



CMF / CRF Details

CMF ID: 2009

Convert 12-ft lanes and 6-ft shoulders to 11-ft lanes and 5-ft shoulders

Description:

Prior Condition: 2-lane rural, undivided. Total width = 36 ft; Lane width = 10 ft; Shoulder width = 8 ft

Category: Roadway

Study: [Safety Effectiveness of Lane and Shoulder Width Combinations on Rural, Two-Lane, Undivided Roads](#), Gross et al., 2009

Star Quality Rating:



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

Crash Modification Factor (CMF)

Value: 1.06

Adjusted Standard Error:

Unadjusted Standard Error: 0.053

Crash Reduction Factor (CRF)

Value: -6 (This value indicates an **increase** in crashes)

Adjusted Standard Error:

Unadjusted Standard Error: 5.3

Applicability

Crash Type: Run off road

Crash Severity: All

Roadway Types: Not Specified

Number of Lanes: 2

Road Division Type: Undivided

Speed Limit:

Area Type: Rural

Traffic Volume: 1000 *Annual Average Daily Traffic (AADT)*

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: 1997 to 2001

Municipality:

State: PA

Country:	
Type of Methodology Used:	Case-control
Sample Size Used:	1893 Sites

Other Details	
Included in Highway Safety Manual?	No
Date Added to Clearinghouse:	Dec-01-2009
Comments:	

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