

# **Annual NSW Speed Camera Performance Review 2015**

#### **Acknowledgements**

Transport for NSW wishes to thank the following:

- NSW Ministry of Health for providing access to information in the NSW Admitted Patient Data Collection, NSW Emergency Department Data Collection and the NSW Registry of Births, Deaths and Marriages – Death registrations.
- Centre for Health Record Linkage for conducting the record linkage.
- Aboriginal Health & Medical Research Council for supporting the ongoing data linkage project.
- Dr Mike Bambach, from Transport and Road Safety (TARS) Research, University of NSW, for analyses of serious injuries not matched to police reports.
- Independent Hospital Pricing Authority for providing the International Classification of Diseases, 10th Revision, Australian Modification (ICD-10-AM) electronic code lists.
- The State Insurance Regulatory Authority (SIRA) and icare (Lifetime Care) for providing data on Compulsory Third Party insurance claims and Lifetime Care participants.
- ACT Health Directorate for providing access to information in the ACT Admitted Patient Care and ACT Emergency Department Information System data collections.

This serious injury research forms part of the routine monitoring activity undertaken by Transport for NSW to improve road safety for the community. It was approved by the following ethics committees:

- Approved by the NSW Population & Health Services Research Ethics Committee on 19th December 2013.
- Approved by the Aboriginal Health & Medical Research Council Ethics Committee on 24th January 2014.
- Approved by the ACT Health Human Research Ethics Committee on 13th November 2013.

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Date: December 2015

Version: 1

**Division:** Freight, Strategy and Planning

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### 1 Executive summary

The purpose of the Annual NSW Speed Camera Performance Review is to systematically monitor speed cameras in NSW to ensure they are having a positive road safety effect. The NSW Centre for Road Safety (CRS) has reviewed all NSW speed cameras against the criteria outlined in the NSW Speed Camera Strategy 2012, culminating in this report.

This series of annual reports addresses the recommendation from the 2011 NSW Auditor-General's audit of speed cameras, to provide the community with information about the road safety impact of speed cameras.

If a camera is found not to have a positive road safety effect, CRS will consider alternative road safety measures at the same location. The findings from this annual review will also guide future speed enforcement priorities and operations.

#### 1.1 How we review speed cameras

The review criteria for each camera type outlined in the Strategy has been determined by CRS based on the road safety benefit that is expected to be achieved from each program. Broadly speaking, review recommendations are measured by two key criteria:

- the reduction in casualty crashes and casualties, caused by the speed camera slowing drivers down, and
- the reduction in infringement rates, caused by the speed camera slowing drivers down.

Typically at least five years of crash and casualty data are required to make an assessment of a camera's safety benefit. The red-light speed camera and point-to-point enforcement programs are in their early stages, with most locations only operational for four years or less. Given the infancy of these programs, the data analysed in this annual review is generally not sufficient to assess reliably the safety benefit of individual camera locations. Where there is sufficient data, we indicate a recommendation to either retain or review the camera.

Because mobile speed cameras are designed to generally deter speeding across the road network, and because they move regularly, these annual reviews examine crash and speed data for the entire state, rather than individual mobile speed camera locations.

#### 1.2 Key findings

This annual review analyses data relating to crashes that occurred between 1 January 2014 and 31 December 2014.

#### 1.2.1 Mobile speed camera program

Program size as at 31 December 2014: 7,000 hours of enforcement per month at 640 locations

Overall, the trend in road fatalities and annual speed surveys indicate that the mobile speed camera program continues to deliver positive road safety benefits, compared with results prior to the reintroduction of the mobile speed camera program in 2010. Over 99 per cent of vehicles passing mobile speed cameras are not infringed for

speeding. This high rate of compliance has remained consistent since 2010 when the program was reintroduced.

The 2014 road toll of 307 fatalities on NSW roads is the lowest annual figure since 1923. This is also 32 per cent lower than in 2009 (with 453 fatalities), before the reintroduction of the mobile speed camera in 2010.

There has also been a 39 per cent reduction in speed related fatalities from 2009 to 2014, and results from the 2014 speed surveys show speeding remains below the level observed in 2009.

The percentage of light vehicles exceeding the speed limit by more than 10km/h in 2014 has reduced in all speed zones compared to 2013, which builds on impressive results from previous years. In 2014 fewer light vehicles were exceeding the speed limit by more than 10km/h compared to all years from 2009 to 2013.

The percentage of heavy vehicles exceeding the speed limit by up to 10km/h has increased in some speed zones compared to 2013; however, the results still compare favourably compared to previous years. Significant reductions in heavy vehicles exceeding the speed limit by over 10 km/h continued into in 2014, achieving the lowest percentages over the entire five year period in 40km/h, 50km/h, 60km/h and 90km/h zones and maintaining low levels in 100km/h zones.

#### 1.2.2 Red-light speed camera program

Program size as at 31 December 2014: 164 cameras at 145 intersections

Preliminary analysis of the red-light speed camera program show encouraging results in changing driver behaviour.

Overall, when comparing the five years before red-light speed cameras were installed to the post installation period for each camera location there has been a:

- 34 per cent reduction in casualty crashes
- 39 per cent reduction in total casualties at these locations including:
  - 55 per cent reduction in fatalities
  - o 32 per cent reduction in serious injuries
  - 45 per cent reduction in moderate injuries
  - o 36 per cent reduction in minor/other injuries
  - 44 per cent reduction in pedestrian casualties

These reductions in casualties represent a total saving of \$95.1 million to the community.

One red-light speed camera has been operating for more than five years as at 31 December 2014, Cumberland Highway, Cabramatta at St Johns Road. Since the camera was installed there has been a 16 per cent reduction in casualty crashes and a 37 per cent reduction in casualties at this location.

The 10 highest infringing red-light speed cameras all had high compliance rates with more than 99 per cent of drivers passing the cameras without being infringed for red-light running or speeding. Where cameras have been operating for longer than two years, infringements have generally decreased over time.

#### 1.2.3 Fixed speed camera program

Program size as at 31 December 2014: 132 cameras at 107 locations<sup>1</sup>

Overall, when comparing the five years before the fixed speed cameras were installed to the most recent five years there has been a:

- 38 per cent reduction in the number of casualty crashes
- 91 per cent reduction in fatalities
- 42 per cent reduction in injuries at these camera locations

These reductions in total casualties represent a saving of \$526.1 million to the community.

Of the 94 fixed speed camera locations, 86 were found to offer continued safety benefits. One location – Hartley, Great Western Highway was identified last year for review, and this will occur once road works at the location is completed. One location has been recommended to be removed because it is no longer providing road safety benefits and is recommended to be relocated to a higher priority location and the remaining six were identified for further review. The locations to be reviewed or removed are:

- Bonville, Pine Creek Way Remove
- Bomaderry, Bolong Road Review
- Brogo, Princes Highway Review
- Burringbar, Tweed Valley Way Review
- North Narrabeen, Pittwater Road Review
- Queanbeyan, Lanyon Drive Review
- Rydalmere, Victoria Road Review
- Hartley, Great Western Highway Review following road works

Cameras at three further locations have been removed due to major road works and will be reviewed once these road works have been completed. These locations are:

- Berry, Princes Highway Review following road works
- Foxground, Princes Highway Review following road works
- Terrigal, Terrigal Drive Review following road works

The 10 highest infringing fixed speed cameras were all found to reduce crashes and casualties. All had high compliance rates with more than 99 per cent of drivers passing the cameras without being infringed for speeding.

#### 1.2.4 Point-to-point speed camera program

Program size as at 31 December 2014: 24 lengths

Preliminary analysis of point-to-point speed enforcement lengths shows that there has been a low number of heavy vehicle crashes since camera operation. Infringement data for average speed offences in point-to-point enforcement lengths show a high level of compliance and a low number of infringements.

<sup>&</sup>lt;sup>1</sup> Of the 107 fixed speed camera locations, seven locations operate in warning mode and five locations are 'high risk' that are located in tunnels. These locations were not included in the fixed speed camera analysis.

#### 2 Introduction

In response to the Auditor-General's recommendation, the NSW Government announced the *NSW Speed Camera Strategy* on 1 June 2012. The strategy provides an integrated framework for speed enforcement in NSW and aims to improve the transparency and understanding of the use of speed cameras in NSW through increased community engagement and education. The strategy was developed in consultation with the NSW Police Force and NRMA Motoring and Services, and reinforces the Government's commitment to reducing fatalities and serious injuries on NSW roads.

One of the key actions outlined in the *NSW Speed Camera Strategy* is the annual publication of camera performance against criteria outlined in the Strategy. This action also meets the NSW Auditor-General's recommendation to provide the community with information about the road safety impact of speed cameras.

The purpose of the *Annual NSW Speed Camera Performance Review* is to present the results of performance monitoring carried out on each of the speed camera programs in NSW. The Auditor-General found that the right speed camera in the right place can save lives. Cameras not delivering the expected road safety benefits will be monitored and reviewed and, potentially recommended for removal. The findings from this report will guide future speed enforcement operations.

This report also addresses the NRMA Motoring & Services' request for an assessment of all high infringing speed camera locations across NSW.

#### 2.1 The speeding problem

Speeding, which encompasses excessive speed (driving above the speed limit) or inappropriate speed (driving too fast for the prevailing conditions), is unquestionably recognised as a major contributing factor in both the number and severity of traffic crashes in NSW.

Speeding increases the risk of having a crash, and increases the risk of serious injury or death in the event of a crash. Studies of survival and impact speed show that small increases in travel speed can result in large increases in braking distances and impact speed, resulting in both an increased risk of a crash and a more severe outcome. This is especially the case for crashes with less protected road users such as pedestrians and cyclists.

#### 2.2 Safety benefits of camera enforcement

Speed camera enforcement is an important road safety initiative with proven road safety benefits, and is a commonly employed method of speed enforcement in many best practice road safety jurisdictions worldwide. Speed enforcement helps to reduce the incidences of speeding on our roads, which in turn reduces the risk of crashes and reduces the likelihood of death or serious injuries in the event of a crash.

Speed enforcement activities aim to reduce speeding by increasing the perceived likelihood of being caught and punished. For an example of how we can see speed cameras changing driver behaviour, Figure 1 depicts the number of infringements per month since the commencement of enforcement at three of the highest infringing fixed speed camera locations.

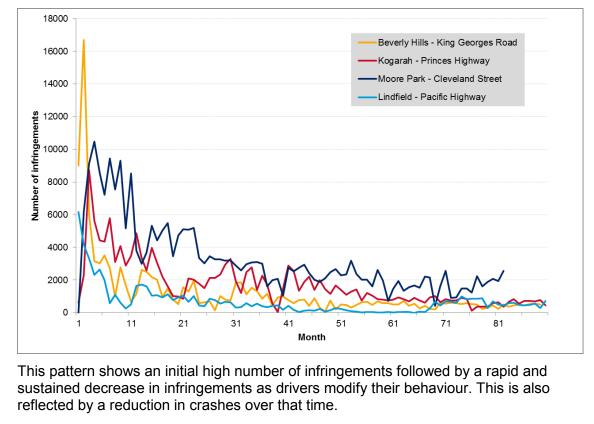


Figure 1: Example of trend in speed camera infringements over time

Appendix C contains this type of graph for every fixed speed camera location in NSW.

#### 2.2.1 Data table trends in speed camera infringements over time

Month	Beverly Hills - King Georges Road	Kogarah - Princes Highway	Moore Park - Cleveland Street	Lindfield - Pacific Highway
1	9009	599	1	6161
2	16685	2296	6176	4155
3	6040	8724	9110	3332
4	3158	5630	10479	2319
5	3017	4425	8573	2640
6	3521	4346	7232	2001
7	2714	5791	9448	588
8	982	3107	7535	1109
9	2768	4091	9313	609
10	1692	2886	5164	269
11	672	3487	8532	505
12	1157	4873	3804	1642
13	2610	3346	2991	1724
14	2497	2599	3678	1624
15	2192	3966	5314	1056
16	2024	3057	4430	1080
17	967	2216	5019	925
18	1468	1612	5486	1121
19	813	1029	3442	772
20	519	989	4734	941
21	1553	852	5114	1054
22	1281	2114	5071	664
23	1957	2008	5186	1006
24	579	1770	3334	441
25	648	1502	3015	398
26	685	2124	3464	846
27	157	2130	3263	776
28	1014	2340	3268	554
29	812	2950	3172	653
30	756	3304	3203	646
31	1838	1946	2873	317
32	1854	1203	2601	353
33	1127	2491	2964	589
34	1531	2789	3071	408
35	1315	1388	3111	548
36	857	2253	3006	395
37	1166	1728	1610	352
38	443	550	2002	431
39	923	31	2069	440
40	980	1465	1055	191

Month	Beverly Hills - King Georges Road	Kogarah - Princes Highway	Moore Park - Cleveland Street	Lindfield - Pacific Highway
41	778	2888	2751	413
42	572	2554	2533	166
43	767	1330	2757	40
44	791	1876	2931	122
45	434	2197	2421	156
46	878	1395	2029	113
47	303	1997	1873	245
48	77	1463	2101	59
49	737	1156	2488	152
50	212	1659	2672	300
51	499	1393	2294	233
52	483	1093	2336	156
53	326	1298	3188	96
54	482	1411	2384	59
55	633	758	2025	29
56	669	1202	2007	48
57	485	1040	1614	42
58	698	816	2623	27
59	592	803	1956	27
60	572	747	731	38
61	505	804	1441	5
62	502	948	1934	37
63	713	834	1331	33
64	413	704	1550	32
65	569	917	1665	1
66	269	735	1528	66
67	424	602	2199	55
68	222	936	2159 417	255
69	212	1016 638	1639	654
70 71	592 567	817	2556	453 701
72	607	760	920	677
73	577	746	920	625
74	538	899	1467	993
75	578	824	1484	821
76	535	137	1228	846
77	510	358	2237	857
78	236	360	1627	894
79	312	370	1874	280
80	459	595	2083	695
81	230	643	1935	503
82	495	365	2559	444
83	360	673	2000	587
84	461	829		614
85	492	555		466
86	444	729		440
87	534	711		478
88	553	684		553
89	506	783		280
90		455		728

#### 2.3 How can I tell if a location has a speed camera?

All speed cameras in NSW are signposted and mobile speed camera vehicles are clearly marked.

The NSW Centre for Road Safety website also lists all speed camera locations in NSW. The website allows any member of the public to find the positions of all mobile, fixed, red-light speed cameras, and the positions of all point-to-point speed zones.

#### 2.4 Where does speed camera revenue go?

All fines from speed and red light cameras are paid into the Community Road Safety Fund. This fund goes towards numerous community road safety initiatives, including road safety engineering works, enhanced enforcement by the NSW Police Force and public education campaigns. Note this does not include fines issued by police.

## 3 Types of speed camera programs in NSW

Speed cameras are speed enforcement tools that supplement enforcement conducted by the NSW Police Force. The NSW Police Force routinely nominates locations to be considered for automated speed enforcement, as they can also operate in locations that are difficult for police to enforce.

Table 1 shows the four types of speed cameras used in NSW.

Table 1: Types of speed camera enforcement in NSW

Speed cameras used in NSW									
Camera Type	Main purpose	Introduced	Size of NSW program as at 31 December 2014						
Mobile	General network deterrence	First introduced in 1991. Ceased operation in December 2008 and re- introduced in 2010	640 locations 7,000 hours of enforcement per month						
Red-light speed	Location specific (To address high risk intersections)	2009	164 cameras at 145 intersections						
Fixed speed	Location specific (To address black spot/high risk)	1997	132 cameras at 107 locations <sup>2</sup>						
Point-to-point	Route enforcement (For heavy vehicles only)	2010	24 lengths						

#### 3.1 Mobile speed cameras

Mobile speed cameras are moved around the road network at various times and locations. This means drivers are less able to predict where enforcement will occur, and so are more likely to comply with the speed limit more often. Therefore the benefit of mobile speed cameras in reducing speeding is not limited to mobile speed camera locations or for the time the camera is located there; they produce a sustained change in driver behaviour by increasing the real and perceived likelihood that speeding can be enforced anywhere at any time.

#### 3.2 Red-light speed cameras

Red-light speed cameras are installed at specific signalised intersections where drivers are vulnerable to right angle crashes and there is an elevated risk of a pedestrian crash. These cameras detect and deter both speeding and red-light running, both of which can result in severe injuries even in lower speed crashes. By reducing the incidence of speeding and red-light running at enforced intersections, red-light speed cameras are also expected to change driver behaviour at

<sup>&</sup>lt;sup>2</sup> Of the 107 fixed speed camera locations, seven locations operate in warning mode and five locations are 'high risk' locations (typically located in tunnels). These locations were not included in the fixed speed camera analysis.

intersections more broadly, reducing speeding and red-light running across the network.

#### 3.3 Fixed speed cameras

Fixed speed cameras are located at specified road lengths where there is a high crash risk or a demonstrated crash history. These cameras detect and deter speeding at a specific location on the road network.

#### 3.4 Point-to-point speed cameras

Point-to-point enforcement addresses heavy vehicle speeding along travel routes with a demonstrated history of heavy vehicle crashes and/or speeding. Point-to-point enforcement in NSW targets heavy vehicles as they are over-represented in crashes on known heavy vehicle routes. Point-to-point enforcement works by measuring the amount of time it takes a heavy vehicle to travel between two points and then calculating the average speed of the vehicle. If the vehicle's average speed is faster than the speed limit for the length of road, the driver will be infringed for speeding.

# 4 Criteria for reviewing speed cameras

The ultimate indicator of performance for all speed cameras in NSW is a reduction in people killed and injured in crashes. The following tables outline the criteria that have guided the review of speed camera performance in NSW as well as the overall performance of the *NSW Speed Camera Strategy*.

Table 2: Criteria for measuring camera performance

Camera Type	Performance data	Measure of performance
	Annual speed surveys	Reduction in vehicles exceeding speed limit across the road network, by testing a random sample of locations
Mobile	Compliance data	Increase in compliance rates and/or reduction in infringement rates
	Crash data	Reduction in crashes and casualties across NSW
	Speeds	Reduction in vehicles exceeding speed limit at intersection
Red-light speed	Compliance data	Increase in compliance at intersection and/or reduction in infringement rates
	Crash data	Reduction in casualties and crashes at intersection
	Speeds	Reduction in vehicles speeding within 500 metres of the camera
Eivad anaad	Compliance data	Increase in compliance at camera location and/or Reduction in infringement rates
Fixed speed	Crash data	Reduction in casualties and crashes within 500 metres of the camera
	Risk	Reduction in risk at the location (for example low level of speeding and/or crashes in tunnels)
	Speeds	Reduction in heavy vehicle speeding within enforcement length
Point-to-point	Compliance data	Increase in compliance within the enforcement length and/or reduction in infringement rates
	Crash data	Reduction in crashes within enforcement length

Table 3: Criteria for measuring overall performance of enforcement programs

Program	Outcome
Mobile	Reduction in road trauma, speed-related crashes and speeding across the entire road network
Red-light speed	Reduction in frequency and severity of crashes at enforced intersections (and at all signalised intersections due to deterrent effect across the network)
Fixed speed	Reduction in vehicles speeding and the frequency or severity of crashes at fixed speed camera locations
Point-to-point	Reduction in speeding and the frequency and severity of crashes on point-to-point enforcement lengths

# 5 Review methodology

#### 5.1 2014 road crash data

The crash data used in this annual review include crashes which occurred between 1 January 2014 and 31 December 2014. Data for this time period were finalised at the time of writing the report, however injury severity data presented in this report for July to December 2014 is preliminary and should be treated with caution. The matched hospital admission and emergency presentation data for this time period were incomplete at the time of writing this report so results may under-represent the true number of injuries for this time period.

The crash statistics recorded by Transport for NSW in the CRS crash recording database, CrashLink, were confined to those crashes which conform to the national guidelines for reporting and classifying road vehicle crashes<sup>3</sup>, based on the following criteria:

- The crash was reported to the Police
- The crash occurred on a road open to the public
- The crash involved at least one moving road vehicle
- The crash involved at least one person being killed or injured or at least one motor vehicle being towed away

#### 5.2 Injury severity

Crash data was presented by severity of injury. The severities are defined as follows:

- **Fatality**: a person who dies within thirty days from injuries received in a road traffic crash
- **Serious injury**: a person identified in CrashLink (casualty or traffic unit controller) who is matched to hospital admission record on the same day or on the day after a crash and did not die within 30 days of the crash
- Moderate injury: a person identified in CrashLink (casualty or traffic unit controller) who is matched to emergency department presentation record on the same day or on the day after a crash (but not subsequently admitted to hospital)
- Minor / Other injury: a person identified as an injury in CrashLink who is not matched to a hospital admission record or emergency department presentation record within two days of the crash
- Injury- Severity uncategorised: a person identified as an injury in CrashLink prior to 2005
- Casualty: any person killed or injured because of a crash
- Casualty crash: a crash that results in at least one person killed or injured

<sup>&</sup>lt;sup>3</sup> More information about how crash data is processed in NSW is available online at www.roadsafety.transport.nsw.gov.au.

#### 5.3 Important notes on crash data and injury severity

This annual review of speed cameras includes changes to crash data reported. The method of reporting tow away crash data changed in October 2014. The tow away crash data from this date is no longer comparable to the before period, and for this reason results exclude tow away crashes. Furthermore, the annual review now includes more detail about the severity of injuries for data from 2005 onwards. This improvement to the data has occurred because crash data has been matched to hospital admissions or emergency department presentations from this date onwards. Further detail is provided below.

#### 5.3.1 Additional information on tow away crash data

The crash statistics reported in this annual review excluded tow away crashes (where no people were killed or injured in the crash). Previous reviews included tow away crashes, however in October 2014 the reporting process for tow away crashes changed, which resulted in significant reductions to the number of those crashes reported and the level of detail contained in the data. This means that tow away crashes reported prior to October 2014 were not comparable to data reported after this date, and therefore were not suitable for before-and-after comparison of speed cameras.

#### 5.3.2 Additional information on injury severity

Crash data reported from 2005 onwards includes additional detail regarding injury severity, and are categorised as Serious Injury, Moderate Injury or Minor / Other Injury. Prior to 2005, crash data was not matched to hospital admissions or emergency department presentations so all non fatal injuries prior to 2005 were uncategorised with respect to the severity of injury.

Crash data for 2014 was incomplete with respect to linkage to hospital admission and emergency department presentation records and was considered preliminary. Updates to linkage of 2014 crash data to hospital admissions and emergency department presentations will occur in 2016, so the data presented in this report was preliminary and subject to change.

An important outcome to note from the data linkage matching process was the inclusion of motor vehicle traffic controllers who were not identified as "injured" in the NSW Police reports, but who were matched to a hospital record. This resulted in the identification of additional injuries.

Crash data results for injuries for the six quarters from July 2010 to the end of 2011 were over-estimated due to a coding practice change in the injury recording process. The coding practice change resulted in an over enumeration of around nine per cent for this period, mostly amongst vehicle occupants, and may influence the results of casualties and injuries for the review period across the speed camera programs. Where a camera appeared not to be performing, CRS reviewed the crash data to determine if the camera was affected by the coding practice change.

#### 5.4 Speed camera crash data

Crash data was examined at individual speed camera locations for fixed, red-light speed and point-to-point cameras to ascertain performance at camera locations. For mobile speed cameras, the annual review examined crash data for the entire state rather than individual locations due to the mobility of mobile speed cameras and their purpose of creating a general deterrence effect across the road network.

Typically at least five years of crash and casualty data are required to make an assessment of a camera's performance. Since red-light speed cameras and point-to-point enforcement programs have been operational for less than five years (with the exception of one red-light speed camera location), the data provided in the annual review were not sufficient to reliably assess the performance of individual camera locations and only preliminary observations are made.

#### 5.4.1 Red-light speed cameras

Preliminary analysis of the red-light speed camera program was conducted by intersection, rather than by camera. At the end of 2014, there were 164 red-light speed cameras in total, operating at 145 intersections around Sydney, Newcastle and Wollongong. 18 intersections had two or more cameras.

Crash data were examined at each intersection with a red-light speed camera for all crashes that occurred within 10 metres of the intersection.

- Pre installation period: crash data for the five years up to 91 days before the
  commencement date of the camera, because this was the period in which the
  camera was under construction. There are two locations where the camera
  was installed, but enforcement did not commence for some time, and a longer
  period than 91 days was used at these locations. This is indicated in the
  report.
- **Post installation period:** crash data from the commencement date of the camera to the end of 2014.

Note: Red-light speed cameras operate in warning mode for a period prior to issuing infringements.

In addition to total casualties at each location, pedestrian casualties were specifically examined given the greater exposure of pedestrians at signalised intersections and the higher likelihood of severe casualty outcomes for this group due to their lack of protection in a crash.

Data was also provided for adjacent, right through and rear-end crashes before and after camera installation as these are the crash types that typically occur at intersections. Adjacent and right-through crashes are often more severe as drivers and passengers are not as protected from side impact crashes, with low-speed side impact crashes potentially resulting in severe injuries. The frequency and severity of these crash types are expected to reduce at intersections enforced by red-light speed cameras.

Rear-end crashes were included in the preliminary analysis, as it has been reported that red-light cameras can lead to an increase in rear-end crashes due to drivers suddenly stopping on an amber light. Red-light speed cameras are intended to counteract the potential increase in rear-end crashes by also enforcing speed, as it is easier for drivers to brake in time to avoid a rear-end collision when they are driving at lower speeds.

Individual camera locations were not assessed because very few locations have been in operation for a long enough time period to appropriately measure their performance.

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 <sup>&</sup>lt;sup>4</sup> Austroads (2009). *Guide to Road Safety Part 8: Treatment of Crash Locations*. Publication No. AGRS08/09.
 <sup>5</sup>Budd, L., Scully, J. & Newstead, S.. (2011). *Evaluation of the Crash Effects of Victoria's Fixed Digital Speed and Red-light Cameras*, Report No. 307, Monash University Accident Research Centre., Publicly available from: http://www.monash.edu.au/miri/research/reports/muarc307.pdf.

#### Additional technical notes for the analysis of red-light speed cameras

- 1. To identify crashes at each intersection, CRS initially examined crashes geo-coded as within 90 metres of the Traffic Control System (TCS) feature and that occurred at the intersection. Crashes were then assigned to the enforced intersection if they occurred within, or up to 10 metres from, the intersection.
- 2. These were viewed and attributed to the intersection under analysis taking into account the geo-coding as well as the values in the street name, the ID feature, and the intersection-type fields.
- 3. Where unclear, the correct location of the crash was confirmed or inferred from the original police report.
- 4. The commencement of the warning letter period was listed for each camera. For the analysis of intersections with two cameras, the post installation period began with the earlier commencement date.
- 5. Data for each crash type (adjacent, right- and rear-end) was reported based on Road User Movement (RUM) codes. RUM codes describe the first impact that occurred during the crash. Adjacent crashes are indicated by RUM code 10; Right-crashes are coded 21 and rear-end crashes are coded 30. More information on RUM codes can be found in the Definition and notes to support road crash data at http://roadsafety.transport.nsw.gov.au/downloads/definitions-notes.pdf
- 6. The improvement rates for crashes and casualties were based on the annual averages in crashes and casualties at each location before and after the cameras were installed. This allowed an approximate comparison to be made between the five year pre installation period and the available data for the post installation period until December 2014 (currently less than five years for nearly all red-light speed camera locations).
- 7. The estimated casualty cost saving for the program was calculated comparing the post installation to the pre installation data using the willingness to pay methodology which reflects the accumulated value the NSW community is willing to pay or forgo in exchange for a reduction in the probability of crash related injuries and road crash deaths on NSW roads. The casualty costs used were \$6,785,013 per fatality, \$244,770 per serious injury and \$51,534 per moderate or minor/other injury, based on the costs for urban fatal and injury reductions.
- 8. Data for the crash analysis were not ranked and were presented alphabetically by suburb of the camera location.

#### 5.4.2 Fixed speed cameras

Analysis of the fixed speed camera program was conducted by fixed speed camera location, rather than by camera. While there are currently 107 fixed speed camera locations across NSW, 94 fixed speed camera locations were analysed in this report. Of the 107 locations, the following were excluded from this performance review:

- Seven locations operate in warning mode following the 2011 audit of speed camera programs. These cameras were not reviewed as part of the performance review, but each annual report includes information on crashes and infringements at these locations.
- Five locations are located in tunnels (and were sometimes referred to in the review as "high risk" locations). These were generally installed when the tunnel was constructed, therefore no pre-installation data are available.

 One location (Sandgate, Pacific Highway) which was identified for removal following the 2013 annual review, and is due to be switched off and removed once safety works have been completed at the location.

For each of the 94 locations included in the analysis, typically crash data within 500 metres either side of the fixed speed camera was examined. For cameras located within a school zone, crash data was examined from patch-to-patch (i.e. the length of road designated as a school zone, as identified by the start and end patches marked on the road). For locations with more than one camera in operation (where cameras are less than 100 metres apart), the crash analysis length was for 500 metres either side of the mid-point of the two cameras.

One fixed speed camera location - the M1 Princes Motorway (formerly the F6, Southern Freeway) Gwynneville - had two cameras operating approximately 1,000 metres apart and infringing in different directions. In this report, these two cameras were listed as separate locations in the directions they enforce. However, crash and infringement data for these locations are included in each annual report.

Fixed speed camera performance was measured through analysis of crash data from the "before" period (pre installation) and the "after" period (post installation). In most cases, the analysis provided crash data for the five year before period, ending three months directly before the commencement date (as this was the period in which warning letters are issued). The after period was the most recent five calendar year period (20010 - 2014) to assess the current performance of the speed camera.

Based on the before and after period crash analysis, and along with other relevant site specific information, for each fixed speed camera location, the report made a recommendation of either:

- Retain
- · Recommended for review, or
- Reviewed in the past five years and not considered for review this year

Fixed speed camera locations were recommended for review when:

- The number of casualty crashes in the last five years had increased compared to the before period.
- The number of casualties in the last five years had increased compared to the before period.
- There was a low road safety risk at the location based on the crash history and there was a low level of speeding based on the infringement data at the location.
- Major road works such as curve re-alignment or highway duplication had significantly improved safety at the location.

Where a fixed speed camera location was identified for review based on the above criteria, a further desktop review of the location was conducted, to determine the appropriateness of the recommendation. This analysis considered the trend in casualty crashes, the circumstances of fatal crashes at the location, the specific types of crashes that occurred at the location and any other known site-specific details that assist in making a recommendation. Where there was additional information which supported the retention of the camera, this is indicated in the report and the camera is recommended to be retained.

#### Additional technical notes for the analysis of fixed speed cameras

- 1. The commencement date listed for each location refers to the date that the fixed speed camera commenced infringement at that location. For locations where more than one fixed speed camera is in operation, the date listed refers to the date that the *first camera* started infringing at that location unless specified otherwise.
- 2. For each location, the pre and post installation periods vary depending on the date the camera commenced infringement, and excluded the three month period directly before the commencement date. For each location, the pre installation period was defined as the five year period up to three months prior to the commencement date of camera infringements. The post installation period was defined as the most recent five year calendar period.
- 3. In instances when there was less than five years of pre installation data, the pre installation period was adjusted so that it represented an equivalent five year period.
- 4. The percentage reduction for crashes and casualties are based on the annual averages in crashes and casualties at each location before and after the cameras were installed. This allows an approximate comparison to be made between the five year pre installation period and the most recent five calendar year post installation period (2010 2014).
- 5. The estimated casualty cost for the pre installation and the most recent five calendar year post installation was calculated using the willingness to pay methodology which reflects the accumulated value the NSW community is willing to pay or forgo in exchange for a reduction in the probability of crash related injuries and road crash deaths on NSW roads. The casualty costs used were \$7,090,792 per fatality, \$291,817 per serious injury, \$59,871 per moderate or minor/other injury and \$138,713 per uncategorised injury, based on the costs for weighted average of urban and non-urban fatal and injury reductions.
- 6. For each fixed speed camera location a test of significance of the change in casualty crashes was conducted using the conditional method<sup>6</sup> comparing the number of casualty crashes in the after period with the conditional distribution of the casualty crashes in the after period given the total casualty crashes in both the before and after period to determine if there was a significant increase or decrease.
- 7. Data for the crash analysis have not been ranked and are presented alphabetically on the location description of the camera location.

#### 5.4.3 Point-to-point speed cameras

At the end of 2014, there were 24 point-to-point enforcement lengths: two lengths were installed in 2010; 13 lengths were installed in 2011; four lengths were installed in 2012; two lengths were installed in 2013; three lengths were installed in 2014. The remaining point-to-point length was installed in early 2015. There were eight lengths that enforced for the entire 2012 - 2014 review periods; however this was still a period of four years or less and was insufficient to assess the performance of individual enforcement lengths.

The report provided heavy vehicle crash data for the five year period prior to the length commencing enforcement and available data for the period after the length was activated in warning period.

<sup>&</sup>lt;sup>6</sup> Przyborowski, J., Wilenski, H., 1940. Homogeneity of results in testing samples from Poisson series. *Biometrika 31*, 313–323.

#### 5.5 Speed survey data

Vehicle speeds were assessed state-wide through the CRS annual speed survey program. In 2014 annual speed surveys were conducted at 175 locations across NSW.

Each year, CRS conducts speed surveys across NSW on a range of roads with a range of speed limits to gather current information about speeding behaviour of both light vehicles and heavy vehicles. The surveys measure free travel speeds, with a headway of four seconds. That is, only the speeds of vehicles that are unimpeded by other traffic are measured. Therefore the survey provides a measure of the speed that drivers choose to travel rather than a measure of traffic congestion.

Speed surveys are not undertaken at specific speed camera enforcement locations, therefore at camera locations infringement data is used as a proxy for speed data in this review. Speed surveys are undertaken at a sample of speed camera enforcement locations so that speeding behaviour can be assessed for these programs.

#### 5.6 Infringement data

Recent infringement data were used as a proxy measure of speeding behaviour at camera locations. Infringement data analysed in this report included penalty notices detected by Roads and Maritime Services speed cameras from July 2002 onwards (no earlier infringement data was available).

All fines from speed cameras are directed to the Community Road Safety Fund to pay for road safety programs across the state. Infringement data for red-light speed cameras, fixed speed cameras and mobile speed cameras are publicly available through the NSW Office of State Revenue (http://www.osr.nsw.gov.au/info/statistics).

# **6** What happens after cameras are reviewed?

#### 6.1 Monitoring the speed cameras that are delivering safety benefits

Fixed speed cameras remain in place when they are found to be delivering road safety benefits. All such cameras continue to be reviewed each year as part of the annual speed camera performance review.

#### 6.2 Identifying cameras that require a safety review

Safety reviews involve a comprehensive examination of crash history, traffic volumes, road conditions, land use and high risk user behaviour near the fixed speed camera location. Safety reviews also involve the consideration of road safety issues raised by the community in regard to the locations.

If the review determines that the camera is not delivering the expected safety benefits at the location, it will be recommended for removal and possible relocation, and alternative road safety treatments will be considered to address any identified road safety issues. Alternative treatments may involve improved signage, road works, traffic facilities, speed zoning reviews and targeted communications.

#### 6.3 Decommissioning the speed cameras that are not improving safety

In July 2011, the NSW Auditor-General released an audit report on the statewide speed camera program. The report identified 38 speed cameras that were not delivering the expected road safety benefit. Consequently, the Minister for Roads, Maritime and Freight directed that these 38 cameras be deactivated; however, cameras at seven of these locations remain in warning mode following safety concerns expressed by the community.

Since the Auditor-General's report, annual speed camera performance reviews report on the road safety performance of speed cameras across the state. Where speed cameras are required to be deactivated and removed because they are not delivering expected road safety benefits, Transport for NSW consults with key stakeholders to develop alternative road safety treatments to address existing road safety risks at each location. These key stakeholders include local communities, councils, nearby schools (if the camera is located in a school zone), NRMA Motoring and Services, the NSW Police Force.

As at 31 December 2014 speed cameras had been removed from 25 locations. At the remaining locations that have been identified for decommissioning, a program of alternative safety works has commenced. At each site, when the alternative safety works have been completed, the speed cameras and signage will be removed. The exception is the speed camera location at Pacific Highway, Sandgate; these cameras remain in operation and will be switched off and removed once safety works are completed.

#### 6.4 Results of last year's review

The 2014 Annual NSW Speed Camera Performance Review identified two fixed speed camera locations for comprehensive review: Richmond Road, Berkshire Park; and Great Western Highway, Hartley.

 Richmond Road, Berkshire Park: The review of Richmond Road, Berkshire Park was conducted in November 2014, and recommended that the speed camera be retained as it continues to provide road safety benefits. • **Great Western Highway, Hartley**: The speed camera on the Great Western Highway, Hartley has not yet been reviewed due to planned road works at this location. Because the change in the road environment is likely to affect the performance of the camera, it will be reviewed following the completion of the road works in 2016.

#### 7 Results and discussion

This review has found that across the four programs, speed cameras are continuing to improve road safety in NSW. Early results from the red-light speed, mobile speed and point-to-point camera programs show that drivers are changing their behaviour, which overall is resulting in a reduction in crashes and casualties at camera locations and across the road network. However, with less than five years of operation, it is still too early to assess the longer term safety benefit of these new programs. CRS will continue to monitor the performance of these programs annually.

#### 7.1 Mobile speed cameras

The analysis of the mobile speed camera program is available at **Appendix A**.

In August 2011, a review of the NSW mobile speed camera program found that in the first year of operation (19 July 2010 to 18 July 2011) the program contributed to a 19 per cent statistically significant reduction in fatalities throughout NSW. This represents a saving of 89 lives and an estimated community saving of around \$575 million.

The immediate impact of the reintroduced mobile speed cameras is evident. The significant reduction in fatalities (and speed-related fatalities) in 2010, the first year of the program, can be attributed to the effect of enforcement as well as the deterrence effect, which produced broader speed limit compliance due to the less predictable enforcement of mobile speed cameras.

The ongoing impact of the mobile speed camera program is reflected in the 2014 road toll. The 2014 road toll of 307 fatalities on NSW roads is the lowest annual figure since 1923 (with 231 fatalities). This is also 32 per cent lower than in 2009 (with 453 fatalities), before the reintroduction of the mobile speed camera in 2010. Speed-related fatalities over 2009 to 2014 have also gradually decreased over this period, with the number of speed-related fatalities of 127 in 2014 being the lowest number ever recorded and representing a 39 per cent reduction compared to 2009 levels.

Results from the 2014 speed surveys show speeding continues to remain below the level observed in 2009, prior to the reintroduction of the mobile speed camera program in 2010.

The percentage of light vehicles exceeding the speed limit by more than 10km/h in 2014 has reduced in all speed zones compared to 2013, which builds on impressive results from previous years. The results show that in 2014 fewer light vehicles were exceeding the speed limit by more than 10km/h compared to all years from 2009 to 2013. As a percentage, this figure has remained lower than 2009 to 2011 figures.

The percentage of heavy vehicles exceeding the speed limit by up to 10km/h has increased in some speed zones compared to the previous year. While some of the reductions in heavy vehicle speeding by up to 10km/h have been lost, the 2014 results still compare favourably compared to previous years. Significant gains in reducing heavy vehicles exceeding the speed limit by more than 10 km/h have been maintained in 2014, achieving the lowest percentages over the entire five year period in 40km/h, 50km/h, 60km/h and 90km/h zones and maintaining a low level of speeding at this level in 100km/h zones.

Overall, the trend in road fatalities and annual speed surveys demonstrates that the mobile speed camera program continues to deliver positive road safety benefits, compared with results prior to the reintroduction of the mobile speed camera program. The general decrease in speeding observed in the annual speed surveys,

over the past five years, provides evidence that mobile speed cameras provide a general deterrence to drivers.

In 2014 the mobile speed camera program increased from around 930 hours of enforcement to the full program size of 7,000 hours of enforcement per month. With this larger program, there is a greater coverage of the road network at various times and locations and, like police enforcement, this mobility increases the deterrence effect due to the unpredictability of the exact location of speed enforcement.

In 2014 there were a total of 55,467 infringements resulting in \$10.54 million in fines from mobile speed camera enforcement. The cost of conducting the mobile speed camera program in 2014 was \$17.4 million.

From June 2012, there was a decrease in infringements that can be attributed to the enhanced visibility of mobile speed camera vehicles as well as additional signage being placed before a mobile speed camera to ensure drivers see and recognise the enforcement activity. At the same time, mobile speed cameras also switched from enforcing in both directions to single direction enforcement, further contributing to the lower volume of infringements. In 2014, the number of infringements issued increased in line with the increased level of enforcement by month, although there appears to be a downward trend towards the latter half of 2014. This trend indicates that driver behaviour has changed with to the higher level of mobile speed camera enforcement.

Since the program was reintroduced in 2010, the compliance rate of vehicles passing a mobile speed camera that are not infringed for speeding remains high. In 2014, 99.79 per cent of vehicles passing mobile cameras were not infringed for speeding.

CRS has developed and implemented a speed camera public education campaign that has supported the rollout of the mobile speed camera program. CRS evidence shows that enforcement and strong public education campaigns change driver behaviour and help prevent speed-related crashes and trauma through awareness of enforcement.

CRS has identified 26 of the 640 approved mobile speed camera locations that were previously used by the Police but are no longer operationally useful because no suitable enforcement sites have been identified. Therefore these enforcement locations are not providing a road safety benefit because there is no enforcement at these locations. These locations are listed in the table below and will be decommissioned.

Table 4: Mobile speed camera locations to be decommissioned

Suburb/Town	Road
Annandale, Camperdown, Leichhardt, Petersham, Stanmore	Parramatta Road
Ashfield, Haberfield, Summer Hill	Parramatta Road
Auburn, Clyde, Granville, Harris Park	M4 Motorway
Beaumont Hills, Kellyville, Kellyville Ridge, Stanhope Gardens	Windsor Road
Belford, Branxton, East Branxton, Lower Belford	New England Highway
Beresfield	John Renshaw Drive
Burwood, Concord, Croydon, Five Dock	Parramatta Road
Burwood, Concord, Homebush, North Strathfield, Strathfield	Parramatta Road
Camperdown, Chippendale, Forest Lodge, Glebe, Ultimo	Parramatta Road
Capertree, Round Swamp	Castlereagh Highway
Cartwright, Hinchinbrook, Hoxton Park, Miller, Prestons	Hoxton Park Road
Cassilis, Uarbry	Golden Highway
Centennial Park, Woollahra	Oxford Street
Coffs Harbour, Korora, Moonee Beach, Sapphire Beach	Pacific Highway
Corowa	Redlands Road

Suburb/Town	Road
Cremorne, Mosman, Neutral Bay	Military Road
Dean Park, Doonside, Glendenning, Oakhurst, Quakers Hill	Richmond Road
Dumaresq Island, Glenthorne, Pampoolah	Pacific Highway
East Gosford, Point Frederick	York Street
East Maitland, Maitland, South Maitland	New England Highway
Finley, Tocumwal	Newell Highway
Gateshead	Pacific Highway
Hartley, South Bowenfels	Great Western Hwy
Kingsvale, Wombat, Young	Back Creek Road
Marchmont, Murrumbateman	Barton Highway
Monak	Sturt Highway

#### 7.2 Red-light speed cameras

The analysis of red-light speed camera locations is available at **Appendix B**.

Overall, there has been a 34 per cent reduction in casualty crashes and a 39 per cent reduction in total casualties at the 145 red-light speed camera locations since the cameras were installed compared with the five year period prior to installation. Of the total casualties, there has been a 55 per cent reduction in fatalities, 32 per cent reduction in serious injuries, 45 per cent reduction in moderate injuries and a 36 per cent reduction in minor/other injuries. This reduction in casualties represents a saving of \$94.8 million to the community.

There was a 44 per cent reduction in pedestrian casualties at red-light speed camera locations. There has also been a reduction in the three main intersection crash types with a 49 per cent reduction in adjacent crashes; a 36 per cent reduction in right-through crashes; and a 22 per cent reduction in rear-end crashes. The reduction in rear-end crashes is a positive result for the combination of red-light and speed enforcement because previous research has found that while red-light cameras reduce more severe right-angle crashes, rear-end crashes can sometimes increase. The addition of speed enforcement to red-light cameras is a countermeasure that assists in addressing the small increase in rear-end crashes at red-light speed camera locations. As can be seen from the results, it also reduces pedestrian casualties due to a decrease in vehicle speeds.

In 2014 there were a total of 281,546 infringements resulting in total fines of \$91.91 million at red-light speed camera intersections. In NSW, the penalty for running a red-light is higher than most speeding penalties because the consequences of this behaviour pose a greater risk. Red-light running can lead to severe T-bone and pedestrian crashes where the front of a car impacts with a pedestrian or the less protected side of a car. Generally, around 60 per cent of offences and 80 per cent of fines at red light speed camera locations are attributed to running a red light. Of the total red-light speed camera infringements for 2014: 164,636 (58 per cent) infringements and \$71.41 million in fines were for red-light offences; and 116,910 (42 per cent) infringements and \$20.50 million in fines were for speeding offences.

One red-light speed camera has been operating for more than five years as at 31 December 2014, Cumberland Highway, Cabramatta at St Johns Road. Since the camera was installed there has been a 16 per cent reduction in casualty crashes and a 37 per cent reduction in casualties at this location.

In next year's annual review a further 57 red-light speed camera locations will have a full five years of crash data following installation, at this time a decision will be made whether to retain the cameras or conduct comprehensive reviews of their performance.

As part of the *NSW Speed Camera Strategy*, the number of intersections with redlight speed cameras will expand to 200. As the red-light speed camera program continues to roll out, an increase in the volume of infringements is anticipated. However, following the program increase the number of infringements is expected to stabilise and return to a downward trend as driver behaviour changes.

At this stage, red-light speed cameras have not been in operation for long enough for there to be a meaningful trend in infringements. However, it is expected that red-light running and speeding at red-light speed camera intersections will decrease over time, thereby reducing the number of infringements and fines at these locations. While red-light running decreased slowly over time, speeding decreased more rapidly. This demonstrates an improvement in driver behaviour as a result of red-light speed cameras.

Early results for the NSW program also indicate that the expected road safety benefits are being achieved when compared with the evaluation of a similar program in Victoria<sup>7</sup>. While these early results are encouraging, it is too early to conclusively determine the safety benefit of individual locations and therefore no recommendations for review are proposed in this report. Typically at least five years of crash and casualty data are required to make an assessment of a camera's performance.

The 2013 review identified the below four locations where there has been a fatality since camera operation:

- Griffiths Road and Turton Road, Lambton
- O'Riordan Street and Gardeners Road, Mascot
- · Anzac Parade and Lang Road, Moore Park
- Corrimal Street and Burelli Street, Wollongong

These fatalities occurred in 2012. No fatalities were identified in 2013 or in the current review period (2014 calendar year). While the cameras at these locations will not be considered for removal, the Centre for Road Safety conducted an initial investigation into the nature of these fatal crashes, with site investigations conducted at Griffiths and Turton Road, Lambton, and Corrimal Street and Burelli Street, Wollongong.

The investigation at O'Riordan Street and Gardeners Road, Mascot identified no safety deficiencies, and revealed the intersection will be upgraded in the near future as part of re-development work associated with Green Square. No safety deficiencies were also identified at the intersection at Anzac Parade and Lang Road, Moore Park.

Following the site investigation at Griffiths Road and Turton Road, Lambton, the traffic light display for eastbound motorists was upgraded. A mast arm has been installed which slightly overhangs the kerbside lane to improve the visibility of traffic lights to oncoming vehicles. A speed review was conducted at this location in 2014.

Following the site investigation at Corrimal Street and Burelli Street, Wollongong, additional pedestrian protection was provided by installing red arrows to control vehicles waiting to turn into adjacent streets. An upgrade to the line marking on Corrimal Street was also completed.

The review identified the 10 red-light speed camera locations with the highest number of infringements detected in 2014. The list is shown at the end of **Appendix B**. Most of the 10 speed camera locations are on main roads with high traffic volumes. As the red-light speed camera program has not been in operation for five years, it is too early

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<sup>&</sup>lt;sup>7</sup>Budd, L., Scully, J. & Newstead, S.. (2011). *Evaluation of the Crash Effects of Victoria's Fixed Digital Speed and Red-light Cameras*, Report No. 307, Monash University Accident Research Centre., Publicly available from: http://www.monash.edu.au/miri/research/reports/muarc307.pdf.

to assess the performance of these cameras. However, all had high compliance rates with more than 99 per cent of drivers passing the cameras without being infringed for red-light running and/or speeding.

#### 7.3 Fixed speed cameras

The analysis of fixed speed camera locations is available at **Appendix C**.

Overall, when comparing the five years before the fixed speed cameras were installed to the current five year analysis period, there has been a 38 per cent reduction in the number of casualty crashes, a 91 per cent reduction in fatalities and a 42 per cent reduction in injuries at camera locations. In the five years before the cameras were installed there were 1,648 casualty crashes, resulting in 55 fatalities and 2,235 injuries. In the current five year analysis period there were 1,040 casualty crashes resulting in 5 fatalities and 1,315 injuries. This reduction in casualties represents a savings of \$526.1 million to the community. In 2014 a total of 296,059 infringements were issued resulting in total fines of \$60.87 million at fixed speed camera locations.

The majority of fixed speed cameras were found to be providing road safety benefits. The top 10 performing speed cameras based on a statistical analysis of the change in casualty crashes are listed in the table below.

· ·	•	
Location	% Change in casualty crashes	% Change in casualties
Canterbury Road, Canterbury	↓62%	↓62%
Parramatta Road, Auburn	↓67%	<b>↓75%</b>
Terrigal Drive, Terrigal	↓84%	↓88%
Pacific Highway, Ewingsdale	↓93%	↓96%
Hume Highway, Lansvale	↓51%	↓52%
King Georges Road, Beverly Hills	↓38%	↓39%
Bexley Road, Bexley North	↓57%	↓66%
Pennant Hills Road, Carlingford	↓45%	↓49%
M1 Princes Motorway, Gwynneville (northbound)	↓73%	↓84%
James Ruse Drive, Camellia	↓44%	↓53%

Table 5: Top performing fixed speed cameras

Based on the analysis of 94 fixed speed camera locations, 8 locations were identified for a preliminary desktop review based on meeting at least one of the crash analysis criteria outlined in the review methodology section. These locations were:

- Bomaderry, Bolong Road
- Bonnyrigg, Elizabeth Drive
- Bonville, Pine Creek Way
- Burringbar, Tweed Valley Way
- Brogo, Princes Highway
- North Narrabeen, Pittwater Road
- Queanbeyan, Lanyon Drive

Rydalmere, Victoria Road

Preliminary reviews of these locations were undertaken to gain an understanding of exactly what had occurred at each location.

The camera at one location, Bonnyrigg, Elizabeth Drive, was retained following the preliminary review.

The camera at Bonville was identified as no longer providing road safety benefits following the preliminary review, and is recommended to be removed. This fixed speed camera is located on Pine Creek Way, a former section of the Pacific Highway that has been bypassed, has a recent crash history that shows few casualties, a low level of speeding infringements and has had community representations requesting its removal. Due to the low number of recent crashes, and that there is a low level of road safety risk at this location due to the Pacific Highway duplication works, it was determined that a comprehensive review was not required and the camera should be switched off immediately and removed and relocated to another high priority location.

The remaining six locations were identified for comprehensive safety reviews to be undertaken by CRS. These locations are:

- Bomaderry, Bolong Road
- Brogo, Princes Highway
- Burringbar, Tweed Valley Way
- · North Narrabeen, Pittwater Road
- Queanbeyan, Lanyon Drive
- Rydalmere, Victoria Road

Additionally, one fixed speed camera location – Hartley, Great Western Highway – was identified for review in last years' annual review. This comprehensive review will be conducted following the road works that are being conducted at this location.

In total, 86 fixed speed camera locations found to offer continued safety benefits and will be retained. Three of these locations were removed in 2014 or 2015 due to major safety works. These locations will be assessed for whether there is still a need for ongoing speed enforcement following the road works at these locations. These locations are:

- Berry, Princes Highway
- Foxground, Princes Highway
- Terrigal, Terrigal Drive

The review also identified the 10 fixed speed camera locations with the highest number of infringements detected in 2014, excluding cameras located in high-risk locations, such as tunnels. The list is shown at the end of **Appendix C**.

Most of the 10 speed camera locations are on main roads with high traffic volumes. All of these locations were identified to be retained in the annual review, delivering crash and casualty reductions. All had high compliance rates with more than 99 per cent of drivers passing the cameras without being infringed for speeding.

The seven locations with fixed speed cameras in warning mode are not included in the fixed speed camera analysis. However a report on crash and infringement results since the camera locations began operating under the '3 strikes' warning letter program is available at **Appendix D**.

#### 7.3.1 Point-to-point speed cameras

The analysis of the point-to-point speed camera program is available at **Appendix E**.

There were 24 lengths of the point-to-point enforcement program rolled out by the end of 2014. However, it is too early to assess the performance of individual point-to-point enforcement lengths as two lengths were installed in 2010, 13 in 2011, five in 2012, two in 2013 and three installed in 2014. Only one point-to-point length, Great Western Highway between Meadow Flat and Raglan, has enforced for a full four year period (2011 - 2013).

A total of 1,581 speeding infringements were issued resulting in total fines of \$0.69 million at point-to-point lengths in 2014. Infringement data for average speed offences in point-to-point enforcement lengths shows a high level of compliance within the enforcement lengths and a low number of infringements. This is consistent with results in other point-to-point programs. Numerous studies have shown that point-to-point enforcement is typically associated with very high rates of compliance with posted speed limits even when traffic volume is high<sup>8</sup>. For example, rates of infringement associated with point-to-point enforcement (light and heavy vehicles) on the Hume Highway, Victoria have been reported at 1-2 per cent.<sup>9</sup>

#### 7.3.2 Future of NSW speed camera programs

The NSW CRS will continue to annually review all individual speed cameras as well as the overall performance of speed camera programs as set out in the *NSW Speed Camera Strategy*. These reviews will be annually published to ensure that the programs remain transparent to the community.

The fixed speed camera program continues to provide positive road safety benefits to the locations where they are installed, and will be annually assessed to ensure they continue delivering a positive road safety benefit. The NSW CRS will review locations that do not show crash and/or casualty reductions, and will remove cameras at locations that are found to not deliver clear road safety benefits.

While it is too early to assess the safety benefit of the red-light speed, mobile speed and point-to-point speed camera programs, the early results from these programs are encouraging, with evidence of changes in driver behaviour. This is also reflected in an improvement in the road toll for 2014.

<sup>&</sup>lt;sup>8</sup> Soole, D. W., Fleiter, J. and Watson, B. (2011) *Point-to-point speed enforcement: A technological overview, review of the empirical evidence and recommendations for better practice*, Draft final report for Austroads Steering Committee, Austroads, Sydney, Australia.

<sup>&</sup>lt;sup>9</sup>Soole, D. W., Fleiter, J. and Watson, B. (2012). *Point-to-point speed enforcement*. Austroads Research Report, AP-R415-12.

# A. Appendix A: Analysis of the NSW mobile speed camera program

#### A.1 NSW Road toll data

In August 2011, the review of the NSW mobile speed camera program<sup>1</sup> found that in the first year of operation there was a 19 per cent statistically significant reduction (p<0.001) in fatalities throughout NSW since the re-introduction of mobile speed cameras (chi-square test of independence at 0.05 probability level).

In the year before mobile speed cameras (19 July 2009 – 18 July 2010) there were 446 fatalities in NSW, whereas in the year after mobile speed cameras (19 July 2010 – 18 July 2011) there were 357 fatalities. This represents a saving of 89 lives and an estimated community saving of around \$575 million (based on willingness-to-pay methodology).

The ongoing impact of the mobile speed camera program is reflected in the 2014 road toll. There were 307 persons killed on NSW roads in 2014. The 2014 road toll result for NSW is a continuation of the significant improvements in the road toll over several decades. From a peak of 1,384 fatalities in 1978 the NSW road toll has reduced by more than 70 per cent to the 2014 figure.

The 2014 result represents the lowest annual figure since 1923 (with 231 fatalities). This is also 32 per cent lower than in 2009 (with 453 fatalities), before the reintroduction of the mobile speed camera in 2010.

Current NSW road toll levels are significant given that the population has more than tripled, the number of licence holders has increased nearly 50 fold and a more than sixty fold increase in registered motor vehicles since 1923. The 2014 fatality rate per population (4.1) is also the lowest since records began in 1908. However, speed continues to remain the biggest killer on NSW road, with 41 per cent of fatalities attributable to speed in 2014. More can be done to further drive reductions in the NSW road toll, and mobile speed cameras will continue to play an important role.

#### A.2 Speed related injuries and fatalities

The positive impact of the mobile speed camera program to date is also reflected in the reduction of speed-related fatalities and injuries. In 2014, there were 4,188 casualties from speed-related crashes, which is a reduction in speed-related casualties compared to 2009 results (4,358), before the mobile speed camera program was reintroduced. Since the reintroduction of the mobile speed camera program, speed-related fatalities have decreased each year that the program has been in operation. In 2014, speed-related fatalities reduced by 39% when compared to 2009.

<sup>&</sup>lt;sup>1</sup> NSW Centre for Road Safety (2011). NSW Mobile Speed Camera Review. NSW Centre for Road Safety.

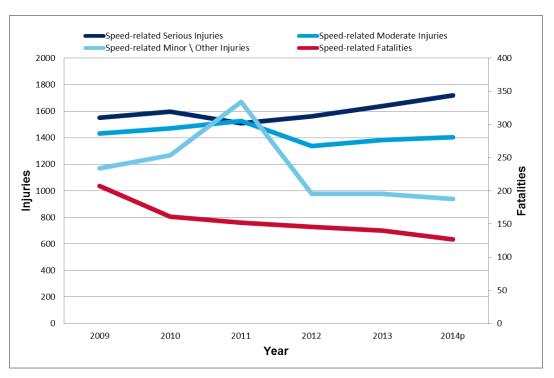


Figure A1: Speed-related fatalities and injuries, 2009-2014

#### A.3 2014 Annual speed surveys

The results represent a summary of annual speed survey results from 2009-2014. Results are presented separately for light and heavy vehicles, and show:

- mean speed;
- 85th percentile speed (i.e. speed that 85 per cent of vehicles are below and 15 per cent of vehicles are exceeding);
- percentage exceeding the speed limit by up to 10km/h; and
- percentage exceeding the speed limit by more than 10km/h.

Vehicle speeds are assessed state-wide through annual speed surveys undertaken by the Centre for Road Safety at the same locations every year. These speed surveys are conducted across NSW on a range of roads with a range of speed limits to gather current information about speeding behaviour of both light vehicles and heavy vehicles.

In 2014 annual speed surveys were conducted at 175 locations across NSW. They were not undertaken at specific speed camera enforcement locations. The annual speed surveys measure free travel speeds, with a headway of four seconds. That is, only the speeds of vehicles that are unimpeded by other traffic are measured. Therefore the survey provides a measure of the speed that drivers choose to travel rather than a measure of traffic congestion.

Table A1: Mean speed and 85th percentile speed survey results, 2009-2014

Posted speed limit		Light	vehicle	mean s	peeds (	km/h)		Light vehi	cle 85 <sup>th</sup> pe	ercentile s	peeds (km	n/h)
	2009	2010	2011	2012	2013	2014	2009	2010	2011	2012	2013	2014
40 km/h school zone	45.1	43.6	44.2	43.3	43.2	42.5	52.7	50.9	51.4	50.2	50.2	48.9
40 km/h	38.9	38.4	38.3	39.3	38.1	38.1	44.6	44.0	43.8	44.7	43.5	43.5
50 km/h	53.6	52.1	52.3	51.4	51.9	51.4	61.1	59.1	59.4	58.5	58.6	58.1
60km/h	58.7	57.7	57.4	58.1	57.1	56.5	65.6	64.2	64.3	65.0	63.8	63.1
70 km/h	69.6	67.9	67.8	67.6	67.9	67.8	77.8	75.8	75.6	75.3	75.6	75.2
80 km/h	77.8	76.1	76.4	77.2	75.4	74.3	85.9	84.5	86.4	85.0	83.3	82.0
90 km/h – small sample ^	88.1	91.1	90.9	86.5	86.9	86.3	96.7	99.0	99.2	95.2	95.0	93.9
100 km/h	98.8	98.6	99.1	98.4	97.2	98.1	106.5	106.2	106.7	106.0	104.7	105.2
110 km/h	109.9	108.8	109.2	109.8	107.9	108.3	118.0	116.6	116.7	117.2	115.6	115.3
Posted speed limit		Heav	y vehicl	e mean	speeds	(km/h)		Heavy ve	hicle 85 <sup>th</sup>	percentil	le speeds	(km/h)
												• •
	2009	2010	2011	2012	2013	2014	2009	2010	2011	2012	2013	2014
40 km/h school zone	2009	2010	2011	2012	2013	2014		2010	2011			
40 km/h school zone 40 km/h							2009			2012	2013	2014
	41.9	41.2	42.4	40.8	41.0	40.6	2009	47.1	49.2	2012	2013	2014
40 km/h	41.9 38.6	41.2 37.7	42.4 37.3	40.8 39.1	41.0 37.3	40.6 37.5	2009 48.3 44.2	47.1 42.7	49.2 42.4	2012 46.4 44.9	2013 46.5 42.5	2014 45.8 42.1
40 km/h 50 km/h	41.9 38.6 53.2	41.2 37.7 51.8	42.4 37.3 51.2	40.8 39.1 50.3	41.0 37.3 50.2	40.6 37.5 50.5	2009 48.3 44.2 60.3	47.1 42.7 58.6	49.2 42.4 58.1	2012 46.4 44.9 57.2	2013 46.5 42.5 56.5	2014 45.8 42.1 56.8
40 km/h 50 km/h 60km/h	41.9 38.6 53.2 56.4	41.2 37.7 51.8 56.2	42.4 37.3 51.2 55.8	40.8 39.1 50.3 57.2	41.0 37.3 50.2 55.3	40.6 37.5 50.5 54.9	2009 48.3 44.2 60.3 63.6	47.1 42.7 58.6 63.2	49.2 42.4 58.1 63.0	2012 46.4 44.9 57.2 65.0	2013 46.5 42.5 56.5 62.6	2014 45.8 42.1 56.8 62.0
40 km/h 50 km/h 60km/h 70 km/h	41.9 38.6 53.2 56.4 66.1	41.2 37.7 51.8 56.2 65.4	42.4 37.3 51.2 55.8 64.9	40.8 39.1 50.3 57.2 64.2	41.0 37.3 50.2 55.3 65.0	40.6 37.5 50.5 54.9 64.9	2009 48.3 44.2 60.3 63.6 75.5	47.1 42.7 58.6 63.2 74.4	49.2 42.4 58.1 63.0 73.4	2012 46.4 44.9 57.2 65.0 72.9	2013 46.5 42.5 56.5 62.6 73.6	2014 45.8 42.1 56.8 62.0 73.8
40 km/h 50 km/h 60km/h 70 km/h 80 km/h	41.9 38.6 53.2 56.4 66.1 76.3	41.2 37.7 51.8 56.2 65.4 72.0	42.4 37.3 51.2 55.8 64.9 72.9	40.8 39.1 50.3 57.2 64.2 75.5	41.0 37.3 50.2 55.3 65.0 71.9	40.6 37.5 50.5 54.9 64.9 74.4	2009 48.3 44.2 60.3 63.6 75.5 89.6	47.1 42.7 58.6 63.2 74.4 81.6	49.2 42.4 58.1 63.0 73.4 81.9	2012 46.4 44.9 57.2 65.0 72.9 83.9	2013 46.5 42.5 56.5 62.6 73.6 80.8	2014 45.8 42.1 56.8 62.0 73.8 84.4

Table A2: Percentage of vehicles exceeding the speed limit speed survey results, 2009-2014

Posted speed limit			cles exce 0 km/h (%		speed limi	t	Light vehicles exceeding the speed limi by 10 km/h or more (%)					it
	2009	2010	2011	2012	2013	2014	2009	2010	2011	2012	2013	2014
40 km/h school zone	46.4%	44.0%	45.1%	42.0%	43.4%	45.0%	23.0%	17.5%	19.7%	18.4%	17.0%	12.3%
40 km/h	30.2%	27.8%	27.2%	32.0%	26.6%	26.8%	4.5%	3.4%	3.7%	6.0%	3.4%	3.0%
50 km/h	48.8%	46.4%	46.6%	42.8%	43.3%	45.3%	16.8%	12.6%	13.2%	13.0%	14.1%	9.7%
60km/h	32.3%	28.8%	28.2%	29.9%	25.9%	24.9%	7.3%	5.4%	5.8%	7.8%	6.3%	3.9%
70 km/h	35.9%	31.3%	30.2%	28.2%	29.5%	29.9%	10.4%	6.6%	6.3%	7.3%	8.2%	6.4%
80 km/h	29.8%	26.3%	26.1%	24.8%	21.1%	18.6%	8.8%	6.3%	6.6%	7.1%	6.2%	4.9%
90 km/h – small sample ^	29.6%	38.0%	38.5%	22.9%	24.8%	24.5%	9.0%	11.8%	13.4%	10.0%	10.1%	6.7%
100 km/h	34.5%	32.2%	34.4%	31.0%	27.6%	31.1%	8.2%	9.0%	8.9%	9.4%	7.9%	6.7%
110 km/h*	40.8%	37.5%	38.9%	41.2%	33.9%	34.1%	9.3%	6.4%	7.0%	11.4%	6.0%	5.4%
Posted speed limit			hicles ex 10 km/h (		he speed	limit			ehicles ex n/h or mo		the speed	d limit
	2009	2010	2011	2012	2013	2014	2009	2010	2011	2012	2013	2014
40 km/h school zone	42.2%	36.2%	43.3%	39.5%	39.7%	39.9%	10.1%	10.2%	12.6%	8.1%	2.6%	3.9%
40 km/h	26.6%	22.8%	21.0%	29.9%	21.0%	22.3%	5.4%	3.6%	3.0%	6.2%	7.1%	2.8%
50 km/h	45.6%	44.7%	42.5%	40.4%	38.3%	41.8%	16.7%	12.5%	10.7%	10.0%	7.8%	7.5%
60km/h	26.7%	25.8%	25.4%	25.4%	22.7%	21.3%	5.0%	3.9%	4.5%	9.6%	4.1%	3.2%
70 km/h	28.6%	27.3%	23.7%	21.4%	24.1%	25.1%	5.7%	4.2%	3.5%	3.6%	3.9%	4.2%
80 km/h	23.6%	21.2%	23.2%	19.4%	18.2%	17.1%	9.8%	5.1%	5.9%	6.2%	4.0%	13.1%
90 km/h – small sample ^	27.2%	41.3%	34.8%	22.6%	30.6%	23.5%	6.3%	14.0%	13.6%	11.2%	8.5%	4.8%
100 km/h	34.5%	34.1%	34.0%	33.4%	26.2%	32.1%	3.2%	4.8%	4.8%	5.8%	2.2%	2.7%
110 km/h*	48.1%	39.8%	44.9%	56.7%	44.0%	40.0%	8.1%	12.9%	8.8%	10.3%	6.7%	11.7%
^ Small samples may result in greate	r fluctuations yea	r to year.				,						
		ed indicate tl										

#### A.3.1 Light vehicles

In 2014, light vehicle speed survey results indicate:

- 50km/h speed zones
  - 45.3 per cent of drivers were travelling up to 10km/h above the posted speed limit, and a further 9.7 per cent were exceeding the speed limit by 10km/h or more.
  - The 85th percentile speed was 58.1 km/h, the mean speed was 51.4 km/h
- 100km/h speed zones
  - 31.1 per cent of drivers were travelling up to 10km/h above the posted speed limit, and a further 6.7 per cent were exceeding the speed limit by 10km/h or more.
  - The 85th percentile speed was 105.2 km/h, the mean speed was 98.1 km/h.

#### A.3.2 Heavy vehicles

In 2014, heavy vehicle speed survey results indicate:

- 50km/h speed zones
  - 41.8 per cent of drivers were travelling up to 10km/h above the posted speed limit, and a further 7.5 per cent were exceeding the speed limit by 10km/h or more.
  - The 85th percentile speed was 56.8 km/h, the mean speed was 50.5 km/h.
- 100km/h speed zones
  - 32.1 per cent of drivers were travelling up to 10km/h above the posted speed limit, and a further 2.7 per cent were exceeding the speed limit by 10km/h or more.
  - The 85th percentile speed was 102.9 km/h, the mean speed was 97.4 km/h.

#### A.3.3 Trends in speed survey results

Over the last six years the general trend has been a decrease in the proportion of light vehicles exceeding the speed limit across most speed zones. The below graph shows that there is a trend of increasing compliance to the speed limit across all speed zones. This includes a significant decrease in the proportion of vehicles exceeding the speed limit in 2010, coinciding with the introduction of mobile speed cameras and installation of red-light speed cameras.

The percentage of light vehicles exceeding the speed limit by more than 10km/h in 2014 has reduced in all speed zones compared to 2013, which builds on impressive results from previous years. The results show that in 2014 fewer light vehicles were exceeding the speed limit by more than 10km/h compared to all years from 2009 to 2013.

When looking at the percentage of light vehicles exceeding the speed limit by up to 10km/h in 2014, there has been a continued suppression of speeding when

comparing results from 2009 to 2011. However, there have been slight increases in some zones compared to 2012 and 2013.

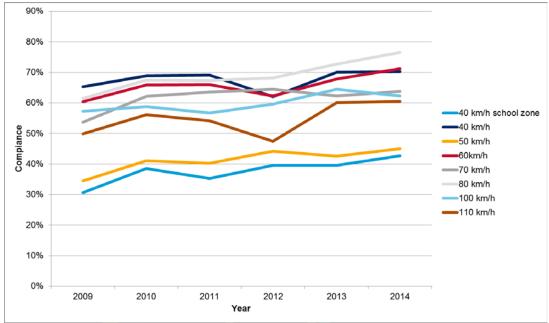


Figure A2: Annual speed survey results, compliance rate (percentage of vehicles driving within the speed limit) by speed zone

The percentage of heavy vehicles exceeding the speed limit by up to 10km/h has increased in some speed zones compared to the previous year. However, the 2014 results still compare favourably compared to previous years. Significant reductions in heavy vehicle speeding by more than 10 km/h over the speed limit have been maintained in 2014, achieving the lowest percentages over the entire five year period in 40km/h, 50km/h, 60km/h and 90km/h zones and maintaining a low level of speeding by more than 10km/h in 100km/h zones.

#### A.4 Mobile speed camera infringements

In 2014 there were a total of 55,467 infringements issued from mobile speed camera enforcement resulting in \$10.54 million of fines. The cost of conducting the mobile speed camera program in 2014 was \$17.4 million. The total number of infringements in 2014 increased four fold compared to 2013, however this increase was lower than expected as the total number of enforcement hours increased more than five fold from 11,106 hours of enforcement in 2013 to 61,256 in 2014.

The below graph depicting the mobile speed camera program infringement data and the number of enforcement hours per months shows that in 2014 there was a steady increase in infringements as the amount of enforcement per month increased until July, when the program reached 7,000 hours of enforcement for the month. Since then the number of infringements has decreased each month as motorists have changed their behaviour at the locations where mobile speed cameras enforce.

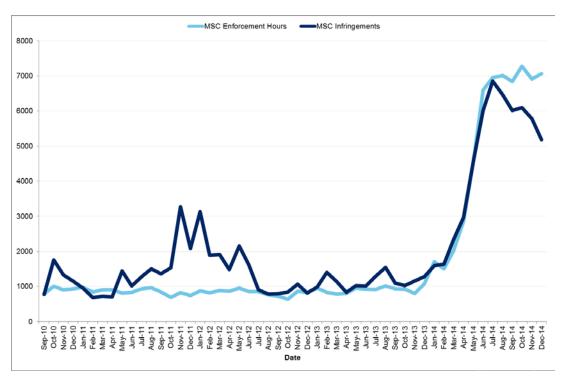


Figure A3: Speeding infringements issued and number of enforcement hours conducted by mobile speed cameras by month

Since the program commenced, the number of sites available for use and the number of sites used each month has increased over time as ongoing assessments to identify suitable enforcement sites are completed. The total number of approved sites is 640 with all selected sites published on the Centre for Road Safety website. The above graph depicts some peaks in infringement numbers when new sites are in use more frequently. In the months following the use of new sites, the number of infringements decreased or stabilised. This trend is to be anticipated; for example fixed speed enforcement follows the same type of pattern, with the difference being that fixed speed cameras remain in the same place and continually enforce meaning that reductions in infringements are more consistent.

The significant decrease in infringements from June 2012 can be attributed to the enhanced visibility of mobile speed camera vehicles as well as additional signage being placed before a mobile speed camera to ensure drivers see and recognised the enforcement activity. At the same time, mobile speed cameras also switched from enforcing in both directions to single direction enforcement, further contributing to the lower volume of infringements.

The figure below shows the compliance rate of vehicles at mobile speed camera locations. Compliance data compares the number of vehicles that pass a camera with the number of fines detected by the camera. As can be seen below, over 99 per cent of vehicles passing mobile cameras are not infringed for speeding. In 2014 the compliance rate was 99.79%. This high rate of compliance has remained consistent since 2010 when the program was reintroduced.

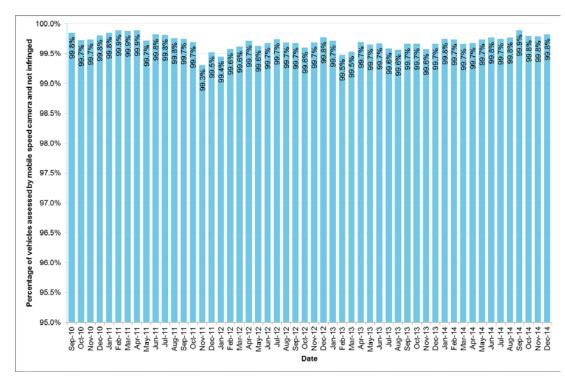


Figure A4: Compliance rate of vehicles at mobile speed camera locations

CRS has developed and implemented a speed camera public education campaign that has supported the rollout of the mobile speed camera program. CRS evidence shows that enforcement and strong public education campaigns change driver behaviour and help prevent speed-related crashes and trauma through awareness of enforcement.

#### A.5 Review of mobile speed camera locations

CRS has identified 26 of the 640 approved mobile speed camera locations that are no longer providing a road safety benefit. These locations were previously used by the Police and are no longer operationally useful because there are no suitable enforcement sites. These locations are listed in the table below and will be decommissioned.

Table A3: Mobile speed camera locations to be decommissioned

Suburb/Town	Road
Annandale, Camperdown, Leichhardt, Petersham, Stanmore	Parramatta Road
Ashfield, Haberfield, Summer Hill	Parramatta Road
Auburn, Clyde, Granville, Harris Park	M4 Motorway
Beaumont Hills, Kellyville, Kellyville Ridge, Stanhope Gardens	Windsor Road
Belford, Branxton, East Branxton, Lower Belford	New England Highway
Beresfield	John Renshaw Drive
Burwood, Concord, Croydon, Five Dock	Parramatta Road
Burwood, Concord, Homebush, North Strathfield, Strathfield	Parramatta Road
Camperdown, Chippendale, Forest Lodge, Glebe, Ultimo	Parramatta Road
Capertree, Round Swamp	Castlereagh Highway
Cartwright, Hinchinbrook, Hoxton Park, Miller, Prestons	Hoxton Park Road
Cassilis, Uarbry	Golden Highway
Centennial Park, Woollahra	Oxford Street
Coffs Harbour, Korora, Moonee Beach, Sapphire Beach	Pacific Highway

Suburb/Town	Road
Corowa	Redlands Road
Cremorne, Mosman, Neutral Bay	Military Road
Dean Park, Doonside, Glendenning, Oakhurst, Quakers Hill	Richmond Road
Dumaresq Island, Glenthorne, Pampoolah	Pacific Highway
East Gosford, Point Frederick	York Street
East Maitland, Maitland, South Maitland	New England Highway
Finley, Tocumwal	Newell Highway
Gateshead	Pacific Highway
Hartley, South Bowenfels	Great Western Hwy
Kingsvale, Wombat, Young	Back Creek Road
Marchmont, Murrumbateman	Barton Highway
Monak	Sturt Highway

# A.6 Summary

Overall, the trend in road fatalities and annual speed surveys demonstrates that the current mobile speed camera program continues to deliver positive road safety benefits. The general decrease in speeding observed in the annual speed surveys, over the past five years, provides evidence that the general deterrence provided by mobile speed cameras can be enhanced by a larger program.

With a larger program, there can be greater coverage of the road network at various times and locations and, like police enforcement, this mobility increases the deterrence effect due to the unpredictability of the exact location and time of speed enforcement.

By the end of 2014, the mobile speed camera program expanded to include 45 marked vehicles operating across 640 locations over approximately 7,000 hours of enforcement per month. This way forward aims to increase the general deterrence of speeding, which is expected to deliver continued reductions in crashes and casualties, and in vehicles exceeding the speed limit.

As the program has expanded there has been an increase in the volume of infringements consistent with the increase in enforcement hours per month over time. However, in the months following the increased level of enforcement, the rate of infringement per hour of enforcement has stabilised and returned to a downward trend as driver behaviour changes.

