



CMF / CRF Details

CMF ID: 227

Convert intersection with minor-road stop control to modern roundabout

Description:

Prior Condition: *No Prior Condition(s)*

Category: Intersection geometry

Study: [NCHRP Report 572: Applying Roundabouts in the United States, Rodegerdts et al., 2007](#)

Star Quality Rating:

3 Stars

Crash Modification Factor (CMF)

Value: 0.56

Adjusted Standard Error: 0.05

Unadjusted Standard Error: 0.04

Crash Reduction Factor (CRF)

Value: 44 (This value indicates a **decrease** in crashes)

Adjusted Standard Error: 5

Unadjusted Standard Error: 4

Applicability

Crash Type:

All

Crash Severity:

All

Roadway Types:

Not Specified

Number of Lanes:

1 or 2

Road Division Type:

Speed Limit:

Area Type:

All

Traffic Volume:

Time of Day:

If countermeasure is intersection-based

Intersection Type:

Roadway/roadway (not interchange related)

Intersection Geometry:

4-leg

Traffic Control:

Stop-controlled

Major Road Traffic Volume:

Minor Road Traffic Volume:

Development Details

Date Range of Data Used:

Municipality:

State:

Country:

Type of Methodology Used:

2

Sample Size Used:

Other Details

Included in Highway Safety Manual?

Yes. HSM lists this CMF in **bold** font to indicate that it has the highest reliability since it has an adjusted standard error of 0.1 or less.

Date Added to Clearinghouse:

Dec-01-2009

Comments:

Countermeasure name changed from "convert two-way stop-controlled intersection to roundabout" 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.