



# CMF / CRF Details

**CMF ID: 10443**

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

**Description: Conversion of intersection into high-speed roundabout**

**Prior Condition: Minor Road Stop-Controlled Intersections**

**Category: Intersection geometry**

**Study: [Evaluation of Roundabouts on High-Speed Roadways, Bagley, D.L., 2020](#)**

**Star Quality Rating:**

**8 Stars**

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

## Crash Modification Factor (CMF)

**Value:** 0.45

**Adjusted Standard Error:**

**Unadjusted Standard Error:** 0.13

## Crash Reduction Factor (CRF)

**Value:** 55 *(This value indicates a **decrease** in crashes)*

**Adjusted Standard Error:**

**Unadjusted Standard Error:** 13

**Applicability**

<b>Crash Type:</b>	Other
<b>Crash Severity:</b>	All
<b>Roadway Types:</b>	All
<b>Number of Lanes:</b>	
<b>Road Division Type:</b>	
<b>Speed Limit:</b>	35-55 MPH
<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>	4-leg
<b>Traffic Control:</b>	Roundabout
<b>Major Road Traffic Volume:</b>	
<b>Minor Road Traffic Volume:</b>	

**Development Details**

<b>Date Range of Data Used:</b>	1999 to 2019
<b>Municipality:</b>	
<b>State:</b>	NC
<b>Country:</b>	
<b>Type of Methodology Used:</b>	2
<b>Sample Size Used:</b>	

## Other Details

**Included in Highway Safety Manual?**

No

**Date Added to Clearinghouse:**

Jun-01-2020

**Comments:**

This CMF is for Frontal Impact Crashes. The number of crashes in the after period were not reported in this study, however, they have been recorded as 300 to give 10 points as a benefit of doubt for one or more of the following: (1) number of miles/sites in the reference/treatment group, (2) number of crashes in the references/treatment group, (3) reporting AADTs for the aggregate dataset but not for the disaggregate dataset used for CMF development.

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