



# CMF / CRF Details

CMF ID: 475

Extend deceleration lane by approx. 100 ft

**Description:**

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

**Category:** Interchange design

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

Star Quality Rating:

8 Stars

## Crash Modification Factor (CMF)

**Value:** 0.93

**Adjusted Standard Error:** 0.06

**Unadjusted Standard Error:** 0.03

## Crash Reduction Factor (CRF)

**Value:** 7 (This value indicates a **decrease** in crashes)

**Adjusted Standard Error:** 6

**Unadjusted Standard Error:** 3

Applicability

<b>Crash Type:</b>	All
<b>Crash Severity:</b>	All
<b>Roadway Types:</b>	Not Specified
<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>	Roadway/roadway (interchange ramp terminal)
<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

**Included in Highway Safety Manual?**

Yes. HSM lists this CMF in bold font to indicate that it has the highest reliability since it has an adjusted standard error of 0.1 or less. However, it also includes an asterisk (\*) to indicate that the CMF value itself is within the range 0.90 to 1.10, but that the confidence interval defined by the  $CMF \pm$  two times the standard error may contain the value 1.0. This is important to note since a treatment with such an CMF could potentially result in (a) a reduction in crashes (safety benefit), (b) no change, or (c) an increase in crashes (safety disbenefit). HSM recommends that this CMF should be used with caution.

**Date Added to Clearinghouse:**

Dec-01-2009

**Comments:**

Countermeasure name changed from "flashing beacons at four leg stop controlled intersections on two lane roads; standard and actuated beacons" to match HSM

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