# B. Appendix B: Analysis of the NSW red-light speed camera program

# **B.1** Overview of red-light speed camera locations

	Location	Road
1	Adamstown	Park Avenue at Northcott Drive
2	Alexandria	Collins Street at O'Riordan Street
3	Alexandria / Waterloo	McEvoy Street at Botany Road
4	Ashfield	Frederick Street at Hume Highway
5	Auburn	Chisholm Road at Mona Street
6	Auburn	Rawson Street at Station Road
7	Auburn	Silverwater Road at M4 westbound on-ramp
8	Bankstown	Edgar Street at Marion Street
9	Bankstown	Meredith Street at Hume Highway (school zone)
10	Bankstown Baulkham Hills	Stacey Street at Hume Highway Windsor Road at Old Northern Road / Seven Hills Road
11 12	Bauiknam Hills Belfield	Burwood Road at Old Northern Road / Seven Hills Road  Burwood Road at Punchbowl Road
13	Bexley	Forest Road at Harrow Road
14	Bexley	Harrow Road at Watkin Street
15	Blacktown	Bungarribee Road at Balmoral Street
16	Blacktown	Great Western Highway at Reservoir Road
17	Blacktown	Lancaster Street at Kildare Street (school zone)
18	Blacktown	Newton Road at Flushcombe Road (school zone)
19	Blacktown	Sunnyholt Road at Main Street
20	Blacktown	Third Avenue at Prince Street
21	Bondi Junction	Old South Head Road at Bondi Road
22	Bradbury	Moore Oxley Bypass at The Parkway
23	Burwood / Concord	Parramatta Road at Burwood Road
24	Cabramatta	Cumberland Highway at Cabramatta Road West
25	Cabramatta	Cumberland Highway at St Johns Road
26	Campbelltown	Kellicar Road at Narellan Road
27	Campbelltown	Moore-Oxley Bypass at Broughton Street
28	Campsie	Canterbury Road at Bexley Road
29 30	Campsie	Canterbury Road at Thorncraft Parade Sackville Street at Canley Vale Road
31	Canley Vale Caringbah	The Kingsway at Gannons Road
32	Castle Hill	Pennant Street at Castle Street
33	Castle Hill	Showground Road at Victoria Avenue
34	Chester Hill / Sefton	Waldron Road at Hector Street
35	Concord	Broughton Street at Crane Street
36	Crows Nest	Pacific Highway at Hume Street
37	Croydon Park	Georges River Road at Croydon Avenue
38	Darlinghurst	Craigend Street at McLachlan Avenue
39	Darlinghurst	Oxford Street at Crown Street
40	Darlinghurst	William Street at Crown Street
41	Dean Park	Richmond Road at M7 Motorway southbound on-ramp
42	Dee Why	Pittwater Road at Harbord Road
43	Eastwood	Blaxland Road at May Street
44	Eastwood	Rutledge Street at Shaftsbury Road (school zone)
45 46	Epping	Carlingford Road at Rawson Street Victoria Road at Spurway Street
46	Ermington Fairfield	Hamilton Road at The Boulevarde
48	Fairfield	The Horsley Drive at Polding Street
49	Figtree	Princes Highway at O'Briens Road
50	Five Dock	Fairlight Street at Ramsay Road
51	Five Dock	Parramatta Road at Arlington Street
52	Glenwood	Old Windsor Road at Sunnyholt Road
53	Granville	Parramatta Road at Good Street
54	Granville	Woodville Road at M4 westbound on-ramp
55	Guildford	Woodville Road at Guildford Road
56	Haberfield	Dobroyd Parade at Mortley Avenue
57	Haberfield	Parramatta Road at Sloane Street
58	Haberfield	Ramsay Street at Wattle Street
59	Hamilton	Tudor Street at Beaumont Street
60	Hamilton East	Pacific Highway at Parry Street
61	Haymarket	George Street at Pitt Street / Quay Street
62	Hunters Hill	Ryde Road at Pittwater Road
63	Kensington	Anzac Parade at Todman Avenue Bexlev Road at William Street
64 65	Kingsgrove	Kingsgrove Road at Forsyth Street
65	Kingsgrove Kirrawee	Acacia Road at President Avenue
	INITATION	Additional actions of the second seco
66 67		Park Road at Princes Highway
67 68	Kogarah Bay Lakemba	Park Road at Princes Highway Punchbowl Road at Wangee Road

	Location	Road
70	Lane Cove	Epping Road at Centennial Avenue
71	Lansdowne / Villawood	Henry Lawson Drive / Woodville Road at Hume Highway
72	Leichhardt	City West Link at James Street
73	Lidcombe	Olympic Drive at Vaughan Street
74	Liverpool	Hume Highway at Elizabeth Drive
75	Liverpool	Memorial Avenue at Bathurst Street
76	Maroubra	Anzac Parade at Boyce Road
77	Marrickville	Sydenham Road at Victoria Road
78	Mascot	O'Riordan Street at Coward Street
79	Mascot	O'Riordan Street at Gardeners Road
80	Mayfield West	Pacific Highway at Maud Street
81 82	Mays Hill Merrylands West	Great Western Highway at Coleman Street / Hawkesbury Road
83	Milperra	Merrylands Road at Sherwood Road Newbridge Road at Henry Lawson Drive
84	Miranda	Kingsway at Port Hacking Road
85	Moore Park	Anzac Parade at Lang Road
86	Moore Park / Paddington	Anzac Parade / Flinders Street at Moore Park Road
87	Moorebank	Newbridge Road at Stockton Avenue
88	Mosman	Military Road at Cowles Road
89	Mount Druitt	Great Western Highway at Carlisle Avenue
90	Naremburn	Willoughby Road at Chandos Street
91	Neutral Bay	Falcon Street at Merlin Street
92	North Ryde	Cox's Road at Lane Cove Road (school zone)
93	North Ryde	Wicks Road at Epping Road
94	Northmead	Briens Road at Redbank Road
95	Northmead	Old Windsor Road at Cumberland Highway
96	Paddington	Moore Park Road at Lang Road
97	Paddington / Surry Hills	South Dowling Street at Fitzroy Street / Moore Park Road
98	Parramatta	Macquarie Street at Marsden Street
99	Parramatta	O'Connell Street at Argyle Street
100	Parramatta	Victoria Road at Church Street
101	Pennant Hills	Pennant Hills Road at Beecroft Road (school zone)
102	Petersham	Gordon Street at New Canterbury Road
103	Petersham	Parramatta Road at West Street
104 105	Ramsgate Randwick	Rocky Point Road at Ramsgate Road
106	Randwick	Alison Street at Avoca Street Avoca Street at Darley Road
107	Redfern	Chalmers Street at Cleveland Street (school zone)
108	Richmond	March Street at East Market Street
109	Rockdale	Bestic Street at West Botany Street
110	Rockdale	Princes Highway at Bay Street / The Seven Ways
111	Roselands	King Georges Road at Moorefields Road
112	Roselands / Wiley Park	Canterbury Road at King Georges Road
113	Rozelle	Victoria Road at Evans Street
114	Rozelle	Wellington Street at Victoria Road
115	Ryde	Victoria Road at Devlin Street
116	Seven Hills	Abbott Road at Station Road
117	Silverwater	Silverwater Road at M4 eastbound on-ramp
118	Smithfield	Cumberland Highway at The Horsley Drive
119	Smithfield	The Horsley Drive at Gipps Street
120	Smithfield	Victoria Street at Hassall Street
121	South Penrith	Parker Street at Jamison Road
122	South Wentworthville	Cumberland Highway at Old Prospect Road
123	Spring Hill	Springhill Road at Masters Road
124	St Marys	Great Western Highway at Charles Hackett Drive / Pages Road  Mamre Road at Saddington Street (school zone)
125 126	St Marys Strathfield	Arthur Street at Centenary Drive
120	Surry Hills	Cleveland Street at South Dowling Street
128	Sydney	Elizabeth Street at Park Street
129	Thornleigh	Pennant Hills Road at Parkes Street
	Ultimo	Wattle Street at William Henry Street
1.50		Princes Highway at Five Islands Road
130 131	Unanderra	
131 132	Unanderra Waitara	Pacific Highway at Romsey Street (school zone)
131		
131 132	Waitara	Pacific Highway at Romsey Street (school zone)
131 132 133	Waitara Wallsend	Pacific Highway at Romsey Street (school zone) Thomas Street at Metcalfe Street
131 132 133 134	Waitara Wallsend Warrawong	Pacific Highway at Romsey Street (school zone) Thomas Street at Metcalfe Street King Street (Grand Pacific Drive) at Cowper Street
131 132 133 134 135	Waitara Wallsend Warrawong Warwick Farm	Pacific Highway at Romsey Street (school zone) Thomas Street at Metcalfe Street King Street (Grand Pacific Drive) at Cowper Street Hume Highway at Bigge Street
131 132 133 134 135 136	Waitara Wallsend Warrawong Warwick Farm Wentworthville	Pacific Highway at Romsey Street (school zone) Thomas Street at Metcalfe Street King Street (Grand Pacific Drive) at Cowper Street Hume Highway at Bigge Street Great Western Highway at Station Street
131 132 133 134 135 136 137	Waitara Wallsend Warrawong Warwick Farm Wentworthville West Pennant Hills	Pacific Highway at Romsey Street (school zone) Thomas Street at Metcalfe Street King Street (Grand Pacific Drive) at Cowper Street Hume Highway at Bigge Street Great Western Highway at Station Street Pennant Hills Road at Eaton Road
131 132 133 134 135 136 137 138 139 140	Waitara Wallsend Warrawong Warwick Farm Wentworthville West Pennant Hills West Pymble Wiley Park Windang	Pacific Highway at Romsey Street (school zone) Thomas Street at Metcalfe Street King Street (Grand Pacific Drive) at Cowper Street Hume Highway at Bigge Street Great Western Highway at Station Street Pennant Hills Road at Eaton Road Ryde Road at Lady Game Drive The Boulevarde at King Georges Road (school zone) Windang Road at Boronia Avenue
131 132 133 134 135 136 137 138 139 140 141	Waitara Wallsend Warrawong Warwick Farm Wentworthville West Pennant Hills West Pymble Wiley Park Windang Wollongong	Pacific Highway at Romsey Street (school zone) Thomas Street at Metcalfe Street King Street (Grand Pacific Drive) at Cowper Street Hume Highway at Bigge Street Great Western Highway at Station Street Pennant Hills Road at Eaton Road Ryde Road at Lady Game Drive The Boulevarde at King Georges Road (school zone) Windang Road at Boronia Avenue Corrimal Street at Burelli Street
131 132 133 134 135 136 137 138 139 140 141 142	Waitara Wallsend Warrawong Warwick Farm Wentworthville West Pennant Hills West Pymble Wiley Park Windang Wollongong Wollongong	Pacific Highway at Romsey Street (school zone) Thomas Street at Metcalfe Street King Street (Grand Pacific Drive) at Cowper Street Hume Highway at Bigge Street Great Western Highway at Station Street Pennant Hills Road at Eaton Road Ryde Road at Lady Game Drive The Boulevarde at King Georges Road (school zone) Windang Road at Boronia Avenue Corrimal Street at Burelli Street Gladstone Avenue at Princes Highway
131 132 133 134 135 136 137 138 139 140 141	Waitara Wallsend Warrawong Warwick Farm Wentworthville West Pennant Hills West Pymble Wiley Park Windang Wollongong	Pacific Highway at Romsey Street (school zone) Thomas Street at Metcalfe Street King Street (Grand Pacific Drive) at Cowper Street Hume Highway at Bigge Street Great Western Highway at Station Street Pennant Hills Road at Eaton Road Ryde Road at Lady Game Drive The Boulevarde at King Georges Road (school zone) Windang Road at Boronia Avenue Corrimal Street at Burelli Street

#### Adamstown - Park Avenue at Northcott Drive

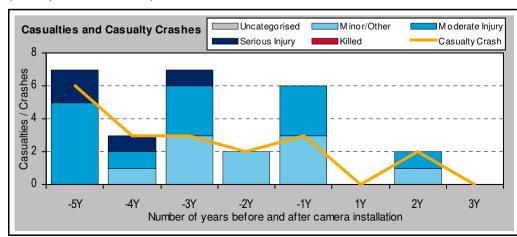
- · There is one camera at this intersection.
- The camera at the intersection of Park Avenue and Northcott Drive commenced issuing warning letters in May 2011.
- While the results to date indicate a decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

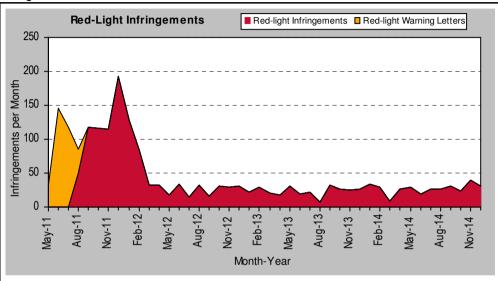
# Casualties and casualty crashes at enforced intersection

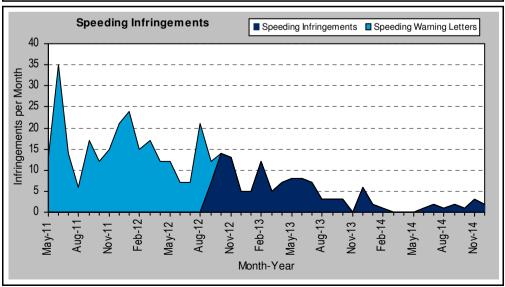
	5 years before installation <sup>1</sup>	3 years and 222 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	4	0	↓ 100%
Moderate Injuries	12	1	↓ 88%
Minor / Other Injuries	9	1	↓ 85%
Total Casualties:	25	2	↓ 89%
Pedestrian Casualties	1	0	↓ 100%
Casualty Crashes	17	2	↓ 84%
Adjacent Casualty Crashes	0	0	-
Right Through Casualty Crashes	8	0	↓ 100%
Rear End Casualty Crashes	5	2	↓ 45%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 21 February 2011

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

#### Alexandria - Collins Street at O'Riordan Street

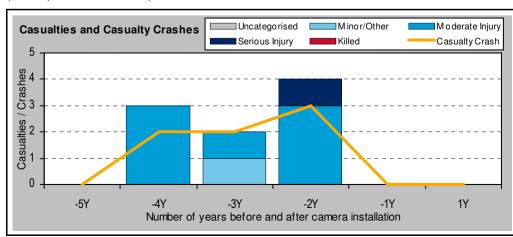
- There is one camera at this intersection.
- The camera at the intersection of Collins Street and O'Riordan Street commenced issuing warning letters in October 2013.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

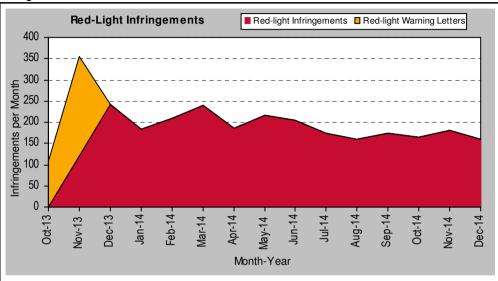
# Casualties and casualty crashes at enforced intersection

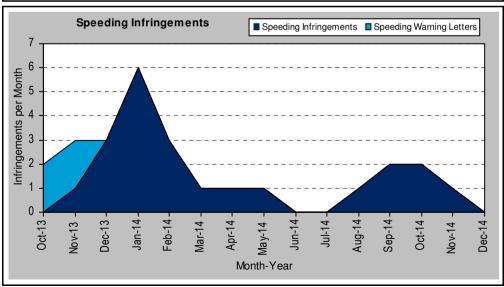
	5 years before installation <sup>1</sup>	1 year and 70 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	1	0	↓ 100%
Moderate Injuries	7	0	↓ 100%
Minor / Other Injuries	1	0	↓ 100%
Total Casualties:	9	0	↓ 100%
Pedestrian Casualties	0	0	-
Casualty Crashes	7	0	↓ 100%
Adjacent Casualty Crashes	3	0	↓ 100%
Right Through Casualty Crashes	1	0	↓ 100%
Rear End Casualty Crashes	1	0	↓ 100%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 23 July 2013

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

# Alexandria / Waterloo - McEvoy Street at Botany Road

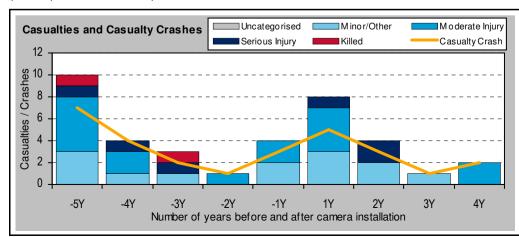
- There are two cameras at this intersection. This was previously a wet-film red-light camera location.
- Both cameras at the intersection of McEvoy Street and Botany Road commenced issuing warning letters in June 2010.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the cameras.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

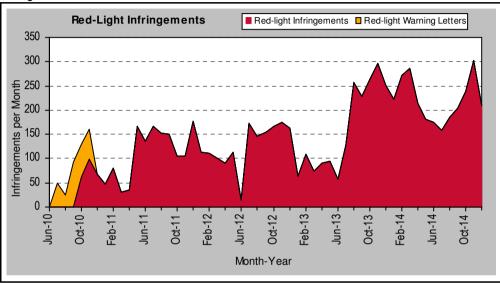
#### Casualties and casualty crashes at enforced intersection

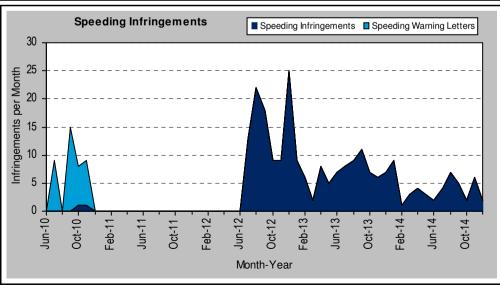
	5 years before installation <sup>1</sup>	4 years and 184 days after installation <sup>2</sup>	Percentage change³
Fatalities	2	0	↓ 100%
Serious Injuries	3	3	<b>↑ 11%</b>
Moderate Injuries	10	8	↓ 11%
Minor / Other Injuries	7	6	↓ 5%
Total Casualties:	22	17	↓ 14%
Pedestrian Casualties	6	1	↓ 81%
Casualty Crashes	17	13	↓ 15%
Adjacent Casualty Crashes	3	9	↑ 233%
Right Through Casualty Crashes	3	1	↓ 63%
Rear End Casualty Crashes	4	1	↓ 72%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 31 March 2010

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

#### Ashfield - Frederick Street at Hume Highway

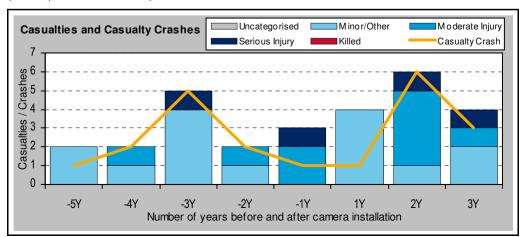
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Frederick Street and Hume Highway commenced issuing warning letters in March 2011.
- While the results available so far suggest a slight increase in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

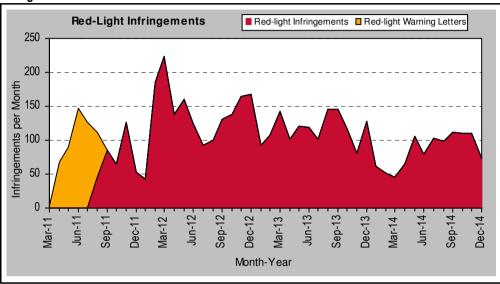
#### Casualties and casualty crashes at enforced intersection

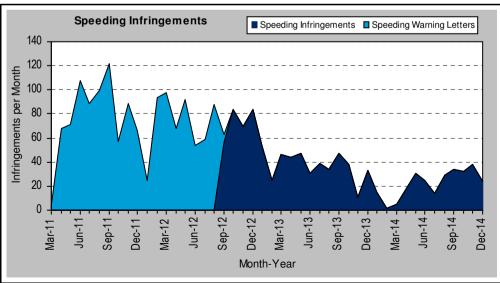
	5 years before installation <sup>1</sup>	3 years and 290 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	2	2	↑ 32%
Moderate Injuries	4	5	<b>↑ 65%</b>
Minor / Other Injuries	8	7	↑ 15%
Total Casualties:	14	14	<b>↑ 32%</b>
Pedestrian Casualties	0	0	-
Casualty Crashes	11	10	↑ 20%
Adjacent Casualty Crashes	2	1	↓ 34%
Right Through Casualty Crashes	3	2	↓ 12%
Rear End Casualty Crashes	4	5	<b>↑ 65%</b>

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 15 December 2010

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

#### Auburn - Chisholm Road at Mona Street

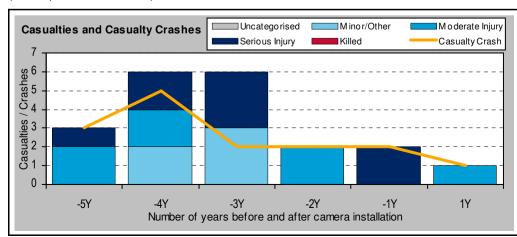
- · There is one camera at this intersection.
- The camera at the intersection of Chisholm Road and Mona Street commenced issuing warning letters in February 2013.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

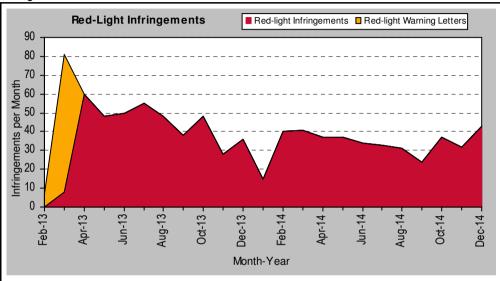
# Casualties and casualty crashes at enforced intersection

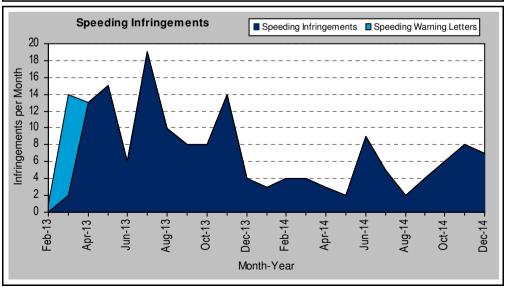
	5 years before installation <sup>1</sup>	1 year and 308 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	8	1	↓ 66%
Moderate Injuries	6	1	↓ 55%
Minor / Other Injuries	5	0	↓ 100%
Total Casualties:	19	2	↓ 71%
Pedestrian Casualties	0	0	-
Casualty Crashes	14	2	↓ 61%
Adjacent Casualty Crashes	8	1	↓ 66%
Right Through Casualty Crashes	2	1	↑ 36%
Rear End Casualty Crashes	1	0	↓ 100%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 27 November 2012

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

#### **Auburn - Rawson Street at Station Road**

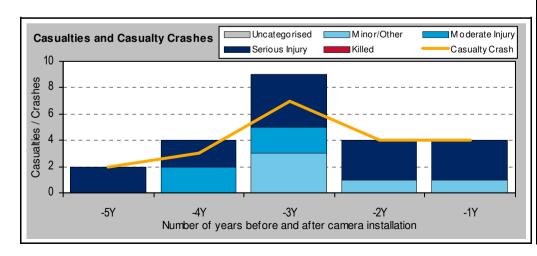
- There is one camera at this intersection.
- The camera at the intersection of Rawson Street and Station Road commenced issuing warning letters in July 2014.
- A longer period of time is required to assess the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

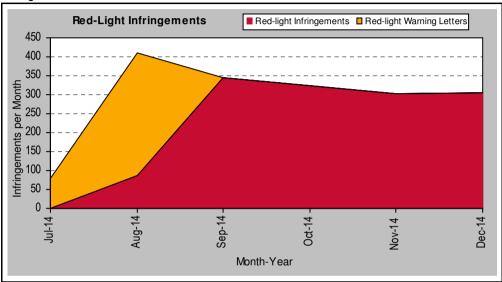
# Casualties and casualty crashes at enforced intersection

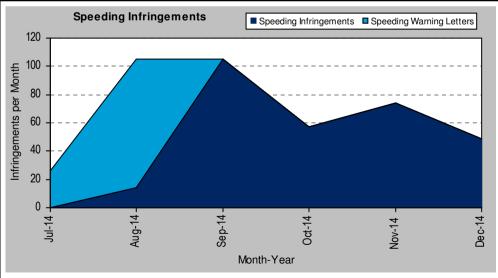
•				
	5 years before installation <sup>1</sup>	159 days after installation <sup>2</sup>		
Fatalities	0	0		
Serious Injuries	14	1		
Moderate Injuries	4	0		
Minor / Other Injuries	5	0		
Total Casualties:	23	1		
Pedestrian Casualties	9	1		
Casualty Crashes	20	1		
Adjacent Casualty Crashes	9	0		
Right Through Casualty Crashes	0	0		
Rear End Casualty Crashes	0	0		

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 25 April 2014

<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014







# Auburn - Silverwater Road at M4 westbound on-ramp

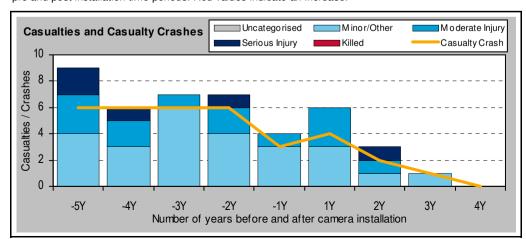
- There are two cameras at this intersection.
- The camera at the intersection of Silverwater Road and M4 Westbound On-ramp (northbound) commenced issuing warning letters in July 2010.
- The camera at the intersection of M4 Western Motorway Off-ramp and Silverwater Road (westbound) commenced issuing warning letters in June 2011.
- While the results to date indicate a decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the cameras.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

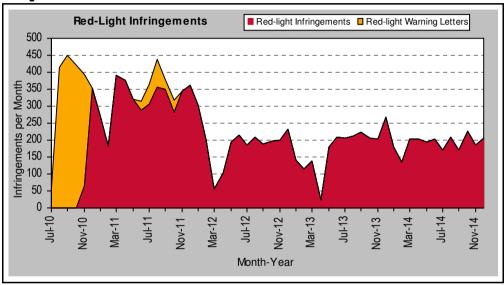
#### Casualties and casualty crashes at enforced intersection

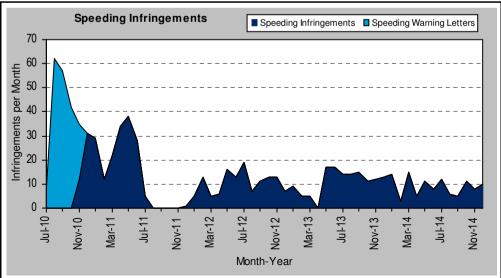
	5 years before installation¹	4 years and 168 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	4	1	↓ 72%
Moderate Injuries	9	4	↓ 50%
Minor / Other Injuries	20	4	↓ 78%
Total Casualties:	33	9	↓ 69%
Pedestrian Casualties	0	0	-
Casualty Crashes	27	6	↓ 75%
Adjacent Casualty Crashes	3	0	↓ 100%
Right Through Casualty Crashes	3	4	↑ <b>4</b> 9%
Rear End Casualty Crashes	13	1	↓ 91%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 16 April 2010

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

# **Bankstown - Edgar Street at Marion Street**

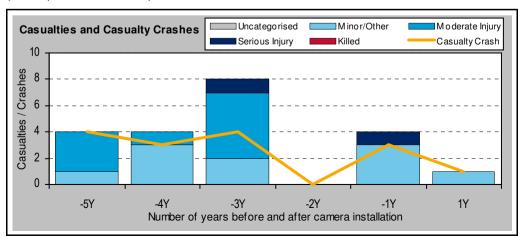
- · There is one camera at this intersection.
- The camera at the intersection of Edgar Street and Marion Street commenced issuing warning letters in August 2013.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

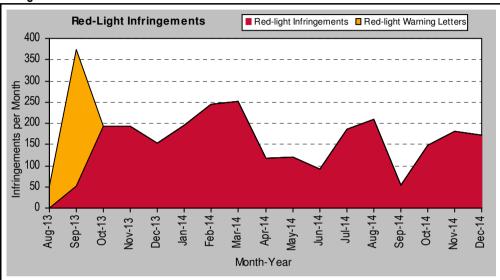
# Casualties and casualty crashes at enforced intersection

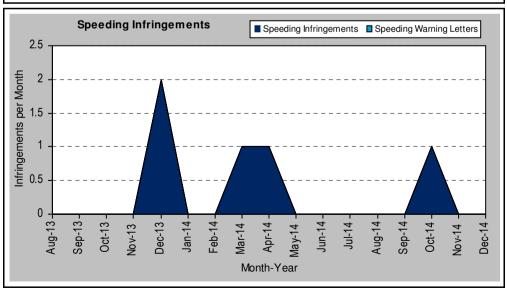
	5 years before installation <sup>1</sup>	1 year and 126 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	2	1	↑ 86%
Moderate Injuries	9	2	↓ 17%
Minor / Other Injuries	9	1	↓ 59%
Total Casualties:	20	4	↓ 26%
Pedestrian Casualties	0	0	-
Casualty Crashes	14	3	↓ 20%
Adjacent Casualty Crashes	6	1	↓ 38%
Right Through Casualty Crashes	2	2	↑ 272%
Rear End Casualty Crashes	3	0	↓ 100%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 28 May 2013

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

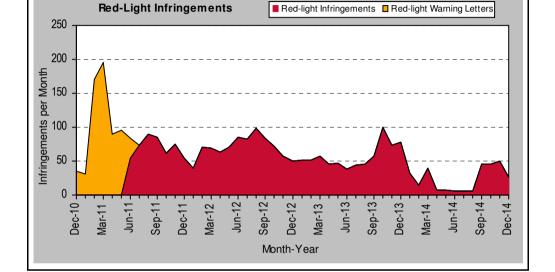
# Bankstown - Meredith Street at Hume Highway (school zone)

- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Meredith Street and Hume Highway commenced issuing warning letters in December 2010. This camera enforces red-light running only.
- While the results available so far suggest a slight increase in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

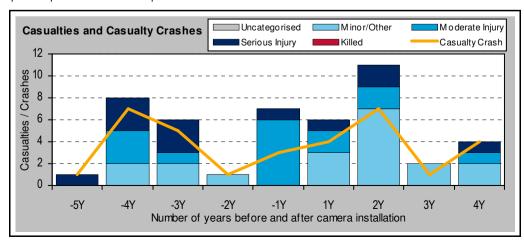
Infringements at enforced intersection

#### Casualties and casualty crashes at enforced intersection

	5 years before installation <sup>1</sup>	4 years and 16 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	8	4	↓ 38%
Moderate Injuries	10	5	↓ 38%
Minor / Other Injuries	5	14	↑ 246%
Total Casualties:	23	23	↑ 24%
Pedestrian Casualties	2	3	↑ 85%
Casualty Crashes	17	16	↑ 16%
Adjacent Casualty Crashes	3	1	↓ 59%
Right Through Casualty Crashes	5	11	↑ 172%
Rear End Casualty Crashes	7	2	↓ 65%



<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.



<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 15 September 2010

<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

# **Bankstown - Stacey Street at Hume Highway**

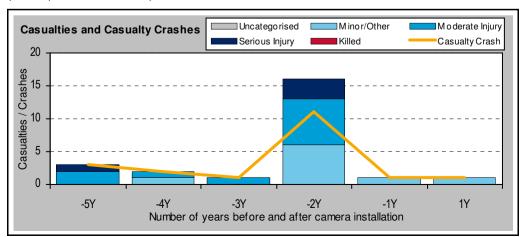
- · There is one camera at this intersection.
- The camera at the intersection of Stacey Street and Hume Highway commenced issuing warning letters in April 2013.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

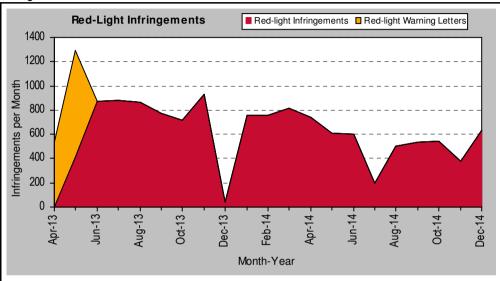
# Casualties and casualty crashes at enforced intersection

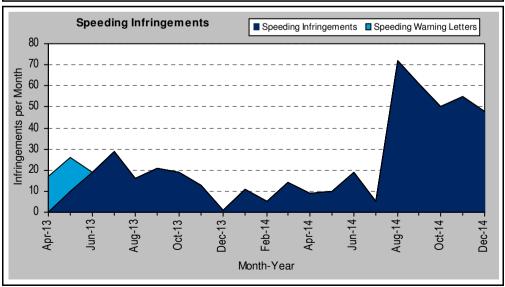
	5 years before installation1	1 year and 255 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	4	0	↓ 100%
Moderate Injuries	11	0	↓ 100%
Minor / Other Injuries	8	3	<b>† 11%</b>
Total Casualties:	23	3	↓ 62%
Pedestrian Casualties	0	0	-
Casualty Crashes	18	3	↓ 51%
Adjacent Casualty Crashes	6	0	↓ 100%
Right Through Casualty Crashes	1	0	↓ 100%
Rear End Casualty Crashes	7	2	↓ 16%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 19 January 2013

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

#### Baulkham Hills - Windsor Road at Old Northern Road / Seven Hills Road

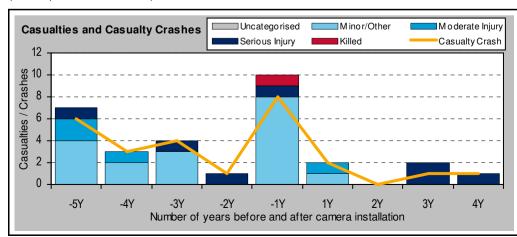
- There are two cameras at this intersection. This was previously a wet-film red-light camera location.
- Both cameras at the intersection of Windsor Road and Seven Hills Road commenced issuing warning letters in September 2010.
- While the results to date indicate a decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the cameras.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

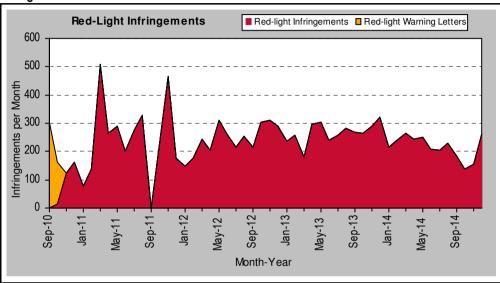
#### Casualties and casualty crashes at enforced intersection

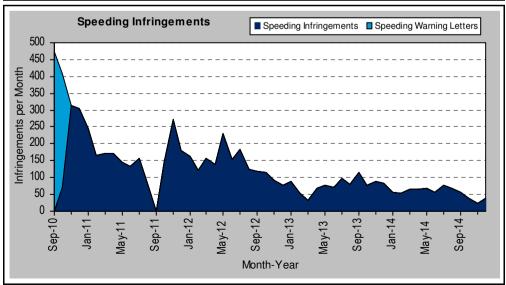
	5 years before installation1	4 years and 120 days after installation <sup>2</sup>	Percentage change³
Fatalities	1	0	↓ 100%
Serious Injuries	4	3	↓ 13%
Moderate Injuries	3	1	↓ 62%
Minor / Other Injuries	17	1	↓ 93%
Total Casualties:	25	5	↓ 77%
Pedestrian Casualties	1	0	↓ 100%
Casualty Crashes	22	4	↓ 79%
Adjacent Casualty Crashes	2	1	↓ 42%
Right Through Casualty Crashes	2	1	↓ 42%
Rear End Casualty Crashes	7	1	↓ 84%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 3 June 2010

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

#### Belfield - Burwood Road at Punchbowl Road

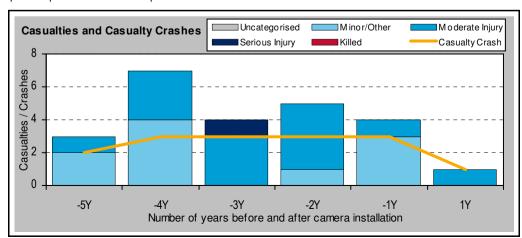
- · There is one camera at this intersection.
- The camera at the intersection of Burwood Road and Punchbowl Road commenced issuing warning letters in October 2013.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

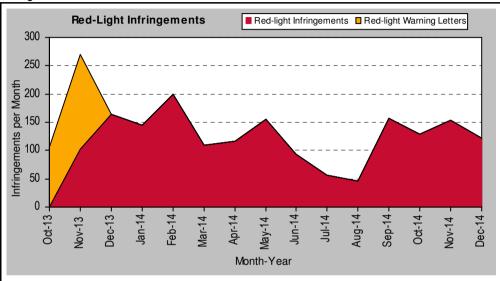
# Casualties and casualty crashes at enforced intersection

	5 years before installation1	1 year and 70 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	1	0	↓ 100%
Moderate Injuries	12	1	↓ 65%
Minor / Other Injuries	10	0	↓ 100%
Total Casualties:	23	1	↓ 82%
Pedestrian Casualties	7	0	↓ 100%
Casualty Crashes	14	1	↓ 70%
Adjacent Casualty Crashes	5	0	↓ 100%
Right Through Casualty Crashes	4	0	↓ 100%
Rear End Casualty Crashes	0	1	Increase

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 23 July 2013

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

#### **Bexley - Forest Road at Harrow Road**

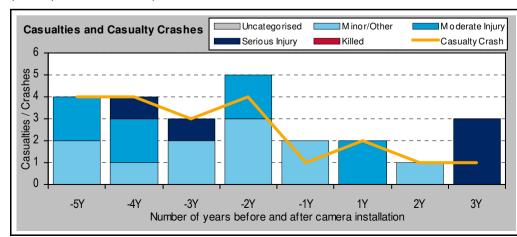
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Forest Road and Harrow Road commenced issuing warning letters in June 2011.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

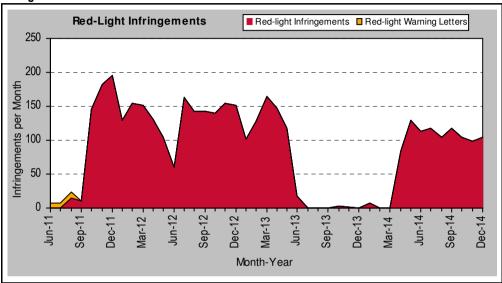
#### Casualties and casualty crashes at enforced intersection

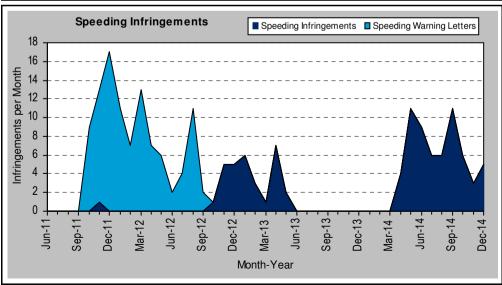
	5 years before installation1	3 years and 185 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	2	5	<b>↑ 256%</b>
Moderate Injuries	6	2	↓ 52%
Minor / Other Injuries	10	2	↓ 71%
Total Casualties:	18	9	↓ 29%
Pedestrian Casualties	1	0	↓ 100%
Casualty Crashes	16	5	↓ 55%
Adjacent Casualty Crashes	1	0	↓ 100%
Right Through Casualty Crashes	4	2	↓ 29%
Rear End Casualty Crashes	7	0	↓ 100%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 30 March 2011

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

# **Bexley - Harrow Road at Watkin Street**

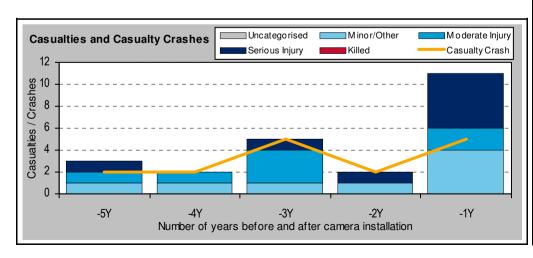
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Harrow Road and Watkin Street commenced issuing warning letters in July 2014.
- A longer period of time is required to assess the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

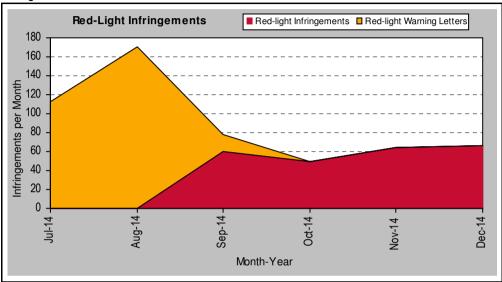
# Casualties and casualty crashes at enforced intersection

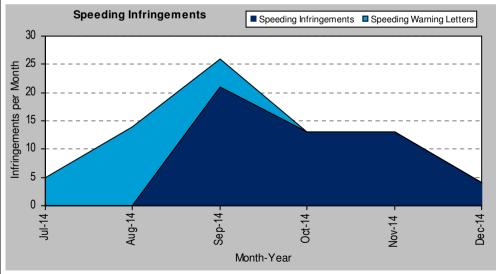
	5 years before installation <sup>1</sup>	159 days after installation <sup>2</sup>
Fatalities	0	0
Serious Injuries	8	0
Moderate Injuries	7	0
Minor / Other Injuries	8	1
Total Casualties:	23	1
Pedestrian Casualties	2	0
Casualty Crashes	16	1
Adjacent Casualty Crashes	5	1
Right Through Casualty Crashes	5	0
Rear End Casualty Crashes	2	0

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 25 April 2014

<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014







# Blacktown - Bungarribee Road at Balmoral Street

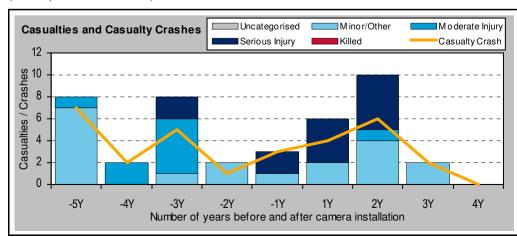
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Bungarribee Road and Balmoral Street commenced issuing warning letters in September 2010.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

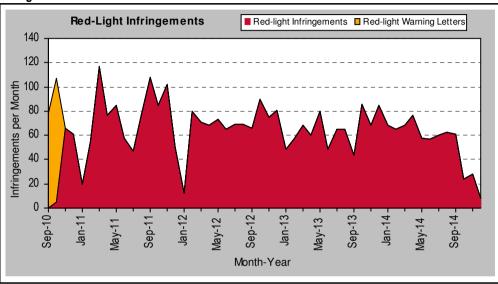
#### Casualties and casualty crashes at enforced intersection

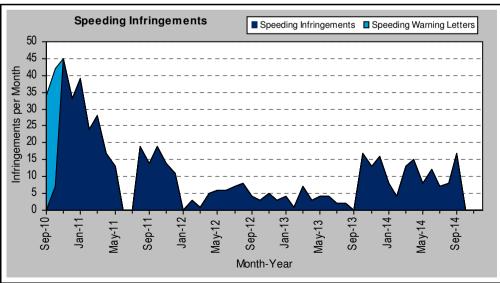
	5 years before installation1	4 years and 109 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	4	9	<b>↑ 162%</b>
Moderate Injuries	8	1	↓ 85%
Minor / Other Injuries	11	9	↓ 5%
Total Casualties:	23	19	↓ 4%
Pedestrian Casualties	0	0	-
Casualty Crashes	18	13	↓ 16%
Adjacent Casualty Crashes	6	1	↓ 81%
Right Through Casualty Crashes	6	6	↑ 16%
Rear End Casualty Crashes	5	5	<b>↑ 16%</b>

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 14 June 2010

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

# Blacktown - Great Western Highway at Reservoir Road

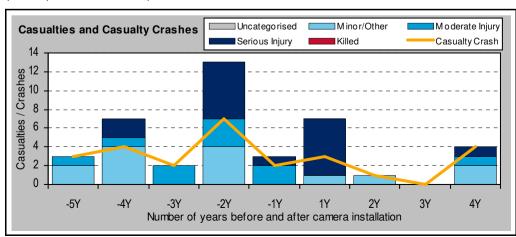
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Great Western Highway and Reservoir Road commenced issuing warning letters in December 2010.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

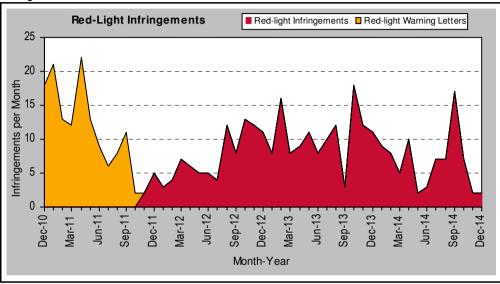
#### Casualties and casualty crashes at enforced intersection

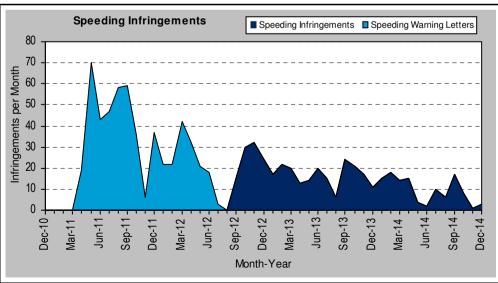
	5 years before installation <sup>1</sup>	4 years and 16 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	9	7	↓ 4%
Moderate Injuries	9	1	↓ 86%
Minor / Other Injuries	10	4	↓ 51%
Total Casualties:	28	12	↓ 47%
Pedestrian Casualties	0	0	-
Casualty Crashes	18	8	↓ 45%
Adjacent Casualty Crashes	3	0	↓ 100%
Right Through Casualty Crashes	5	1	↓ 75%
Rear End Casualty Crashes	6	3	↓ 38%

<sup>&</sup>lt;sup>1</sup> Ending 348 days before the start of the warning letter period, 1 January 2010

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







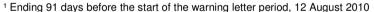
<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

#### Blacktown - Lancaster Street at Kildare Street (school zone)

- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Lancaster Street and Kildare Road commenced issuing warning letters in November 2010.
- While the results to date indicate a decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

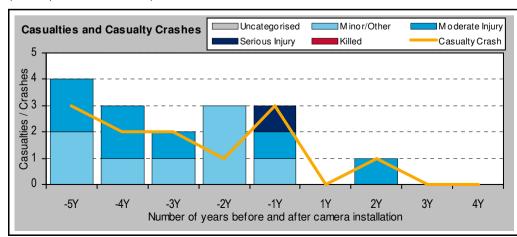
#### Casualties and casualty crashes at enforced intersection

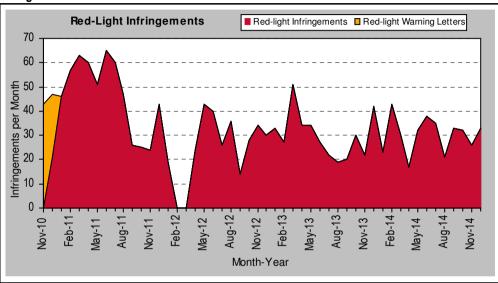
	5 years before installation1	4 years and 50 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	1	0	↓ 100%
Moderate Injuries	6	1	↓ 80%
Minor / Other Injuries	8	0	↓ 100%
Total Casualties:	15	1	↓ 92%
Pedestrian Casualties	2	0	↓ 100%
Casualty Crashes	11	1	↓ 89%
Adjacent Casualty Crashes	3	0	↓ 100%
Right Through Casualty Crashes	1	1	↑ 21%
Rear End Casualty Crashes	3	0	↓ 100%

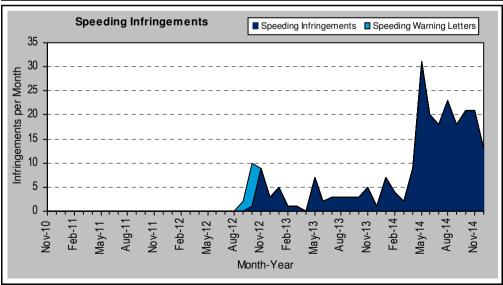


<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







#### Blacktown - Newton Road at Flushcombe Road (school zone)

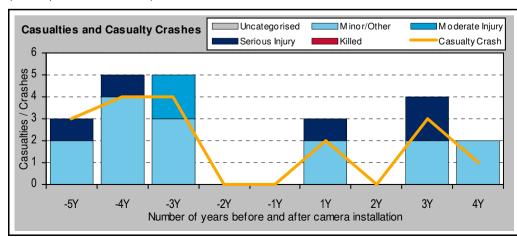
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Newton Road and Flushcombe Road commenced issuing warning letters in October 2010.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

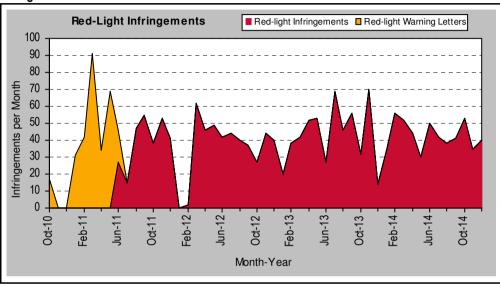
#### Casualties and casualty crashes at enforced intersection

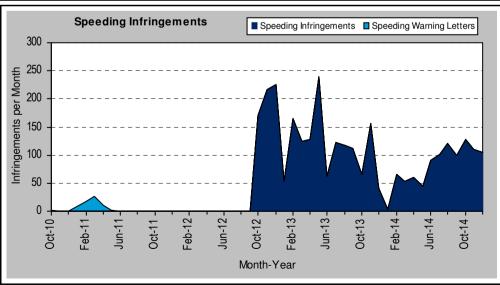
	5 years before installation <sup>1</sup>	4 years and 85 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	2	3	↑ 77%
Moderate Injuries	2	0	↓ 100%
Minor / Other Injuries	9	6	↓ 21%
Total Casualties:	13	9	↓ 18%
Pedestrian Casualties	1	0	↓ 100%
Casualty Crashes	11	6	↓ 36%
Adjacent Casualty Crashes	2	2	↑ 18%
Right Through Casualty Crashes	6	2	↓ 61%
Rear End Casualty Crashes	2	1	↓ 41%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 8 July 2010

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

# Blacktown - Sunnyholt Road at Main Street

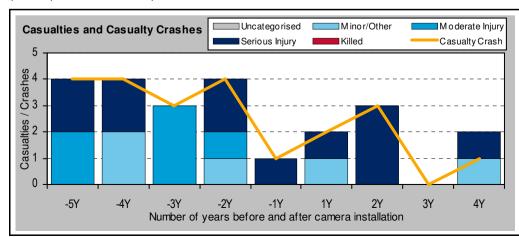
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Sunnyholt Road and Main Street commenced issuing warning letters in November 2010.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

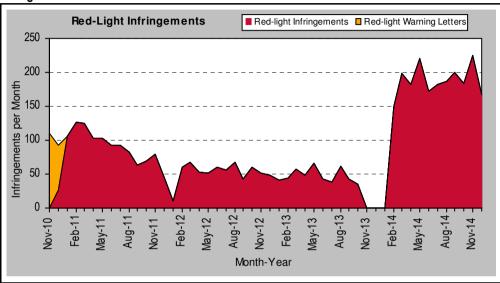
#### Casualties and casualty crashes at enforced intersection

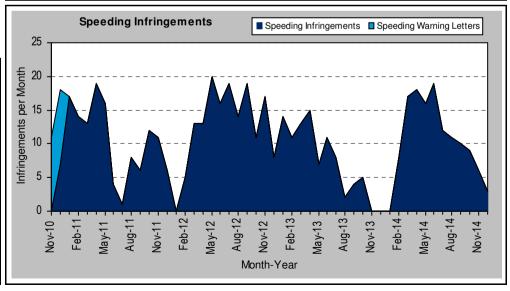
	5 years before installation <sup>1</sup>	4 years and 50 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	7	5	↓ 14%
Moderate Injuries	6	0	↓ 100%
Minor / Other Injuries	3	2	↓ 19%
Total Casualties:	16	7	↓ 47%
Pedestrian Casualties	8	1	↓ 85%
Casualty Crashes	16	6	↓ 55%
Adjacent Casualty Crashes	2	0	↓ 100%
Right Through Casualty Crashes	1	0	↓ 100%
Rear End Casualty Crashes	2	1	↓ 40%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 12 August 2010

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

#### Blacktown - Third Avenue at Prince Street

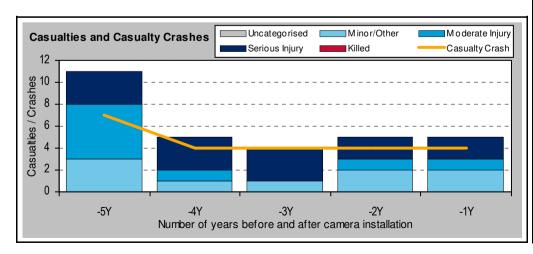
- There is one camera at this intersection.
- The camera at the intersection of Third Avenue and Prince Street commenced issuing warning letters in July 2014.
- A longer period of time is required to assess the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

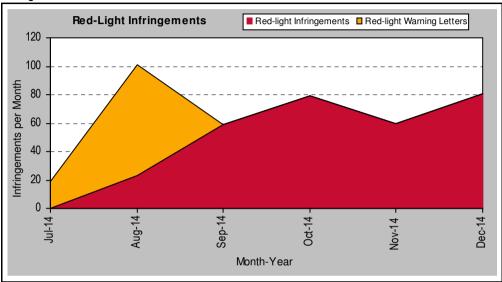
# Casualties and casualty crashes at enforced intersection

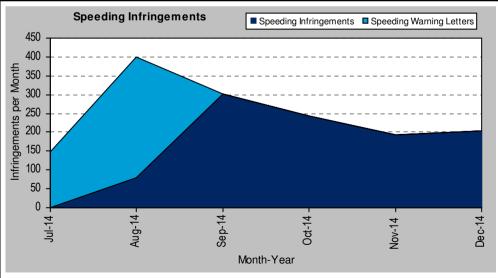
,		
	5 years before installation <sup>1</sup>	159 days after installation <sup>2</sup>
Fatalities	0	0
Serious Injuries	13	1
Moderate Injuries	8	0
Minor / Other Injuries	9	0
Total Casualties:	30	1
Pedestrian Casualties	9	0
Casualty Crashes	23	1
Adjacent Casualty Crashes	3	1
Right Through Casualty Crashes	7	0
Rear End Casualty Crashes	4	0

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 25 April 2014

<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014







#### Bondi Junction - Old South Head Road at Bondi Road

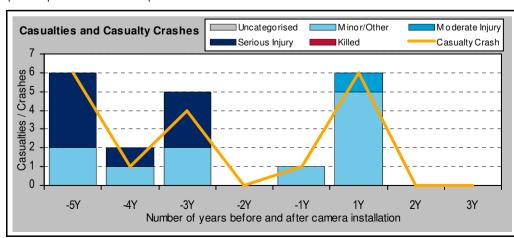
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Old South Head Road and Bondi Road commenced issuing warning letters in June 2011.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

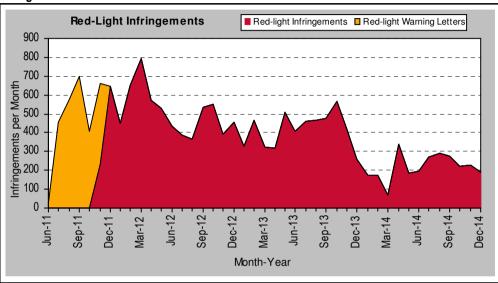
# Casualties and casualty crashes at enforced intersection

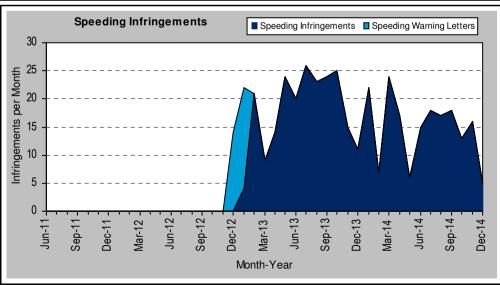
	5 years before installation <sup>1</sup>	3 years and 187 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	8	0	↓ 100%
Moderate Injuries	0	1	Increase
Minor / Other Injuries	6	5	† 19%
Total Casualties:	14	6	↓ 39%
Pedestrian Casualties	2	0	↓ 100%
Casualty Crashes	12	6	↓ 29%
Adjacent Casualty Crashes	6	2	↓ 53%
Right Through Casualty Crashes	0	0	-
Rear End Casualty Crashes	0	3	Increase

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 28 March 2011

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

# **Bradbury - Moore Oxley Bypass at The Parkway**

- · There is one camera at this intersection.
- The camera at the intersection of Moore Oxley Bypass and The Parkway commenced issuing warning letters in October 2013.
- While the results available so far suggest a slight increase in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

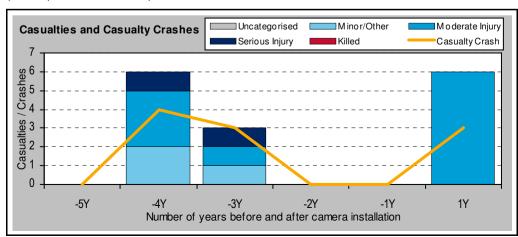
# Casualties and casualty crashes at enforced intersection

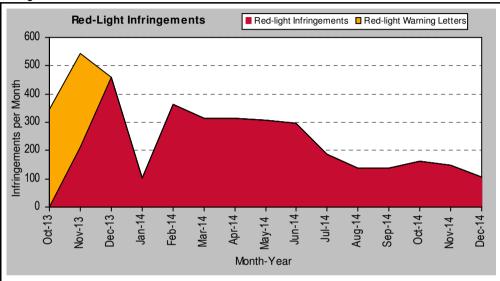
	5 years before installation <sup>1</sup>	1 year and 74 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	2	0	↓ 100%
Moderate Injuries	4	6	↑ 524%
Minor / Other Injuries	3	0	↓ 100%
Total Casualties:	9	6	↑ 177%
Pedestrian Casualties	0	0	-
Casualty Crashes	7	3	↑ 78%
Adjacent Casualty Crashes	1	0	↓ 100%
Right Through Casualty Crashes	4	2	↑ 108%
Rear End Casualty Crashes	1	1	↑ 316%

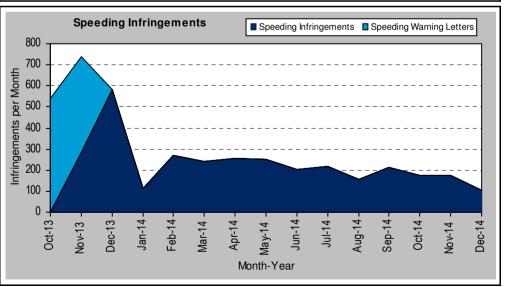


<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







#### Burwood / Concord - Parramatta Road at Burwood Road

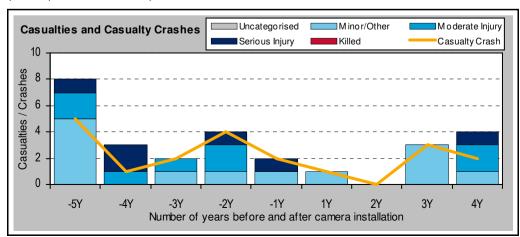
- There are two cameras at this intersection.
- Both cameras at the intersection of Parramatta Road and Burwood Road commenced issuing warning letters in September 2010.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the cameras.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

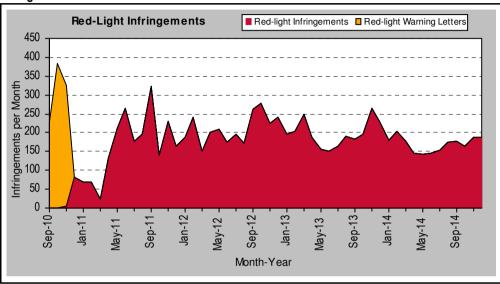
# Casualties and casualty crashes at enforced intersection

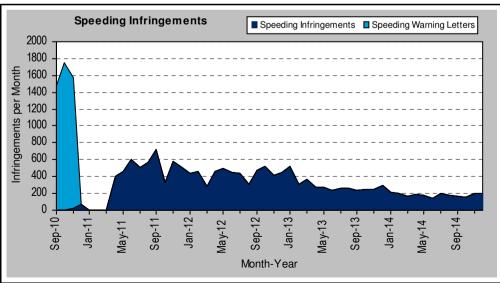
	5 years before installation <sup>1</sup>	4 years and 116 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	5	2	↓ 54%
Moderate Injuries	6	3	↓ 42%
Minor / Other Injuries	8	5	↓ 28%
Total Casualties:	19	10	↓ 39%
Pedestrian Casualties	3	1	↓ 61%
Casualty Crashes	14	8	↓ 34%
Adjacent Casualty Crashes	5	1	↓ 77%
Right Through Casualty Crashes	0	0	-
Rear End Casualty Crashes	4	5	↑ <b>4</b> 5%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 7 June 2010

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

# Cabramatta - Cumberland Highway at Cabramatta Road West

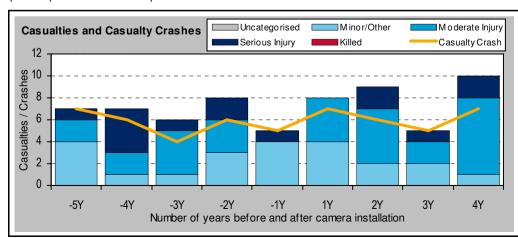
- There are two cameras at this intersection. This was previously a wet-film red-light camera location.
- Both cameras at the intersection of Cumberland Highway and Cabramatta Road West commenced issuing warning letters in June 2010.
- While the results available so far suggest a slight increase in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the cameras.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

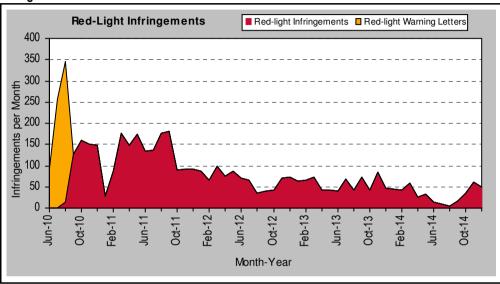
# Casualties and casualty crashes at enforced intersection

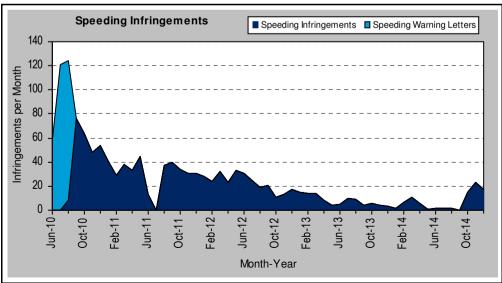
	5 years before installation <sup>1</sup>	4 years and 190 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	9	5	↓ 39%
Moderate Injuries	11	19	↑ 91%
Minor / Other Injuries	13	9	↓ 23%
Total Casualties:	33	33	↑ 11%
Pedestrian Casualties	2	0	↓ 100%
Casualty Crashes	28	26	↑ 3%
Adjacent Casualty Crashes	3	1	↓ 63%
Right Through Casualty Crashes	11	11	↑ 11%
Rear End Casualty Crashes	7	10	↑ 58%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 25 March 2010

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

# Cabramatta - Cumberland Highway at St Johns Road

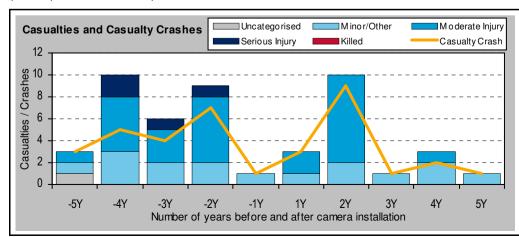
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Cumberland Highway and St Johns Road commenced issuing warning letters in December 2009.
- While the results available so far are encouraging, an assessment of effectiveness of individual red-light speed camera locations that have been operational for five years or more will be made in future performance reviews of speed cameras.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

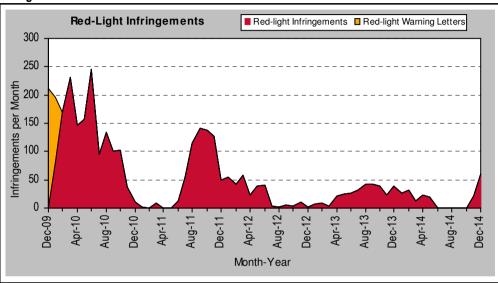
#### Casualties and casualty crashes at enforced intersection

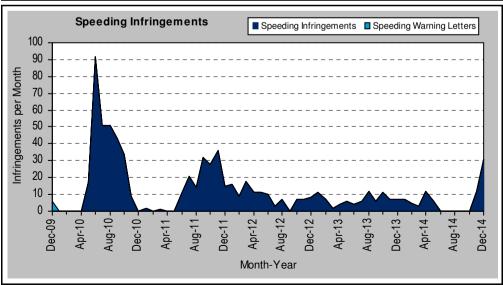
	4 years and 260 days before installation¹	5 years after installation²	Percentage change³
Fatalities	0	0	-
Serious Injuries	4	0	↓ 100%
Moderate Injuries	15	11	↓ 31%
Minor / Other Injuries	8	7	↓ 18%
Total Casualties:	27	18	↓ 37%
Pedestrian Casualties	0	0	-
Casualty Crashes	18	16	↓ 16%
Adjacent Casualty Crashes	1	2	↑ 88%
Right Through Casualty Crashes	7	2	↓ 73%
Rear End Casualty Crashes	5	9	↑ 70%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 18 September 2009

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 18 December 2014

# Campbelltown - Kellicar Road at Narellan Road

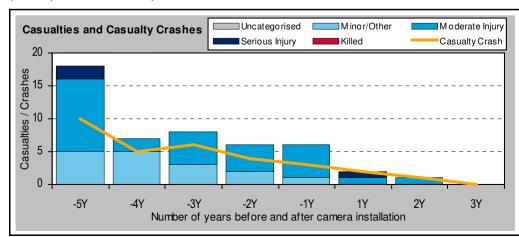
- There are two cameras at this intersection.
- Both cameras at the intersection of Kellicar Road and Narellan Road commenced issuing warning letters in May 2011.
- While results to date reveal a significant decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the cameras.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

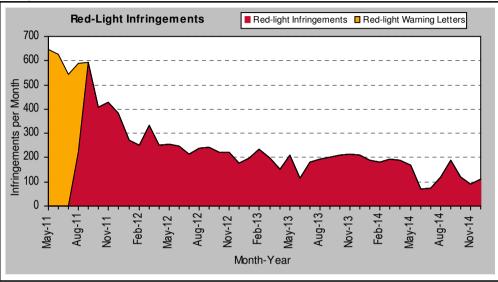
# Casualties and casualty crashes at enforced intersection

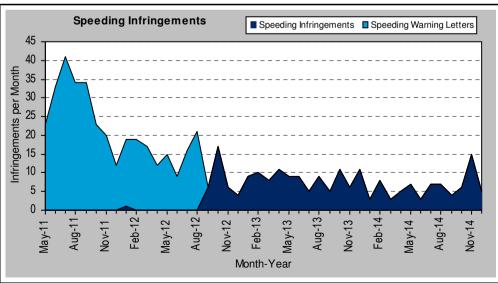
	5 years before installation¹	3 years and 236 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	2	1	↓ 31%
Moderate Injuries	27	2	↓ 90%
Minor / Other Injuries	16	2	↓ 83%
Total Casualties:	45	5	↓ 85%
Pedestrian Casualties	6	0	↓ 100%
Casualty Crashes	28	4	↓ 80%
Adjacent Casualty Crashes	3	0	↓ 100%
Right Through Casualty Crashes	9	1	↓ 85%
Rear End Casualty Crashes	5	3	↓ 18%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 7 February 2011

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

# Campbelltown - Moore-Oxley Bypass at Broughton Street

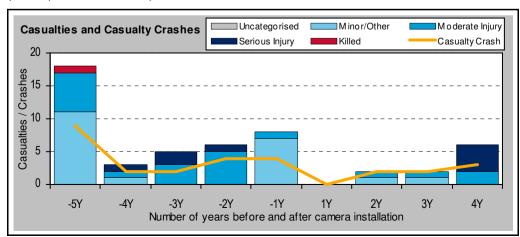
- There are two cameras at this intersection. This was previously a wet-film red-light camera location.
- Both cameras at the intersection of Moore-Oxley Bypass and Broughton Street commenced issuing warning letters in June 2010.
- While the results to date indicate a decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the cameras.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

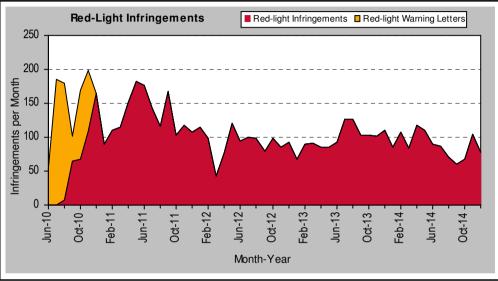
#### Casualties and casualty crashes at enforced intersection

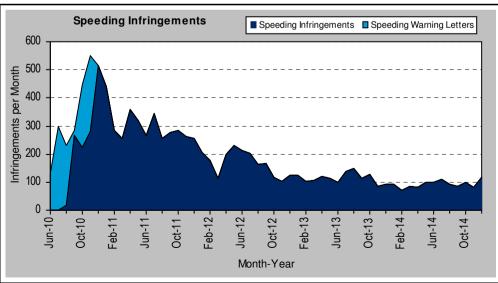
	5 years before installation <sup>1</sup>	4 years and 190 days after installation <sup>2</sup>	Percentage change³
Fatalities	1	0	↓ 100%
Serious Injuries	4	4	↑ 11%
Moderate Injuries	16	6	↓ 59%
Minor / Other Injuries	19	2	↓ 88%
Total Casualties:	40	12	↓ 67%
Pedestrian Casualties	0	0	-
Casualty Crashes	21	8	↓ 58%
Adjacent Casualty Crashes	4	1	↓ 72%
Right Through Casualty Crashes	10	4	↓ 56%
Rear End Casualty Crashes	6	3	↓ 45%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 25 March 2010

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

# Campsie - Canterbury Road at Bexley Road

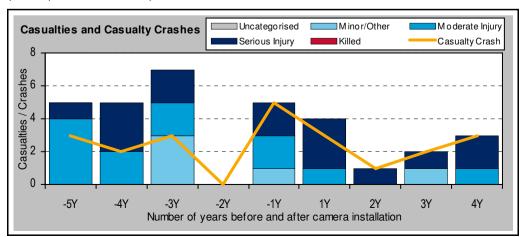
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Canterbury Road and Bexley Road commenced issuing warning letters in October 2010.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

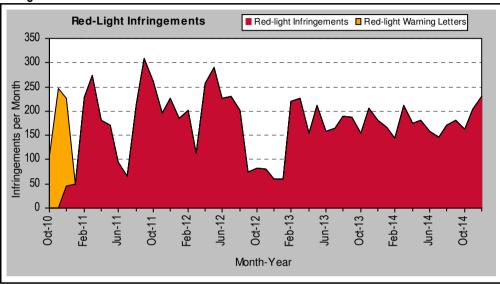
#### Casualties and casualty crashes at enforced intersection

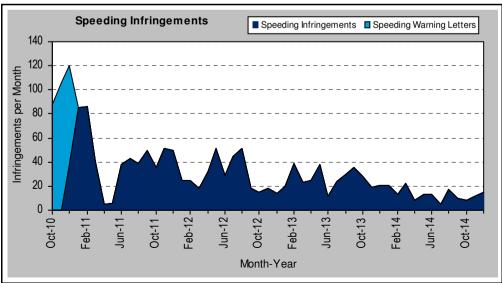
	5 years before installation <sup>1</sup>	4 years and 77 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	8	8	↑ 19%
Moderate Injuries	10	2	↓ 76%
Minor / Other Injuries	4	1	↓ 70%
Total Casualties:	22	11	↓ 41%
Pedestrian Casualties	1	3	↑ 256%
Casualty Crashes	13	10	↓ 9%
Adjacent Casualty Crashes	0	0	-
Right Through Casualty Crashes	5	3	↓ 29%
Rear End Casualty Crashes	3	1	↓ 60%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 16 July 2010

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

# **Campsie - Canterbury Road at Thorncraft Parade**

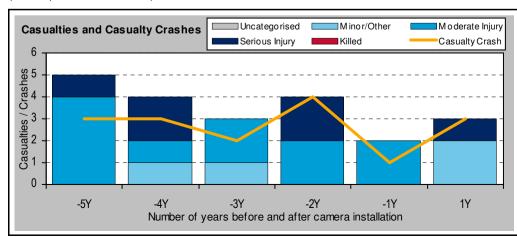
- There is one camera at this intersection.
- The camera at the intersection of Canterbury Road and Thorncraft Parade commenced issuing warning letters in April 2013.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

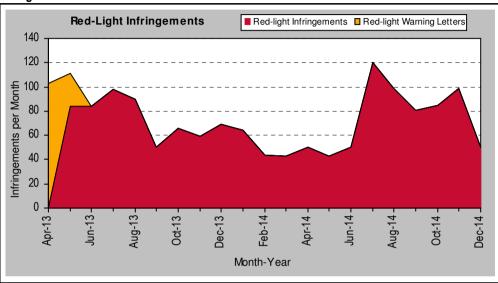
#### Casualties and casualty crashes at enforced intersection

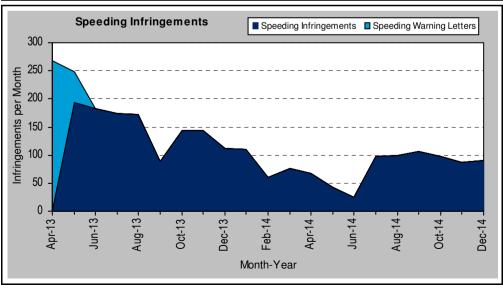
	5 years before installation <sup>1</sup>	1 year and 269 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	5	1	↓ 42%
Moderate Injuries	11	0	↓ 100%
Minor / Other Injuries	2	2	↑ 188%
Total Casualties:	18	3	↓ 52%
Pedestrian Casualties	3	1	↓ 4%
Casualty Crashes	13	3	↓ 33%
Adjacent Casualty Crashes	5	1	↓ 42%
Right Through Casualty Crashes	4	1	↓ 28%
Rear End Casualty Crashes	1	0	↓ 100%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 5 January 2013

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

# Canley Vale - Sackville Street at Canley Vale Road

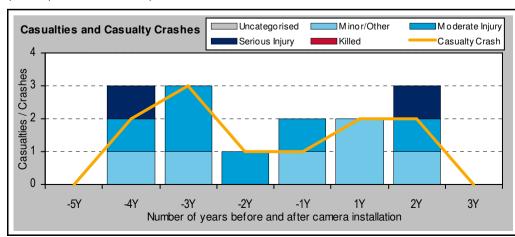
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Sackville Street and Canley Vale Road commenced issuing warning letters in April 2011.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

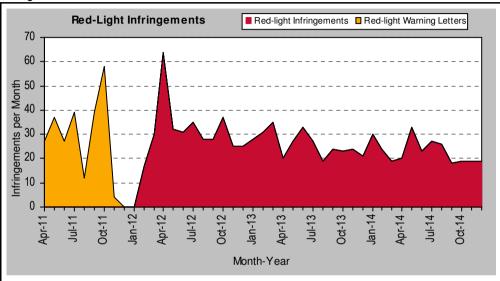
#### Casualties and casualty crashes at enforced intersection

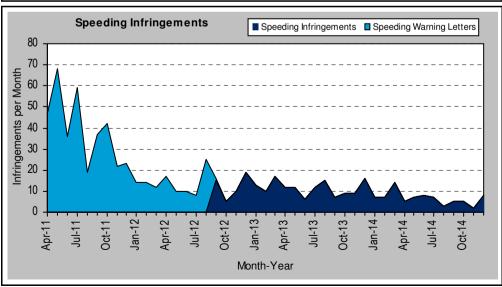
	5 years before installation <sup>1</sup>	3 years and 267 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	1	1	<b>↑ 34%</b>
Moderate Injuries	5	2	↓ 46%
Minor / Other Injuries	3	3	<b>↑ 34%</b>
Total Casualties:	9	6	↓ 11%
Pedestrian Casualties	0	0	-
Casualty Crashes	7	5	↓ 4%
Adjacent Casualty Crashes	1	2	↑ 168%
Right Through Casualty Crashes	3	2	↓ 11%
Rear End Casualty Crashes	2	1	↓ 33%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 7 January 2011

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

# Caringbah - The Kingsway at Gannons Road

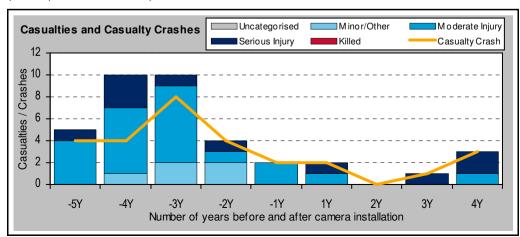
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Kingsway and Gannons Road commenced issuing warning letters in September 2010.
- While the results to date indicate a decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

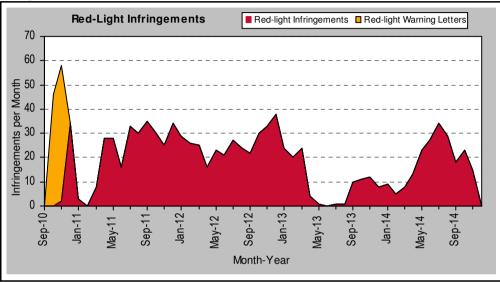
# Casualties and casualty crashes at enforced intersection

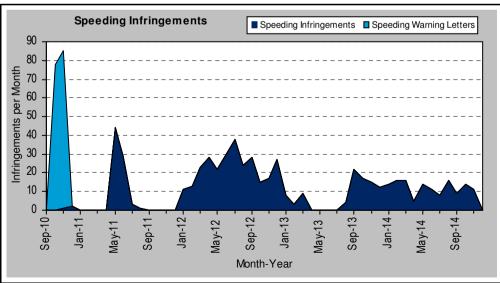
	5 years before installation <sup>1</sup>	4 years and 93 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	6	4	↓ 22%
Moderate Injuries	20	2	↓ 88%
Minor / Other Injuries	5	0	↓ 100%
Total Casualties:	31	6	↓ 77%
Pedestrian Casualties	3	1	↓ 61%
Casualty Crashes	22	6	↓ 68%
Adjacent Casualty Crashes	6	0	↓ 100%
Right Through Casualty Crashes	8	2	↓ 71%
Rear End Casualty Crashes	3	1	↓ 61%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 30 June 2010

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

#### Castle Hill - Pennant Street at Castle Street

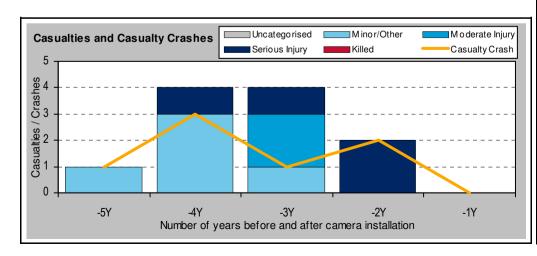
- There is one camera at this intersection.
- The camera at the intersection of Pennant Street and Castle Street commenced issuing warning letters in August 2014.
- A longer period of time is required to assess the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

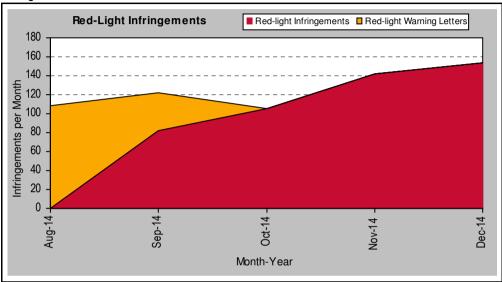
# Casualties and casualty crashes at enforced intersection

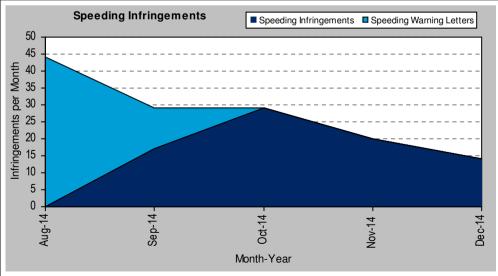
	5 years before	141 days after	
	installation1	installation <sup>2</sup>	
Fatalities	0	0	
Serious Injuries	4	0	
Moderate Injuries	2	0	
Minor / Other Injuries	5	0	
Total Casualties:	11	0	
Pedestrian Casualties	0	0	
Casualty Crashes	7	0	
Adjacent Casualty Crashes	1	0	
Right Through Casualty Crashes	4	0	
Rear End Casualty Crashes	0	0	

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 13 May 2014

<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014







# Castle Hill - Showground Road at Victoria Avenue

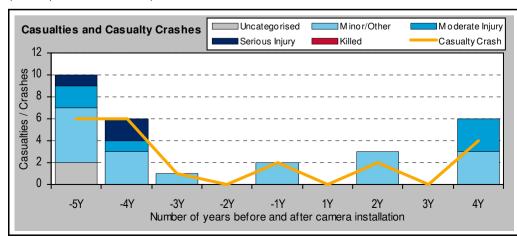
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Showground Road and Victoria Avenue commenced issuing warning letters in February 2010.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

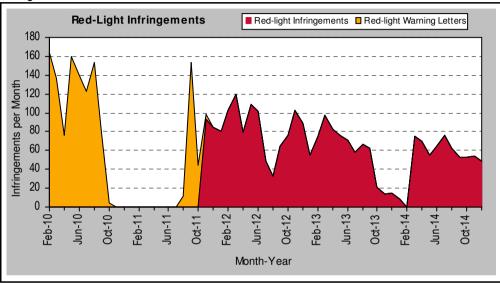
# Casualties and casualty crashes at enforced intersection

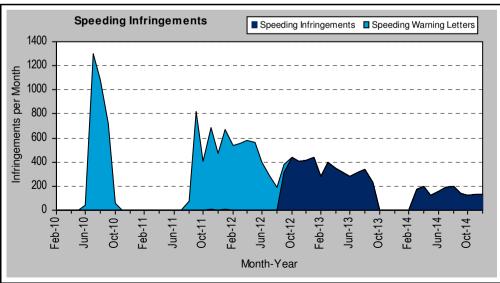
	4 years and 305 days before installation <sup>1</sup>	4 years and 333 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	3	0	↓ 100%
Moderate Injuries	3	3	↓ 2%
Minor / Other Injuries	11	7	↓ 37%
Total Casualties:	17	10	↓ 42%
Pedestrian Casualties	0	0	-
Casualty Crashes	14	7	↓ 51%
Adjacent Casualty Crashes	1	0	↓ 100%
Right Through Casualty Crashes	4	0	↓ 100%
Rear End Casualty Crashes	6	3	↓ 51%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 2 November 2009

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

#### Chester Hill / Sefton - Waldron Road at Hector Street

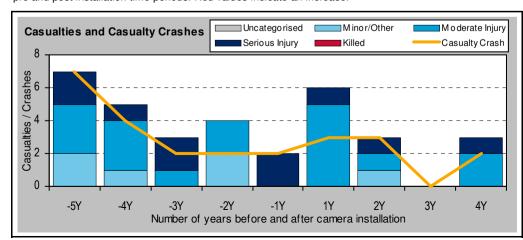
- There are two cameras at this intersection.
- The camera at the intersection of Waldron Road and Hector Street (westbound) commenced issuing warning letters in July 2010.
- The camera at the intersection of Waldron Road and Hector Street (eastbound) commenced issuing warning letters in August 2010.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the cameras.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

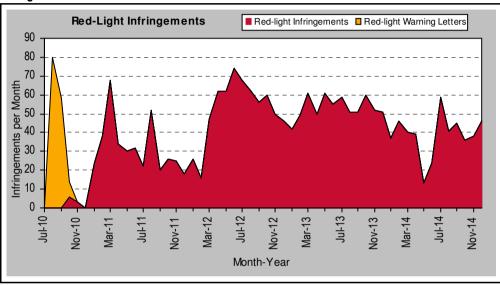
#### Casualties and casualty crashes at enforced intersection

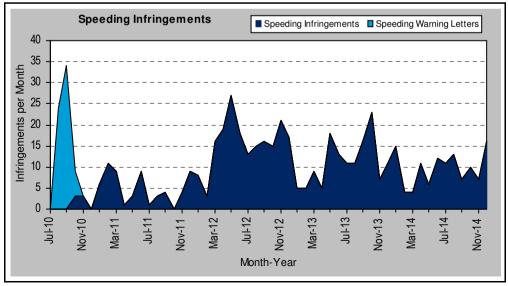
-			
	5 years before installation1	4 years and 161 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	7	3	↓ 52%
Moderate Injuries	9	8	↓ 0%
Minor / Other Injuries	5	3	↓ 32%
Total Casualties:	21	14	↓ 25%
Pedestrian Casualties	1	0	↓ 100%
Casualty Crashes	17	10	↓ 34%
Adjacent Casualty Crashes	5	1	↓ 77%
Right Through Casualty Crashes	10	6	↓ 32%
Rear End Casualty Crashes	0	0	-

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 23 April 2010

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

### **Concord - Broughton Street at Crane Street**

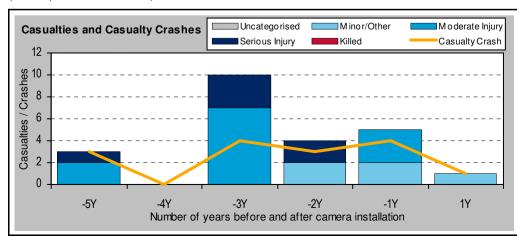
- · There is one camera at this intersection.
- The camera at the intersection of Broughton Street and Crane Street commenced issuing warning letters in March 2013.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

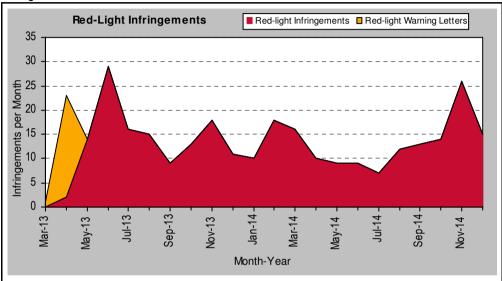
## Casualties and casualty crashes at enforced intersection

	5 years before installation1	1 year and 277 days after installation <sup>2</sup>	Percentage change³
Catalities	0	0	
Fatalities	U	U	-
Serious Injuries	6	0	↓ 100%
Moderate Injuries	12	0	↓ 100%
Minor / Other Injuries	4	1	↓ 29%
Total Casualties:	22	1	↓ 87%
Pedestrian Casualties	0	0	-
Casualty Crashes	14	1	↓ 80%
Adjacent Casualty Crashes	12	1	↓ 76%
Right Through Casualty Crashes	1	0	↓ 100%
Rear End Casualty Crashes	0	0	-

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 28 December 2012

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

## **Crows Nest - Pacific Highway at Hume Street**

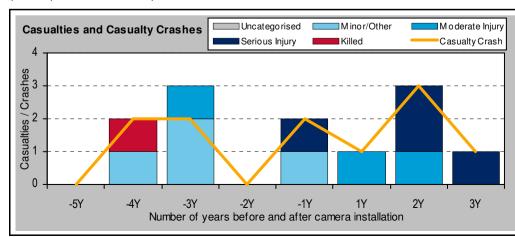
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Pacific Highway and Hume Street commenced issuing warning letters in April 2011.
- While the results available so far suggest a slight increase in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

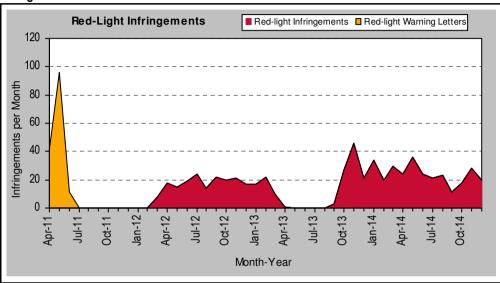
## Casualties and casualty crashes at enforced intersection

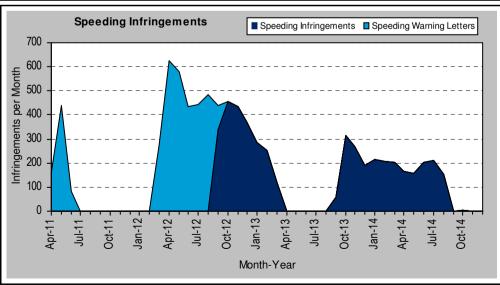
	5 years before installation <sup>1</sup>	3 years and 257 days after installation <sup>2</sup>	Percentage change³
Fatalities	1	0	↓ 100%
Serious Injuries	1	3	↑ 305%
Moderate Injuries	1	2	↑ 170%
Minor / Other Injuries	4	0	↓ 100%
Total Casualties:	7	5	↓ 4%
Pedestrian Casualties	3	2	↓ 10%
Casualty Crashes	6	5	↑ 12%
Adjacent Casualty Crashes	1	1	↑ 35%
Right Through Casualty Crashes	0	1	Increase
Rear End Casualty Crashes	2	0	↓ 100%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 17 January 2011

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

## Croydon Park - Georges River Road at Croydon Avenue

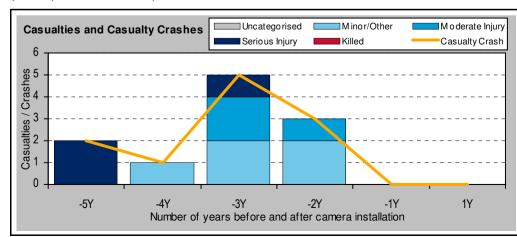
- · There is one camera at this intersection.
- The camera at the intersection of Georges River Road and Croydon Avenue commenced issuing warning letters in August 2013.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

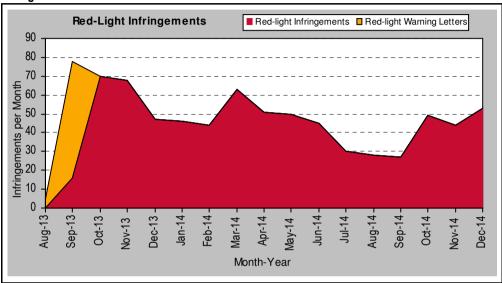
## Casualties and casualty crashes at enforced intersection

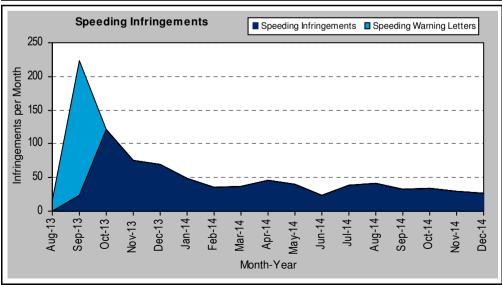
	5 years before installation1	1 year and 126 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	3	0	↓ 100%
Moderate Injuries	3	0	↓ 100%
Minor / Other Injuries	5	0	↓ 100%
Total Casualties:	11	0	↓ 100%
Pedestrian Casualties	3	0	↓ 100%
Casualty Crashes	11	0	↓ 100%
Adjacent Casualty Crashes	5	0	↓ 100%
Right Through Casualty Crashes	3	0	↓ 100%
Rear End Casualty Crashes	0	0	-

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 28 May 2013

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







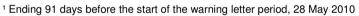
<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

### **Darlinghurst - Craigend Street at McLachlan Avenue**

- · There is one camera at this intersection.
- The camera at the intersection of Craigend Street and McLachlan Avenue commenced issuing warning letters in August 2010.
- While the results to date indicate a decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued. This location was impacted by major civil works between June and November 2011.

