



CMF / CRF Details

CMF ID: 7913

Roundabout geometry

Description: Various geometric elements of roundabout

Prior Condition: Approach gradient of two percent

Category: Intersection geometry

Study: [Development of Safety Performance Measures for Urban Roundabouts in India, Anjana and Anjaneyulu, 2015](#)

Star Quality Rating:

3 Stars

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Crash Modification Factor (CMF)

Value:

$$CMF_{PDO,AG} = \exp [-0.092 \times (AG - 2)]$$

Adjusted Standard Error:

Unadjusted Standard Error:

Crash Reduction Factor (CRF)

Value:

(This value indicates an **increase** in crashes)

Adjusted Standard Error:

Unadjusted Standard Error:

Applicability

Crash Type:

All

Crash Severity:

0 (property damage only)

Roadway Types:

Not specified

Number of Lanes:

Road Division Type:

Speed Limit:

Area Type:

Urban

Traffic Volume:

Time of Day:

All

If countermeasure is intersection-based

Intersection Type:

Intersection Geometry:

No values chosen.

Traffic Control:

Roundabout

Major Road Traffic Volume:

19197 to 71307 Average Daily Traffic (ADT)

Minor Road Traffic Volume:

Development Details

Date Range of Data Used:

2008 to 2010

Municipality:

Kerala

State:

Country:

India

Type of Methodology Used:	7
Sample Size Used:	

Other Details	
Included in Highway Safety Manual?	No
Date Added to Clearinghouse:	Mar-08-2016
Comments:	CMF function for non-injury (PDO) crashes for Approach Gradient (AG) of roundabout (percent). The CMF applies to roundabout approaches.

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