



# CMF / CRF Details

CMF ID: 9765

## 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:** Traditional traffic signal

**Category:** Intersection traffic control

**Study:** [Estimating Safety Effects of Adaptive Signal Control Technology using the Empirical Bayes Method, Khattak et al., 2018](#)

Star Quality Rating:	
8 Stars	<a href="#">[View score details]</a>

Crash Modification Factor (CMF)	
Value:	0.64
Adjusted Standard Error:	
Unadjusted Standard Error:	0.063

Crash Reduction Factor (CRF)	
Value:	36 (This value indicates a <b>decrease</b> in crashes)
Adjusted Standard Error:	

**Unadjusted Standard Error:** 6.3

### Applicability

**Crash Type:** Multiple vehicle

**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 and suburban

**Traffic Volume:**

**Time of Day:** All

### *If countermeasure is intersection-based*

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

**Intersection Geometry:** 3-leg,4-leg

**Traffic Control:** Signalized

**Major Road Traffic Volume:** 3148 to 61581 Annual Average Daily Traffic (AADT)

**Minor Road Traffic Volume:** 900 to 19849 Annual Average Daily Traffic (AADT)

### Development Details

**Date Range of Data Used:**

**Municipality:** Pittsburgh

**State:** PA

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

<b>Other Details</b>	
<b>Included in Highway Safety Manual?</b>	No
<b>Date Added to Clearinghouse:</b>	Oct-27-2018
<b>Comments:</b>	Applies to crashes within 350 feet of an intersection. Both SURTRAC and InSync adaptive signal systems

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