



CMF / CRF Details

CMF ID: 4701

Convert high-speed rural intersection (4 leg) to roundabout

Description: Convert a high speed rural 4 leg intersection into a roundabout

Prior Condition: 4 leg intersection

Category: Intersection geometry

Study: [A Statistical Analysis and Development of a Crash Prediction Model for Roundabouts on High-Speed Rural Roadways, Isebrands, 2012](#)

Star Quality Rating:	
<input type="text" value="2 Stars"/>	[View score details]

Crash Modification Factor (CMF)	
Value:	1.41
Adjusted Standard Error:	
Unadjusted Standard Error:	

Crash Reduction Factor (CRF)	
Value:	-41 (This value indicates an increase in crashes)
Adjusted Standard Error:	
Unadjusted Standard Error:	

Applicability

Crash Type:

All

Crash Severity:

All

Roadway Types:

Not specified

Number of Lanes:

2

Road Division Type:

Speed Limit:

40-65 mph

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:

Roundabout

Major Road Traffic Volume:

Minor Road Traffic Volume:

Development Details

Date Range of Data Used:

Municipality:

State:

KS, MD, MN, OR, WA, WI

Country:

Type of Methodology Used:

2

Sample Size Used:	Site-years
Before Sample Size Used:	5 Site-years
After Sample Size Used:	5 Site-years

Other Details	
Included in Highway Safety Manual?	No
Date Added to Clearinghouse:	May-01-2013
Comments:	

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.