



## CMF / CRF Details

CMF ID: 6856

### Install adaptive traffic signal control

**Description:** ATSC is a traffic management strategy in which traffic signal timings change, or adapt, based on observed traffic demand. These systems utilize increased detection to continually collect data on observed demand, and signal timings are then re-optimized based on current data.

**Prior Condition:** Intersections with regular traffic signals

**Category:** Intersection traffic control

**Study:** [\*Estimation of the Safety Effects of an Adaptive Traffic Signal Control System, Ma et al., 2015\*](#)

Star Quality Rating:

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

### Crash Modification Factor (CMF)

Value: 0.83

Adjusted Standard Error:

Unadjusted Standard Error: 0.05

### Crash Reduction Factor (CRF)

Value: 17 (This value indicates a **decrease** in crashes)

<b>Adjusted Standard Error:</b>	
<b>Unadjusted Standard Error:</b>	5

### Applicability

<b>Crash Type:</b>	All
<b>Crash Severity:</b>	All
<b>Roadway Types:</b>	All
<b>Number of Lanes:</b>	
<b>Road Division Type:</b>	
<b>Speed Limit:</b>	
<b>Area Type:</b>	Urban and suburban
<b>Traffic Volume:</b>	
<b>Time of Day:</b>	All

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

<b>Intersection Type:</b>	Not specified
<b>Intersection Geometry:</b>	3-leg,4-leg
<b>Traffic Control:</b>	Signalized
<b>Major Road Traffic Volume:</b>	6667 to 49384 Annual Average Daily Traffic (AADT)
<b>Minor Road Traffic Volume:</b>	387 to 19010 Annual Average Daily Traffic (AADT)

### Development Details

<b>Date Range of Data Used:</b>	2006 to 2013
<b>Municipality:</b>	

<b>State:</b>	VA
<b>Country:</b>	
<b>Type of Methodology Used:</b>	Before/after using empirical Bayes or full Bayes
<b>Sample Size Used:</b>	

<b>Other Details</b>	
<b>Included in Highway Safety Manual?</b>	No
<b>Date Added to Clearinghouse:</b>	Nov-01-2015
<b>Comments:</b>	

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