



## CMF / CRF Details

CMF ID: 239

Convert intersection with minor-road stop control to modern roundabout

Description:

Prior Condition: *No Prior Condition(s)*

Category: Intersection geometry

Study: [NCHRP Report 572: Applying Roundabouts in the United States, Rodegerdts et al., 2007](#)

Star Quality Rating:



### Crash Modification Factor (CMF)

Value: 0.22

Adjusted Standard Error: 0.12

Unadjusted Standard Error: 0.1

### Crash Reduction Factor (CRF)

Value: 78 (This value indicates a **decrease** in crashes)

Adjusted Standard Error: 12

<b>Unadjusted Standard Error:</b>	10
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### Applicability

<b>Crash Type:</b>	All
<b>Crash Severity:</b>	A (serious injury),B (minor injury),C (possible injury)
<b>Roadway Types:</b>	Not Specified
<b>Number of Lanes:</b>	1
<b>Road Division Type:</b>	
<b>Speed Limit:</b>	
<b>Area Type:</b>	Suburban
<b>Traffic Volume:</b>	
<b>Time of Day:</b>	

### *If countermeasure is intersection-based*

<b>Intersection Type:</b>	Roadway/roadway (not interchange related)
<b>Intersection Geometry:</b>	4-leg
<b>Traffic Control:</b>	Stop-controlled
<b>Major Road Traffic Volume:</b>	
<b>Minor Road Traffic Volume:</b>	

### Development Details

<b>Date Range of Data Used:</b>	
<b>Municipality:</b>	
<b>State:</b>	

<b>Country:</b>	
<b>Type of Methodology Used:</b>	2
<b>Sample Size Used:</b>	

<b>Other Details</b>	
<b>Included in Highway Safety Manual?</b>	Yes. HSM lists this CMF in <b>bold</b> font to indicate that it has the highest reliability since it has an adjusted standard error of 0.1 or less.
<b>Date Added to Clearinghouse:</b>	Dec-01-2009
<b>Comments:</b>	Countermeasure name changed from "convert two-way stop-controlled intersection to roundabout" to match HSM

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