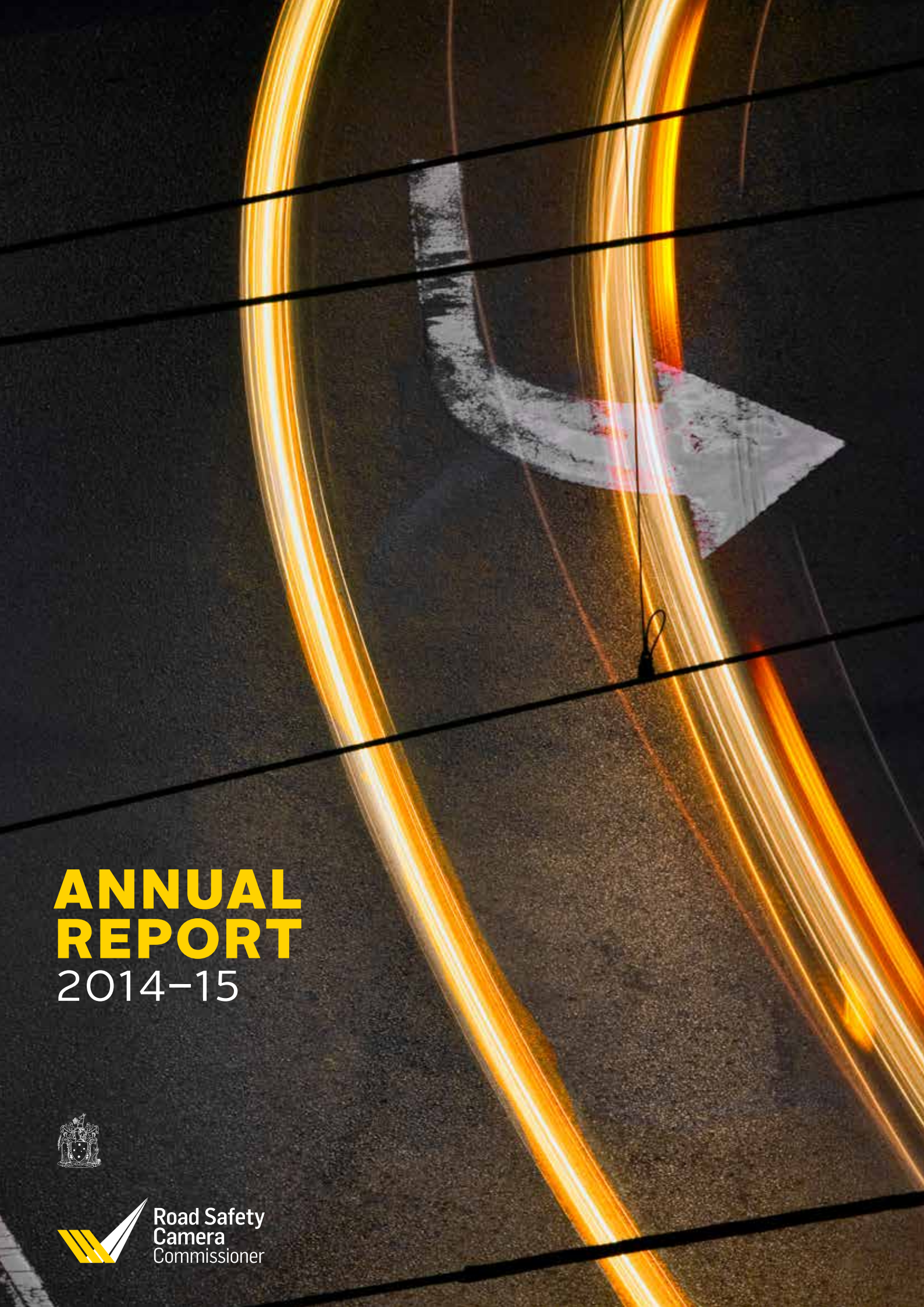


ANNUAL REPORT 2014–15

Road Safety Camera Commissioner

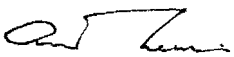
Letter of transmittal

To: The Honourable the President of the Legislative Council

And: The Honourable the Speaker of Legislative Assembly

I am pleased to present to you the Annual Report of the Road Safety Camera Commissioner for the financial year 2014-2015 for presentation to Parliament, in accordance with section 21 of the *Road Safety Camera Commissioner Act 2011*.

Yours sincerely



HIS HONOUR GORDON LEWIS AM
Road Safety Camera Commissioner

Contents

Commissioner's message

This report is submitted almost three and a half years after my initial appointment. I am satisfied that the existence of the office provides motorists with an impartial avenue to voice their complaints and seek information.

HIS HONOUR GORDON LEWIS AM
Road Safety Camera Commissioner

I am responsible for three essential functions

ONE
Reporting and quality assurance

This involves independently monitoring compliance of the road safety camera system with the requirements of the *Road Safety Act 1986*. I am also required to review and assess the operation of the road safety camera system at least annually, in addition to regularly reviewing the information made available to the public by the Department of Justice & Regulation.

TWO
Investigation and review

The *Road Safety Camera Commissioner Act 2011* empowers me to undertake investigations requested or agreed to by the Minister for Police into the accuracy and efficiency of the road safety camera system. The Minister may also refer to me for investigation, any matter in relation to the road safety camera system. I am required to publish the findings of any investigation and recommendations in my annual report.

THREE
Complaints management

Any person who has a complaint concerning an aspect of the road safety camera system itself, can lodge it with me, although it is not my role to intervene in cases of individual infringements. I may investigate an issue where any complaint points to a systemic problem with the road safety camera system.

This is my fourth annual report as the Victorian Road Safety Camera Commissioner.

My first report was written five months after the office commenced to fulfil its statutory role, and although in 2015 we are older and hopefully wiser now, there is something I said in June 2012 which I am happy to reiterate today.

"I am proud to have been appointed as the inaugural Road Safety Camera Commissioner and to be given the opportunity and the challenge to establish an office designed to promote increased transparency in the road safety camera system, as well as enhanced accountability for that system."

This financial year I have divided my time between providing information to the motoring public in respect of a wide range of personal enquiries made by post, emails and telephone and carrying out three specific investigations dictated by the volume of complaints we have received from the motoring public about particular issues.

Of these three investigations, the most time consuming related to complaints from the motoring public arising from infringement notices received in respect of four specific 40km/h zones, where speed / red light cameras operate.

While the investigations carried out into the fixed road safety cameras at the intersection of Springvale Road and Lower Dandenong Road, Braeside and at the Maroondah Highway in Lilydale, were of great interest to local residents, the presence of road safety cameras in 40km/h zones attracted more than 170 complaints.

That latter investigation could not have been more thoroughly carried out, and as you will see from reading the body of the report, I was unable to find any fault with the road safety cameras operating at these four intersections. This is not what the road users wanted to hear.

Once I was satisfied that the cameras themselves were not malfunctioning and adequate speed limit signage advising of a reduced speed limit had been installed in the vicinity of a camera, the only other relevant factor had to be the motorists themselves.

A universal theme in all complaints from offenders, was why was the speed limit so low in the particular area, and in the absence of evidence of significant road trauma, it was asserted the answer could only be revenue raising. While the presence of road safety cameras in a 40 km/h zone has brought matters to a head, the reality is that some Victorian motorists have scant regard for 40 km/h speed limits. An example of this is the almost total disregard shown by motorists for 40 km/h signs in the presence of road works. The attitude seems to be "50 km/h is near enough" and in the absence of a mobile road safety camera, there are no sanctions.

Some frustrations and disappointments manifested themselves in the financial year 2014-15. Included in these were:

- The widely held belief that the sole purpose of road safety cameras, is to raise revenue for the Victorian government. The fact that all road penalties are paid into general revenue but earmarked to the precise dollar for the repairs to and improvement of Victorian roads, seems to have little significance and carries no weight with the revenue raising critics.
- The continuing failure to introduce frontal identification on motorcycles has no logical basis. Frontal identification on motorcycles will of course increase the number of motorcyclists identified exceeding the speed limit, and should result in increased compliance with speed limits. The relevant figures for 2014-15 remain remarkably stable. Motorcyclists are still 4% of all road users but account for 12% of fatalities and 19% of serious injuries. Past statistics from previous financial years (and I do not anticipate any appreciable change) indicate that 41.3% of motorcyclists exceeding the speed limit escaped penalty because they could not be identified due to the lack of frontal identification.

  The old argument that frontal identification on motorcycles would put us out of step with the rest of the motoring world, just does not stand up to scrutiny. Some 77 million motorcycles in Indonesia, 115 million motorcycles in India and 144,000 motorcycles in Singapore have frontal identification.

  If the present reluctance to bring motorcycles into line with all other road users is an illustration of anything, it is that once a privilege is granted (in this case in 1981) it is very difficult to subsequently take away that privilege.
- Advisory speed signage. Without the support of VicRoads, and because of its continuing claim that advisory speed signage is too expensive to maintain, the position is unchanged from my last annual report. That is, with the exception of the advisory speed sign on the Geelong – Melbourne road, all other advisory speed signs remain either inoperative or hopelessly inaccurate.

  I maintain my stance that accurate advisory speed signs can be of great assistance to motorists who are trying to obey the law.
- There are still only two point to point camera systems operating in Victoria, one on the Hume Highway and the other on Peninsula Link. The trend in the United Kingdom (UK) is towards the installation of more and more point to point systems.

  Surely point to point road safety camera systems are the fairest way to measure a motorist's speed? Certainly they preclude the claim I hear so often from motorists that they were booked because of a 'momentary inadvertence' on their part. Three to fifteen minutes of speeding in a point to point system seems to preclude reliance on the 'momentary inadvertence' excuse.

On a positive note, the following items highlight progress and continued trust in the road safety camera system.

