



# CMF / CRF Details

**CMF ID: 2953**

**Install red-light camera on major road of a 4-leg intersection (motorcycle crashes)**

**Description: Install red-light camera on the major road of a four-legged signalized intersection (effect on motorcycle crashes)**

**Prior Condition: *No Prior Condition(s)***

**Category: Advanced technology and ITS**

**Study: [Applying Bayesian Hierarchical Models to Examine Motorcycle Crashes at Signalized Intersections, Haque et al., 2010](#)**

**Star Quality Rating:**

**5 Stars**

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

## Crash Modification Factor (CMF)

**Value:** 0.63

**Adjusted Standard Error:**

**Unadjusted Standard Error:**

## Crash Reduction Factor (CRF)

**Value:** 37 (This value indicates a **decrease** in crashes)

**Adjusted Standard Error:**

**Unadjusted Standard Error:**

## Applicability

**Crash Type:**

All

**Crash Severity:**

All

**Roadway Types:**

Not Specified

**Number of Lanes:**

**Road Division Type:**

**Speed Limit:**

**Area Type:**

Urban

**Traffic Volume:**

**Time of Day:**

All

### *If countermeasure is intersection-based*

**Intersection Type:**

Not specified

**Intersection Geometry:**

4-leg

**Traffic Control:**

Signalized

**Major Road Traffic Volume:**

5700 to 37520 Annual Average Daily Traffic (AADT)

**Minor Road Traffic Volume:**

2850 to 31270 Annual Average Daily Traffic (AADT)

## Development Details

**Date Range of Data Used:**

2003 to 2006

**Municipality:**

**State:**

**Country:**

Singapore

<b>Type of Methodology Used:</b>	7
<b>Sample Size Used:</b>	1948 Crashes

<b>Other Details</b>	
<b>Included in Highway Safety Manual?</b>	No
<b>Date Added to Clearinghouse:</b>	Mar-21-2011
<b>Comments:</b>	Only motorcycle related crashes

---

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.*