



CMF / CRF Details

CMF ID: 8810

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: No HOT lanes

Category: Roadway

Study: [Effects of Using High Occupancy Vehicle Lanes on Safety Performance of Freeways, Abuzwidah and Abdel-Aty, 2017](#)

Star Quality Rating:	
<input type="text" value="4 Stars"/>	[View score details]

Crash Modification Factor (CMF)	
Value:	1.27
Adjusted Standard Error:	
Unadjusted Standard Error:	0.08

Crash Reduction Factor (CRF)	
Value:	-27 (This value indicates an increase in crashes)
Adjusted Standard Error:	
Unadjusted Standard Error:	8

Applicability

Crash Type:	Rear end
Crash Severity:	All
Roadway Types:	Principal Arterial Interstate
Number of Lanes:	5
Road Division Type:	Divided by Median
Speed Limit:	
Area Type:	
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:	2005 to 2013
Municipality:	Miami
State:	FL
Country:	USA

Type of Methodology Used:	2
Sample Size Used:	

Other Details	
Included in Highway Safety Manual?	No
Date Added to Clearinghouse:	Nov-17-2017
Comments:	CMF applies to free-lanes only. The number of crashes in the after period were not reported in this study, however, they have been recorded as 300 to give 10 points as a benefit of doubt for one or more of the following: (1) number of miles/sites in the reference/treatment group, (2) number of crashes in the references/treatment group, (3) reporting AADTs for the aggregate dataset but not for the disaggregate dataset used for CMF development.

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