



# CMF / CRF Details

**CMF ID: 10435**

**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

<b>Star Quality Rating:</b>	<input type="text" value="4 Stars"/> <a href="#">[View score details]</a>
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## Crash Modification Factor (CMF)

<b>Value:</b>	0.21
<b>Adjusted Standard Error:</b>	
<b>Unadjusted Standard Error:</b>	0.08

## Crash Reduction Factor (CRF)

<b>Value:</b>	79 (This value indicates a <b>decrease</b> in crashes)
<b>Adjusted Standard Error:</b>	
<b>Unadjusted Standard Error:</b>	8

## 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>	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>	3-leg,4-leg
<b>Traffic Control:</b>	Roundabout
<b>Major Road Traffic Volume:</b>	2000 to 12500 Annual Average Daily Traffic (AADT)
<b>Minor Road Traffic Volume:</b>	400 to 11000 Annual Average Daily Traffic (AADT)

**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:**

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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