



## CMF / CRF Details

**CMF ID: 2438**

### 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:** 0.84

**Adjusted Standard Error:**

**Unadjusted Standard Error:** 0.104

### Crash Reduction Factor (CRF)

**Value:** 16 (This value indicates a **decrease** in crashes)

**Adjusted Standard Error:**

<b>Unadjusted Standard Error:</b>	10.4
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### Applicability

<b>Crash Type:</b>	Non-intersection
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<b>Crash Severity:</b>	K (fatal),A (serious injury),B (minor injury),C (possible injury)
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<b>Roadway Types:</b>	All
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<b>Number of Lanes:</b>	2
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<b>Road Division Type:</b>	Undivided
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<b>Speed Limit:</b>	
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<b>Area Type:</b>	Rural
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<b>Traffic Volume:</b>	261 to 14790 <i>Annual Average Daily Traffic (AADT)</i>
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<b>Time of Day:</b>	All
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### *If countermeasure is intersection-based*

<b>Intersection Type:</b>	
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<b>Intersection Geometry:</b>	
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<b>Traffic Control:</b>	
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<b>Major Road Traffic Volume:</b>	
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<b>Minor Road Traffic Volume:</b>	
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### Development Details

<b>Date Range of Data Used:</b>	1993 to 2007
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<b>Municipality:</b>	
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<b>State:</b>	WA
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<b>Country:</b>	
<b>Type of Methodology Used:</b>	Before/after using empirical Bayes or full Bayes
<b>Sample Size Used:</b>	
<b>Before Sample Size Used:</b>	72
<b>After Sample Size Used:</b>	95

<b>Other Details</b>	
<b>Included in Highway Safety Manual?</b>	No
<b>Date Added to Clearinghouse:</b>	
<b>Comments:</b>	

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