



CMF / CRF Details

CMF ID: 1411

Add additional signal and upgrade to 12-inch lenses

Description:

Prior Condition: *No Prior Condition(s)*

Category: Intersection traffic control

Study: [Older Drivers at a Crossroads, Morena et al., 2007](#)

Star Quality Rating:



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

Crash Modification Factor (CMF)

Value: 0.69

Adjusted Standard Error:

Unadjusted Standard Error: 0.066

Crash Reduction Factor (CRF)

Value: 31 (This value indicates a **decrease** in crashes)

Adjusted Standard Error:

Unadjusted Standard Error: 6.6

Applicability

Crash Type:	All
Crash Severity:	All
Roadway Types:	Not specified
Number of Lanes:	
Road Division Type:	
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

Date Range of Data Used:	
Municipality:	Detroit
State:	MI
Country:	usa

Type of Methodology Used:	Simple before/after
Sample Size Used:	Crashes
Before Sample Size Used:	272 Crashes
After Sample Size Used:	189 Crashes

Other Details	
Included in Highway Safety Manual?	No
Date Added to Clearinghouse:	Dec-01-2009
Comments:	Applies to older driver crashes (ages 65+)

This site is funded by the U.S. Department of Transportation Federal Highway Administration and maintained by the University of North Carolina Highway Safety Research Center

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