



CMF / CRF Details

CMF ID: 256

Provide a channelized left-turn lane on both major-road approaches

Description:

Prior Condition: *No Prior Condition(s)*

Category: Intersection geometry

Study: [Handbook of Road Safety Measures, Elvik, R. and Vaa, T., 2004](#)

Star Quality Rating:

8 Stars

Crash Modification Factor (CMF)

Value: 0.96

Adjusted Standard Error: 0.21

Unadjusted Standard Error: 0.12

Crash Reduction Factor (CRF)

Value: 4 (This value indicates a **decrease** in crashes)

Adjusted Standard Error: 21

Unadjusted Standard Error: 12

Applicability

Crash Type:	All
Crash Severity:	A (serious injury),B (minor injury),C (possible injury)
Roadway Types:	Not Specified
Number of Lanes:	2
Road Division Type:	
Speed Limit:	
Area Type:	Rural
Traffic Volume:	
Time of Day:	

If countermeasure is intersection-based

Intersection Type:	Roadway/roadway (not interchange related)
Intersection Geometry:	4-leg
Traffic Control:	Not Specified
Major Road Traffic Volume:	5000 to 15000 Average Daily Traffic (ADT)
Minor Road Traffic Volume:	

Development Details

Date Range of Data Used:	
Municipality:	
State:	
Country:	
Type of Methodology Used:	9
Sample Size Used:	

Other Details

Included in Highway Safety Manual?

Yes. HSM lists this CMF in italics font to indicate that it has a lower reliability than bold font CMFs since it has an adjusted standard error of 0.2 to 0.3. HSM also includes an asterisk (*) to indicate that the CMF value itself is within the range 0.90 to 1.10, but that the confidence interval defined by the $CMF \pm$ two times the standard error may contain the value 1.0. This is important to note since a treatment with such an CMF could potentially result in (a) a reduction in crashes (safety benefit), (b) no change, or (c) an increase in crashes (safety disbenefit). HSM recommends that this CMF should be used with caution.

Date Added to Clearinghouse:

Dec-01-2009

Comments:

Countermeasure name changed from "physical channelization of left-turn lane on major road" to match HSM.

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.