- The good news is that ongoing criticism of the old fashioned and out of step requirement that motorists wishing to see an image of their offence, would have to either journey into Melbourne's Central Business District (CBD) or pay $7.50 to have the image of their offence sent to them, has been successful. The introduction of a streamlined electronic method for motorists to view an image of their offence without payment of a fee, has brought Victoria into line with New South Wales, South Australia and Western Australia.
- In accordance with my statutory obligations, fixed road safety cameras have continued to be tested regularly throughout the year. My office has not yet detected a malfunctioning camera.

While I am aware that Victoria Police, in conjunction with the Department of Justice & Regulation, is intending to change the cluttered format of the infringement notices served on allegedly erring motorists, I hope this will be addressed in the financial year 2015-16 with any changes the subject of prior discussion between Victoria Police, the Department of Justice & Regulation, and my office.

During the year, I have augmented the Reference Group provided for in Section 18 of the *Road Safety Camera Commissioner Act 2011*. As at 30 June 2015 there was the maximum of seven members with expertise in every aspect of road safety. I am indebted to the members of the Reference Group for their contribution to my office's function, both by way of positive suggestions and also sensible responses to problems.

I have maintained overseas contacts throughout the year, and I am particularly grateful to the Road Safety Support organisation, in the United Kingdom, for providing me with the professional contacts to keep me informed of road safety initiatives in the UK throughout the year.

As part of my policy of transparency, throughout this financial year, my office continued to have regular exposure in the media. In this regard I am indebted to Mr Neil Mitchell of Radio 3AW and Mr Keith Moor of the Herald Sun for their assistance in lifting the veil of ignorance surrounding the operation of road safety cameras. The road safety camera system must be completely transparent to facilitate scrutiny of its fairness. Importantly, in addition to the motoring public, representatives of the media, both TV and radio, recognized the independence of my office, by seeking clarification in respect of the facts when controversy about road safety camera issues arose. Some regional and country newspapers made regular contact with my office throughout the year, particularly if the siting of fixed cameras or mobile safety cameras was controversial.

The value of a minor amendment to the *Road Safety Camera Commissioner Act 2011,* which has enabled me to provide information to the public, cannot be overstated.

Being the Road Safety Camera Commissioner for more than three years, has satisfied me that this office is essential if the motoring public is to have somewhere to express their grievances about the road safety camera system and to provide the necessary transparency in respect of the road safety camera system, which was sadly lacking prior to the establishment of this office.

As the then Auditor-General Mr Pearson commented in the August 2011 report on the Road Safety Camera Program

"The Department of Justice should expedite the implementation of its communication strategy with a particular emphasis on addressing misconceptions about the program."

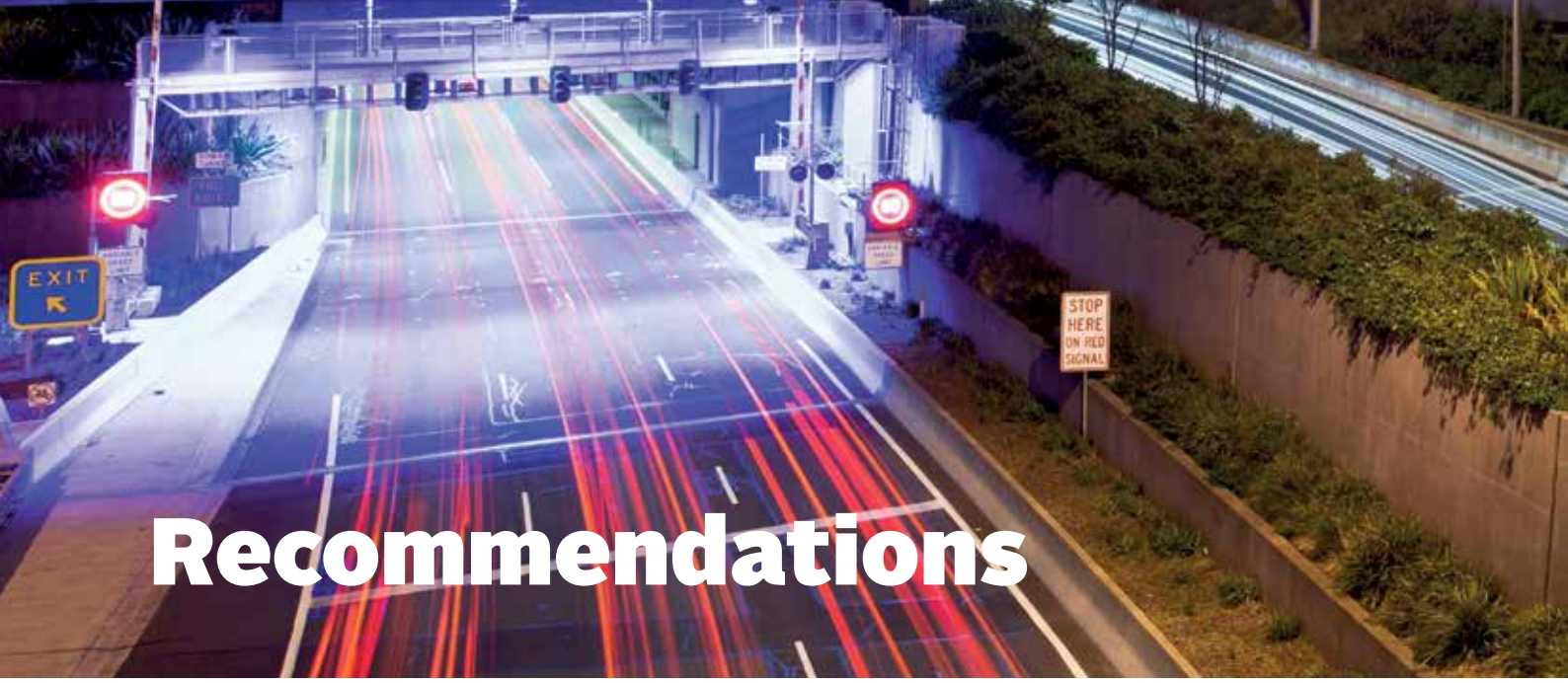
This need still exists today.

The independence of my statutory office is, of course, paramount, and by monitoring the overriding concept of fairness in the context of the use of road safety cameras, this office will continue to serve the motoring public well.

I thank Ms Marisa De Cicco, the Deputy Secretary of Criminal Justice in the Department of Justice & Regulation, for her unfailing support and assistance throughout the year. I have indeed been fortunate to have had Ms De Cicco and her predecessor Mr Neil Robertson to support my office during the past three years. I also thank Assistant Commissioner Robert Hill APM of Road Policing Command, Mr Brendan Facey, the Director of Infringement Management and Enforcement Services in the Department of Justice & Regulation, and Mr John Merritt the Chief Executive of VicRoads, for their cooperation.

Regular meetings with Assistant Commissioner Hill were invaluable in keeping the lines of communication open with Victoria Police and have served to quickly address any misunderstandings which could have occurred.

Mine is a compact office, but I would be remiss if I did not thank also Ms Melanie McShane and Mr Zhi Peng Ye for their contribution to the quality of the service my office provides.



Recommendations

Investigation into fixed road safety cameras in 40km/h speed limit zones

I recommended that:

- Clear and concise explanations, including relevant accident statistics, of why fixed road safety cameras are installed at a location, should be easily accessible to the public,
- Clear and concise explanations detailing the reasons a length of road or area has a speed limit of 40km/h should be easily accessible to the public,
- Some type of engineering solution, such as barriers that prevent people from travelling along the median, be erected along Warrigal Road, near its intersection with Batesford Road in Chadstone, to stop pedestrians from jaywalking across the carriageways of Warrigal Road. Such a construction would force pedestrians to use the existing traffic light controlled pedestrian crossings and the pedestrian overpass looping around the railway bridge,
- For the other three fixed road safety camera sites, where the speed limit is permanently 40km/h, that VicRoads and the City of Melbourne (where relevant), implement engineering solutions to align the road environment with the posted speed limit of 40km/h, and
- Concerning the length of road along Fitzroy Street, on approach to the intersection with Lakeside Drive, VicRoads consider changing the signs reading "School Zone" near St Kilda Park Primary School to read "School Ahead", or some similar phrase, in order to avoid confusion, as many motorists have advised me they believed these signs alluded to a variation in speed limits due to an approaching school zone.

For the following recommendations, I stress that I am satisfied that the existing signage at all four intersections is adequate to warn all drivers committed to concentrating on the task of driving at the applicable speed limit, since the vast majority of motorists travelling past these cameras are not detected speeding.

- Concerning the length of road along Flinders Street, on approach to the intersection with William Street, I recommend that the static speed limit sign immediately preceding the road safety camera, be replaced with a flashing, LED illuminated sign,
- Concerning the length of road along Exhibition Street, on approach to the intersection with Victoria Street, I recommend the static speed limit signs immediately preceding the road safety camera be replaced with flashing, LED illuminated signs, and
- All current speed limit signage leading into the City of Melbourne's 40km/h speed limit area should be replaced with flashing, LED illuminated versions of those signs for additional visibility. In short, it should not be possible to enter the CBD by motor vehicle without being confronted by at least one flashing, LED illuminated 40km/h speed limit sign. I believe these steps would make hollow any complaint by a motorist that they were unaware of the relevant speed limit.

Introduction of 'Smart' enforcement vehicles

I recommend that:

A full evaluation be conducted of the Smart Enforcement Vehicle program in Manchester, United Kingdom with the view to these enforcement vehicles being introduced into Victoria. The vehicles are used for the mobile detection of a range of offences and target driver inattention (such as texting and using mobile phones), driver and passenger safety, and associated road safety issues.

Replacement of all fixed analogue road safety cameras

I reiterate that:

I recommend that current fixed analogue road safety camera systems, where a new road safety camera system can be shown to enhance road safety at that location, should be replaced with modern fixed road safety cameras as soon as practicable.

(Annual Report 2011-12)

Redesign of the Infringement Notice

I reiterate that:

The redesign of the form of infringement notices by Victoria Police, in conjunction with the Department of Justice & Regulation, with a view to streamlining the manner in which information relating to the alleged offence can be obtained.