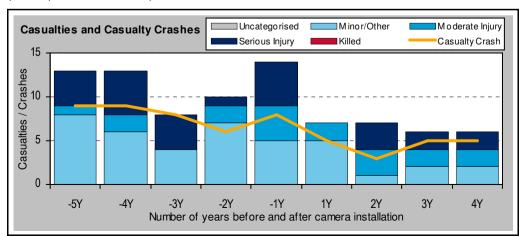
### Casualties and casualty crashes at enforced intersection

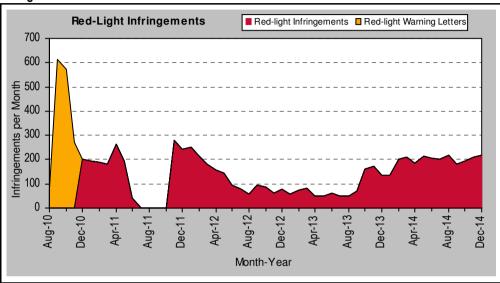
	5 years before installation <sup>1</sup>	4 years and 126 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	19	7	↓ 58%
Moderate Injuries	9	10	↑ 28%
Minor / Other Injuries	30	10	↓ 62%
Total Casualties:	58	27	↓ 46%
Pedestrian Casualties	0	0	-
Casualty Crashes	40	19	↓ 45%
Adjacent Casualty Crashes	32	13	↓ 53%
Right Through Casualty Crashes	0	0	
Rear End Casualty Crashes	2	1	↓ 42%

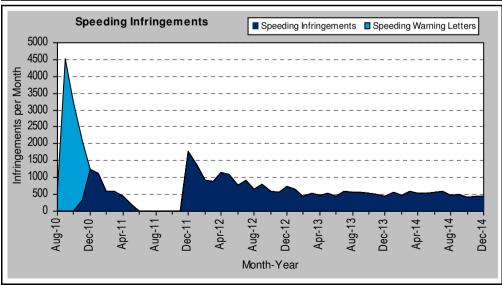


<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







## **Darlinghurst - Oxford Street at Crown Street**

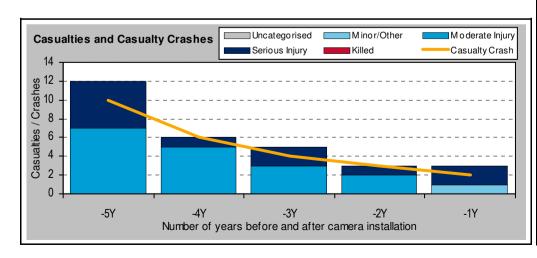
- There is one camera at this intersection.
- The camera at the intersection of Oxford Street and Crown Street commenced issuing warning letters in September 2014.
- A longer period of time is required to assess the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

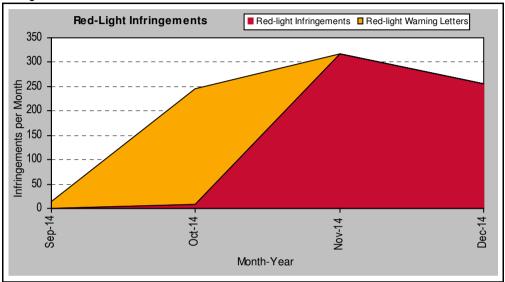
# Casualties and casualty crashes at enforced intersection

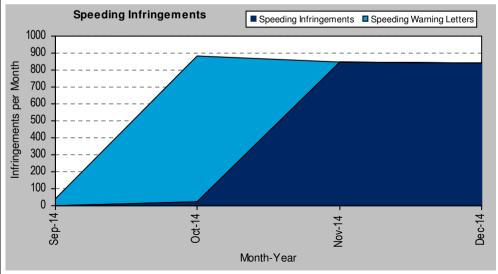
•		
	5 years before installation <sup>1</sup>	92 days after installation²
Fatalities	0	0
Serious Injuries	11	1
Moderate Injuries	17	0
Minor / Other Injuries	1	0
Total Casualties:	29	1
Pedestrian Casualties	15	1
Casualty Crashes	25	1
Adjacent Casualty Crashes	0	0
Right Through Casualty Crashes	0	0
Rear End Casualty Crashes	2	0

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 1 July 2014

<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014







## **Darlinghurst - William Street at Crown Street**

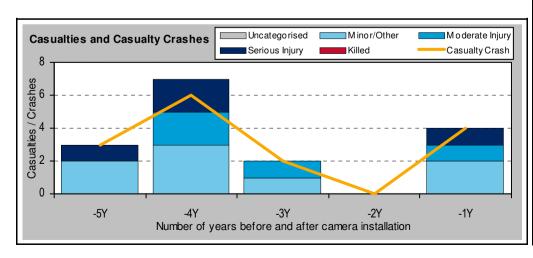
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of William Street and Crown Street commenced issuing warning letters in October 2014.
- A longer period of time is required to assess the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

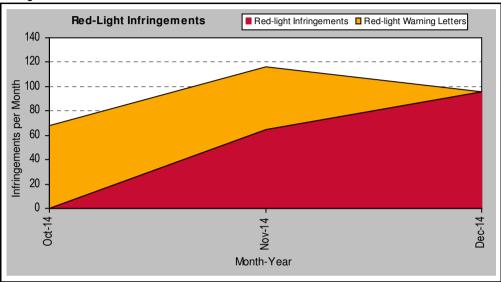
# Casualties and casualty crashes at enforced intersection

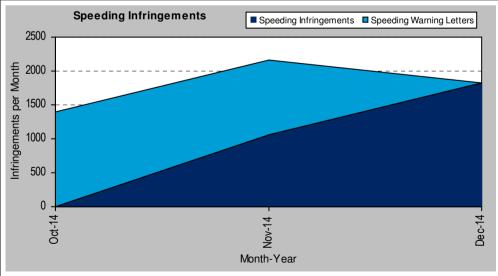
	5 years before installation <sup>1</sup>	76 days after installation²	
Fatalities	0	0	
Serious Injuries	4	0	
Moderate Injuries	4	0	
Minor / Other Injuries	8	0	
Total Casualties:	16	0	
Pedestrian Casualties	2	0	
Casualty Crashes	15	0	
Adjacent Casualty Crashes	3	0	
Right Through Casualty Crashes	2	0	
Rear End Casualty Crashes	0	0	

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 17 July 2014

<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014







### Dean Park - Richmond Road at M7 Motorway southbound on-ramp

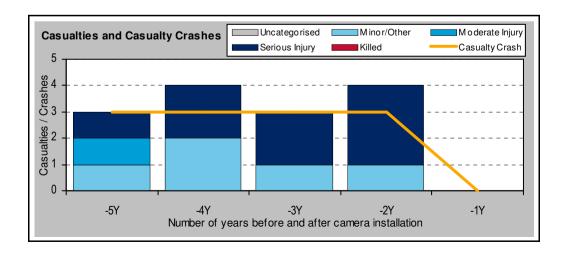
- There is one camera at this intersection.
- The camera at the intersection of Richmond Road and M7 Motorway on ramp (Southbound) commenced issuing warning letters in August 2014. This camera enforces red-light running only.
- A longer period of time is required to assess the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

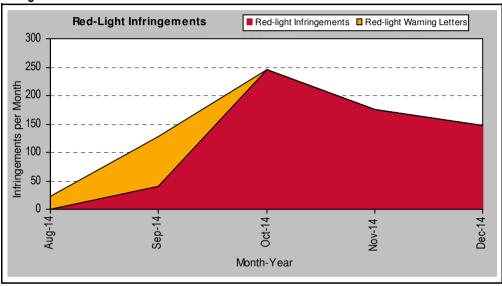
#### Casualties and casualty crashes at enforced intersection

	5 years before installation <sup>1</sup>	126 days after installation²
Fatalities	0	0
Serious Injuries	8	2
Moderate Injuries	1	0
Minor / Other Injuries	5	0
Total Casualties:	14	2
Pedestrian Casualties	0	0
Casualty Crashes	12	2
Adjacent Casualty Crashes	0	0
Right Through Casualty Crashes	11	1
Rear End Casualty Crashes	0	1

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 28 May 2014

<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014





### Dee Why - Pittwater Road at Harbord Road

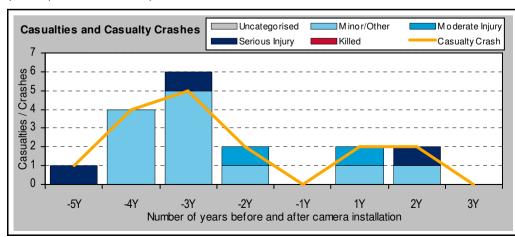
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Pittwater Road and Harbord Road commenced issuing warning letters in June 2011.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

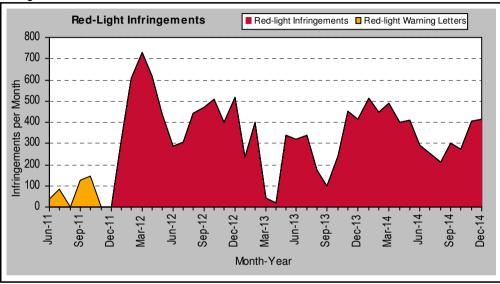
## Casualties and casualty crashes at enforced intersection

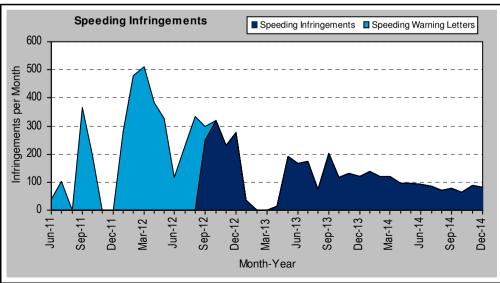
	5 years before installation <sup>1</sup>	3 years and 187 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	2	1	↓ 29%
Moderate Injuries	1	1	<b>† 42%</b>
Minor / Other Injuries	10	4	↓ 43%
Total Casualties:	13	6	↓ 34%
Pedestrian Casualties	0	0	-
Casualty Crashes	12	6	↓ 29%
Adjacent Casualty Crashes	1	0	↓ 100%
Right Through Casualty Crashes	0	2	Increase
Rear End Casualty Crashes	8	4	↓ 29%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 28 March 2011

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

### **Eastwood - Blaxland Road at May Street**

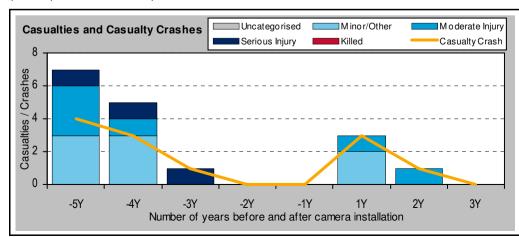
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Blaxland Road and May Street commenced issuing warning letters in April 2011.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

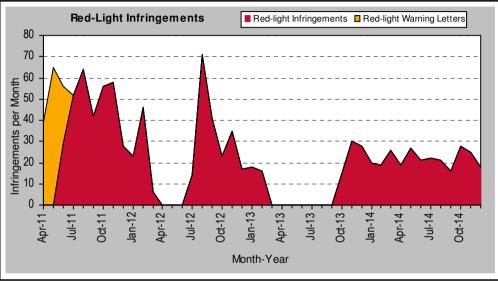
## Casualties and casualty crashes at enforced intersection

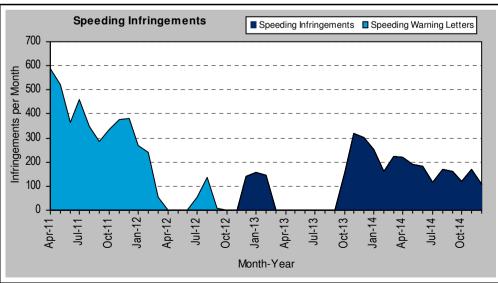
	5 years before installation1	3 years and 267 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	3	0	↓ 100%
Moderate Injuries	4	2	↓ 33%
Minor / Other Injuries	6	2	↓ 55%
Total Casualties:	13	4	↓ 59%
Pedestrian Casualties	2	0	↓ 100%
Casualty Crashes	8	4	↓ 33%
Adjacent Casualty Crashes	0	0	-
Right Through Casualty Crashes	4	1	↓ 67%
Rear End Casualty Crashes	2	2	↑ 34%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 7 January 2011

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

### Eastwood - Rutledge Street at Shaftsbury Road (school zone)

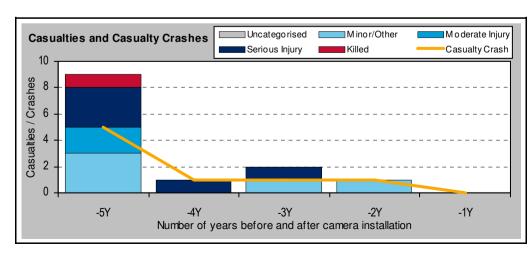
- There is one camera at this intersection.
- The camera at the intersection of Rutledge Street and Shaftsbury Road commenced issuing warning letters in July 2014.
- A longer period of time is required to assess the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

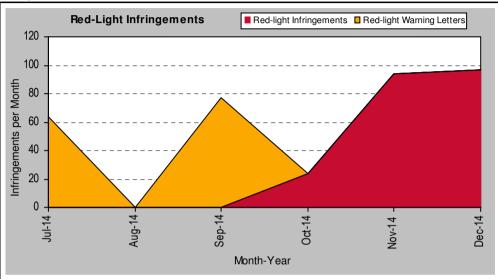
# Casualties and casualty crashes at enforced intersection

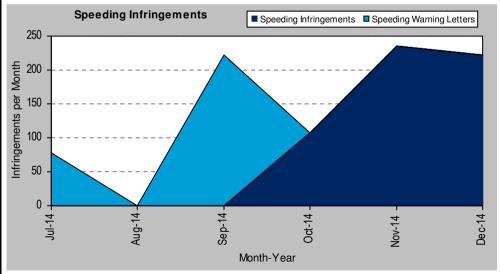
	5 years before installation <sup>1</sup>	170 days after installation <sup>2</sup>
Fatalities	1	0
Serious Injuries	5	0
Moderate Injuries	2	0
Minor / Other Injuries	5	0
Total Casualties:	13	0
Pedestrian Casualties	2	0
Casualty Crashes	8	0
Adjacent Casualty Crashes	3	0
Right Through Casualty Crashes	2	0
Rear End Casualty Crashes	0	0

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 14 April 2014

<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014







## **Epping - Carlingford Road at Rawson Street**

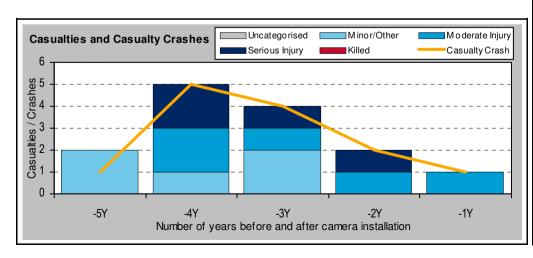
- There is one camera at this intersection.
- The camera at the intersection of Carlingford Road and Rawson Street commenced issuing warning letters in August 2014.
- A longer period of time is required to assess the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

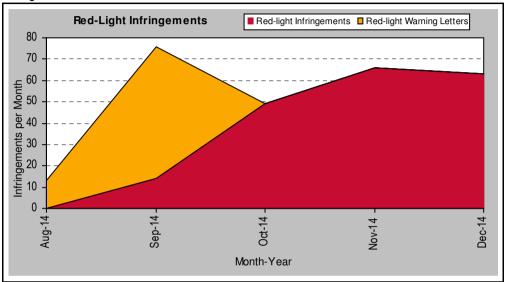
# Casualties and casualty crashes at enforced intersection

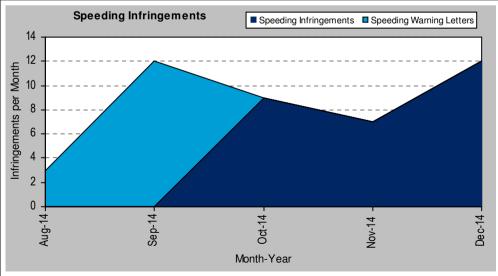
	5 years before installation <sup>1</sup>	126 days after installation²
Fatalities	0	0
Serious Injuries	4	0
Moderate Injuries	5	0
Minor / Other Injuries	5	0
Total Casualties:	14	0
Pedestrian Casualties	5	0
Casualty Crashes	13	0
Adjacent Casualty Crashes	1	0
Right Through Casualty Crashes	4	0
Rear End Casualty Crashes	2	0

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 28 May 2014

<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014







## **Ermington - Victoria Road at Spurway Street**

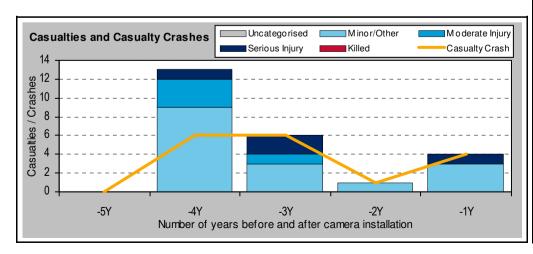
- There is one camera at this intersection.
- The camera at the intersection of Victoria Road and Spurway Street commenced issuing warning letters in August 2014.
- A longer period of time is required to assess the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

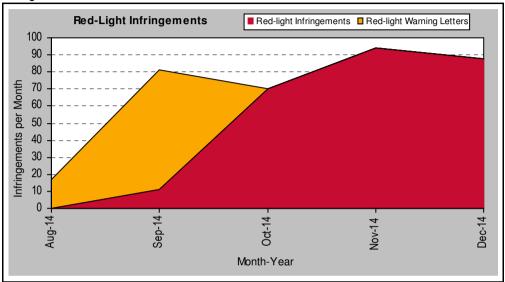
# Casualties and casualty crashes at enforced intersection

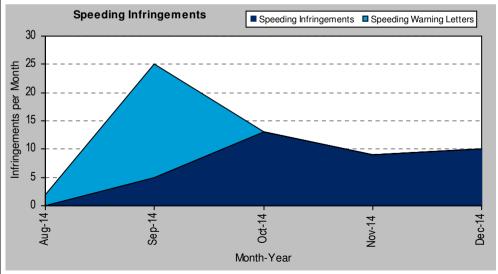
	5 years before installation <sup>1</sup>	126 days after installation <sup>2</sup>
Fatalities	0	0
Serious Injuries	4	0
Moderate Injuries	4	1
Minor / Other Injuries	16	0
Total Casualties:	24	1
Pedestrian Casualties	3	0
Casualty Crashes	17	1
Adjacent Casualty Crashes	2	0
Right Through Casualty Crashes	9	0
Rear End Casualty Crashes	0	0

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 28 May 2014

<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014







#### Fairfield - Hamilton Road at The Boulevarde

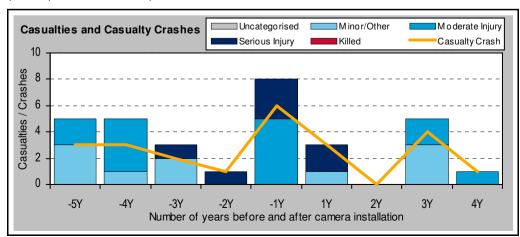
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Hamilton Road and The Boulevarde commenced issuing warning letters in October 2010.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

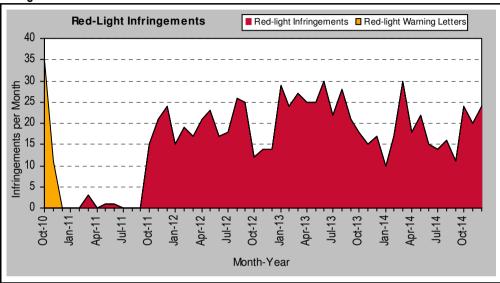
### Casualties and casualty crashes at enforced intersection

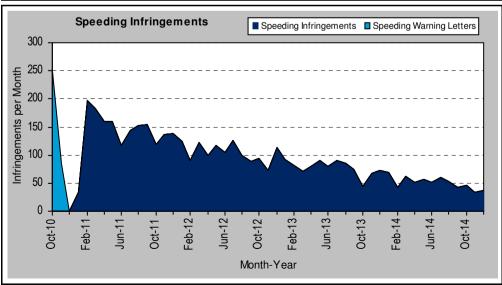
	5 years before installation1	4 years and 81 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	5	2	↓ 53%
Moderate Injuries	11	3	↓ 68%
Minor / Other Injuries	6	4	↓ 21%
Total Casualties:	22	9	↓ 52%
Pedestrian Casualties	1	1	↑ 18%
Casualty Crashes	15	8	↓ 37%
Adjacent Casualty Crashes	2	0	↓ 100%
Right Through Casualty Crashes	9	4	↓ 47%
Rear End Casualty Crashes	0	2	Increase

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 12 July 2010

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

### Fairfield - The Horsley Drive at Polding Street

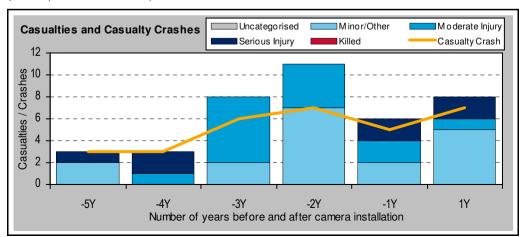
- · There is one camera at this intersection.
- The camera at the intersection of The Horsley Drive and Polding Street commenced issuing warning letters in September 2013.
- While the results available so far suggest a slight increase in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

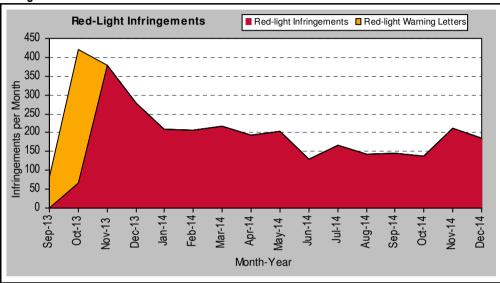
## Casualties and casualty crashes at enforced intersection

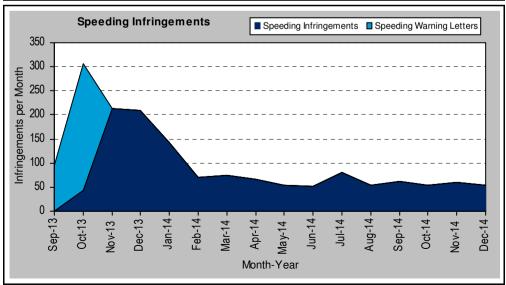
	5 years before installation <sup>1</sup>	1 year and 96 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	5	2	↑ 58%
Moderate Injuries	13	2	↓ 39%
Minor / Other Injuries	13	5	↑ 52%
Total Casualties:	31	9	↑ 15%
Pedestrian Casualties	1	0	↓ 100%
Casualty Crashes	24	8	↑ 32%
Adjacent Casualty Crashes	4	0	↓ 100%
Right Through Casualty Crashes	12	5	↑ 65%
Rear End Casualty Crashes	4	1	↓ 1%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 27 June 2013

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

### Figtree - Princes Highway at O'Briens Road

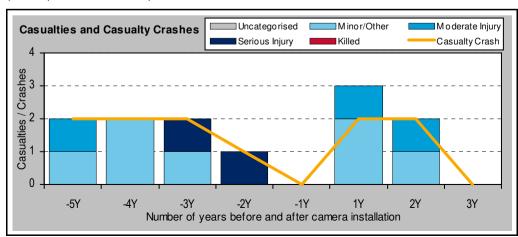
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Princes Highway and O'Briens Road commenced issuing warning letters in April 2011.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

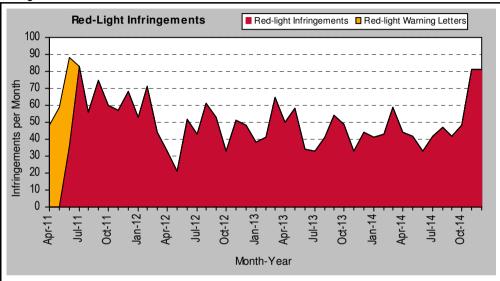
# Casualties and casualty crashes at enforced intersection

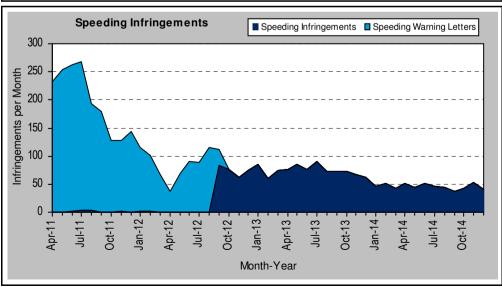
	5 years before installation <sup>1</sup>	3 years and 257 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	2	0	↓ 100%
Moderate Injuries	1	2	↑ 170%
Minor / Other Injuries	4	3	↑ 1%
Total Casualties:	7	5	↓ 4%
Pedestrian Casualties	0	0	-
Casualty Crashes	7	4	↓ 23%
Adjacent Casualty Crashes	1	0	↓ 100%
Right Through Casualty Crashes	2	4	↑ 170%
Rear End Casualty Crashes	2	0	↓ 100%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 17 January 2011

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

#### Five Dock - Fairlight Street at Ramsay Road

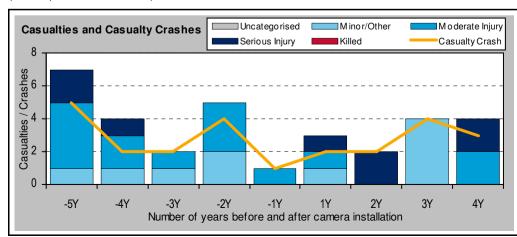
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Fairlight Street and Ramsay Road commenced issuing warning letters in November 2010.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

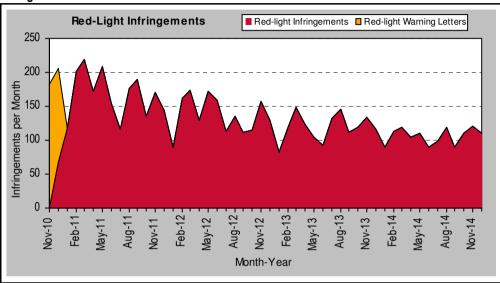
#### Casualties and casualty crashes at enforced intersection

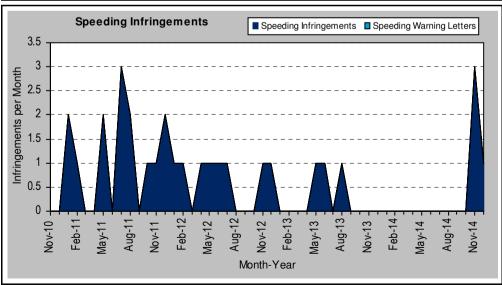
	5 years before installation <sup>1</sup>	4 years and 50 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	3	5	↑ 101%
Moderate Injuries	11	3	↓ 67%
Minor / Other Injuries	5	5	<b>↑ 21%</b>
Total Casualties:	19	13	↓ 17%
Pedestrian Casualties	2	0	↓ 100%
Casualty Crashes	14	11	↓ 5%
Adjacent Casualty Crashes	5	4	↓ 3%
Right Through Casualty Crashes	1	0	↓ 100%
Rear End Casualty Crashes	1	1	<b>↑ 21%</b>

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 12 August 2010

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







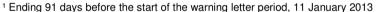
<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

### **Five Dock - Parramatta Road at Arlington Street**

- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Parramatta Road and Arlington Street commenced issuing warning letters in April 2013.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

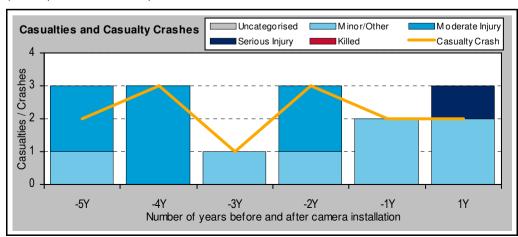
## Casualties and casualty crashes at enforced intersection

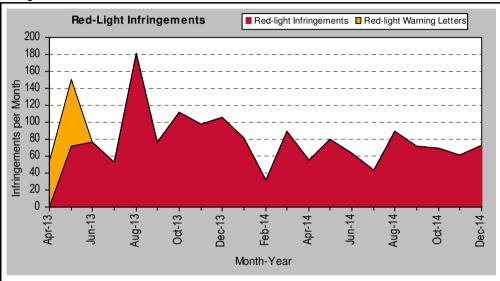
	5 years before installation1	1 year and 263 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	0	1	Increase
Moderate Injuries	7	0	↓ 100%
Minor / Other Injuries	5	2	<b>↑ 16%</b>
Total Casualties:	12	3	↓ 27%
Pedestrian Casualties	2	0	↓ 100%
Casualty Crashes	11	2	↓ 47%
Adjacent Casualty Crashes	4	1	↓ 27%
Right Through Casualty Crashes	0	0	-
Rear End Casualty Crashes	4	0	↓ 100%

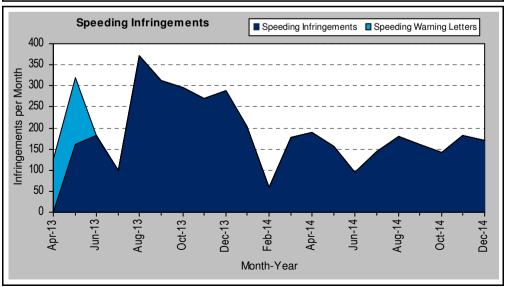


<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







## Glenwood - Old Windsor Road at Sunnyholt Road

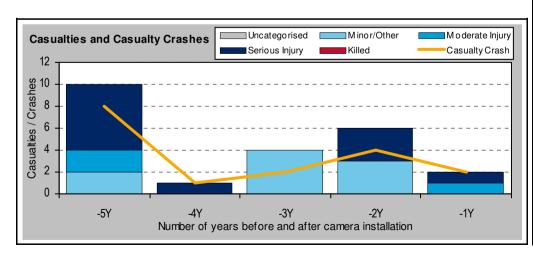
- There is one camera at this intersection.
- The camera at the intersection of Old Windsor Road and Sunnyholt Road commenced issuing warning letters in August 2014.
- A longer period of time is required to assess the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

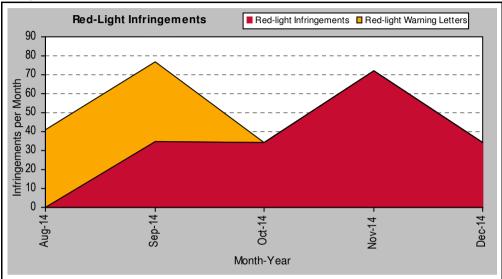
### Casualties and casualty crashes at enforced intersection

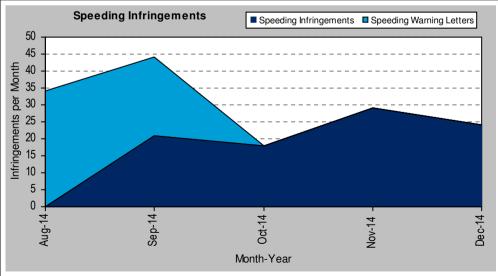
,			
	5 years before installation <sup>1</sup>	137 days after installation <sup>2</sup>	
Fatalities	0	0	
Serious Injuries	11	0	
Moderate Injuries	3	0	
Minor / Other Injuries	9	0	
Total Casualties:	23	0	
Pedestrian Casualties	0	0	
Casualty Crashes	17	0	
Adjacent Casualty Crashes	3	0	
Right Through Casualty Crashes	4	0	
Rear End Casualty Crashes	4	0	

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 17 May 2014

<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014







#### **Granville - Parramatta Road at Good Street**

- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Parramatta Road and Good Street commenced issuing warning letters in February 2013.
- While the results available so far suggest a slight increase in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

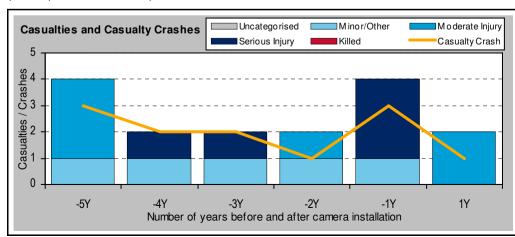
### Casualties and casualty crashes at enforced intersection

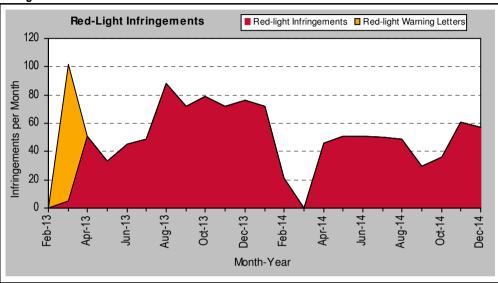
	5 years before installation <sup>1</sup>	1 year and 308 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	5	2	↑ 9%
Moderate Injuries	4	5	↑ 239%
Minor / Other Injuries	5	1	↓ 46%
Total Casualties:	14	8	↑ 55%
Pedestrian Casualties	0	1	Increase
Casualty Crashes	11	6	↑ 48%
Adjacent Casualty Crashes	3	1	↓ 10%
Right Through Casualty Crashes	5	1	↓ 46%
Rear End Casualty Crashes	2	2	↑ 171%

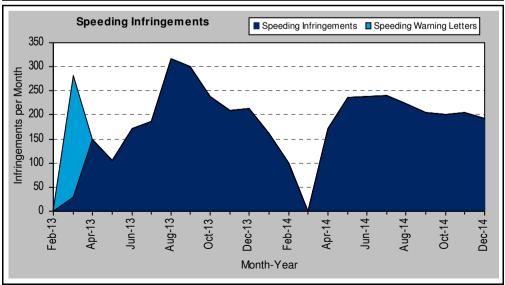


<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







### Granville - Woodville Road at M4 westbound on-ramp

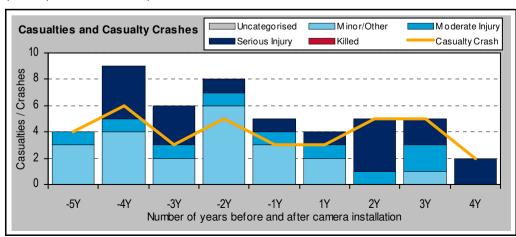
- There is one camera at this intersection.
- The camera at the intersection of Woodville Road and M4 on ramp commenced issuing warning letters in September 2010.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

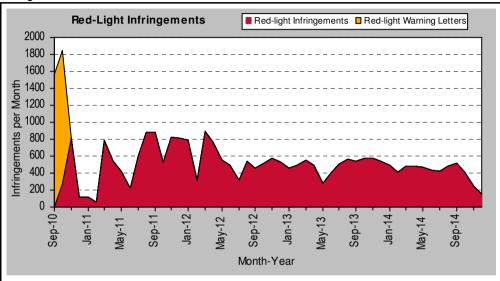
## Casualties and casualty crashes at enforced intersection

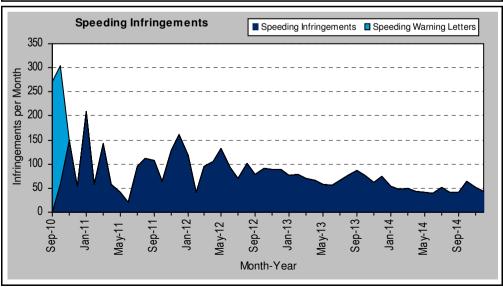
	5 years before installation1	4 years and 113 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	9	9	↑ 16%
Moderate Injuries	5	5	<b>↑ 16%</b>
Minor / Other Injuries	18	3	↓ 81%
Total Casualties:	32	17	↓ 38%
Pedestrian Casualties	1	1	↑ 16%
Casualty Crashes	21	16	↓ 12%
Adjacent Casualty Crashes	5	2	↓ 54%
Right Through Casualty Crashes	5	3	↓ 30%
Rear End Casualty Crashes	4	3	↓ 13%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 10 June 2010

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

#### Guildford - Woodville Road at Guildford Road

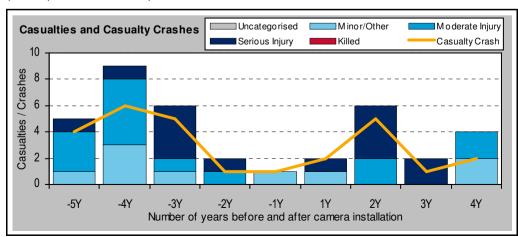
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Woodville Road and Guildford Road commenced issuing warning letters in November 2010.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

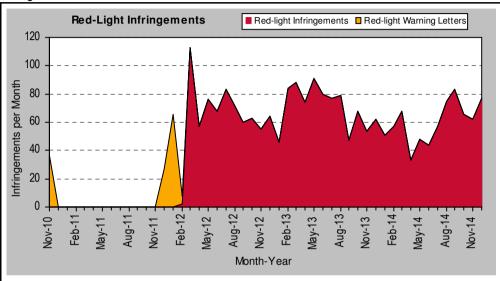
### Casualties and casualty crashes at enforced intersection

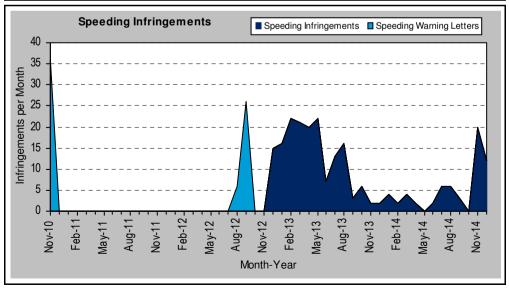
	5 years before installation <sup>1</sup>	4 years and 50 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	7	7	↑ 21%
Moderate Injuries	10	4	↓ 52%
Minor / Other Injuries	6	4	↓ 19%
Total Casualties:	23	15	↓ 21%
Pedestrian Casualties	2	1	↓ 40%
Casualty Crashes	17	11	↓ 22%
Adjacent Casualty Crashes	6	3	↓ 40%
Right Through Casualty Crashes	2	1	↓ 40%
Rear End Casualty Crashes	2	5	↑ 202%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 12 August 2010

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

### **Haberfield - Dobroyd Parade at Mortley Avenue**

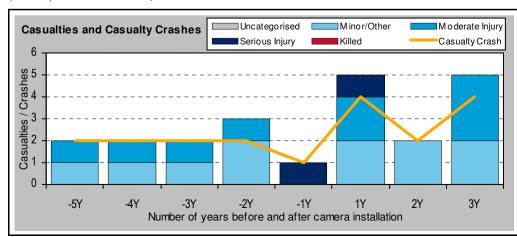
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Dobroyd Parade and Mortley Avenue commenced issuing warning letters in June 2011.
- While the results available so far suggest a slight increase in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

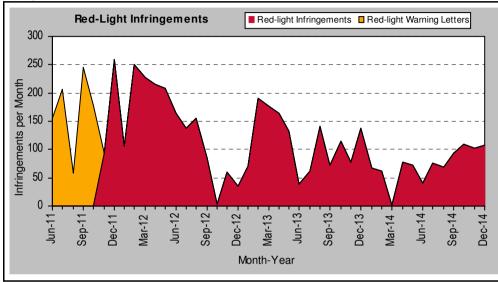
#### Casualties and casualty crashes at enforced intersection

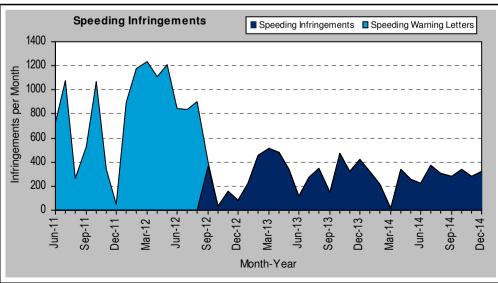
	5 years before installation <sup>1</sup>	3 years and 199 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	1	1	↑ <b>41</b> %
Moderate Injuries	4	5	<b>↑ 76%</b>
Minor / Other Injuries	5	6	<b>↑ 69%</b>
Total Casualties:	10	12	<b>↑ 69%</b>
Pedestrian Casualties	1	0	↓ 100%
Casualty Crashes	9	10	↑ 57%
Adjacent Casualty Crashes	0	2	Increase
Right Through Casualty Crashes	4	2	↓ 29%
Rear End Casualty Crashes	3	6	↑ 182%

<sup>&</sup>lt;sup>1</sup> Ending 530 days before the start of the warning letter period, 1 January 2010

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

#### Haberfield - Parramatta Road at Sloane Street

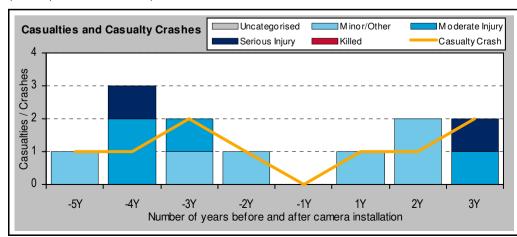
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Parramatta Road and Sloane Street commenced issuing warning letters in June 2011.
- While the results available so far suggest a slight increase in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

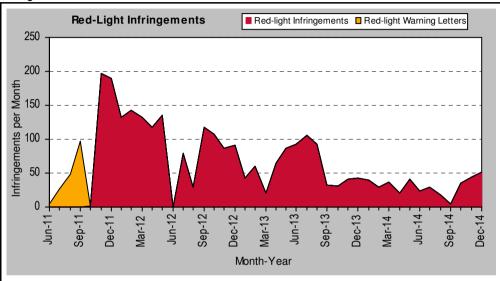
#### Casualties and casualty crashes at enforced intersection

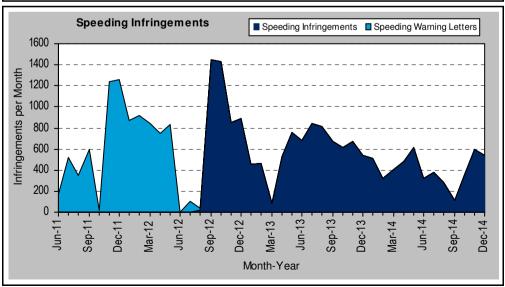
	5 years before installation1	3 years and 187 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	1	1	↑ <b>42</b> %
Moderate Injuries	3	1	↓ 53%
Minor / Other Injuries	3	3	<b>† 42%</b>
Total Casualties:	7	5	↑ 2%
Pedestrian Casualties	1	0	↓ 100%
Casualty Crashes	5	4	↑ 14%
Adjacent Casualty Crashes	0	1	Increase
Right Through Casualty Crashes	0	0	-
Rear End Casualty Crashes	2	3	↑ 113%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 28 March 2011

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

### **Haberfield - Ramsay Street at Wattle Street**

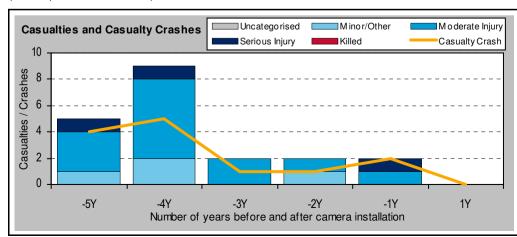
- There is one camera at this intersection.
- The camera at the intersection of Ramsay Street and Wattle Street commenced issuing warning letters in February 2013.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

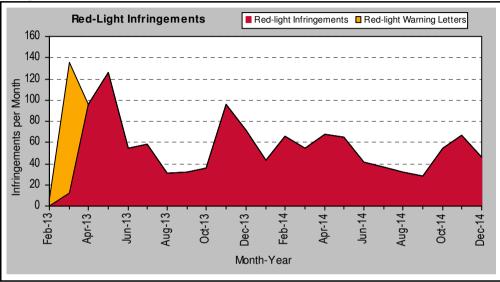
## Casualties and casualty crashes at enforced intersection

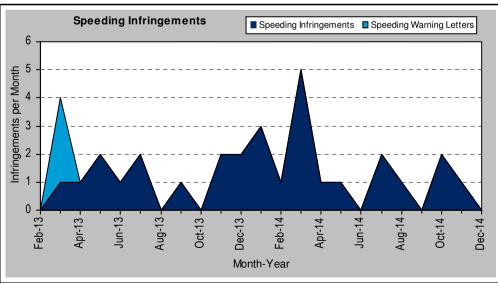
	5 years before installation <sup>1</sup>	1 year and 308 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	3	0	↓ 100%
Moderate Injuries	13	1	↓ 79%
Minor / Other Injuries	4	0	↓ 100%
Total Casualties:	20	1	↓ 86%
Pedestrian Casualties	0	0	-
Casualty Crashes	13	1	↓ 79%
Adjacent Casualty Crashes	9	1	↓ 70%
Right Through Casualty Crashes	0	0	-
Rear End Casualty Crashes	2	0	↓ 100%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 27 November 2012

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

#### Hamilton - Tudor Street at Beaumont Street

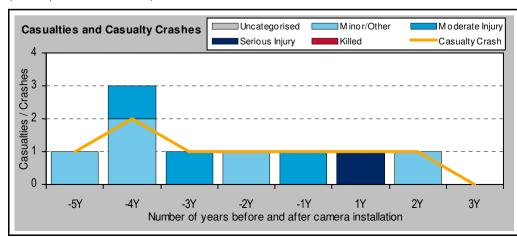
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Tudor Street and Beaumont Street commenced issuing warning letters in June 2011.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

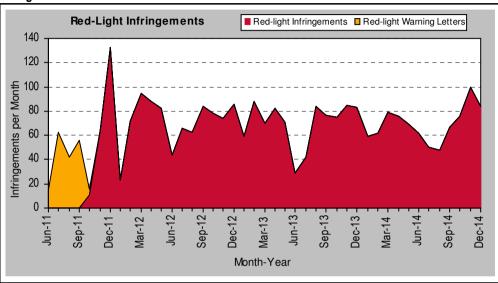
### Casualties and casualty crashes at enforced intersection

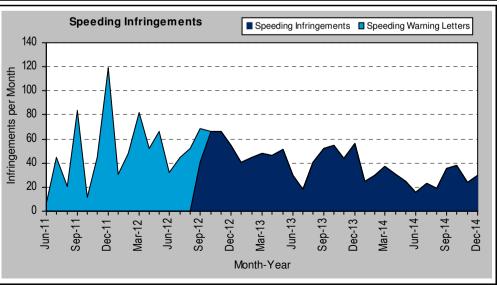
	5 years before installation1	3 years and 187 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	0	1	Increase
Moderate Injuries	3	0	↓ 100%
Minor / Other Injuries	4	1	↓ 64%
Total Casualties:	7	2	↓ 59%
Pedestrian Casualties	1	2	↑ 185%
Casualty Crashes	6	2	↓ 53%
Adjacent Casualty Crashes	1	0	↓ 100%
Right Through Casualty Crashes	1	0	↓ 100%
Rear End Casualty Crashes	2	0	↓ 100%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 28 March 2011

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







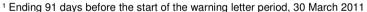
<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

### **Hamilton East - Pacific Highway at Parry Street**

- · There is one camera at this intersection.
- The camera at the intersection of Pacific Highway and Parry Street commenced issuing warning letters in June 2011.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

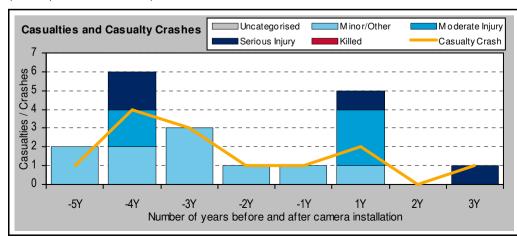
## Casualties and casualty crashes at enforced intersection

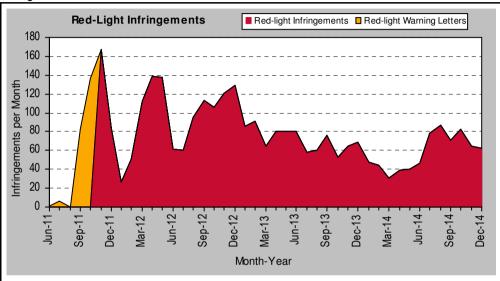
	5 years before installation <sup>1</sup>	3 years and 185 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	2	2	↑ <b>43</b> %
Moderate Injuries	2	3	↑ 114%
Minor / Other Injuries	9	1	↓ 84%
Total Casualties:	13	6	↓ 34%
Pedestrian Casualties	0	1	Increase
Casualty Crashes	10	3	↓ 57%
Adjacent Casualty Crashes	4	2	↓ 29%
Right Through Casualty Crashes	0	0	-
Rear End Casualty Crashes	3	0	↓ 100%

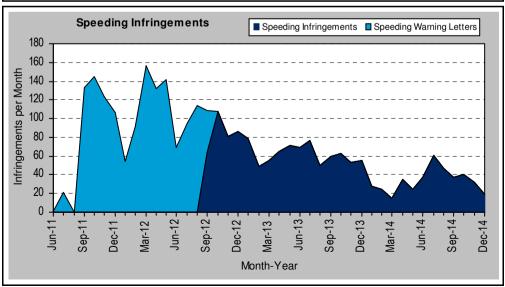


<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







### Haymarket - George Street at Pitt Street / Quay Street

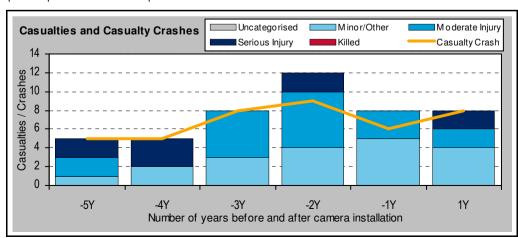
- There are two cameras at this intersection.
- Both cameras at the intersection of George Street and Pitt Street commenced issuing warning letters in June 2013.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the cameras.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

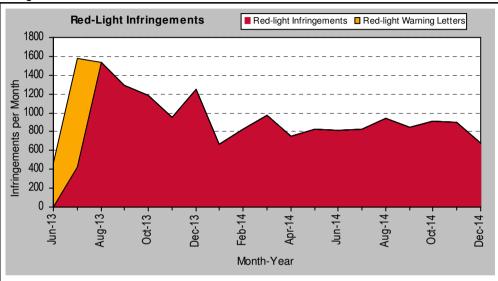
## Casualties and casualty crashes at enforced intersection

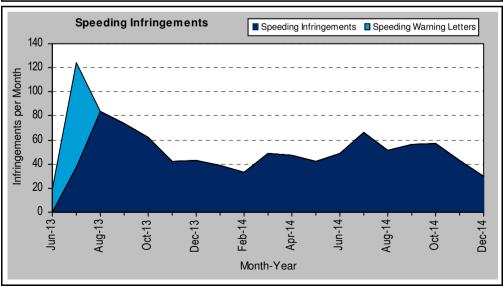
	5 years before installation <sup>1</sup>	1 year and 192 days after installation <sup>2</sup>	Percentage change³
	iristaliation	and installation	Change
Fatalities	0	0	-
Serious Injuries	7	2	↓ 6%
Moderate Injuries	16	2	↓ 59%
Minor / Other Injuries	15	5	↑ 9%
Total Casualties:	38	9	↓ 22%
Pedestrian Casualties	15	1	↓ 78%
Casualty Crashes	33	9	↓ 11%
Adjacent Casualty Crashes	4	2	↑ 64%
Right Through Casualty Crashes	2	1	↑ 64%
Rear End Casualty Crashes	3	0	↓ 100%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 23 March 2013

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

### **Hunters Hill - Ryde Road at Pittwater Road**

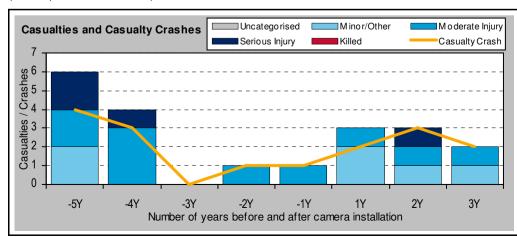
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Ryde Road and Pittwater Road commenced issuing warning letters in March 2011.
- While the results available so far suggest a slight increase in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

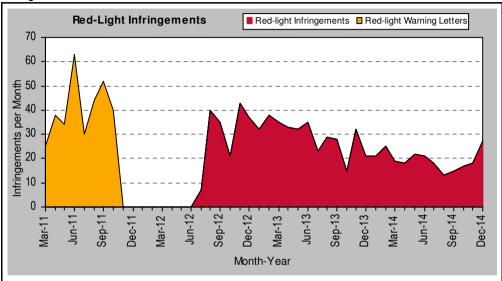
## Casualties and casualty crashes at enforced intersection

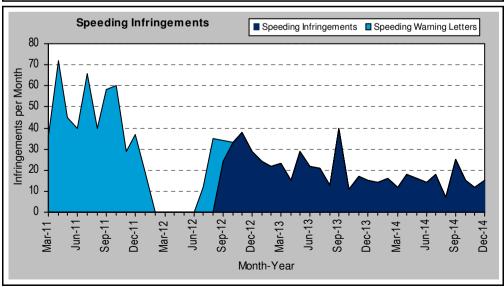
	5 years before installation1	3 years and 288 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	3	2	↓ 12%
Moderate Injuries	7	3	↓ 43%
Minor / Other Injuries	2	4	<b>↑ 164%</b>
Total Casualties:	12	9	↓ 1%
Pedestrian Casualties	0	1	Increase
Casualty Crashes	9	8	↑ 17%
Adjacent Casualty Crashes	0	0	-
Right Through Casualty Crashes	7	6	↑ 13%
Rear End Casualty Crashes	2	1	↓ 34%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 17 December 2010

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

### Kensington - Anzac Parade at Todman Avenue

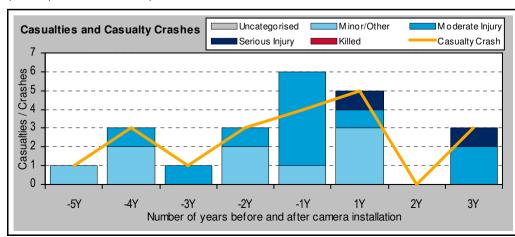
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Anzac Parade and Todman Avenue commenced issuing warning letters in June 2011.
- While the results available so far suggest a slight increase in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

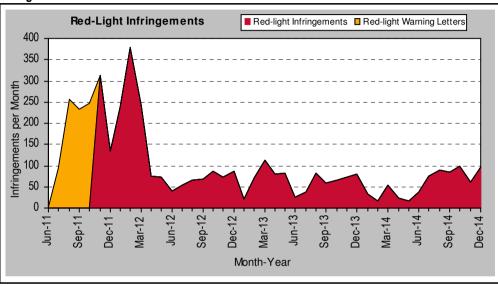
# Casualties and casualty crashes at enforced intersection

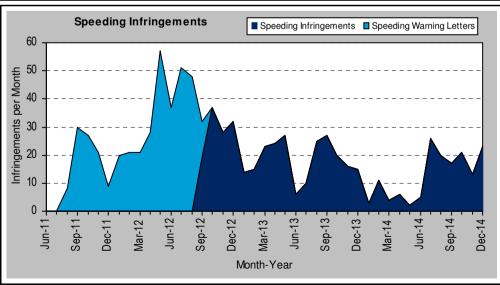
	5 years before installation <sup>1</sup>	3 years and 185 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	0	3	Increase
Moderate Injuries	8	3	↓ 47%
Minor / Other Injuries	6	4	↓ 5%
Total Casualties:	14	10	↑ 2%
Pedestrian Casualties	4	1	↓ 64%
Casualty Crashes	12	10	↑ 19%
Adjacent Casualty Crashes	2	2	↑ <b>43</b> %
Right Through Casualty Crashes	2	3	↑ 114%
Rear End Casualty Crashes	3	0	↓ 100%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 30 March 2011

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

### Kingsgrove - Bexley Road at William Street

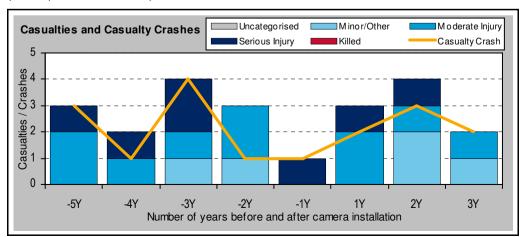
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Bexley Road and William Street commenced issuing warning letters in April 2011.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

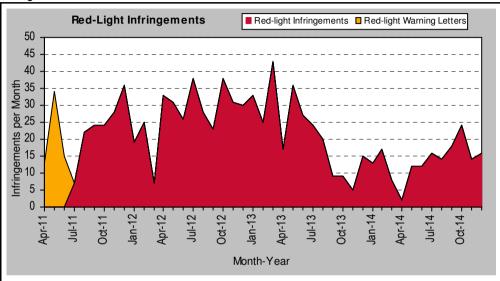
### Casualties and casualty crashes at enforced intersection

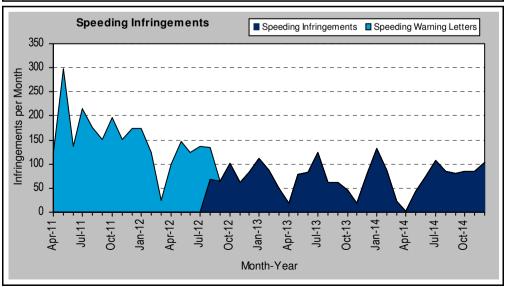
	5 years before installation1	3 years and 264 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	5	2	↓ 46%
Moderate Injuries	6	4	↓ 10%
Minor / Other Injuries	2	3	↑ 101%
Total Casualties:	13	9	↓ 7%
Pedestrian Casualties	0	0	-
Casualty Crashes	10	7	↓ 6%
Adjacent Casualty Crashes	1	1	↑ 34%
Right Through Casualty Crashes	6	5	↑ 12%
Rear End Casualty Crashes	1	1	↑ 34%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 10 January 2011

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

### Kingsgrove - Kingsgrove Road at Forsyth Street

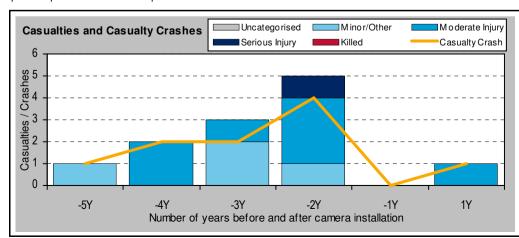
- · There is one camera at this intersection.
- The camera at the intersection of Kingsgrove Road and Forsyth Street commenced issuing warning letters in November 2013.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

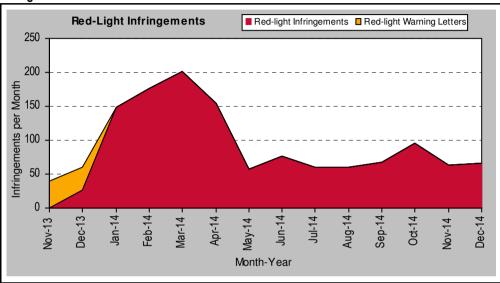
### Casualties and casualty crashes at enforced intersection

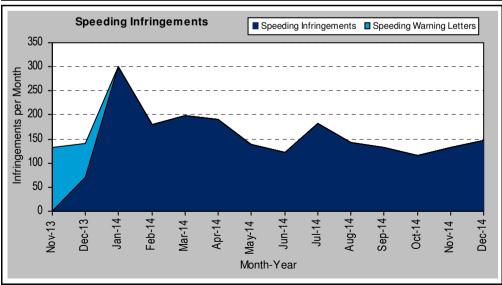
	5 years before installation <sup>1</sup>	1 year and 46 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	1	0	↓ 100%
Moderate Injuries	6	1	↓ 26%
Minor / Other Injuries	4	0	↓ 100%
Total Casualties:	11	1	↓ 60%
Pedestrian Casualties	1	0	↓ 100%
Casualty Crashes	9	1	↓ 51%
Adjacent Casualty Crashes	5	1	↓ 11%
Right Through Casualty Crashes	1	0	↓ 100%
Rear End Casualty Crashes	1	0	↓ 100%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 16 August 2013

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

#### Kirrawee - Acacia Road at President Avenue

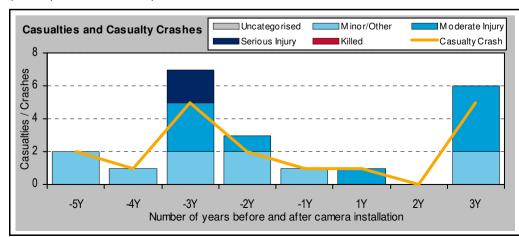
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Acacia Road and President Avenue commenced issuing warning letters in June 2011.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

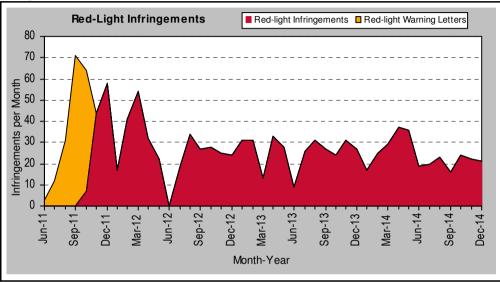
### Casualties and casualty crashes at enforced intersection

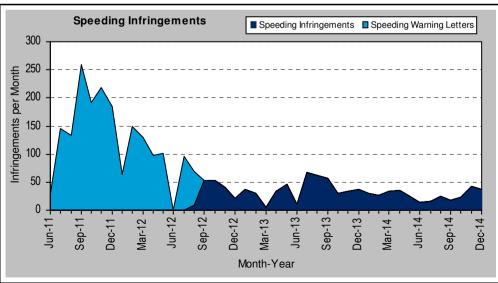
	5 years before installation1	3 years and 187 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	2	0	↓ 100%
Moderate Injuries	4	5	↑ 78%
Minor / Other Injuries	8	2	↓ 64%
Total Casualties:	14	7	↓ 29%
Pedestrian Casualties	2	1	↓ 29%
Casualty Crashes	11	6	↓ 22%
Adjacent Casualty Crashes	1	1	↑ 42%
Right Through Casualty Crashes	3	2	↓ 5%
Rear End Casualty Crashes	4	1	↓ 64%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 28 March 2011

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

## Kogarah Bay - Park Road at Princes Highway

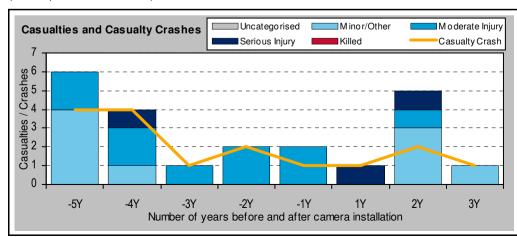
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Park Road and Princes Highway commenced issuing warning letters in June 2011.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

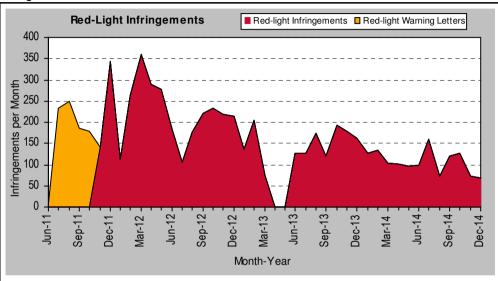
### Casualties and casualty crashes at enforced intersection

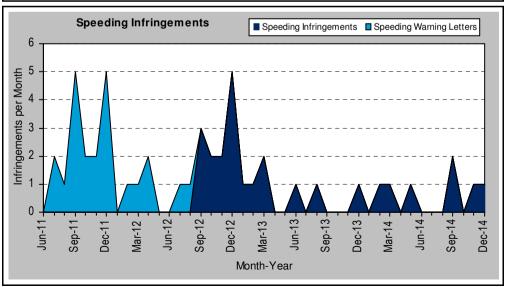
	5 years before installation <sup>1</sup>	3 years and 199 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	1	3	↑ 323%
Moderate Injuries	9	2	↓ 69%
Minor / Other Injuries	5	4	<b>↑ 13%</b>
Total Casualties:	15	9	↓ 15%
Pedestrian Casualties	0	1	Increase
Casualty Crashes	12	6	↓ 29%
Adjacent Casualty Crashes	5	1	↓ 72%
Right Through Casualty Crashes	3	3	↑ 41%
Rear End Casualty Crashes	3	1	↓ 53%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 16 March 2011

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

### Lakemba - Punchbowl Road at Wangee Road

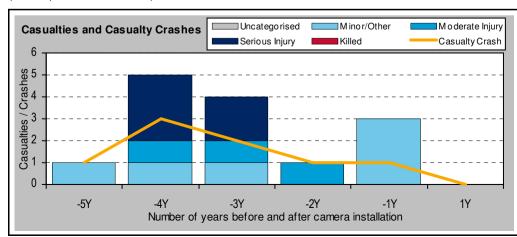
- · There is one camera at this intersection.
- The camera at the intersection of Punchbowl Road and Wangee Road commenced issuing warning letters in October 2013.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

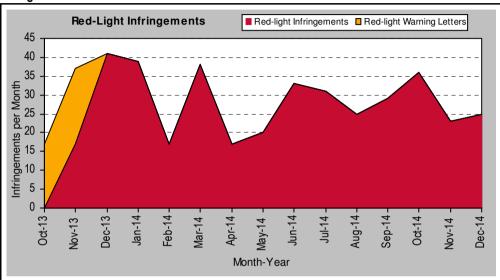
## Casualties and casualty crashes at enforced intersection

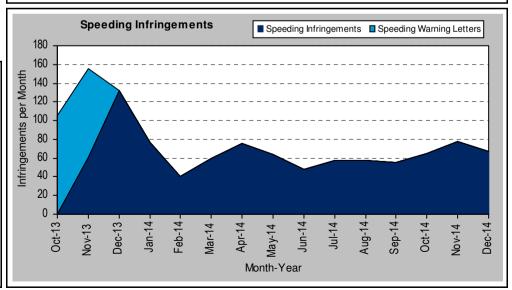
	5 years before installation¹	1 year and 74 days after installation <sup>2</sup>	Percentage change³
Fatalities Fatalities	0	0	
Fatailties	ů	U	-
Serious Injuries	5	0	↓ 100%
Moderate Injuries	3	0	↓ 100%
Minor / Other Injuries	6	0	↓ 100%
Total Casualties:	14	0	↓ 100%
Pedestrian Casualties	0	0	-
Casualty Crashes	8	0	↓ 100%
Adjacent Casualty Crashes	4	0	↓ 100%
Right Through Casualty Crashes	2	0	↓ 100%
Rear End Casualty Crashes	1	0	↓ 100%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 19 July 2013

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

#### Lambton - Griffiths Road at Turton Road

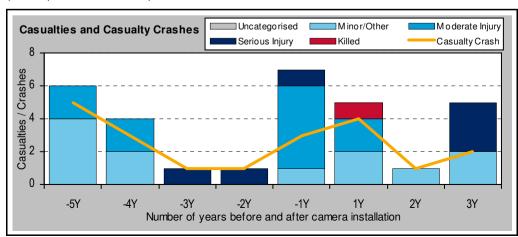
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Griffiths Road and Turton Road commenced issuing warning letters in June 2011.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

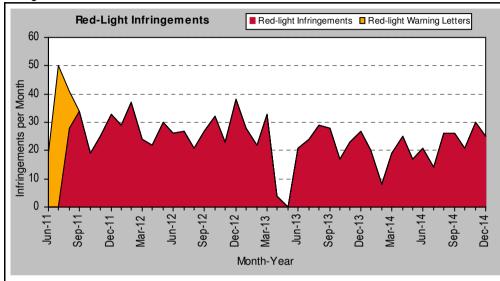
## Casualties and casualty crashes at enforced intersection

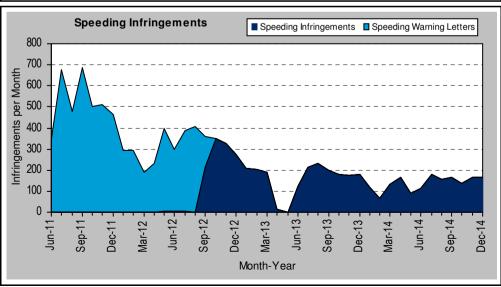
	5 years before installation <sup>1</sup>	3 years and 212 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	1	Increase
Serious Injuries	3	4	↑ 86%
Moderate Injuries	9	2	↓ 69%
Minor / Other Injuries	7	6	<b>† 20%</b>
Total Casualties:	19	13	↓ 4%
Pedestrian Casualties	1	1	↑ 40%
Casualty Crashes	13	8	↓ 14%
Adjacent Casualty Crashes	2	2	↑ 40%
Right Through Casualty Crashes	2	2	↑ 40%
Rear End Casualty Crashes	5	3	↓ 16%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 3 March 2011

