CRASH MODIFICATION FACTORS CLEARINGHOUSE

CMF / CRF Details

CMF ID: 7922

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: No adaptive traffic signal control (FAST-TRAC)

Category: Intersection traffic control

Study: *Impact of adaptive traffic control systems on crash frequency and severity*, Fink et al., 2015

Star Quality Rating:	★★★☆☆ [View score details]

Crash Modification Factor (CMF)	
Value:	0.807
Adjusted Standard Error:	
Unadjusted Standard Error:	0.009

Crash Reduction Factor (CRF)	
Value:	19.3 *(This value indicates a **decrease** in crashes)*

Adjusted Standard Error:	
Unadjusted Standard Error:	0.9

Applicability

Crash Type:	Angle
Crash Severity:	All
Roadway Types:	Not specified
Number of Lanes:	
Road Division Type:	
Speed Limit:	25-55
Area Type:	Urban and suburban
Traffic Volume:	
Time of Day:	Not specified

If countermeasure is intersection-based

Intersection Type:	Roadway/roadway (not interchange related)
Intersection Geometry:	Not specified
Traffic Control:	Signalized
Major Road Traffic Volume:	
Minor Road Traffic Volume:	

Development Details

Date Range of Data Used:	2010 to 2012
Municipality:	Oakland

State:	MI
Country:	
Type of Methodology Used:	Regression cross-section
Sample Size Used:	

Other Details

Included in Highway Safety Manual?	No
Date Added to Clearinghouse:	Mar-08-2016
Comments:	

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