(Annual Report 2013-14)

Frontal identification for motorcycles and motor scooters

I reiterate that:

Legislation be enacted to amend *Road Safety (Vehicles) Regulations 2009*, Regulation No 48(1)(g) to require frontal identification of some kind on motorcycles and motor scooters, together with any consequential amendments.

(Annual Report 2011-12, Annual Report 2012-13 and Annual Report 2013-14)

Electronic Speed Advisory Signs

I reiterate that:

The electronic speed advisory signs should be well maintained and calibrated to the same level of accuracy and reliability as Victoria's fixed road safety camera systems. These systems are clearly of assistance to motorists in driving within the relevant speed limit and assessing the accuracy of their speedometers.

(Annual Report 2011-12 and Annual Report 2012-13)

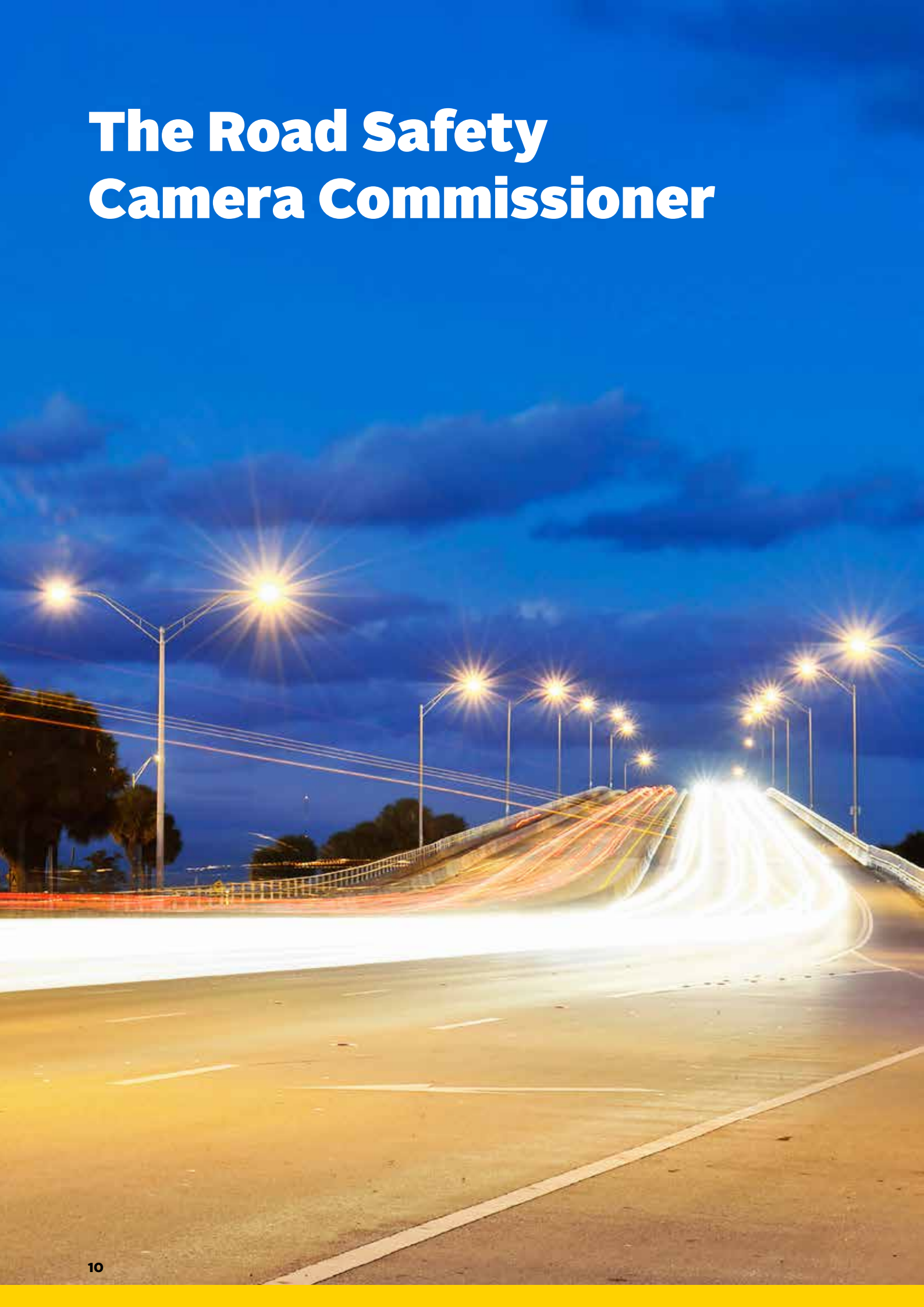
Point-to-point road safety camera systems

I reiterate that:

Speed on all major Victorian highways should be measured by point-to-point road safety camera systems, similar to those currently installed on the Hume Highway and Peninsula Link. I am satisfied that camera surfing is prevalent on our roads and that point-to-point road safety camera systems are the only practical method of ensuring compliance with the speed limit over a considerable stretch of road, and the fairest method of speed measurement for motorists.

(Annual Report 2013-14)

The Road Safety Camera Commissioner



The Road Safety Camera Commissioner

The position of the Road Safety Camera Commissioner was established by section 4 of the *Road Safety Camera Commissioner Act 2011*.

The role of the Road Safety Camera Commissioner is to provide an independent, impartial and objective office to monitor compliance of Victoria's road safety camera system with the *Road Safety Act 1986*. The office has the statutory responsibility to receive complaints in relation to the road safety cameras and to investigate any systemic issues in relation to the road safety camera system.

His Honour Gordon Lewis AM was appointed the inaugural Road Safety Camera Commissioner in December 2011 for a term of two years. The Office of the Road Safety Camera Commissioner began operating on 6 February 2012. He was reappointed on 5 February 2014 for a further year, and again on 5 February 2015 for a further twelve months.

His Honour began legal practice in 1958, and was the Director of the Law Institute of Victoria from 1975 until 1986. After serving as the Victorian Government Solicitor for three years, he was appointed as a County Court judge in 1990. He served on the bench for eighteen years.

From 2008 to 2011, His Honour was a Deputy Chairman of the Victorian Commission for Gambling Regulation. In 2008, he conducted an inquiry into integrity in the racing industry in Victoria, leading to the establishment of the Office of the Racing Integrity Commissioner. In 2011, he was also appointed to the Anti-corruption and Integrity Consultation Panel to advise on the establishment of the Independent Broad-based Anti-corruption Commission for Victoria.

Functions

The Office of the Road Safety Camera Commissioner was established to promote increased transparency in the road safety camera system and to enhance accountability for that system.

Section 10 of the *Road Safety Camera Commissioner Act 2011* provides for the Road Safety Camera Commissioner to perform various functions. These functions are:

- to undertake, at least annually, reviews and assessments of the accuracy of the road safety camera system in order to monitor compliance of the system with the requirements of the *Road Safety Act 1986* and regulations made under that Act
- to undertake, at least annually, reviews and assessments of the information about the road safety camera system that is made available to the public by the Department of Justice & Regulation
- to undertake investigations requested or agreed to by the Minister into the integrity, accuracy or efficiency of the road safety camera system
- to receive complaints concerning any aspect of the road safety camera system and:
  - if appropriate, to refer a complaint to an appropriate person or body for further action, or
  - to provide information on the available avenues for resolution of a complaint,
- to investigate complaints received by the Commissioner that appear to indicate a problem with the road safety camera system and to make recommendations to the Minister to address any systemic issues identified
- to investigate any matter in relation to the road safety camera system that the Minister refers to the Commissioner
- to provide advice to the Minister on any matter in relation to the road safety camera system
- to refer appropriate matters to the Reference Group for research and advice
- to keep records of investigations undertaken and complaints received by the Commissioner and the action taken in response, if any
- to make available to the Minister, on request, the records of investigations undertaken and complaints received, and
- any other function conferred on the Commissioner by or under this or any other Act.

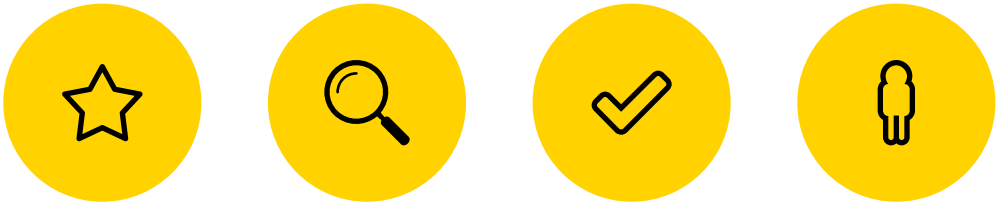
Vision

To increase the public's confidence in the accuracy, reliability and integrity of the Victorian road safety camera system.

Mission

To provide Victorian motorists with ongoing support in relation to the state's road safety camera system and to provide an alternative avenue for complaints, quality assurance and investigations.

Values



The Commissioner is committed to four values, which guide and inform his work:

- **Integrity** – the Commissioner will carry out his functions with honesty, accuracy and consistency
- **Transparency** – the Commissioner will provide credible expert information about the road safety camera system to Parliament and the community
- **Accountability** – the Commissioner will monitor and review the accuracy, integrity and efficiency of Victoria's road safety camera system
- **Independence** – the Commissioner will act impartially and objectively in the fulfilment of his functions under the *Road Safety Camera Commissioner Act 2011*

The annual report

This is the fourth annual report of the Office of the Road Safety Camera Commissioner and covers the full financial year 2014 to 2015.

Section 21 of the *Road Safety Camera Commissioner Act 2011* requires the Road Safety Camera Commissioner to provide a report to Parliament relating to the performance of his functions under that Act during the financial year ending 30 June 2015.

Section 21 of the *Road Safety Camera Commissioner Act 2011* provides that the annual report must include:

- A report on the activities of the Road Safety Camera Commissioner's Reference Group during the financial year, and
- The findings of investigations conducted by the Road Safety Camera Commissioner during the financial year and any recommendations made, and
- Any other information or recommendation that the Road Safety Camera Commissioner considers appropriate, and
- Any information requested by the Minister for Police (the Minister).

