



CMF / CRF Details

CMF ID: 10085

Conversion of intersection to roundabout

Description: Conversion of stop- and signal-controlled intersections into roundabouts

Prior Condition: Intersections without roundabouts

Category: Intersection geometry

Study: [Safety Evaluation of Roundabouts in Georgia, Gbologah et al., 2019](#)

Star Quality Rating:



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

Crash Modification Factor (CMF)

Value: 0.509

Adjusted Standard Error:

Unadjusted Standard Error:

Crash Reduction Factor (CRF)

Value: 49.1 (This value indicates a **decrease** in crashes)

Adjusted Standard Error:

Unadjusted Standard Error:

Applicability

Crash Type:

All

Crash Severity:

K (fatal),A (serious injury),B (minor injury),C (possible injury)

Roadway Types:

Not specified

Number of Lanes:

Road Division Type:

Undivided

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:

4-leg

Traffic Control:

Not specified

Major Road Traffic Volume:

Minor Road Traffic Volume:

Development Details

Date Range of Data Used:

2007 to 2014

Municipality:

State:

GA

Country:	
Type of Methodology Used:	Before/after using empirical Bayes or full Bayes
Sample Size Used:	

Other Details	
Included in Highway Safety Manual?	No
Date Added to Clearinghouse:	Jul-26-2019
Comments:	Applies to the conversion of a four-leg intersection to a single-lane roundabout. CMF analysis includes roundabout locations with less than four average observed crashes per year in before period as one sample, roundabout locations with just a single data-year of crashes in before or after period, and roundabout locations with zero observed crashes in the before period.

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