



CMF / CRF Details

CMF ID: 8278

Convert diamond interchange to Diverging Diamond Interchange (DDI) or Double Crossover Diamond (DCD)

Description: Convert a diamond interchange to a Diverging Diamond Interchange (DDI) or a Double Crossover Diamond (DCD)

Prior Condition: Diamond interchange

Category: Interchange design

Study: [Safety Evaluation of Seven of the Earliest Diverging Diamond Interchanges Installed in the US, Hummer et al., 2016](#)

Star Quality Rating:



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

Crash Modification Factor (CMF)

Value: 0.59

Adjusted Standard Error:

Unadjusted Standard Error: 0.07

Crash Reduction Factor (CRF)

Value: 41 (This value indicates a **decrease** in crashes)

Adjusted Standard Error:	
Unadjusted Standard Error:	7

Applicability	
Crash Type:	All
Crash Severity:	K (fatal),A (serious injury),B (minor injury),C (possible injury)
Roadway Types:	Principal Arterial Other Freeways and Expressways
Number of Lanes:	3-6
Road Division Type:	Divided by Median
Speed Limit:	40-45
Area Type:	Suburban
Traffic Volume:	
Time of Day:	All

<i>If countermeasure is intersection-based</i>	
Intersection Type:	
Intersection Geometry:	
Traffic Control:	
Major Road Traffic Volume:	
Minor Road Traffic Volume:	

Development Details	
Date Range of Data Used:	
Municipality:	

State:	KY, MO, NY, TN
Country:	USA
Type of Methodology Used:	Before/after using comparison group
Sample Size Used:	

Other Details	
Included in Highway Safety Manual?	No
Date Added to Clearinghouse:	Jan-17-2017
Comments:	The volume here is the crossover volume. CMFs of six interchanges in MO, KY, NY, and TN.

This site is funded by the U.S. Department of Transportation Federal Highway Administration and maintained by the University of North Carolina Highway Safety Research Center

The information contained in the Crash Modification Factors (CMF) Clearinghouse is disseminated under the sponsorship of the U.S. Department of Transportation in the interest of information exchange. The U.S. Government assumes no liability for the use of the information contained in the CMF Clearinghouse. The information contained in the CMF Clearinghouse does not constitute a standard, specification, or regulation, nor is it a substitute for sound engineering judgment.