



CMF / CRF Details

CMF ID: 5229

Conversion of intersection into high-speed roundabout

Description: Conversion of intersection into high-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](#)

Star Quality Rating:



[\[View score details\]](#)

Crash Modification Factor (CMF)

Value: 0.659

Adjusted Standard Error:

Unadjusted Standard Error: 0.094

Crash Reduction Factor (CRF)

Value: 34.13 (This value indicates a **decrease** in crashes)

Adjusted Standard Error:

Unadjusted Standard Error:	9.4
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Applicability

Crash Type:	All
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Crash Severity:	All
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Roadway Types:	Not specified
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Number of Lanes:	2,4
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Road Division Type:	All
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Speed Limit:	
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Area Type:	All
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Traffic Volume:	
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Time of Day:	All
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If countermeasure is intersection-based

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

Date Range of Data Used:	1994 to 2010
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Municipality:	Statewide
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State:	WI
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Country:	USA
Type of Methodology Used:	2
Sample Size Used:	Crashes
Before Sample Size Used:	124 Crashes
After Sample Size Used:	82 Crashes

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