



# CMF / CRF Details

**CMF ID: 45**

**Install concrete guardrail in median**

**Description:**

**Prior Condition:** *No Prior Condition(s)*

**Category:** Roadside

**Study:** [Handbook of Road Safety Measures, Elvik, R. and Vaa, T., 2004](#)

**Star Quality Rating:**

## Crash Modification Factor (CMF)

**Value:** 1.15

**Adjusted Standard Error:** 0.36

**Unadjusted Standard Error:** 0.2

## Crash Reduction Factor (CRF)

**Value:** -15 (*This value indicates an **increase** in crashes*)

**Adjusted Standard Error:** 36

**Unadjusted Standard Error:** 20

**Applicability**

<b>Crash Type:</b>	All
<b>Crash Severity:</b>	A (serious injury),B (minor injury),C (possible injury)
<b>Roadway Types:</b>	Principal Arterial Other
<b>Number of Lanes:</b>	
<b>Road Division Type:</b>	
<b>Speed Limit:</b>	
<b>Area Type:</b>	Not specified
<b>Traffic Volume:</b>	
<b>Time of Day:</b>	

*If countermeasure is intersection-based*

<b>Intersection Type:</b>	
<b>Intersection Geometry:</b>	
<b>Traffic Control:</b>	
<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>	
<b>Country:</b>	
<b>Type of Methodology Used:</b>	9
<b>Sample Size Used:</b>	

## Other Details

<b>Included in Highway Safety Manual?</b>	No
<b>Date Added to Clearinghouse:</b>	Dec-01-2009
<b>Comments:</b>	

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