



CMF / CRF Details

CMF ID: 10233

Provide protected left-turn phase

Description:

Prior Condition: No approaches have a protected phase.

Category: Intersection traffic control

Study: [Estimation of bicycle crash modification factors \(CMFs\) on urban facilities using zero inflated negative binomial models, Raihan et al., 2019](#)

| | |
|----------------------|--------------------------------------|
| Star Quality Rating: | |
| 3 Stars | [View score details] |

| Crash Modification Factor (CMF) | |
|---------------------------------|------|
| Value: | 0.69 |
| Adjusted Standard Error: | |
| Unadjusted Standard Error: | 0.14 |

| Crash Reduction Factor (CRF) | |
|------------------------------|--|
| Value: | 31 (This value indicates a decrease in crashes) |
| Adjusted Standard Error: | |
| Unadjusted Standard Error: | 14 |

Applicability

Crash Type: Vehicle/bicycle

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: Roadway/roadway (not interchange related)

Intersection Geometry: 4-leg

Traffic Control: Signalized

Major Road Traffic Volume: 1500 to 74500 Annual Average Daily Traffic (AADT)

Minor Road Traffic Volume:

Development Details

Date Range of Data Used: 2011 to 2014

Municipality:

State: FL

Country: USA

Type of Methodology Used: 7

| | |
|--------------------------|--|
| Sample Size Used: | |
|--------------------------|--|

| Other Details | |
|---|--|
| Included in Highway Safety Manual? | No |
| Date Added to Clearinghouse: | Dec-07-2019 |
| Comments: | This CMF applies to vehicle-bicycle crashes at four-leg signalized intersections when at least one approach is converted to protected control. |

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