

**Submission
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**INQUIRY INTO THE IMPACT OF ROAD SAFETY BEHAVIOURS ON
VULNERABLE ROAD USERS**

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Office of the Road Safety Camera Commissioner

VICTORIAN PARLIAMENT

LEGISLATIVE ASSEMBLY ECONOMY AND
INFRASTRUCTURE COMMITTEE

**INQUIRY INTO THE IMPACT OF ROAD SAFETY
BEHAVIOURS ON VULNERABLE ROAD USERS**

Submission by the Road Safety Camera Commissioner

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We acknowledge the Aboriginal Traditional Owners of Country throughout Victoria and pay respect to their cultures and Elders past, present, and emerging.

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1 BACKGROUND OF SUBMISSION

The Legislative Assembly Economy and Infrastructure Committee ('Committee') of the Victorian Parliament announced on 9 March 2023 an 'Inquiry into the impact of road safety behaviours on vulnerable road users' ('Inquiry').

1.1 TERMS OF REFERENCE

The Inquiry by the Committee will examine *"changes to road safety behaviours during and post the COVID[-]19 pandemic and impacts on vulnerable road users."* This includes *"pedestrians, cyclists, motorcycle riders, children 7 and under, older people and mobile device users."*

The Committee will examine all the submissions received and make any necessary recommendations that may improve road safety in Victoria, particularly in regards to vulnerable road users.

The Committee will provide its final report no later than 31 March 2024.

2 INTRODUCTION

My name is Neville Taylor and I was appointed as the Road Safety Camera Commissioner ('Commissioner') on 6 June 2022 for the State of Victoria. I am the fourth Commissioner to have been appointed in this role.

The Office of the Road Safety Camera Commissioner ('Office') commenced operations on 6 February 2012. Over that time, successive Commissioners have undertaken 26 formal investigations and reviews and made over 100 recommendations to the Minister for Police ('Minister'). Broadly, these recommendations centre around addressing any systemic issues identified and improving the systems and processes governing the collaboration, management, and operation of the road safety camera system. Recommendations made are often referred to different member departments and agencies within the road safety partnership to progress and complete.

The role of the Commissioner is to ensure there is ongoing integrity, transparency, and community confidence in Victoria's road safety camera system and that the cameras are operating at the highest level of accuracy and reliability.

2.1 OFFICE OF THE ROAD SAFETY CAMERA COMMISSIONER OVERVIEW

The Office is an independent, statutory, oversight body established by the government under the *Road Safety Camera Commissioner Act 2011* ('RSCC Act') to enhance community confidence in the road safety camera system. This was in response to recommendations made in the 2011 Road Safety Camera Program report by the Victorian Auditor-General's Office ('VAGO Report').¹

The Office, which includes one senior technical specialist adviser on matters relating to road safety camera technology, supports the Commissioner to fulfil the powers and functions under the RSCC Act.

The Commissioner is also supported by a group of specialist advisors appointed under the provision of the RSCC Act. The Road Safety Camera Commissioner Reference Group ('Reference Group') is comprised of experts in road safety research, enforcement, policy making, governance and oversight functions, engineering, technology, forensic crash reconstruction, and the psychology of behaviour change. Some members also have lived experience with road trauma. Further information on the Office and the Reference Group can be found at the Camera Commissioner's website at cameracommissioner.vic.gov.au.

2.2 RESPONSE TO THE TERMS OF REFERENCE

I note that the Terms of Reference of the Inquiry is to namely examine "*changes to road safety behaviours during and post the COVID[-]19 pandemic and impacts on vulnerable road users.*" I have considered my role and functions under the RSCC Act to determine what, if anything, is within that remit that would be relevant to the Inquiry's Terms of Reference. I felt that the

¹ Victorian Auditor-General's Office, *Road Safety Camera Program*, Victorian Auditor-General's Office, 31 August 2011

results of a survey into the community perceptions of road safety cameras was one that would provide insights that may be of interest to the Committee.

In coming to this conclusion, I have considered an opinion offered by a credible road safety researcher, Dr Soames Job, Chief Executive Officer and Principal of Global Road Safety Solutions. Dr Job suggested there is a myth about people's attitudes influencing their behaviour. He claimed that in the study of cognitive dissonance, it is established that attitude change does not change behaviour; often it is behaviour change that leads to attitude change. Dr Job suggested that people do not change their behaviour when using the roads due to fear of a collision, rather it is more likely that people change their driving/riding behaviour due to the fear of receiving a penalty.² It would be reasonable then to accept that a survey into the perceptions held by road users about road safety cameras provides some insight into their attitudes, and consequently, their behaviours relating to speed (both low-level and excessive), red-light offending, illegal mobile phone use, and the non-use of seatbelts.