Part A
The year in review

PHOTO: TOM PERKINS

Key achievements for the financial year 2014-2015

Relationship development

Self assessment is always suspect, but I am satisfied that during the financial year 2014 – 2015, the Office of the Road Safety Camera Commissioner has assumed greater significance both in the media and with the general public.

In September 2014, as a result of an invitation to be the principal guest speaker, I again attended the National Safer Roads Partnerships' Conference (NSRP) in Manchester. Because this conference was attended by all the police constabularies in the United Kingdom, it was rich with ideas and approaches to reduce the road toll. I submitted a written report about the conference to the then Minister for Police and Emergency Services in a report dated 1 October 2014.

In that report I make mention of the Smart Enforcement Vehicles, used by Manchester police to enforce seatbelt and mobile phone use and to detect driver distraction, and advocated their introduction in Victoria. Unfortunately there was no representative of Victoria Police at the 2014 conference and as one of Victoria's road safety partners, I believe it would be beneficial for Victoria Police to be represented at this conference.

Together with my staff, I attended the Road Safety – Research, Policing, Education Conference in Melbourne from 13 – 15 November 2014. With Mr Zhi Peng Ye, I also attended the conference of the Victorian Association of Drink and Drug Driver Services on 8 December 2014.

I found both the papers and further discussions at these conferences, very beneficial.

On 15 August 2014, my office received a visit from a group of senior government officials from Abu Dhabi, who were examining the question of increased road safety in that Emirate. In addition to my office the delegation met with other government departments and key industry bodies specialising in road safety.

I addressed the Road Safety Executive Group at their meeting on 31 October 2014 describing the role and experience of the Road Safety Camera Commissioner. I explained where I considered my office fitted into the statutory responsibilities of the Department of Justice & Regulation, Victoria Police, VicRoads and the Transport Accident Commission. I expanded on some of the police initiatives introduced in the United Kingdom, and stressed the need for transparency in respect of the Road Safety Camera System in Victoria.

Of significance this year, was the culmination of several years of urging that Victoria come into line with other states, by providing an electronic means for motorists to view an image of their offence on-line. This function became available to motorists in early 2015 via an easy to access website which holds infringement images for a rolling six month period. To be able to point at a recommendation that came to fruition, is always satisfying.

In terms of dependence on co-operation, nothing has changed. For the Road Safety Camera Commissioner's Office to fulfil the public's expectation, it is utterly dependent on full co-operation from bodies I have already mentioned as well as Serco Group Pty Ltd, SGS Australia Pty Ltd, Connect East Pty Ltd and similar bodies. I am grateful to all these organisation for their help.

The reference group

The Road Safety Camera Commissioner is empowered under the *Road Safety Camera Commissioner Act 2011* to establish a group of advisers to be known as the Reference Group. The Reference Group consists of the Commissioner and not less than three and not more than seven other members, appointed by the Minister for Police on the recommendation of the Commissioner.

Reference Group members were initially appointed in the first half of 2012, and three of those members have continued to serve on the Reference Group up to, and including, this financial year. The Reference Group, which is made up of experts in their respective fields, provides information and advice to the Commissioner.

Section 21 of the *Road Safety Camera Commissioner Act 2011* provides that the annual report must include a report on the activities of the Reference Group during the financial year. I have found the Reference Group to be a most useful sounding board and the diverse experience each member brings to his/her statutory role, has proved invaluable in achieving a balanced consideration of many contentious issues.

The Reference Group met on nine occasions during the 2014-2015 financial year. At the commencement of the financial year Professor Tom Drummond, Ms Jane Fenton AM, Mr David Jones and Mr Mark Kelly continued on as members of the group. In addition, Professor Brian Fildes joined the group in August 2014, together with Professor Carolyn Unsworth and Ms Pauline Kostiuk in June 2015. The membership of the Reference Group numbered the statutory maximum of seven as at the end of the financial year.

Professor Tom Drummond

Department of Electrical and Computer Systems Engineering, Monash University

Tom is a professor of Electrical and Computer Systems Engineering at Monash University. His research specialisation is in real-time processing of sensor information, in particular computer vision with application to robotics, augmented reality and assistive devices for the visually impaired. He has a BA in mathematics and an MA from the University of Cambridge, UK and a PhD in computer science from Curtin University, WA.

Jane Fenton AM

Non-executive director and expert in communications

Jane is the Chair of the Queen Victoria Women's Centre Trust, Deputy Chair of the Queen Victoria Market Pty Ltd and of the Cancer Council Australia Pty Ltd., and a trustee of the Melbourne Cricket Ground. She is a Fellow of the Australian Institute of Company Directors and the Public Relations Institute of Australia, a Life Governor of Very Special Kids and a consultant to the business she founded in 1987, Fenton Communications.

David Jones

Manager, Roads and Traffic, RACV

David leads RACV's advocacy on roads and traffic issues, and represents RACV's members on government and industry advisory committees. His background is in managing transport research and in transport planning and traffic engineering.

Mark Kelly

General Manager, Murcotts Driving Excellence Pty Ltd

Murcotts is Australia's largest driver training organisation and it specialises in safe driving programs and fleet risk management services. Mark manages Murcotts' nationally accredited driver education and training programs including forensic programs. He has been involved in road safety since the mid 1980s and was Principal Researcher to the Parliamentary Road Safety Committee in their Inquiries into Speed Limits in Victoria and Motorcycle Safety. He is also President of the Victorian Association of Drink & Drug Driver Services, the peak body in Victoria representing 43 accredited agencies.

Professor Brian Fildes

Accident Research Centre, Monash University

Brian is head of the Traffic Engineering and Vehicle Safety Consortium and a foundation member of the Monash University Accident Research Centre (MUARC) since its formation in 1987. He has a PhD in behavioural research and also has qualifications in Science and Engineering. Brian is also a Visiting Professor at the Transport Safety Research Centre at Loughborough University in the UK. His research interests include vehicle safety, speeding, driver perception, and injuries to older people, both on the road and in the home.

Professor Carolyn Unsworth

Professor of Occupational Therapy, Central Queensland University, Melbourne

Carolyn is Professor of Occupational Therapy at Central Queensland University and holds Adjunct Professor appointments at La Trobe University, Melbourne, Jönköping University, Sweden, and Curtin University in Perth, Australia. Carolyn's expertise is the occupation of community transport mobility among older adults and people who have disabilities. Her research and publications are on the assessment and rehabilitation of older and/or functionally impaired drivers, and scooter and powered wheelchair mobility use and access on public transport. Carolyn is a also a registered Occupational Therapy Driver Assessor.

Pauline Kostiuk

Lecturer, Holmesglen TAFE

Pauline is a lecturer in leadership, management and criminal law at Holmesglen TAFE. Pauline served 35 years with Victoria Police in areas including traffic, investigations, training and prosecutions. She spent 19 years in senior management positions representing Victoria Police in international and national forums.

"I HAVE FOUND THE REFERENCE GROUP TO BE A MOST USEFUL SOUNDING BOARD AND THE DIVERSE EXPERIENCE EACH MEMBER BRINGS TO HIS/HER STATUTORY ROLE, HAS PROVED INVALUABLE IN ACHIEVING A BALANCED CONSIDERATION OF MANY CONTENTIOUS ISSUES."

Monitoring the road safety camera system

The *Road Safety Camera Commissioner Act 2011* requires the Commissioner to undertake reviews and assessments of the accuracy of the road safety camera system in order to monitor compliance of the system with the requirements of the *Road Safety Act 1986* and the regulations made under that Act. The reviews and assessments are required to be undertaken at least annually.

The objectives of the technical analysis and monitoring of the road safety camera system are:

- To find any potential systemic issues with the camera network or technologies
- Performance monitoring of the cameras and the camera system as a whole, and
- An oversight of the testing and maintenance activities performed on the camera system.

In the 2014-2015 financial year, I again enlisted the services of an experienced electrical and IT systems engineer to assist my Senior Technical Officer to complete the monitoring of all fixed digital road safety camera systems in Victoria not assessed and reported on in the 2013-2014 annual report. Further information regarding this monitoring is contained in Part D of this report.

By the end of this financial year, all fixed digital road safety cameras in operation as at 1 July 2014, have now been monitored. In the coming financial year, my office will give attention to the newly commissioned cameras and will revisit approximately half of the entire camera network to ensure their continued accuracy and reliability.

It is my hope that the phasing out of the aged fixed analogue road safety cameras will be accelerated as they have been overtaken by more modern technology. This is further explained in Part D of this report.

Media

I have received generous support from all branches of the media during the past twelve months, and my office has utilised this support to disseminate information on how the road safety camera system works, creating greater transparency in the system.

That increased transparency could not have been achieved without the unfailing support of the media. With media help, I believe this office has continued demystifying the entire road safety camera system, dated urban myths included.

The reporting by the media, in turn, has resulted in increased reactive communication to my office by the motoring public, and it has been satisfying to see, that as a result of the efforts of this office, there is now much greater public awareness of just how the road safety camera system operates.

Mobile road safety cameras – publication of review dates

My office has been queried regularly by motorists about the mobile road safety camera program generally and in particular, why certain sites are regularly utilized for the operation of mobile road safety cameras. The latter queries are generally accompanied by an assertion that the placement of cameras is closely associated with revenue raising and totally removed from road safety.

In the interests of transparency, I requested that the reason/s that a site had been selected, be published in full on the Cameras Save Lives website so that the motoring public would have more confidence in the system. For example, I envisaged that a full history of any fatalities and major injuries that had occurred at these locations, would be published.

