



CMF / CRF Details

CMF ID: 4925

Conversion of intersection into single-lane roundabout

Description: Conversion of intersection into single-lane roundabout

Prior Condition: The intersection was operating under no control, yield, TWSC, AWSC, or signal control.

Category: Intersection geometry

Study: [Evaluation of Roundabout Safety, Qin et al., 2013](#)

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

Crash Modification Factor (CMF)	
Value:	0.818
Adjusted Standard Error:	
Unadjusted Standard Error:	0.154

Crash Reduction Factor (CRF)	
Value:	18.2 <i>(This value indicates a decrease in crashes)</i>
Adjusted Standard Error:	
Unadjusted Standard Error:	15.4

Applicability

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

If countermeasure is intersection-based

Intersection Type:	Roadway/roadway (not interchange related)
Intersection Geometry:	3-leg,4-leg
Traffic Control:	Other
Major Road Traffic Volume:	6000 (Total) to 21900 (Total) Annual Average Daily Traffic (AADT)
Minor Road Traffic Volume:	

Development Details

Date Range of Data Used:	1994 to 2010
Municipality:	Statewide
State:	WI
Country:	USA
Type of Methodology Used:	2

Sample Size Used:	Crashes
Before Sample Size Used:	34 Crashes
After Sample Size Used:	18 Crashes

Other Details	
Included in Highway Safety Manual?	No
Date Added to Clearinghouse:	Aug-01-2013
Comments:	- Study included three-year before and after crash data for each site.- "Traffic Control" included intersections with yield control, two-way stop-control, all-way stop-control, and signal control.- Min, max, avg AADTs are for both major and minor roads.

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

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