



# CMF / CRF Details

CMF ID: 2114

Convert continuous access HOV lanes to limited-access (HOV and left lane crashes)

Description:

Prior Condition: freeway with HOV lane

Category: Roadway

Study: [Safety Performance of High-Occupancy-Vehicle Facilities: Evaluation of HOV Lane Configurations in California, Jang et al., 2009](#)

Star Quality Rating:	
<input type="text" value="X Star"/>	<a href="#">[View score details]</a>

Crash Modification Factor (CMF)	
Value:	1.54
Adjusted Standard Error:	
Unadjusted Standard Error:	1.061

Crash Reduction Factor (CRF)	
Value:	-54.1 (This value indicates an <b>increase</b> in crashes)
Adjusted Standard Error:	
Unadjusted Standard Error:	106.1

## Applicability

**Crash Type:**

All

**Crash Severity:**

All

**Roadway Types:**

Principal Arterial Interstate

**Number of Lanes:**

**Road Division Type:**

**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:**

1999 to 2003

**Municipality:**

**State:**

CA

**Country:**

**Type of Methodology Used:**

6

<b>Sample Size Used:</b>	92
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### Other Details

<b>Included in Highway Safety Manual?</b>	No
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<b>Date Added to Clearinghouse:</b>	Dec-01-2009
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<b>Comments:</b>	Only for HOV and left-lane crashes. The authors initially released this CMF in a paper presented at the 2009 TRB Annual Meeting. The subsequent publication in Transportation Research Record 2099 has corrected values. This entry reflects the corrected values from the TRR.
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