BIG BROTHER IS WATCHING
ADDRESSING OUR CHRONIC RED LIGHT RUNNING PROBLEM

Evaluation of the Crash Effects of Victoria’s Fixed Digital Speed and Red-Light Cameras, Monash University Accident Research Centre (MUARC), May 2011

More than 20 publications were identified as potentially relevant to the study.


Evaluation of the Crash Effects of Victoria’s Fixed Digital Speed and Red-Light Cameras - Monash University Accident Research Centre (MUARC), May 2011

47% Reduction in injury crashes on the treatment approach

44% Reduction in targeted injury crashes across the intersection

26% Reduction in injury crashes across the intersection.

New South Wales (NSW) Safety Camera Review – NSW Centre for Road Safety. September 2011

26% Reduction in crashes

34% Reduction in casualties

CAS data for the past 5 years (2008 - 2012)

322 ‘Did not stop at a steady red light’, 323 ‘Did not stop at a steady red arrow’, and 334 ‘Inattentive: Failed to notice traffic lights’

Movement types HA, JA, JC and KB

HA

RIGHT ANGLE (70° TO 110°)

JA

RIGHT TURN RIGHT SIDE

JC

TWO TURNING

KB

RIGHT TURN IN
110 Too fast for conditions
- 111 Cornering
- 112 On Straight
- 113 To give way at Intersection
- 114 Approaching railway crossing
- 115 When passing stationery school bus
- 116 At temporary speed limit
- 117 At crash emergency

These do not necessarily mean the vehicles were exceeding the speed limit

130 Lost Control
- 131 When Turning
- 132 Under heavy breaking
- 133 Under heavy acceleration

There were 3,665 red light running crashes and 2,009 speed related crashes at 1,066 Intersections

50% in Auckland

21% in Christchurch City

35% were Injury Crashes
83 Intersections had 4 or more injury crashes in the past 5 years

Consistent with the HRIG threshold for using Personal Risk to establish whether an intersection can be classified as high risk

322A – driver of vehicle 1 did not stop at a steady red light

The approach with the highest number of 'at-fault' vehicle movements was selected.

Where two approaches had the equal highest number of at-fault vehicle movements, the approach with the highest 'other' vehicle movements was selected.

In situations where a crash was caused by two vehicles running a red light, the vehicle identified as Vehicle A was selected as the at-fault vehicle.

Excluded if, the 'at-fault' approach did not have multiple observations and the proportion of red-light running injury crashes was less than 20% of all injury crashes.
Intersection Summary
Red Light Injury Crashes – 17
Speed Crashes – 1
All Injury Crashes – 20
Alcohol Related Crashes – 0

Monitored Approach – SH1 East
Number of injury crashes involved vehicles travelling – 18
At Fault – 12, Other 6

39% Reduction
Potential Crash Savings of $2,664,763 per year

75 Intersections were identified as candidate sites for treatment
26% are located on the State Highway network
80% in Auckland and Christchurch
50% of the intersections have a ‘High’ or ‘Medium High’ Collective Risk
To carry out a detailed review of TCRs

To calculate the Personal Risk profile of all 75 intersections so the indicative treatment strategy can be determined

Identify the procurement and maintenance costs of dual red light and speed cameras

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