2.2.1 Integrity, transparency, and community confidence with cameras

According to the VAGO Report, a *"high level of [technical] confidence in the accuracy and reliability of the equipment used in the road safety camera system"* is required for public trust. The VAGO Report also acknowledged that making relevant documentation publicly available is crucial for system transparency and public peace of mind. When the then Minister for Police and Emergency Services, the Hon Peter Ryan MP, introduced legislation in late-2011 to create an independent oversight body for the camera system, he emphasised during the Second Reading about the importance of boosting public confidence. He noted that, *"when people understand clearly that the cameras are accurate and only catch those doing the wrong thing, it can lead to behaviour change that includes drivers being more likely to take a careful approach to keeping with the speed limit and obeying traffic signals, which in turn will promote improved road safety outcomes."* He stated further, *"to increase transparency, the Commissioner will provide credible, expert advice about road safety camera operations [and the camera system] to the [Victorian] Parliament and the community."*³

Road safety cameras play an important enforcement role in making our roads safer. Even though cameras are only one of the various road safety enforcement measures employed, they often receive criticism from certain members of the public and within both traditional and social media. It is acknowledged that people's perceptions of road safety cameras are based on personal experiences and the belief that other factors might have influenced their driving/riding behaviour at the time. If the public was aware of the high degree of integrity and transparency in the operation of road safety cameras, it would bolster their confidence that cameras are a legitimate and effective application tool within the suite of available road safety measures utilised.

² Dr S Job, *The Victoria Police: Driving Road Safety*, forum held at the Melbourne Cricket Ground, 14 September 2023

³ P Ryan MP, *Road Safety Camera Commissioner Bill 2011*, Victorian Parliament - Hansard, 31 May 2011, hansard.parliament.vic.gov.au

2.2.2 Previous Public Perceptions Surveys

On 6 September 2017, then Commissioner John Voyage published the results of the inaugural benchmark public survey of drivers/riders. This benchmark survey aimed to understand if the level of public confidence in cameras reasonably reflected the precision of the road safety camera system.⁴

On 10 November 2020, then Commissioner Stephen Leane published the second wave of the public perceptions survey.⁵ The majority of questions from the benchmark public survey were retained to determine any trends in the data. New questions seeking community attitudes to distracted driving enforcement, point-to-point cameras, community observations of driving behaviours during COVID-19 lockdowns, and the views of professional road users – people who drive professionally for a living – were included.

2.3 PUBLIC PERCEPTIONS WAVE 3 SURVEY

I have just overseen the completion of the Office of the Road Safety Camera Commissioner Road Safety Camera Perceptions Wave 3 Survey ('Wave 3 Survey'), which is yet to be published. The Wave 3 Survey was conducted by the same expert consultants as the first two surveys to enhance the consistency and reliability of the methodology utilised across all the three waves. The data analysis employed was able to focus on indicators of trends in perceptions self-reported by the surveyed respondents.

The primary objective of this Wave 3 Survey was to measure the perceived impacts and general attitudes of the community towards the road safety camera system and how this related to road users' behaviour and confidence in the system. The research objectives included awareness and views of road users on the various road safety camera technology in use, general road safety initiatives, observed post-COVID-19 impacts on the driving/riding behaviour of road users, and insights into any improvements that could be made to enhance the community's views on the road safety camera system.

The Wave 3 Survey involved a 16-minute online interview of 1,223 adult respondents in September 2023. The sample size provides an overall margin of error of +/-2.8 at a confidence level of 95 per cent. The survey methodology utilised over repeated waves would typically result in less than a 3 per cent duplication in respondents. Given that each wave of survey has been conducted three years' apart, it would be expected to have a very low sample overlap of respondents from survey to survey.

⁴ Road Safety Camera Commissioner, *Community Perceptions Benchmark*, Office of the Road Safety Camera Commissioner, 6 September 2017, cameracommissioner.vic.gov.au/publications/results-survey-victorians-perceptions-road-safety

