



# CMF / CRF Details

CMF ID: 8808

**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:

8 Stars

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

## Crash Modification Factor (CMF)

**Value:** 0.77

**Adjusted Standard Error:**

**Unadjusted Standard Error:** 0.13

## Crash Reduction Factor (CRF)

**Value:** 23 (This value indicates a **decrease** in crashes)

**Adjusted Standard Error:**

**Unadjusted Standard Error:** 13

**Applicability**

<b>Crash Type:</b>	Other
<b>Crash Severity:</b>	All
<b>Roadway Types:</b>	Principal Arterial Interstate
<b>Number of Lanes:</b>	5
<b>Road Division Type:</b>	Divided by Median
<b>Speed Limit:</b>	
<b>Area Type:</b>	
<b>Traffic Volume:</b>	
<b>Time of Day:</b>	All

***If countermeasure is intersection-based***

<b>Intersection Type:</b>	
<b>Intersection Geometry:</b>	
<b>Traffic Control:</b>	
<b>Major Road Traffic Volume:</b>	
<b>Minor Road Traffic Volume:</b>	

**Development Details**

<b>Date Range of Data Used:</b>	2005 to 2013
<b>Municipality:</b>	Miami
<b>State:</b>	FL
<b>Country:</b>	USA

<b>Type of Methodology Used:</b>	2
<b>Sample Size Used:</b>	

<b>Other Details</b>	
<b>Included in Highway Safety Manual?</b>	No
<b>Date Added to Clearinghouse:</b>	Nov-17-2017
<b>Comments:</b>	CMF applies to HOT lanes only. Crash type = all except rear-end and "lane change related" crashes. 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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