



CMF / CRF Details

CMF ID: 4197

Conversion of signalized intersection into single- or multi-lane roundabout

Description:

Prior Condition: Signalized intersection

Category: Intersection geometry

Study: [Safety Effectiveness of Converting Signalized Intersections to Roundabouts, Gross et al., 2012](#)

Star Quality Rating:



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

Crash Modification Factor (CMF)

Value: 0.45

Adjusted Standard Error:

Unadjusted Standard Error: 0.12

Crash Reduction Factor (CRF)

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

Adjusted Standard Error:

Unadjusted Standard Error:

12

Applicability

Crash Type:

All

Crash Severity:

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

Roadway Types:

Not Specified

Number of Lanes:

1

Road Division Type:

Speed Limit:

15-35 mph

Area Type:

Urban and suburban

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:

Roundabout

Major Road Traffic Volume:

5300 to 52500 Annual Average Daily Traffic (AADT)

Minor Road Traffic Volume:

Development Details

Date Range of Data Used:

2000 to 2009

Municipality:

State:

CO, FL, IN, MD, MI, NY, NC, SC, VT, WA

Country:	
Type of Methodology Used:	Before/after using empirical Bayes or full Bayes
Sample Size Used:	Sites
Before Sample Size Used:	12 Sites
After Sample Size Used:	12 Sites

Other Details	
Included in Highway Safety Manual?	No
Date Added to Clearinghouse:	Nov-01-2012
Comments:	Conversion to one lane roundabout

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