In this regard, Victoria Police considered that this idea was not practical as there are approximately 2,000 sites at any time, and the list is subject to regular change. A compromise was reached, where a simple code was assigned to a broad reason. The codes and accompanying reasons are:

A The chosen site had a documented history of serious and major injury collisions within the previous three years,

B As a result of validated complaints of excessive speed. These complaints could be from the general public, local councils, etc.,

C Identified by police to be a speed related problem site,

D Proposed speed limit enforcement by non-camera devices within the specified site, deemed not practicable or unsuitable.

Many sites had more than one indicator, where more than one reason was given for its selection.

I had further discussions with Victoria Police in late 2014 with a view to making the motoring public better informed about mobile camera sites. I was concerned that the original complainants about certain mobile camera sites might have moved on, or changes had been made to the environment, making the original reason for site selection out of date. After further discussion, Victoria Police agreed that the last review date for each site would be published on the Cameras Save Lives website.

However, in this regard there was a caveat that the updating of the list on Cameras Save Lives, could well take some months. A target date of the first quarter of 2015 was agreed upon and to the credit of Victoria Police, the additional information was first published on the Cameras Save Lives website in May 2015.

Only time will tell whether this additional information assuages the concerns of the motoring public.

Powers of investigation

The Commissioner has the power to conduct investigations into matters requested or agreed to by the Minister, into the integrity, accuracy or efficiency of the road safety camera system pursuant to section 10(c) of the *Road Safety Camera Commissioner Act 2011*. The Commissioner also has the power to investigate any matter in relation to the road safety camera system that the Minister refers to the Commissioner pursuant to section 10(f) of the Act.

In addition, the Commissioner has the power to investigate complaints that he has received concerning any aspect of the road safety camera system that appears to indicate a systemic or technical problem with the road safety camera system and to make recommendations to the Minister to address any issues identified, pursuant to section 10(e) of the *Road Safety Camera Commissioner Act 2011*.

I carried out three major investigations during this financial year. These investigations were:

- → Springvale Rd and Lower Dandenong Rd, Braeside
- → Lilydale pedestrian crossing
- → Fixed road safety cameras in 40km/h speed limit zones

A summary of each investigation and the relevant recommendations are set out in Part C of this Report.

Complaints and Correspondence

As a result of an amendment to the *Road Safety Camera Commissioner Act 2011* which came into operation on 22 October 2014, my office has had the statutory duty to provide information about the road safety camera system in response to a request for information from a person or body.

This statutory amendment gave legitimacy to my endeavours to provide an independent body to which confused and/or aggrieved motorists could turn to for information or to express a concern. The result was that during the year under review, my office received over 900 communications from the motoring public via telephone, email and post.

I sought to achieve a rapid response rate to these communications and it was only in cases where my office was waiting for information from Infringement Management and Enforcement Services (IMES), in the Department of Justice or some other government entity, that the response time was in excess of five business days. This is a tribute to the efficiency of my staff members Mr Zhi Peng Ye and Ms Melanie McShane.

Part B
About the office

Governance, structure and financial reporting

PHOTO: ANDREW HAYSOM

Governance and organisational structure

The Road Safety Camera Commissioner is a statutory office holder appointed by the Governor in Council and reports to Parliament through the Minister for Police.

As at 30 June 2015, there were three full time employees under Part 3 of the *Public Administration Act 2004* to enable the Road Safety Camera Commissioner to perform his functions and exercise his powers under the *Road Safety Camera Commissioner Act 2011*. The two permanent staff include a Manager, Operations and a Senior Technical Officer.

The staff of the Office of the Road Safety Camera Commissioner are appointed by the Commissioner, but are employed by the Department of Justice & Regulation. For the purposes of their work with the Commissioner, the Commissioner's staff work independently of the Department of Justice & Regulation.

The Road Safety Camera Commissioner is committed to applying merit and equity principles when appointing staff. The selection processes employed ensure that applicants are assessed and evaluated fairly and equitably, based on the key selection criteria and other accountabilities, without discrimination.

Financial reporting obligations

The Office of the Road Safety Camera Commissioner's annual financial statements and report of operations have been consolidated into the Department of Justice & Regulation annual financial statements and report of operations, pursuant to a determination made by the Minister for Finance under section 53(1)(b) of the *Financial Management Act 1994*.

This report contains only the reporting requirements under Part 3 of the *Road Safety Camera Commissioner Act 2011*.

Freedom of information

The *Freedom of Information Act 1982* allows the public a right of access to documents held by the Office of the Road Safety Camera Commissioner. During the financial year 2014-2015, no applications under this Act were received.

Making a request

Access to documents may be obtained by making a written request to the Freedom of Information Manager, as per section 17 of the *Freedom of Information Act 1982*.

The requirements for making a request are that:

- → it should be in writing,
- → it should identify as clearly as possible, which document is being requested, and
- → it should be accompanied by the appropriate application fee (the fee may be waived in certain circumstances).

Requests for information in the possession of the office should be addressed to:

Freedom of Information Manager
Office of the Road Safety Camera Commissioner
Locked Bag 14
Collins Street East
Melbourne VIC 8003

Access charges may also apply once documents have been processed and a decision on access is made, for example, photocopying and search and retrieval charges.

Further information regarding Freedom of Information may be found at foi.vic.gov.au.

Compliance with the Protected Disclosure Act 2012

The *Protected Disclosure Act 2012* encourages and assists people in making disclosures of improper conduct by public officers and public bodies. The legislation provides protection to people who make disclosures in accordance with its provisions and establishes a system for the matters disclosed to be investigated and rectifying action to be taken.

Reporting procedures

The office cannot receive disclosures under the *Protected Disclosures Act 2012*. Disclosures of improper conduct or detrimental action by the Commissioner or employees of the office may be made directly to the Independent Broad-based Anti-corruption Commission at:

Independent Broad-based Anti-corruption Commission
Level 1, 459 Collins Street
(North Tower)
Melbourne VIC 3000

GPO Box 24234
Melbourne VIC 3000

Toll free: 1300 735 135
Website: ibac.vic.gov.au

Part C Investigations and recommendations

In the financial year 2014 to 2015, I conducted the following investigations and made appropriate recommendations:

Summary of investigations and recommendations:

- → Fixed road safety cameras at the intersection of Springvale Road and Lower Dandenong Road, Braeside
- → Fixed road safety cameras on Maroondah Highway, Lilydale
- → Fixed road safety cameras in 40km/h speed limit zones

Investigation into fixed road safety cameras at the intersection of Springvale Road and Lower Dandenong Road, Braeside

Background

There are two fixed road safety cameras installed at the intersection of Springvale Road and Lower Dandenong Road in Braeside. They have been operating since October 2011, monitoring compliance with the speed limit of 80km/h and the traffic signals for southbound vehicles.

Two fixed road safety cameras are required to monitor southbound traffic at this intersection because there are six lanes of traffic. The two cameras monitor three lanes of traffic each.

On 30 June 2014, a story titled *'Red light gran helps out others'* was published in the *Dandenong Leader* about motorists complaining about traffic infringements they had received for entering the intersection of Springvale Road and Lower Dandenong Road in Braeside, against a red light or arrow.

Since my office began operating on 6 February 2012, I have received twelve written complaints regarding the operation of the road safety cameras at this intersection as well as numerous telephone enquiries.

Due to the media coverage and number of complaints my office had received, I commenced an investigation into the two fixed road safety cameras at this intersection, under section 10(e) of the *Road Safety Camera Commissioner Act 2011*.

The road safety camera system

The fixed road safety cameras installed at the intersection of Springvale Road and Lower Dandenong Road in Braeside comprise two independently operating systems. The primary system is a Gatsometer GTC-GS11, a prescribed device in the *Road Safety (General) Regulations 2009*. The secondary system installed at this location is an infrared laser system.

The two independent systems measure a vehicle's speed, and their measurements must correlate in order for the road safety cameras to accept it as valid. Otherwise, the measurement cannot be used as the basis for any infringement notice.

In addition to the annual calibration and certification requirements, the road safety camera system is subject to a regime of monthly maintenance and quarterly testing, to ensure it is operating continuously in accordance with the *Road Safety (General) Regulations 2009*.

Complaints about the road safety camera

Not all of the written and telephone complaints I have received regarding the road safety cameras at this intersection, were in relation to traffic infringements. Some were general in nature, expressing concern at the road safety cameras' operation. However, all of the complaints made by motorists who had received a traffic infringement at this intersection were from those who had allegedly entered the intersection to turn right against a red arrow.

The issues that the motorists complained about were:

- The motorist was "within the intersection" when the road safety camera recorded images of their vehicle,
- The duration of the green arrow was very short, and not many vehicles were able to effect a right hand turn,
- The duration of the green arrow was unpredictable during the day, and
- The duration of the yellow arrow was very short.

As at the date of this annual report, I still have not received any complaints from motorists who were alleged to have exceeded the speed limit or entered the intersection against a red light while travelling straight through.

Scope of the investigation

My investigation focused on several aspects of the operation of the road safety cameras in relation to the complaints that my office had received. For this purpose, I obtained raw data recorded between 19 March 2012 and 9 August 2014 by both road safety cameras at this intersection. The focus was on:

- The general operation of the road safety cameras,
- The testing, maintenance and certification activities performed on the road safety cameras,
- Changes made to the design and operation of the traffic lights,
- Traffic volume and infringement data recorded by the road safety cameras, and
- Analysing traffic infringements referred to me in complaints from the public.

In addition to the raw camera data containing 11.77 million vehicle movements over an 874 day period, I also examined the images of every traffic infringement referred to me by motorists, to ensure that the camera systems were functioning accurately and reliably.

Results of the investigation

In my examination of the testing, maintenance and certification activities carried out on the fixed road safety cameras, I could not find any suggestion of technical or systemic issues regarding their operation. I was satisfied that the road safety cameras operated in accordance with the regulatory requirements set out in the *Road Safety (General) Regulations 2009* and within the specifications set out by the Department of Justice & Regulation and the manufacturer.

Analysis of the raw camera data showed that the number of speed and red light incidents detected over 874 days by the road safety camera was 17,640. Compared to the total traffic volume past the two road safety cameras of 11.77 million, the rate of compliance at this location was approximately 99.85 per cent.

