



CMF / CRF Details

CMF ID: 7218

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: 1.316

Adjusted Standard Error:

Unadjusted Standard Error: 0.046

Crash Reduction Factor (CRF)

Value: -31.63 (This value indicates an **increase** in crashes)

Adjusted Standard Error:

Unadjusted Standard Error:	4.56
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Applicability

Crash Type:	Fixed object
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Crash Severity:	All
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Roadway Types:	Principal Arterial Other Freeways and Expressways
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Number of Lanes:	6
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Road Division Type:	Divided by Median
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Speed Limit:	
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Area Type:	Rural
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Traffic Volume:	
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Time of Day:	All
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If countermeasure is intersection-based

Intersection Type:	
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Intersection Geometry:	
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Traffic Control:	
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Major Road Traffic Volume:	
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Minor Road Traffic Volume:	
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Development Details

Date Range of Data Used:	2000 to 2007
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Municipality:	
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State:	CA, MO, NC, OH, PA, WA
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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 six-lane freeways with a rigid barrier.

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