a one foot increase in median shoulder width for fixed-object crashes on four-lane freeways with a flexible barrier.

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