



CMF / CRF Details

CMF ID: 9819

Implement transit signal priority

Description: Transit signal priority (TSP) is a type of transit preferential treatment implemented at signalized intersections to reduce (bus or urban rail) transit delays by providing extended or early green time to transit vehicles in operation.

Prior Condition: No TSP

Category: Transit

Study: [Assessing Effects of Transit Signal Priority on Traffic Safety: Empirical Bayes Before-After Study Using King County, Washington Data, Song and Noyce, 2018](#)

Star Quality Rating:	
5 Stars	

Crash Modification Factor (CMF)	
Value:	0.841
Adjusted Standard Error:	
Unadjusted Standard Error:	0.021

Crash Reduction Factor (CRF)	
Value:	15.9 (This value indicates a decrease in crashes)
Adjusted Standard Error:	

Unadjusted Standard Error:	2.1
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Applicability

Crash Type:	All
Crash Severity:	0 (property damage only)
Roadway Types:	Not specified
Number of Lanes:	
Road Division Type:	
Speed Limit:	
Area Type:	Urban
Traffic Volume:	
Time of Day:	Not specified

If countermeasure is intersection-based

Intersection Type:	Roadway/railroad grade crossing
Intersection Geometry:	No values chosen.
Traffic Control:	Signalized
Major Road Traffic Volume:	7268 to 44576 Annual Average Daily Traffic (AADT)
Minor Road Traffic Volume:	

Development Details

Date Range of Data Used:	2002 to 2015
Municipality:	King County
State:	WA

Country:	USA
Type of Methodology Used:	2
Sample Size Used:	

Other Details	
Included in Highway Safety Manual?	No
Date Added to Clearinghouse:	Oct-27-2018
Comments:	

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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