Of particular interest, nearly eighty per cent of the incidents detected by the road safety cameras were due to vehicles entering the intersection against a red arrow to effect a right hand turn from the two lanes on the extreme right. Further, since all of the complaints my office had received were about motorists turning right against a red light, I decided to focus on this aspect of the function of the road safety cameras.

The data recorded by the road safety camera systems showed that the duration of the yellow lights and arrows were always in accordance with the guidelines set out in the VicRoads *Traffic Engineering Manual*.

While I acknowledge there were complaints about the length and predictability of the green arrow at this intersection, those issues were squarely in the realm of VicRoads, and outside my statutory authority as the Road Safety Camera Commissioner.

As I could not find any technical or systemic issue with the operation of the road safety cameras, I began to analyse the images of infringement notices referred to me by motorists. They all showed motorists entering, and turning right through the intersection against a red arrow. The vehicles were always the last one in a queue, and this is very similar to behaviour found in a previous investigation into a road safety camera system installed in Norlane during financial year 2013-14.

I am still very concerned that motorists are exhibiting this level of impatience at intersections, treating the yellow light as an invitation to risk receiving a traffic infringement notice and save a small sliver of time, rather than its actual purpose, a warning to stop their vehicles, if it is safe to do so.

The full text of this report is available on my website, at cameracommissioner.vic.gov.au.

Investigation into the fixed road safety cameras on Maroondah Highway, Lilydale, approximately 100 metres west of Hutchinson Street

Background

The two fixed road safety cameras installed on Maroondah Highway in Lilydale, approximately 100 metres west of Hutchinson Street have been in operation since March 2014. Maroondah Highway is bound by two service roads separated by dividing medians, providing on street parking and access to local shops and businesses. Both cameras are installed on the southern dividing median, with one camera monitoring compliance with the speed limit of 50km/h and the red lights in each direction.

In the first eighteen days of the cameras' operation, Victoria Police issued 2,482 traffic infringements to motorists for exceeding the speed limit and/or entering the pedestrian crossing against a red light. In the first full quarter of operation after this period, a further 11,576 infringements were detected by the two road safety cameras.

Due to the large number of infringements, the *Lilydale and Yarra Valley Leader* newspaper published a series of articles beginning on 19 August 2014 in relation to the road safety cameras, questioning their accuracy and reliability, and containing complaints from local residents about the infringement notices they had received. My office also received written complaints from motorists regarding the road safety cameras.

Following the media attention and complaints to my office, I decided to commence a technical investigation into the fixed road safety cameras on Maroondah Highway in Lilydale, pursuant to section 10(e) of the *Road Safety Camera Commissioner Act 2011*.

The road safety camera system

The fixed road safety cameras installed at Maroondah Highway in Lilydale, approximately 100 metres west of Hutchinson Street, comprise two independently operating systems. The primary systems are two Jenoptik Robot TRAFFIPAX Traffistar SR520s, prescribed devices in the *Road Safety (General) Regulations 2009*. The secondary system paired with each primary system at this location is a radar system that can track a vehicle's position over a distance, using hundreds of measurements to determine its speed.

The two independent systems measure a vehicle's speed, and their measurements must correlate in order for the road safety cameras to accept it as valid. Otherwise, the measurement cannot be used as the basis for any infringement notice.

In addition to the annual calibration and certification requirements, the road safety camera system is subject to a regime of monthly maintenance and quarterly testing, to ensure it is operating continuously in accordance with the *Road Safety (General) Regulations 2009*.

Complaints about the road safety cameras

In total, my office received twelve complaints regarding the fixed road safety cameras installed on Maroondah Highway in Lilydale. Two of those complaints were about their operation generally, while the remainder were related to at least one traffic infringement the motorists and/or their families had received.

The issues motorists wrote to me about were:

- The cameras can flash when no vehicles are travelling across the pedestrian crossing,
- The short distance of the pedestrian crossing, compared with an intersection, makes it easier to be caught within the crossing, when the lights turn red,
- The accuracy and reliability of the road safety cameras,
- The large number of infringements detected in the short period of eighteen days,
- Doubts as to the reasons for the cameras' installation,
- The cameras are "revenue raisers" that do not improve the safety of the pedestrian crossing, and
- A general lack of confidence in the reasons for installation of the road safety cameras.

Scope of investigation

My investigation focused on several aspects of the operation of the road safety cameras in relation to the complaints that my office had received. For this purpose, I obtained raw data recorded between 14 March 2014 and 31 August 2014 by both road safety cameras at this intersection. The focus was on:

- The general operation of the road safety cameras,
- The testing, maintenance and certification activities performed on the road safety cameras,
- Traffic behaviour at the pedestrian crossing in both directions,
- Traffic volume and incident data recorded by the road safety cameras, and
- Analysing traffic infringements referred to me in complaints from the public.

In addition to the raw camera data containing 3.7 million vehicle movements over a 171 day period, I also examined the images of every traffic infringement referred to me by motorists, to ensure that the camera systems were functioning accurately and reliably.

Further, I visited the location with a member of my technical staff and consulted with Victoria Police Yarra Valley Highway Patrol officers, regarding their observations of traffic behaviour and complaints they had received about the road safety cameras.

Finally, I also made enquiries of the Department of Justice & Regulation as to the reasons for the installation of the road safety cameras themselves, as some of the complaints my office received expressed doubts about this issue.

Results of the investigation

I examined the testing, maintenance and certification activities carried out on the fixed road safety cameras, and I could not find any suggestion of technical or systemic issues regarding their operation. I am confident that the road safety cameras operated in accordance with the requirements set out in the *Road Safety (General) Regulations 2009* and the specifications set out by the Department of Justice & Regulation and the manufacturer.

In examining the raw data recorded by the road safety cameras, it was clear that the cameras correctly validated all speed measurements by correlating speed measurements made by the independent primary and secondary speed calculation units.

Further, it was clear that red light incidents were correctly recorded, with no incidents recorded below the Victoria Police mandated 0.5 second grace period. The data confirmed the duration of the yellow lights was in accordance with the guidelines set out in the VicRoads *Traffic Engineering Manual*, and that two images were recorded of each detected incident.

I noted that traffic behaviour and volume along Maroondah Highway was typical of a commuter road, with most of the traffic travelling along the left lanes in both directions. Interestingly, slightly more vehicles (50.44 per cent of the total) were recorded travelling in a westerly direction overall. This may be due to motorists using different commuting routes, or simply that some motorists used the service roads on the way home to access the shops, thereby bypassing the road safety cameras themselves.

In analysing the incident data, it was found the two fixed road safety cameras recorded a total of 25,623 vehicles exceeding the speed limit or entering the pedestrian crossing against a red light. This amounts to approximately 0.7 per cent of all traffic travelling past the two fixed road safety cameras.

Of the total number of incidents detected, only 1,223 (4.77 per cent) were for vehicles entering the pedestrian crossing against a red light. The remainder were for vehicles exceeding the speed limit of 50km/h along Maroondah Highway. The low proportion of motorists disobeying the red lights is reflected in the number of complaints I received about the two road safety cameras. Of the twelve complaints I received, only two referred to a red light infringement.

I could not discern any technical or systemic malfunction with the road safety cameras after examining the traffic and incident data, nor could I find any issues after examining the images recorded of all the traffic infringements referred to me by motorists.

Upon further analysis of the camera data, it was found that the number of incidents detected over weekdays in both directions, was relatively low. However, the number of incidents detected over a Saturday or Sunday was consistently two to three times more than on a weekday. This level of traffic incidents may be related to the use of Maroondah Highway by motorists to travel to and from the tourism area in the Yarra Valley on those days.

Flash units activating

A number of complaints about the road safety cameras to the media and to my office, were regarding the flash units activating without any provocation by motorists exceeding the speed limit or disobeying the red light.

At my request, the Department of Justice & Regulation investigated the operation of the flash units but could not find any issues with the relevant hardware or software. Subsequently, VicRoads found that a power cable it had installed leading to the traffic light control systems and some components of the road safety cameras, were underrated for the amount of power used.

This underrated cable was causing power fluctuations into the road safety camera system, which may have caused the flash unit to activate independently of the camera. However, there are no records to show that this in fact occurred. The cable has since been replaced with one that meets the power requirements.

To ensure that the flash units did not activate independently, I commissioned a temporary video camera to be installed near the two road safety cameras, to monitor the flash units for one week. Reviewing the footage recorded by the road safety cameras did not disclose any malfunction of the flash units or the road safety cameras.

I noted, however, that the flash units did activate when motorists stopped their vehicles partially over the stop line, when a red light was being shown. This action would activate the camera, as this movement is similar to a vehicle entering the pedestrian crossing against the red light. To oncoming motorists, these cases would appear to show that no vehicles had triggered the camera system.

From my observations of the video footage recorded over a seven day period, I could only conclude that the flash unit activations motorists saw, were most likely during the commissioning and testing phase of the road safety camera's installation, and prior to its activation.

Reasons for installation of road safety cameras

Motorists also wrote to me expressing doubts about the reasons for the cameras' installation, ranging from accusations of revenue raising, to there being very good compliance with the speed limit and traffic lights.

However, after I reviewed the documentation regarding the road safety camera, it was clear that as early as 2010, concerns were expressed locally about traffic behaviour along Maroondah Highway, especially the pedestrian crossing. These concerns were from local businesses and The Honourable Christine Fyffe MP, the Member for Evelyn.

These concerns were brought to the attention of the Department of Justice & Regulation, Victoria Police and VicRoads. Two technical specialists were sent to the area to determine whether those concerns had any merit, and during that time, recorded multiple instances of motorists speeding or entering the pedestrian crossing against the red light, even as pedestrians, who had right of way, were about to cross the road.

Yarra Valley Highway Patrol also informed me that it had been conducting an operation along this section of Maroondah Highway, because of local concerns about pedestrian safety, due to large numbers of accidents resulting from distracted driving, and motorists exceeding the speed limit.

