



## CMF / CRF Details

**CMF ID: 2199**

**Presence of crosswalk at signalized intersection (bike crashes)**

**Description:**

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

**Category:** Bicyclists

**Study:** [Assessing Critical Factors Associated with Bicycle Collisions at Urban Signalized Intersections, Oh et al., 2008](#)

**Star Quality Rating:**



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

### Crash Modification Factor (CMF)

**Value:** 8.76

**Adjusted Standard Error:**

**Unadjusted Standard Error:** 13.7

### Crash Reduction Factor (CRF)

**Value:** -775.83 (This value indicates an **increase** in crashes)

**Adjusted Standard Error:**

<b>Unadjusted Standard Error:</b>	1370.21
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### Applicability

<b>Crash Type:</b>	Vehicle/bicycle
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<b>Crash Severity:</b>	All
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<b>Roadway Types:</b>	Not Specified
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<b>Number of Lanes:</b>	
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<b>Road Division Type:</b>	
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<b>Speed Limit:</b>	
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<b>Area Type:</b>	
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<b>Traffic Volume:</b>	
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<b>Time of Day:</b>	All
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### *If countermeasure is intersection-based*

<b>Intersection Type:</b>	
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<b>Intersection Geometry:</b>	
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<b>Traffic Control:</b>	Signalized
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<b>Major Road Traffic Volume:</b>	
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<b>Minor Road Traffic Volume:</b>	
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### Development Details

<b>Date Range of Data Used:</b>	2005 to 2005
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<b>Municipality:</b>	Incheon, South Korea
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<b>State:</b>	
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<b>Country:</b>	
<b>Type of Methodology Used:</b>	Regression cross-section
<b>Sample Size Used:</b>	151

<b>Other Details</b>	
<b>Included in Highway Safety Manual?</b>	No
<b>Date Added to Clearinghouse:</b>	Dec-01-2009
<b>Comments:</b>	Only for bicycle-related crashes.

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