



CMF / CRF Details

CMF ID: 10417

Provide 2-ft paved shoulders (both sides)

Description: Provide 2-ft paved shoulders on both sides of 2-lane rural roads

Prior Condition: *No Prior Condition(s)*

Category: Shoulder treatments

Study: [Evaluation of the safety effectiveness of lane departure countermeasures on two-lane undivided roadways using crash modification factors, Dissanayake and Galgamuwa, 2019](#)

Star Quality Rating: <input type="text" value="8 Stars"/> [View score details]	
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Crash Modification Factor (CMF)	
Value:	0.79
Adjusted Standard Error:	
Unadjusted Standard Error:	0.056

Crash Reduction Factor (CRF)	
Value:	21 (This value indicates a decrease in crashes)
Adjusted Standard Error:	
Unadjusted Standard Error:	5.6

Applicability

Crash Type: Run off road

Crash Severity: K (fatal),A (serious injury),B (minor injury),C (possible injury)

Roadway Types: Not specified

Number of Lanes:

Road Division Type: Undivided

Speed Limit:

Area Type: Rural

Traffic Volume: 50 to 8550 *Annual Average Daily Traffic (AADT)*

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: 2009 to 2014

Municipality:

State: KS

Country: USA

Type of Methodology Used:	7
Sample Size Used:	

Other Details	
Included in Highway Safety Manual?	No
Date Added to Clearinghouse:	Jun-01-2020
Comments:	CMF for lane departure crashes on curved road segments

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