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

## Lane Cove - Epping Road at Centennial Avenue

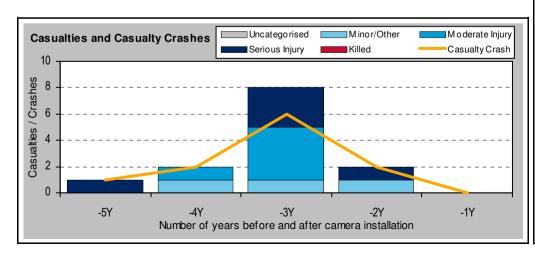
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Epping Road and Centennial Avenue commenced issuing warning letters in August 2014.
- A longer period of time is required to assess the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

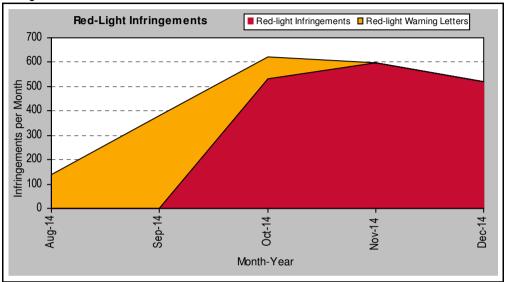
# Casualties and casualty crashes at enforced intersection

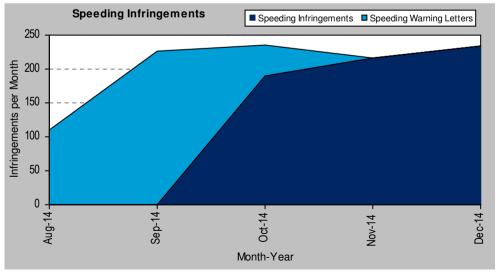
	5 years before installation <sup>1</sup>	141 days after installation²
Fatalities	0	0
Serious Injuries	5	0
Moderate Injuries	5	0
Minor / Other Injuries	3	0
Total Casualties:	13	0
Pedestrian Casualties	0	0
Casualty Crashes	11	0
Adjacent Casualty Crashes	2	0
Right Through Casualty Crashes	2	0
Rear End Casualty Crashes	5	0

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 13 May 2014

<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014







## Lansdowne / Villawood - Henry Lawson Drive / Woodville Road at Hume Highway

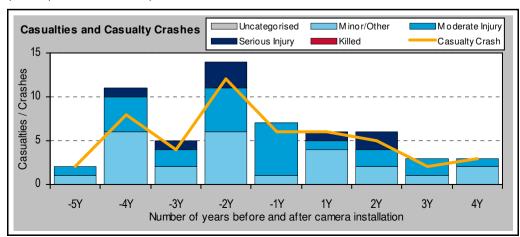
- There are two cameras at this intersection. This was previously a wet-film red-light camera location.
- Both cameras at the intersection of Woodville Road and Hume Highway commenced issuing warning letters in August 2010.
- While the results to date indicate a decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the cameras.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

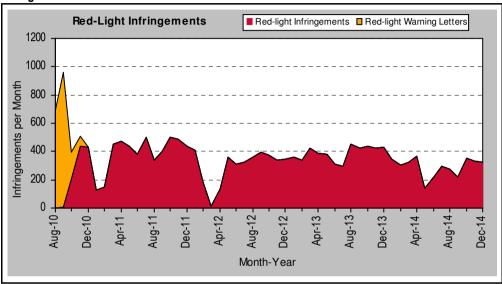
## Casualties and casualty crashes at enforced intersection

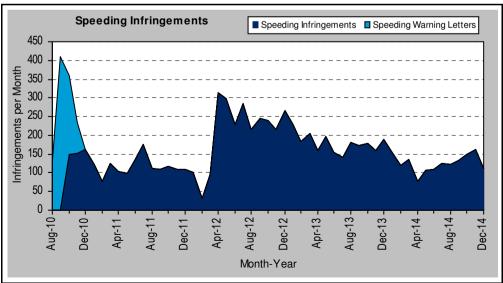
	5 years before installation <sup>1</sup>	4 years and 140 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	5	3	↓ 32%
Moderate Injuries	18	6	↓ 62%
Minor / Other Injuries	16	9	↓ 36%
Total Casualties:	39	18	↓ 47%
Pedestrian Casualties	2	1	↓ 43%
Casualty Crashes	32	16	↓ 43%
Adjacent Casualty Crashes	1	1	<b>↑ 14%</b>
Right Through Casualty Crashes	4	3	↓ 14%
Rear End Casualty Crashes	13	6	↓ 47%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 14 May 2010

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

### Leichhardt - City West Link at James Street

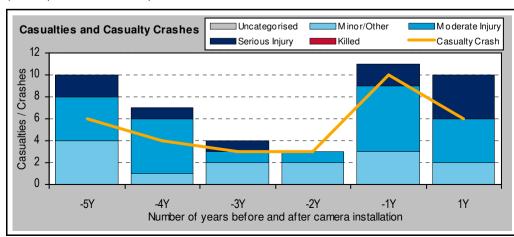
- There is one camera at this intersection.
- The camera at the intersection of City West Link and James Street commenced issuing warning letters in April 2013.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

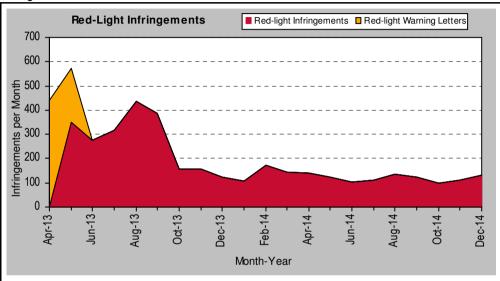
## Casualties and casualty crashes at enforced intersection

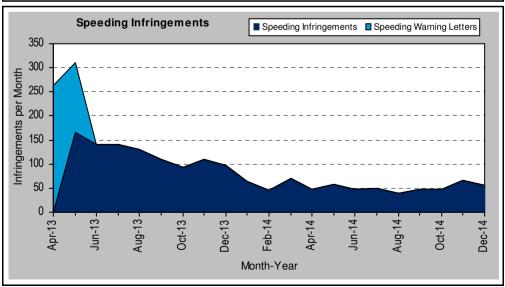
	5 years before installation1	1 year and 263 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	6	4	↑ 94%
Moderate Injuries	17	5	↓ 14%
Minor / Other Injuries	12	2	↓ 52%
Total Casualties:	35	11	↓ 9%
Pedestrian Casualties	0	0	-
Casualty Crashes	26	7	↓ 22%
Adjacent Casualty Crashes	11	4	↑ 6%
Right Through Casualty Crashes	1	0	↓ 100%
Rear End Casualty Crashes	10	3	↓ 13%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 11 January 2013

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

## **Lidcombe - Olympic Drive at Vaughan Street**

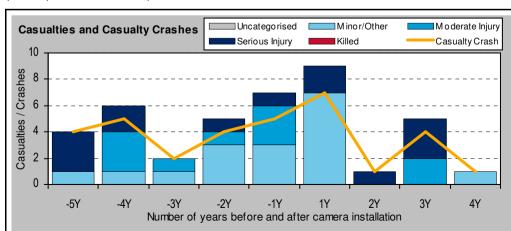
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Olympic Drive and Vaughan Street commenced issuing warning letters in September 2010.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

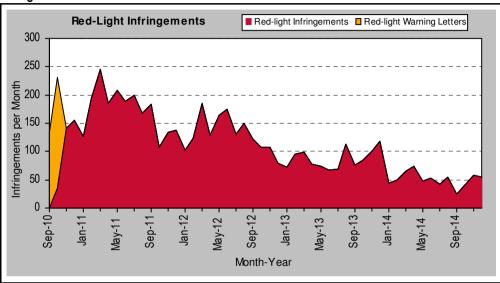
## Casualties and casualty crashes at enforced intersection

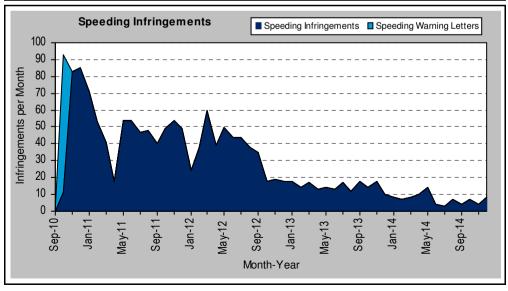
	5 years before installation <sup>1</sup>	4 years and 109 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	7	6	↓ 0%
Moderate Injuries	8	2	↓ 71%
Minor / Other Injuries	9	8	↑ 3%
Total Casualties:	24	16	↓ 22%
Pedestrian Casualties	2	1	↓ 42%
Casualty Crashes	20	13	↓ 24%
Adjacent Casualty Crashes	1	1	↑ 16%
Right Through Casualty Crashes	5	2	↓ 53%
Rear End Casualty Crashes	11	8	↓ 15%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 14 June 2010

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

## Liverpool - Hume Highway at Elizabeth Drive

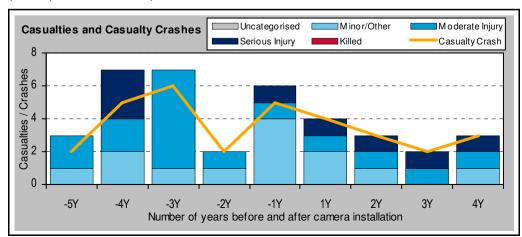
- · There is one camera at this intersection.
- The camera at the intersection of Hume Highway and Elizabeth Drive commenced issuing warning letters in October 2010.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

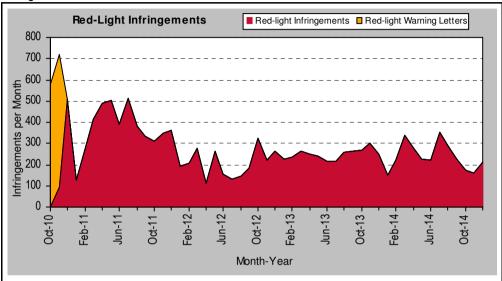
## Casualties and casualty crashes at enforced intersection

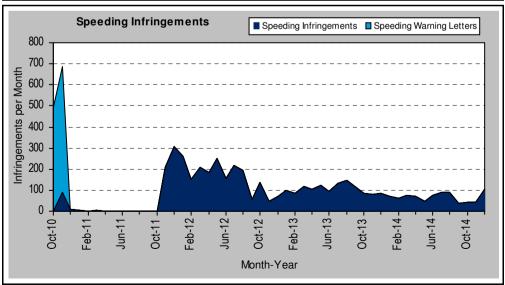
	5 years before installation <sup>1</sup>	4 years and 78 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	4	4	† 19%
Moderate Injuries	12	4	↓ 60%
Minor / Other Injuries	9	5	↓ 34%
Total Casualties:	25	13	↓ 38%
Pedestrian Casualties	1	0	↓ 100%
Casualty Crashes	20	13	↓ 23%
Adjacent Casualty Crashes	2	0	↓ 100%
Right Through Casualty Crashes	3	4	↑ 58%
Rear End Casualty Crashes	6	6	† 19%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 15 July 2010

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

## **Liverpool - Memorial Avenue at Bathurst Street**

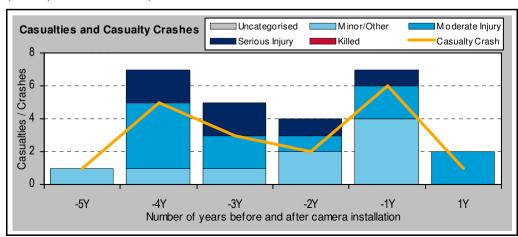
- · There is one camera at this intersection.
- The camera at the intersection of Memorial Avenue and Bathurst Street commenced issuing warning letters in April 2013.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

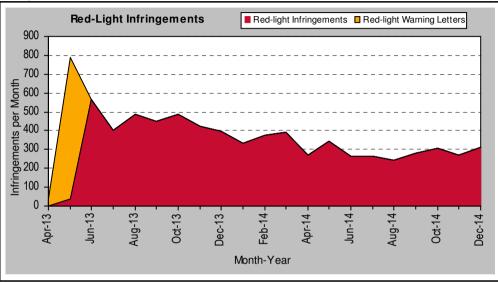
## Casualties and casualty crashes at enforced intersection

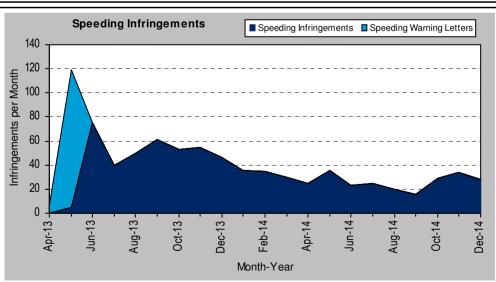
	5 years before installation <sup>1</sup>	1 year and 245 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	6	1	↓ 50%
Moderate Injuries	9	6	↑ 100%
Minor / Other Injuries	9	0	↓ 100%
Total Casualties:	24	7	↓ 13%
Pedestrian Casualties	2	0	↓ 100%
Casualty Crashes	17	2	↓ 65%
Adjacent Casualty Crashes	5	0	↓ 100%
Right Through Casualty Crashes	5	2	↑ 20%
Rear End Casualty Crashes	1	0	↓ 100%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 29 January 2013

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

### Maroubra - Anzac Parade at Boyce Road

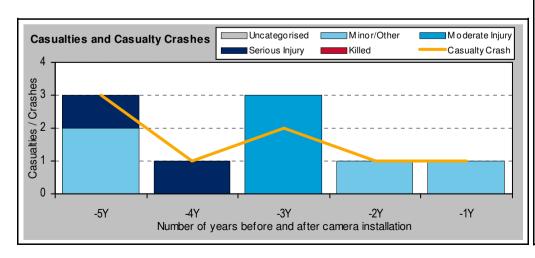
- There is one camera at this intersection.
- The camera at the intersection of Anzac Parade and Boyce Road commenced issuing warning letters in August 2014.
- A longer period of time is required to assess the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

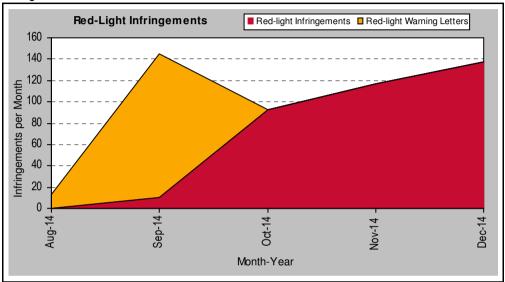
### Casualties and casualty crashes at enforced intersection

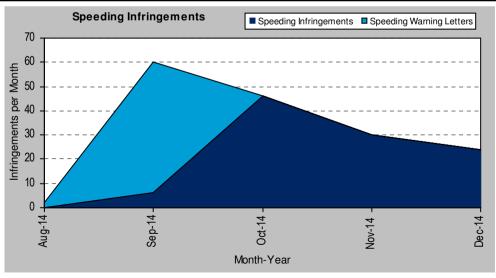
<u> </u>			
	5 years before installation <sup>1</sup>	124 days after installation²	
Fatalities	0	0	
Serious Injuries	2	0	
Moderate Injuries	3	0	
Minor / Other Injuries	4	0	
Total Casualties:	9	0	
Pedestrian Casualties	1	0	
Casualty Crashes	8	0	
Adjacent Casualty Crashes	5	0	
Right Through Casualty Crashes	0	0	
Rear End Casualty Crashes	0	0	

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 30 May 2014

<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014







### Marrickville - Sydenham Road at Victoria Road

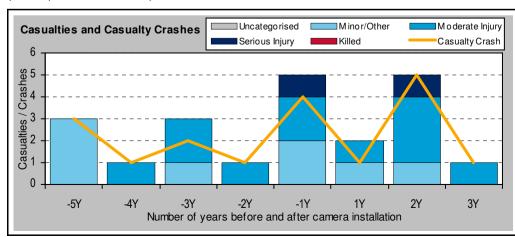
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Sydenham Road and Victoria Road commenced issuing warning letters in June 2011.
- While the results available so far suggest a slight increase in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

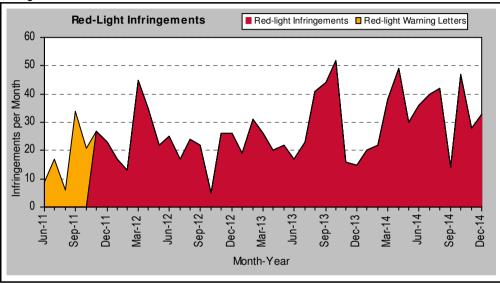
#### Casualties and casualty crashes at enforced intersection

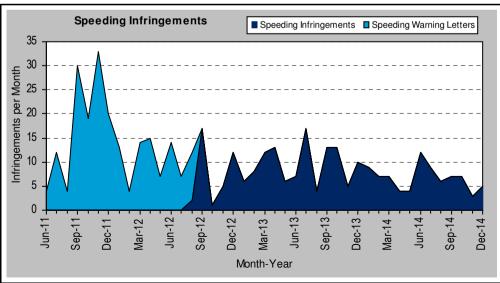
	5 years before installation <sup>1</sup>	3 years and 199 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	1	1	↑ <b>41</b> %
Moderate Injuries	6	5	↑ 18%
Minor / Other Injuries	6	6	<b>↑ 41%</b>
Total Casualties:	13	12	↑ 30%
Pedestrian Casualties	2	1	↓ 29%
Casualty Crashes	11	8	↑ 3%
Adjacent Casualty Crashes	2	0	↓ 100%
Right Through Casualty Crashes	3	2	↓ 6%
Rear End Casualty Crashes	3	2	↓ 6%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 16 March 2011

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

#### Mascot - O'Riordan Street at Coward Street

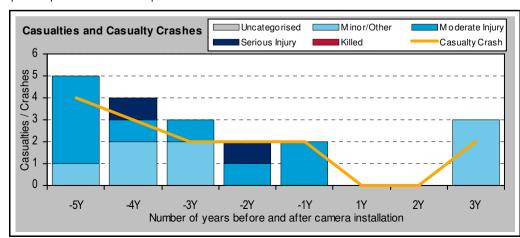
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of O'Riordan Street and Coward Street commenced issuing warning letters in April 2011.
- While the results to date indicate a decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

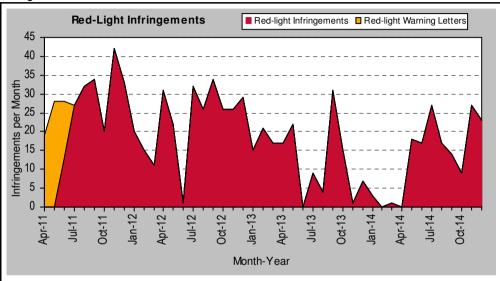
### Casualties and casualty crashes at enforced intersection

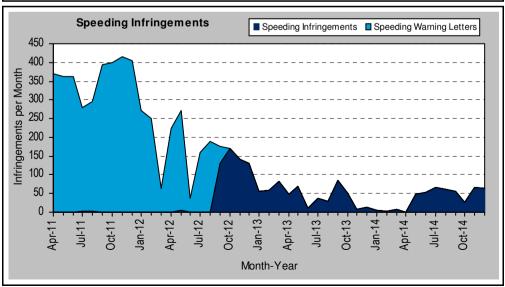
	5 years before installation1	3 years and 264 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	2	0	↓ 100%
Moderate Injuries	9	0	↓ 100%
Minor / Other Injuries	5	3	↓ 19%
Total Casualties:	16	3	↓ 75%
Pedestrian Casualties	1	0	↓ 100%
Casualty Crashes	13	2	↓ 79%
Adjacent Casualty Crashes	3	0	↓ 100%
Right Through Casualty Crashes	6	0	↓ 100%
Rear End Casualty Crashes	1	1	↑ 34%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 10 January 2011

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

#### Mascot - O'Riordan Street at Gardeners Road

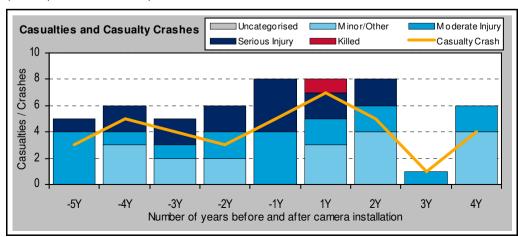
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of O'Riordan Street and Gardeners Road commenced issuing warning letters in October 2010.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

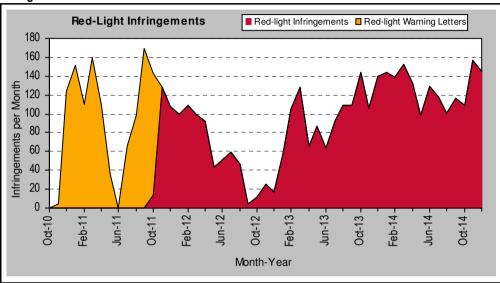
### Casualties and casualty crashes at enforced intersection

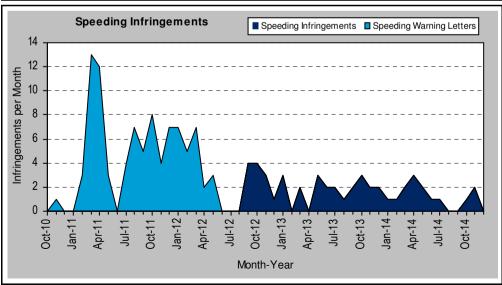
	5 years before installation <sup>1</sup>	4 years and 64 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	1	Increase
Serious Injuries	11	4	↓ 56%
Moderate Injuries	12	7	↓ 30%
Minor / Other Injuries	7	10	↑ 71%
Total Casualties:	30	22	↓ 12%
Pedestrian Casualties	1	0	↓ 100%
Casualty Crashes	20	16	↓ 4%
Adjacent Casualty Crashes	2	1	↓ 40%
Right Through Casualty Crashes	10	7	↓ 16%
Rear End Casualty Crashes	2	4	<b>↑ 139%</b>

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 29 July 2010

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

## Mayfield West - Pacific Highway at Maud Street

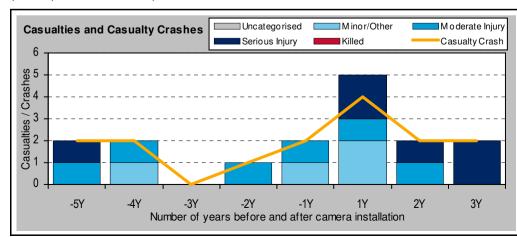
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Pacific Highway and Maud Street commenced issuing warning letters in May 2011.
- While the results available so far suggest a slight increase in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

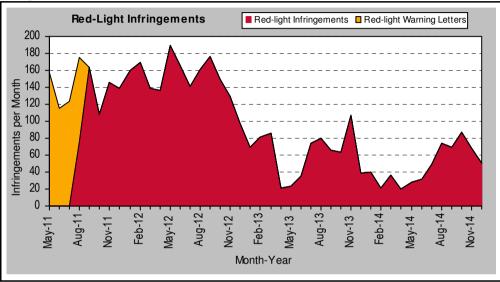
# Casualties and casualty crashes at enforced intersection

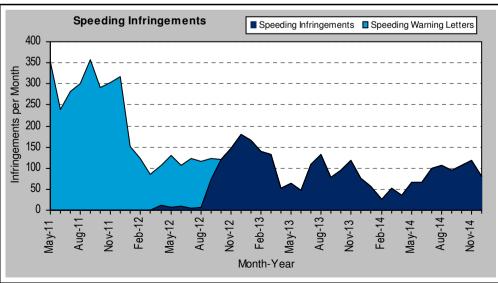
	5 years before installation <sup>1</sup>	3 years and 232 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	1	5	↑ 588%
Moderate Injuries	4	2	↓ 31%
Minor / Other Injuries	2	4	↑ 175%
Total Casualties:	7	11	<b>↑ 116%</b>
Pedestrian Casualties	1	0	↓ 100%
Casualty Crashes	7	9	↑ 77%
Adjacent Casualty Crashes	2	0	↓ 100%
Right Through Casualty Crashes	0	5	Increase
Rear End Casualty Crashes	1	3	↑ 313%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 11 February 2011

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

### Mays Hill - Great Western Highway at Coleman Street / Hawkesbury Road

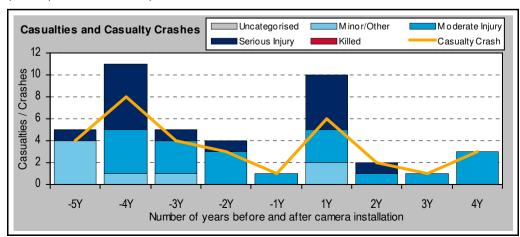
- · There are two cameras at this intersection.
- Both cameras at the intersection of Great Western Highway and Hawkesbury Road commenced issuing warning letters in July 2010.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the cameras.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

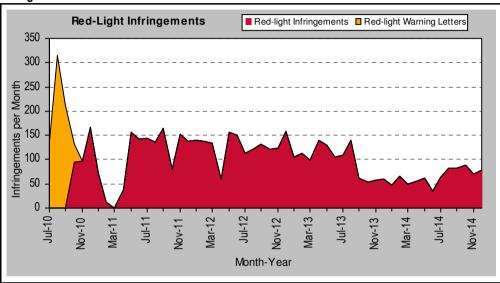
## Casualties and casualty crashes at enforced intersection

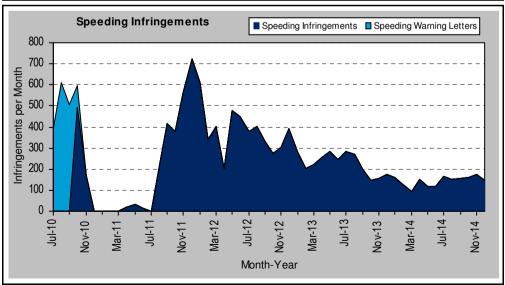
	5 years before installation1	4 years and 183 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	9	6	↓ 26%
Moderate Injuries	11	8	↓ 19%
Minor / Other Injuries	6	2	↓ 63%
Total Casualties:	26	16	↓ 32%
Pedestrian Casualties	0	0	-
Casualty Crashes	20	12	↓ 33%
Adjacent Casualty Crashes	3	1	↓ 63%
Right Through Casualty Crashes	9	5	↓ 38%
Rear End Casualty Crashes	7	2	↓ 68%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 1 April 2010

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

## Merrylands West - Merrylands Road at Sherwood Road

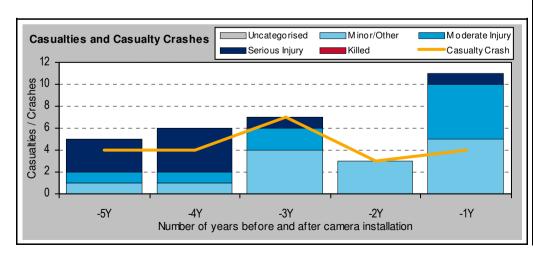
- There is one camera at this intersection.
- The camera at the intersection of Merrylands Road and Sherwood Road commenced issuing warning letters in October 2014.
- A longer period of time is required to assess the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

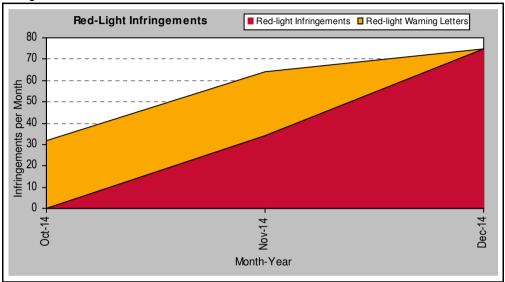
# Casualties and casualty crashes at enforced intersection

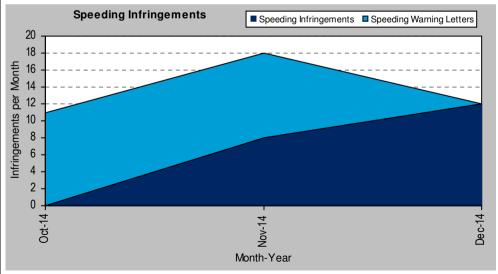
	5 years before installation <sup>1</sup>	75 days after installation²
Fatalities	0	0
Serious Injuries	9	0
Moderate Injuries	9	1
Minor / Other Injuries	14	1
Total Casualties:	32	2
Pedestrian Casualties	0	0
Casualty Crashes	22	2
Adjacent Casualty Crashes	1	0
Right Through Casualty Crashes	16	1
Rear End Casualty Crashes	0	1

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 18 July 2014

<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014







### Milperra - Newbridge Road at Henry Lawson Drive

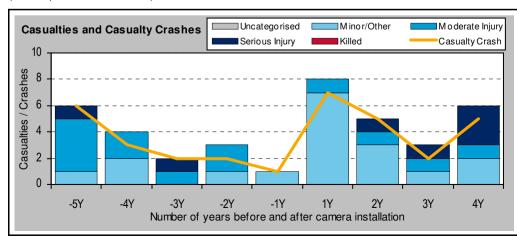
- · There is one camera at this intersection.
- The camera at the intersection of Newbridge Road and Henry Lawson Drive commenced issuing warning letters in September 2010.
- While the results to date indicate an increase casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued. Speed limit changed from 60 to 70 in May 2012.

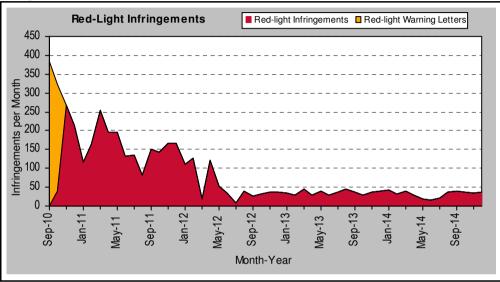
# Casualties and casualty crashes at enforced intersection

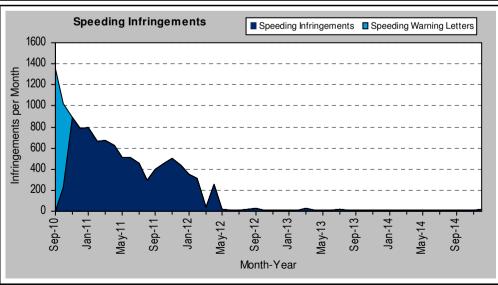
	5 years before installation1	4 years and 113 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	2	5	↑ 190%
Moderate Injuries	9	4	↓ 48%
Minor / Other Injuries	5	17	<b>↑ 294%</b>
Total Casualties:	16	26	<b>↑ 89%</b>
Pedestrian Casualties	1	0	↓ 100%
Casualty Crashes	14	23	↑ 91%
Adjacent Casualty Crashes	1	1	<b>↑ 16%</b>
Right Through Casualty Crashes	3	1	↓ 61%
Rear End Casualty Crashes	8	13	↑ 89%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 10 June 2010

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

## Miranda - Kingsway at Port Hacking Road

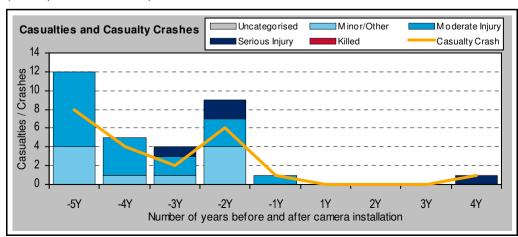
- There is one camera at this intersection.
- The camera at the intersection of Kingsway and Port Hacking Road commenced issuing warning letters in July 2010.
- While results to date reveal a significant decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

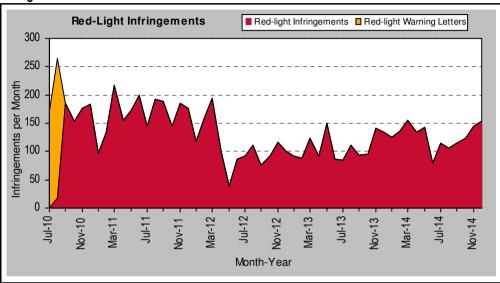
## Casualties and casualty crashes at enforced intersection

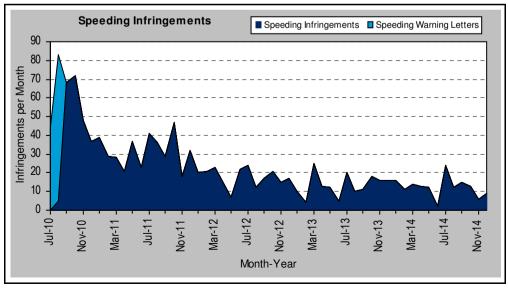
	5 years before installation1	4 years and 177 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	3	1	↓ 63%
Moderate Injuries	18	0	↓ 100%
Minor / Other Injuries	11	0	↓ 100%
Total Casualties:	32	1	↓ 97%
Pedestrian Casualties	3	0	↓ 100%
Casualty Crashes	22	1	↓ 95%
Adjacent Casualty Crashes	2	0	↓ 100%
Right Through Casualty Crashes	11	1	↓ 90%
Rear End Casualty Crashes	4	0	↓ 100%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 7 April 2010

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

### Moore Park - Anzac Parade at Lang Road

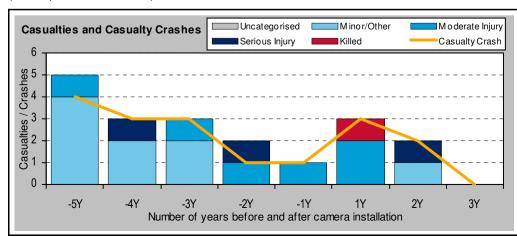
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Anzac Parade and Lang Road commenced issuing warning letters in March 2011.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

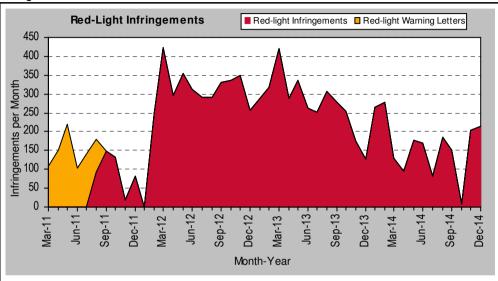
#### Casualties and casualty crashes at enforced intersection

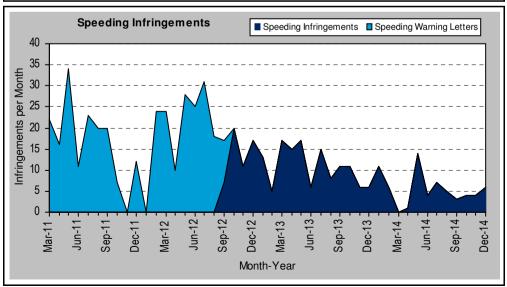
	5 years before installation1	3 years and 290 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	1	Increase
Serious Injuries	2	3	↑ 98%
Moderate Injuries	4	3	↓ 1%
Minor / Other Injuries	8	1	↓ 84%
Total Casualties:	14	8	↓ 25%
Pedestrian Casualties	1	2	↑ 163%
Casualty Crashes	12	8	↓ 12%
Adjacent Casualty Crashes	2	1	↓ 34%
Right Through Casualty Crashes	1	1	↑ 32%
Rear End Casualty Crashes	5	1	↓ 74%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 15 December 2010

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

## Moore Park / Paddington - Anzac Parade / Flinders Street at Moore Park Road

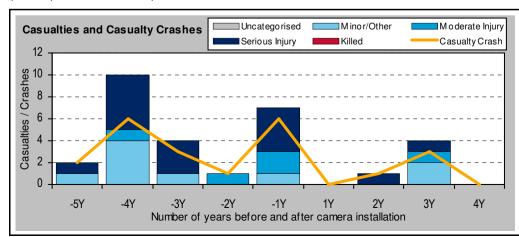
- · There are two cameras at this intersection.
- Both cameras at the intersection of Anzac Parade and Moore Park Road commenced issuing warning letters in August 2010.
- While the results to date indicate a decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the cameras.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

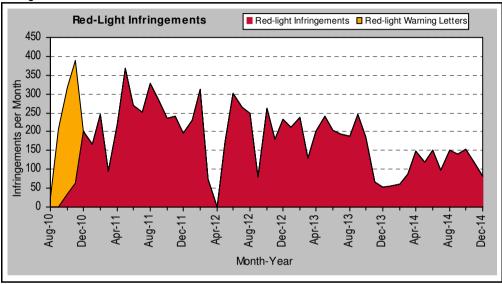
## Casualties and casualty crashes at enforced intersection

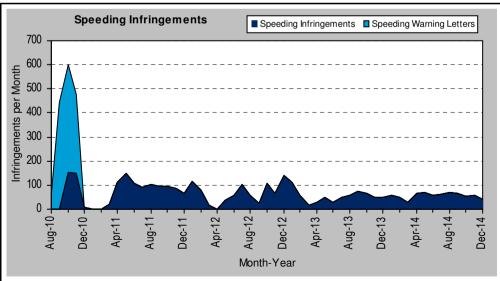
	5 years before installation <sup>1</sup>	4 years and 135 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	13	2	↓ 82%
Moderate Injuries	4	1	↓ 71%
Minor / Other Injuries	7	3	↓ 51%
Total Casualties:	24	6	↓ 71%
Pedestrian Casualties	1	0	↓ 100%
Casualty Crashes	18	5	↓ 68%
Adjacent Casualty Crashes	2	1	↓ 43%
Right Through Casualty Crashes	8	3	↓ 57%
Rear End Casualty Crashes	2	1	↓ 43%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 19 May 2010

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

#### Moorebank - Newbridge Road at Stockton Avenue

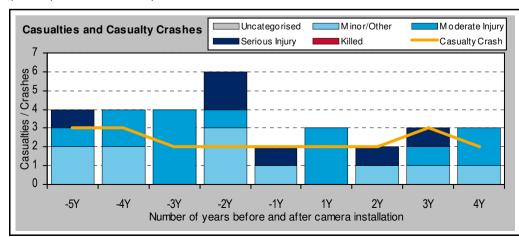
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Newbridge Road and Stockton Avenue commenced issuing warning letters in December 2010.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

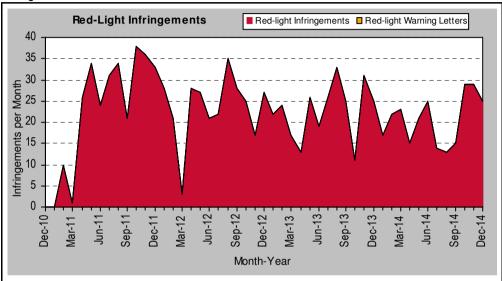
#### Casualties and casualty crashes at enforced intersection

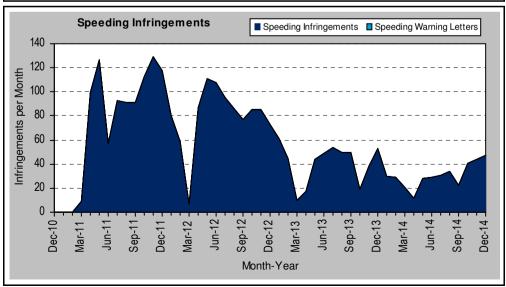
	5 years before installation <sup>1</sup>	4 years and 16 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	4	2	↓ 38%
Moderate Injuries	8	6	↓ 7%
Minor / Other Injuries	8	3	↓ 54%
Total Casualties:	20	11	↓ 32%
Pedestrian Casualties	0	0	-
Casualty Crashes	12	9	↓ 7%
Adjacent Casualty Crashes	0	0	-
Right Through Casualty Crashes	6	5	↑ 3%
Rear End Casualty Crashes	4	3	↓ 7%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 15 September 2010

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

### **Mosman - Military Road at Cowles Road**

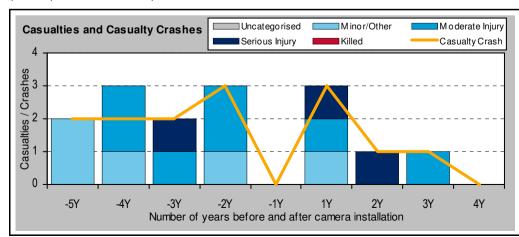
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Military Road and Cowles Road commenced issuing warning letters in December 2010.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

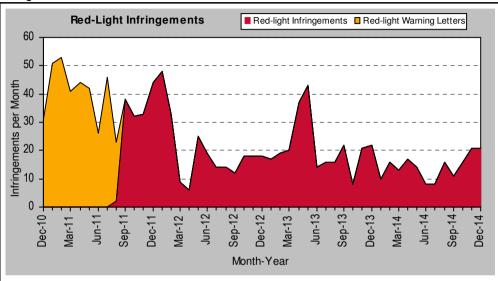
#### Casualties and casualty crashes at enforced intersection

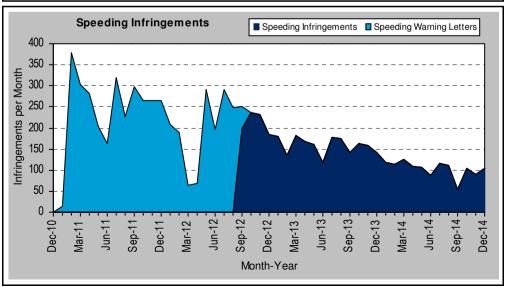
	5 years before installation <sup>1</sup>	4 years and 16 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	1	2	↑ 147%
Moderate Injuries	5	2	↓ 51%
Minor / Other Injuries	4	1	↓ 69%
Total Casualties:	10	5	↓ 38%
Pedestrian Casualties	1	2	↑ 147%
Casualty Crashes	9	5	↓ 31%
Adjacent Casualty Crashes	2	0	↓ 100%
Right Through Casualty Crashes	1	0	↓ 100%
Rear End Casualty Crashes	5	0	↓ 100%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 15 September 2010

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







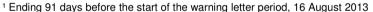
<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

### Mount Druitt - Great Western Highway at Carlisle Avenue

- There is one camera at this intersection.
- The camera at the intersection of Great Western Highway and Carlisle Avenue commenced issuing warning letters in November 2013.
- While the results available so far suggest a slight increase in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

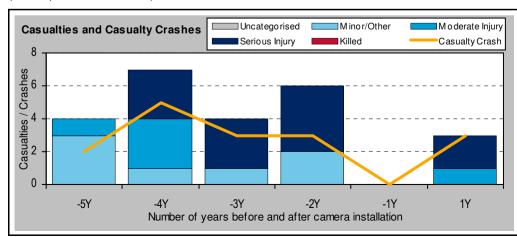
## Casualties and casualty crashes at enforced intersection

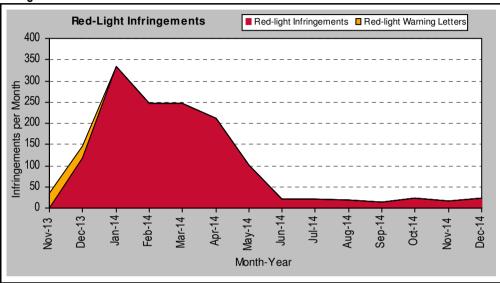
	5 years before installation <sup>1</sup>	1 year and 46 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	10	2	↓ 11%
Moderate Injuries	4	1	↑ 11%
Minor / Other Injuries	7	1	↓ 37%
Total Casualties:	21	4	↓ 15%
Pedestrian Casualties	0	0	-
Casualty Crashes	13	4	↑ 37%
Adjacent Casualty Crashes	0	0	-
Right Through Casualty Crashes	1	0	↓ 100%
Rear End Casualty Crashes	3	2	↑ 196%

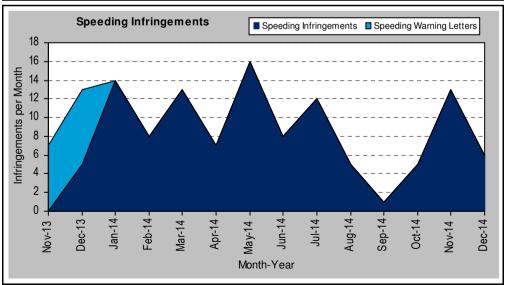


<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







## Naremburn - Willoughby Road at Chandos Street

- · There is one camera at this intersection.
- The camera at the intersection of Willoughby Road and Chandos Street commenced issuing warning letters in February 2013.
- While the results available so far suggest a slight increase in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

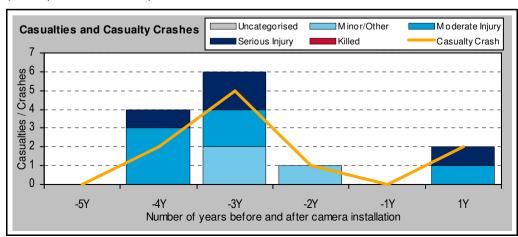
## Casualties and casualty crashes at enforced intersection

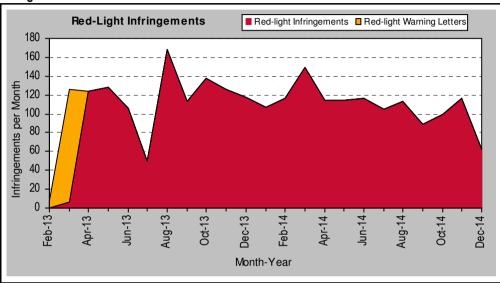
	5 years before installation <sup>1</sup>	1 year and 308 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	3	1	↓ 10%
Moderate Injuries	5	2	↑ 9%
Minor / Other Injuries	3	1	↓ 10%
Total Casualties:	11	4	↓ 1%
Pedestrian Casualties	1	1	↑ 171%
Casualty Crashes	8	4	↑ 36%
Adjacent Casualty Crashes	5	3	↑ 63%
Right Through Casualty Crashes	2	0	↓ 100%
Rear End Casualty Crashes	0	0	-



<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







## **Neutral Bay - Falcon Street at Merlin Street**

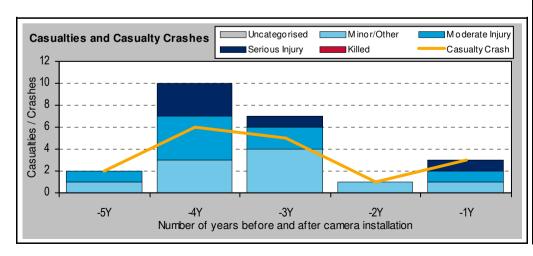
- There is one camera at this intersection.
- The camera at the intersection of Falcon Street and Merlin Street commenced issuing warning letters in July 2014.
- A longer period of time is required to assess the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

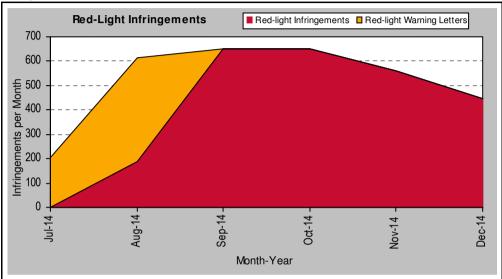
### Casualties and casualty crashes at enforced intersection

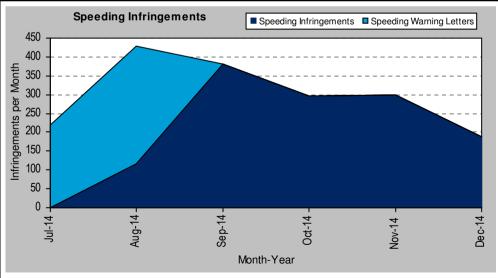
	5 years before installation <sup>1</sup>	163 days after installation <sup>2</sup>
Fatalities	0	0
Serious Injuries	5	0
Moderate Injuries	8	0
Minor / Other Injuries	10	0
Total Casualties:	23	0
Pedestrian Casualties	0	0
Casualty Crashes	17	0
Adjacent Casualty Crashes	7	0
Right Through Casualty Crashes	0	0
Rear End Casualty Crashes	7	0

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 21 April 2014

<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014





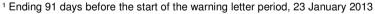


### North Ryde - Cox's Road at Lane Cove Road (school zone)

- There are three cameras at this intersection.
- The camera at the intersection of Cox's Road and Lane Cove Road (westbound) commenced issuing warning letters in April 2013. This camera enforces red-light running only.
- Both cameras at the intersection of Lane Cove Road and Cox's Road commenced issuing warning letters in April 2013.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the cameras.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

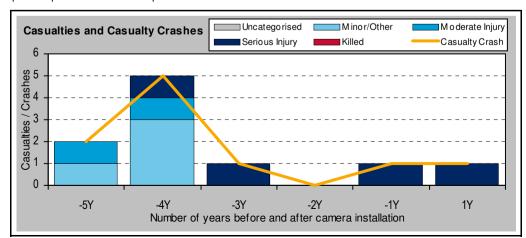
#### Casualties and casualty crashes at enforced intersection

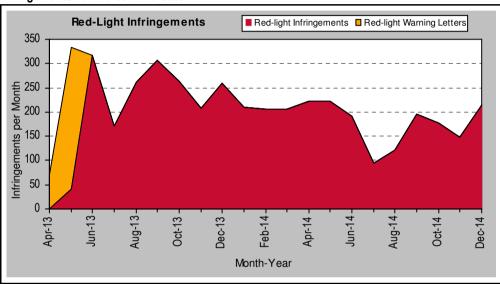
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	5 years before installation <sup>1</sup>	1 year and 251 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	3	1	↓ 1%
Moderate Injuries	2	1	↑ 48%
Minor / Other Injuries	4	0	↓ 100%
Total Casualties:	9	2	↓ 34%
Pedestrian Casualties	3	0	↓ 100%
Casualty Crashes	9	2	↓ 34%
Adjacent Casualty Crashes	0	0	-
Right Through Casualty Crashes	0	1	Increase
Rear End Casualty Crashes	2	1	↑ 48%



<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







#### North Ryde - Wicks Road at Epping Road

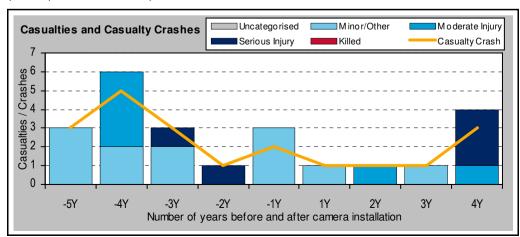
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Wicks Road and Epping Road commenced issuing warning letters in November 2010.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

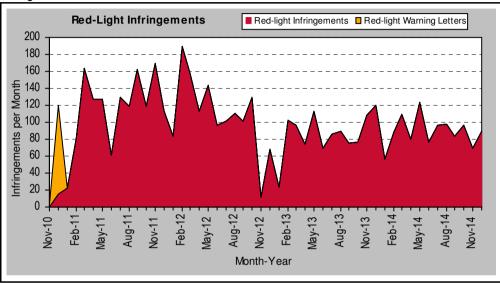
#### Casualties and casualty crashes at enforced intersection

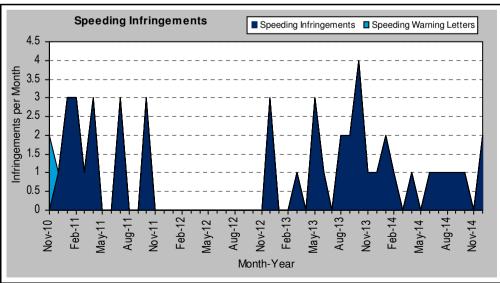
	5 years before installation <sup>1</sup>	4 years and 50 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	2	3	↑ 81%
Moderate Injuries	4	2	↓ 40%
Minor / Other Injuries	10	3	↓ 64%
Total Casualties:	16	8	↓ 40%
Pedestrian Casualties	0	0	-
Casualty Crashes	14	7	↓ 40%
Adjacent Casualty Crashes	1	1	↑ 21%
Right Through Casualty Crashes	0	1	Increase
Rear End Casualty Crashes	9	3	↓ 60%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 12 August 2010

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

#### Northmead - Briens Road at Redbank Road

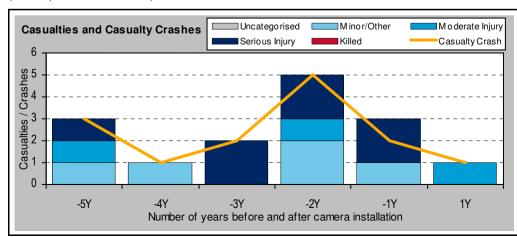
- · There is one camera at this intersection.
- The camera at the intersection of Briens Road and Redbank Road commenced issuing warning letters in September 2013.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

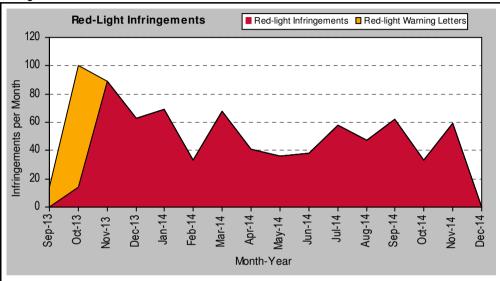
## Casualties and casualty crashes at enforced intersection

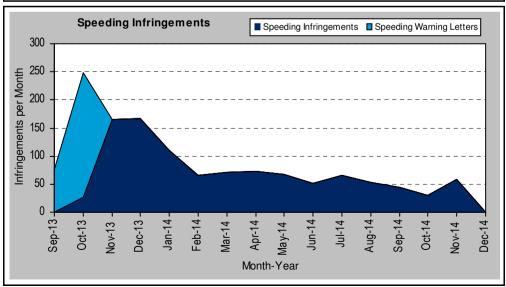
	5 years before installation <sup>1</sup>	1 year and 96 days after installation <sup>2</sup>	Percentage change³
			<b>.</b>
Fatalities	0	0	-
Serious Injuries	7	0	↓ 100%
Moderate Injuries	2	1	↑ 98%
Minor / Other Injuries	5	0	↓ 100%
Total Casualties:	14	1	↓ 72%
Pedestrian Casualties	0	0	-
Casualty Crashes	13	1	↓ 70%
Adjacent Casualty Crashes	1	0	↓ 100%
Right Through Casualty Crashes	2	0	↓ 100%
Rear End Casualty Crashes	5	1	↓ 21%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 27 June 2013

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

### Northmead - Old Windsor Road at Cumberland Highway

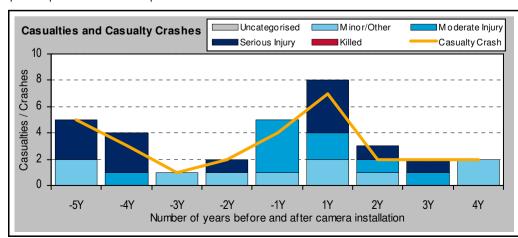
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Old Windsor Road and Cumberland Highway commenced issuing warning letters in December 2010.
- While the results available so far suggest a slight increase in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

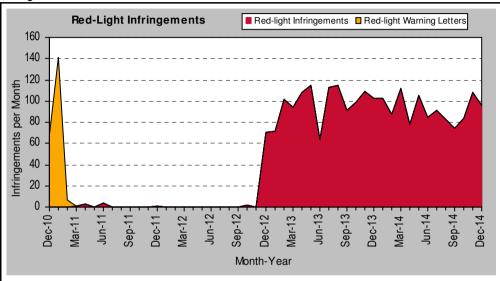
# Casualties and casualty crashes at enforced intersection

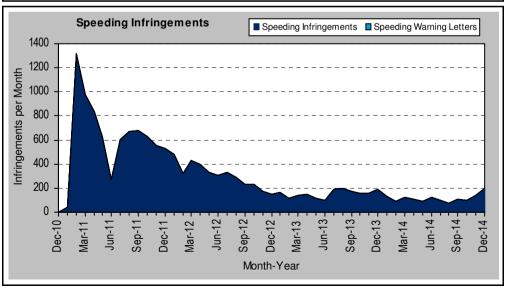
	5 years before installation <sup>1</sup>	4 years and 16 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	7	6	↑ 6%
Moderate Injuries	5	4	↓ 1%
Minor / Other Injuries	5	5	↑ <b>24</b> %
Total Casualties:	17	15	↑ 9%
Pedestrian Casualties	0	0	-
Casualty Crashes	15	13	↑ 7%
Adjacent Casualty Crashes	0	0	-
Right Through Casualty Crashes	0	3	Increase
Rear End Casualty Crashes	8	7	↑ 8%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 15 September 2010

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

### Paddington - Moore Park Road at Lang Road

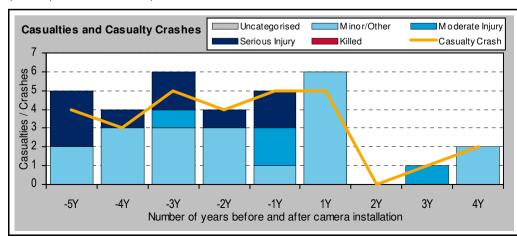
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Moore Park Road and Lang Road commenced issuing warning letters in October 2010.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

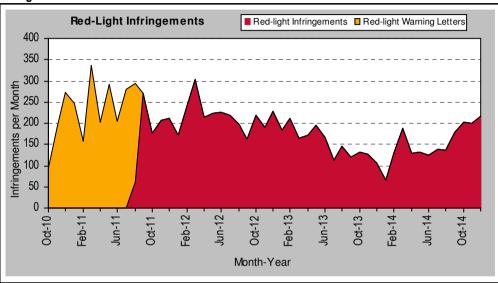
## Casualties and casualty crashes at enforced intersection

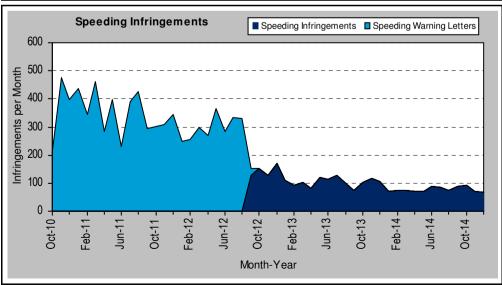
	5 years before installation1	4 years and 72 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	9	0	↓ 100%
Moderate Injuries	3	2	↓ 21%
Minor / Other Injuries	12	8	↓ 21%
Total Casualties:	24	10	↓ 50%
Pedestrian Casualties	3	0	↓ 100%
Casualty Crashes	21	9	↓ 49%
Adjacent Casualty Crashes	5	2	↓ 52%
Right Through Casualty Crashes	4	0	↓ 100%
Rear End Casualty Crashes	4	5	↑ <b>49</b> %

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 21 July 2010

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

## Paddington / Surry Hills - South Dowling Street at Fitzroy Street / Moore Park Road

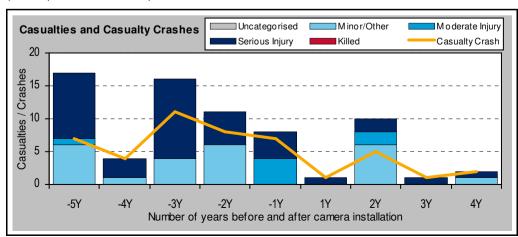
- There are two cameras at this intersection. This was previously a wet-film red-light camera location.
- Both cameras at the intersection of South Dowling Street and Fitzroy Street commenced issuing warning letters in June 2010.
- While the results to date indicate a decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the cameras.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

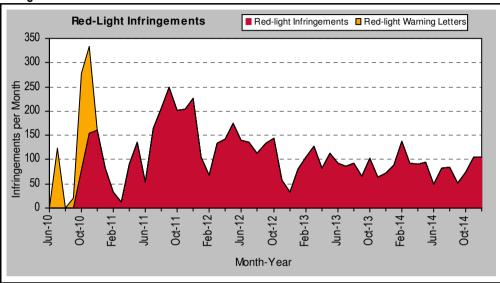
## Casualties and casualty crashes at enforced intersection

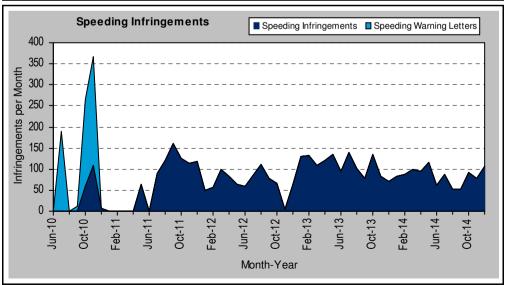
	5 years before installation <sup>1</sup>	4 years and 184 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	34	8	↓ 74%
Moderate Injuries	5	4	↓ 11%
Minor / Other Injuries	17	8	↓ 48%
Total Casualties:	56	20	↓ 60%
Pedestrian Casualties	2	0	↓ 100%
Casualty Crashes	37	13	↓ 61%
Adjacent Casualty Crashes	26	5	↓ 79%
Right Through Casualty Crashes	1	2	↑ 122%
Rear End Casualty Crashes	5	2	↓ 56%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 31 March 2010

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

### Parramatta - Macquarie Street at Marsden Street

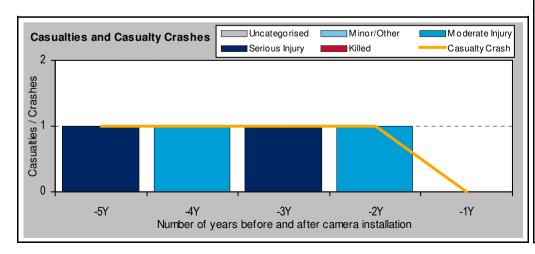
- There is one camera at this intersection.
- The camera at the intersection of Macquarie Street and Marsden Street commenced issuing warning letters in February 2014.
- A longer period of time is required to assess the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

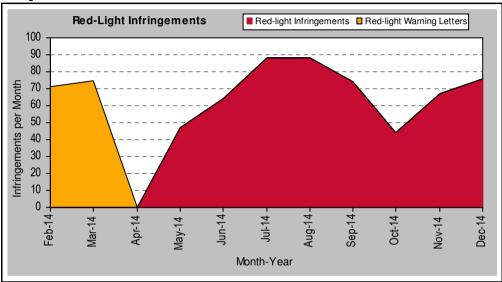
# Casualties and casualty crashes at enforced intersection

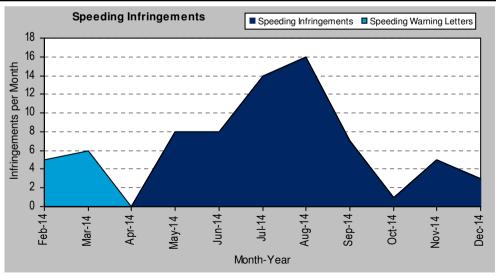
	5 years before installation <sup>1</sup>	321 days after installation <sup>2</sup>
Fatalities	0	0
Serious Injuries	2	0
Moderate Injuries	2	0
Minor / Other Injuries	0	2
Total Casualties:	4	2
Pedestrian Casualties	2	0
Casualty Crashes	4	2
Adjacent Casualty Crashes	1	2
Right Through Casualty Crashes	0	0
Rear End Casualty Crashes	1	0

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 14 November 2013

<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014







### Parramatta - O'Connell Street at Argyle Street

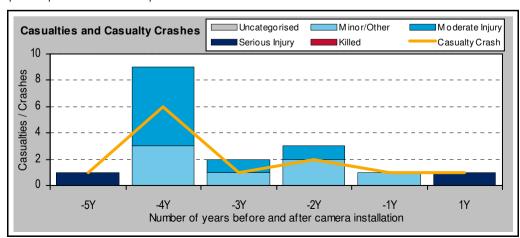
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of O'Connell Street and Argyle Street commenced issuing warning letters in May 2013.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

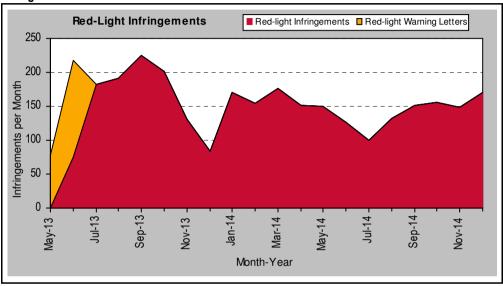
## Casualties and casualty crashes at enforced intersection

	5 years before installation <sup>1</sup>	1 year and 223 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	1	1	↑ 211%
Moderate Injuries	8	0	↓ 100%
Minor / Other Injuries	7	0	↓ 100%
Total Casualties:	16	1	↓ 81%
Pedestrian Casualties	1	0	↓ 100%
Casualty Crashes	11	1	↓ 72%
Adjacent Casualty Crashes	8	0	↓ 100%
Right Through Casualty Crashes	0	0	1
Rear End Casualty Crashes	1	0	↓ 100%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 20 February 2013

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

#### Parramatta - Victoria Road at Church Street

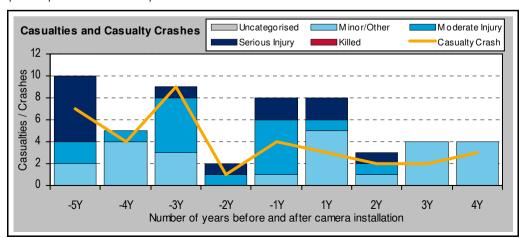
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Victoria Road and Church Street commenced issuing warning letters in June 2010.
- While the results to date indicate a decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

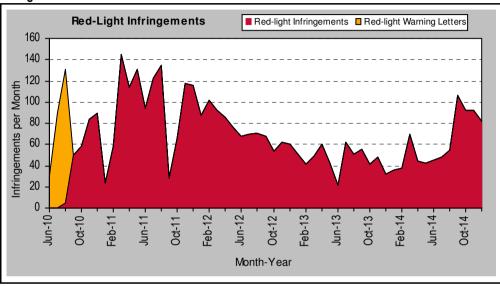
## Casualties and casualty crashes at enforced intersection

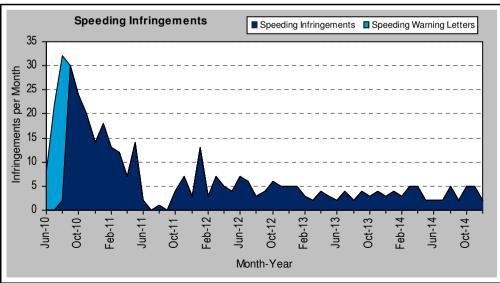
	5 years before installation <sup>1</sup>	4 years and 190 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	10	3	↓ 67%
Moderate Injuries	14	2	↓ 84%
Minor / Other Injuries	10	14	<b>↑ 55%</b>
Total Casualties:	34	19	↓ 38%
Pedestrian Casualties	3	1	↓ 63%
Casualty Crashes	25	10	↓ 56%
Adjacent Casualty Crashes	0	0	-
Right Through Casualty Crashes	14	7	↓ 45%
Rear End Casualty Crashes	4	1	↓ 72%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 25 March 2010

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

### Pennant Hills - Pennant Hills Road at Beecroft Road (school zone)

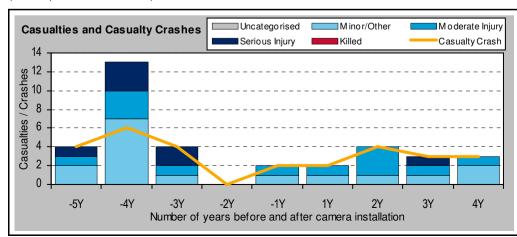
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Pennant Hills Road and Beecroft Road commenced issuing warning letters in September 2010.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

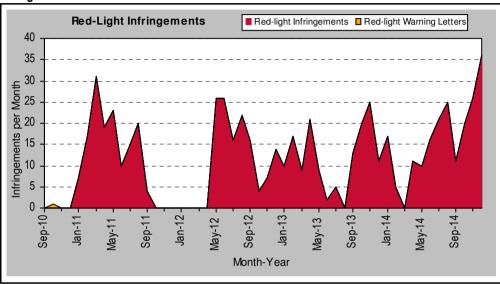
## Casualties and casualty crashes at enforced intersection

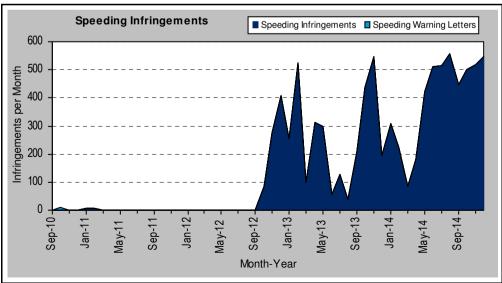
	5 years before installation1	4 years and 121 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	6	1	↓ 81%
Moderate Injuries	6	6	↑ 15%
Minor / Other Injuries	11	5	↓ 48%
Total Casualties:	23	12	↓ 40%
Pedestrian Casualties	0	0	1
Casualty Crashes	16	12	↓ 13%
Adjacent Casualty Crashes	0	0	-
Right Through Casualty Crashes	0	0	-
Rear End Casualty Crashes	16	8	↓ 42%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 2 June 2010

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







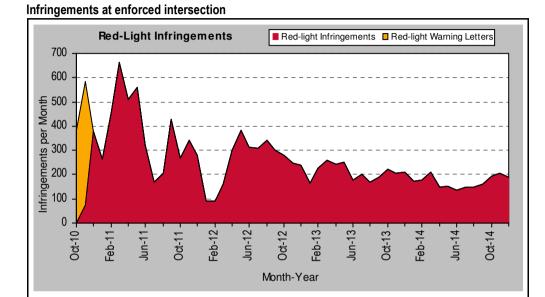
<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

### Petersham - Gordon Street at New Canterbury Road

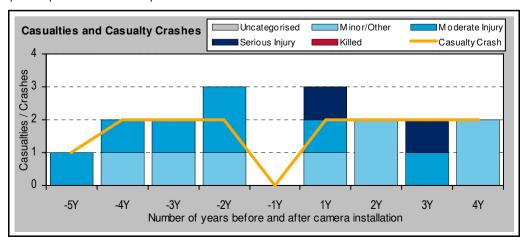
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Gordon Street and New Canterbury Road commenced issuing warning letters in October 2010. This camera enforces red-light running only.
- While the results available so far suggest a slight increase in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

### Casualties and casualty crashes at enforced intersection

,			
	5 years before installation¹	4 years and 77 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	0	2	Increase
Moderate Injuries	5	2	↓ 53%
Minor / Other Injuries	3	5	↑ 98%
Total Casualties:	8	9	↑ 34%
Pedestrian Casualties	1	5	↑ <b>494</b> %
Casualty Crashes	7	8	↑ 36%
Adjacent Casualty Crashes	2	2	↑ 19%
Right Through Casualty Crashes	1	0	↓ 100%
Rear End Casualty Crashes	2	2	↑ 19%



<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.



<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 16 July 2010

<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

#### Petersham - Parramatta Road at West Street

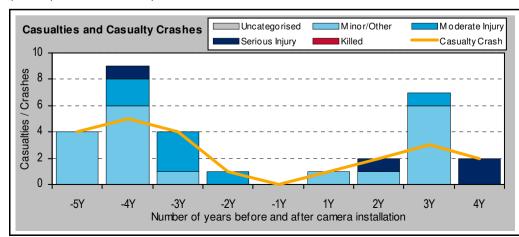
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Parramatta Road and West Street commenced issuing warning letters in September 2010.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

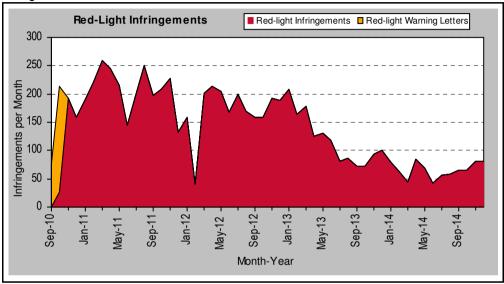
# Casualties and casualty crashes at enforced intersection

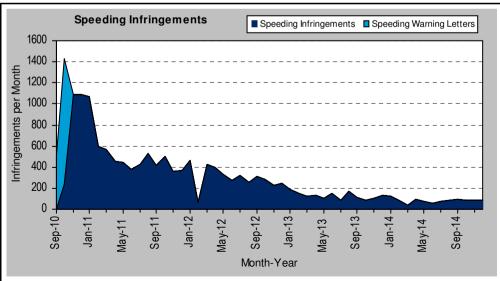
	5 years before installation <sup>1</sup>	4 years and 99 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	1	3	↑ 251%
Moderate Injuries	6	1	↓ 80%
Minor / Other Injuries	11	8	↓ 15%
Total Casualties:	18	12	↓ 22%
Pedestrian Casualties	1	0	↓ 100%
Casualty Crashes	14	8	↓ 33%
Adjacent Casualty Crashes	3	0	↓ 100%
Right Through Casualty Crashes	4	5	↑ 46%
Rear End Casualty Crashes	6	1	↓ 80%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 24 June 2010

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

#### Ramsgate - Rocky Point Road at Ramsgate Road

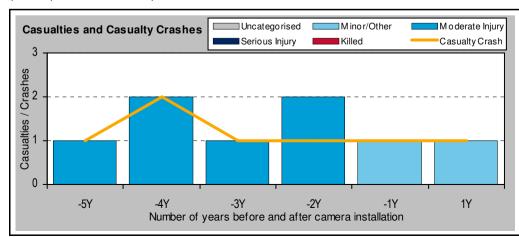
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Rocky Point Road and Ramsgate Road commenced issuing warning letters in September 2013.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

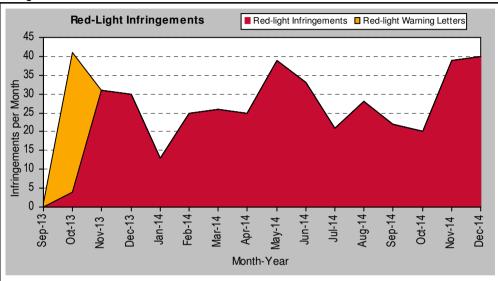
### Casualties and casualty crashes at enforced intersection

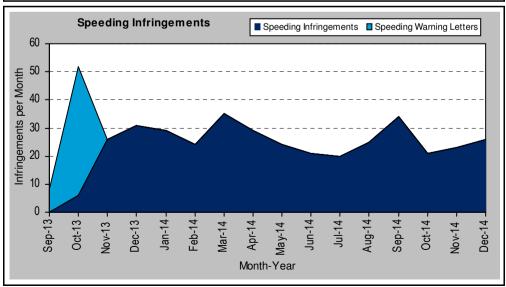
	5 years before installation <sup>1</sup>	1 year and 95 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	0	0	-
Moderate Injuries	6	0	↓ 100%
Minor / Other Injuries	1	1	↑ 297%
Total Casualties:	7	1	↓ 43%
Pedestrian Casualties	0	0	-
Casualty Crashes	6	1	↓ 34%
Adjacent Casualty Crashes	3	0	↓ 100%
Right Through Casualty Crashes	0	0	-
Rear End Casualty Crashes	3	0	↓ 100%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 28 June 2013

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

#### Randwick - Alison Street at Avoca Street

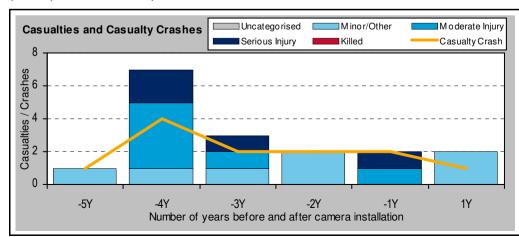
- · There is one camera at this intersection.
- The camera at the intersection of Alison Road and Avoca Street commenced issuing warning letters in November 2013.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

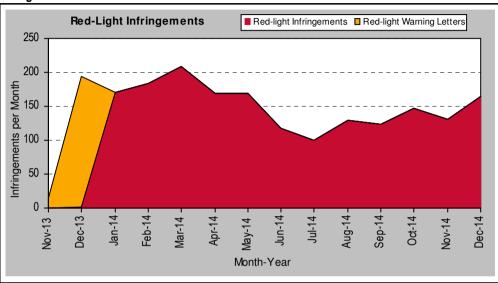
### Casualties and casualty crashes at enforced intersection

	5 years before installation <sup>1</sup>	1 year and 32 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	4	0	↓ 100%
Moderate Injuries	6	0	↓ 100%
Minor / Other Injuries	5	2	↑ 84%
Total Casualties:	15	2	↓ 39%
Pedestrian Casualties	1	0	↓ 100%
Casualty Crashes	11	1	↓ 58%
Adjacent Casualty Crashes	3	0	↓ 100%
Right Through Casualty Crashes	1	0	↓ 100%
Rear End Casualty Crashes	2	1	↑ 130%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 30 August 2013

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

# Randwick - Avoca Street at Darley Road

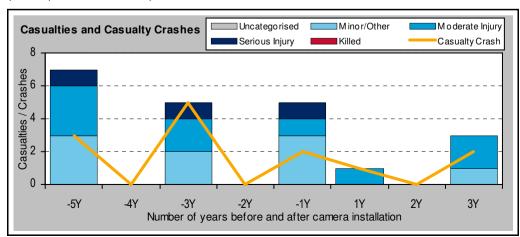
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Avoca Street and Darley Road commenced issuing warning letters in June 2011.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

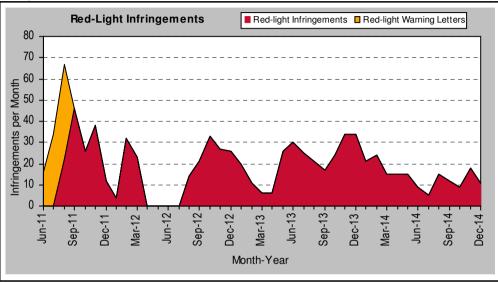
# Casualties and casualty crashes at enforced intersection

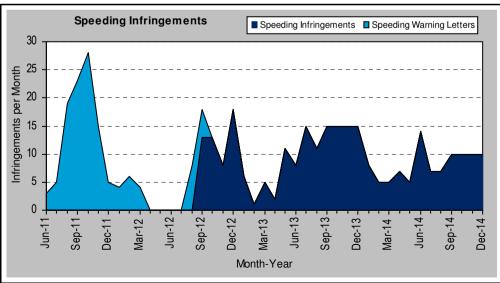
	5 years before installation <sup>1</sup>	3 years and 193 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	3	0	↓ 100%
Moderate Injuries	6	4	↓ 6%
Minor / Other Injuries	8	1	↓ 82%
Total Casualties:	17	5	↓ 58%
Pedestrian Casualties	1	0	↓ 100%
Casualty Crashes	10	4	↓ 43%
Adjacent Casualty Crashes	1	1	↑ 42%
Right Through Casualty Crashes	3	1	↓ 53%
Rear End Casualty Crashes	4	1	↓ 65%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 22 March 2011

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

### Redfern - Chalmers Street at Cleveland Street (school zone)

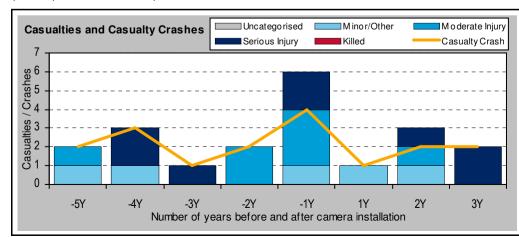
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Chalmers Street and Cleveland Street commenced issuing warning letters in June 2011.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

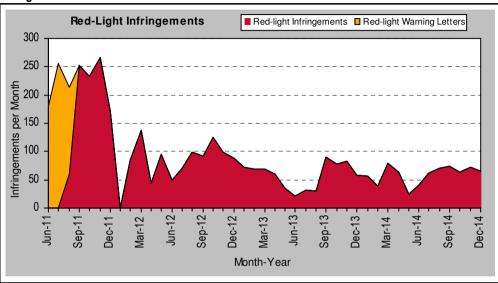
# Casualties and casualty crashes at enforced intersection

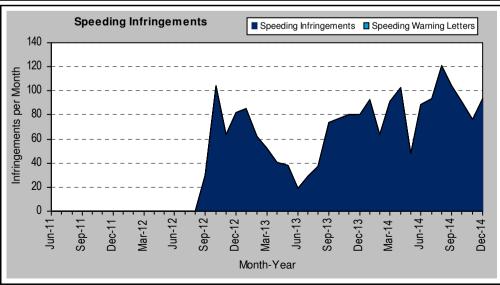
	5 years before installation <sup>1</sup>	3 years and 204 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	5	3	↓ 16%
Moderate Injuries	6	3	↓ 30%
Minor / Other Injuries	3	2	↓ 6%
Total Casualties:	14	8	↓ 20%
Pedestrian Casualties	3	2	↓ 6%
Casualty Crashes	12	7	↓ 18%
Adjacent Casualty Crashes	0	2	Increase
Right Through Casualty Crashes	0	0	-
Rear End Casualty Crashes	5	1	↓ 72%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 11 March 2011

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

#### Richmond - March Street at East Market Street

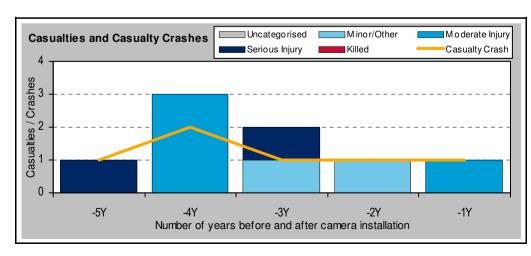
- There is one camera at this intersection.
- The camera at the intersection of March Street and East Market Street commenced issuing warning letters in August 2014.
- A longer period of time is required to assess the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

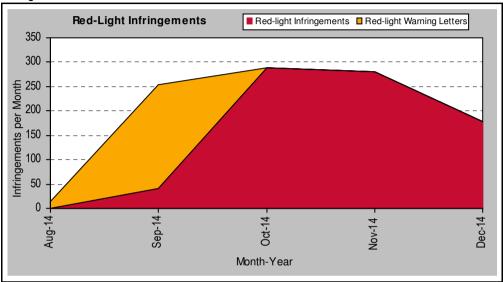
# Casualties and casualty crashes at enforced intersection

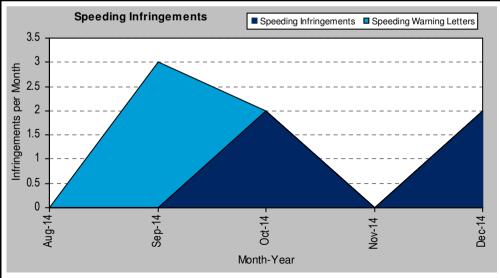
	5 years before installation <sup>1</sup>	126 days after installation <sup>2</sup>
Fatalities	0	0
Serious Injuries	2	0
Moderate Injuries	4	1
Minor / Other Injuries	2	0
Total Casualties:	8	1
Pedestrian Casualties	0	0
Casualty Crashes	6	1
Adjacent Casualty Crashes	1	0
Right Through Casualty Crashes	5	0
Rear End Casualty Crashes	0	1

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 28 May 2014

<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014





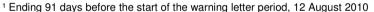


#### Rockdale - Bestic Street at West Botany Street

- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Bestic Street and West Botany Street commenced issuing warning letters in November 2010.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

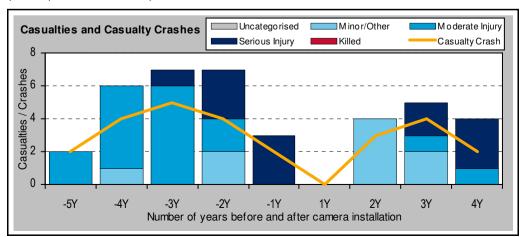
#### Casualties and casualty crashes at enforced intersection

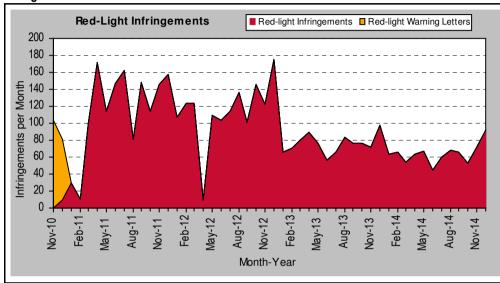
	5 years before installation <sup>1</sup>	4 years and 50 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	7	5	↓ 14%
Moderate Injuries	15	2	↓ 84%
Minor / Other Injuries	3	6	↑ 142%
Total Casualties:	25	13	↓ 37%
Pedestrian Casualties	0	0	-
Casualty Crashes	17	9	↓ 36%
Adjacent Casualty Crashes	8	6	↓ 9%
Right Through Casualty Crashes	8	0	↓ 100%
Rear End Casualty Crashes	0	2	Increase

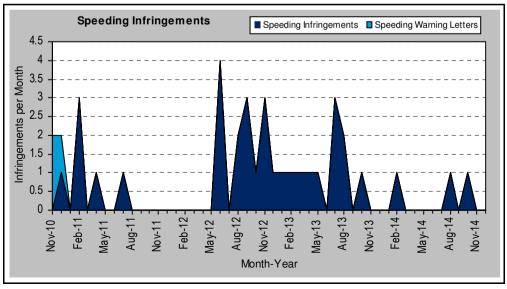


<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







# Rockdale - Princes Highway at Bay Street / The Seven Ways

- There are two cameras at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Princes Highway and The Seven Ways (northbound) commenced issuing warning letters in July 2010.
- The camera at the intersection of Princes Highway and Bay Street (southbound) commenced issuing warning letters in June 2011.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the cameras.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

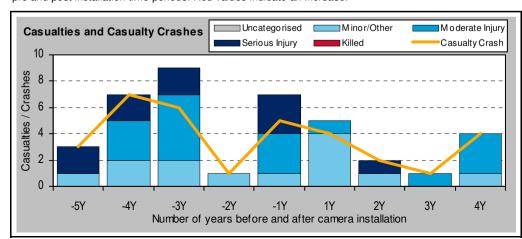
#### Casualties and casualty crashes at enforced intersection

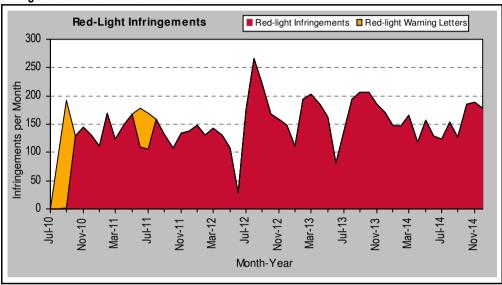
	5 years before installation <sup>1</sup>	4 years and 154 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	9	2	↓ 75%
Moderate Injuries	11	5	↓ 49%
Minor / Other Injuries	7	7	↑ 13%
Total Casualties:	27	14	↓ 41%
Pedestrian Casualties	3	2	↓ 25%
Casualty Crashes	22	13	↓ 33%
Adjacent Casualty Crashes	1	0	↓ 100%
Right Through Casualty Crashes	8	3	↓ 58%
Rear End Casualty Crashes	5	6	↑ 36%

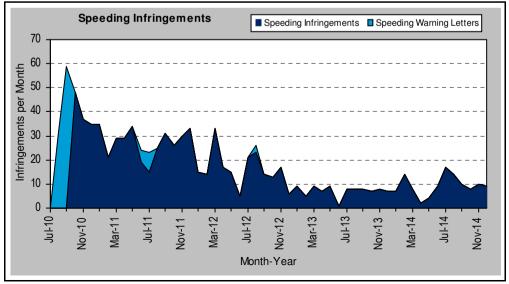


<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







# Roselands - King Georges Road at Moorefields Road

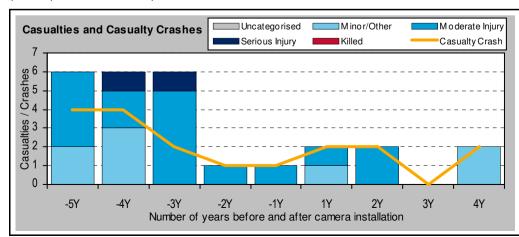
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of King Georges Road and Moorefields Road commenced issuing warning letters in October 2010.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued. Speed limit changed from 70 to 60 in October 2011.

