



CMF / CRF Details

CMF ID: 2988

Convert High-Occupancy-Vehicle (HOV) lanes to High-Occupancy-Toll (HOT) lanes

Description: convert a High-Occupancy-Vehicle (HOV) interstate segment into a High-Occupancy-Toll (HOT) segment

Prior Condition: High-Occupancy-Vehicle (HOV) interstate segment

Category: Roadway

Study: [Safety Benefits of Converting HOV lanes to HOT lanes: Case Study of the I-394 MnPass, Cao et al., 2011](#)

Star Quality Rating:



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

Crash Modification Factor (CMF)

Value: 0.95

Adjusted Standard Error:

Unadjusted Standard Error: 0

Crash Reduction Factor (CRF)

Value: 5 (This value indicates a **decrease** in crashes)

Adjusted Standard Error:	
Unadjusted Standard Error:	4

Applicability

Crash Type:	All
Crash Severity:	All
Roadway Types:	Principal Arterial Interstate
Number of Lanes:	
Road Division Type:	Divided by Median
Speed Limit:	
Area Type:	Urban
Traffic Volume:	
Time of Day:	All

If countermeasure is intersection-based

Intersection Type:	
Intersection Geometry:	
Traffic Control:	
Major Road Traffic Volume:	
Minor Road Traffic Volume:	

Development Details

Date Range of Data Used:	1998 to 2006
Municipality:	Minneapolis-St. Paul

State:	MN
Country:	U.S.A.
Type of Methodology Used:	Before/after using empirical Bayes or full Bayes
Sample Size Used:	
Before Sample Size Used:	785
After Sample Size Used:	1984

Other Details	
Included in Highway Safety Manual?	No
Date Added to Clearinghouse:	Jul-15-2011
Comments:	

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