



CMF / CRF Details

CMF ID: 1893

Install a combination of chevron signs, curve warning signs, and/or sequential flashing beacons

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 curve delineation treatment. Deflection angle greater than 60 gon.

Category: Signs

Study: [Safety Evaluation of Curve Delineation Improvements An Empirical Bayes Observational Before-After Study, Montella, 2009](#)

| | |
|----------------------|--------------------------------------|
| Star Quality Rating: | |
| 8 Stars | [View score details] |

| Crash Modification Factor (CMF) | |
|---------------------------------|------|
| Value: | 0.72 |
| Adjusted Standard Error: | |
| Unadjusted Standard Error: | 0.22 |

| Crash Reduction Factor (CRF) | |
|------------------------------|--|
| Value: | 28 (This value indicates a decrease in crashes) |
| Adjusted Standard Error: | |

Unadjusted Standard Error:

22

Applicability

Crash Type:

Angle,Fixed object,Frontal and opposing direction sideswipe,Head on,Rear end,Rear to rear,Sideswipe,Single vehicle

Crash Severity:

All

Roadway Types:

Principal Arterial Other Freeways and Expressways

Number of Lanes:

4

Road Division Type:

Speed Limit:

Area Type:

Not specified

Traffic Volume:

7400 to 13975 *Annual Average Daily Traffic (AADT)*

Time of Day:

All

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:

2001 to 2005

Municipality:

Trans European Road Network, Italy

State:

| | |
|----------------------------------|---|
| Country: | |
| Type of Methodology Used: | 2 |
| Sample Size Used: | |
| Before Sample Size Used: | 5 |
| After Sample Size Used: | 5 |

| Other Details | |
|---|-------------|
| Included in Highway Safety Manual? | No |
| Date Added to Clearinghouse: | Dec-01-2009 |
| Comments: | |

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