



# CMF / CRF Details

CMF ID: 8445

Install intersection conflict warning systems (ICWS) for four-lane at two-lane intersections

Description:

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

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

## Crash Modification Factor (CMF)

Value: 1.05

Adjusted Standard Error:

Unadjusted Standard Error: 0.39

## Crash Reduction Factor (CRF)

Value: -5 (This value indicates an **increase** in crashes)

Adjusted Standard Error:

Unadjusted Standard Error: 39

## Applicability

**Crash Type:**

All

**Crash Severity:**

A (serious injury),B (minor injury),C (possible injury)

**Roadway Types:**

Not specified

**Number of Lanes:**

4

**Road Division Type:**

**Speed Limit:**

**Area Type:**

Rural

**Traffic Volume:**

**Time of Day:**

Not specified

### *If countermeasure is intersection-based*

**Intersection Type:**

Roadway/roadway (not interchange related)

**Intersection Geometry:**

4-leg

**Traffic Control:**

Stop-controlled

**Major Road Traffic Volume:**

**Minor Road Traffic Volume:**

## Development Details

**Date Range of Data Used:**

**Municipality:**

**State:**

MN

**Country:**

**Type of Methodology Used:**

2

<b>Sample Size Used:</b>	
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<b>Other Details</b>	
<b>Included in Highway Safety Manual?</b>	No
<b>Date Added to Clearinghouse:</b>	Jan-17-2017
<b>Comments:</b>	Authors indicated that this CMF is based on small sample size and should be interpreted with caution.

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