After reviewing the documentation and consulting with local police members regarding motorist behaviour along this length of road, I was satisfied that the installation of the road safety cameras was as a preventative measure against pedestrian injuries and fatalities. I acknowledge that the perception of using road safety cameras to raise revenue is alive and well, but I could not find any evidence for that allegation in Lilydale.

The full text of this report is available on my website, at cameracommissioner.vic.gov.au.

Investigation into four fixed road safety cameras operating in 40km/h speed limit zones

Background

There are eleven fixed road safety camera sites in Victoria located within permanent and variable 40km/h speed limit zones. Of those eleven camera sites, four cameras are consistently within the top five cameras for infringements detected in each quarter of operation.

The four road safety cameras are installed at the intersections of:

- Warrigal Road and Batesford Road, Chadstone,
- Fitzroy Street and Lakeside Drive, St Kilda,
- Exhibition Street and Victoria Street, Melbourne, and
- Flinders Street and William Street, Melbourne.

With the exception of the road safety camera in Chadstone, which has a variable speed limit between 40km/h and 60km/h, the road safety cameras in this investigation enforce a permanent speed limit of 40km/h.

Due to the large number of traffic infringements detected by these four road safety cameras, my office has received over 170 complaints from motorists. Following these complaints and the media attention paid to these road safety camera sites, I decided to commence an investigation into them, pursuant to section 10(e) of the *Road Safety Camera Commissioner Act 2011*.

The road safety camera systems

The four fixed road safety cameras involved in this investigation are not of the same make and model. The road safety cameras at Fitzroy Street and Warrigal Road are Gatsometer GTC-GS11s, the road safety camera on Flinders Street is a REDFLEXred-speed HDX system, and on Exhibition Street, a Jenoptik Robot SR520 is installed. All three types of road safety cameras are prescribed devices in the *Road Safety (General) Regulations 2009*.

The Gatsometer and Jenoptik camera systems use pairs of inductive loop sensors installed on a per lane basis as the primary speed calculation and vehicle detection method. The Redflex camera system uses a combination of inductive loops and piezoelectric sensors for speed calculation and vehicle presence in each lane.

Each of the road safety cameras involved in this investigation is also equipped with an independently operating secondary speed calculation system. Speed calculations made by the two independent systems must corroborate in order for the camera system to deem them valid. Otherwise, the calculations are rejected, and no traffic infringements can be issued.

In addition to the annual calibration and certification requirements, each road safety camera is subject to a regime of monthly maintenance and quarterly testing, to ensure it is operating continuously in accordance with the *Road Safety (General) Regulations 2009*.

Complaints about the road safety cameras

As at the date of the full report, my office had received over 170 written complaints regarding speed infringements detected by these four road safety cameras. In addition, there were three enquiries regarding red light infringements received by motorists at Fitzroy Street and Flinders Street. However, as the complaints regarding red light infringements were not regarding the operation of the road safety cameras, I excluded this aspect of the road safety cameras' operation from the investigation.

The complaints regarding speed infringements detected by these four cameras were about the following issues:

- The accuracy and reliability of the fixed road safety cameras,
- The speed limit of 40km/h, permanent or otherwise, is inappropriate,
- 40km/h speed limits should be limited to school zones,
- The speed limit signage is inconspicuous, confusing, difficult to read or insufficient,
- Changes in the speed limit were not sufficiently promulgated,
- The activation of the road safety cameras was not sufficiently promulgated,
- The cameras are "revenue raisers" and do not improve the safety at these locations, and
- A general lack of confidence in the reasons for the installation of the road safety cameras at these locations.

Scope of investigation

Referring to the issues raised by motorists, I concentrated on examining the following aspects of the road safety cameras:

- The general operation of the four road safety cameras,
- All testing, maintenance and certification activities of the four road safety cameras,
- The detection rate of incidents recorded by the road safety cameras,
- Infringements referred to me by motorists to assist in examining the validity of the fines,
- The history of the speed limit along the relevant length of road,
- The reasons for the installation of the road safety cameras,
- When the road safety cameras were installed and activated,
- The level of signage promulgating the speed limits on approach to the road safety cameras, and
- Any other factors that may have influenced the large number of traffic infringements detected at these four intersections.

For the purposes of this investigation, the Department of Justice & Regulation provided raw camera data recorded by the road safety cameras from 7 March 2014 to 31 December 2014. Each road safety camera recorded at least one million vehicle movements during this period.

Results of the investigation

Data recorded by the road safety cameras

After examining the testing, maintenance and certification activities performed on the road safety cameras, I am satisfied that they were operating, and continue to operate accurately and reliably. I could not find any technical issues with the three different types of road safety cameras in their operation.

In examining the data recorded by the road safety cameras, it is clear that each camera validated the speed calculations of each passing vehicle with the speed recorded by the secondary speed calculation system.

At Warrigal Road, where the speed limit is variable, the speed limit compliance rate was over 99.5 per cent when the speed limit was at its highest setting, compared to 96 per cent when the 40km/h speed limit was active. This was not surprising to me.

In comparison, the three camera locations where the speed limit was permanently 40km/h showed an interesting pattern. The level of compliance with the speed limit was always highest in the evening and early morning hours. In general, all of the cameras recorded 98 to 99 per cent speed limit compliance when traffic volume dropped. However, the speed limit compliance rate during the day, when it was busiest, dropped to 96 per cent. It is unclear why this change in speed limit compliance occurs.

Signage and environment

Due to numerous complaints from motorists regarding inadequate speed limit signage on approach to the road safety cameras installed at these intersections, I commissioned a study into this aspect of the four road safety camera sites under investigation. The study was performed by the Australian Road Research Board (ARRB), led by Professor Michael Regan, an expert in human factors and driving.

The results of the study showed that all of the speed limit signage installed on approach to the four road safety cameras was more than adequate. In completing the study, ARRB noted that the road safety cameras and the warning signs for them were installed in areas where the driving and visual environment was busier than usual, which meant motorists may not be able to visually identify them.

Traffic studies

In addition to examining data recorded by the road safety cameras, I also commissioned six traffic studies to be completed at various locations to examine driver behaviour in 40km/h speed limit zones. These locations were:

- The south bound carriageway of Warrigal Road in Chadstone, between Power Avenue and The Boulevard,
- Northeast bound along Fitzroy Street in St Kilda near William Balluk Close,
- Northeast bound along Fitzroy Street in St Kilda, approximately 100 metres after the intersection with Lakeside Drive,
- North bound along Russell Street in Melbourne, between Latrobe Street and Victoria Street,
- Barkly Street in St Kilda, between Vale Street and Carlisle Street, and
- Barkly Street in St Kilda, approximately 200 metres after the intersection with Carlisle Street.

The traffic studies showed that at the sites where a mismatch was identified between the environment and the speed limit, a significant proportion of motorists travelled at or above the speed limit. This was the case along Warrigal Road in Chadstone, Fitzroy Street in St Kilda and Russell Street in Melbourne, all areas where the road is relatively wide, with multiple lanes and a dividing median or tram lines dividing opposing traffic. This was shown by the high 85th percentile speeds at these sites (the speed at which 15 per cent of vehicles are travelling above), which are all at, or above the speed limit of 40km/h.

On approach to the road safety camera installed on Barkly Street in St Kilda, which has a 40km/h speed limit between 8AM and 7PM, Monday to Saturday, the average speed and 85th percentile speed of traffic was 31km/h and 38km/h respectively, during the periods the 40km/h speed limit was

active. Somewhat surprisingly, the average speed and 85th percentile speeds remained at those values between 8AM and 7PM on Sundays, when the speed limit was 60km/h. This result suggested that the road environment during the hours of 8AM to 7PM matched a 40km/h speed limit, and motorists were driving accordingly.

These results have satisfied me that where a 40km/h speed limit is in place for a significant proportion of time over a week, that length of road should receive additional changes to its environment, to align it with the posted speed limit.

Accident and casualty statistics

I also examined the accident and casualty statistics for the four intersections where the road safety cameras are installed and operating. Fixed road safety cameras operating at intersections are installed, based on assessments made about their crash history. If at least three injuries or fatalities have occurred at that location within five years, that location is deemed a "blackspot". A road safety camera will be installed, if it is effective in preventing behaviour that caused accidents and casualties at a location.

After assessing the historical crash data available on the VicRoads website covering the period 1 January 1987 to 31 December 2013, I am satisfied that all four of the road safety cameras in this investigation are located in historical accident blackspots.

Conclusions

At the end of my examination of the four fixed road safety cameras, I was unable to find any technical issues with their operation. The testing, maintenance and certification activities the cameras were subject to, ensured they operated in accordance with the requirements set out in the *Road Safety (General) Regulations 2009*.

An independent study completed by ARRB, confirmed that there was enough speed limit signage installed on approach to these locations to give motorists ample opportunity to recognise the posted speed limit. The ARRB study also showed that elements of the road environments on the approach to these road safety cameras did not suit the posted speed limit.

Additional traffic studies conducted at six locations, reinforced the main issue identified by the ARRB study, that is, when introducing a 40km/h speed limit to a length of road, the road environment must be altered to suit. If this is not done, a significant proportion of motorists are likely to drive at a higher speed than the posted speed limit.

Using the publicly available accident statistics, I was also satisfied that these road safety cameras, at the time of the installation and activation were accident blackspots, where injuries, and in some cases, fatalities had occurred.

The full text of this report is located on my website at cameracommissioner.vic.gov.au.

