



CMF / CRF Details

CMF ID: 10223

Change lane width from X to Y (in feet)

Description: Change lane width on rural two-lane highways from X to Y (in feet)

Prior Condition: Average lane width of X feet

Category: Roadway

Study: [Estimation of bicycle crash modification factors \(CMFs\) on urban facilities using zero inflated negative binomial models, Raihan et al., 2019](#)

Star Quality Rating:

3 Stars

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

Crash Modification Factor (CMF)

Value:

$$CMF = e^{(-0.343627*[Y-X])}$$

Y = proposed average lane width in feet

X = existing average lane width in feet

Adjusted Standard Error:

Unadjusted Standard Error:

Crash Reduction Factor (CRF)

Value:

$$CRF = 100 * (1 - e^{(-0.343627 * [Y-X])})$$

Y = proposed average lane width in feet

X = existing average lane width in feet

Adjusted Standard Error:

Unadjusted Standard Error:

Applicability

Crash Type: Vehicle/bicycle

Crash Severity: All

Roadway Types: Not specified

Number of Lanes: 4

Road Division Type: Divided by Median

Speed Limit: 35-60 MPH

Area Type: Urban

Traffic Volume: 2300 to 120000 *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:	2011 to 2014
Municipality:	
State:	FL
Country:	USA
Type of Methodology Used:	7
Sample Size Used:	

Other Details

Included in Highway Safety Manual?	No
Date Added to Clearinghouse:	Dec-07-2019
Comments:	This CMF applies to vehicle/bicycle crashes on urban four-lane divided segments with an average lane width from 10 to 12 feet.

This site is funded by the U.S. Department of Transportation Federal Highway Administration and maintained by the University of North Carolina Highway Safety Research Center

The information contained in the Crash Modification Factors (CMF) Clearinghouse is disseminated under the sponsorship of the U.S. Department of Transportation in the interest of information exchange. The U.S. Government assumes no liability for the use of the information contained in the CMF Clearinghouse. The information contained in the CMF Clearinghouse does not constitute a standard, specification, or regulation, nor is it a substitute for sound engineering judgment.