



# CMF / CRF Details

**CMF ID: 5228**

**Conversion of intersection into low-speed roundabout**

**Description: Conversion of intersection into low-speed 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](#)**

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

<b>Crash Modification Factor (CMF)</b>	
<b>Value:</b>	0.473
<b>Adjusted Standard Error:</b>	
<b>Unadjusted Standard Error:</b>	0.113

<b>Crash Reduction Factor (CRF)</b>	
<b>Value:</b>	52.73 <i>(This value indicates a <b>decrease</b> in crashes)</i>
<b>Adjusted Standard Error:</b>	
<b>Unadjusted Standard Error:</b>	11.3

## Applicability

<b>Crash Type:</b>	All
<b>Crash Severity:</b>	K (fatal),A (serious injury),B (minor injury),C (possible injury)
<b>Roadway Types:</b>	Not specified
<b>Number of Lanes:</b>	2,4
<b>Road Division Type:</b>	All
<b>Speed Limit:</b>	
<b>Area Type:</b>	All
<b>Traffic Volume:</b>	
<b>Time of Day:</b>	All

### *If countermeasure is intersection-based*

<b>Intersection Type:</b>	Roadway/roadway (not interchange related)
<b>Intersection Geometry:</b>	3-leg,4-leg
<b>Traffic Control:</b>	Other
<b>Major Road Traffic Volume:</b>	4100 (total entering) to 48100 (total entering) Annual Average Daily Traffic (AADT)
<b>Minor Road Traffic Volume:</b>	

## Development Details

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

<b>Sample Size Used:</b>	Crashes
<b>Before Sample Size Used:</b>	55 Crashes
<b>After Sample Size Used:</b>	26 Crashes

<b>Other Details</b>	
<b>Included in Highway Safety Manual?</b>	No
<b>Date Added to Clearinghouse:</b>	Aug-01-2013
<b>Comments:</b>	- Study included three-yearbefore and after crash datafor each site.- In this case, the reported before-crashes represent the "expected crashes" after treatment.- "Traffic Control" includes intersections with yield control, two-way stop-control, all-way stop-control, and signal control.- Reported traffic volume is total entering volume.

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