



## CMF / CRF Details

CMF ID: 8885

### Implement systemic signing and marking improvements at stop-controlled intersections

**Description:** Doubleup (i.e., both right and left side) 36 in. x 36 in. intersection warning signs (W2- 22 series in the MUTCD (4)) on fluorescent yellow sheeting. Add advance street name plaque (W168 in the MUTCD(4)) on fluorescent yellow 24 sheeting accompanying each rightside intersection warning sign. Double-up (i.e., both right and left side) 48 in. x 48 in. STOP or YIELD signs (R11 and 26 R12 in the MUTCD(4)). Install retroreflective strips on sign posts for the above signs. Place minor road stop bars within 4 to 10 ft of the edge of the nearest through lane along the major road. Install yield bars at all lanes having yield conditions. Add dashed white edge-lines along the major road through the intersection. Remark all existing stop bars, crosswalks, arrows and word messages unless:

- o The roadway has been resurfaced within one calendar year and new thermoplastic markings have been applied.
- o Existing markings are uniformly reflective and above ground thickness is 90 mils or greater.
- o Otherwise directed by a district representative.

Mark all turn lanes to include the pattern of lane arrows and text marking “ONLY” based on the turn lane length.

**Prior Condition:** Stop-controlled intersections without systemic signing and marking improvements

**Category:** Intersection traffic control

**Study:** [\*Safety Effects of Low-Cost Systemic Safety Improvements at Signalized and Stop-Controlled Intersections, Le et al., 2017\*](#)

Star Quality Rating:



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

### Crash Modification Factor (CMF)

**Value:** 0.962

**Adjusted Standard Error:**

**Unadjusted Standard Error:** 0.036

### Crash Reduction Factor (CRF)

**Value:** 3.8 (*This value indicates a **decrease** in crashes*)

**Adjusted Standard Error:**

**Unadjusted Standard Error:** 3.6

### Applicability

**Crash Type:** Rear end

**Crash Severity:** All

**Roadway Types:** All

**Number of Lanes:** 2,4

**Road Division Type:**

**Speed Limit:**

**Area Type:** All

**Traffic Volume:**

**Time of Day:** All

*If countermeasure is intersection-based*

**Intersection Type:**

**Intersection Geometry:** 3-leg

|                                   |  |
|-----------------------------------|--|
| <b>Traffic Control:</b>           | Stop-controlled                                  |
| <b>Major Road Traffic Volume:</b> | 641 to 41731 Annual Average Daily Traffic (AADT) |
| <b>Minor Road Traffic Volume:</b> | 102 to 8436 Annual Average Daily Traffic (AADT)  |

| <b>Development Details</b>       |  |
|----------------------------------|--|
| <b>Date Range of Data Used:</b>  | 2005 to 2014                                     |
| <b>Municipality:</b>             |  |
| <b>State:</b>                    | SC   |
| <b>Country:</b>                  |  |
| <b>Type of Methodology Used:</b> | Before/after using empirical Bayes or full Bayes |
| <b>Sample Size Used:</b>         |  |

| <b>Other Details</b>                      |             |
|---|-------------|
| <b>Included in Highway Safety Manual?</b> | No          |
| <b>Date Added to Clearinghouse:</b>       | Nov-17-2017 |
| <b>Comments:</b>                          |             |

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