CMF / CRF Details

CMF ID: 4116

Increase cycle length for pedestrian crossing

Description: Increase the total cycle length to lengthen pedestrian crossing time.

Prior Condition: The cycle lengths of many of the intersections on Queens Boulevard (a 12-lane thoroughfare) and Ocean Parkway (has a central 7-lane roadway, two service roads, and two medians with trees) were increased as a traffic safety countermeasure: from 120-second to 150-second on Queens Boulevard, allowing an additional 20-second walk time for pedestrians crossing the very wide main street, and from 90 to 120 seconds on Ocean Parkway, allowing an increase in pedestrian crossing time from 6 to 17 seconds.

Category: Pedestrians

Study: *The Relative Effectiveness of Pedestrian Safety Countermeasures at Urban Intersections - Lessons from a New York City Experience*, Li Chen, Cynthia Chen, and Reid Ewing, 2012

Star Quality Rating:	Stars [View score details]

Crash Modification Factor (CMF)	
Value:	0.55
Adjusted Standard Error:	
Unadjusted Standard Error:	

Crash Reduction Factor (CRF)

Value:	45 *(This value indicates a **decrease** in crashes)*
Adjusted Standard Error:	
Unadjusted Standard Error:	

Applicability

Crash Type:	Angle,Head on,Left turn,Rear end,Rear to rear,Right turn,Sideswipe
Crash Severity:	All
Roadway Types:	Not Specified
Number of Lanes:	6
Road Division Type:	All
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:	3-leg,4-leg,More than 4 legs
Traffic Control:	Signalized
Major Road Traffic Volume:	
Minor Road Traffic Volume:	

Development Details

Date Range of Data Used:	1998 to 2008

Municipality:	New York City
State:	NY
Country:	USA
Type of Methodology Used:	3
Sample Size Used:	Crashes
Before Sample Size Used:	1609 Crashes
After Sample Size Used:	357 Crashes

Other Details

Included in Highway Safety Manual?	No
Date Added to Clearinghouse:	Nov-01-2012
Comments:	The corresponding change in crashes in the comparison group was a 37 percent reduction in multiple-vehicle crashes. This could be used to adjust the treatment effect to account for other factors not related to the treatment.

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