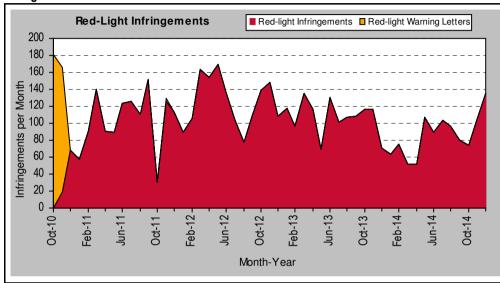
#### Casualties and casualty crashes at enforced intersection

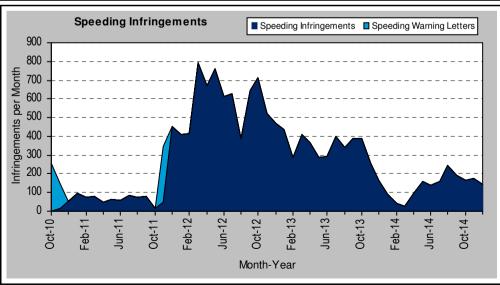
	5 years before installation <sup>1</sup>	4 years and 91 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	2	0	↓ 100%
Moderate Injuries	13	3	↓ 73%
Minor / Other Injuries	5	6	↑ <b>41</b> %
Total Casualties:	20	9	↓ 47%
Pedestrian Casualties	0	0	-
Casualty Crashes	12	9	↓ 12%
Adjacent Casualty Crashes	0	0	-
Right Through Casualty Crashes	4	0	↓ 100%
Rear End Casualty Crashes	5	6	↑ 41%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 2 July 2010

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







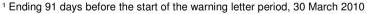
<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

# Roselands / Wiley Park - Canterbury Road at King Georges Road

- There are two cameras at this intersection.
- The camera at the intersection of Canterbury Road and King Georges Road (westbound) commenced issuing warning letters in June 2010.
- The camera at the intersection of Canterbury Road and King Georges Road (eastbound) commenced issuing warning letters in August 2010.
- While the results to date indicate a decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the cameras.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

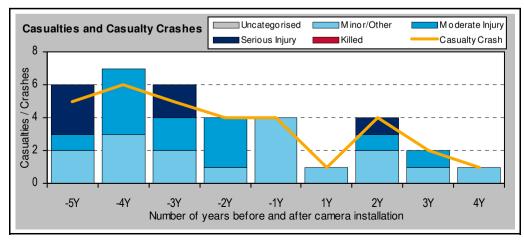
#### Casualties and casualty crashes at enforced intersection

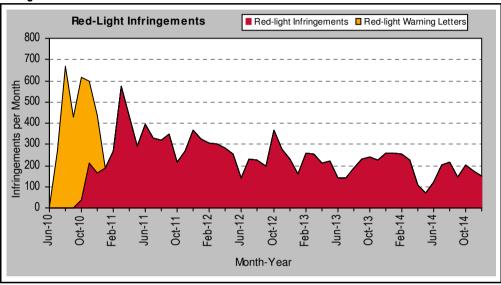
	5 years before installation1	4 years and 185 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	5	2	↓ 56%
Moderate Injuries	10	2	↓ 78%
Minor / Other Injuries	12	6	↓ 45%
Total Casualties:	27	10	↓ 59%
Pedestrian Casualties	0	0	-
Casualty Crashes	24	10	↓ 54%
Adjacent Casualty Crashes	0	0	-
Right Through Casualty Crashes	3	0	↓ 100%
Rear End Casualty Crashes	14	5	↓ 60%

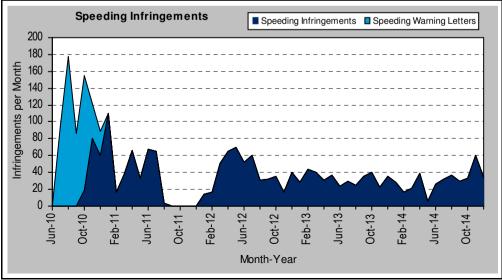


<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







#### Rozelle - Victoria Road at Evans Street

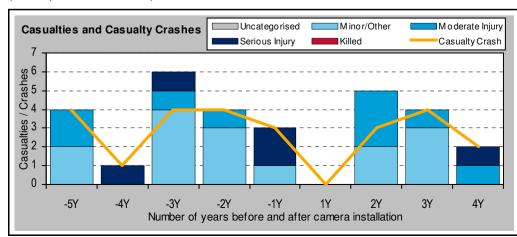
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Victoria Road and Evans Street commenced issuing warning letters in October 2010.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

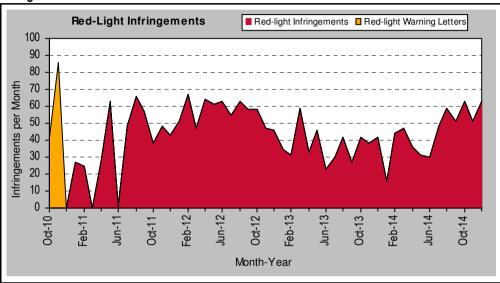
# Casualties and casualty crashes at enforced intersection

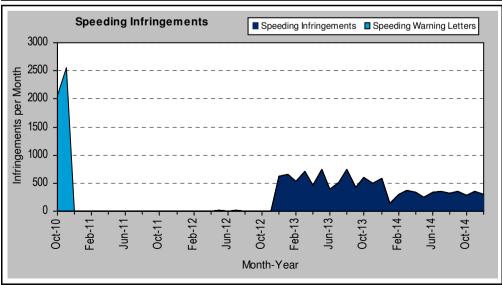
	5 years before installation <sup>1</sup>	4 years and 77 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	4	1	↓ 70%
Moderate Injuries	4	5	↑ 48%
Minor / Other Injuries	10	5	↓ 41%
Total Casualties:	18	11	↓ 27%
Pedestrian Casualties	2	1	↓ 41%
Casualty Crashes	16	9	↓ 33%
Adjacent Casualty Crashes	8	4	↓ 41%
Right Through Casualty Crashes	2	0	↓ 100%
Rear End Casualty Crashes	1	2	↑ 137%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 16 July 2010

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

# Rozelle - Wellington Street at Victoria Road

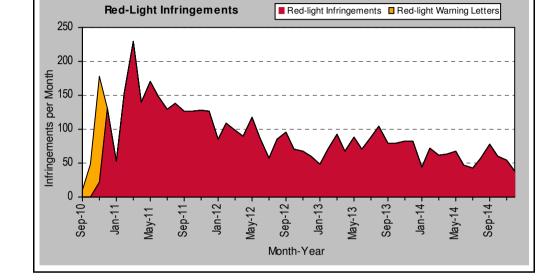
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Wellington Street and Victoria Road commenced issuing warning letters in September 2010. This camera enforces red-light running only.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.

Infringements at enforced intersection

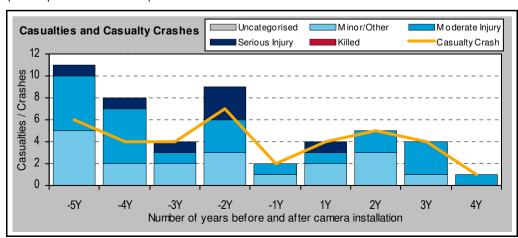
• The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

# Casualties and casualty crashes at enforced intersection

	5 years before installation <sup>1</sup>	4 years and 94 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	6	1	↓ 80%
Moderate Injuries	15	7	↓ 45%
Minor / Other Injuries	13	6	↓ 46%
Total Casualties:	34	14	↓ 52%
Pedestrian Casualties	1	0	↓ 100%
Casualty Crashes	23	14	↓ 29%
Adjacent Casualty Crashes	7	3	↓ 50%
Right Through Casualty Crashes	1	0	↓ 100%
Rear End Casualty Crashes	3	2	↓ 22%



<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.



<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 29 June 2010

<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

# Ryde - Victoria Road at Devlin Street

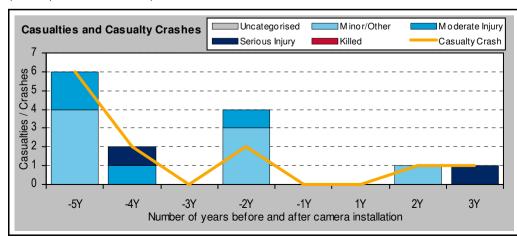
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Victoria Road and Devlin Street commenced issuing warning letters in June 2011.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

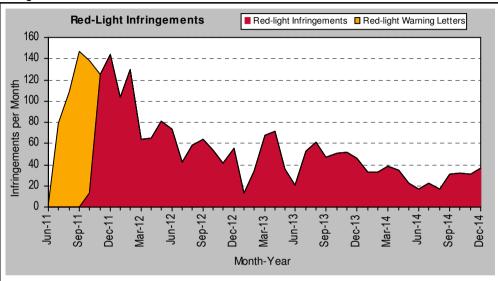
# Casualties and casualty crashes at enforced intersection

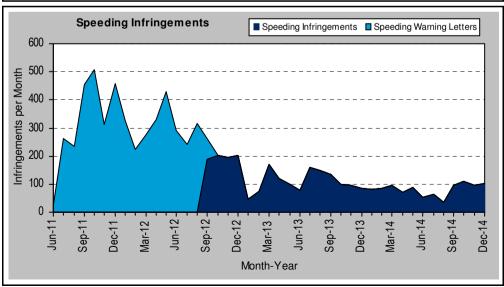
	5 years before installation <sup>1</sup>	3 years and 187 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	1	1	↑ <b>42</b> %
Moderate Injuries	4	1	↓ 64%
Minor / Other Injuries	7	1	↓ 80%
Total Casualties:	12	3	↓ 64%
Pedestrian Casualties	0	1	Increase
Casualty Crashes	10	3	↓ 57%
Adjacent Casualty Crashes	0	0	-
Right Through Casualty Crashes	3	1	↓ 53%
Rear End Casualty Crashes	3	1	↓ 53%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 28 March 2011

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

#### Seven Hills - Abbott Road at Station Road

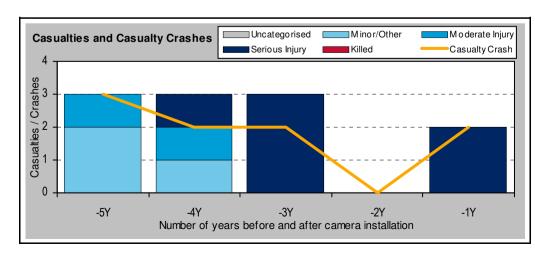
- There is one camera at this intersection.
- The camera at the intersection of Abbott Road and Station Road commenced issuing warning letters in January 2014.
- A longer period of time is required to assess the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

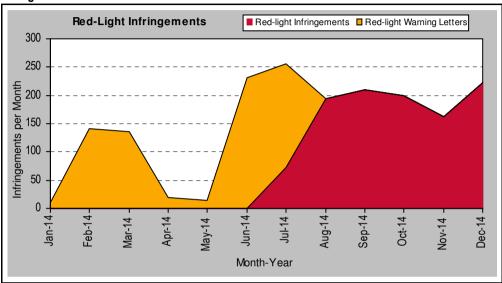
#### Casualties and casualty crashes at enforced intersection

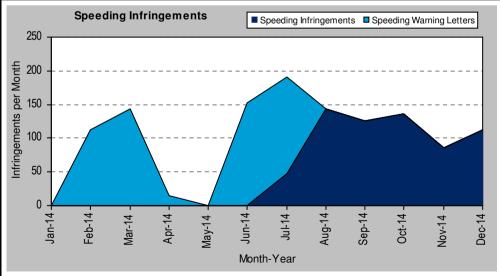
	5 years before installation¹	347 days after installation²
Fatalities	0	0
Serious Injuries	6	1
Moderate Injuries	2	0
Minor / Other Injuries	3	0
Total Casualties:	11	1
Pedestrian Casualties	0	0
Casualty Crashes	9	1
Adjacent Casualty Crashes	1	1
Right Through Casualty Crashes	2	0
Rear End Casualty Crashes	2	0

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 19 October 2013

<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014







### Silverwater - Silverwater Road at M4 eastbound on-ramp

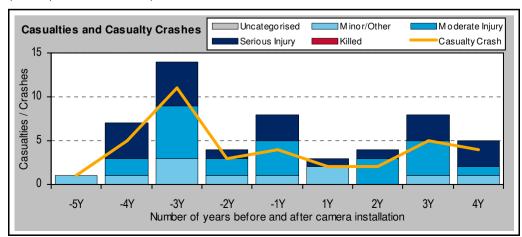
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Silverwater Road and M4 Eastbound On-ramp commenced issuing warning letters in June 2010.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

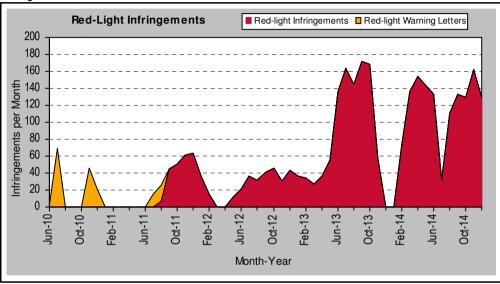
# Casualties and casualty crashes at enforced intersection

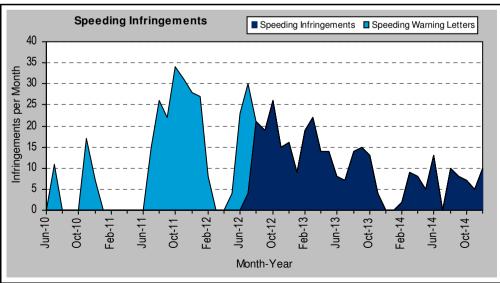
	5 years before installation <sup>1</sup>	4 years and 185 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	13	8	↓ 32%
Moderate Injuries	14	8	↓ 37%
Minor / Other Injuries	7	4	↓ 37%
Total Casualties:	34	20	↓ 35%
Pedestrian Casualties	0	0	-
Casualty Crashes	24	13	↓ 40%
Adjacent Casualty Crashes	0	0	-
Right Through Casualty Crashes	15	6	↓ 56%
Rear End Casualty Crashes	3	2	↓ 26%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 30 March 2010

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

# Smithfield - Cumberland Highway at The Horsley Drive

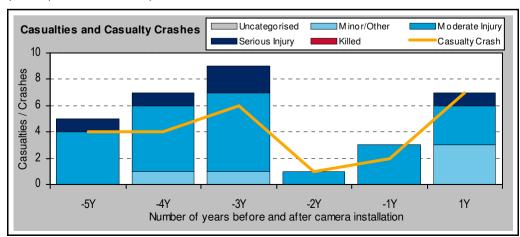
- There is one camera at this intersection.
- The camera at the intersection of Cumberland Highway and The Horsley Drive commenced issuing warning letters in November 2013.
- While the results available so far suggest a slight increase in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

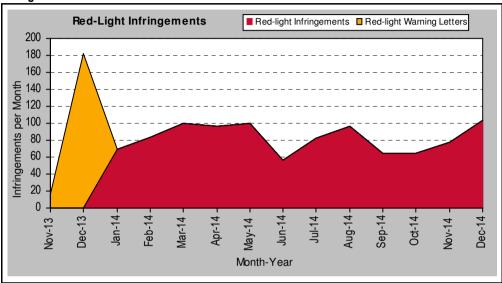
### Casualties and casualty crashes at enforced intersection

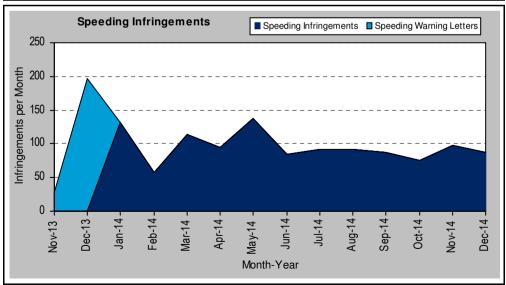
	5 years before installation <sup>1</sup>	1 year and 32 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	4	1	<b>↑ 15%</b>
Moderate Injuries	19	3	↓ 27%
Minor / Other Injuries	2	3	↑ 590%
Total Casualties:	25	7	<b>↑ 29%</b>
Pedestrian Casualties	1	0	↓ 100%
Casualty Crashes	17	7	↑ 89%
Adjacent Casualty Crashes	6	0	↓ 100%
Right Through Casualty Crashes	1	1	↑ 360%
Rear End Casualty Crashes	4	3	↑ 245%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 30 August 2013

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

# **Smithfield - The Horsley Drive at Gipps Street**

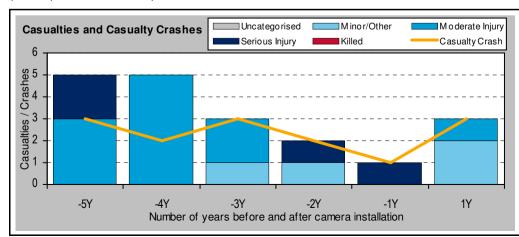
- There is one camera at this intersection.
- The camera at the intersection of The Horsley Drive and Gipps Street commenced issuing warning letters in August 2013.
- While the results available so far suggest a slight increase in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

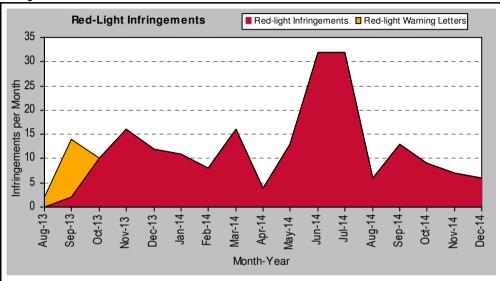
# Casualties and casualty crashes at enforced intersection

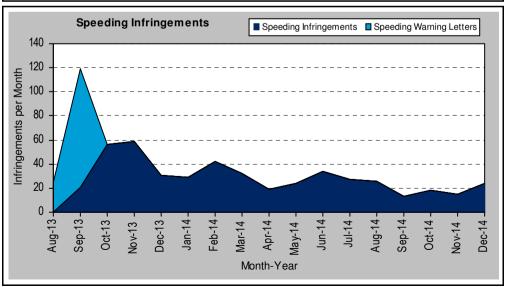
	5 years before installation <sup>1</sup>	1 year and 126 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	4	0	↓ 100%
Moderate Injuries	10	1	↓ 63%
Minor / Other Injuries	2	3	↑ 458%
Total Casualties:	16	4	↓ 7%
Pedestrian Casualties	0	0	-
Casualty Crashes	11	4	↑ 35%
Adjacent Casualty Crashes	2	3	↑ 458%
Right Through Casualty Crashes	6	0	↓ 100%
Rear End Casualty Crashes	2	1	↑ 86%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 28 May 2013

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

#### Smithfield - Victoria Street at Hassall Street

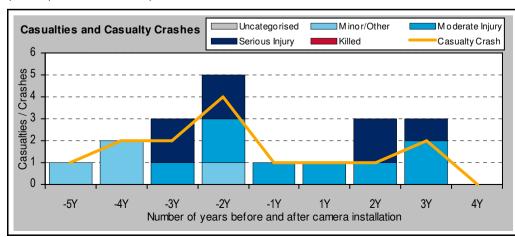
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Victoria Street and Hassall Street commenced issuing warning letters in November 2010.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

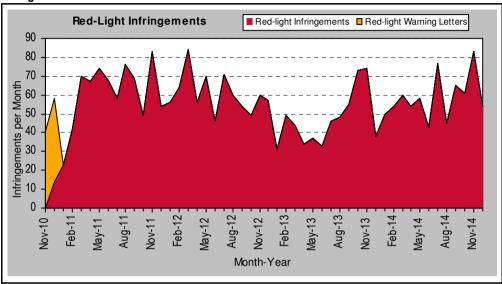
#### Casualties and casualty crashes at enforced intersection

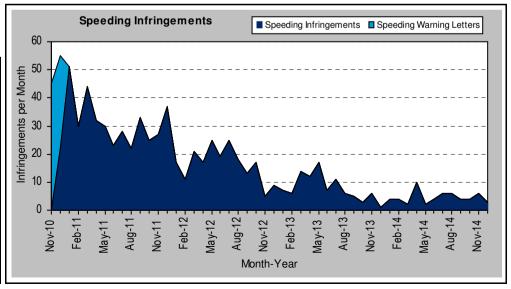
	5 years before installation <sup>1</sup>	4 years and 50 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	4	3	↓ 9%
Moderate Injuries	4	4	<b>↑ 21%</b>
Minor / Other Injuries	4	0	↓ 100%
Total Casualties:	12	7	↓ 30%
Pedestrian Casualties	0	0	-
Casualty Crashes	10	4	↓ 52%
Adjacent Casualty Crashes	3	2	↓ 19%
Right Through Casualty Crashes	5	2	↓ 52%
Rear End Casualty Crashes	1	0	↓ 100%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 12 August 2010

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

#### South Penrith - Parker Street at Jamison Road

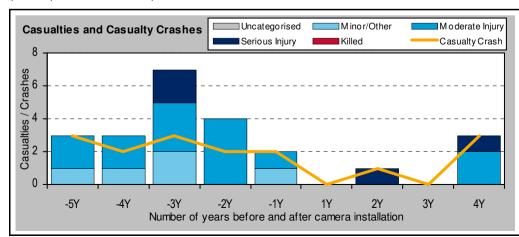
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Parker Street and Jamison Road commenced issuing warning letters in November 2010.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

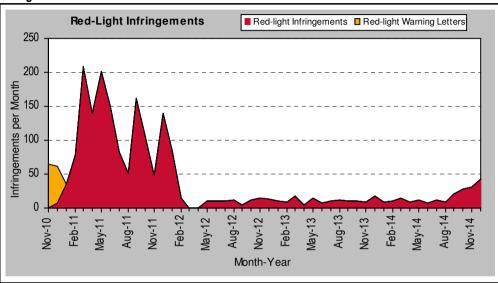
### Casualties and casualty crashes at enforced intersection

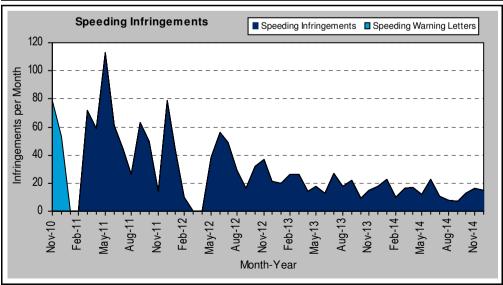
	5 years before installation1	4 years and 50 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	2	2	↑ 21%
Moderate Injuries	12	2	↓ 80%
Minor / Other Injuries	5	0	↓ 100%
Total Casualties:	19	4	↓ 75%
Pedestrian Casualties	1	0	↓ 100%
Casualty Crashes	12	4	↓ 60%
Adjacent Casualty Crashes	1	0	↓ 100%
Right Through Casualty Crashes	7	3	↓ 48%
Rear End Casualty Crashes	3	0	↓ 100%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 12 August 2010

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

# South Wentworthville - Cumberland Highway at Old Prospect Road

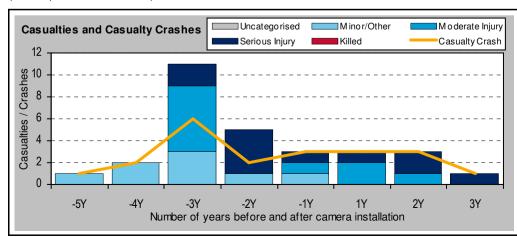
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Cumberland Highway and Old Prospect Road commenced issuing warning letters in April 2011.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

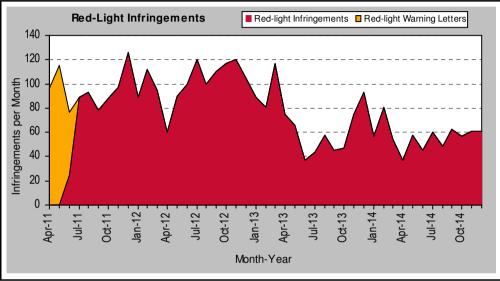
#### Casualties and casualty crashes at enforced intersection

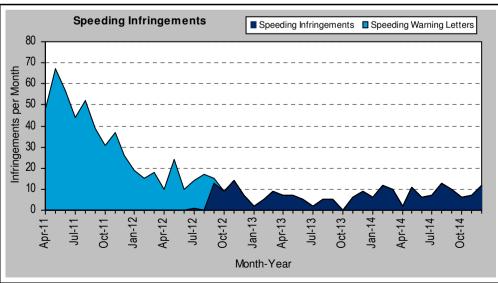
	5 years before installation <sup>1</sup>	3 years and 268 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	7	6	<b>↑ 15%</b>
Moderate Injuries	7	5	↓ 4%
Minor / Other Injuries	8	1	↓ 83%
Total Casualties:	22	12	↓ 27%
Pedestrian Casualties	1	0	↓ 100%
Casualty Crashes	14	9	↓ 14%
Adjacent Casualty Crashes	1	1	↑ 34%
Right Through Casualty Crashes	4	4	↑ 34%
Rear End Casualty Crashes	5	2	↓ 46%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 6 January 2011

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







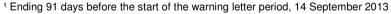
<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

## Spring Hill - Springhill Road at Masters Road

- There are two cameras at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Springhill Road and Masters Road (northbound) commenced issuing warning letters in December 2013.
- The camera at the intersection of Springhill Road and Masters Road (southbound) commenced issuing warning letters in January 2014.
- While the results available so far suggest a slight increase in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the cameras.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

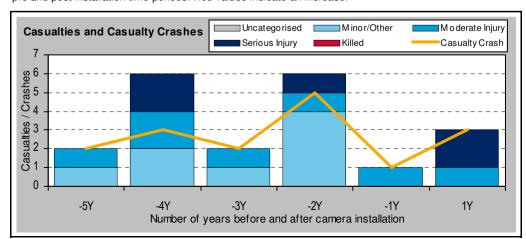
#### Casualties and casualty crashes at enforced intersection

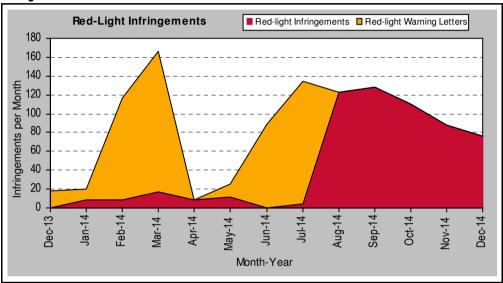
	5 years before installation <sup>1</sup>	1 year and 17 days after installation²	Percentage change³
Fatalities	0	0	-
Serious Injuries	3	2	↑ 219%
Moderate Injuries	6	1	↓ 20%
Minor / Other Injuries	8	0	↓ 100%
Total Casualties:	17	3	↓ 16%
Pedestrian Casualties	0	1	Increase
Casualty Crashes	13	3	↑ 10%
Adjacent Casualty Crashes	1	0	↓ 100%
Right Through Casualty Crashes	4	0	↓ 100%
Rear End Casualty Crashes	5	1	↓ 4%

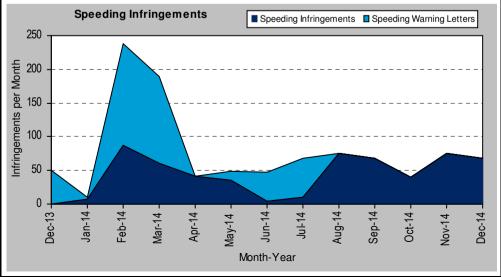


<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







# St Marys - Great Western Highway at Charles Hackett Drive / Pages Road

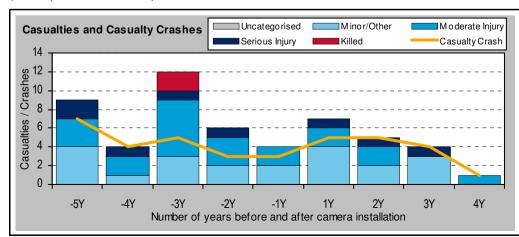
- There are two cameras at this intersection.
- Both cameras at the intersection of Great Western Highway and Charles Hackett Drive commenced issuing warning letters in July 2010.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the cameras.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

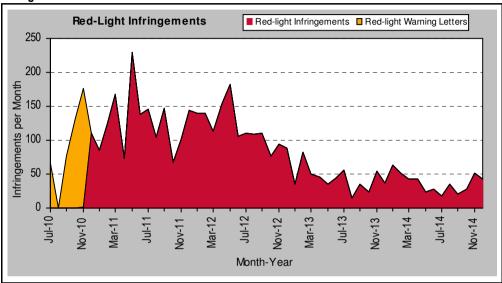
### Casualties and casualty crashes at enforced intersection

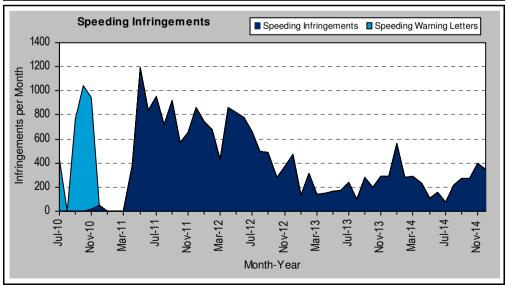
	5 years before installation¹	4 years and 176 days after installation <sup>2</sup>	Percentage change³
Fatalities	2	0	↓ 100%
Serious Injuries	5	3	↓ 33%
Moderate Injuries	16	5	↓ 65%
Minor / Other Injuries	12	9	↓ 16%
Total Casualties:	35	17	↓ 46%
Pedestrian Casualties	1	1	↑ 12%
Casualty Crashes	22	15	↓ 24%
Adjacent Casualty Crashes	2	0	↓ 100%
Right Through Casualty Crashes	14	6	↓ 52%
Rear End Casualty Crashes	2	7	↑ 290%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 8 April 2010

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

# St Marys - Mamre Road at Saddington Street (school zone)

- · There is one camera at this intersection.
- The camera at the intersection of Mamre Road and Saddington Street commenced issuing warning letters in September 2013.
- While the results available so far suggest a slight increase in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

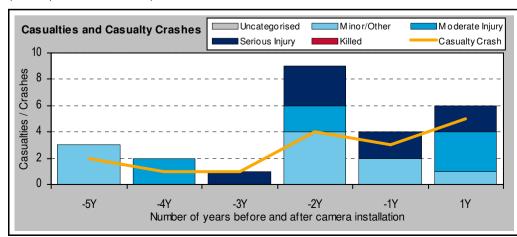
### Casualties and casualty crashes at enforced intersection

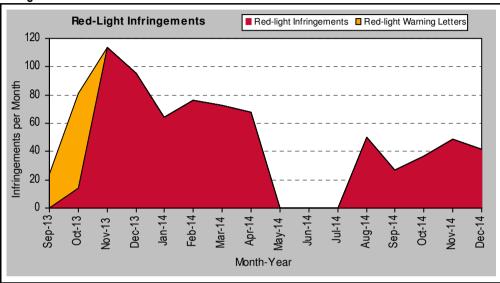
	5 years before installation1	1 year and 96 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	6	2	↑ 32%
Moderate Injuries	4	3	↑ 197%
Minor / Other Injuries	9	1	↓ 56%
Total Casualties:	19	6	↑ 25%
Pedestrian Casualties	0	1	Increase
Casualty Crashes	11	5	↑ 80%
Adjacent Casualty Crashes	6	0	↓ 100%
Right Through Casualty Crashes	4	2	↑ 98%
Rear End Casualty Crashes	0	2	Increase

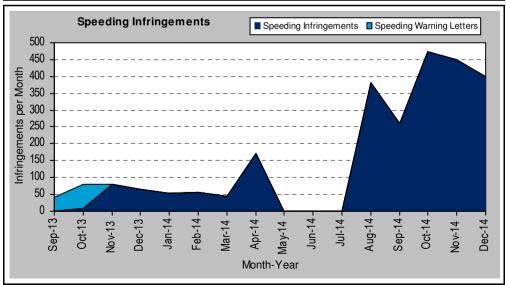


<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







# Strathfield - Arthur Street at Centenary Drive

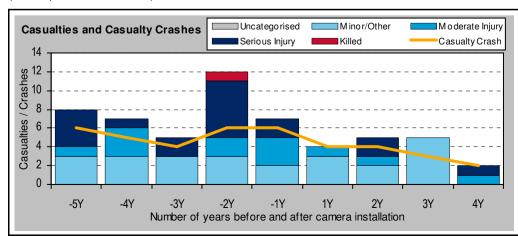
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Arthur Street and Centenary Drive commenced issuing warning letters in October 2010.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

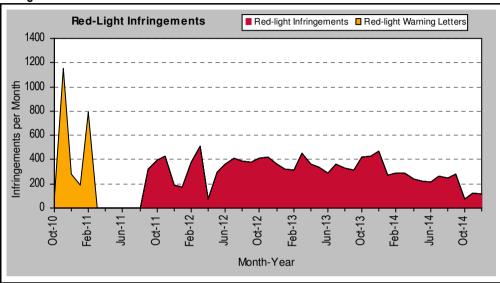
# Casualties and casualty crashes at enforced intersection

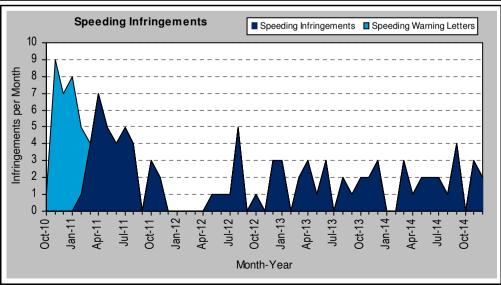
	5 years before installation <sup>1</sup>	4 years and 65 days after installation <sup>2</sup>	Percentage change³
Fatalities	1	0	↓ 100%
Serious Injuries	15	3	↓ 76%
Moderate Injuries	9	4	↓ 47%
Minor / Other Injuries	14	12	↑ 3%
Total Casualties:	39	19	↓ 42%
Pedestrian Casualties	0	0	-
Casualty Crashes	27	15	↓ 34%
Adjacent Casualty Crashes	11	1	↓ 89%
Right Through Casualty Crashes	1	3	↑ 259%
Rear End Casualty Crashes	11	7	↓ 24%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 28 July 2010

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

# Surry Hills - Cleveland Street at South Dowling Street

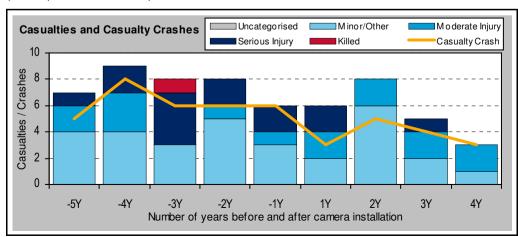
- · There is one camera at this intersection.
- The camera at the intersection of Cleveland Street and South Dowling Street commenced issuing warning letters in June 2010.
- While the results to date indicate a decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

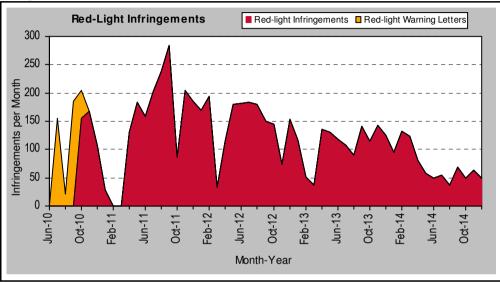
### Casualties and casualty crashes at enforced intersection

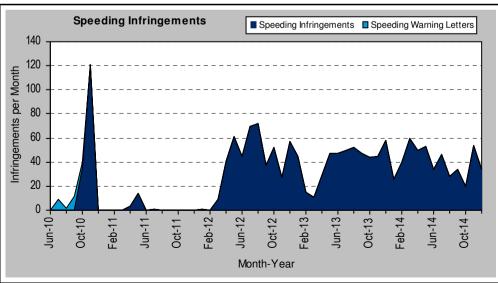
	5 years before installation <sup>1</sup>	4 years and 184 days after installation <sup>2</sup>	Percentage change³
Fatalities	1	0	↓ 100%
Serious Injuries	11	4	↓ 60%
Moderate Injuries	7	8	<b>↑ 27%</b>
Minor / Other Injuries	19	11	↓ 36%
Total Casualties:	38	23	↓ 33%
Pedestrian Casualties	0	0	-
Casualty Crashes	31	16	↓ 43%
Adjacent Casualty Crashes	6	4	↓ 26%
Right Through Casualty Crashes	6	5	↓ 7%
Rear End Casualty Crashes	10	4	↓ 56%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 31 March 2010

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

# **Sydney - Elizabeth Street at Park Street**

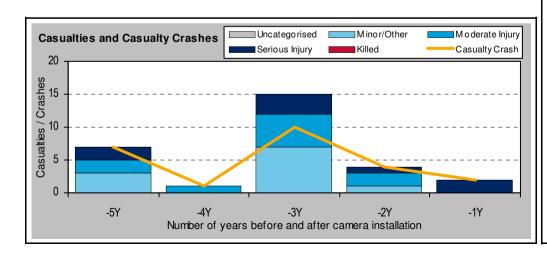
- There is one camera at this intersection.
- The camera at the intersection of Elizabeth Street and Park Street commenced issuing warning letters in September 2014.
- A longer period of time is required to assess the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

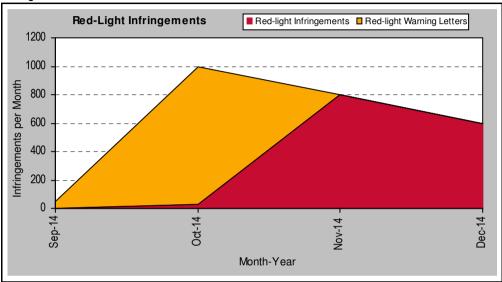
# Casualties and casualty crashes at enforced intersection

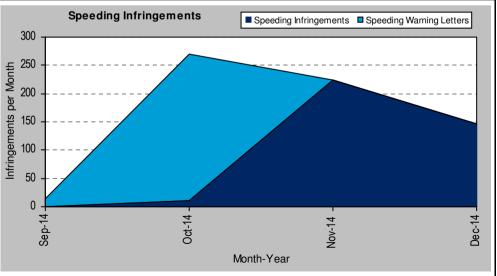
	5 years before installation <sup>1</sup>	92 days after installation²
Fatalities	0	0
Serious Injuries	8	1
Moderate Injuries	10	0
Minor / Other Injuries	11	0
Total Casualties:	29	1
Pedestrian Casualties	9	1
Casualty Crashes	24	1
Adjacent Casualty Crashes	2	0
Right Through Casualty Crashes	2	0
Rear End Casualty Crashes	2	0

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 1 July 2014

<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014







# **Thornleigh - Pennant Hills Road at Parkes Street**

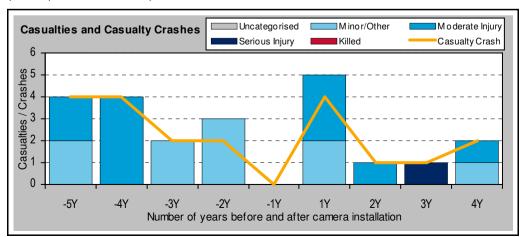
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Pennant Hills Road and Parkes Street commenced issuing warning letters in December 2010.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

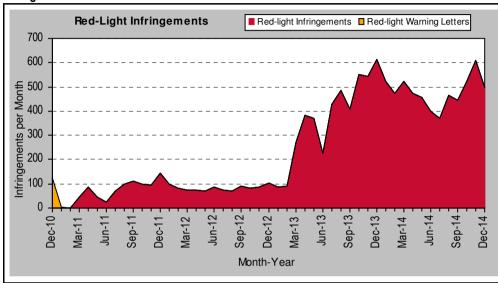
#### Casualties and casualty crashes at enforced intersection

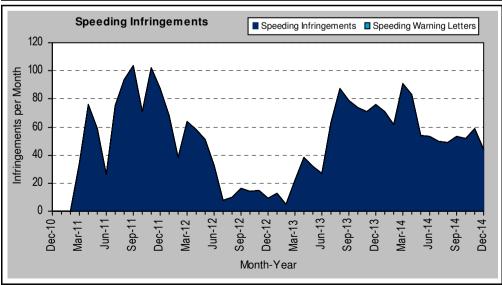
	5 years before installation <sup>1</sup>	4 years and 16 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	0	1	Increase
Moderate Injuries	6	5	↑ 3%
Minor / Other Injuries	7	4	↓ 29%
Total Casualties:	13	10	↓ 5%
Pedestrian Casualties	0	0	-
Casualty Crashes	12	9	↓ 7%
Adjacent Casualty Crashes	0	1	Increase
Right Through Casualty Crashes	1	0	↓ 100%
Rear End Casualty Crashes	7	5	↓ 12%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 15 September 2010

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

# Ultimo - Wattle Street at William Henry Street

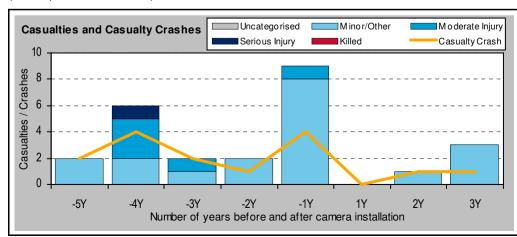
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Wattle Street and William Henry Street commenced issuing warning letters in June 2011.
- While the results to date indicate a decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

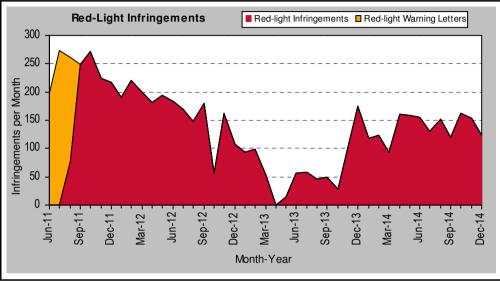
# Casualties and casualty crashes at enforced intersection

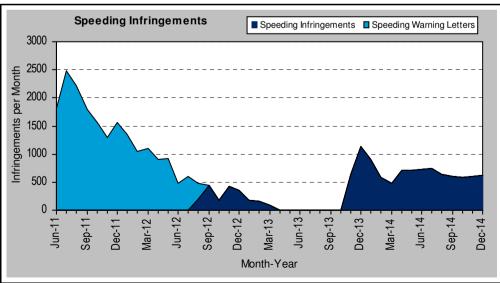
	5 years before installation <sup>1</sup>	3 years and 204 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	1	0	↓ 100%
Moderate Injuries	5	0	↓ 100%
Minor / Other Injuries	15	4	↓ 63%
Total Casualties:	21	4	↓ 73%
Pedestrian Casualties	0	0	-
Casualty Crashes	13	2	↓ 78%
Adjacent Casualty Crashes	6	1	↓ 77%
Right Through Casualty Crashes	3	0	↓ 100%
Rear End Casualty Crashes	1	1	↑ 40%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 11 March 2011

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

# **Unanderra - Princes Highway at Five Islands Road**

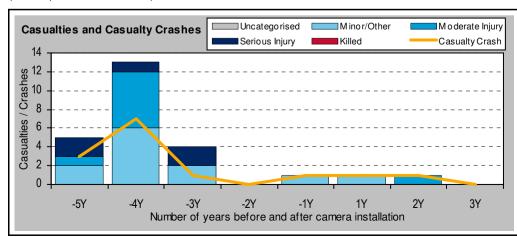
- There is one camera at this intersection.
- The camera at the intersection of Princes Highway and Five Islands Road commenced issuing warning letters in April 2011.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

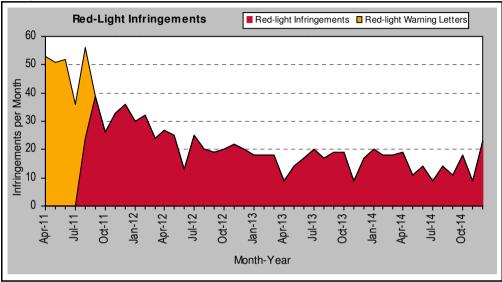
# Casualties and casualty crashes at enforced intersection

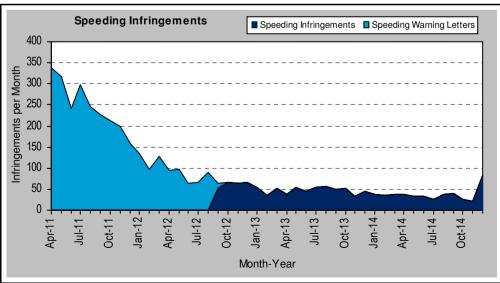
	5 years before installation <sup>1</sup>	3 years and 263 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	5	0	↓ 100%
Moderate Injuries	7	1	↓ 81%
Minor / Other Injuries	11	3	↓ 63%
Total Casualties:	23	4	↓ 77%
Pedestrian Casualties	0	1	Increase
Casualty Crashes	12	4	↓ 55%
Adjacent Casualty Crashes	0	0	-
Right Through Casualty Crashes	10	1	↓ 87%
Rear End Casualty Crashes	1	1	↑ 34%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 11 January 2011

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

# Waitara - Pacific Highway at Romsey Street (school zone)

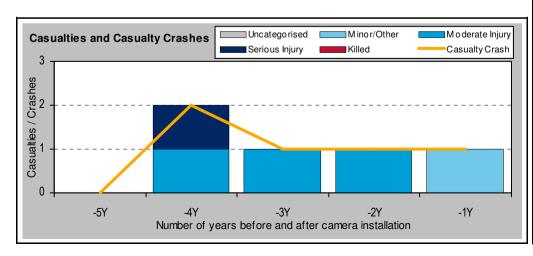
- There is one camera at this intersection.
- The camera at the intersection of Pacific Highway and Romsey Street commenced issuing warning letters in September 2014.
- A longer period of time is required to assess the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

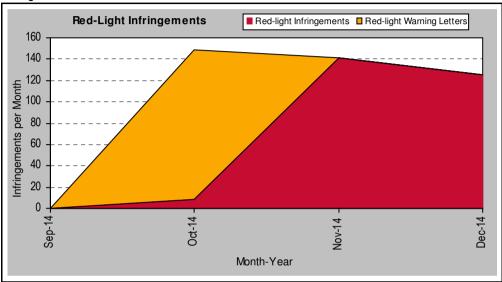
# Casualties and casualty crashes at enforced intersection

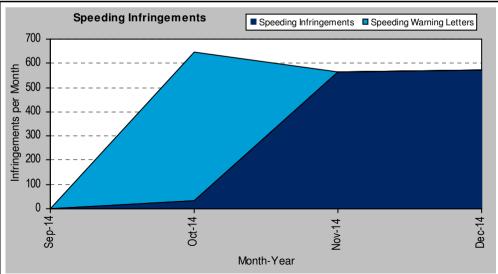
	5 years before installation <sup>1</sup>	92 days after installation²	
Fatalities	0	0	
Serious Injuries	1	0	
Moderate Injuries	3	0	
Minor / Other Injuries	1	1	
Total Casualties:	5	1	
Pedestrian Casualties	1	0	
Casualty Crashes	5	1	
Adjacent Casualty Crashes	0	0	
Right Through Casualty Crashes	2	0	
Rear End Casualty Crashes	0	1	

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 1 July 2014

<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014







#### Wallsend - Thomas Street at Metcalfe Street

- · There is one camera at this intersection.
- The camera at the intersection of Thomas Street and Metcalfe Street commenced issuing warning letters in September 2013.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

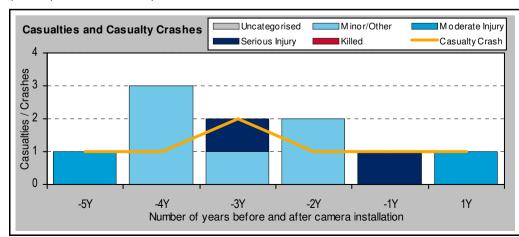
### Casualties and casualty crashes at enforced intersection

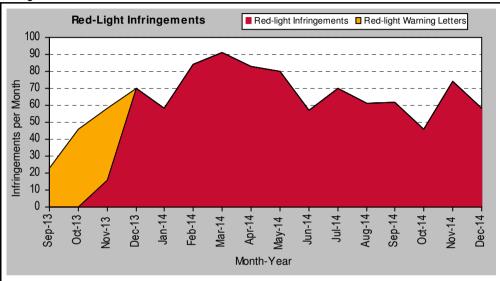
	5 years before installation1	1 year and 96 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	2	0	↓ 100%
Moderate Injuries	1	1	↑ 296%
Minor / Other Injuries	6	0	↓ 100%
Total Casualties:	9	1	↓ 56%
Pedestrian Casualties	0	0	-
Casualty Crashes	6	1	↓ 34%
Adjacent Casualty Crashes	0	0	-
Right Through Casualty Crashes	1	0	↓ 100%
Rear End Casualty Crashes	5	1	↓ 21%

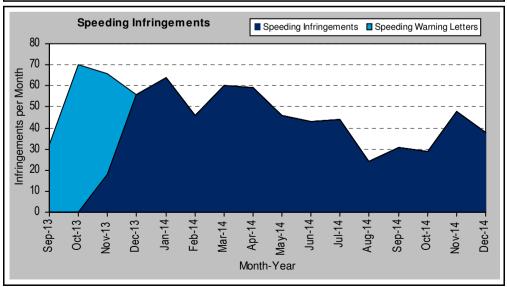


<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







# Warrawong - King Street (Grand Pacific Drive) at Cowper Street

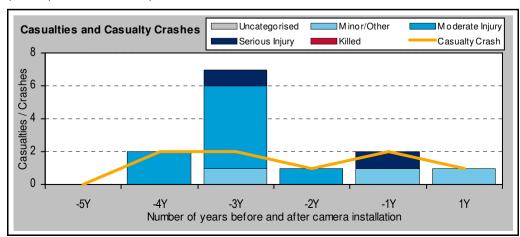
- There is one camera at this intersection.
- The camera at the intersection of King Street (Grand Pacific Drive) and Cowper Street commenced issuing warning letters in October 2013.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

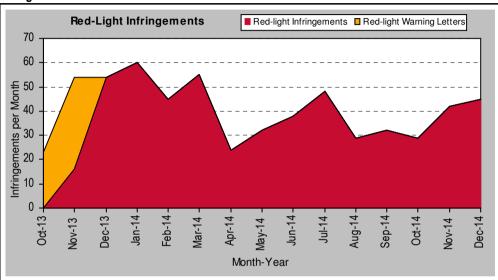
### Casualties and casualty crashes at enforced intersection

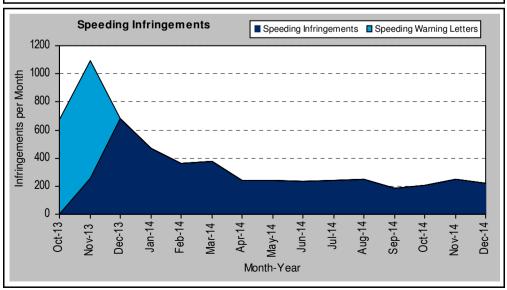
	5 years before installation <sup>1</sup>	1 year and 70 days after installation²	Percentage change³
Fatalities	0	0	-
Serious Injuries	2	0	↓ 100%
Moderate Injuries	8	0	↓ 100%
Minor / Other Injuries	2	1	↑ 110%
Total Casualties:	12	1	↓ 65%
Pedestrian Casualties	1	1	↑ 320%
Casualty Crashes	7	1	↓ 40%
Adjacent Casualty Crashes	2	0	↓ 100%
Right Through Casualty Crashes	1	0	↓ 100%
Rear End Casualty Crashes	2	0	↓ 100%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 23 July 2013

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

# Warwick Farm - Hume Highway at Bigge Street

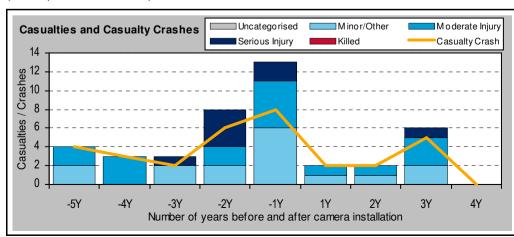
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Hume Highway and Bigge Street commenced issuing warning letters in November 2010.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

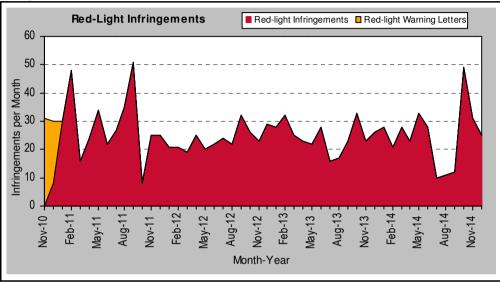
#### Casualties and casualty crashes at enforced intersection

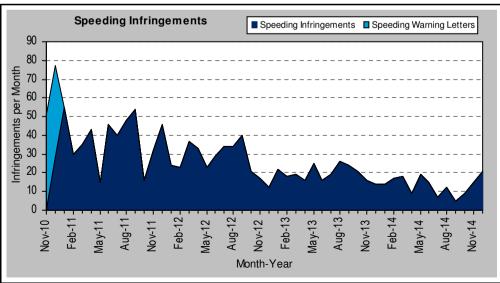
	5 years before installation <sup>1</sup>	4 years and 46 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	7	1	↓ 83%
Moderate Injuries	12	5	↓ 50%
Minor / Other Injuries	12	6	↓ 39%
Total Casualties:	31	12	↓ 53%
Pedestrian Casualties	1	1	↑ 21%
Casualty Crashes	23	10	↓ 47%
Adjacent Casualty Crashes	0	0	-
Right Through Casualty Crashes	7	0	↓ 100%
Rear End Casualty Crashes	11	8	↓ 12%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 16 August 2010

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

# Wentworthville - Great Western Highway at Station Street

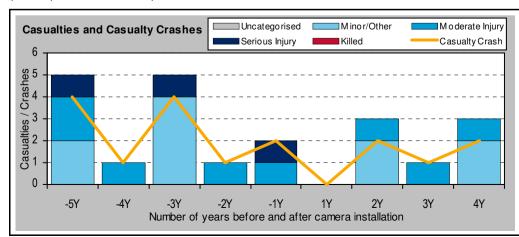
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Great Western Highway and Station Street commenced issuing warning letters in September 2010.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

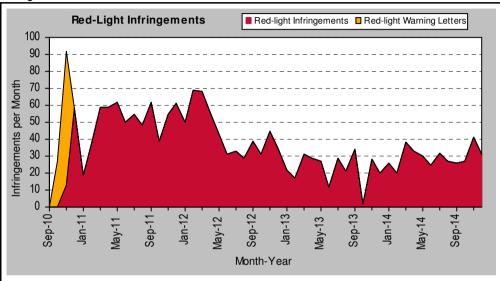
# Casualties and casualty crashes at enforced intersection

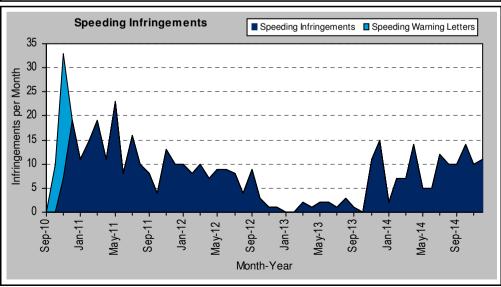
	5 years before installation <sup>1</sup>	4 years and 95 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	3	0	↓ 100%
Moderate Injuries	5	3	↓ 30%
Minor / Other Injuries	6	4	↓ 22%
Total Casualties:	14	7	↓ 41%
Pedestrian Casualties	0	0	-
Casualty Crashes	12	5	↓ 51%
Adjacent Casualty Crashes	4	0	↓ 100%
Right Through Casualty Crashes	1	0	↓ 100%
Rear End Casualty Crashes	5	4	↓ 6%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 28 June 2010

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

#### West Pennant Hills - Pennant Hills Road at Eaton Road

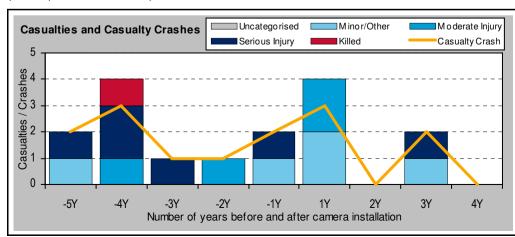
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Pennant Hills Road and Eaton Road commenced issuing warning letters in August 2010.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

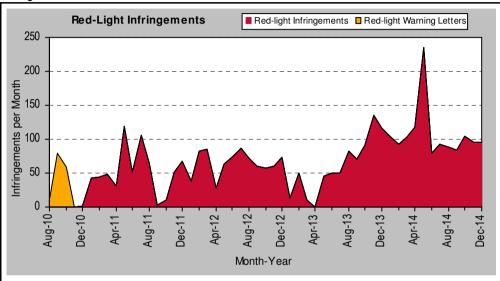
### Casualties and casualty crashes at enforced intersection

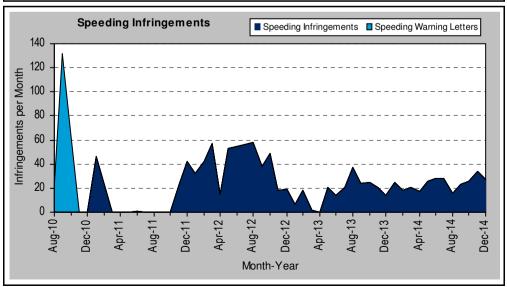
	5 years before installation <sup>1</sup>	4 years and 127 days after installation <sup>2</sup>	Percentage change³
Fatalities	1	0	↓ 100%
Serious Injuries	5	1	↓ 77%
Moderate Injuries	2	2	<b>↑ 15%</b>
Minor / Other Injuries	2	3	↑ <b>72</b> %
Total Casualties:	10	6	↓ 31%
Pedestrian Casualties	0	0	-
Casualty Crashes	9	5	↓ 36%
Adjacent Casualty Crashes	1	1	<b>↑ 15%</b>
Right Through Casualty Crashes	2	0	↓ 100%
Rear End Casualty Crashes	2	4	↑ 130%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 27 May 2010

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

# West Pymble - Ryde Road at Lady Game Drive

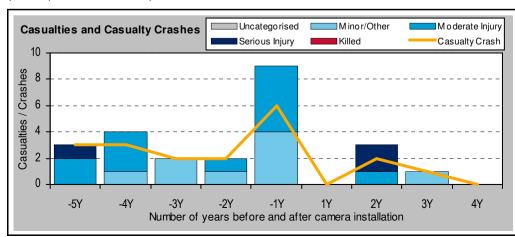
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Ryde Road and Lady Game Drive commenced issuing warning letters in December 2010.
- While the results to date indicate a decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

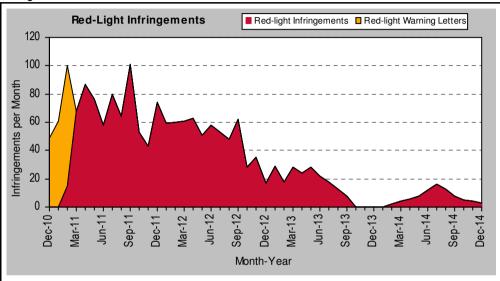
### Casualties and casualty crashes at enforced intersection

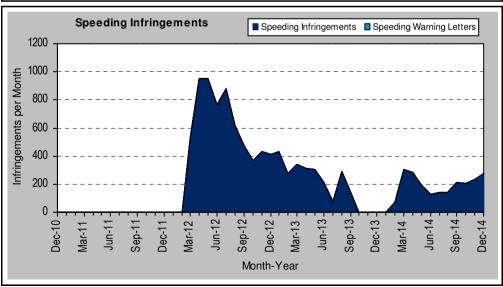
	5 years before installation¹	4 years and 16 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	1	2	↑ 147%
Moderate Injuries	11	2	↓ 78%
Minor / Other Injuries	8	1	↓ 85%
Total Casualties:	20	5	↓ 69%
Pedestrian Casualties	0	1	Increase
Casualty Crashes	16	4	↓ 69%
Adjacent Casualty Crashes	0	0	-
Right Through Casualty Crashes	2	0	↓ 100%
Rear End Casualty Crashes	10	2	↓ 75%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 15 September 2010

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

# Wiley Park - The Boulevarde at King Georges Road (school zone)

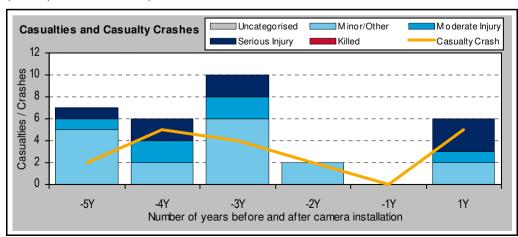
- · There is one camera at this intersection.
- The camera at the intersection of The Boulevarde and King Georges Road commenced issuing warning letters in March 2013.
- While the results available so far suggest a slight increase in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

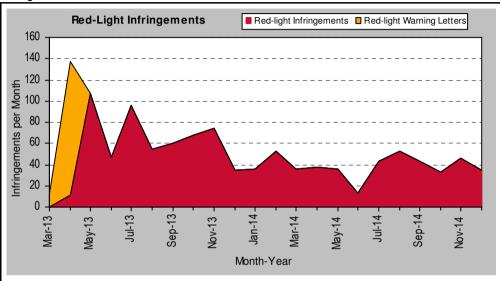
# Casualties and casualty crashes at enforced intersection

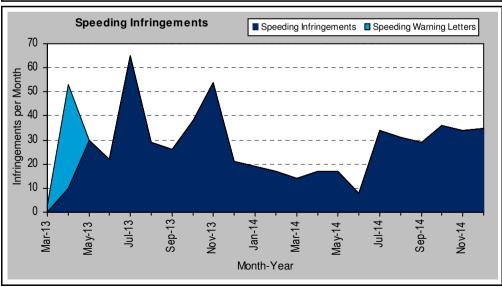
	5 years before installation <sup>1</sup>	1 year and 277 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	5	4	↑ 128%
Moderate Injuries	5	4	↑ 128%
Minor / Other Injuries	15	3	↓ 43%
Total Casualties:	25	11	<b>↑ 25%</b>
Pedestrian Casualties	2	3	↑ 327%
Casualty Crashes	13	10	↑ 119%
Adjacent Casualty Crashes	4	1	↓ 29%
Right Through Casualty Crashes	4	4	↑ 185%
Rear End Casualty Crashes	2	1	↑ 42%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 28 December 2012

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

# Windang - Windang Road at Boronia Avenue

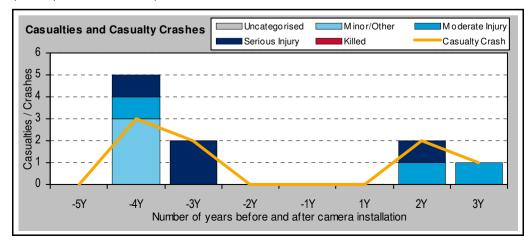
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Windang Road and Boronia Avenue commenced issuing warning letters in May 2011.
- While the results available so far suggest a slight increase in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

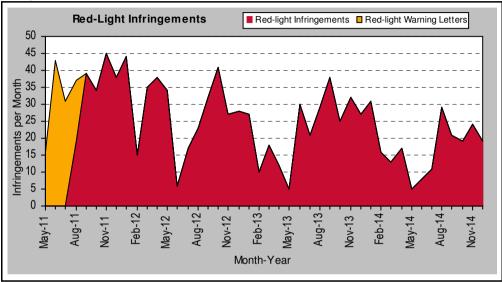
# Casualties and casualty crashes at enforced intersection

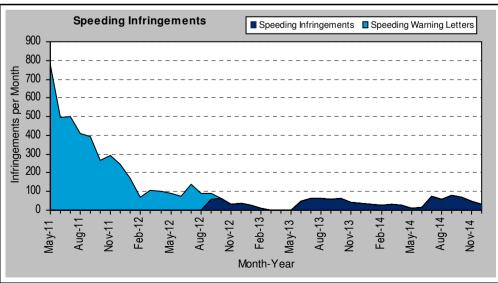
	5 years before installation <sup>1</sup>	3 years and 218 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	3	1	↓ 54%
Moderate Injuries	1	3	↑ 317%
Minor / Other Injuries	3	0	↓ 100%
Total Casualties:	7	4	↓ 21%
Pedestrian Casualties	3	0	↓ 100%
Casualty Crashes	5	4	↑ 11%
Adjacent Casualty Crashes	0	0	-
Right Through Casualty Crashes	1	0	↓ 100%
Rear End Casualty Crashes	0	2	Increase

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 25 February 2011

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

# **Wollongong - Corrimal Street at Burelli Street**

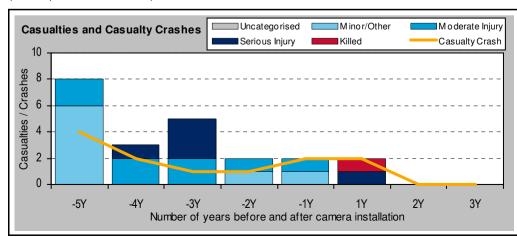
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Corrimal Street and Burelli Street commenced issuing warning letters in April 2011.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

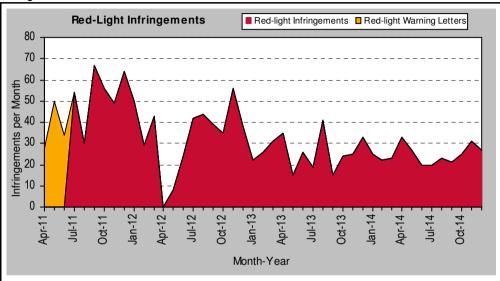
### Casualties and casualty crashes at enforced intersection

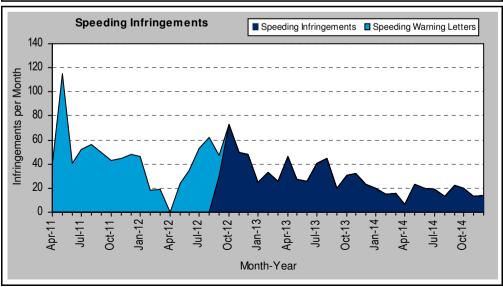
	5 years before installation1	3 years and 256 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	1	Increase
Serious Injuries	4	1	↓ 66%
Moderate Injuries	8	1	↓ 83%
Minor / Other Injuries	8	1	↓ 83%
Total Casualties:	20	4	↓ 73%
Pedestrian Casualties	2	1	↓ 32%
Casualty Crashes	10	4	↓ 46%
Adjacent Casualty Crashes	3	1	↓ 55%
Right Through Casualty Crashes	5	1	↓ 73%
Rear End Casualty Crashes	1	0	↓ 100%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 18 January 2011

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

# Wollongong - Gladstone Avenue at Princes Highway

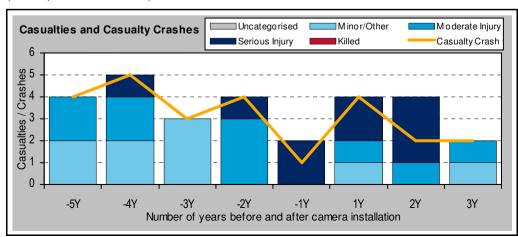
- There is one camera at this intersection.
- The camera at the intersection of Gladstone Avenue and Princes Highway commenced issuing warning letters in June 2011.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

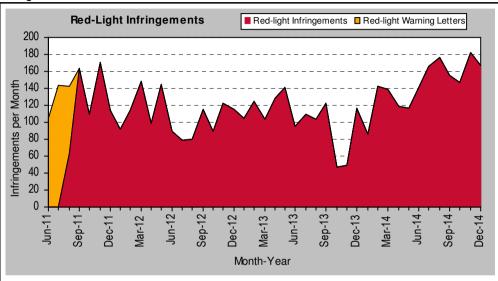
# Casualties and casualty crashes at enforced intersection

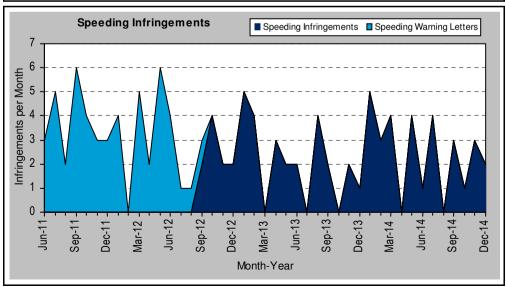
	5 years before installation <sup>1</sup>	3 years and 200 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	4	7	<b>↑ 147%</b>
Moderate Injuries	7	3	↓ 40%
Minor / Other Injuries	7	4	↓ 19%
Total Casualties:	18	14	↑ 10%
Pedestrian Casualties	3	1	↓ 53%
Casualty Crashes	17	12	↓ 1%
Adjacent Casualty Crashes	3	4	↑ 88%
Right Through Casualty Crashes	9	5	↓ 22%
Rear End Casualty Crashes	0	2	Increase

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 15 March 2011

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

#### Woollahra - Queen Street at Ocean Street

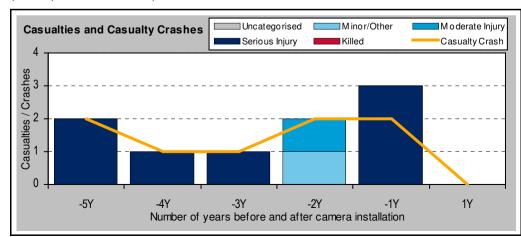
- · There is one camera at this intersection.
- The camera at the intersection of Queen Street and Ocean Street commenced issuing warning letters in October 2013.
- While the results available so far suggest a slight decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

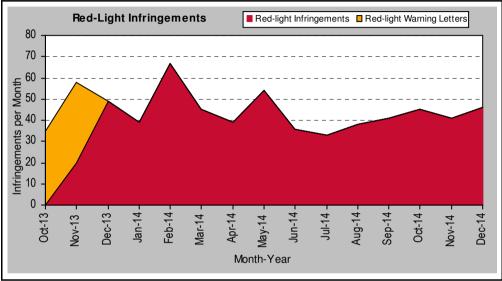
# Casualties and casualty crashes at enforced intersection

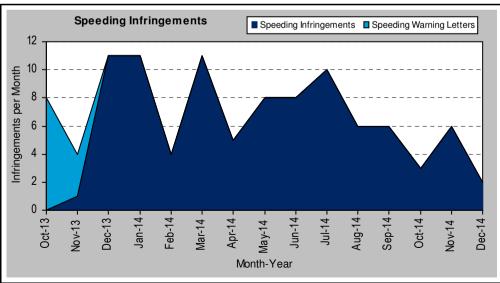
	5 years before installation1	1 year and 74 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	7	0	↓ 100%
Moderate Injuries	1	0	↓ 100%
Minor / Other Injuries	1	0	↓ 100%
Total Casualties:	9	0	↓ 100%
Pedestrian Casualties	0	0	-
Casualty Crashes	8	0	↓ 100%
Adjacent Casualty Crashes	5	0	↓ 100%
Right Through Casualty Crashes	3	0	↓ 100%
Rear End Casualty Crashes	0	0	-

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 19 July 2013

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

# Yagoona - Rookwood Road at Brunker Road

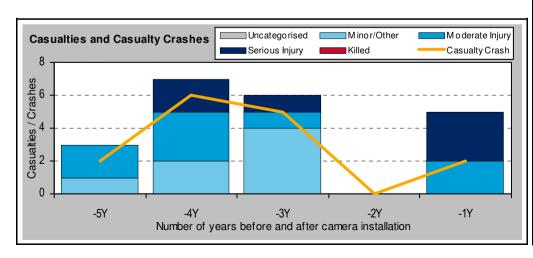
- There is one camera at this intersection.
- The camera at the intersection of Rookwood Road and Brunker Road commenced issuing warning letters in July 2014.
- A longer period of time is required to assess the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

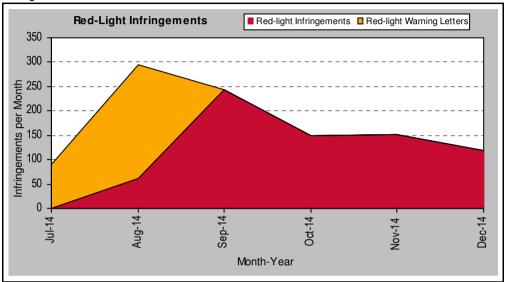
# Casualties and casualty crashes at enforced intersection

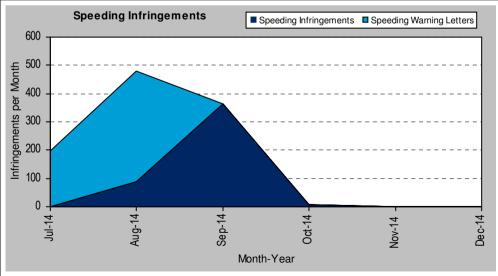
	5 years before installation <sup>1</sup>	159 days after installation <sup>2</sup>
Fatalities	0	0
Serious Injuries	6	0
Moderate Injuries	8	0
Minor / Other Injuries	7	0
Total Casualties:	21	0
Pedestrian Casualties	0	0
Casualty Crashes	15	0
Adjacent Casualty Crashes	9	0
Right Through Casualty Crashes	4	0
Rear End Casualty Crashes	0	0

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 25 April 2014

<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014







# Zetland - Bourke Street at Botany Road

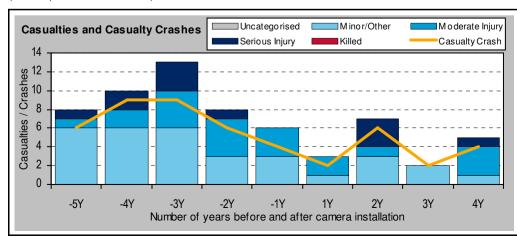
- There is one camera at this intersection. This was previously a wet-film red-light camera location.
- The camera at the intersection of Bourke Street and Botany Road commenced issuing warning letters in June 2010.
- While the results to date indicate a decrease in casualty crashes, a more comprehensive analysis over a longer time period is required before making any conclusions about the effectiveness of the camera.
- The infringement graphs show the number of warning letters and infringements issued at this intersection as well as the trend in infringements since the camera began operation. Roadworks and camera maintenance may influence the number of infringements issued.

