



# CMF / CRF Details

**CMF ID: 4578**

**Change left-turn phase from permissive to protected/permissive or permissive/protected phasing on one or more approaches**

**Description: Change from permissive to protected/permissive or permissive/protected phasing on one or more approaches at urban signalized intersection**

**Prior Condition: Permitted phasing**

**Category: Intersection traffic control**

**Study: [Highway Safety Manual, 1st Edition, Various, 2010](#)**

<b>Star Quality Rating:</b>	
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## Crash Modification Factor (CMF)

<b>Value:</b>	0.84
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<b>Adjusted Standard Error:</b>	
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<b>Unadjusted Standard Error:</b>	0.02
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## Crash Reduction Factor (CRF)

<b>Value:</b>	16 (This value indicates a <b>decrease</b> in crashes)
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<b>Adjusted Standard Error:</b>	
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<b>Unadjusted Standard Error:</b>	2
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## Applicability

**Crash Type:** Left turn

**Crash Severity:** K (fatal),A (serious injury),B (minor injury),C (possible injury)

**Roadway Types:** Not specified

**Number of Lanes:**

**Road Division Type:**

**Speed Limit:**

**Area Type:** Urban

**Traffic Volume:**

**Time of Day:**

### *If countermeasure is intersection-based*

**Intersection Type:** Roadway/roadway (not interchange related)

**Intersection Geometry:** 4-leg

**Traffic Control:** Signalized

**Major Road Traffic Volume:** 3000 to 77000 Annual Average Daily Traffic (AADT)

**Minor Road Traffic Volume:** 1 to 45500 Annual Average Daily Traffic (AADT)

## Development Details

**Date Range of Data Used:**

**Municipality:**

**State:**

**Country:**

<b>Type of Methodology Used:</b>	2
<b>Sample Size Used:</b>	

<b>Other Details</b>	
<b>Included in Highway Safety Manual?</b>	
<b>Date Added to Clearinghouse:</b>	
<b>Comments:</b>	

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