



CMF / CRF Details

CMF ID: 2439

Install chevron signs on horizontal curves

Description: Along a curve with a small radius, large deflection angle, available sight distance smaller than stopping sight distance, and superelevation smaller than demanded at design and operating speed.

Prior Condition: No sign

Category: Signs

Study: [*Safety Evaluation of Improved Curve Delineation, Srinivasan et al., 2009*](#)

Star Quality Rating:



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

Crash Modification Factor (CMF)

Value: 0.75

Adjusted Standard Error:

Unadjusted Standard Error: 0.095

Crash Reduction Factor (CRF)

Value: 25 (This value indicates a **decrease** in crashes)

Adjusted Standard Error:

Unadjusted Standard Error:

9.5

Applicability

Crash Type:

Nighttime,Non-intersection

Crash Severity:

All

Roadway Types:

All

Number of Lanes:

2

Road Division Type:

Undivided

Speed Limit:

Area Type:

Rural

Traffic Volume:

261 to 14790 *Annual Average Daily Traffic (AADT)*

Time of Day:

Night

If countermeasure is intersection-based

Intersection Type:

Intersection Geometry:

Traffic Control:

Major Road Traffic Volume:

Minor Road Traffic Volume:

Development Details

Date Range of Data Used:

1993 to 2007

Municipality:

State:

WA

Country:	
Type of Methodology Used:	Before/after using empirical Bayes or full Bayes
Sample Size Used:	
Before Sample Size Used:	72
After Sample Size Used:	95

Other Details	
Included in Highway Safety Manual?	No
Date Added to Clearinghouse:	
Comments:	

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