



CMF / CRF Details

CMF ID: 11132

Convert to roundabout interchanges

Description: Convert to interchange roundabouts with either a single roundabout or a pair.

Prior Condition: Stop-controlled ramp terminal on diamond interchange

Category: Interchange design

Study: [*Are Roundabouts Safe and Economically Viable Replacing Conventional Diamond Interchange Ramp Terminals?*, Boris Claros, Beau Burdett, Madhav Chitturi, Andrea Bill, and David A. Noyce, 2021](#)

Star Quality Rating:	
	<input type="text" value="8 Stars"/>

Crash Modification Factor (CMF)	
Value:	0.604
Adjusted Standard Error:	
Unadjusted Standard Error:	

Crash Reduction Factor (CRF)	
Value:	39.6 (This value indicates a decrease in crashes)
Adjusted Standard Error:	
Unadjusted Standard Error:	

Applicability

Crash Type:	All
Crash Severity:	All
Roadway Types:	Principal Arterial Other Freeways and Expressways
Number of Lanes:	
Road Division Type:	
Speed Limit:	
Area Type:	
Traffic Volume:	
Time of Day:	Not specified

If countermeasure is intersection-based

Intersection Type:	Roadway/roadway (interchange ramp terminal)
Intersection Geometry:	No values chosen.
Traffic Control:	Roundabout
Major Road Traffic Volume:	2060 to 17150 Annual Average Daily Traffic (AADT)
Minor Road Traffic Volume:	1300 to 10900 Annual Average Daily Traffic (AADT)

Development Details

Date Range of Data Used:	
Municipality:	
State:	MO, WI
Country:	USA

Type of Methodology Used:	2
Sample Size Used:	

Other Details	
Included in Highway Safety Manual?	No
Date Added to Clearinghouse:	Aug-25-2022
Comments:	AADT on exit ramps were between 1,300 and 10,900 vpd. AADT on entrance ramps were between 647 and 11,450 vpd. AADT on crossroad approaches were between 2,060 and 17,150 vpd.

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