Recommendations

At the conclusion of this investigation, I recommended that:

- → Clear and concise explanations, including relevant accident statistics, of why fixed road safety cameras are installed at a location, should be easily accessible to the public,
- → Clear and concise explanations detailing the reasons a length of road or area has a speed limit of 40km/h should be easily accessible to the public,
- → That some sort of engineering solution, such as barriers that prevent people from travelling along the median strip, be erected along Warrigal Road, near its intersection with Batesford Road in Chadstone to stop pedestrians from jaywalking across the carriageways of Warrigal Road. Such a construction would force pedestrians to use the existing traffic light controlled pedestrian crossings and the pedestrian overpass looping around the railway bridge,
- → For the other three fixed road safety camera sites, where the speed limit is permanently 40km/h, I recommend that VicRoads and the City of Melbourne (where relevant), implement engineering solutions to align the road environment with the posted speed limit of 40km/h,
- → Concerning the length of road along Fitzroy Street, on approach to the intersection with Lakeside Drive, VicRoads considers changing the signs reading "School Zone" near St Kilda Park Primary School to read "School Ahead", or some similar phrase, in order to avoid confusion, as many motorists have advised me they believed these signs alluded to a variation in speed limits due to an approaching school zone,
- → Concerning the length of road along Flinders Street, on approach to the intersection with William Street, I recommend that the static speed limit sign immediately preceding the road safety camera be replaced with a flashing, LED illuminated sign,
- → Concerning the length of road along Exhibition Street, on approach to the intersection with Victoria Street, I recommend the static speed limit signs immediately preceding the road safety camera be replaced with flashing, LED illuminated signs, and
- → All current speed limit signage leading into the City of Melbourne's 40km/h speed limit area should be replaced with flashing, LED illuminated versions of those signs for additional visibility. In short, it should not be possible to enter the CBD by motor vehicle without being confronted by at least one flashing, LED illuminated 40km/h speed limit sign. I believe these steps would make hollow any complaint by a motorist that they were unaware of the relevant speed limit.

Part D
Annual reviews and other road safety camera matters

Review of the road safety camera system

In accordance with the *Road Safety Camera Commissioner Act 2011*, I am required to undertake, at least annually, a review and assessment of the accuracy, reliability and effectiveness of Victoria's road safety camera system. The review and assessment I undertake is to ensure the road safety cameras comply with the requirements in the *Road Safety (General) Regulations 2009*.

In the annual reviews spanning the financial years of 2012-2013 and 2013-2014, my office examined the operation of every fixed road safety camera that was operating in Victoria. In the first financial year, my office examined a representative sample, while that following review took in the rest of the cameras. This financial year, my office conducted an annual review on approximately half of the fixed road safety camera network. This annual review was conducted with the assistance of an independent, qualified, electrical engineer.

All fixed road safety camera sites commissioned and in operation prior to 1 July 2014 were considered to be part of this review. A representative mixture of the major freeway camera sites, including point-to-point systems, and cameras installed at intersection "blackspots" were included in this annual review.

To ensure the selected road safety cameras were accurate and reliable, my technical staff examined the certification, and scheduled testing and maintenance activities the cameras were subjected to over a period of twelve calendar months in detail, to ensure they complied with the requirements in the *Road Safety (General) Regulations 2009)*.

By examining the scheduled testing and maintenance activities performed on road safety cameras, the review can:

- Find any potential technical or systemic issues with a specific road safety camera, or the road safety camera network,
- Monitor the performance of the road safety camera network as a whole,
- Oversee, and ensure that certification, testing and maintenance is carried out in accordance with Department of Justice & Regulation policy,
- Ensure that the road safety cameras operate accurately and reliably between their annual calibrations, and
- Establish a trend in data and statistics recorded during the operation of the road safety cameras.

At the conclusion of my annual review, I am satisfied that the road safety cameras were operating accurately and reliably, in accordance with the requirements set out in the *Road Safety (General) Regulations 2009*. The cameras were tested and maintained correctly, and operated continuously within their calibrations. I was unable to find any reason why, or instance where, a traffic infringement notice sent to motorists, could have been detected by a road safety camera that was not operating correctly.

Review and assessment of the publicly available information about the road safety camera system

Section 10(b) of the *Road Safety Camera Commissioner Act 2011* requires me to undertake, at least annually, reviews and assessments of the information about the road safety camera system that is made available to the public by the Department of Justice & Regulation.

After discussions with the Director of Infringement Management and Enforcement Services at the Department of Justice & Regulation, it was agreed that I would consider a sample of one week's correspondence from each calendar month, which came within the above definition. The result was that I considered 90 pieces of correspondence involving the provision of information about the road safety camera system.

The Director advised me that after the establishment of the office of the Road Safety Camera Commissioner, as the public became more and more aware of its existence, so did the correspondence relating to the function of the road safety cameras, reduce at his office.

There are two comments I make about the correspondence.

The quality of the correspondence is excellent from the point of view of manner of expression and helpful content.

However, as in past years, although slightly improved, the time taken by Infringement Management and Enforcement Services to respond to the members of the public, was in my view, unduly long. The turnaround time from the date of receipt to response, averaged about 43 days. As I observed in last year's annual report, delays of this nature would be unacceptable in the business world. When I have taken up my concerns with the Director, he has pointed to lack of staff, and that this response time is significantly better than other government departments.

While I accept the Director's assurances in this regard without question, I point out that where time limits and the imposition of fines (or worse) become relevant, approximately one and a half months to reply to a letter, is unacceptable.

Leaving aside correspondence as the source of information for the public about the road safety camera system, the release of infringement statistics on nominated dates, together with a brief explanation of them, is a great step forward in transparency.

I also congratulate the Department of Justice & Regulation for its decision to review and redesign the entire Cameras Save Lives website. The diagrams and explanations are now more easily understood, and for example, the updated map of fixed camera locations, is more motorist friendly.

Recommendation for Smart Enforcement Vehicles

During my visits to the United Kingdom's National Safer Roads Conference held in Manchester, I was introduced to the Smart Enforcement Vehicles and their operators. These vehicles are used by Manchester's police force to target distracted driving and motorists who do not wear seatbelts while driving.

Each vehicle has a roof mounted video camera that can rotate through 360 degrees, and when operators see a motorist using mobile devices, not wearing their seatbelt, or performing other tasks that distract from driving, images and video of each incident can be recorded for later review, with the view to issuing traffic infringement notices. All of this is done within a 100 metre radius of the Smart Enforcement vehicle.

I believe that all forms of distracted driving is one of the emerging issues in road safety, and the contravention of the rules regarding seatbelts by some motorists is a recurring issue. While the monetary and demerit point penalties for these offences have increased recently, it is difficult to envisage how to deter such risky behaviour without more effective enforcement.

During my short introduction to these vehicles in Manchester, it was clear that they were effective in recording evidence of distracted driving offences. With a number of vehicles outfitted in a similar manner, Victoria Police would have a flexible and relatively cheap solution that would be an effective deterrent against distracted driving.

The data relating to infringements detected by the Smart Enforcement vehicles in Manchester speaks for itself in the table below.

Year	Seatbelt offences	Mobile phone offences
2010	4517	373
2011	3105	319
2012	4160	683
2013	2250	321
2014	3593	768

Greater Manchester Police has confirmed that it believes that motorists' awareness of the operation of the Smart Enforcement vehicles has acted as a major deterrent in keeping in check an escalating road safety problem.

Replacement of all fixed analogue road safety cameras

Victoria's earliest fixed road safety cameras were installed throughout the 1980s and 1990s. This type of camera relies on antiquated technology, and can only monitor compliance with red lights and arrows. There are currently 41 installations of fixed analogue camera systems in Victoria, with up to 30 of these installations active at any one time.

It is of great satisfaction to me, to be able to say that after three and a half years in this office, I am not aware of a defective road safety camera. However, I am apprehensive that these analogue road safety cameras, after exposure to the elements for as long as three decades, and subject to a level of maintenance by VicRoads far lower than that applied to newer camera systems by the Department of Justice & Regulation, could be reaching the end of their useful lives. This would result in each system requiring more frequent and increasingly expensive maintenance to ensure they retain the level of reliability which the motoring public is entitled to expect.

In fact, these cameras are so old that the method by which images are recorded and stored on these devices, is through rolls of wet film negatives. Because of this, regular visits to remove and restock the film are required, which is both time consuming and expensive.

Their method of operation is quite simple and reflects the state of technology at the time of their manufacture. One inductive loop sensor, which detects ferrous content in objects, is installed in the road. When a vehicle is detected travelling over this sensor after the traffic lights and arrows have turned red, the camera activates and records two images, to show that a vehicle has contravened rules 59 or 60 of the *Road Safety Road Rules 2009*.

Their simplistic operation can lead to higher numbers of false positive activations, such as when cyclists, skateboards or a person or persons carrying an appreciable amount of ferrous metals, travel over the sensor. These false activations are detected and discarded during manual processing.

In contrast, modern fixed road safety cameras installed at intersections, use the inputs of at least two in road sensors, along with more complex and intelligent mathematical algorithms, to detect vehicle presence and calculate speed. This arrangement prevents any activations caused by bicycles, skateboards or metallic objects held close to the ground moving over individual sensors.

The newer generation of fixed road safety cameras are also far more advanced and use digital technology to record, store and transmit encrypted information. They are remotely controlled and do not require regular visits to ensure there is sufficient storage for data. Further, the quality and clarity of images produced by a modern digital system are demonstrably better than that produced by a wet film camera, and the processing power of a modern digital system, allow them to monitor speed limit compliance in addition to red light offences.

In this financial year, my office received several complaints regarding fixed analogue road safety cameras appearing to malfunction. The complaints all related to the road safety cameras' flash units activating independently of the road safety camera system. While there is no evidence that the road safety cameras were recording images at the same time as the flashes, I believe that this type of occurrence can erode confidence in Victoria's road safety cameras.

In recent years, a succession of governments has indicated that fixed analogue road safety cameras will be phased out. Certainly, during my time as the Road Safety Camera Commissioner, that undertaking has been given. However, as at the date of this report, I am not aware that any analogue road safety camera, currently operating has been replaced by a more modern installation.

Enquiries about the likely cost of direct replacement of all 41 installations currently in use have resulted in estimates of between eight to ten million dollars in total. As I regard this as money well spent, I recommend that current fixed analogue road safety camera systems, where a new road safety camera system can be shown to enhance road safety at that location, should be replaced with modern fixed road safety cameras as soon as practicable.

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