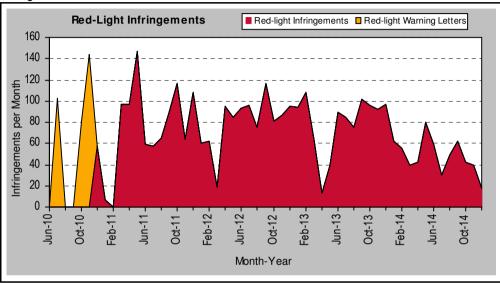
# Casualties and casualty crashes at enforced intersection

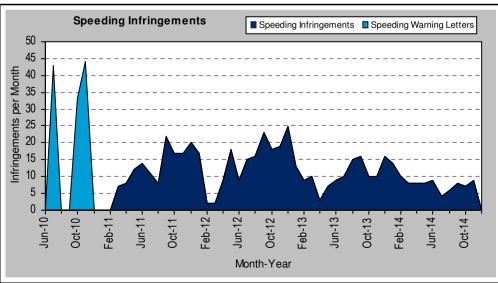
	5 years before installation1	4 years and 184 days after installation <sup>2</sup>	Percentage change³
Fatalities	0	0	-
Serious Injuries	7	4	↓ 37%
Moderate Injuries	14	6	↓ 52%
Minor / Other Injuries	24	7	↓ 68%
Total Casualties:	45	17	↓ 58%
Pedestrian Casualties	3	0	↓ 100%
Casualty Crashes	34	14	↓ 54%
Adjacent Casualty Crashes	5	3	↓ 33%
Right Through Casualty Crashes	9	4	↓ 51%
Rear End Casualty Crashes	7	3	↓ 52%

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period, 31 March 2010

<sup>&</sup>lt;sup>3</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.







<sup>&</sup>lt;sup>2</sup> Ending 31 December 2014

# B.2 Red-light speed camera locations with the most infringements

In April 2013, NRMA Motoring & Services called for an assessment of all high infringing speed camera locations across the state to determine whether the cameras were appropriately placed and clearly signposted.

The NSW Centre for Road Safety (CRS) has identified the 10 red-light speed camera locations with the highest number of infringements detected in 2014, detailed in the table below. High infringing fixed speed cameras are detailed separately in **Appendix C**. As the red-light speed camera program has not been in operation for five years, it is too early to assess the effectiveness of these cameras.

All of the 10 red-light speed camera locations are on main roads with high traffic volumes. Where cameras have been operating for longer than two years, the infringement data indicates that infringements have mostly decreased when comparing 2014 infringements to 2013. This trend is to be expected, as the fixed speed camera program has shown that high infringement rates decrease over time.

Across the red-light speed camera program, around 60 per cent of infringements at red-light speed camera locations are attributed to running a red light. For the 10 highest infringing camera locations, the division between the two types of infringements is site-dependent, with six of the locations having a higher proportion of red-light infringements and four having a higher proportion of speeding infringements.

Compliance data compares the number of vehicles that pass a camera with the number of infringements issued by the camera. All camera locations had high compliance rates with more than 99 per cent of drivers passing the cameras without being infringed for red-light running and/or speeding. This demonstrates that most drivers stop on a red signal and do not exceed the speed limit, with less than one per cent of drivers penalised. It is this high level of compliance that provides road safety benefits.

Road signs at all enforced intersections were improved in late 2012. As is the case currently, Roads and Maritime Services (RMS) may increase the warning letter period and/or use Variable Message Signs to increase driver awareness of speed camera locations, where the trend in warning letters or number of infringements issued deems this appropriate. Ongoing site maintenance is also conducted by RMS to ensure that signage is effectively placed and not obscured by roadside objects, such as trees.

While the cameras at the 10 highest infringing locations will not be considered for removal, CRS will review these locations to identify, and where appropriate address, any road safety issues contributing to the high number of infringements.

Table B1: Red-light speed camera locations with the most infringements

Location	Number of cameras	Total infringements issued 2013	Total infringements issued 2014	% comprising red light and speed infringements of 2014 total	Compliance rate in 2014
Haymarket - George Street at Pitt Street / Quay Street (June,2013)	2	6,981	10,511	94.7% red-light 5.3% speed	99.92%
Ultimo - Wattle Street at William Henry Street (June,2011)	1	2,989	9,573	17.3% red-light 82.7% speed	99.90%
Darlinghurst - Craigend Street at McLachlan Avenue (August,2010)	1	7,263	8,487	28.0% red-light 72.0% speed	99.95%
North Ryde - Cox's Road at Lane Cove Road (school zone) (April,2013)	3	3,967	8,103	27.2% red-light 72.8% speed	99.96%
Bankstown - Stacey Street at Hume Highway (April,2013)	1	5,626	7,436	95.2% red-light 4.8% speed	99.91%
Thornleigh - Pennant Hills Road at Parkes Street (December,2010)	1	5,058	6,481	88.9% red-light 11.1% speed	99.95%
Granville - Woodville Road at M4 westbound on-ramp (September,2010)	1	6,833	5,556	89.8% red-light 10.2% speed	99.91%
Dee Why - Pittwater Road at Harbord Road (June,2011)	1	4,305	5,544	79.7% red-light 20.3% speed	99.92%
Haberfield - Parramatta Road at Sloane Street (June,2011)	1	7,847	5,310	7.0% red-light 93.0% speed	99.94%
Lansdowne / Villawood - Henry Lawson Drive / Woodville Road at Hume Highway (August,2010)	2	6,826	5,014	70.0% red-light 30.0% speed	99.94%

# C. Appendix B: Analysis of the NSW fixed speed camera program

# C.1 Overview of fixed speed camera locations

	Location	Road
1	Ashfield	Hume Highway, between Murrell Street and Queen Street
2	Auburn	Parramatta Road, between Harbord Street and Duck Street
3	Bankstown	Hume Highway, between Rookwood Road and Stacey Street
4	Bar Point	M1 Pacific Motorway, between Jolls Bridge and Mt White Exit Ramp
5	Ben Lomond	New England Highway, between Ross Road and Ben Lomond Road
6	Berkshire Park	Richmond Road, between Llandilo Road and Sanctuary Drive
7	Berry	Princes Highway, between Kangaroo Valley Road and Victoria Street
8	Beverly Hills	King Georges Road, between Stoney Creek Road and Edgbaston Road
9	Bexley North	Bexley Road, between Kingsland Road North and Miller Avenue
10	Blandford	New England Highway, between Hayles Street and Mills Street
11	Bomaderry	Bolong Road, between Beinda Street and Coomea Street
12 13	Bonnyrigg	Elizabeth Drive, between Brown Road and Humphries Road
14	Bonnyrigg Bonville	Cabramatta Road, between Katinka Street and Tarlington Parade Pine Creek Way, between Bonville Creek and Bonville Station Road
15	Brogo	Princes Highway, between Pioneer Close and Brogo River
16	Bulli	Princes Highway, between Grevillea Park Road and Black Diamond Place
17	Burringbar	Tweed Valley Way, between Blakeneys Road and Cooradilla Road
18	Burwood Heights	Hume Highway, between Kelso Street and Appian Way
19	Camellia	James Ruse Drive, between Victoria Road and Grand Avenue North
20	Canterbury	Canterbury Road, between Gould Street and Jeffrey Street
21	Caringbah	Captain Cook Drive, between Cawarra Road and Gannons Road
22	Carlingford	Pennant Hills Road, between Evans Road and Coleman Avenue
23	Castle Hill	Old Northern Road, between Telfer Road and Brisbane Road
24	Charmhaven	Pacific Highway, between Wallarah Creek and Lowana Avenue
25	Concord West	Concord Road, between Nirranda Street and Mepunga Street
26	Condell Park	Edgar Street, between Augusta Street and Upper Railway Parade
27	Corrimal	Northern Distributor (Memorial Drive), between Towradgi Road and Railway
28	East Gardens/ Maroubra	Bunnerong Road, between Fitzgerald Avenue and Smith Street
29	Edgecliff	New South Head Road, between Waratah Street and New Beach Road
30	Ewingsdale	Pacific Highway, between St Helena Road and Ewingsdale Road.
31	Fairfield East	Fairfield Street, between Scott Street and Mandarin Street
32	Foxground	Princes Highway, between Foxground Road and Broughton Creek
33	Gateshead	Pacific Highway, between Sydney Street and Macquarie Avenue
34	Greystanes	Greystanes Road, between Merrylands Road and Old Prospect Road
35	Guildford	Woodville Road, between Kenelda Avenue and Osgood Street
36 37	Gwynneville Gwynneville	M1 Princes Motorway, between Northern Distributor Overpass and Gipps M1 Princes Motorway, University Avenue Overpass and Mount Ousley Road
38	Hartley	Great Western Highway, between Mid Hartley Road and Blackmans Creek
39	Hungry Head	Pacific Highway, between Boundary Road and Ballards Road
40	Hurstville	Forest Road, between Lily Street and Cronulla Street
41	Kingswood	Parker Street, between Copeland Street and Gascoigne Street
42	Kogarah	Princes Highway, between Gray Street and President Avenue
43	Korora	Pacific Highway, between Bruxner Park Road and Korora Basin Road
44	Kurrajong	Bells Line of Road, between Queen Street and Bellbird Avenue
45	Lane Cove	Centennial Avenue, between Gentle Street and Figtree Street
46	Lansvale	Hume Highway, between Henry Lawson Drive and Knight Street
47	Lindfield	Pacific Highway, between Eton Road and Gladstone Parade
48	Liverpool	Bigge Street, between Elizabeth Drive and Campbell Street
49	Lochinvar	New England Highway, between Robert Road and Station Lane
50	Maroubra	Malabar Road, between Mons Avenue and Duncan Street
51	Mayfield West	Pacific Highway, between Werribee Street and Tourle Street
52	Merrylands	Merrylands Road, between Chetwynd Road and Davies Street
53	Miranda	Kingsway, between Sylva Avenue and University Road
54	Moore Park	Cleveland Street, between Anzac Parade and South Dowling Street
55 56	Mosman	Macpherson Street, between Ourimbah Road and Montague Road
56 57	Narrabeen New Italy	Pittwater Road, between Ocean Street and Devitt Street Pacific Highway, between New Italy Road and Turners Road
57 58	Nords Wharf	Pacific Highway, between Nords Wharf Road and Flowers Drive
59	North Curl Curl	Harbord Road, between Abbott Road and Brighton Street
60	North Macksville	Pacific Highway, between Lawrence Wilmont Drive and Watt Creek
61	North Narrabeen	Pittwater Road, between Garden Street and Namona Street
62	North Parramatta	Pennant Hills Road, between Castle Street and Bellevue Street
63	North Parramatta / Oatlands	Pennant Hills Road, between Masons Drive and Suttor Avenue
64	North Wollongong	Princes Highway, between Ajax Avenue and Exeter Avenue
65	Old Guildford	Woodville Road, between Orchardleigh Street and Middleton Road
66	Ourimbah	M1 Pacific Motorway, between Dogtrap Road Overpass and Ourimbah
67	Ourimbah	Pacific Highway, between Yates Road and Dog Trap Road
68	Padstow	Gibson Avenue, between Turvey Street and Bryant Street, Padstow
-		

	Location	Road
70	Penshurst	Forest Road, between Penshurst Street and St Georges Street
71	Picnic Point	Henry Lawson Drive, between Carinya Road and The River Road
72	Queanbeyan	Lanyon Drive, between Tompsitt Drive and Hoover Road
73	Randwick	Avoca Street, between Howard Street and Barker Road
74	Rankin Park	McCaffrey Drive, between Duval Street and Orara Street
75	Rosebery/Alexandria	Botany Road, between Gardeners Road and Gillespie Street
76	Rydalmere	Victoria Road, between Park Road and John Road
77	Ryde	Blaxland Road, between Reservoir Lane and North Road
78	Ryde	Victoria Road, between Margaret Street and Cressy Road
79	South Windsor	George Street, between Rickaby Street and Yarrawonga Street
80	Strathfield	The Boulevarde, between Torrington Parade and Russell Street
81	Tenterfield	New England Highway, between Duncan Street and George Street
82	Terrigal	Terrigal Drive, between Brunswick Road and Bellbird Avenue
83	Toongabbie	Fitzwilliam Road, between Reynolds Street and Binalong Road
84	Valla Beach	Pacific Highway, between Valla Beach Road and Oyster Creek
85	Valley Heights	Great Western Highway, between The Valley Road and Sun Valley Road
86	Wahroonga	Pacific Highway, between Gilda Avenue and Woodville Avenue
87	Wardell	Pacific Highway, between Riverside Drive and Carlisle Street
88	Warrawong	Northcliffe Drive, between Griffin Street and Kully Street
89	West Pennant Hills	Castle Hill Road, between Pennant Hills Road and Coonara Avenue
90	Wollongbar	Bruxner Highway, between Convernys Lane and McLeans Ridges Road
91	Wollongong	Princes Highway, between Mount Keira Road and Highway Avenue
92	Woodburn	Pacific Highway, between Wagner Street and Norman Street
93	Wyoming	Henry Parry Drive, between Glennie Street and Dwyer Street
94	Yagoona	Hume Highway, between Smith Street and Brennan Avenue

# **High risk locations**

	Location	Road
95	Bardwell Park/Arncliffe	M5 Motorway
96	Darlinghurst	Eastern Distributor
97	Lane Cove	Lane Cove Tunnel
98	Sydney	Sydney Harbour Tunnel
99	Woolloomooloo/East Sydney	Cross City Tunnel

# Ashfield - Hume Highway, between Murrell Street and Queen Street

#### School zone: Ashfield Public School

This location is 410m (patch to patch) in length, and is enforced with one camera. The camera commenced operating on 7 August 2007.

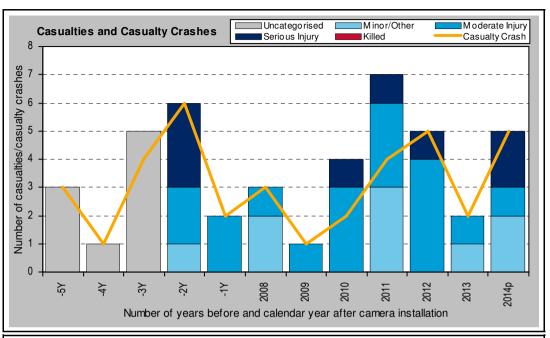
#### **Casualties and Casualty Crashes**

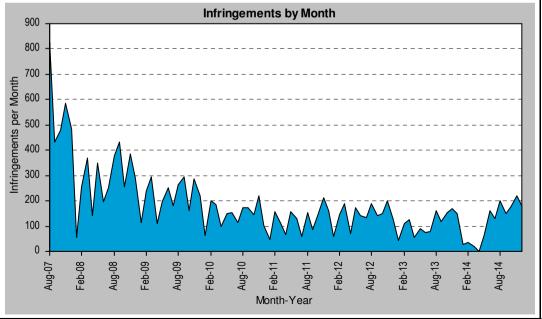
	5 years before installation¹	2010	Calendar years 2010 - 2014 Percentage	
		Count	Change <sup>2</sup>	
Fatalities	0	0	-	
Total Injuries	17	23	↑ 35%	
Serious	3	5		
Moderate	4	12		
Minor/Other	1	6		
Uncategorised	9			
Casualty Crashes	16	18	↑ 13%	
Casualty Cost:	\$2.42M	\$2.54M	↑ 5%	

<sup>&</sup>lt;sup>1</sup> Ending 7 May 2007, 3 calendar months before installation.

#### Status: Retained based on 2013 comprehensive review

- When comparing the pre installation period to the most recent five year period, there has been a 13% increase in casualty crashes and a 35% increase in casualties at this fixed speed camera location. The increase in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since the camera began operating. Roadworks and camera maintenance may influence the number of infringements issued.
- This location was reviewed in 2013 due to concerns about the increase in casualties in recent years. In the 2013 review it was recommended that the speed camera be retained.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

# Auburn - Parramatta Road, between Harbord Street and Duck Street

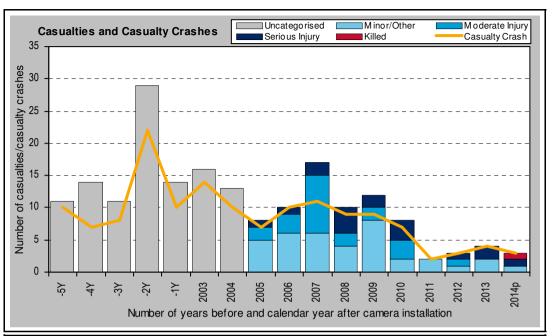
This location is 1000m in length, and is enforced with one camera. The camera commenced operating on 15 May 2002.

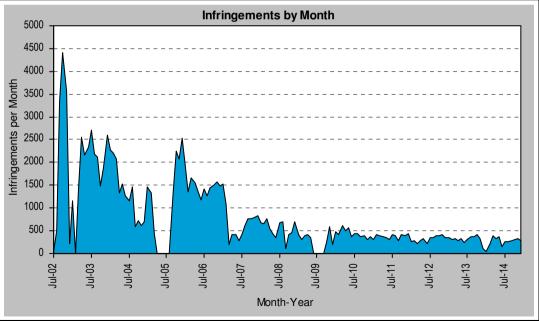
# **Casualties and Casualty Crashes**

	5 years before installation <sup>1</sup>		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	0	1	Increase
Total Injuries	79	19	↓ 76%
Serious		7	
Moderate		4	
Minor/Other		8	
Uncategorised	79		
Casualty Crashes	57	19	↓ 67%
Casualty Cost:	\$10.96M	\$9.85M	↓ 10%

<sup>&</sup>lt;sup>1</sup> Ending 15 February 2002, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 67% decrease in casualty crashes and a 75% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since July 2002. Infringement data before this date is not available. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

# Bankstown - Hume Highway, between Rookwood Road and Stacey Street

#### School zone: Bankstown North Public School, La Salle Catholic School

This location is 670m patch to patch in length, and is enforced by 2 cameras. Both cameras commenced operating on 4 July 2007.

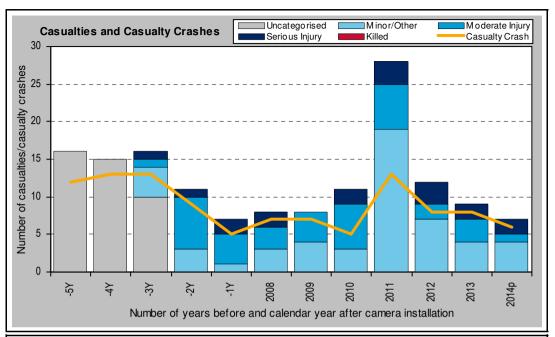
# **Casualties and Casualty Crashes**

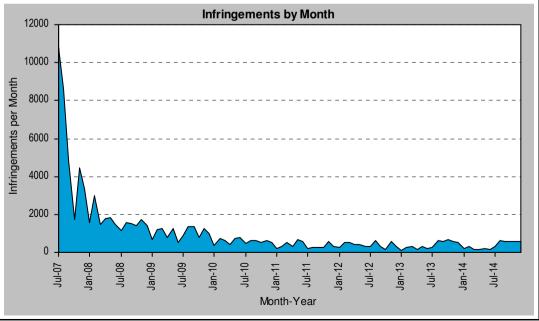
	5 years before installation¹		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	0	0	-
Total Injuries	65	67	↑ 3%
Serious	4	12	
Moderate	12	18	
Minor/Other	8	37	
Uncategorised	41		
Casualty Crashes	52	40	↓ 23%
Casualty Cost:	\$8.05M	\$6.79M	↓ 16%

<sup>&</sup>lt;sup>1</sup> Ending 4 April 2007, 3 calendar months before installation.

#### Status: Retained based on 2013 comprehensive review

- When comparing the pre installation period to the most recent five year period, there has been a 23% decrease in casualty crashes and a 3% increase in casualties at this fixed speed camera location. The decrease in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since the camera began operating. Roadworks and camera maintenance may influence the number of infringements issued.
- This location was reviewed in 2013 due to concerns about the increase in casualties in recent years. The review found that during 2011 there were 28 casualties. This significant increase in the number of casualties included one crash involving a bus, resulting in 11 casualties. The number of casualty crashes has reduced in the following years. Speeding infringements were also found to have significantly reduced following the introduction of the speed cameras. It was recommended that the speed cameras be retained.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

# Bar Point - M1 Pacific Motorway, between Jolls Bridge and Mt White Exit Ramp

This location is 1000m in length, and is enforced with one camera.

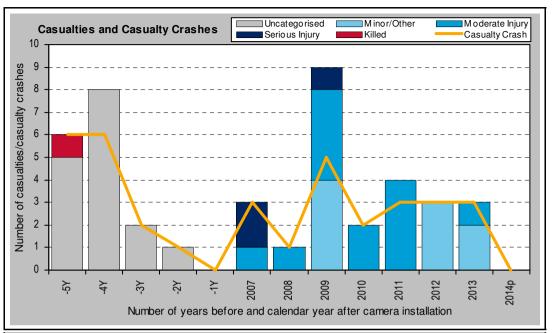
The camera commenced operating on 10 April 2006.

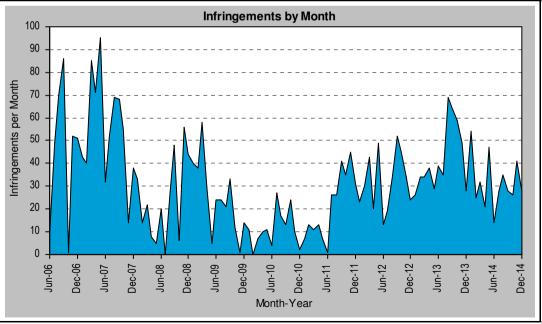
#### **Casualties and Casualty Crashes**

	5 years before installation <sup>1</sup>		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	1	0	↓ 100%
Total Injuries	16	12	↓ 25%
Serious	0	0	
Moderate	0	7	
Minor/Other	0	5	
Uncategorised	16		
Casualty Crashes	15	11	↓ 27%
Casualty Cost:	\$9.31M	\$0.72M	↓ 92%

<sup>&</sup>lt;sup>1</sup> Ending 10 January 2006, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 27% decrease in casualty crashes and a 29% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since the camera began operating. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

# Ben Lomond - New England Highway, between Ross Road and Ben Lomond Road

This location is 1000m in length, and is enforced with one camera.

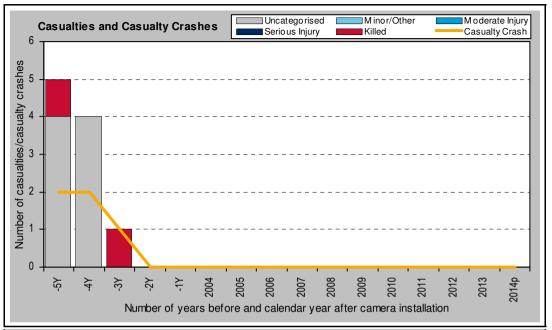
The camera commenced operating on 4 September 2003.

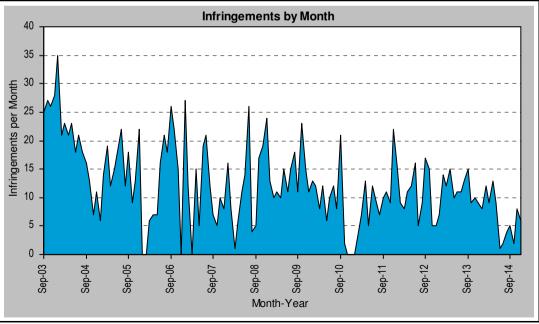
# **Casualties and Casualty Crashes**

	5 years before installation¹	Calendar years 2010 - 2014 Count Percentage Change <sup>2</sup>	
Fatalities	2	0	↓ 100%
Total Injuries	8	0	↓ 100%
Serious		0	
Moderate		0	
Minor/Other		0	
Uncategorised	8		
Casualty Crashes	5	0	↓ 100%
Casualty Cost:	\$15.29M	\$0	↓ 100%

<sup>&</sup>lt;sup>1</sup> Ending 4 June 2003, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 100% decrease in casualty crashes and a 100% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since the camera began operating. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

# Berkshire Park - Richmond Road, between Llandilo Road and Sanctuary Drive

This location is 1000m in length, and is enforced with one camera.

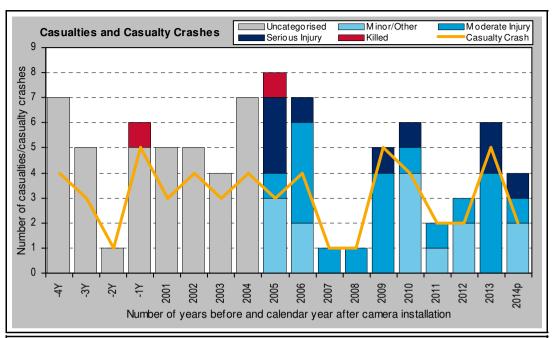
The camera commenced operating on 30 June 2000.

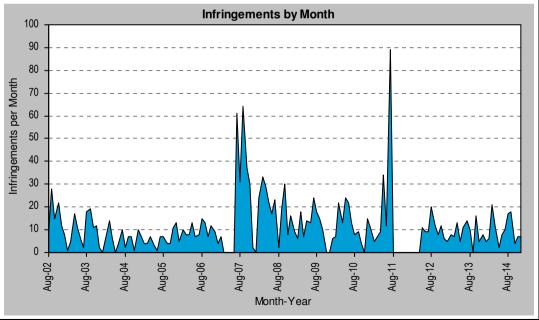
# **Casualties and Casualty Crashes**

	4 years before installation <sup>1</sup>		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	1	0	↓ 100%
Total Injuries	18	21	↓7%
Serious		4	
Moderate		8	
Minor/Other		9	
Uncategorised	18		
Casualty Crashes	13	15	↓8%
Casualty Cost:	\$9.59M	\$2.19M	↓ 82%

<sup>&</sup>lt;sup>1</sup> Ending 30 March 2000, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been an 8% decrease in casualty crashes and a 12% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since July 2002. Infringement data before this date is not available. Roadworks and camera maintenance may influence the number of infringements issued.
- This location was reviewed in 2014. The safety review fount that the speed camera continues to provide safety benefits and it was recommended that the speed camera be retained.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

# Berry - Princes Highway, between Kangaroo Valley Road and Victoria Street

This location is 1000m in length, and is enforced with one camera. The camera commenced operating on 28 April 2003.

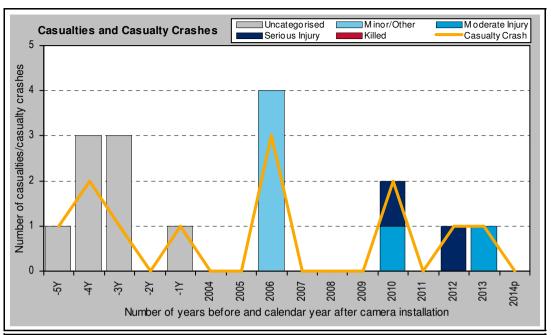
#### **Casualties and Casualty Crashes**

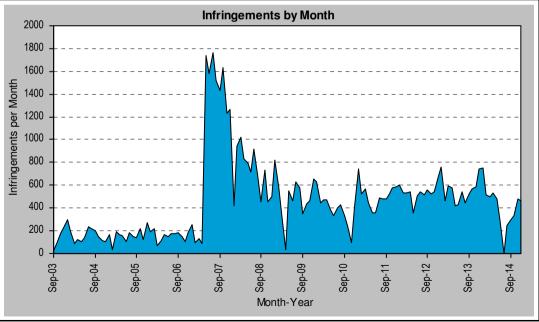
	5 years before installation¹		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	0	0	-
Total Injuries	8	4	↓ 50%
Serious		2	
Moderate		2	
Minor/Other		0	
Uncategorised	8		
Casualty Crashes	5	4	↓ 20%
Casualty Cost:	\$1.11M	\$0.70M	↓ 37%

<sup>&</sup>lt;sup>1</sup> Ending 28 January 2003, 3 calendar months before installation.

# Status: Review following road works

- When comparing the pre installation period to the most recent five year period, there has been a 20% decrease in casualty crashes and a 50% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since the camera began operating. Roadworks and camera maintenance may influence the number of infringements issued.
- In 2015, major traffic works commenced at this location for the construction of the Foxground and Berry bypass. The camera and accompanying signage has been removed for the works. The location will be monitored once works are complete and a final decision will be made about the need for ongoing enforcement.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

# Beverly Hills - King Georges Road, between Stoney Creek Road and Edgbaston Road

# School zone: Beverly Hills Girls High School

This location is 1040m patch to patch in length, and is enforced by 2 cameras.

The cameras commenced operating on:

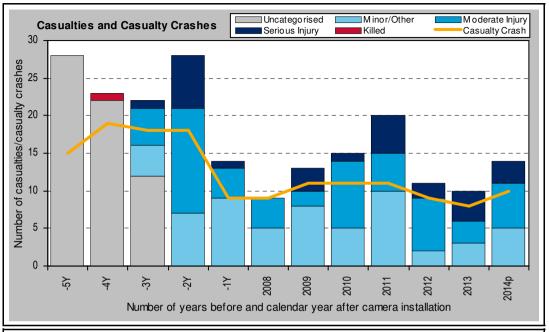
- Camera 1 (northbound) 9 July 2007
- · Camera 2 (southbound) 20 July 2007

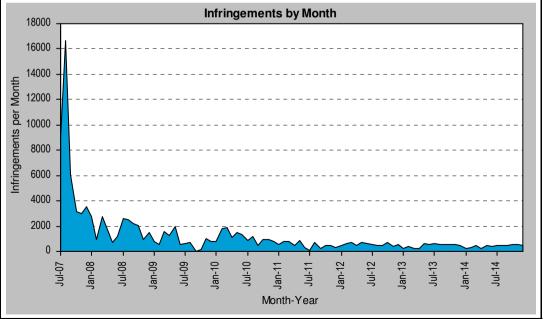
#### **Casualties and Casualty Crashes**

	5 years before installation <sup>1</sup>		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	1	0	↓ 100%
Total Injuries	114	70	↓ 39%
Serious	9	15	
Moderate	23	30	
Minor/Other	20	25	
Uncategorised	62		
Casualty Crashes	79	49	↓ 38%
Casualty Cost:	\$20.89M	\$7.67M	↓ 63%

<sup>&</sup>lt;sup>1</sup> Ending 9 April 2007, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 38% decrease in casualty crashes and a 39% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since the camera began operating. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

# Bexley North - Bexley Road, between Kingsland Road North and Miller Avenue

This location is 1000m in length, and is enforced with one camera.

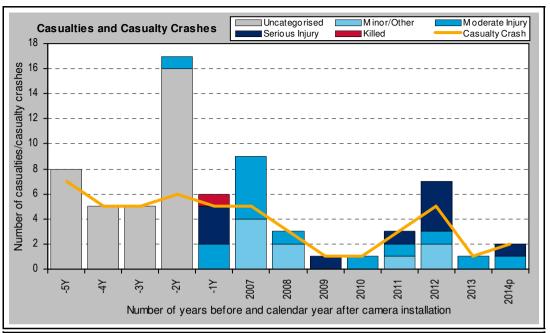
The camera commenced operating on 29 May 2006.

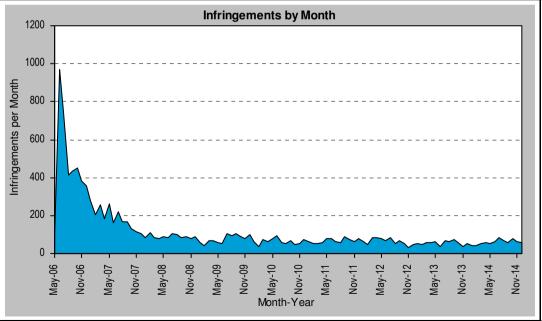
# **Casualties and Casualty Crashes**

	5 years before installation <sup>1</sup>		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	1	0	↓ 100%
Total Injuries	40	14	↓ 65%
Serious	3	6	
Moderate	3	5	
Minor/Other	0	3	
Uncategorised	34		
Casualty Crashes	28	12	↓ 57%
Casualty Cost:	\$12.86M	\$2.23M	↓ 83%

<sup>&</sup>lt;sup>1</sup> Ending 1 March 2006, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 57% decrease in casualty crashes and a 66% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since the camera began operating. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

# Blandford - New England Highway, between Hayles Street and Mills Street

This location is 1000m in length, and is enforced with one camera.

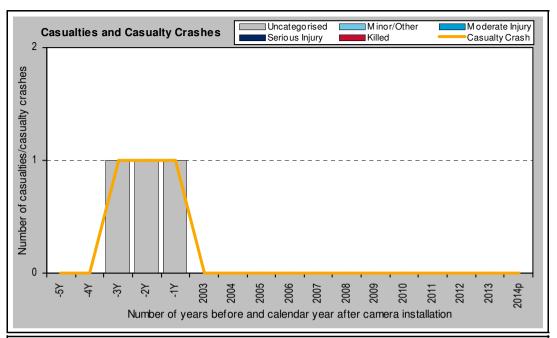
The camera commenced operating on 10 April 2002.

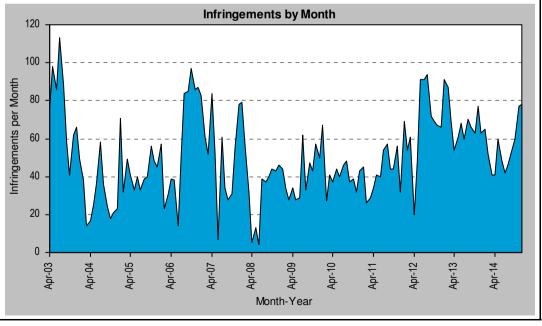
# **Casualties and Casualty Crashes**

	5 years before installation <sup>1</sup>		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	0	0	-
Total Injuries	3	0	↓ 100%
Serious		0	
Moderate		0	
Minor/Other		0	
Uncategorised	3		
Casualty Crashes	3	0	↓ 100%
Casualty Cost:	\$0.42M	\$0	↓ 100%

<sup>&</sup>lt;sup>1</sup> Ending 10 January 2002, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 100% decrease in casualty crashes and a 100% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since July 2002. Infringement data before this date is not available. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

# Bomaderry - Bolong Road, between Beinda Street and Coomea Street

This location is 1000m in length, and is enforced with one camera. The camera commenced operating on 31 March 2003.

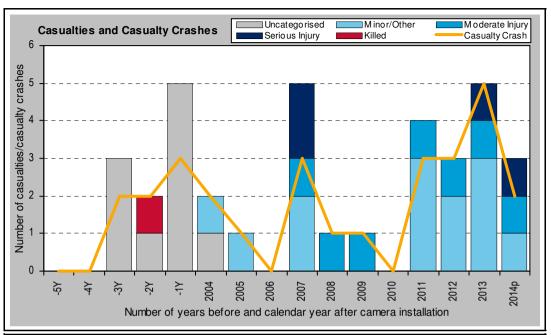
# **Casualties and Casualty Crashes**

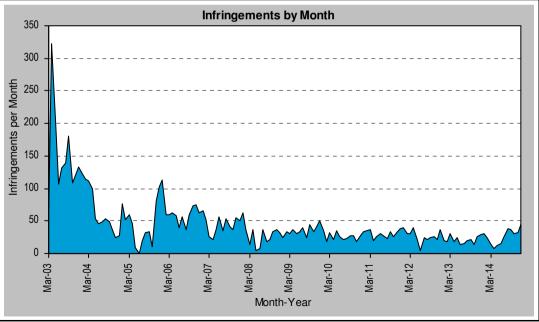
	5 years before installation <sup>1</sup>		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	1	0	↓ 100%
Total Injuries	9	15	↑ 67%
Serious		2	
Moderate		4	
Minor/Other		9	
Uncategorised	9		
Casualty Crashes	7	13	↑ 86%
Casualty Cost:	\$8.34M	\$1.36M	↓ 84%

<sup>&</sup>lt;sup>1</sup> Ending 31 December 2002, 3 calendar months before installation.

#### Status: Review

- When comparing the pre installation period to the most recent five year period, there has been an 86% increase in casualty crashes and a 50% increase in casualties at this fixed speed camera location. The increase in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since the camera began operating. Roadworks and camera maintenance may influence the number of infringements issued.
- This location has been identified for review. It is noted that an increase in traffic volumes may be occurring at this location in conjunction with the nearby construction work on the Foxground and Berry bypass. Any changes to conditions will be taken into consideration in the review of the speed camera at this location.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

# Bonnyrigg - Cabramatta Road, between Katinka Street and Tarlington Parade

#### School zone: Bonnyrigg High School, Our Lady of Mt Carmel Primary School

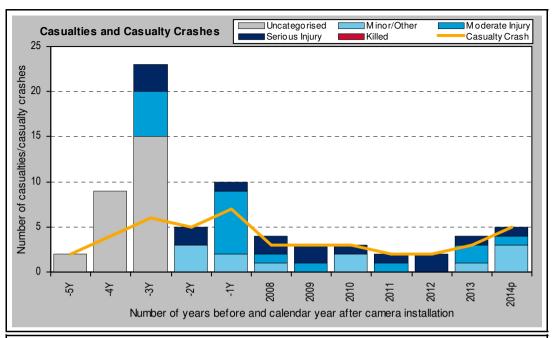
This location is 1000m (patch to patch) in length, and is enforced with one camera. The camera commenced operating on 17 October 2007.

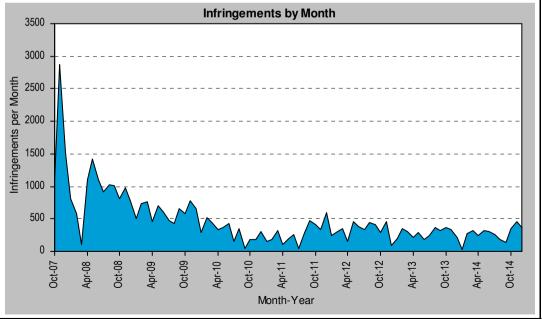
# **Casualties and Casualty Crashes**

	5 years before installation¹	Calend 2010 Count	ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	0	0	-
Total Injuries	49	16	↓ 67%
Serious	6	6	
Moderate	12	4	
Minor/Other	5	6	
Uncategorised	26		
Casualty Crashes	24	15	↓ 38%
Casualty Cost:	\$6.38M	\$2.35M	↓ 63%

<sup>&</sup>lt;sup>1</sup> Ending 17 July 2007, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 38% decrease in casualty crashes and a 67% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since the camera began operating. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

# Bonnyrigg - Elizabeth Drive, between Brown Road and Humphries Road

This location is 1000m in length, and is enforced with one camera. The camera commenced operating on 7 July 2000.

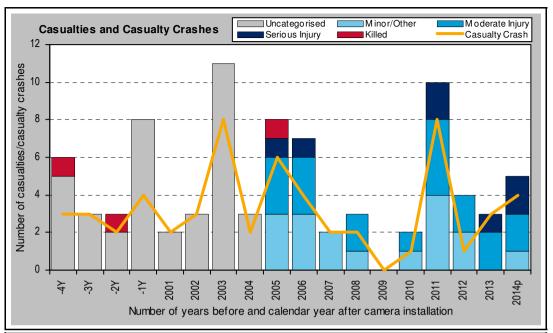
# **Casualties and Casualty Crashes**

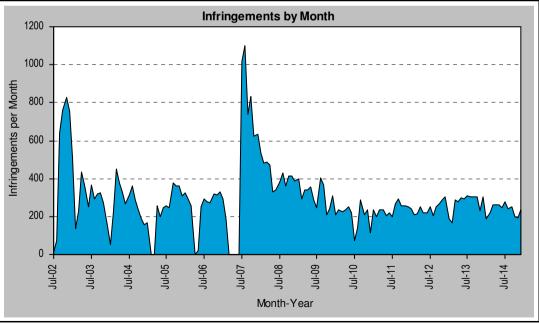
	4 years before installation <sup>1</sup>		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	2	0	↓ 100%
Total Injuries	18	24	↑ 7%
Serious		5	
Moderate		11	
Minor/Other		8	
Uncategorised	18		
Casualty Crashes	12	17	↑ 13%
Casualty Cost:	\$16.68M	\$2.60M	↓ 88%

<sup>&</sup>lt;sup>1</sup> Ending 7 April 2000, 3 calendar months before installation.

#### Status: Retained following 2015 preliminary review

- When comparing the pre installation period to the most recent five year period, there has been a 13% increase in casualty crashes and a 4% decrease in casualties at this fixed speed camera location. The increase in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since July 2002. Infringement data before this date is not available. The spike in infringements from July 2007 can be attributed to the camera commencing speed enforcement of both directions of traffic where it previously enforced one direction. Since then, there has been a reduction in speeding behaviour at this location over time. Roadworks and camera maintenance may influence the number of infringements issued.
- A desktop review of this location was undertaken due to the increase in casualty crashes. There has, however, been a reduction in casualties, including a reduction in fatalities from 2 in the four years prior to the camera being installed to zero in the last five years. Based on this information it was decided to retain the camera.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

# Bonville - Pine Creek Way, between Bonville Creek and Bonville Station Road

This location is 1000m in length, and is enforced with one camera.

The camera commenced operating on 16 December 2005.

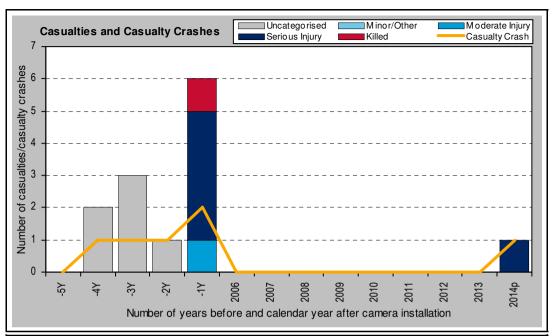
# **Casualties and Casualty Crashes**

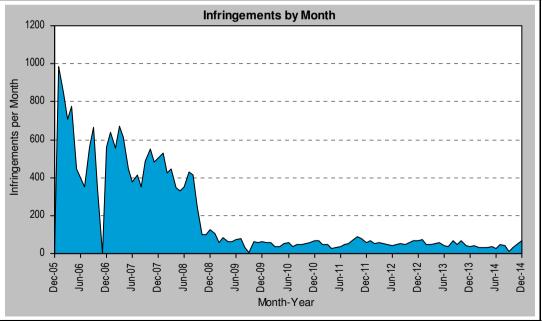
	5 years before installation <sup>1</sup>		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	1	0	↓ 100%
Total Injuries	11	1	↓ 91%
Serious	4	1	
Moderate	1	0	
Minor/Other	0	0	
Uncategorised	6		
Casualty Crashes	5	1	↓ 80%
Casualty Cost:	\$9.15M	\$0.29M	↓ 97%

<sup>&</sup>lt;sup>1</sup> Ending 16 September 2005, 3 calendar months before installation.

#### Status: Remove

- When comparing the pre installation period to the most recent five year period, there has been an 80% decrease in casualty crashes and a 92% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since the camera began operating. Roadworks and camera maintenance may influence the number of infringements issued.
- This location has been identified for removal. This camera is located on a section of road that was formerly the Pacific Highway, that has been bypassed, has a recent crash history that shows few casualties, a low level of speeding infringements and has had community representations requesting its removal.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

# **Brogo - Princes Highway, between Pioneer Close and Brogo River**

This location is 1000m in length, and is enforced with one camera. The camera commenced operating on 2 May 2003.

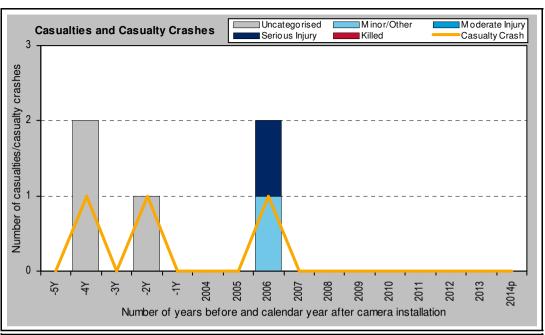
# **Casualties and Casualty Crashes**

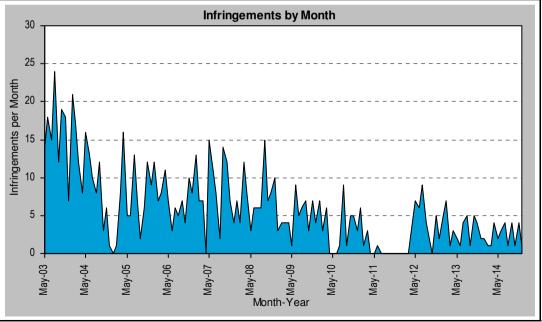
	5 years before installation <sup>1</sup>		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	0	0	-
Total Injuries	3	0	↓ 100%
Serious		0	
Moderate		0	
Minor/Other		0	
Uncategorised	3		
Casualty Crashes	2	0	↓ 100%
Casualty Cost:	\$0.42M	\$0	↓ 100%

<sup>&</sup>lt;sup>1</sup> Ending 2 February 2003, 3 calendar months before installation.

#### Status: Review

- When comparing the pre installation period to the most recent five year period, there has been a 100% decrease in casualty crashes and a 100% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since the camera began operating. Roadworks and camera maintenance may influence the number of infringements issued.
- This location has been identified for review. It has been identified that there is a low road safety risk at this location based on the casualty crash data and there is a low level of speeding infringements.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

# Bulli - Princes Highway, between Grevillea Park Road and Black Diamond Place

This location is 1000m in length, and is enforced with one camera.

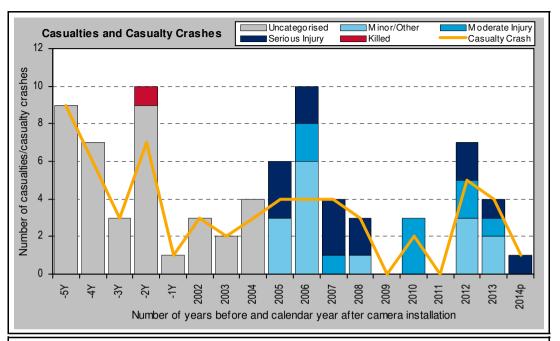
The camera commenced operating on 4 December 2001.

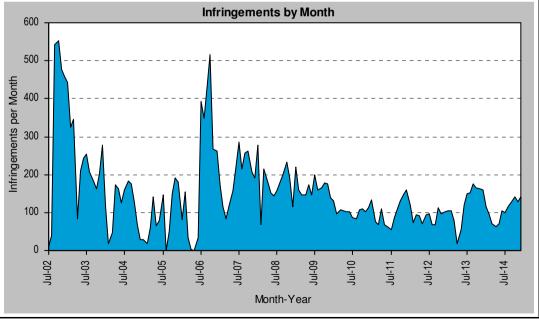
#### **Casualties and Casualty Crashes**

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	5 years before installation <sup>1</sup>		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	1	0	↓ 100%
Total Injuries	29	15	↓ 48%
Serious		4	
Moderate		6	
Minor/Other		5	
Uncategorised	29		
Casualty Crashes	26	12	↓ 54%
Casualty Cost:	\$11.11M	\$1.83M	↓ 84%

<sup>&</sup>lt;sup>1</sup> Ending 4 September 2001, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 54% decrease in casualty crashes and a 50% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since July 2002. Infringement data before this date is not available. The spike in infringements from July 2006 may be attributed to the camera commencing speed enforcement of both directions of traffic where it previously enforced one direction. Since then, there has been a reduction in speeding behaviour at this location over time. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

# Burringbar - Tweed Valley Way, between Blakeneys Road and Cooradilla Road

This location is 1000m in length, and is enforced with one camera.

The camera commenced operating on 2 April 1999.

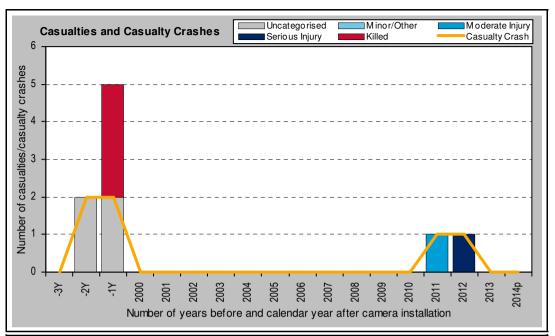
# **Casualties and Casualty Crashes**

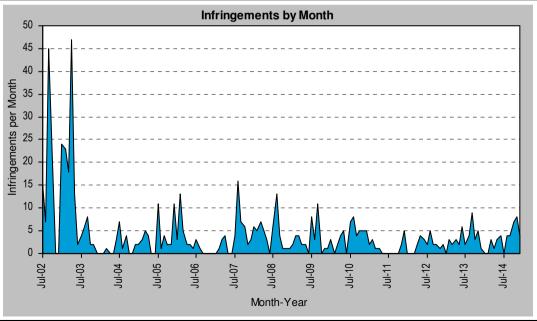
	3 years before installation <sup>1</sup>		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	3	0	↓ 100%
Total Injuries	4	2	↓ 70%
Serious		1	
Moderate		1	
Minor/Other		0	
Uncategorised	4		
Casualty Crashes	4	2	↓ 70%
Casualty Cost:	\$21.83M	\$0.35M	↓ 99%

<sup>&</sup>lt;sup>1</sup> Ending 2 January 1999, 3 calendar months before installation.

#### Status: Review

- When comparing the pre installation period to the most recent five year period, there has been a 70% decrease in casualty crashes and an 83% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since July 2002. Infringement data before this date is not available. Roadworks and camera maintenance may influence the number of infringements issued.
- This location has been identified for review. This camera is located on a section of road that was formerly the Pacific Highway, that has been bypassed. While there are a low level of speeding infringements at this location, the review will help determine whether there are road safety risks that require ongoing speed enforcement at this location.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

# Burwood Heights - Hume Highway, between Kelso Street and Appian Way

This location is 1000m in length, and is enforced with one camera.

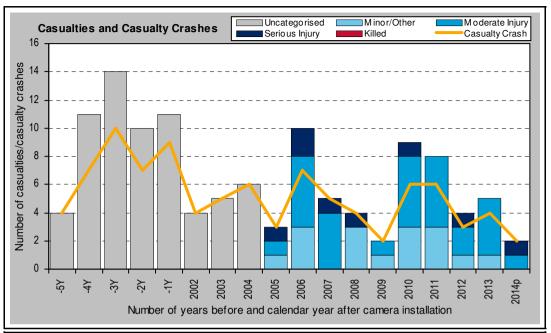
The camera commenced operating on 5 December 2001.

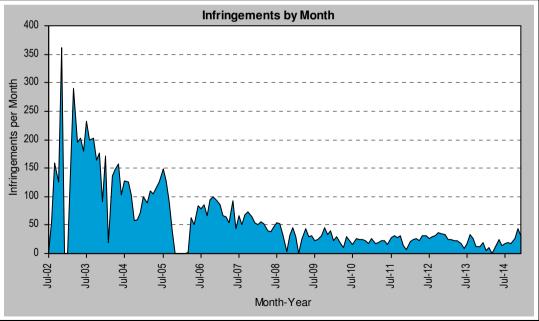
# **Casualties and Casualty Crashes**

	5 years before installation <sup>1</sup>		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	0	0	-
Total Injuries	50	28	↓ 44%
Serious		3	
Moderate		17	
Minor/Other		8	
Uncategorised	50		
Casualty Crashes	37	21	↓ 43%
Casualty Cost:	\$6.94M	\$2.37M	↓ 66%

<sup>&</sup>lt;sup>1</sup> Ending 5 September 2001, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 43% decrease in casualty crashes and a 44% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since July 2002. Infringement data before this date is not available. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

# Camellia - James Ruse Drive, between Victoria Road and Grand Avenue North

This location is 1000m in length, and is enforced with one camera.

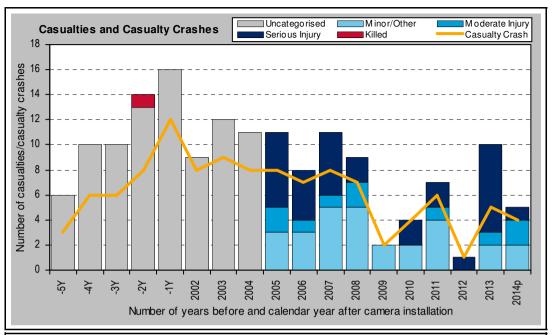
The camera commenced operating on 6 December 2001.

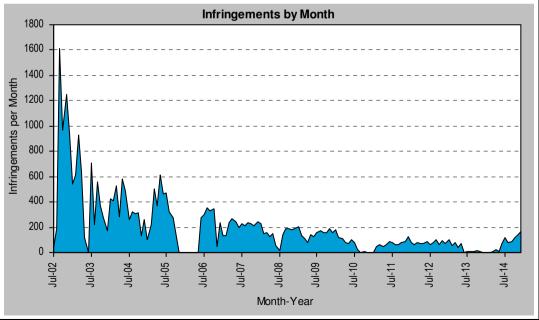
# **Casualties and Casualty Crashes**

	5 years before installation <sup>1</sup>		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	1	0	↓ 100%
Total Injuries	56	27	↓ 52%
Serious		13	
Moderate		4	
Minor/Other		10	
Uncategorised	56		
Casualty Crashes	36	20	↓ 44%
Casualty Cost:	\$14.86M	\$4.63M	↓ 69%

<sup>&</sup>lt;sup>1</sup> Ending 6 September 2001, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 44% decrease in casualty crashes and a 53% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since July 2002. Infringement data before this date is not available. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

# Canterbury - Canterbury Road, between Gould Street and Jeffrey Street

This location is 1000m in length, and is enforced with one camera.

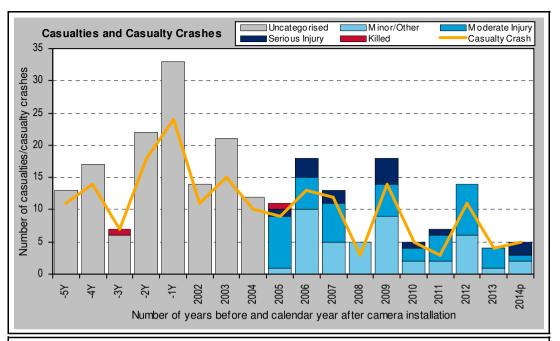
The camera commenced operating on 19 April 2001.

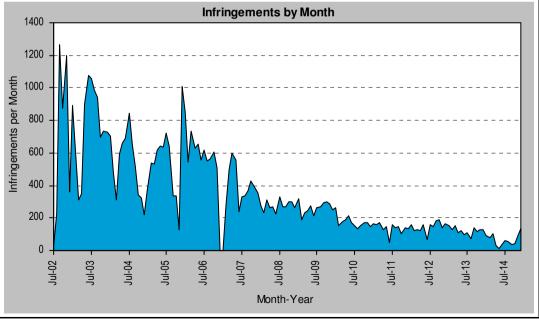
# **Casualties and Casualty Crashes**

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	5 years before installation <sup>1</sup>		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	1	0	↓ 100%
Total Injuries	91	35	↓ 62%
Serious		4	
Moderate		18	
Minor/Other		13	
Uncategorised	91		
Casualty Crashes	74	28	↓ 62%
Casualty Cost:	\$19.71M	\$3.02M	↓ 85%

<sup>&</sup>lt;sup>1</sup> Ending 19 January 2001, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 62% decrease in casualty crashes and a 62% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since July 2002. Infringement data before this date is not available. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

# Caringbah - Captain Cook Drive, between Cawarra Road and Gannons Road

This location is 1000m in length, and is enforced with one camera.

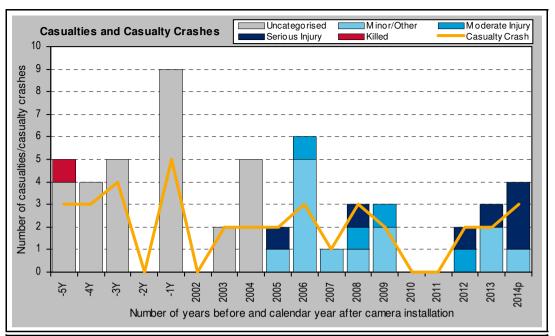
The camera commenced operating on 12 April 2001.

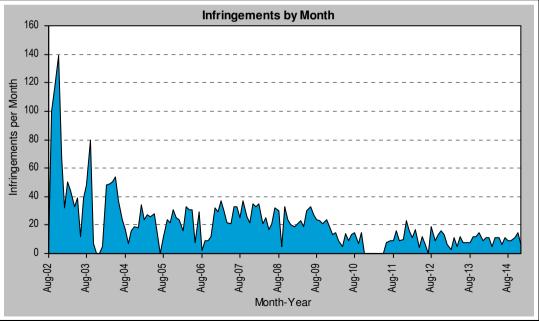
# **Casualties and Casualty Crashes**

	5 years before installation <sup>1</sup>		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	1	0	↓ 100%
Total Injuries	22	9	↓ 59%
Serious		5	
Moderate		1	
Minor/Other		3	
Uncategorised	22		
Casualty Crashes	15	7	↓ 53%
Casualty Cost:	\$10.14M	\$1.70M	↓ 83%

<sup>&</sup>lt;sup>1</sup> Ending 12 January 2001, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 53% decrease in casualty crashes and a 61% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since July 2002. Infringement data before this date is not available. No infringements were recorded at this location from November 2010 to May 2011 as a replacement camera was installed. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

# Carlingford - Pennant Hills Road, between Evans Road and Coleman Avenue

This location is 1000m in length, and is enforced with one camera.

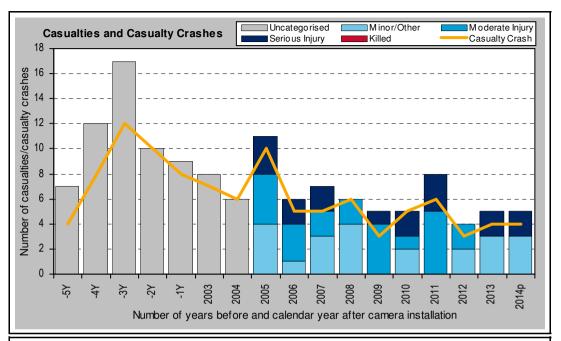
The camera commenced operating on 16 August 2002.

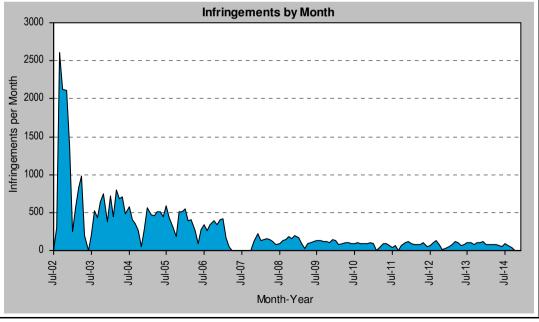
# **Casualties and Casualty Crashes**

	5 years before installation <sup>1</sup>		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	0	0	-
Total Injuries	55	27	↓ 51%
Serious		9	
Moderate		8	
Minor/Other		10	
Uncategorised	55		
Casualty Crashes	42	22	↓ 48%
Casualty Cost:	\$7.63M	\$3.70M	↓ 51%

<sup>&</sup>lt;sup>1</sup> Ending 16 May 2002, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 48% decrease in casualty crashes and a 51% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since the camera began operating. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

# Castle Hill - Old Northern Road, between Telfer Road and Brisbane Road

# School zone: St Bernadette's Primary School

This location is 430m patch to patch in length, and is enforced with one camera.

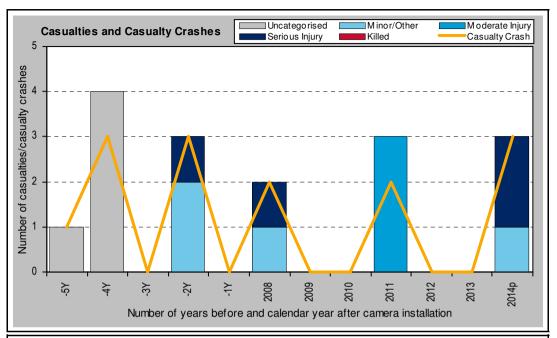
The camera commenced operating on 18 May 2007.

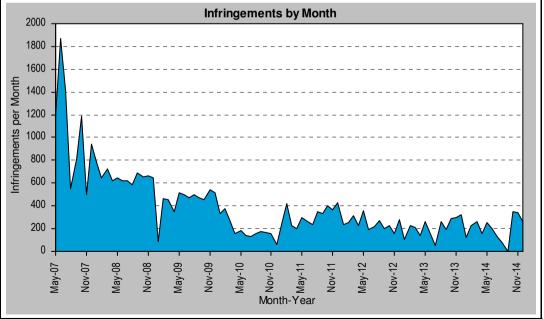
#### **Casualties and Casualty Crashes**

	5 years before installation <sup>1</sup>	Calend 2010 Count	ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	0	0	-
Total Injuries	8	6	↓ 25%
Serious	1	2	
Moderate	0	3	
Minor/Other	2	1	
Uncategorised	5		
Casualty Crashes	7	5	↓ 29%
Casualty Cost:	\$1.11M	\$0.82M	↓ 26%

<sup>&</sup>lt;sup>1</sup> Ending 18 February 2007, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 29% decrease in casualty crashes and a 25% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since the camera began operating. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

# Charmhaven - Pacific Highway, between Wallarah Creek and Lowana Avenue

This location is 1000m in length, and is enforced with one camera.

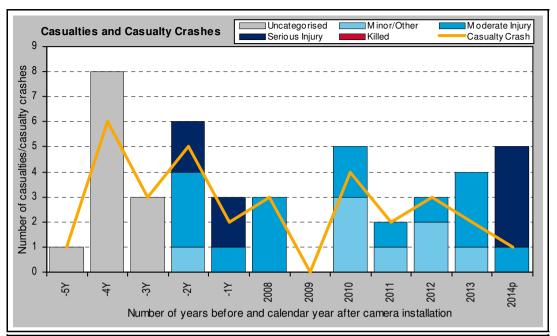
The camera commenced operating on 10 April 2007.

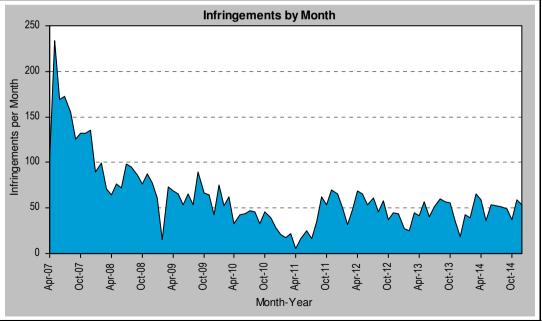
# **Casualties and Casualty Crashes**

	5 years before installation¹		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	0	0	-
Total Injuries	21	19	↓ 10%
Serious	4	4	
Moderate	4	8	
Minor/Other	1	7	
Uncategorised	12		
Casualty Crashes	17	12	↓ 29%
Casualty Cost:	\$3.13M	\$2.07M	↓ 34%

<sup>&</sup>lt;sup>1</sup> Ending 10 January 2007, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 29% decrease in casualty crashes and a 10% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since the camera began operating. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

# Concord West - Concord Road, between Nirranda Street and Mepunga Street

This location is 1000m in length, and is enforced with one camera.

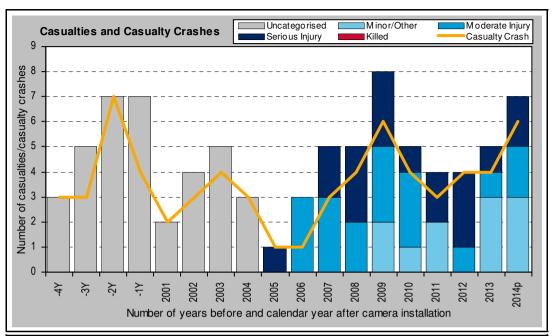
The camera commenced operating on 24 July 2000.

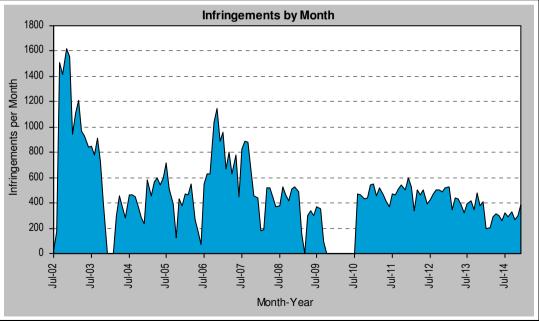
# **Casualties and Casualty Crashes**

	4 years before installation <sup>1</sup>		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	0	0	-
Total Injuries	22	25	↓9%
Serious		9	
Moderate		7	
Minor/Other		9	
Uncategorised	22		
Casualty Crashes	17	21	↓ 1%
Casualty Cost:	\$3.05M	\$3.58M	↓ 6%

<sup>&</sup>lt;sup>1</sup> Ending 24 April 2000, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 1% decrease in casualty crashes and a 9% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is not statistically significant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since July 2002. Infringement data before this date is not available. No infringements were recorded at this location from October 2009 to July 2010 due to road resurfacing works. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

# Condell Park - Edgar Street, between Augusta Street and Upper Railway Parade

#### School zone: Condell Park Primary School

This location is 240m (patch to patch) in length, and is enforced with one camera.

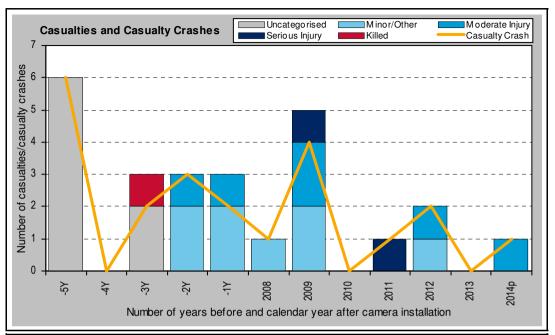
The camera commenced operating on 24 October 2007.

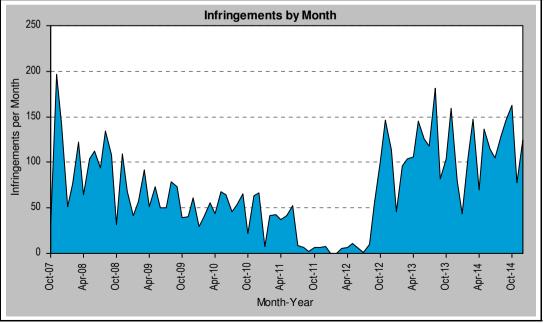
#### **Casualties and Casualty Crashes**

	5 years before installation¹		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	1	0	↓ 100%
Total Injuries	14	4	↓ 71%
Serious	0	1	
Moderate	2	2	
Minor/Other	4	1	
Uncategorised	8		
Casualty Crashes	13	4	↓ 69%
Casualty Cost:	\$8.56M	\$0.47M	↓ 94%

<sup>&</sup>lt;sup>1</sup> Ending 24 July 2007, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 69% decrease in casualty crashes and a 73% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since the camera began operating. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

# Corrimal - Northern Distributor (Memorial Drive), between Towradgi Road and Railway Street

This location is 1000m in length, and is enforced by 2 cameras.

The cameras commenced operating on:

- Camera 1 (northbound) 11 July 2002
- · Camera 2 (southbound) 25 July 2002

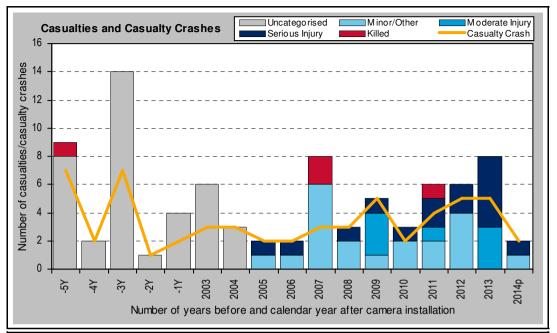
# **Casualties and Casualty Crashes**

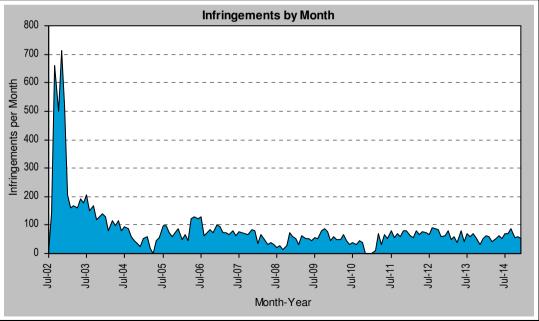
	5 years before installation <sup>1</sup>		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	1	1	0%
Total Injuries	29	24	↓ 17%
Serious		11	
Moderate		4	
Minor/Other		9	
Uncategorised	29		
Casualty Crashes	19	18	↓ 5%
Casualty Cost:	\$11.11M	\$11.08M	0%

<sup>&</sup>lt;sup>1</sup> Ending 11 April 2002, 3 calendar months before installation.

#### Status: Retained based on 2012 comprehensive safety review

- When comparing the pre installation period to the most recent five year period, there has been a 5% decrease in casualty crashes and a 17% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since the camera began operating. Roadworks and camera maintenance may influence the number of infringements issued.
- This location was reviewed in 2012 due to concerns about the increase in fatalities in recent years. The review found no evidence that the recent fatality, which occurred at an adjacent intersection, were speed-related and it is unlikely that the speed camera would have reduced these crashes.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

# East Gardens/ Maroubra - Bunnerong Road, between Fitzgerald Avenue and Smith Street

# School zone: Marist College Pagewood

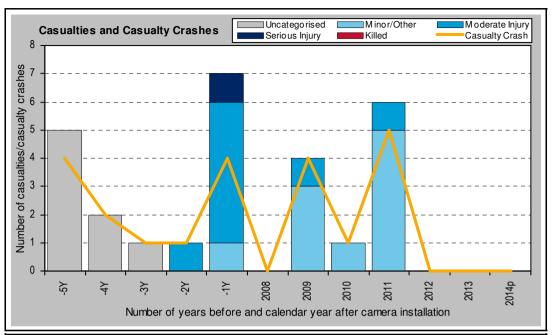
This location is 370m (patch to patch) in length, and is enforced by 2 cameras. Both cameras commenced operating on 20 June 2007.

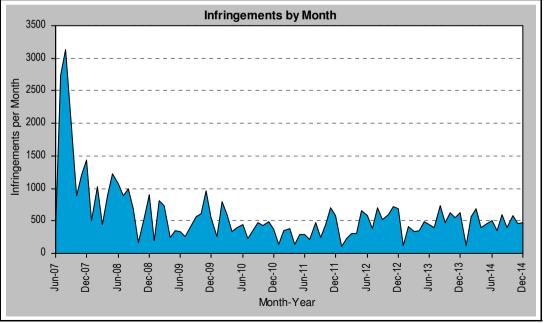
#### **Casualties and Casualty Crashes**

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	5 years before installation <sup>1</sup>		ar years - 2014 Percentage Change <sup>2</sup>	
Fatalities	0	0	-	
Total Injuries	16	7	↓ 56%	
Serious	1	0		
Moderate	6	1		
Minor/Other	1	6		
Uncategorised	8			
Casualty Crashes	12	6	↓ 50%	
Casualty Cost:	\$1.82M	\$0.42M	↓ 77%	

<sup>&</sup>lt;sup>1</sup> Ending 20 March 2007, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 50% decrease in casualty crashes and a 56% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since the camera began operating. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

## Edgecliff - New South Head Road, between Waratah Street and New Beach Road

This location is 1000m in length, and is enforced with one camera.

The camera commenced operating on 7 December 2001.

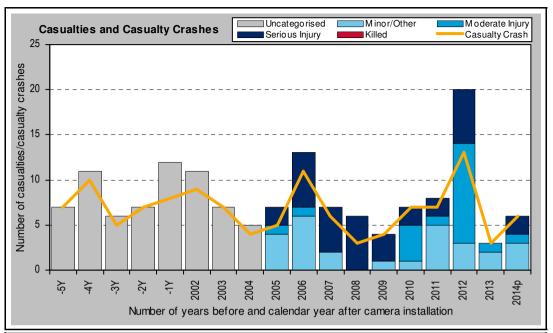
## **Casualties and Casualty Crashes**

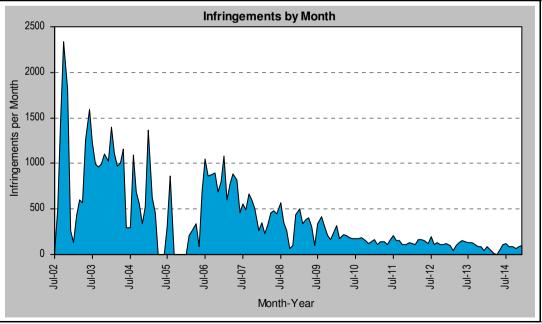
	5 years before installation <sup>1</sup>	Calend 2010 Count	ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	0	0	-
Total Injuries	43	44	↑ 2%
Serious		12	
Moderate		18	
Minor/Other		14	
Uncategorised	43		
Casualty Crashes	37	36	↓ 3%
Casualty Cost:	\$5.96M	\$5.42M	↓ 9%

<sup>&</sup>lt;sup>1</sup> Ending 7 September 2001, 3 calendar months before installation.

### Status: Retained based on 2012 comprehensive safety review

- When comparing the pre installation period to the most recent five year period, there has been a 3% decrease in casualty crashes and a 2% increase in casualties at this fixed speed camera location. The decrease in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since July 2002. Infringement data before this date is not available. Roadworks and camera maintenance may influence the number of infringements issued.
- This location was reviewed in 2012 due to concerns that crashes and casualties at this location had increased. The comprehensive review found that the camera only has an impact on the eastbound direction of traffic because the camera only enforces in this direction and there is a very wide median at the camera location. Therefore the camera was found to be effective and this crash analysis looks only at the eastbound carriageway of New South Head Road.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

# Ewingsdale - Pacific Highway, between St Helena Road and Ewingsdale Road.

This location is 1000m in length, and is enforced with one camera.

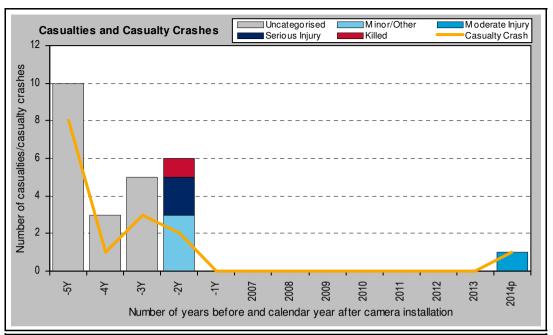
The camera commenced operating on 22 September 2006.

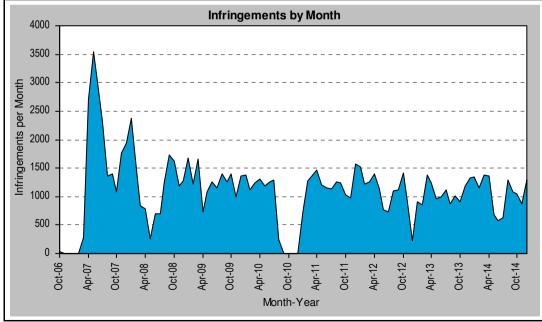
## **Casualties and Casualty Crashes**

	5 years before installation¹		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	1	0	↓ 100%
Total Injuries	23	1	↓ 96%
Serious	2	0	
Moderate	0	1	
Minor/Other	3	0	
Uncategorised	18		
Casualty Crashes	14	1	↓ 93%
Casualty Cost:	\$10.35M	\$0.06M	↓ 99%

<sup>&</sup>lt;sup>1</sup> Ending 22 June 2006, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 93% decrease in casualty crashes and a 96% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since the camera began operating. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

### Fairfield East - Fairfield Street, between Scott Street and Mandarin Street

This location is 1000m in length, and is enforced with one camera. The camera commenced operating on 4 July 2002.

