



CMF / CRF Details

CMF ID: 10440

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:

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

Crash Modification Factor (CMF)

Value: 0.17

Adjusted Standard Error:

Unadjusted Standard Error: 0.13

Crash Reduction Factor (CRF)

Value: 83 (This value indicates a **decrease** in crashes)

Adjusted Standard Error:

Unadjusted Standard Error: 13

Applicability

Crash Type:	All
Crash Severity:	K (fatal),A (serious injury),B (minor injury),C (possible injury)
Roadway Types:	All
Number of Lanes:	
Road Division Type:	
Speed Limit:	35-55 MPH
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
Traffic Control:	Roundabout
Major Road Traffic Volume:	
Minor Road Traffic Volume:	

Development Details

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

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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