



CMF / CRF Details

CMF ID: 2950

Change number of lanes on major road of a 4-leg signalized intersection from X to Y (motorcycle crashes)

Description: Change the number of lanes along the major road of a four-legged signalized intersection from X to Y (effect on motorcycle crashes)

Prior Condition: *No Prior Condition(s)*

Category: Intersection geometry

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

Star Quality Rating:



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

Crash Modification Factor (CMF)

Value:

$$e^{0.125(Y-X)}$$

Adjusted Standard Error:

Unadjusted Standard Error:

Crash Reduction Factor (CRF)

Value:	$100 * (1 - e^{0.125(Y-X)})$
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

<i>If countermeasure is intersection-based</i>	
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
Type of Methodology Used:	Regression cross-section
Sample Size Used:	1948 Crashes

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

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