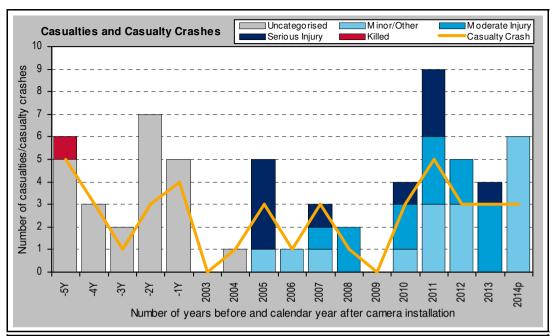
## **Casualties and Casualty Crashes**

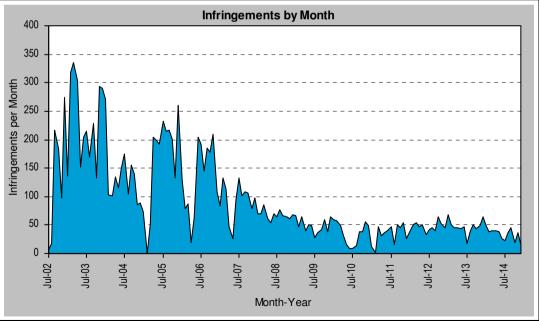
	5 years before installation <sup>1</sup>		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	1	0	↓ 100%
Total Injuries	22	28	↑ 27%
Serious		5	
Moderate		10	
Minor/Other		13	
Uncategorised	22		
Casualty Crashes	16	17	↑ 6%
Casualty Cost:	\$10.14M	\$2.84M	↓ 72%

<sup>&</sup>lt;sup>1</sup> Ending 4 April 2002, 3 calendar months before installation.

### Status: Retained based on 2013 comprehensive review

- When comparing the pre installation period to the most recent five year period, there has been a 6% increase in casualty crashes and a 22% increase in casualties at this fixed speed camera location. The increase in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since the camera began operating. Roadworks and camera maintenance may influence the number of infringements issued.
- This location was reviewed in 2013 due to concerns about the increase in crashes and casualties in recent years. The 2013 review found that since the speed camera was installed, the number of crashes per year had decreased. The review also found that the number of injury crashes per year decreased. While there was one fatal crash with one fatality prior to the installation of the speed camera, there have been no fatalities since the camera has been in operation. Therefore based on this information, the speed camera has been retained.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

# Foxground - Princes Highway, between Foxground Road and Broughton Creek

This location is 1000m in length, and is enforced with one camera.

The camera commenced operating on 9 May 2003.

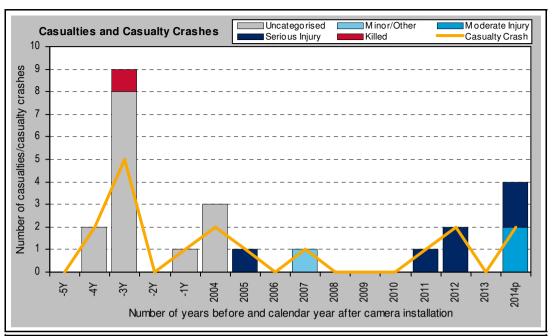
## **Casualties and Casualty Crashes**

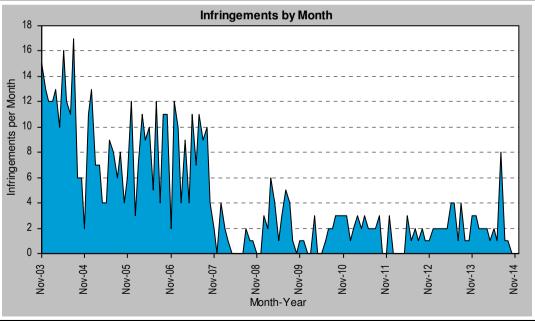
	5 years before installation <sup>1</sup>		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	1	0	↓ 100%
Total Injuries	11	7	↓ 36%
Serious		5	
Moderate		2	
Minor/Other		0	
Uncategorised	11		
Casualty Crashes	8	5	↓ 38%
Casualty Cost:	\$8.62M	\$1.58M	↓ 82%

<sup>&</sup>lt;sup>1</sup> Ending 9 February 2003, 3 calendar months before installation.

## Status: Review following road works

- When comparing the pre installation period to the most recent five year period, there has been a 38% decrease in casualty crashes and a 42% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since the camera began operating. Roadworks and camera maintenance may influence the number of infringements issued.
- In 2015, major traffic works commenced at this location for the construction of the Foxground and Berry bypass. The camera and accompanying signage has been removed for the works. The location will be monitored once works are complete and a final decision will be made about the need for ongoing enforcement.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

# Gateshead - Pacific Highway, between Sydney Street and Macquarie Avenue

School zone: Hunter Sports High School, Gateshead Public School, St Mary's High School

This location is 820m (patch to patch) in length, and is enforced with one camera.

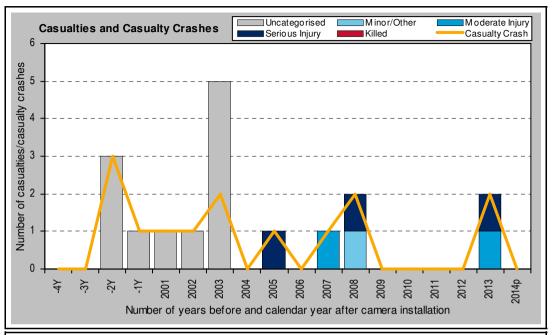
The camera commenced operating on 30 May 2000.

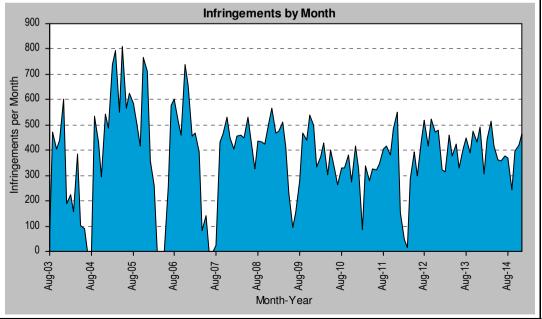
### **Casualties and Casualty Crashes**

	4 years before installation1	Calendar years 2010 - 2014	
		Count	Percentage Change <sup>2</sup>
Fatalities	0	0	-
Total Injuries	4	2	↓ 60%
Serious		1	
Moderate		1	
Minor/Other		0	
Uncategorised	4		
Casualty Crashes	4	2	↓ 60%
Casualty Cost:	\$0.55M	\$0.35M	↓ 49%

<sup>&</sup>lt;sup>1</sup> Ending 1 March 2000, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 60% decrease in casualty crashes and a 60% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since July 2002. Infringement data before this date is not available. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

# Greystanes - Greystanes Road, between Merrylands Road and Old Prospect Road

This location is 1000m in length, and is enforced with one camera.

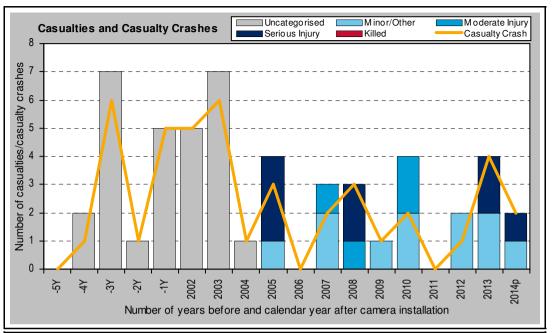
The camera commenced operating on 30 November 2001.

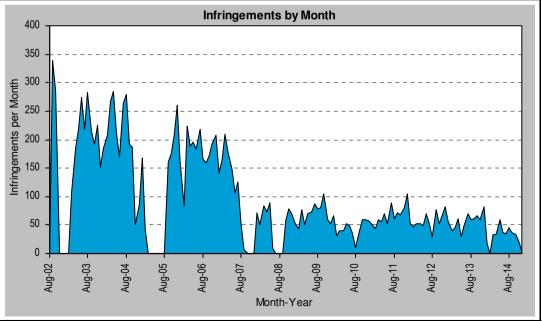
## **Casualties and Casualty Crashes**

	5 years before installation <sup>1</sup>		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	0	0	-
Total Injuries	15	12	↓ 20%
Serious		3	
Moderate		2	
Minor/Other		7	
Uncategorised	15		
Casualty Crashes	13	9	↓ 31%
Casualty Cost:	\$2.08M	\$1.41M	↓ 32%

<sup>&</sup>lt;sup>1</sup> Ending 30 August 2001, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 31% decrease in casualty crashes and a 20% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since July 2002. Infringement data before this date is not available. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

# Guildford - Woodville Road, between Kenelda Avenue and Osgood Street

# School zone: Granville South Public School

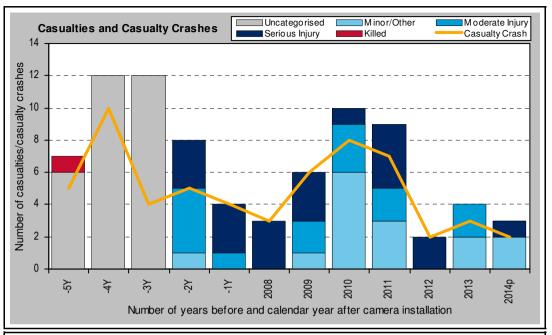
This location is 500m (patch to patch) in length, and is enforced by 2 cameras. Both cameras commenced operating on 16 May 2007.

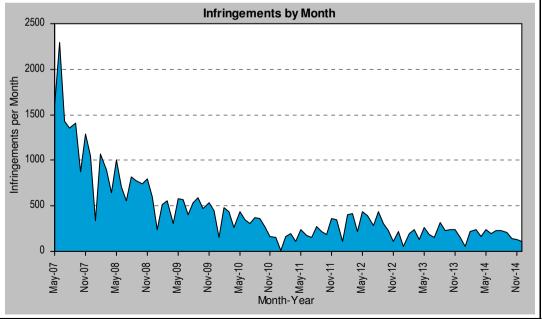
### **Casualties and Casualty Crashes**

	5 years before installation <sup>1</sup>		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	1	0	↓ 100%
Total Injuries	42	28	↓ 33%
Serious	6	8	
Moderate	5	7	
Minor/Other	1	13	
Uncategorised	30		
Casualty Crashes	28	22	↓ 21%
Casualty Cost:	\$13.36M	\$3.53M	↓ 74%

<sup>&</sup>lt;sup>1</sup> Ending 16 February 2007, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 21% decrease in casualty crashes and a 35% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since the camera began operating. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

# Gwynneville - M1 Princes Motorway, University Avenue Overpass and Mount Ousley Road (southbound)

This location is 1000m in length, and is enforced with one camera.

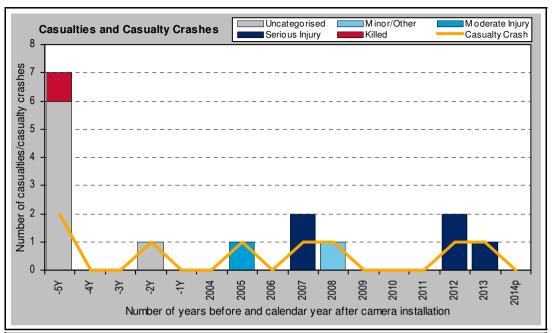
The camera commenced operating on 7 August 2003.

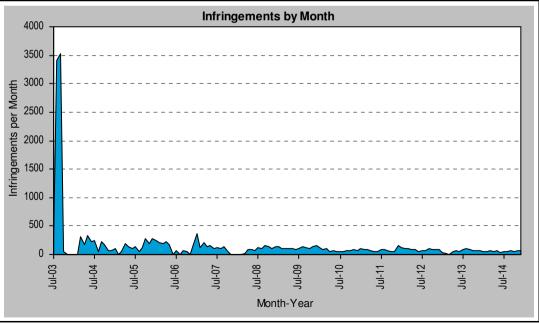
## **Casualties and Casualty Crashes**

	5 years before installation¹		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	1	0	↓ 100%
Total Injuries	7	3	↓ 57%
Serious		3	
Moderate		0	
Minor/Other		0	
Uncategorised	7		
Casualty Crashes	3	2	↓ 33%
Casualty Cost:	\$8.06M	\$0.88M	↓ 89%

<sup>&</sup>lt;sup>1</sup> Ending 7 May 2003, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 33% decrease in casualty crashes and a 63% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since the camera began operating. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

# Gwynneville - M1 Princes Motorway, between Northern Distributor Overpass and Gipps Road Overpass (northbound)

This location is 1000m in length, and is enforced with one camera.

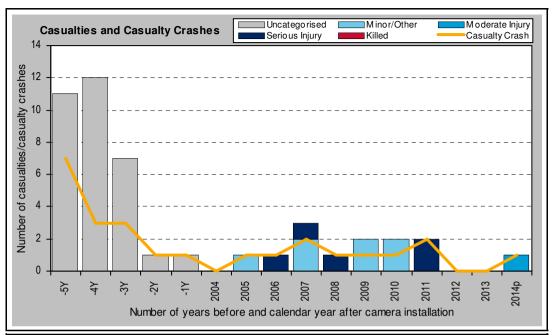
The camera commenced operating on 7 August 2003.

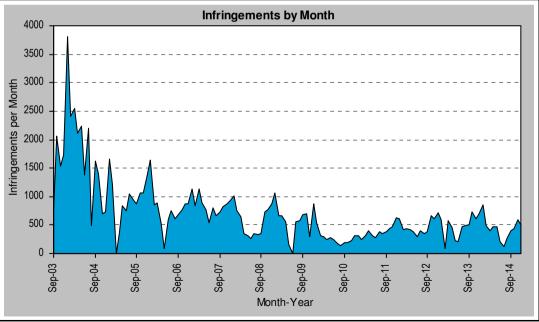
## **Casualties and Casualty Crashes**

	5 years before installation¹		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	0	0	-
Total Injuries	32	5	↓ 84%
Serious		2	
Moderate		1	
Minor/Other		2	
Uncategorised	32		
Casualty Crashes	15	4	↓ 73%
Casualty Cost:	\$4.44M	\$0.76M	↓ 83%

<sup>&</sup>lt;sup>1</sup> Ending 7 May 2003, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 73% decrease in casualty crashes and an 84% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since the camera began operating. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

# Hartley - Great Western Highway, between Mid Hartley Road and Blackmans Creek Road

This location is 1000m in length, and is enforced with one camera.

The camera commenced operating on 6 December 2000.

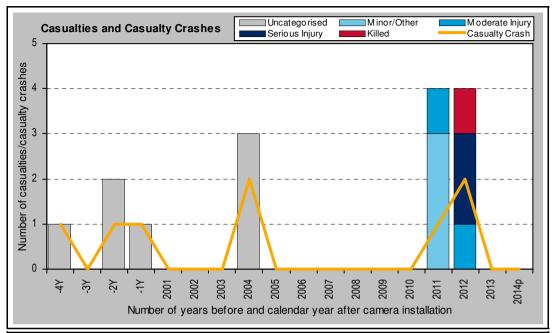
## **Casualties and Casualty Crashes**

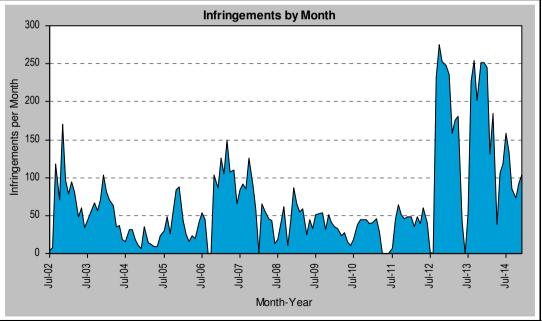
	4 years before installation <sup>1</sup>		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	0	1	Increase
Total Injuries	4	7	↑ <b>40</b> %
Serious		2	
Moderate		2	
Minor/Other		3	
Uncategorised	4		
Casualty Crashes	3	3	↓ 20%
Casualty Cost:	\$0.55M	\$7.97M	↑ 1050%

<sup>&</sup>lt;sup>1</sup> Ending 6 September 2000, 3 calendar months before installation.

### Status: Review following road works

- When comparing the pre installation period to the most recent five year period, there has been a 20% decrease in casualty crashes and a 60% increase in casualties at this fixed speed camera location. The decrease in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since July 2002. Infringement data before this date is not available. Roadworks and camera maintenance may influence the number of infringements issued.
- This location was recommended for review in the 2014 annual speed camera review. This location will be reviewed following the current road works which are due to be completed in 2016 at this location.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

# Hungry Head - Pacific Highway, between Boundary Road and Ballards Road

This location is 1000m in length, and is enforced with one camera. The camera commenced operating on 25 November 2002.

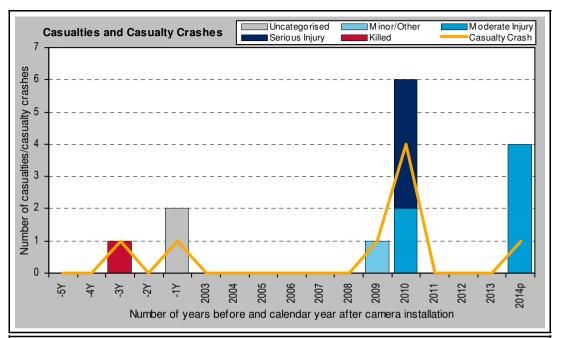
## **Casualties and Casualty Crashes**

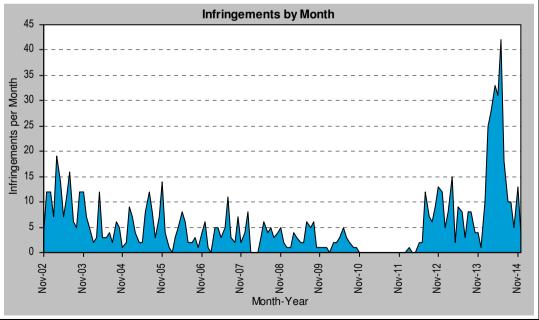
	5 years before installation <sup>1</sup>		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	1	0	↓ 100%
Total Injuries	2	10	↑ 400%
Serious		4	
Moderate		6	
Minor/Other		0	
Uncategorised	2		
Casualty Crashes	2	5	↑ 150%
Casualty Cost:	\$7.37M	\$1.53M	↓ 79%

<sup>&</sup>lt;sup>1</sup> Ending 25 August 2002, 3 calendar months before installation.

## Status: Retained based on 2012 comprehensive safety review

- When comparing the pre installation period to the most recent five year period, there has been a 150% increase in casualty crashes and a 233% increase in casualties at this fixed speed camera location. The increase in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since the camera began operating. Roadworks and camera maintenance may influence the number of infringements issued.
- This location was reviewed in 2012 due to concerns that casualties at this location had increased. This speed camera is also located on a section of the Pacific highway which is yet to be upgraded. This camera was retained until the road is bypassed as part of the Pacific Highway upgrade.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

# Hurstville - Forest Road, between Lily Street and Cronulla Street

School zone: Bethany College, Sydney Technical High School, Hurstville Boys High School, Hurstville Primary School

This location is 710m (patch to patch) in length, and is enforced with one camera.

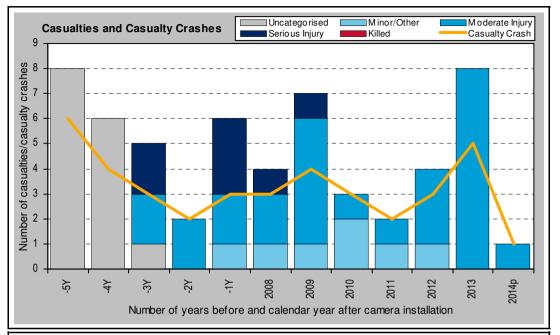
The camera commenced operating on 17 October 2007.

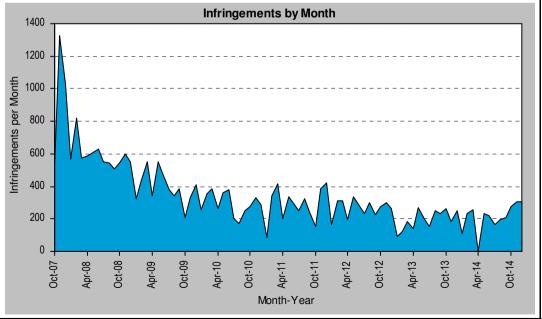
# **Casualties and Casualty Crashes**

	5 years before installation <sup>1</sup>		ar years - 2014
	motanation	Count	Percentage Change <sup>2</sup>
Fatalities	0	0	-
Total Injuries	27	18	↓ 33%
Serious	5	0	
Moderate	6	14	
Minor/Other	1	4	
Uncategorised	15		
Casualty Crashes	18	14	↓ 22%
Casualty Cost:	\$3.96M	\$1.08M	↓ 73%

<sup>&</sup>lt;sup>1</sup> Ending 17 July 2007, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 22% decrease in casualty crashes and a 33% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since the camera began operating. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

# Kingswood - Parker Street, between Copeland Street and Gascoigne Street

#### School zone: St Dominics College

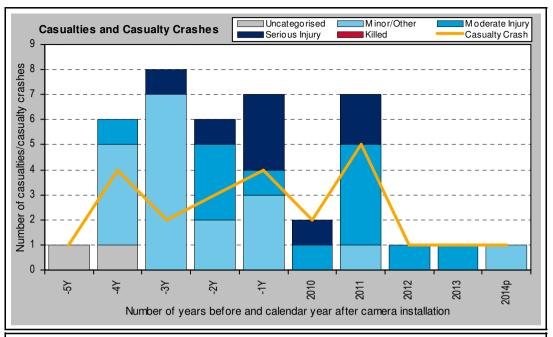
This location is 340m (patch to patch) in length, and is enforced by 2 cameras. Both cameras commenced operating on 28 January 2009.

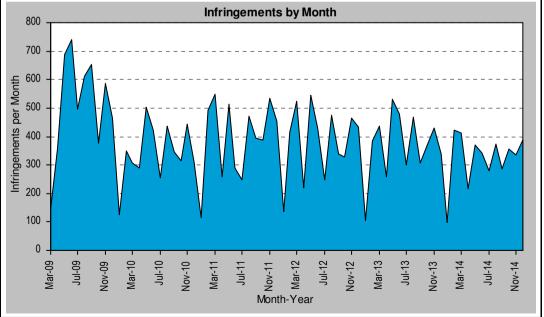
### **Casualties and Casualty Crashes**

	5 years before installation <sup>1</sup>		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	0	0	-
Total Injuries	28	12	↓ 57%
Serious	5	3	
Moderate	5	7	
Minor/Other	16	2	
Uncategorised	2		
Casualty Crashes	14	10	↓ 29%
Casualty Cost:	\$2.99M	\$1.41M	↓ 53%

<sup>&</sup>lt;sup>1</sup> Ending 28 October 2008, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 29% decrease in casualty crashes and a 57% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since the camera began operating. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

# Kogarah - Princes Highway, between Gray Street and President Avenue

School zone: St Patricks Primary School, Bethany College, James Cook Boys High School, Moorefield Girls High School, Kogarah Public School

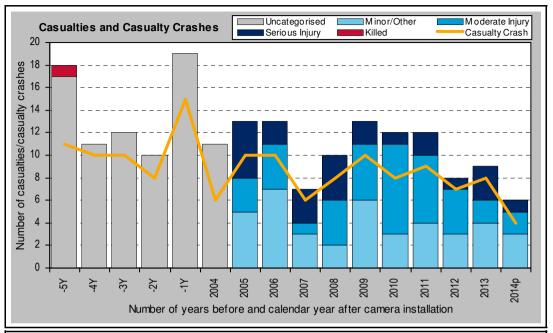
This location is 990m (patch to patch) in length, and is enforced by 2 cameras. Both cameras commenced operating on 15 July 2003.

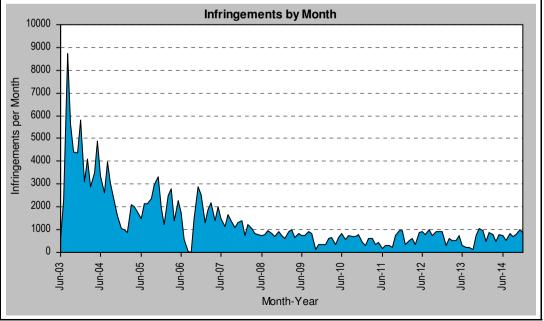
### **Casualties and Casualty Crashes**

	5 years before installation¹		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	1	0	↓ 100%
Total Injuries	69	47	↓ 32%
Serious		8	
Moderate		22	
Minor/Other		17	
Uncategorised	69		
Casualty Crashes	54	36	↓ 33%
Casualty Cost:	\$16.66M	\$4.67M	↓ 72%

<sup>&</sup>lt;sup>1</sup> Ending 15 April 2003, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 33% decrease in casualty crashes and a 33% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since the camera began operating. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

# Korora - Pacific Highway, between Bruxner Park Road and Korora Basin Road

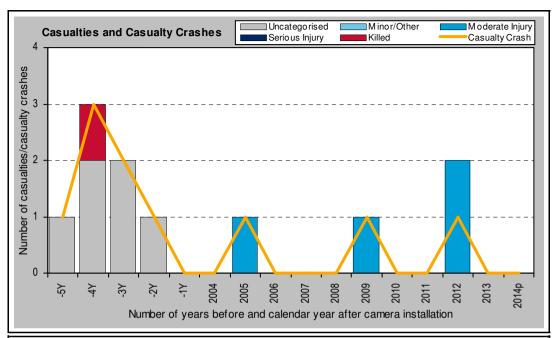
This location is 1000m in length, and is enforced with one camera. The camera commenced operating on 20 February 2003.

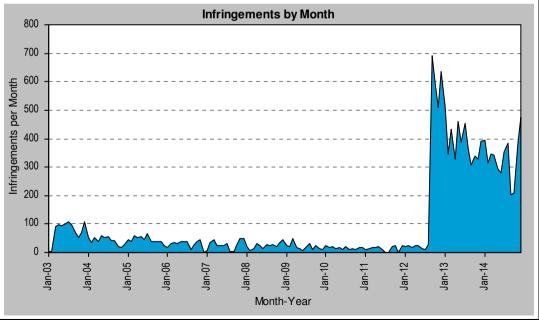
## **Casualties and Casualty Crashes**

	5 years before installation <sup>1</sup>		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	1	0	↓ 100%
Total Injuries	6	2	↓ 67%
Serious		0	
Moderate		2	
Minor/Other		0	
Uncategorised	6		
Casualty Crashes	7	1	↓ 86%
Casualty Cost:	\$7.92M	\$0.12M	↓ 98%

<sup>&</sup>lt;sup>1</sup> Ending 20 November 2002, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been an 86% decrease in casualty crashes and a 71% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since the camera began operating. The spike in infringements in July 2012 can be attributed to a speed limit change from 100km/h to 80km/h. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

# Kurrajong - Bells Line of Road, between Queen Street and Bellbird Avenue

This location is 1000m in length, and is enforced with one camera.

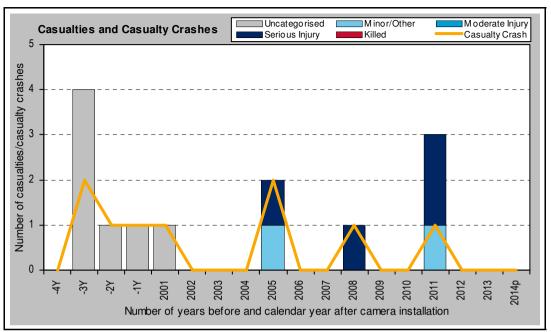
The camera commenced operating on 22 May 2000.

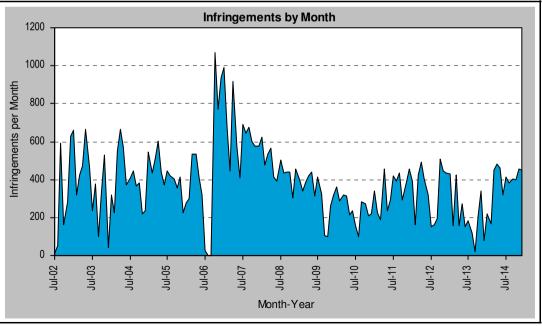
## **Casualties and Casualty Crashes**

	4 years before installation <sup>1</sup>		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	0	0	-
Total Injuries	6	3	↓ 60%
Serious		2	
Moderate		0	
Minor/Other		1	
Uncategorised	6		
Casualty Crashes	4	1	↓ 80%
Casualty Cost:	\$0.83M	\$0.64M	↓ 38%

<sup>&</sup>lt;sup>1</sup> Ending 22 February 2000, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been an 80% decrease in casualty crashes and a 60% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since July 2002. Infringement data before this date is not available. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

# Lane Cove - Centennial Avenue, between Gentle Street and Figtree Street

This location is 1000m in length, and is enforced with one camera.

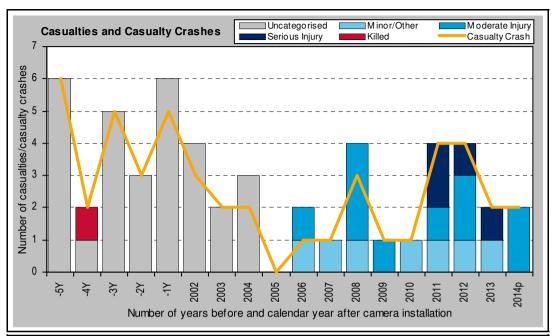
The camera commenced operating on 10 December 2001.

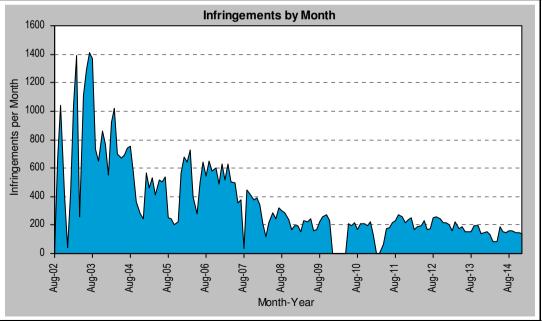
## **Casualties and Casualty Crashes**

	5 years before installation <sup>1</sup>		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	1	0	↓ 100%
Total Injuries	21	13	↓ 38%
Serious		4	
Moderate		5	
Minor/Other		4	
Uncategorised	21		
Casualty Crashes	21	13	↓ 38%
Casualty Cost:	\$10.00M	\$1.71M	↓ 83%

<sup>&</sup>lt;sup>1</sup> Ending 10 September 2001, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 38% decrease in casualty crashes and a 41% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since July 2002. Infringement data before this date is not available. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

# Lansvale - Hume Highway, between Henry Lawson Drive and Knight Street

This location is 1000m in length, and is enforced with one camera.

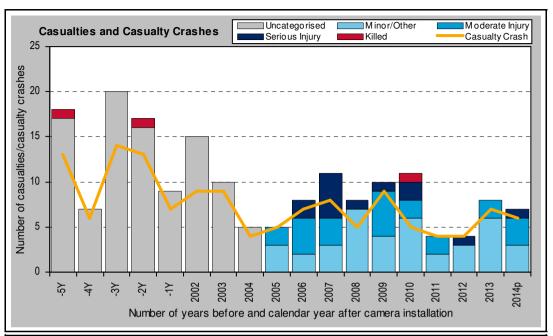
The camera commenced operating on 5 December 2001.

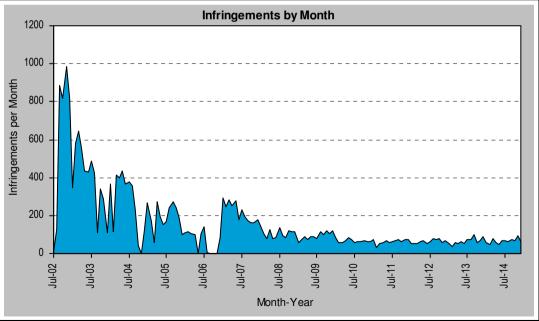
# **Casualties and Casualty Crashes**

	5 years before installation1		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	2	1	↓ 50%
Total Injuries	69	33	↓ 52%
Serious		4	
Moderate		9	
Minor/Other		20	
Uncategorised	69		
Casualty Crashes	53	26	↓ 51%
Casualty Cost:	\$23.75M	\$9.99M	↓ 58%

<sup>&</sup>lt;sup>1</sup> Ending 5 September 2001, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 51% decrease in casualty crashes and a 52% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since July 2002. Infringement data before this date is not available. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

# Lindfield - Pacific Highway, between Eton Road and Gladstone Parade

### School zone: Lindfield Primary School

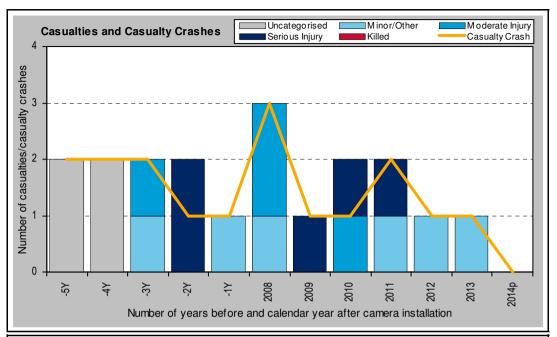
This location is 480m (patch to patch) in length, and is enforced by 2 cameras. Both cameras commenced operating on 9 July 2007.

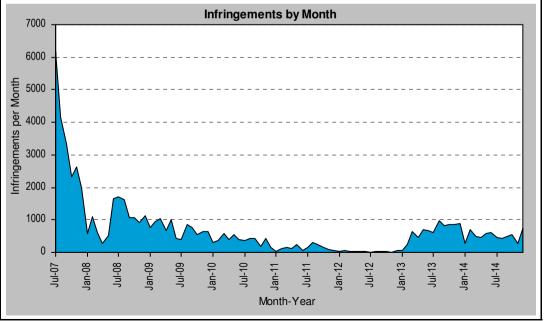
### **Casualties and Casualty Crashes**

	5 years before installation¹	Calendar years 2010 - 2014 Percentage	
		Count	Change <sup>2</sup>
Fatalities	0	0	-
Total Injuries	9	6	↓ 33%
Serious	2	2	
Moderate	1	1	
Minor/Other	2	3	
Uncategorised	4		
Casualty Crashes	8	5	↓ 38%
Casualty Cost:	\$1.32M	\$0.82M	↓ 38%

<sup>&</sup>lt;sup>1</sup> Ending 9 April 2007, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 38% decrease in casualty crashes and a 33% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since the camera began operating. The camera was turned off at this location during 2012 due to road works at this location. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

# Liverpool - Bigge Street, between Elizabeth Drive and Campbell Street

School zone: All Saints Catholic Primary School, All Saints Catholic Girls College, All Saints Catholic Boys College

This location is 360m (patch to patch) in length, and is enforced with one camera.

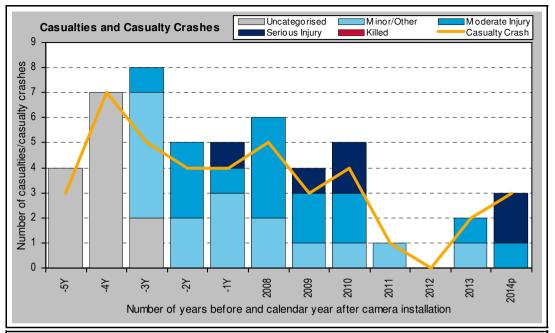
The camera commenced operating on 14 November 2007.

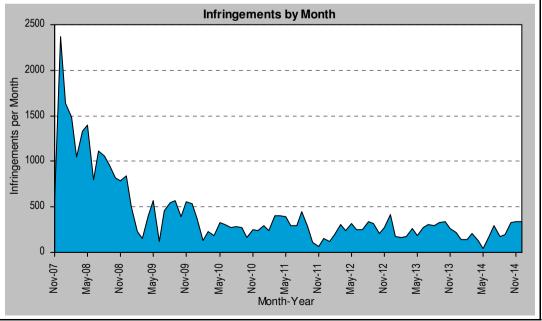
# **Casualties and Casualty Crashes**

	5 years before installation <sup>1</sup>	Calendar years 2010 - 2014 Percentage	
		Count	Change <sup>2</sup>
Fatalities	0	0	-
Total Injuries	29	11	↓ 62%
Serious	1	4	
Moderate	5	4	
Minor/Other	10	3	
Uncategorised	13		
Casualty Crashes	23	10	↓ 57%
Casualty Cost:	\$2.99M	\$1.59M	↓ 47%

<sup>&</sup>lt;sup>1</sup> Ending 14 August 2007, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 57% decrease in casualty crashes and a 62% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since the camera began operating. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

# Lochinvar - New England Highway, between Robert Road and Station Lane

School zone: Lochinvar Public School, St Patrick's Primary School, All Saint's College - St Joseph's Campus

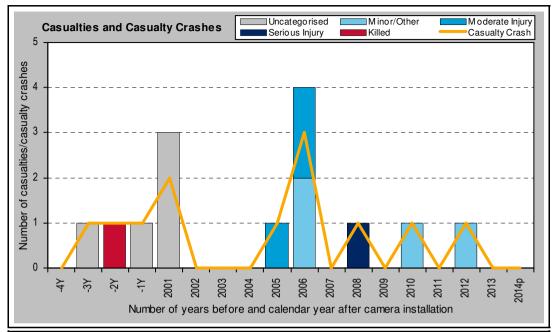
This location is 1000m (patch to patch) in length, and is enforced with one camera. The camera commenced operating on 9 May 2000.

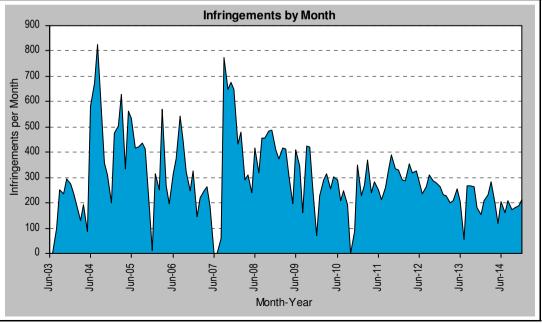
# **Casualties and Casualty Crashes**

	4 years before installation <sup>1</sup>		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	1	0	↓ 100%
Total Injuries	2	2	↓ 20%
Serious		0	
Moderate		0	
Minor/Other		2	
Uncategorised	2		
Casualty Crashes	3	2	↓ 47%
Casualty Cost:	\$7.37M	\$0.12M	↓ 99%

<sup>&</sup>lt;sup>1</sup> Ending 9 February 2000, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 47% decrease in casualty crashes and a 47% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since July 2002. Infringement data before this date is not available. The spike in infringements from September 2007 was due to the camera commencing speed enforcement of both directions of traffic where it previously enforced one direction. Roadworks and camera maintenance may influence the number of infringements issued.
- This location was reviewed in 2012 due to concerns that casualties had increased slightly. The comprehensive safety review found that since the speed camera was installed, traffic volumes had increased significantly due to mining activities in the Hunter region. Given the increase in traffic volume, the adjusted casualty rate indicated that the speed camera has been effective in reducing casualties. Further, there was strong community support for the retention of the speed camera due to its location in a school zone where safety is a high priority. Therefore the speed camera at this location was retained.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

## Maroubra - Malabar Road, between Mons Avenue and Duncan Street

### School zone: St Mary and St Joseph's Primary, Maroubra Bay

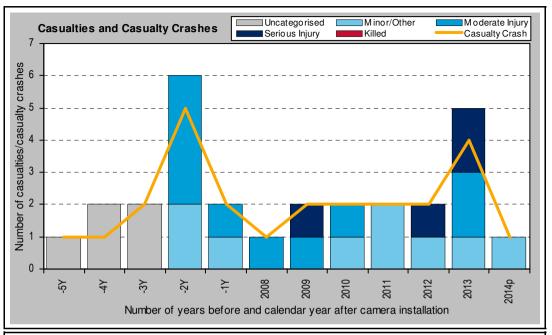
This location is 680m (patch to patch) in length, and is enforced by 2 cameras. Both cameras commenced operating on 20 June 2007.

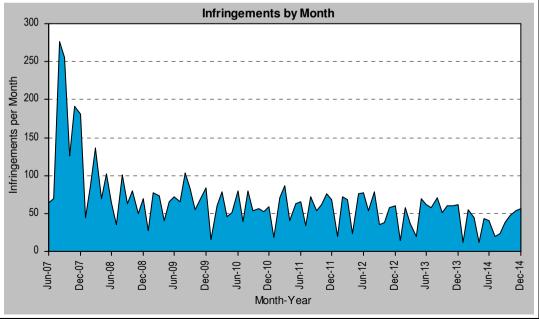
# **Casualties and Casualty Crashes**

	5 years before installation¹		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	0	0	-
Total Injuries	13	12	↓8%
Serious	0	3	
Moderate	5	3	
Minor/Other	3	6	
Uncategorised	5		
Casualty Crashes	11	11	0%
Casualty Cost:	\$1.17M	\$1.41M	↑ <b>21</b> %

<sup>&</sup>lt;sup>1</sup> Ending 20 March 2007, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been no change in casualty crashes and an 8% decrease in casualties at this fixed speed camera location. The change in casualty crashes is not statistically significant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since the camera began operating. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

# Mayfield West - Pacific Highway, between Werribee Street and Tourle Street

This location is 1000m in length, and is enforced with one camera.

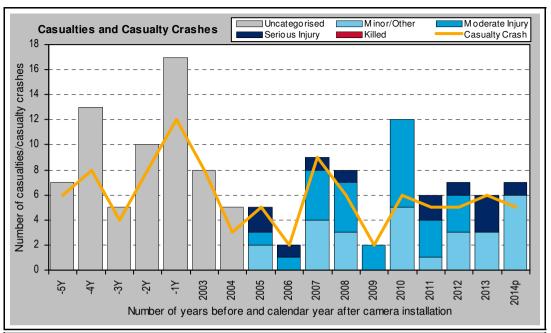
The camera commenced operating on 23 December 2002.

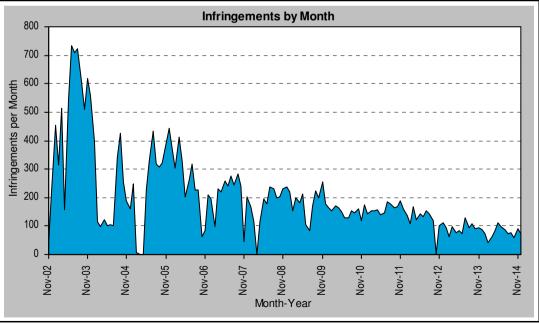
## **Casualties and Casualty Crashes**

	5 years before installation <sup>1</sup>		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	0	0	-
Total Injuries	52	38	↓ 27%
Serious		7	
Moderate		13	
Minor/Other		18	
Uncategorised	52		
Casualty Crashes	38	27	↓ 29%
Casualty Cost:	\$7.21M	\$3.90M	↓ 46%

<sup>&</sup>lt;sup>1</sup> Ending 23 September 2002, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 29% decrease in casualty crashes and a 27% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since the camera began operating. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

# Merrylands - Merrylands Road, between Chetwynd Road and Davies Street

### School zone: St Margaret Mary's Primary School

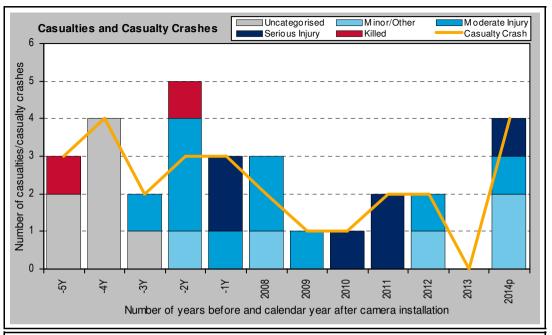
This location is 220m (patch to patch) in length, and is enforced with one camera. The camera commenced operating on 16 May 2007.

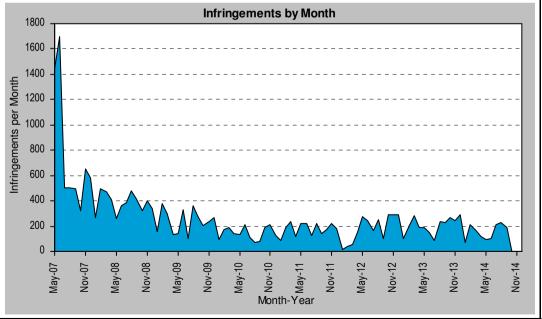
### **Casualties and Casualty Crashes**

	5 years before installation¹		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	2	0	↓ 100%
Total Injuries	15	9	↓ 40%
Serious	2	4	
Moderate	5	2	
Minor/Other	1	3	
Uncategorised	7		
Casualty Crashes	15	9	↓ 40%
Casualty Cost:	\$16.10M	\$1.47M	↓ 91%

<sup>&</sup>lt;sup>1</sup> Ending 16 February 2007, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 40% decrease in casualty crashes and a 47% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since the camera began operating. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

# Miranda - Kingsway, between Sylva Avenue and University Road

### School zone: Port Hacking High School, Miranda Public School

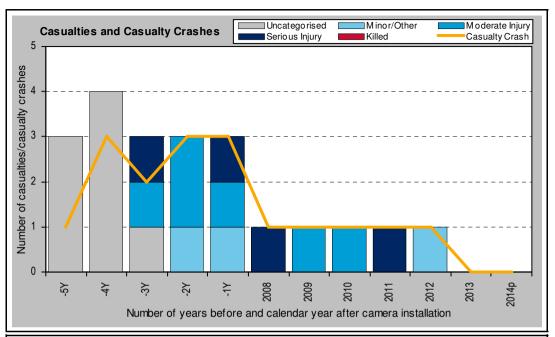
This location is 400 (patch to patch) in length, and is enforced by 2 cameras. Both cameras commenced operating on 7 November 2007.

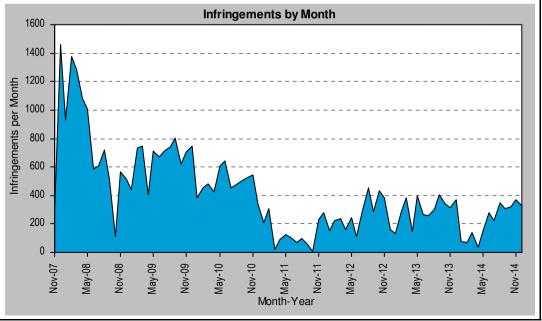
### **Casualties and Casualty Crashes**

	5 years before installation¹		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	0	0	-
Total Injuries	16	3	↓ 81%
Serious	2	1	
Moderate	4	1	
Minor/Other	2	1	
Uncategorised	8		
Casualty Crashes	12	3	↓ 75%
Casualty Cost:	\$2.05M	\$0.41M	↓ 80%

<sup>&</sup>lt;sup>1</sup> Ending 7 August 2007, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 75% decrease in casualty crashes and an 81% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since the camera began operating. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

# Moore Park - Cleveland Street, between Anzac Parade and South Dowling Street

### School zone: Sydney Boys High School, Sydney Girls High School

This location is 380m (patch to patch) in length, and is enforced by 2 cameras.

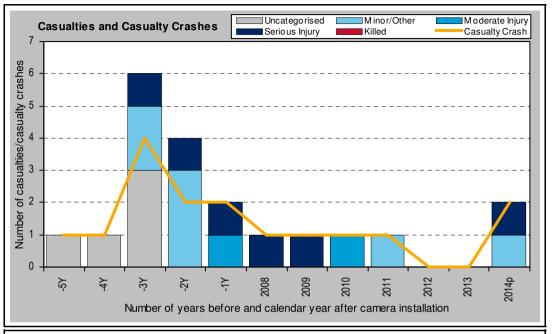
The cameras commenced operating on:

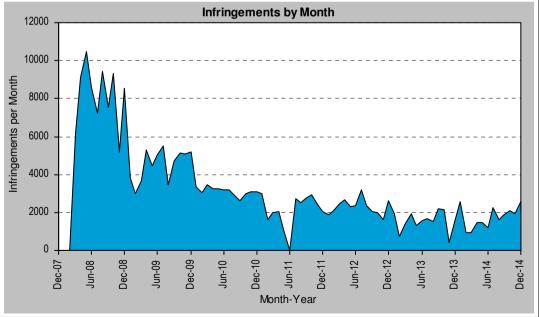
- Camera 1 (eastbound) 14 November 2007
- Camera 2 (westbound) 15 November 2007

## **Casualties and Casualty Crashes**

	5 years before installation <sup>1</sup>		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	0	0	-
Total Injuries	14	4	↓ 71%
Serious	3	1	
Moderate	1	1	
Minor/Other	5	2	
Uncategorised	5		
Casualty Crashes	10	4	↓ 60%
Casualty Cost:	\$1.93M	\$0.47M	↓ 76%

<sup>&</sup>lt;sup>1</sup> Ending 14 August 2007, 3 calendar months before installation.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

<sup>•</sup> When comparing the pre installation period to the most recent five year period, there has been a 60% decrease in casualty crashes and a 71% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.

<sup>•</sup> The infringement graph details the trend in infringements at this location since the camera began operating. Roadworks and camera maintenance may influence the number of infringements issued.

# Mosman - Macpherson Street, between Ourimbah Road and Montague Road

### School zone: Middle Harbour Primary School

This location is 320m (patch to patch) in length, and is enforced with one camera.

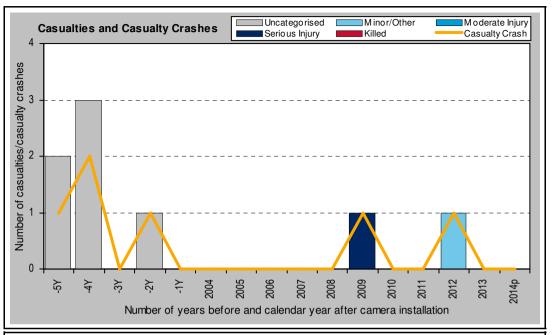
The camera commenced operating on 15 July 2003.

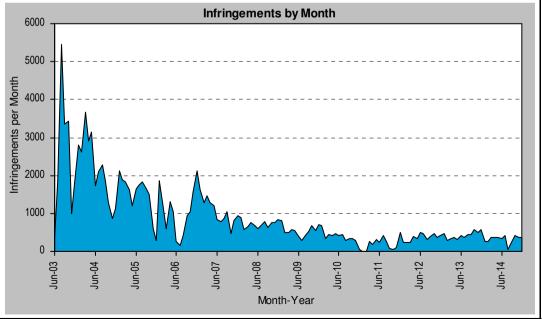
### **Casualties and Casualty Crashes**

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	5 years before installation¹		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	0	0	-
Total Injuries	6	1	↓ 83%
Serious		0	
Moderate		0	
Minor/Other		1	
Uncategorised	6		
Casualty Crashes	4	1	↓ 75%
Casualty Cost:	\$0.83M	\$0.06M	↓ 93%

<sup>&</sup>lt;sup>1</sup> Ending 15 April 2003, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 75% decrease in casualty crashes and an 83% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is not statistically significant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since the camera began operating. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

## Narrabeen - Pittwater Road, between Ocean Street and Devitt Street

### School zone: Narrabeen Lakes Primary School

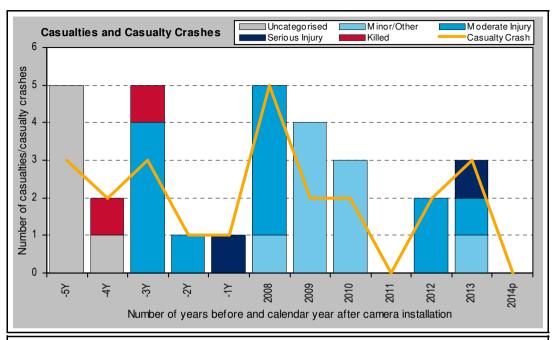
This location is 300m (patch to patch) in length, and is enforced by 2 cameras. Both cameras commenced operating on 31 October 2007.

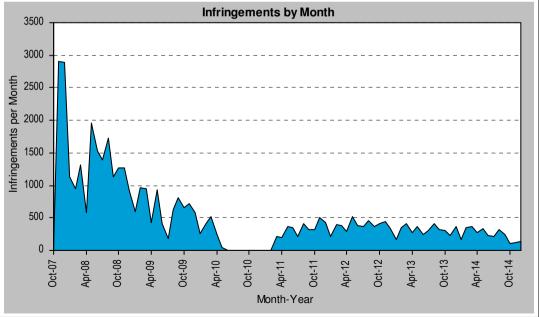
### **Casualties and Casualty Crashes**

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	5 years before installation¹		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	2	0	↓ 100%
Total Injuries	12	8	↓ 33%
Serious	1	1	
Moderate	5	3	
Minor/Other	0	4	
Uncategorised	6		
Casualty Crashes	10	7	↓ 30%
Casualty Cost:	\$15.61M	\$0.71M	↓ 95%

<sup>&</sup>lt;sup>1</sup> Ending 31 July 2007, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 30% decrease in casualty crashes and a 43% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since the camera began operating. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

# New Italy - Pacific Highway, between New Italy Road and Turners Road

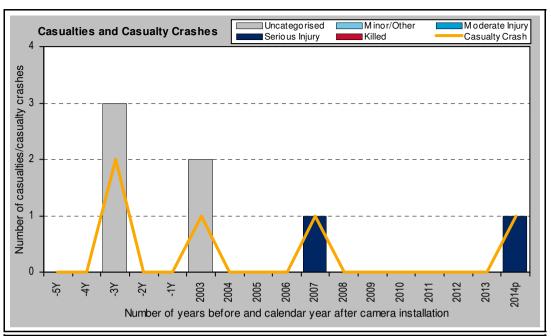
This location is 1000m in length, and is enforced by 2 cameras. Both cameras commenced operating on 25 July 2002.

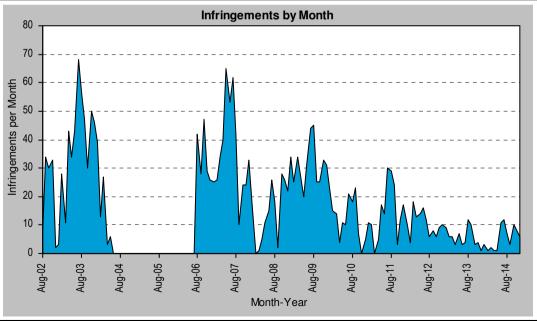
## **Casualties and Casualty Crashes**

	5 years before installation <sup>1</sup>		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	0	0	-
Total Injuries	3	1	↓ 67%
Serious		1	
Moderate		0	
Minor/Other		0	
Uncategorised	3		
Casualty Crashes	2	1	↓ 50%
Casualty Cost:	\$0.42M	\$0.29M	↓ 30%

<sup>&</sup>lt;sup>1</sup> Ending 25 April 2002, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 50% decrease in casualty crashes and a 67% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since the camera began operating. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

# Nords Wharf - Pacific Highway, between Nords Wharf Road and Flowers Drive

This location is 1000m in length, and is enforced with one camera.

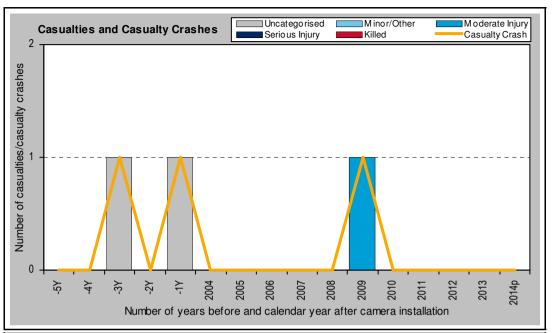
The camera commenced operating on 27 February 2003.

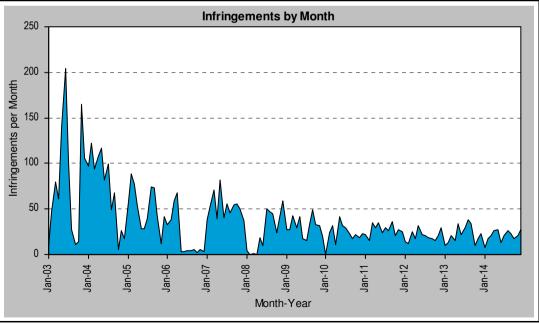
## **Casualties and Casualty Crashes**

	5 years before installation <sup>1</sup>		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	0	0	-
Total Injuries	2	0	↓ 100%
Serious		0	
Moderate		0	
Minor/Other		0	
Uncategorised	2		
Casualty Crashes	2	0	↓ 100%
Casualty Cost:	\$0.28M	\$0	↓ 100%

<sup>&</sup>lt;sup>1</sup> Ending 27 November 2002, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 100% decrease in casualty crashes and a 100% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since the camera began operating. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

# North Curl Curl - Harbord Road, between Abbott Road and Brighton Street

#### School zone: Freshwater Senior High School, Manly Selective Campus

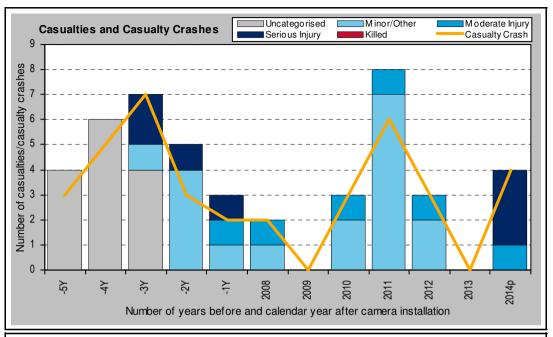
This location is 1060m (patch to patch) in length, and is enforced with one camera. The camera commenced operating on 31 October 2007.

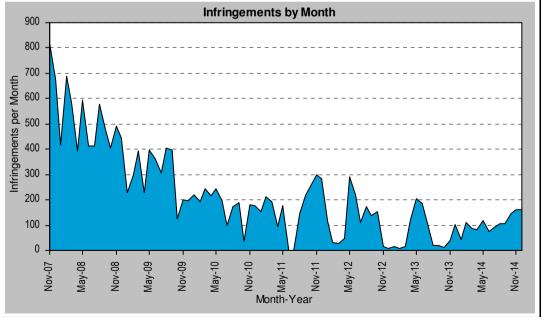
# **Casualties and Casualty Crashes**

	5 years before installation <sup>1</sup>		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	0	0	-
Total Injuries	25	18	↓ 28%
Serious	4	3	
Moderate	1	4	
Minor/Other	6	11	
Uncategorised	14		
Casualty Crashes	20	16	↓ 20%
Casualty Cost:	\$3.53M	\$1.77M	↓ 50%

<sup>&</sup>lt;sup>1</sup> Ending 31 July 2007, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 20% decrease in casualty crashes and a 28% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since the camera began operating. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

# North Macksville - Pacific Highway, between Lawrence Wilmont Drive and Watt Creek

This location is 1000m in length, and is enforced with one camera.

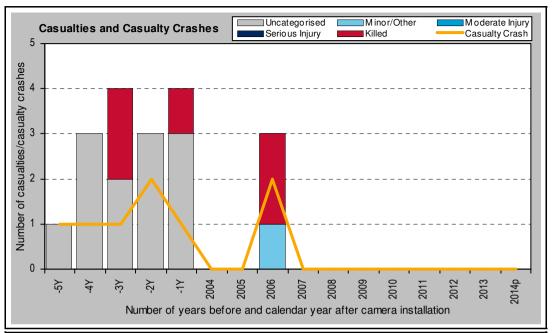
The camera commenced operating on 3 March 2003.

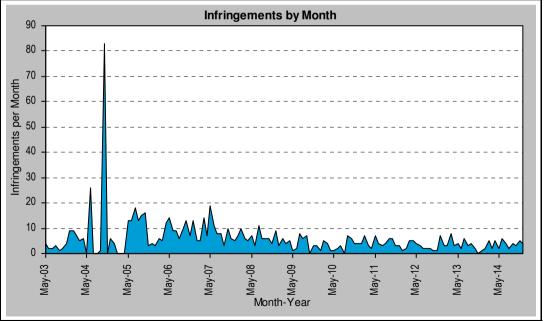
# **Casualties and Casualty Crashes**

	5 years before installation <sup>1</sup>		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	3	0	↓ 100%
Total Injuries	12	0	↓ 100%
Serious		0	
Moderate		0	
Minor/Other		0	
Uncategorised	12		
Casualty Crashes	6	0	↓ 100%
Casualty Cost:	\$22.94M	\$0	↓ 100%

<sup>&</sup>lt;sup>1</sup> Ending 3 December 2002, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 100% decrease in casualty crashes and a 100% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since the camera began operating. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

### North Narrabeen - Pittwater Road, between Garden Street and Namona Street

#### School zone: Narrabeen North Public School, Narrabeen Sports High

This location is 590m (patch to patch) in length, and is enforced by 2 cameras. Both cameras commenced operating on 28 January 2009.

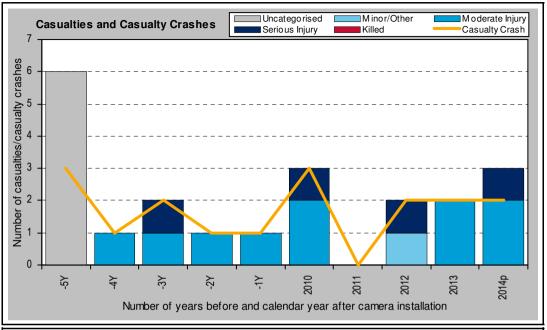
# **Casualties and Casualty Crashes**

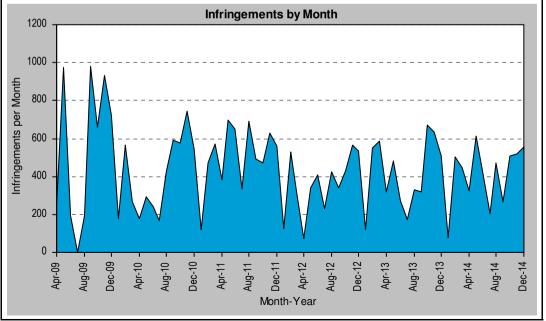
	5 years before installation <sup>1</sup>		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	0	0	-
Total Injuries	11	10	↓9%
Serious	1	3	
Moderate	4	6	
Minor/Other	0	1	
Uncategorised	6		
Casualty Crashes	8	9	↑ 13%
Casualty Cost:	\$1.36M	\$1.29M	↓ 5%

<sup>&</sup>lt;sup>1</sup> Ending 28 October 2008, 3 calendar months before installation.

### Status: Review

- When comparing the pre installation period to the most recent five year period, there has been a 13% increase in casualty crashes and a 9% decrease in casualties at this fixed speed camera location. The increase in casualty crashes is not statistically significant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since the camera began operating. Roadworks and camera maintenance may influence the number of infringements issued.
- This location has been identified for review due to the increase in casualty crashes at this location.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

# North Parramatta - Pennant Hills Road, between Castle Street and Bellevue Street

This location is 1000m in length, and is enforced with one camera.

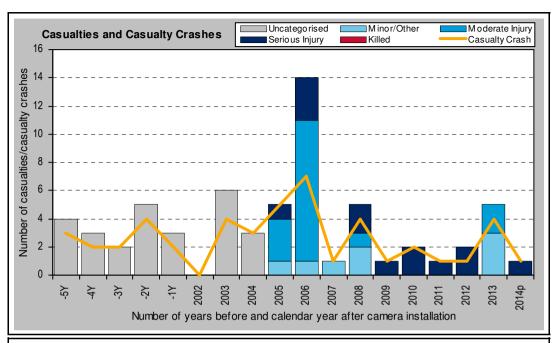
The camera commenced operating on 30 November 2001.

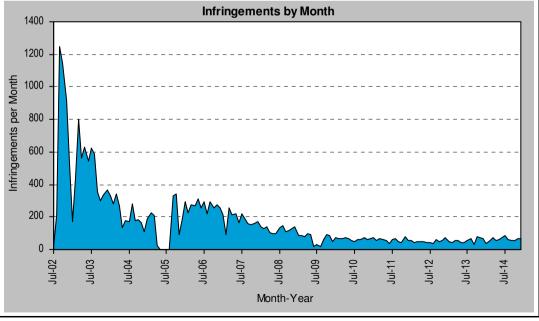
## **Casualties and Casualty Crashes**

	5 years before installation <sup>1</sup>		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	0	0	-
Total Injuries	17	11	↓ 35%
Serious		6	
Moderate		2	
Minor/Other		3	
Uncategorised	17		
Casualty Crashes	13	9	↓ 31%
Casualty Cost:	\$2.36M	\$2.05M	↓ 13%

<sup>&</sup>lt;sup>1</sup> Ending 30 August 2001, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 31% decrease in casualty crashes and a 35% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since July 2002. Infringement data before this date is not available. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

# North Parramatta / Oatlands - Pennant Hills Road, between Masons Drive and Suttor Avenue

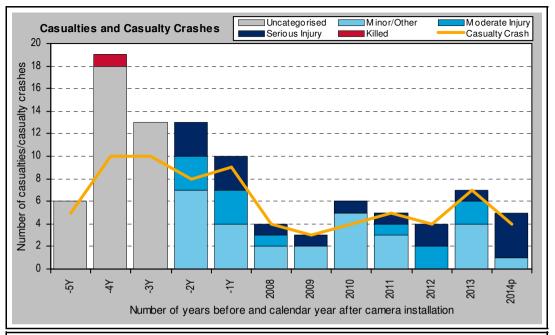
School zone: Burnside Public School, The Kings School, Redeemer Baptist School, Garfield Barwick School, American International School, Cumberland High School

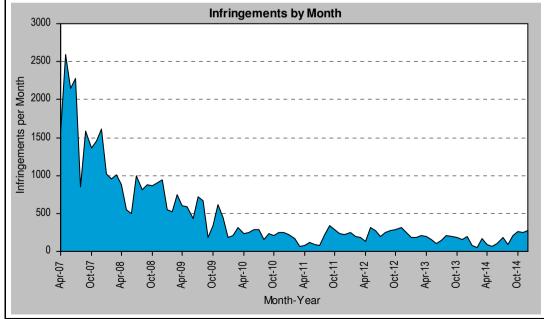
This location is 2770m (patch to patch) in length, and is enforced by 2 cameras. Both cameras commenced operating on 10 April 2007.

#### **Casualties and Casualty Crashes**

	5 years before installation¹		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	1	0	↓ 100%
Total Injuries	60	27	↓ 55%
Serious	6	9	
Moderate	6	5	
Minor/Other	11	13	
Uncategorised	37		
Casualty Crashes	42	24	↓ 43%
Casualty Cost:	\$14.99M	\$3.70M	↓ 75%

<sup>&</sup>lt;sup>1</sup> Ending 10 January 2007, 3 calendar months before installation.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

<sup>•</sup> When comparing the pre installation period to the most recent five year period, there has been a 43% decrease in casualty crashes and a 56% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.

<sup>•</sup> The infringement graph details the trend in infringements at this location since the camera began operating. Roadworks and camera maintenance may influence the number of infringements issued.

# North Wollongong - Princes Highway, between Ajax Avenue and Exeter Avenue

This location is 1000m in length, and is enforced with one camera.

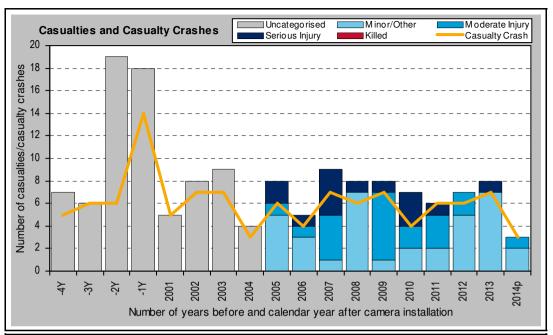
The camera commenced operating on 13 June 2000.

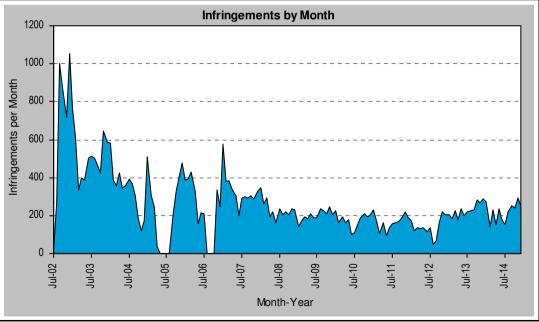
# **Casualties and Casualty Crashes**

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	4 years before installation <sup>1</sup>		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	0	0	-
Total Injuries	50	31	↓ 50%
Serious		5	
Moderate		8	
Minor/Other		18	
Uncategorised	50		
Casualty Crashes	31	26	↓ 33%
Casualty Cost:	\$6.94M	\$3.02M	↓ 65%

<sup>&</sup>lt;sup>1</sup> Ending 13 March 2000, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 33% decrease in casualty crashes and a 50% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since July 2002. Infringement data before this date is not available. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

## Old Guildford - Woodville Road, between Orchardleigh Street and Middleton Road

#### School zone: Old Guildford Public School

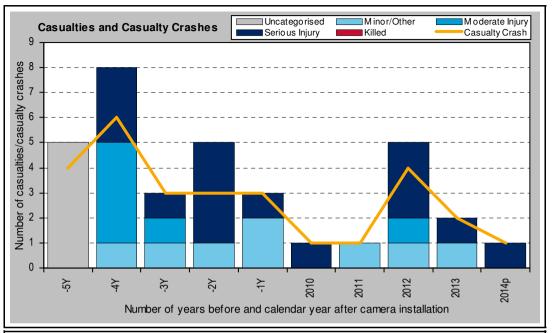
This location is 370m in length, and is enforced by 2 cameras. Both cameras commenced operating on 30 January 2009.

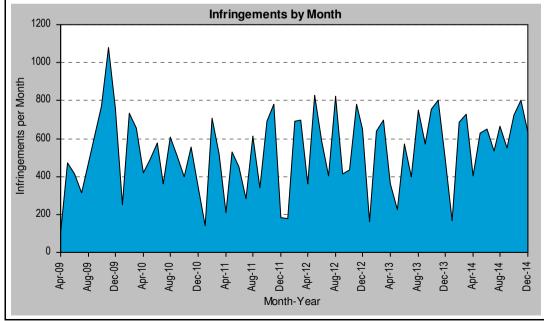
#### **Casualties and Casualty Crashes**

	5 years before installation <sup>1</sup>	Calendar years 2010 - 2014 Percentage	
		Count	Change <sup>2</sup>
Fatalities	0	0	-
Total Injuries	24	11	↓ 54%
Serious	9	6	
Moderate	5	2	
Minor/Other	5	3	
Uncategorised	5		
Casualty Crashes	19	10	↓ 47%
Casualty Cost:	\$3.92M	\$2.05M	↓ 48%

<sup>&</sup>lt;sup>1</sup> Ending 30 October 2008, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 47% decrease in casualty crashes and a 54% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since the camera began operating. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

## Ourimbah - Pacific Highway, between Yates Road and Dog Trap Road

#### School zone: Ourimbah Primary School

This location is 360m (patch to patch) in length, and is enforced by 2 cameras.

The cameras commenced operating on:

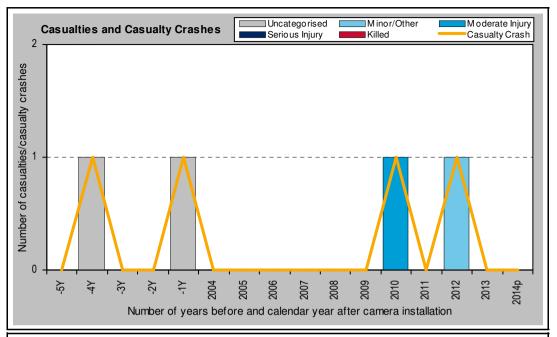
- Camera 1 (northbound) 15 July 2003
- Camera 2 (southbound) 18 February 2008

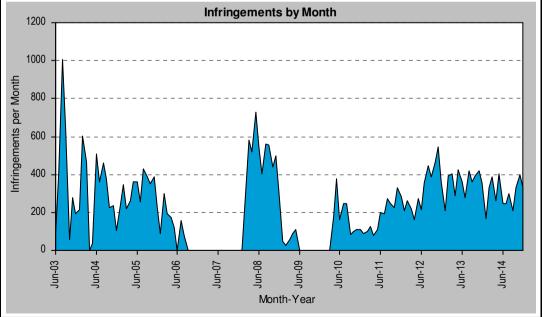
## **Casualties and Casualty Crashes**

	5 years before installation¹		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	0	0	-
Total Injuries	2	2	0%
Serious		0	
Moderate		1	
Minor/Other		1	
Uncategorised	2		
Casualty Crashes	2	2	0%
Casualty Cost:	\$0.28M	\$0.12M	↓ 57%

<sup>&</sup>lt;sup>1</sup> Ending 15 April 2003, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been no change in casualty crashes and no change in casualties at this fixed speed camera location. The change in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since the camera began operating. The spike in infringements from February 2008 can be attributed to the installation of a second camera at this location, enforcing southbound traffic. The extended period of camera downtime in 2009 and 2010 was due to significant road upgrades. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

## Ourimbah - M1 Pacific Motorway, between Dogtrap Road Overpass and Ourimbah Creek Road

This location is 1000m in length, and is enforced with one camera.

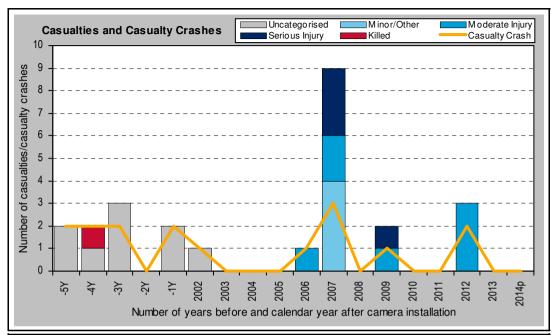
The camera commenced operating on 6 December 2001.

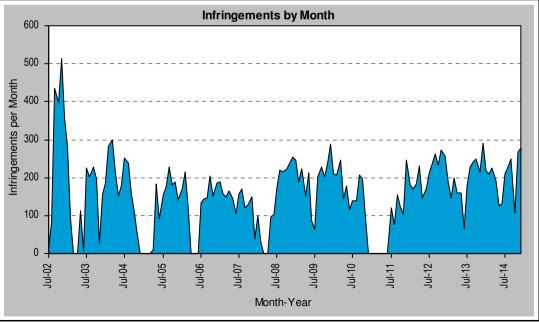
#### **Casualties and Casualty Crashes**

	5 years before installation <sup>1</sup>		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	1	0	↓ 100%
Total Injuries	8	3	↓ 63%
Serious		0	
Moderate		3	
Minor/Other		0	
Uncategorised	8		
Casualty Crashes	8	2	↓ 75%
Casualty Cost:	\$8.20M	\$0.18M	↓ 98%

<sup>&</sup>lt;sup>1</sup> Ending 6 September 2001, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 75% decrease in casualty crashes and a 67% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since July 2002. Infringement data before this date is not available. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

## Padstow - Gibson Avenue, between Turvey Street and Bryant Street, Padstow

This location is 1000m in length, and is enforced with one camera.

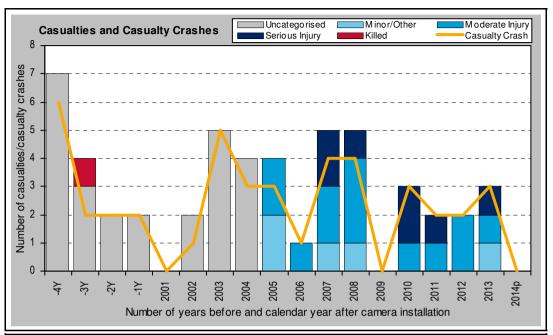
The camera commenced operating on 3 July 2000.

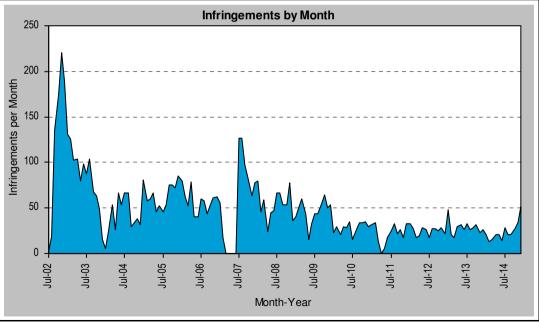
## **Casualties and Casualty Crashes**

	4 years before installation <sup>1</sup>		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	1	0	↓ 100%
Total Injuries	14	10	↓ 43%
Serious		4	
Moderate		5	
Minor/Other		1	
Uncategorised	14		
Casualty Crashes	12	10	↓ 33%
Casualty Cost:	\$9.03M	\$1.53M	↓ 86%

<sup>&</sup>lt;sup>1</sup> Ending 3 April 2000, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 33% decrease in casualty crashes and a 47% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since July 2002. Infringement data before this date is not available. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

## Peakhurst - Henry Lawson Drive, between Belmont Road and Ogilvy Street

This location is 1000m in length, and is enforced with one camera.

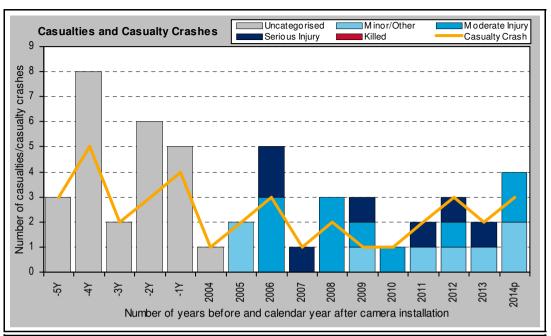
The camera commenced operating on 29 January 2003.

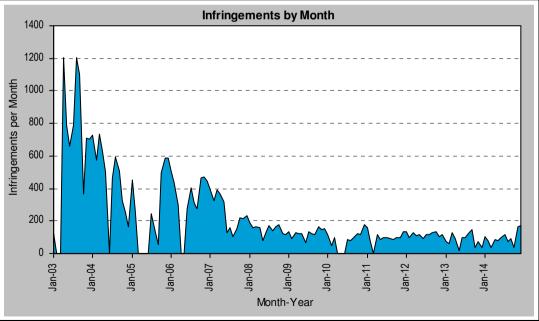
## **Casualties and Casualty Crashes**

	5 years before installation <sup>1</sup>		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	0	0	-
Total Injuries	24	12	↓ 50%
Serious		3	
Moderate		4	
Minor/Other		5	
Uncategorised	24		
Casualty Crashes	17	11	↓ 35%
Casualty Cost:	\$3.33M	\$1.41M	↓ 58%

<sup>&</sup>lt;sup>1</sup> Ending 29 October 2002, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 35% decrease in casualty crashes and a 50% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since the camera began operating. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

## Penshurst - Forest Road, between Penshurst Street and St Georges Street

School zone: Penshurst Girls Campus - Georges River College, Penshurst Public School, St Declan's Primary School

This location is 620m (patch to patch) in length, and is enforced with one camera.

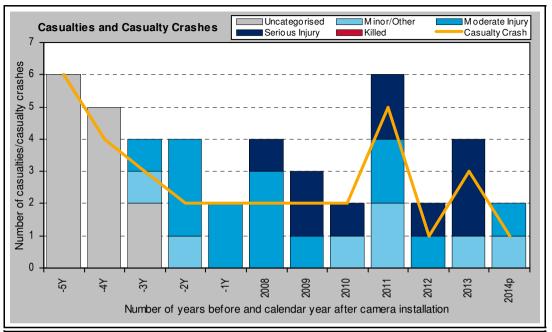
The camera commenced operating on 17 October 2007.

