



# CMF / CRF Details

CMF ID: 8460

**Install an intersection conflict warning system (ICWS) with overhead signs (various messages) and flashers at the intersection on minor; loop on major**

**Description: Install an intersection conflict warning system (ICWS) with overhead signs (various messages) and flashers at the intersection on minor; loop on major**

**Prior Condition: No intersection conflict warning systems**

**Category: Signs**

**Study: [Multi-State Safety Evaluation of Intersection Conflict Warning Systems \(ICWS\), Himes et al, 2016](#)**

|                      |                                      |
|----------------------|--------------------------------------|
| Star Quality Rating: |                                      |
| 8 Stars              | <a href="#">[View score details]</a> |

| Crash Modification Factor (CMF) |       |
|---------------------------------|-------|
| Value:                          | 0.944 |
| Adjusted Standard Error:        |       |
| Unadjusted Standard Error:      | 0.101 |

| Crash Reduction Factor (CRF) |   |
|------------------------------|---|
| Value:                       | 5.6 (This value indicates a <b>decrease</b> in crashes) |
| Adjusted Standard Error:     |   |

|                                   |      |
|-----------------------------------|------|
| <b>Unadjusted Standard Error:</b> | 10.1 |
|-----------------------------------|------|

### Applicability

|                    |     |
|--------------------|-----|
| <b>Crash Type:</b> | All |
|--------------------|-----|

|                        |   |
|------------------------|---|
| <b>Crash Severity:</b> | K (fatal),A (serious injury),B (minor injury),C (possible injury) |
|------------------------|---|

|                       |               |
|-----------------------|---------------|
| <b>Roadway Types:</b> | Not specified |
|-----------------------|---------------|

|                         |   |
|-------------------------|---|
| <b>Number of Lanes:</b> | 2 |
|-------------------------|---|

|                            |  |
|----------------------------|--|
| <b>Road Division Type:</b> |  |
|----------------------------|--|

|                     |  |
|---------------------|--|
| <b>Speed Limit:</b> |  |
|---------------------|--|

|                   |       |
|-------------------|-------|
| <b>Area Type:</b> | Rural |
|-------------------|-------|

|                        |  |
|------------------------|--|
| <b>Traffic Volume:</b> |  |
|------------------------|--|

|                     |               |
|---------------------|---------------|
| <b>Time of Day:</b> | Not specified |
|---------------------|---------------|

### *If countermeasure is intersection-based*

|                           |   |
|---------------------------|---|
| <b>Intersection Type:</b> | Roadway/roadway (not interchange related) |
|---------------------------|---|

|                               |       |
|-------------------------------|-------|
| <b>Intersection Geometry:</b> | 4-leg |
|-------------------------------|-------|

|                         |                 |
|-------------------------|-----------------|
| <b>Traffic Control:</b> | Stop-controlled |
|-------------------------|-----------------|

|                                   |  |
|-----------------------------------|--|
| <b>Major Road Traffic Volume:</b> |  |
|-----------------------------------|--|

|                                   |  |
|-----------------------------------|--|
| <b>Minor Road Traffic Volume:</b> |  |
|-----------------------------------|--|

### Development Details

|                                 |  |
|---------------------------------|--|
| <b>Date Range of Data Used:</b> |  |
|---------------------------------|--|

|                      |  |
|----------------------|--|
| <b>Municipality:</b> |  |
|----------------------|--|

|               |            |
|---------------|------------|
| <b>State:</b> | MN, MO, NC |
|---------------|------------|

|                                  |   |
|----------------------------------|---|
| <b>Country:</b>                  |   |
| <b>Type of Methodology Used:</b> | 2 |
| <b>Sample Size Used:</b>         |   |

| <b>Other Details</b>                      |  |
|---|--|
| <b>Included in Highway Safety Manual?</b> | No                                     |
| <b>Date Added to Clearinghouse:</b>       | Jan-17-2017                            |
| <b>Comments:</b>                          | CMF for 2-lane at 2-lane intersections |

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