



# CMF / CRF Details

CMF ID: 8482

## Install Pedestrian Signals

### Description:

**Prior Condition:** Intersections without pedestrian signals

**Category:** Pedestrians

**Study:** [Developing Crash Modification Functions for Pedestrian Signal Improvement, Sacchi et al., 2015](#)

Star Quality Rating:

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

### Crash Modification Factor (CMF)

$$CMF_{PDO} = 0.753 \times (V_{M,1}^* \times V_{m,1}^*)^{0.060} \times \exp(0.064 \times Area + (-0.054)[1 - (0.703)^S]/s)$$

Where:

$V_M$  = Major Road AADT (in thousands of vehicles)

$V_m$  = Minor Road AADT (in thousands of vehicles)

Area = Area Type Indicator (Residential = 0, Commercial = 1)

S = Number of years since treatment installation

Adjusted  
Standard  
Error:

Unadjusted  
Standard  
Error:

## Crash Reduction Factor (CRF)

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

**Adjusted Standard Error:**

**Unadjusted Standard Error:**

## Applicability

**Crash Type:** All

**Crash Severity:** 0 (property damage only)

**Roadway Types:** Not specified

**Number of Lanes:**

**Road Division Type:**

**Speed Limit:**

**Area Type:** Urban and suburban

**Traffic Volume:**

**Time of Day:** Not specified

### *If countermeasure is intersection-based*

**Intersection Type:**

**Intersection Geometry:** 4-leg

**Traffic Control:** Signalized

**Major Road Traffic Volume:** 5120 to 44800 Annual Average Daily Traffic (AADT)

**Minor Road Traffic Volume:** 650 to 9530 Annual Average Daily Traffic (AADT)

## Development Details

**Date Range of Data Used:** 2005 to 2013

**Municipality:** Metro Vancouver

<b>State:</b>	
<b>Country:</b>	Canada
<b>Type of Methodology Used:</b>	10
<b>Sample Size Used:</b>	

<b>Other Details</b>	
<b>Included in Highway Safety Manual?</b>	No
<b>Date Added to Clearinghouse:</b>	Mar-13-2017
<b>Comments:</b>	

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