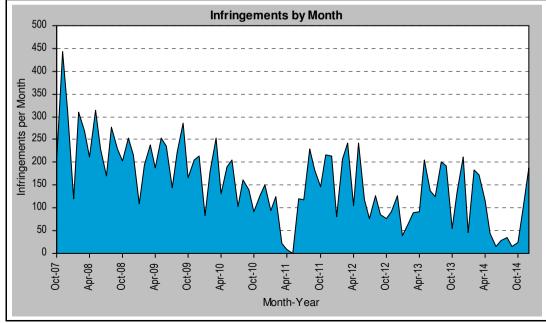
## **Casualties and Casualty Crashes**

	5 years before installation¹		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	0	0	-
Total Injuries	21	16	↓ 24%
Serious	0	7	
Moderate	6	4	
Minor/Other	2	5	
Uncategorised	13		
Casualty Crashes	17	12	↓ 29%
Casualty Cost:	\$2.28M	\$2.58M	↑ 13%

<sup>&</sup>lt;sup>1</sup> Ending 17 July 2007, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 29% decrease in casualty crashes and a 24% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since the camera began operating. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

## Picnic Point - Henry Lawson Drive, between Carinya Road and The River Road

This location is 1000m in length, and is enforced with one camera.

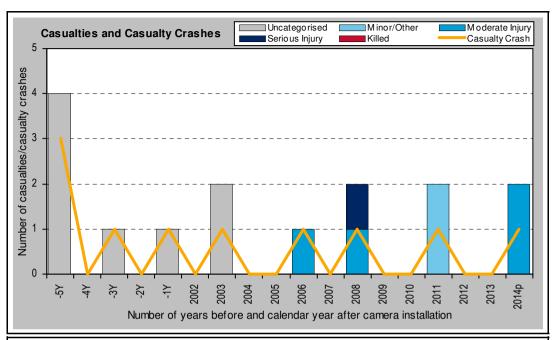
The camera commenced operating on 16 May 2001.

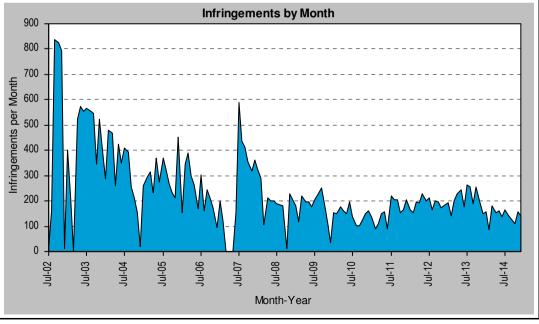
## **Casualties and Casualty Crashes**

	5 years before installation <sup>1</sup>		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	0	0	-
Total Injuries	6	4	↓ 33%
Serious		0	
Moderate		2	
Minor/Other		2	
Uncategorised	6		
Casualty Crashes	5	2	↓ 60%
Casualty Cost:	\$0.83M	\$0.24M	↓ 71%

<sup>&</sup>lt;sup>1</sup> Ending 16 February 2001, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 60% decrease in casualty crashes and a 33% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since July 2002. Infringement data before this date is not available. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

## Queanbeyan - Lanyon Drive, between Tompsitt Drive and Hoover Road

This location is 1000m in length, and is enforced with one camera. The camera commenced operating on 2 May 2003.

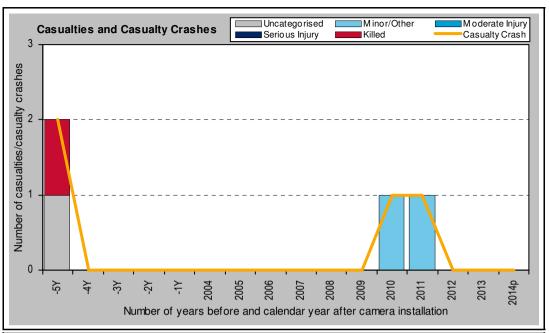
## **Casualties and Casualty Crashes**

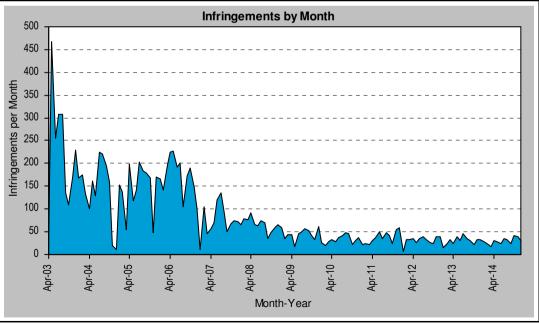
	5 years before installation <sup>1</sup>		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	1	0	↓ 100%
Total Injuries	1	2	↑ 100%
Serious		0	
Moderate		0	
Minor/Other		2	
Uncategorised	1		
Casualty Crashes	2	2	0%
Casualty Cost:	\$7.23M	\$0.12M	↓ 98%

<sup>&</sup>lt;sup>1</sup> Ending 2 February 2003, 3 calendar months before installation.

#### Status: Review

- When comparing the pre installation period to the most recent five year period, there has been no change in casualty crashes and no change in casualties at this fixed speed camera location. The change in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since the camera began operating. Roadworks and camera maintenance may influence the number of infringements issued.
- This location has been identified for review. It has been identified that there is a low road safety risk at this location based on the casualty crash data and there is a low level of speeding infringements.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

## Randwick - Avoca Street, between Howard Street and Barker Road

#### School zone: Randwick Boys High School, Randwick Girls High School

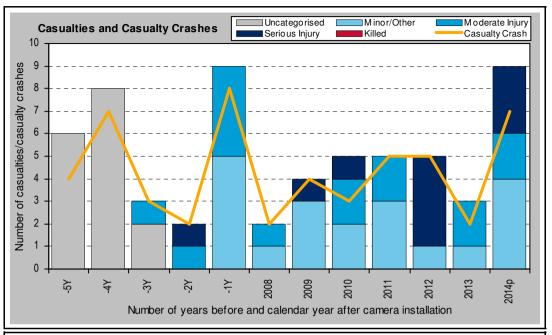
This location is 560m (patch to patch) in length, and is enforced with one camera. The camera commenced operating on 29 June 2007.

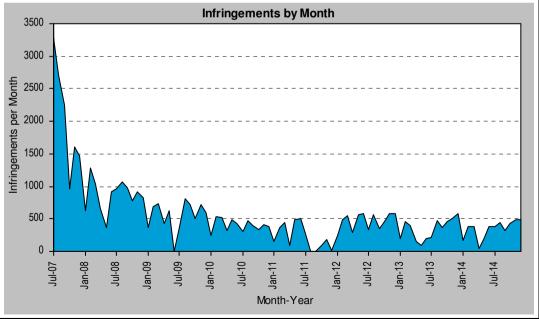
#### **Casualties and Casualty Crashes**

	5 years before installation¹		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	0	0	-
Total Injuries	28	27	↓ 4%
Serious	1	8	
Moderate	6	8	
Minor/Other	5	11	
Uncategorised	16		
Casualty Crashes	24	22	↓8%
Casualty Cost:	\$3.17M	\$3.47M	↑ 10%

<sup>&</sup>lt;sup>1</sup> Ending 29 March 2007, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been an 8% decrease in casualty crashes and a 4% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since the camera began operating. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

## Rankin Park - McCaffrey Drive, between Duval Street and Orara Street

This location is 1000m in length, and is enforced with one camera. The camera commenced operating on 29 April 2003.

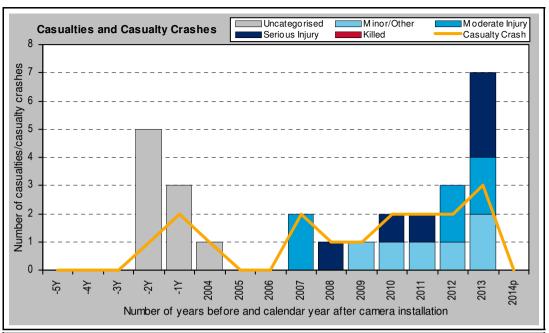
## **Casualties and Casualty Crashes**

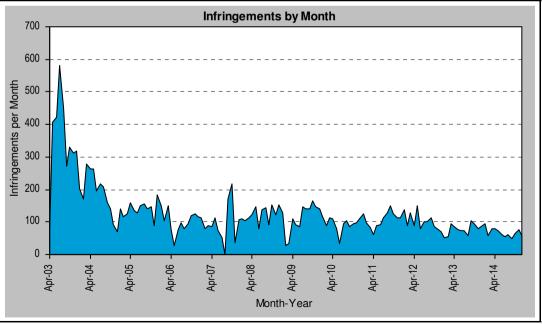
	5 years before installation <sup>1</sup>		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	0	0	-
Total Injuries	8	14	↑ 75%
Serious		5	
Moderate		4	
Minor/Other		5	
Uncategorised	8		
Casualty Crashes	3	9	↑ 200%
Casualty Cost:	\$1.11M	\$2.00M	↑ 80%

<sup>&</sup>lt;sup>1</sup> Ending 29 January 2003, 3 calendar months before installation.

#### Status: Retained based on 2013 comprehensive review

- When comparing the pre installation period to the most recent five year period, there has been a 200% increase in casualty crashes and a 75% increase in casualties at this fixed speed camera location. The increase in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since the camera began operating. Roadworks and camera maintenance may influence the number of infringements issued.
- This location was reviewed in 2013 due to concerns about the increase in casualties in recent years. It was recommended retaining the speed camera at this location following the comprehensive review.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

## Rosebery/Alexandria - Botany Road, between Gardeners Road and Gillespie Street

#### School zone: Gardeners Road Public School

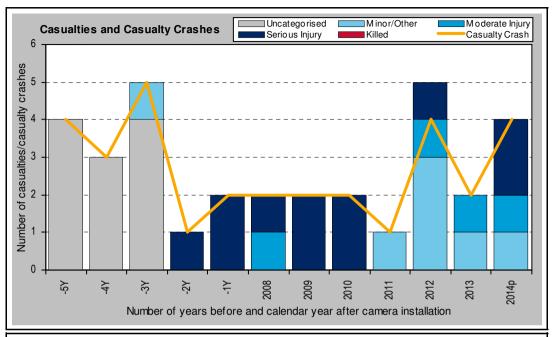
This location is 360m (patch to patch) in length, and is enforced by 2 cameras. Both cameras commenced operating on 13 June 2007.

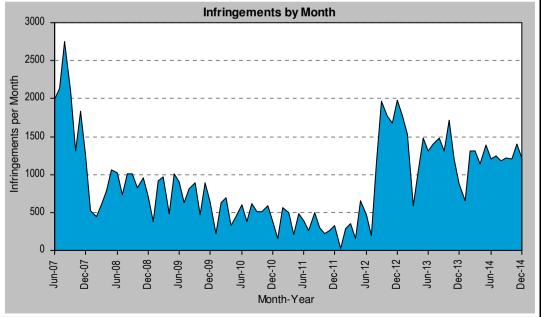
#### **Casualties and Casualty Crashes**

	5 years before installation <sup>1</sup>	Calendar years 2010 - 2014 Count Percentage	
		Count	Change <sup>2</sup>
Fatalities	0	0	-
Total Injuries	15	14	↓7%
Serious	3	5	
Moderate	0	3	
Minor/Other	1	6	
Uncategorised	11		
Casualty Crashes	15	13	↓ 13%
Casualty Cost:	\$2.46M	\$2.00M	↓ 19%

<sup>&</sup>lt;sup>1</sup> Ending 13 March 2007, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 13% decrease in casualty crashes and a 7% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since the camera began operating. The spike in infringements after July 2012 can be attributed to a change in speed limit from 60km/h to 50km/h. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

#### Rydalmere - Victoria Road, between Park Road and John Road

#### School zone: Rydalmere Public School

This location is 440m (patch to patch) in length, and is enforced by 2 cameras. Both cameras commenced operating on 28 January 2009.

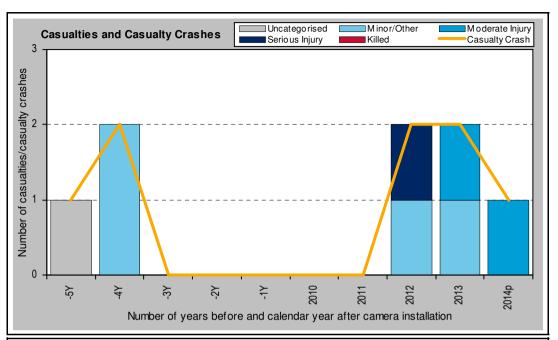
#### **Casualties and Casualty Crashes**

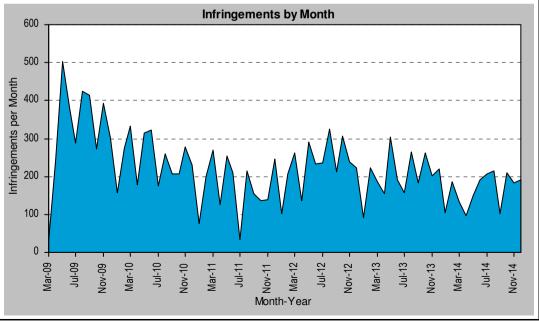
	5 years before installation <sup>1</sup>	Calendar years 2010 - 2014 Percentage	
		Count	Change <sup>2</sup>
Fatalities	0	0	-
Total Injuries	3	5	↑ 67%
Serious	0	1	
Moderate	0	2	
Minor/Other	2	2	
Uncategorised	1		
Casualty Crashes	3	5	↑ 67%
Casualty Cost:	\$0.26M	\$0.53M	↑ 106%

<sup>&</sup>lt;sup>1</sup> Ending 28 October 2008, 3 calendar months before installation.

#### Status: Review

- When comparing the pre installation period to the most recent five year period, there has been a 67% increase in casualty crashes and a 67% increase in casualties at this fixed speed camera location. The increase in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since the camera began operating. Roadworks and camera maintenance may influence the number of infringements issued.
- This location has been identified for review due to the increase in casualties and casualty crashes at this location. It should be noted that there were a large number of non-casualty crashes in the five year before installation period, which are now excluded from the analysis. This indicates that while there are a low number of casualties at this location, there is an identified crash risk, which will be considered in the review of the speed cameras at this location.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

## Ryde - Victoria Road, between Margaret Street and Cressy Road

#### School zone: Holy Cross College Ryde, St Charles School Ryde

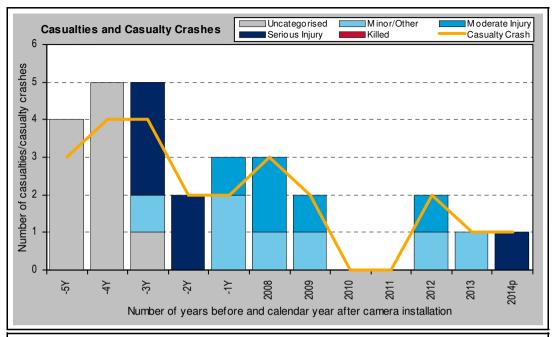
This location is 570m (patch to patch) in length, and is enforced by 2 cameras. Both cameras commenced operating on 14 November 2007.

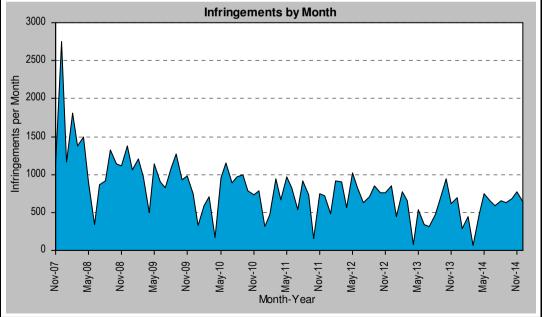
#### **Casualties and Casualty Crashes**

	5 years before installation <sup>1</sup>		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	0	0	-
Total Injuries	19	4	↓ 79%
Serious	5	1	
Moderate	1	1	
Minor/Other	3	2	
Uncategorised	10		
Casualty Crashes	15	4	↓ 73%
Casualty Cost:	\$3.09M	\$0.47M	↓ 85%

<sup>&</sup>lt;sup>1</sup> Ending 14 August 2007, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 73% decrease in casualty crashes and a 79% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since the camera began operating. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

## Ryde - Blaxland Road, between Reservoir Lane and North Road

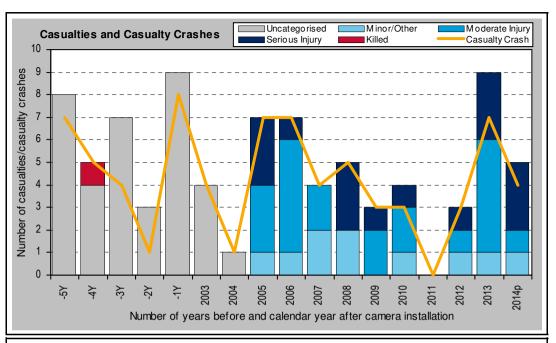
This location is 1000m in length, and is enforced with one camera. The camera commenced operating on 24 June 2002.

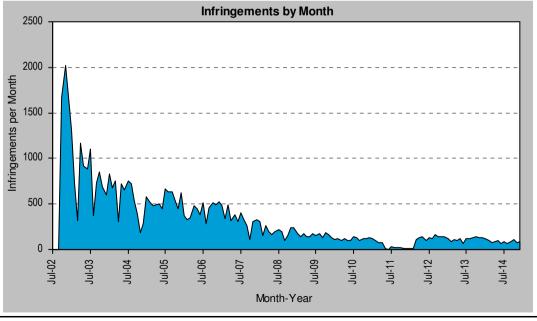
## **Casualties and Casualty Crashes**

	5 years before installation <sup>1</sup>		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	1	0	↓ 100%
Total Injuries	31	21	↓ 32%
Serious		8	
Moderate		9	
Minor/Other		4	
Uncategorised	31		
Casualty Crashes	25	17	↓ 32%
Casualty Cost:	\$11.39M	\$3.11M	↓ 73%

<sup>&</sup>lt;sup>1</sup> Ending 24 March 2002, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 32% decrease in casualty crashes and a 34% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since the camera began operating. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

## South Windsor - George Street, between Rickaby Street and Yarrawonga Street

This location is 1000m in length, and is enforced with one camera.

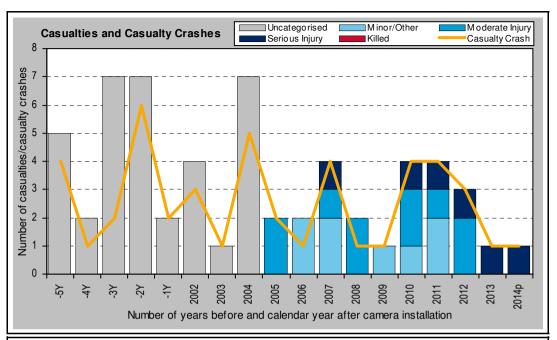
The camera commenced operating on 30 November 2001.

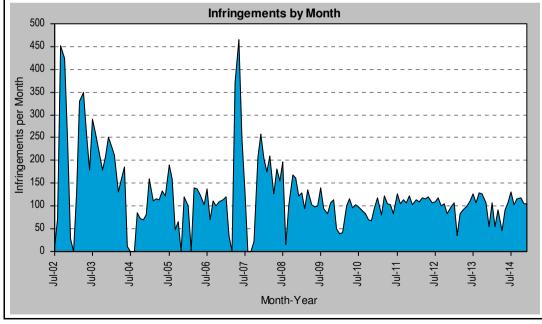
## **Casualties and Casualty Crashes**

	5 years before installation <sup>1</sup>		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	0	0	-
Total Injuries	23	13	↓ 43%
Serious		5	
Moderate		5	
Minor/Other		3	
Uncategorised	23		
Casualty Crashes	15	13	↓ 13%
Casualty Cost:	\$3.19M	\$1.94M	↓ 39%

<sup>&</sup>lt;sup>1</sup> Ending 30 August 2001, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 13% decrease in casualty crashes and a 43% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since July 2002. Infringement data before this date is not available. The spike in infringements in April 2007 may be attributed to the camera commencing speed enforcement of both directions of traffic where it previously enforced one direction only. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

## Strathfield - The Boulevarde, between Torrington Parade and Russell Street

School zone: Trinity Grammar Preparatory School, Santa Sabina College, Santa Maria Del Monte, Meridan Senior and Junior

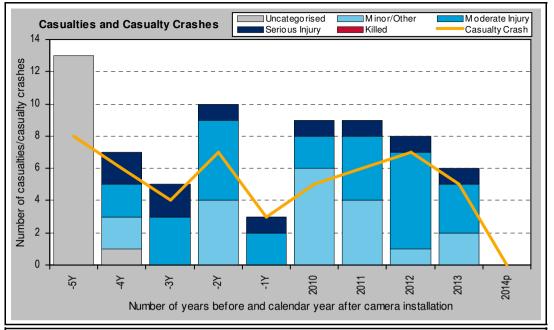
This location is 1010m (patch to patch) in length, and is enforced with one camera. The camera commenced operating on 4 February 2009.

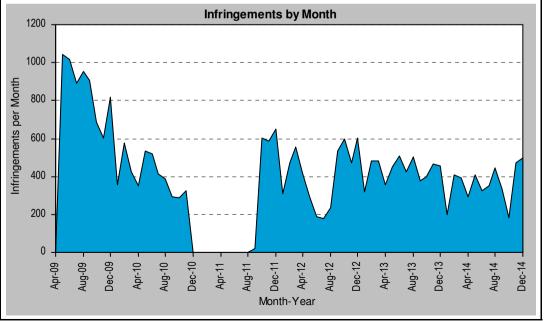
## **Casualties and Casualty Crashes**

	5 years before installation <sup>1</sup>		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	0	0	-
Total Injuries	38	32	↓ 16%
Serious	6	4	
Moderate	12	15	
Minor/Other	6	13	
Uncategorised	14		
Casualty Crashes	28	23	↓ 18%
Casualty Cost:	\$4.77M	\$2.84M	↓ 40%

<sup>&</sup>lt;sup>1</sup> Ending 4 November 2008, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been an 18% decrease in casualty crashes and a 16% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since the camera began operating. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

## Tenterfield - New England Highway, between Duncan Street and George Street

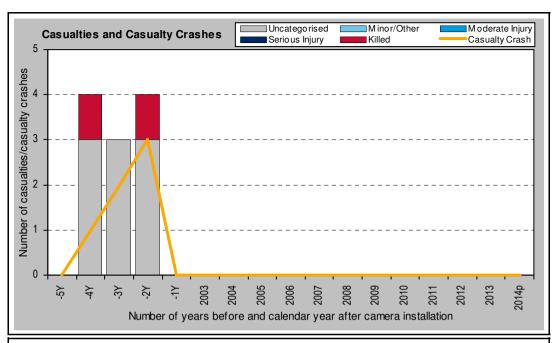
This location is 1000m in length, and is enforced by 2 cameras. Both cameras commenced operating on 3 October 2002.

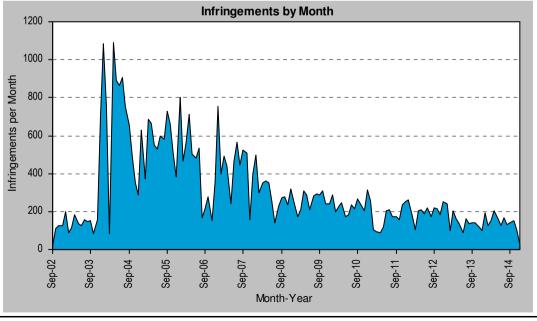
## **Casualties and Casualty Crashes**

	5 years before installation <sup>1</sup>		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	2	0	↓ 100%
Total Injuries	9	0	↓ 100%
Serious		0	
Moderate		0	
Minor/Other		0	
Uncategorised	9		
Casualty Crashes	6	0	↓ 100%
Casualty Cost:	\$15.43M	\$0	↓ 100%

<sup>&</sup>lt;sup>1</sup> Ending 3 July 2002, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 100% decrease in casualty crashes and a 100% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since the camera began operating. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

## Terrigal - Terrigal Drive, between Brunswick Road and Bellbird Avenue

This location is 585m in length, and is enforced with one camera. The camera commenced operating on 27 February 2003.

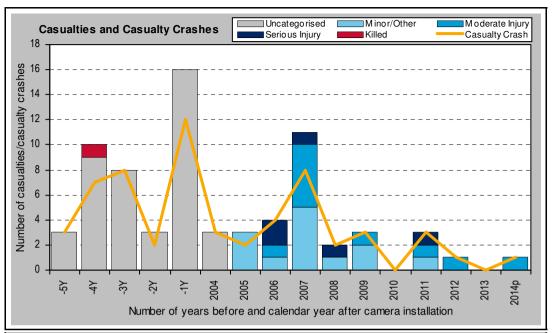
## **Casualties and Casualty Crashes**

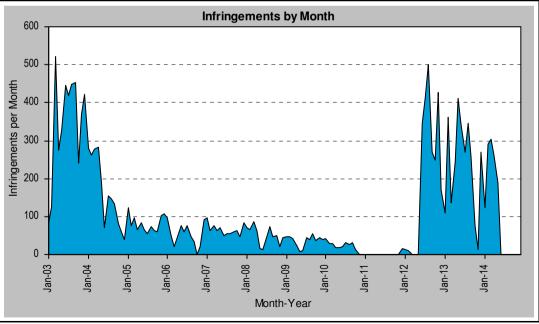
	5 years before installation <sup>1</sup>		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	1	0	↓ 100%
Total Injuries	39	5	↓ 87%
Serious		1	
Moderate		3	
Minor/Other		1	
Uncategorised	39		
Casualty Crashes	32	5	↓ 84%
Casualty Cost:	\$12.50M	\$0.53M	↓ 96%

<sup>&</sup>lt;sup>1</sup> Ending 27 November 2002, 3 calendar months before installation.

#### Status: Review following road works

- When comparing the pre installation period to the most recent five year period, there has been an 84% decrease in casualty crashes and an 88% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since the camera began operating. The extended period of camera downtime from December 2010 to June 2012 was due to road works. The subsequent spike in infringements in June 2012 may be attributed to a change in speed limit as the area became a school zone in March 2012. Roadworks and camera maintenance may influence the number of infringements issued.
- In 2014, major road safety and traffic works commenced at this location. The camera and accompanying signage has been removed for the works. The location will be monitored once works are complete and a final decision will be made about the need for ongoing enforcement.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

## Toongabbie - Fitzwilliam Road, between Reynolds Street and Binalong Road

#### School zone: Toongabbie Public School

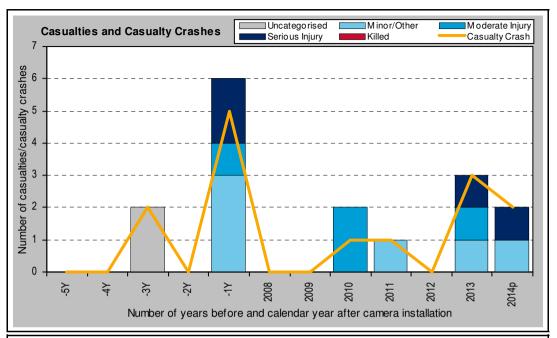
This location is 590m (patch to patch) in length, and is enforced by 2 cameras. Both cameras commenced operating on 16 May 2007.

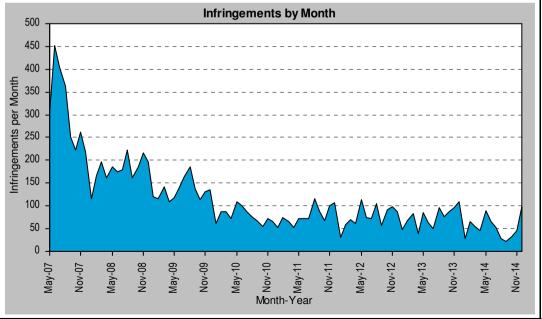
#### **Casualties and Casualty Crashes**

	5 years before installation <sup>1</sup>	Calendar years 2010 - 2014 Percentage Change <sup>2</sup>	
Fatalities	0	0	-
Total Injuries	8	8	0%
Serious	2	2	
Moderate	1	3	
Minor/Other	3	3	
Uncategorised	2		
Casualty Crashes	7	7	0%
Casualty Cost:	\$1.10M	\$0.94M	↓ 14%

<sup>&</sup>lt;sup>1</sup> Ending 16 February 2007, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been no change in casualty crashes and no change in casualties at this fixed speed camera location. The change in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since the camera began operating. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

## Valla Beach - Pacific Highway, between Valla Beach Road and Oyster Creek

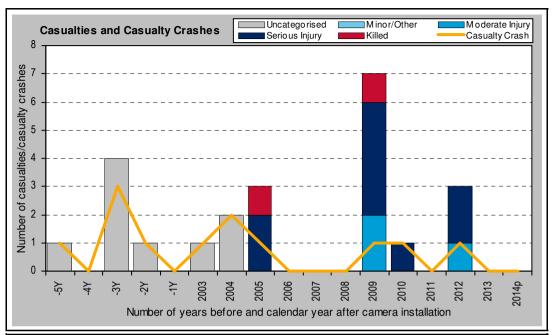
This location is 1000m in length, and is enforced by 2 cameras. Both cameras commenced operating on 5 February 2002.

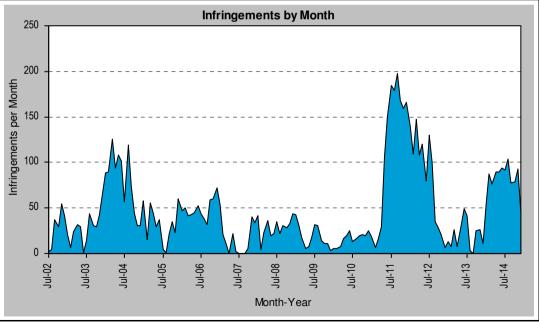
## **Casualties and Casualty Crashes**

	5 years before installation <sup>1</sup>		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	0	0	-
Total Injuries	6	4	↓ 33%
Serious		3	
Moderate		1	
Minor/Other		0	
Uncategorised	6		
Casualty Crashes	5	2	↓ 60%
Casualty Cost:	\$0.83M	\$0.94M	↑ 12%

<sup>&</sup>lt;sup>1</sup> Ending 5 November 2001, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 60% decrease in casualty crashes and a 33% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since July 2002. Infringement data before this date is not available. The spike in infringements from May 2011 can be attributed to the speed limit changing from 100km/h to 80km/h. The speed limit was changed due to the poor safety record of this section of the Pacific Highway. Following an adjustment period, the graph shows there has been a reduction in speeding from the end of 2012. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

## Valley Heights - Great Western Highway, between The Valley Road and Sun Valley Road

This location is 1000m in length, and is enforced with one camera.

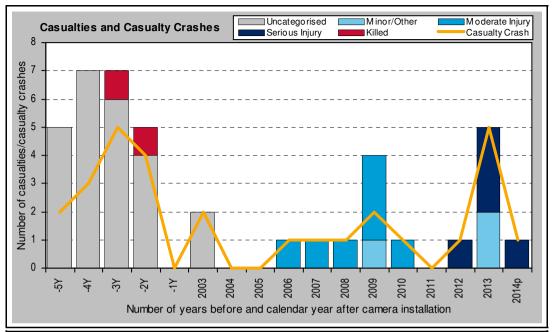
The camera commenced operating on 29 April 2002.

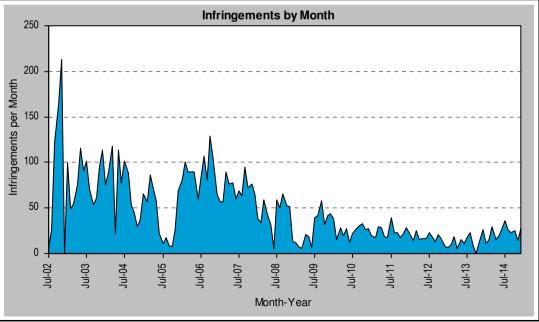
## **Casualties and Casualty Crashes**

Casaunics and Gasaun		Calend	ar years
	5 years before installation <sup>1</sup>		- 2014
	installation	Count	Percentage Change <sup>2</sup>
Fatalities	2	0	↓ 100%
Total Injuries	22	8	↓ 64%
Serious		5	
Moderate		1	
Minor/Other		2	
Uncategorised	22		
Casualty Crashes	14	8	↓ 43%
Casualty Cost:	\$17.23M	\$1.64M	↓ 90%

<sup>&</sup>lt;sup>1</sup> Ending 29 January 2002, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 43% decrease in casualty crashes and a 67% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since July 2002. Infringement data before this date is not available. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

## Wahroonga - Pacific Highway, between Gilda Avenue and Woodville Avenue

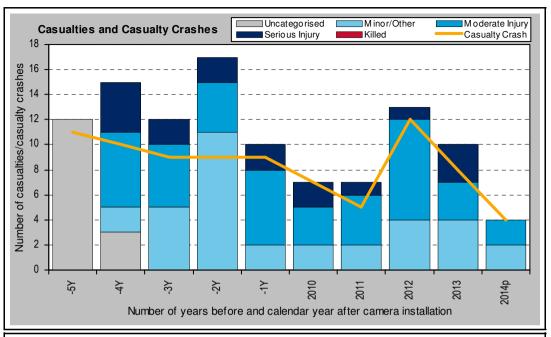
School zone: Warrawee Public School, Knox Grammar, Abbotsleigh Senior Campus This location is 1960m (patch to patch) in length, and is enforced by 2 cameras. Both cameras commenced operating on 28 January 2009.

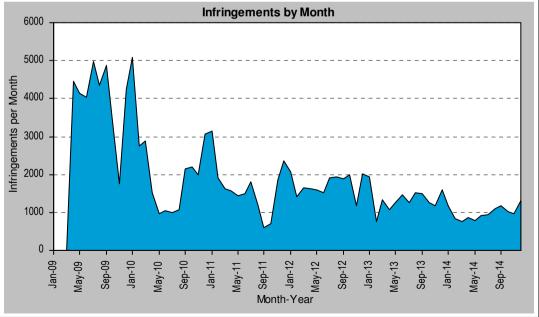
## **Casualties and Casualty Crashes**

	5 years before installation <sup>1</sup>		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	0	0	-
Total Injuries	66	41	↓ 38%
Serious	10	7	
Moderate	21	20	
Minor/Other	20	14	
Uncategorised	15		
Casualty Crashes	48	36	↓ 25%
Casualty Cost:	\$7.45M	\$4.08M	↓ 45%

<sup>&</sup>lt;sup>1</sup> Ending 28 October 2008, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 25% decrease in casualty crashes and a 38% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since the camera began operating. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

## Wardell - Pacific Highway, between Riverside Drive and Carlisle Street

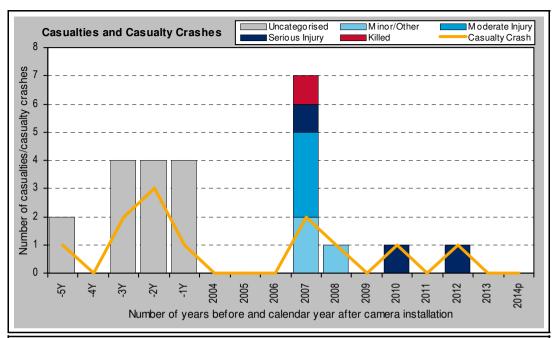
This location is 1000m in length, and is enforced with one camera. The camera commenced operating on 24 February 2003.

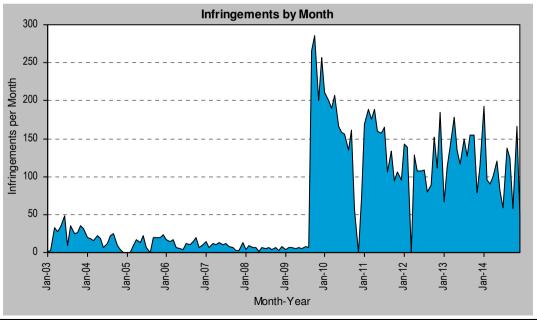
## **Casualties and Casualty Crashes**

	5 years before installation <sup>1</sup>		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	0	0	-
Total Injuries	14	2	↓ 86%
Serious		2	
Moderate		0	
Minor/Other		0	
Uncategorised	14		
Casualty Crashes	7	2	↓ 71%
Casualty Cost:	\$1.94M	\$0.58M	↓ 70%

<sup>&</sup>lt;sup>1</sup> Ending 24 November 2002, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 71% decrease in casualty crashes and an 86% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since the camera began operating. The spike in infringements in September 2009 can be attributed to the speed limit changing from 100km/h to 80km/h. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

## Warrawong - Northcliffe Drive, between Griffin Street and Kully Street

This location is 1000m in length, and is enforced with one camera.

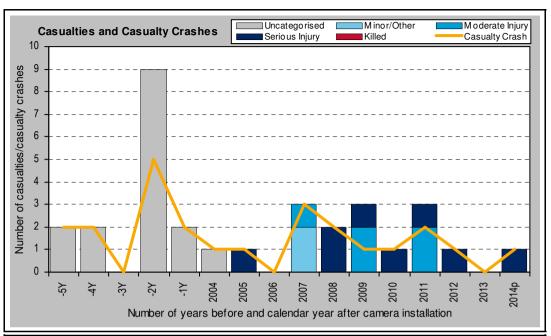
The camera commenced operating on 1 May 2003.

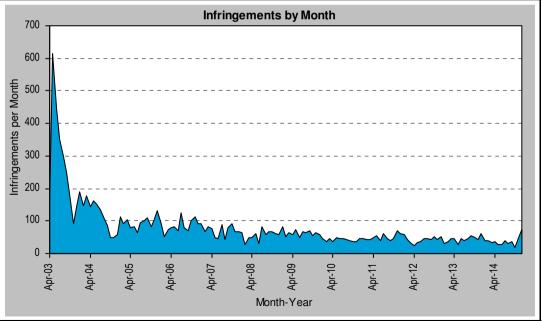
## **Casualties and Casualty Crashes**

	5 years before installation <sup>1</sup>		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	0	0	-
Total Injuries	15	6	↓ 60%
Serious		4	
Moderate		2	
Minor/Other		0	
Uncategorised	15		
Casualty Crashes	11	5	↓ 55%
Casualty Cost:	\$2.08M	\$1.29M	↓ 38%

<sup>&</sup>lt;sup>1</sup> Ending 1 February 2003, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 55% decrease in casualty crashes and a 60% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since the camera began operating. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

## West Pennant Hills - Castle Hill Road, between Pennant Hills Road and Coonara Avenue

This location is 1000m in length, and is enforced with one camera.

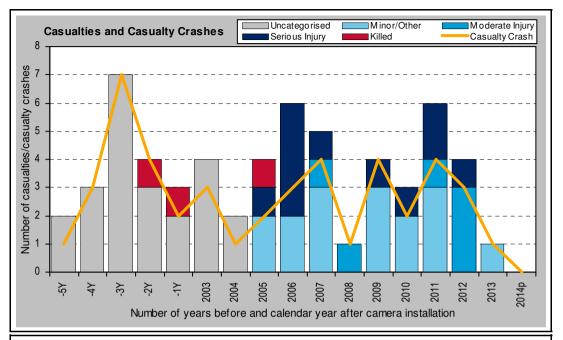
The camera commenced operating on 18 July 2002.

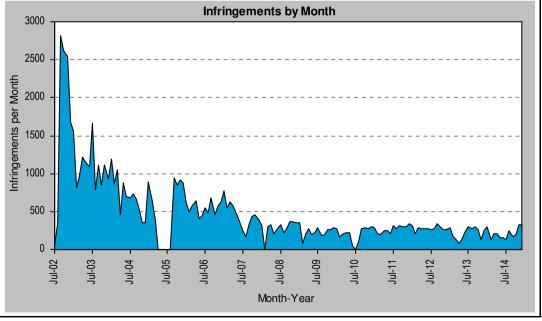
## **Casualties and Casualty Crashes**

	5 years before installation¹		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	2	0	↓ 100%
Total Injuries	17	14	↓ 18%
Serious		4	
Moderate		4	
Minor/Other		6	
Uncategorised	17		
Casualty Crashes	17	10	↓ 41%
Casualty Cost:	\$16.54M	\$1.77M	↓ 89%

<sup>&</sup>lt;sup>1</sup> Ending 18 April 2002, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 41% decrease in casualty crashes and a 26% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since the camera began operating. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

## Wollongbar - Bruxner Highway, between Convernys Lane and McLeans Ridges Road

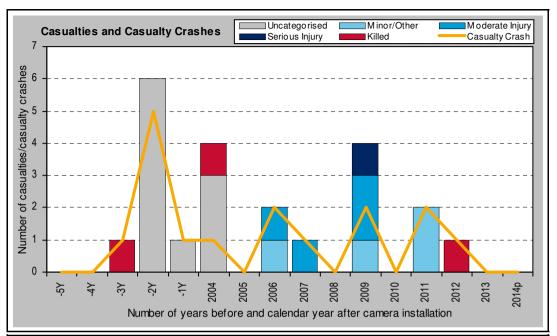
This location is 1000m in length, and is enforced with one camera. The camera commenced operating on 24 February 2003.

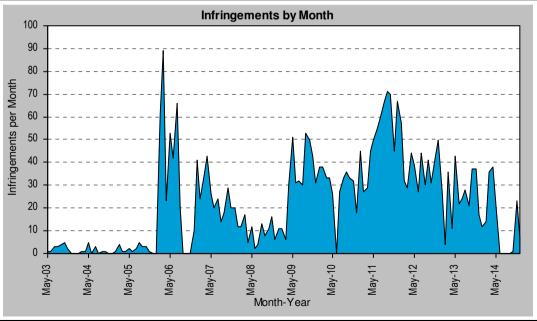
## **Casualties and Casualty Crashes**

	5 years before installation <sup>1</sup>		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	1	1	0%
Total Injuries	7	2	↓ 71%
Serious		0	
Moderate		0	
Minor/Other		2	
Uncategorised	7		
Casualty Crashes	7	3	↓ 57%
Casualty Cost:	\$8.06M	\$7.21M	↓ 11%

<sup>&</sup>lt;sup>1</sup> Ending 24 November 2002, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 57% decrease in casualty crashes and a 63% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since the camera began operating. The spike in infringements in February 2006 can be attributed to the speed limit changing from 100km/h to 80km/h. The spike in infringements in April 2009 can be attributed to when the camera switched to bi-directional enforcement where it previously enforced in one direction. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

## Wollongong - Princes Highway, between Mount Keira Road and Highway Avenue

School zone: Illawarra Grammar School, Wollongong West Public School, St Theresa Primary School

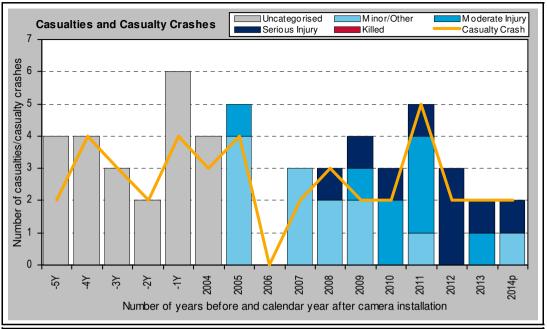
This location is 620m (patch to patch) in length, and is enforced with one camera.

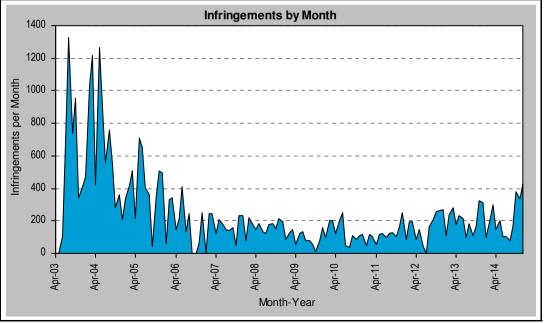
The camera commenced operating on 15 July 2003.

#### **Casualties and Casualty Crashes**

	5 years before installation¹		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	0	0	-
Total Injuries	19	15	↓ 21%
Serious		7	
Moderate		6	
Minor/Other		2	
Uncategorised	19		
Casualty Crashes	15	13	↓ 13%
Casualty Cost:	\$2.64M	\$2.52M	↓ 4%

<sup>&</sup>lt;sup>1</sup> Ending 15 April 2003, 3 calendar months before installation.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

<sup>•</sup> When comparing the pre installation period to the most recent five year period, there has been a 13% decrease in casualty crashes and a 21% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is not statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.

<sup>•</sup> The infringement graph details the trend in infringements at this location since the camera began operating. Roadworks and camera maintenance may influence the number of infringements issued.

## Woodburn - Pacific Highway, between Wagner Street and Norman Street

This location is 1000m in length, and is enforced with one camera.

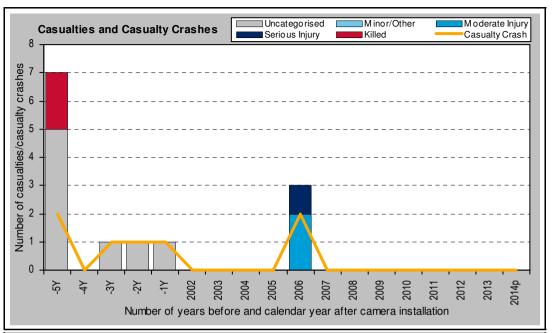
The camera commenced operating on 20 March 2001.

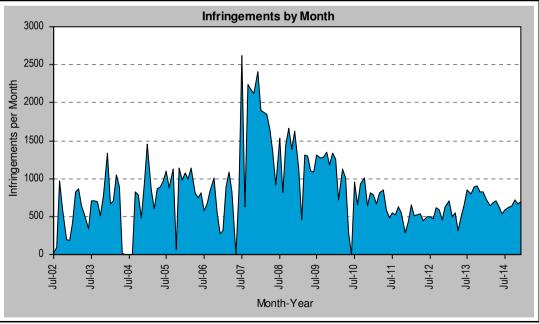
## **Casualties and Casualty Crashes**

	5 years before installation <sup>1</sup>		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	2	0	↓ 100%
Total Injuries	8	0	↓ 100%
Serious		0	
Moderate		0	
Minor/Other		0	
Uncategorised	8		
Casualty Crashes	5	0	↓ 100%
Casualty Cost:	\$15.29M	\$0	↓ 100%

<sup>&</sup>lt;sup>1</sup> Ending 20 December 2000, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 100% decrease in casualty crashes and a 100% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since July 2002. Infringement data before this date is not available. The spike in infringements in June 2007 may be attributed to the speed limit changing from 60km/h to 50km/h. Following this spike, infringements again reduced and have remained at a consistent level at this location. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

## Wyoming - Henry Parry Drive, between Glennie Street and Dwyer Street

## School zone: Our Lady of the Rosary Primary School

This location is 230m (patch to patch) in length, and is enforced with one camera.

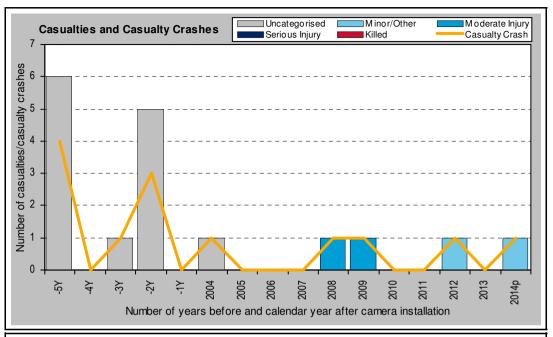
The camera commenced operating on 15 July 2003.

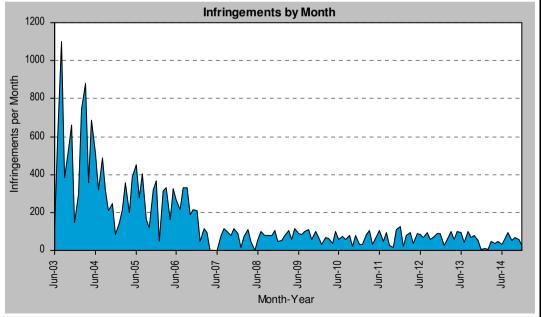
#### **Casualties and Casualty Crashes**

	5 years before installation <sup>1</sup>	2010	ar years - 2014 Percentage
		Count	Change <sup>2</sup>
Fatalities	0	0	-
Total Injuries	12	2	↓ 83%
Serious		0	
Moderate		0	
Minor/Other		2	
Uncategorised	12		
Casualty Crashes	8	2	↓ 75%
Casualty Cost:	\$1.66M	\$0.12M	↓ 93%

<sup>&</sup>lt;sup>1</sup> Ending 15 April 2003, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 75% decrease in casualty crashes and an 83% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is not statistically significant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since the camera began operating. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

## Yagoona - Hume Highway, between Smith Street and Brennan Avenue

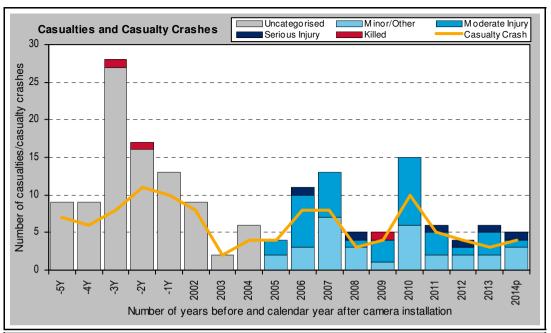
This location is 1000m in length, and is enforced with one camera. The camera commenced operating on 7 December 2001.

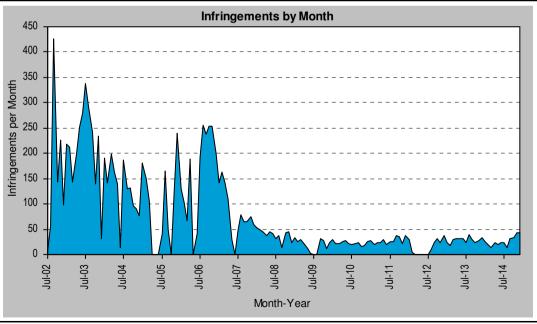
## **Casualties and Casualty Crashes**

	5 years before installation <sup>1</sup>		ar years - 2014 Percentage Change <sup>2</sup>
Fatalities	2	0	↓ 100%
Total Injuries	74	36	↓ 51%
Serious		4	
Moderate		17	
Minor/Other		15	
Uncategorised	74		
Casualty Crashes	42	26	↓ 38%
Casualty Cost:	\$24.45M	\$3.08M	↓ 87%

<sup>&</sup>lt;sup>1</sup> Ending 7 September 2001, 3 calendar months before installation.

- When comparing the pre installation period to the most recent five year period, there has been a 38% decrease in casualty crashes and a 53% decrease in casualties at this fixed speed camera location. The decrease in casualty crashes is statistically signficant, however does not account for the prevailing statewide trend in casualty crashes.
- The infringement graph details the trend in infringements at this location since July 2002. Infringement data before this date is not available. Roadworks and camera maintenance may influence the number of infringements issued.





<sup>&</sup>lt;sup>2</sup> The percentage change is based on annualised crash data to allow for a direct comparison between the pre and post installation time periods. Red values indicate an increase.

## Bardwell Park/Arncliffe - M5 Motorway

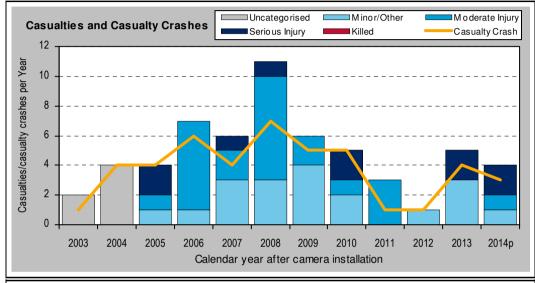
This is a high risk location that is enforced with fixed speed cameras, because it is difficult for the NSW Police to enforce. The length of each enforced direction is:

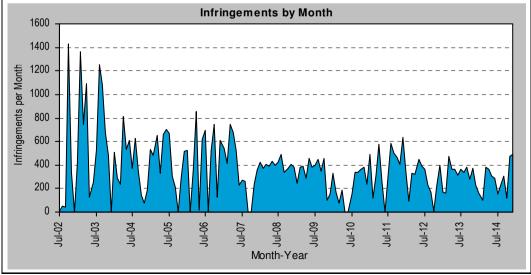
- Camera 1 (eastbound) 3975m
- · Camera 2 (westbound) 3965m

The cameras commenced operating on 1 August 2002.

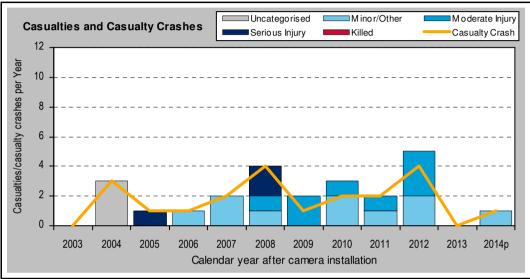
- In the eastbound direction, there were 3 casualty crashes in the provisional 2014 data. This resulted in 2 serious injuries, 1 moderate injury, and 1 minor injury.
- In the westbound direction, there was 1 casualty crash in the provisional 2014 data. This resulted in 1 minor injury.
- The infringement graphs show the number of infringements issued at this location by direction, as well as the trend in infringements. Roadworks and camera maintenance may influence the number of infringements issued.

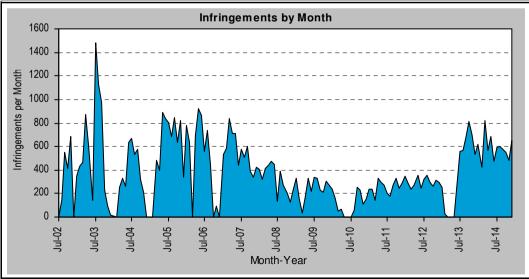
#### Camera 1 Eastbound





#### Camera 2 Westbound





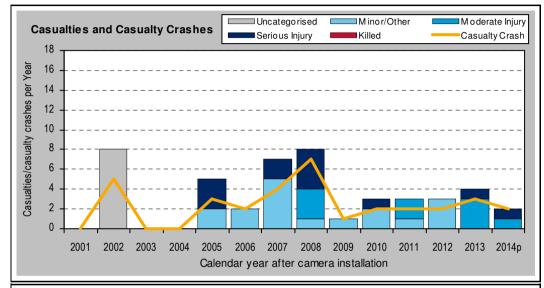
## **Darlinghurst - Eastern Distributor**

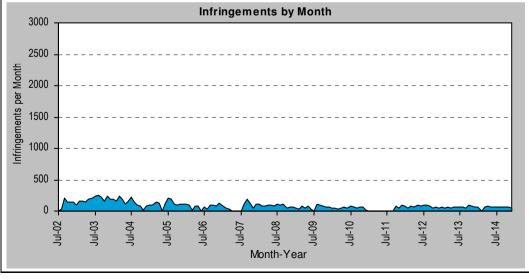
This is a high risk location that is enforced with fixed speed cameras, because it is difficult for the NSW Police to enforce. This location is 1645m in length, and the two cameras commenced operating on:

- Camera 1 (southbound) 6 June 2000
- Camera 2 (northbound) 30 November 2000

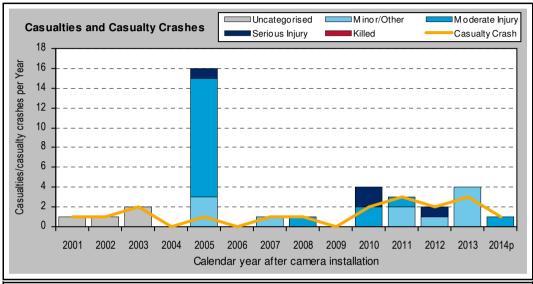
- In the southbound direction, there were 2 casualty crashes in the provisional 2014 data. This resulted in 1 serious injury, and 1 moderate injury.
- In the northbound direction, there was 1 casualty crash in the provisional 2014 data. This resulted in 1 moderate injury.
- The infringement graphs show the number of infringements issued at this location by direction, as well as the trend in infringements. Roadworks and camera maintenance may influence the number of infringements issued.

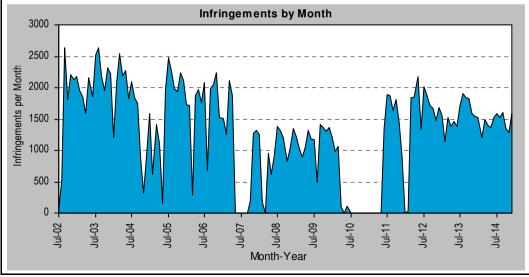
#### Camera 1 Southbound





#### Camera 2 Northbound





#### **Lane Cove - Lane Cove Tunnel**

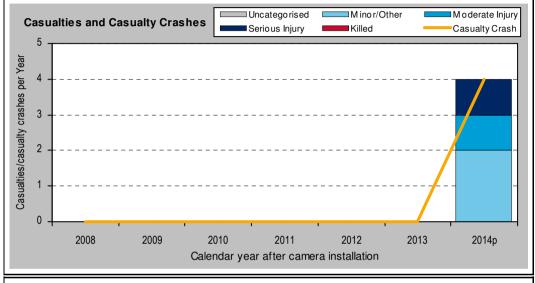
This is a high risk location that is enforced with fixed speed cameras, because it is difficult for the NSW Police to enforce. The length of each enforced direction is:

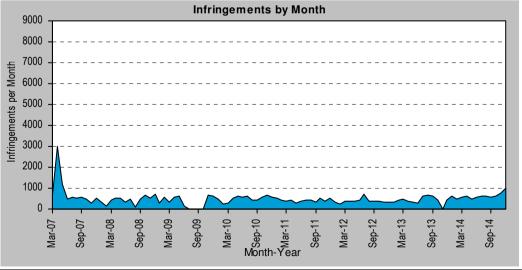
- Camera 1 (eastbound) 3610m
- Camera 2 (westbound) 3615m

The cameras commenced operating on 25 March 2007.

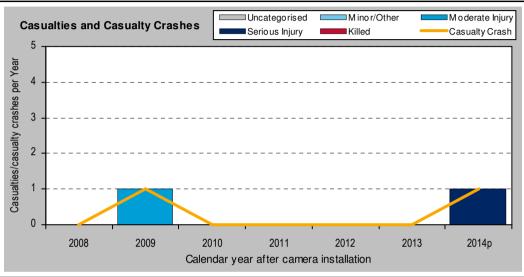
- In the eastbound direction, there were 4 casualty crashes in the provisional 2014 data. This resulted in 1 serious injury, 1 moderate injury, and 2 minor injuries.
- In the westbound direction, there was 1 casualty crash in the provisional 2014 data. This resulted in 1 serious injury.
- The infringement graphs show the number of infringements issued at this location by direction, as well as the trend in infringements. Roadworks and camera maintenance may influence the number of infringements issued.

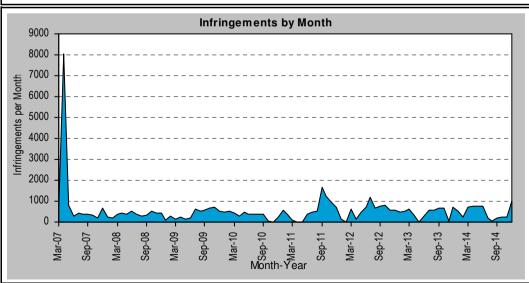
#### Camera 1 Eastbound





#### Camera 2 Westbound



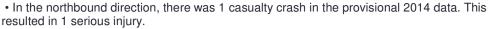


## **Sydney - Sydney Harbour Tunnel**

This is a high risk location that is enforced with fixed speed cameras, because it is difficult for the NSW Police to enforce. The length of each enforced direction is:

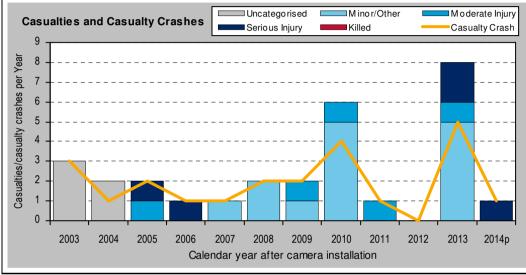
- Camera 1 (northbound) 2295m
- · Camera 2 (southbound) 2295m

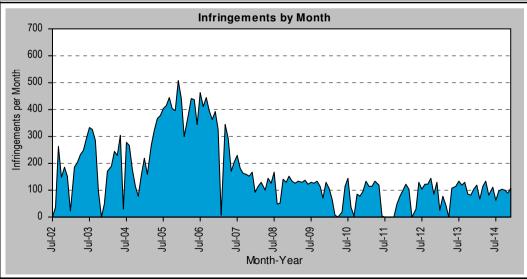
The cameras commenced operating on 2 August 2002.



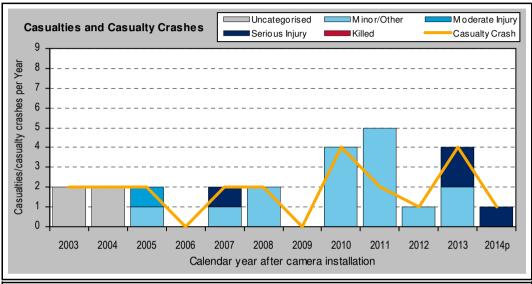
- In the southbound direction, there was 1 casualty crash in the provisional 2014 data. This resulted in 1 serious injury.
- The infringement graphs show the number of infringements issued at this location by direction, as well as the trend in infringements. Roadworks and camera maintenance may influence the number of infringements issued.

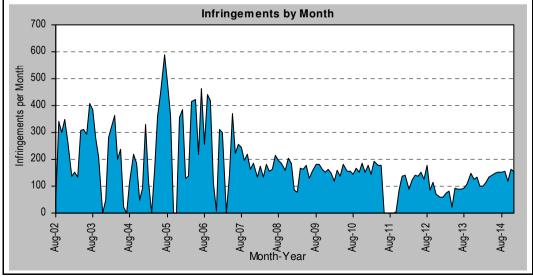
#### Camera 1 Northbound





#### Camera 2 Southbound





## Woolloomooloo/East Sydney - Cross City Tunnel

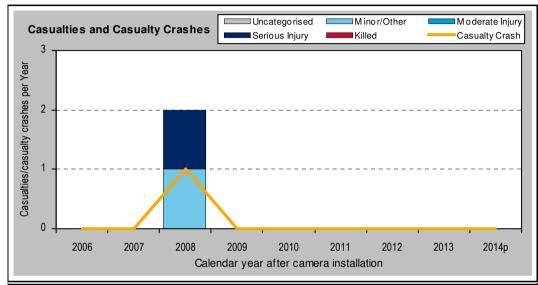
This is a high risk location that is enforced with fixed speed cameras, because it is difficult for the NSW Police to enforce. The length of each enforced direction is:

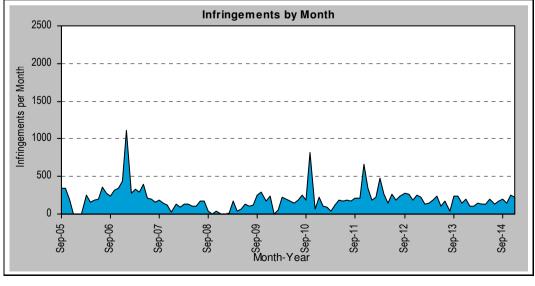
- Camera 1 (eastbound) 2145m
- · Camera 2 (westbound) 2090m

The cameras commenced operating on 5 September 2005.

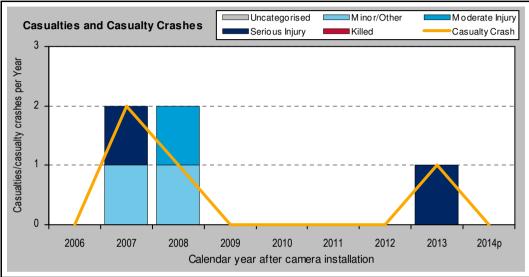
- In the eastbound direction, there were no casualty crashes in the provisional 2014 data.
- In the westbound direction, there were no casualty crashes in the provisional 2014 data.
- The infringement graphs show the number of infringements issued at this location by direction, as well as the trend in infringements. Roadworks and camera maintenance may influence the number of infringements issued.

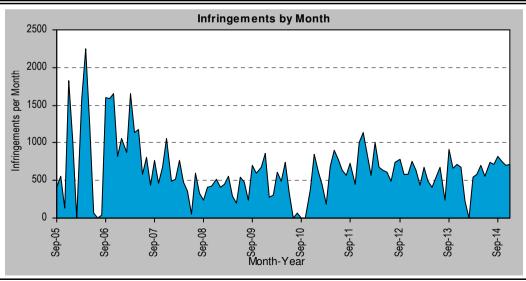
#### Camera 1 Eastbound





#### Camera 2 Westbound





## C.2 Fixed speed camera locations with the most infringements

In April 2013, NRMA Motoring & Services called for an assessment of all high infringing speed camera locations across the state to determine whether the cameras were appropriately placed and clearly signposted.

The NSW Centre for Road Safety (CRS) has identified the 10 fixed speed camera locations with the highest number of infringements detected in 2014, detailed in the table below. Cameras in high-risk locations are excluded.

Most of the 10 speed camera locations are on main roads with high traffic volumes. All of these locations were recommended to be retained in the annual review. These positive results are best reflected in the crash data for the Princes Highway, Kogarah, which shows a statistically significant reduction in casualty crashes of 33 per cent when comparing the pre installation period to the most recent five year period.

All camera locations had high compliance rates with more than 99 per cent of drivers passing the cameras without being infringed for speeding. This demonstrates that most drivers are aware of the cameras and do not exceed the speed limit, with less than one per cent of drivers penalised. It is this high level of compliance that provides road safety benefits. Compliance data compares the number of vehicles that pass a camera with the number of infringements issued by the camera.

CRS will continue to monitor infringement numbers at camera locations to identify and address any ongoing road safety risks. As is the case currently, Roads and Maritime Services (RMS) may increase the warning letter period and/or use Variable Message Signs to increase driver awareness of speed camera locations, where the trend in warning letters or number of infringements issued deems this appropriate. Ongoing site maintenance is also conducted by RMS to ensure that signage is effectively placed and not obscured by roadside objects, such as trees.

Table C1: Fixed speed camera locations with the most infringements

Location	Number of cameras	Total infringements issued 2013	Total infringements issued 2014	Compliance rate in 2014
Moore Park - Cleveland Street, between Anzac Parade and South Dowling Street (November 2007)	2	18,550	20,916	99.64%
Rosebery/Alexandria - Botany Road, between Gardeners Road and Gillespie Street (June 2007)	2	15,733	14,495	99.83%
Ewingsdale - Pacific Highway, between St Helena Road and Ewingsdale Road. (September 2006)	1	12,792	12,703	99.75%
Wahroonga - Pacific Highway, between Gilda Avenue and Woodville Avenue (January 2009)	2	16,159	11,824	99.94%
Kogarah - Princes Highway, between Gray Street and President Avenue (July 2003)	2	6,348	8,870	99.96%
Woodburn - Pacific Highway, between Wagner Street and Norman Street (March 2001)	1	8,306	7,858	99.65%
Old Guildford - Woodville Road, between Orchardleigh Street and Middleton Road (January 2009)	2	6,423	7,179	99.96%
Ryde - Victoria Road, between Margaret Street and Cressy Road (November 2007)	2	6,564	6,665	99.94%
Lindfield - Pacific Highway, between Eton Road and Gladstone Parade (July 2007)	2	7,831	6,068	99.96%
East Gardens/ Maroubra - Bunnerong Road, between Fitzgerald Avenue and Smith Street (June 2007)	2	5,566	5,587	99.94%

## D. Appendix D: NSW fixed speed cameras operating in warning mode

Following the results of the 2011 audit of speed cameras, the Minister for Roads and Freight directed the deactivation of fixed speed cameras that were found to not be delivering the expected road safety benefit at 38 locations. Cameras at seven of these locations remain in warning mode following reviews by the Centre for Road Safety and safety concerns expressed by the community. These seven locations are not included in the fixed speed camera analysis; however, a report on crash and infringement results for 2014 has been included below in **Table D1**.

The cameras began operating in warning mode at different times, starting from August 2011. By July 2012, cameras at all seven locations commenced operating under a 'three strike' scheme where vehicle owners receive an infringement notice on the third speeding offence at any of the seven locations. Vehicles detected speeding more than 30km/h over the speed limit receive a court attendance notice and face significant penalties.

The results show that there are significant decreases in the number of warning notices from the issuing of a first warning notice, to the second warning notice and subsequent infringement notice for a third strike.

Table D1: Performance at fixed speed camera locations operating in warning mode (2014)

Location	No. of cameras	Casualty	crashes a	nd casualt	ies 2014			etters and in rikes' progr	fringements am	issued	Court attendance notices issued			
		Fatalities	Serious injuries	Moderate injuries	Minor / other injuries	Casualty crashes	1 <sup>st</sup> warning letter	2 <sup>nd</sup> warning letter	3 <sup>rd</sup> speeding offence (infringement issued)	Total number of warning letters and infringements	Vehicles speeding >30km/h	Vehicles speeding >45km/h	Total number of notices issued	
Spit Road, Beauty Point (June 2012)	2	0	3	0	0	3	1329	131	49	1509	0	3	3	
Bangalow Road, Clunes (August 2011)	1	0	0	0	0	0	7049	722	249	8020	190	9	199	
Eastern Arterial Road, Gordon (June 2012)	1	0	2	0	0	2	581	48	15	644	0	0	0	
President Avenue, Gymea - school zone (August 2011)	1	0	0	1	0	1	1212	107	26	1345	2	0	2	
Carlingford Road, North Epping - school zone (June 2012)	1	0	0	0	0	0	2886	385	235	3506	1	3	4	
Eastern Valley Way, North Willoughby (July 2012)	1	0	1	2	0	3	1818	163	71	2052	3	0	3	
Pacific Highway, Urunga (January 2012)	1	0	1	2	1	1	4168	156	31	4355	29	5	34	

# E. Appendix E: Analysis of the NSW point-to-point speed enforcement program

## E.1 Overview of point-to-point speed enforcement lengths

	Road	Section	Approximate Length (km)
1	Federal Highway	Between Goulburn and Collector	20
2	Golden Highway	Between Sandy Hollow to Merriwa	28
3	Great Western Highway	Between Meadow Flat and Raglan	26
4	Gwydir Highway	Between Glen Innes and Inverell	57
5	Hume Highway	Between Coolac and Yass	72
6	Hume Highway	Between Gundagai and Coolac	16
7	Mitchell Highway	Between Molong and Cundumbul	28
8	Monaro Highway	Between Bredbo and Cooma	28
9	Mount Ousley Road	Between Bulli and Gwynneville	15
10	New England Highway	Between Muswellbrook and Aberdeen	7
11	New England Highway	Between Muswellbrook and Singleton	36
12	Newell Highway	Between Eumungerie and Gilgandra	30
13	Newell Highway	Between Forbes and West Wyalong	94
14	Newell Highway	Between Peak Hill and Tomingley	10
15	Oxley Highway	Between Gunedah and Tamworth	60
16	Pacific Highway	Between Ballina and Wardell	16
17	Pacific Highway	Between Harwood and New Italy	35
18	Pacific Highway	Between Kew and Port Macquarie	15
19	Pacific Highway	Between Nabiac and Taree	17
20	Pacific Highway	Between Port Macquarie and Kempsey	36
21	Pacific Highway	Between Tyndale and Harwood	21
22	Pacific Highway	Between Urunga and Valla	13
23	Pacific Highway	Between Woodburn and Wardell	18
24	Picton Road	Between Wilton and Cataract	17

## E.2 Installation of point-to-point enforcement lengths

There are 25 lengths that are part of the point-to-point enforcement program, and 24 of these lengths were installed and operational by the end of 2014:

- two lengths were installed in 2010
- 13 lengths were installed in 2011
- five lengths were installed in 2012
- one length was installed in 2013
- three lengths were installed in 2014

The remaining point-to-point length was installed and operational in early 2015.

## E.3 Analysis

There were 21 lengths that have enforced for the entire 2014 review period. While heavy vehicle speed compliance within these lengths is positive, many point-to-point speed enforcement lengths have been operational for three years or less, and it is too early to assess the effectiveness of individual enforcement lengths.

Only one point-to-point length, Great Western Highway between Meadow Flat and Raglan, has enforced for more than four years. This length commenced in warning mode in May 2010.

Eight point-to-point lengths have enforced for at least three years:

- Federal Highway between Goulburn and Collector
- Great Western Highway between Meadow Flat and Raglan (has enforced for more than four years)
- Hume Highway between Coolac and Yass
- Hume Highway between Gundagai and Coolac
- Monaro Highway between Bredbo and Cooma
- Pacific Highway between Harwood and New Italy
- Pacific Highway between Nabiac and Taree
- Pacific Highway between Woodburn and Wardell

The pre installation and current post installation period data, detailed in **Table E1** below, shows that crashes and casualties have reduced at these locations.

The infringement data for these lengths are detailed in **Figure E1** below. The low number of infringements issued within each of these lengths shows that there has been a high level of compliance with the speed limit. The graph also shows there has been a reduction in speeding behaviour at these lengths over time.

A total of 1,581 speeding infringements were issued resulting in total fines of \$688,758 at point-to-point lengths in 2014.

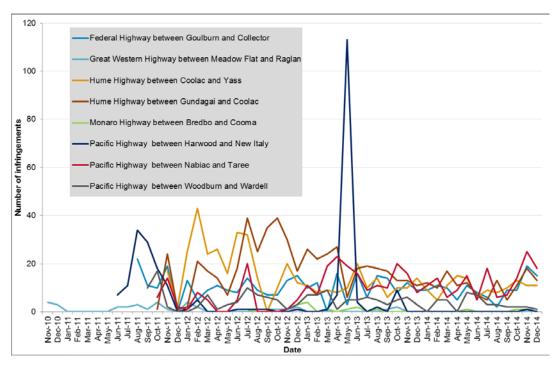


Figure E1: Point-to-point speed infringements at selected locations

It is important to note that roadworks and camera maintenance may influence the number of infringements issued. For example, **Figure E1** above depicts a spike in infringements at the enforcement length on the Pacific Highway between Harwood and New Italy in May 2013. This can be attributed to a reduction in speed limit due to road works that occurred in April 2013.

Table E1: Heavy vehicle crashes and infringements at point-to-point speed enforcement locations

Road	Section and warning letter start date	Before ir and casu	nstallation h ualties (5 ye	neavy vehic ears before i	le casualty installation	crashes ) <sup>1</sup>	After inst	tallation he s (up to 31	eavy vehicle December 2	casualty c 2014)	rashes and	Infringements				
		Fatalities	Serious injuries	Moderate injuries	Minor / other injuries	Casualty crashes	Fatalities	Serious injuries	Moderate injuries	Minor / other injuries	Casualty crashes	2011	2012	2013	2014	
Federal Highway	Between Goulburn and Collector (30 May 2011)	0	1	1	0	2	0	0	1	2	2	62	120	121	114	
Golden Highway	Between Sandy Hollow to Merriwa (1 Mar 2012)	0	2	2	0	3	1	1	0	0	2	<u>-</u>	7	10	2	
Great Western Highway	Between Meadow Flat and Raglan (31 May 2010)	2	2	6	3	10	4	5	1	0	5	13	12	3	0	
Gwydir Highway	Between Glen Innes and Inverell (25 Oct 2011)	0	0	1	0	1	0	0	0	0	0	<u>-</u>	4	1	2	
Hume Highway	Between Coolac and Yass (26 Aug 2011)	2	3	1	18	17	0	6	1	14	14	19	255	130	122	
Hume Highway	Between Gundagai and Coolac (26 Aug 2011)	1	6	0	1	7	1	0	0	4	3	26	264	214	134	
Mitchell Highway	Between Molong and Cundumbul (5 Aug 2011)	0	5	0	0	3	1	0	1	0	1	-	-	3	20	
Monaro Highway	Between Bredbo and Cooma (17 Sep 2011)	1	0	0	0	1	0	1	1	0	1	-	5	9	3	
Mount Ousley Road	Between Bulli and Gwynneville (28 Jan 2014)	0	14	7	7	20	0	2	1	0	3	-	-	-	401	
New England Highway	Between Muswellbrook and Aberdeen (16 Dec 2011)	0	4	1	1	4	0	1	0	0	1	-	1	2	2	

Road	Section and warning letter start date	Before ir and casu	nstallation l ualties (5 ye	heavy vehic ears before i	e casualty nstallation	crashes	After ins casualtie	tallation he s (up to 31	eavy vehicle December	casualty c 2014)	rashes and	Infringements				
		Fatalities	Serious injuries	Moderate injuries	Minor / other injuries	Casualty crashes	Fatalities	Serious injuries	Moderate injuries	Minor / other injuries	Casualty crashes	2011	2012	2013	2014	
New England Highway	Between Muswellbrook and Singleton (20 Dec 2011)	2	2	4	1	7	1	3	3	0	7	-	3	3	2	
Newell Highway	Between Eumungerie and Gilgandra (22 Dec 2011)	2	2	4	4	6	0	2	1	1	3	-	72	28	22	
Newell Highway	Between Forbes and West Wyalong (22 Mar 2013)	0	6	0	7	10	1	1	2	0	3	-	-	21	18	
Newell Highway	Between Peak Hill and Tomingley (22 Dec 2011)	2	2	0	1	2	0	0	0	0	0	-	21	28	22	
Oxley Highway	Between Gunedah and Tamworth (30 Nov 2011)	1	1	1	1	4	1	0	0	0	1	-	4	8	9	
Pacific Highway	Between Ballina and Wardell (5 Feb 2014)	0	5	3	6	8	0	0	0	0	0	-	-	-	8	
Pacific Highway	Between Harwood and New Italy (31 Mar 2010)	4	11	0	8	17	4	11	3	9	17	110	11	136	1	
Pacific Highway	Between Kew and Port Macquarie (17 Aug 2012)	1	9	4	5	14	3	0	3	0	4	-	-	199	402	
Pacific Highway	Between Nabiac and Taree (5 Aug 2011)	1	4	5	0	7	1	3	2	1	7	22	45	169	148	
Pacific Highway	Between Port Macquarie and Kempsey (14 Dec 2011)	0	8	5	2	10	0	3	4	3	6	-	1	0	0	
Pacific Highway	Between Tyndale and Harwood (5 Feb 2014)	0	4	4	2	7	1	2	0	1	2	-	-	-	3	

Road	Section and warning letter start date	Before in and casu	stallation h lalties (5 ye	neavy vehicl ears before i	e casualty nstallation	crashes ) <sup>1</sup>	After installation heavy vehicle casualty crashes and casualties (up to 31 December 2014)						Infringements				
		Fatalities	Serious injuries	Moderate injuries	Minor / other injuries	Casualty crashes	Fatalities	Serious injuries	Moderate injuries	Minor / other injuries	Casualty crashes	2011	2012	2013	2014		
Pacific Highway	Between Urunga and Valla (29 Sep 2012)	4	7	2	8	10	0	0	2	5	2	-	<u>-</u>	79	73		
Pacific Highway	Between Woodburn and Wardell (28 Jun 2011)	4	10	1	7	16	3	5	3	3	9	29	49	62	38		
Picton Road	Between Wilton and Cataract (17 Oct 2012)	8	3	3	2	7	0	0	0	2	2	-	-	5	1		

<sup>&</sup>lt;sup>1</sup> Ending 91 days before the start of the warning letter period.