



CMF / CRF Details

CMF ID: 8428

Improve angle of channelized right turn lane

Description: Changes made to the study approaches include: sharpening the flat approach angle typical in traditional designs, reducing the radius, adjusting the stop bar position, and modifying the corner island to increase the line of sight of approaching through traffic.

Prior Condition: Varied depending on intersection

Category: Intersection geometry

Study: [*Safety Impacts of a Modified Right Turn Lane Design at Intersections, Schattler and Hanson, 2016*](#)

Star Quality Rating:



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

Crash Modification Factor (CMF)

Value: 0.558

Adjusted Standard Error:

Unadjusted Standard Error: 0.114

Crash Reduction Factor (CRF)

Value: 44.2 (This value indicates a **decrease** in crashes)

Adjusted Standard Error:	
Unadjusted Standard Error:	11.4

Applicability

Crash Type:	All
Crash Severity:	All
Roadway Types:	Not specified
Number of Lanes:	1 to 3
Road Division Type:	
Speed Limit:	
Area Type:	Not specified
Traffic Volume:	
Time of Day:	All

If countermeasure is intersection-based

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

Development Details

Date Range of Data Used:	2003 to 2016
Municipality:	Peoria

State:	IL
Country:	USA
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:	Jan-17-2017
Comments:	Total intersection AADT ranged from 3300 to 41300. Group of intersections analyzed included both signalized and stop-controlled intersections.

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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