



CMF / CRF Details

CMF ID: 10398

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:



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

Crash Modification Factor (CMF)

Value: 0.88

Adjusted Standard Error:

Unadjusted Standard Error: 0.01

Crash Reduction Factor (CRF)

Value: 12 (This value indicates a **decrease** in crashes)

Adjusted Standard Error:

Unadjusted Standard Error:

1

Applicability

Crash Type:

Run off road

Crash Severity:

All

Roadway Types:

Not specified

Number of Lanes:

Road Division Type:

Undivided

Speed Limit:

Area Type:

Rural

Traffic Volume:

30 to 15900 *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 tangent road segments

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