



CMF / CRF Details

CMF ID: 6860

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: 0.996

Adjusted Standard Error:

Unadjusted Standard Error: 0.13

Crash Reduction Factor (CRF)

Value: 0.4 (This value indicates a **decrease** in crashes)

Adjusted Standard Error:	
Unadjusted Standard Error:	13

Applicability

Crash Type:	All
Crash Severity:	All
Roadway Types:	All
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:	Not specified
Intersection Geometry:	3-leg
Traffic Control:	Signalized
Major Road Traffic Volume:	
Minor Road Traffic Volume:	

Development Details

Date Range of Data Used:	2006 to 2013
Municipality:	

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

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

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