



## 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:**

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

### Crash Modification Factor (CMF)

**Value:** 0.818

**Adjusted Standard Error:**

**Unadjusted Standard Error:** 0.154

### Crash Reduction Factor (CRF)

**Value:** 18.2 *(This value indicates a **decrease** in crashes)*

**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

<b>Country:</b>	USA
<b>Type of Methodology Used:</b>	Before/after using empirical Bayes or full Bayes
<b>Sample Size Used:</b>	Crashes
<b>Before Sample Size Used:</b>	34 Crashes
<b>After Sample Size Used:</b>	18 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-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.

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