



# CMF / CRF Details

CMF ID: 4120

## Provide split phases

**Description:** The regular 2 phases of a cycle are split into three phases. Pedestrians receive a "walk" display while the parallel traffic that would normally turn left or right through the crosswalk is held with a left or right red arrow signal and the through movement proceeds on a green signal. After the pedestrian crossing is completed, a red "steady hand" is displayed and the turns are then made on a green arrow signal while the through movement continues to move. Split phase requires dedicated turn lanes since through and turning movements are governed by different signal indications.

**Prior Condition:** The regular two phases of a traffic cycle are split into three phases. Pedestrians receive a "walk" display while the parallel traffic that would normally turn left or right through the crosswalk is held with a left or right red arrow and the through movement proceeds on a green signal. After the pedestrian crossing is completed, a red "steady hand" is displayed and the turns are then made on a green arrow signal while the through movement continues to move.

**Category:** Intersection traffic control

**Study:** [\*The Relative Effectiveness of Pedestrian Safety Countermeasures at Urban Intersections - Lessons from a New York City Experience, Li Chen, Cynthia Chen, and Reid Ewing, 2012\*](#)



Star Quality Rating:	<input type="text" value="2 Stars"/> <a href="#">[View score details]</a>
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Value:	0.44
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Adjusted Standard Error:	
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**Unadjusted Standard Error:**

**Crash Reduction Factor (CRF)**

**Value:** 56 (This value indicates a **decrease** in crashes)

**Adjusted Standard Error:**

**Unadjusted Standard Error:**

**Applicability**

**Crash Type:** Angle,Head on,Left turn,Rear end,Rear to rear,Right turn,Sideswipe

**Crash Severity:** All

**Roadway Types:** Not Specified

**Number of Lanes:**

**Road Division Type:** All

**Speed Limit:**

**Area Type:** Urban

**Traffic Volume:**

**Time of Day:** All

***If countermeasure is intersection-based***

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

**Intersection Geometry:** 4-leg

**Traffic Control:** Signalized

**Major Road Traffic Volume:**

**Minor Road Traffic Volume:**

Development Details	
<b>Date Range of Data Used:</b>	1998 to 2008
<b>Municipality:</b>	New York City
<b>State:</b>	NY
<b>Country:</b>	USA
<b>Type of Methodology Used:</b>	3
<b>Sample Size Used:</b>	Crashes
<b>Before Sample Size Used:</b>	590 Crashes
<b>After Sample Size Used:</b>	103 Crashes

Other Details	
<b>Included in Highway Safety Manual?</b>	No
<b>Date Added to Clearinghouse:</b>	Nov-01-2012
<b>Comments:</b>	The major roadway operates as one-way traffic flow. The corresponding change in crashes in the comparison group was a 44 percent reduction in multiple-vehicle crashes. This could be used to adjust the treatment effect to account for other factors not related to the treatment.

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