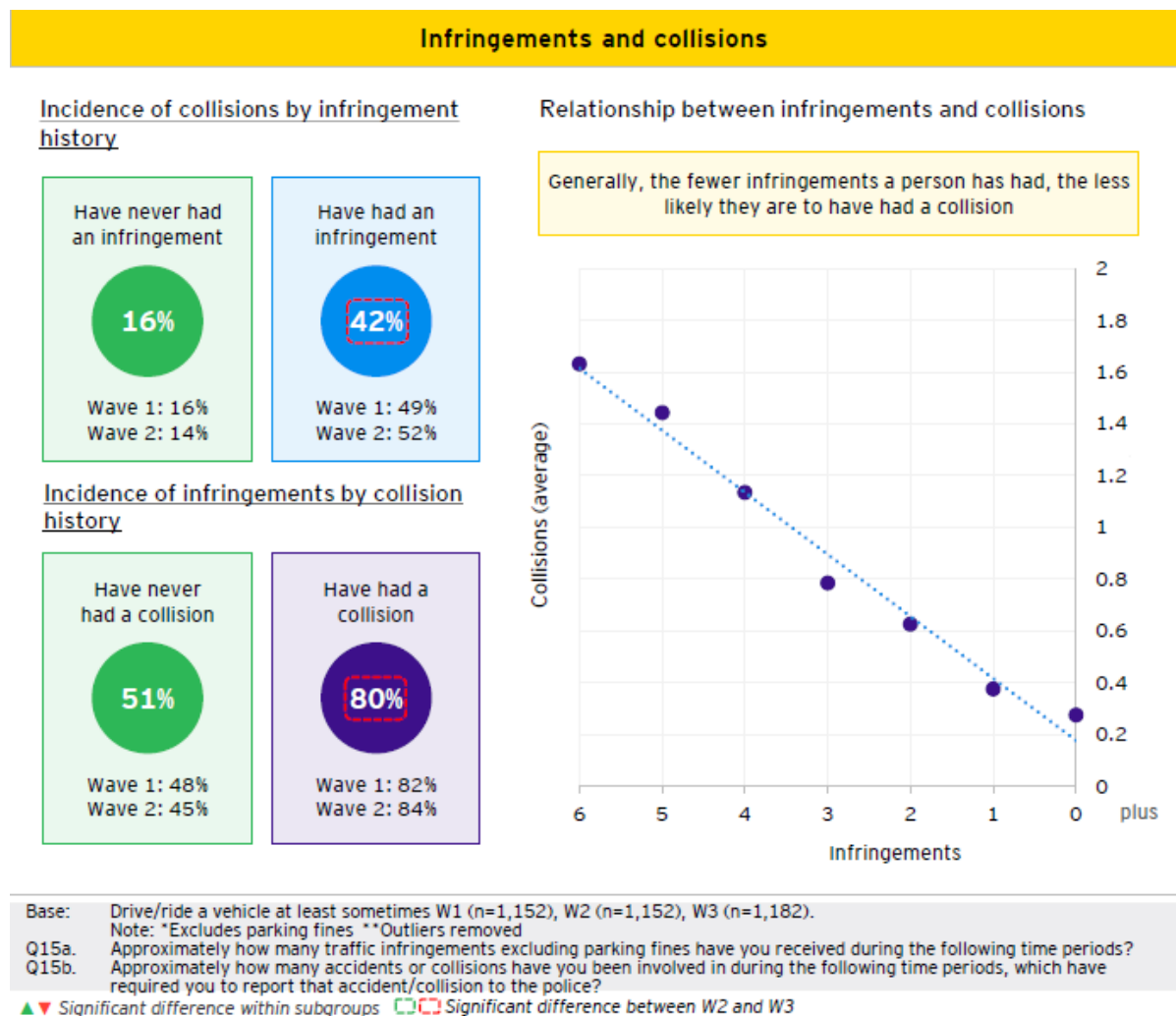
⁵ Road Safety Camera Commissioner, *Road Safety Camera Perceptions Wave 2*, Office of the Road Safety Camera Commissioner, 10 November 2020, cameracommissioner.vic.gov.au/publications/road-safety-camera-commissioner-survey-wave-2

3 KEY FINDING CALLOUTS FROM THE WAVE 3 SURVEY

The Office now has six years of data that can be analysed further and generate discussions with the road safety partners on demonstrated trends. For example, the public's perception towards road safety cameras enforcing speed has not changed significantly over the previous six years. Further exploration would be required to understand if this is a result of road users being more prepared to accept the road safety risks of low-level speeding over being captured by a camera. Does this perception of the effectiveness and/or acceptability of speed cameras carry across to other types of newer camera technologies?

I want to emphasise that the following key finding callouts from the Wave 3 Survey are not designed to provide in-depth analysis, as this detail is provided in the full body of the report. Rather, the intention is to provide quick callouts on particular topics of interest. My submission is limited to a range of those callouts in a number of areas of interest that I consider relate to the Terms of Reference of this Inquiry.

3.1 STRONG CORRELATION BETWEEN INFRINGEMENTS AND COLLISIONS



Consistent across six years of data, there is a strong correlation between traffic infringement notices and collisions. Put simply, the more traffic infringements an individual receives, the more likely that person is to be involved in a collision.

The Wave 3 Survey found that Victorian road users, whom have received an infringement notice, were more than twice as likely to have had a collision at some point in time (42% compared to 16% of respondents who reported to never having had an infringement notice). Additionally, 80 per cent of respondents who have had a collision have also previously received an infringement notice in the past.

This correlation is important to highlight as further interrogation of the data may yield potential future solutions to assist in reducing the incidences of road trauma and help meet the goals of the Victorian Road Safety Strategy 2021–2030.

3.2 IMPACT OF SPEEDING INFRINGEMENTS ON ROAD USERS' BEHAVIOUR

The methodology utilised in all three surveys was applied consistently in each wave, with a 16-minute online survey conducted with approximately 1,200 adult respondents based in Victoria – 1,223 respondents in 2023, 1,233 respondents in 2020, and 1,204 respondents in 2017. There was a remarkable consistency in the number and percentage of respondents confirming they have received a speeding infringement notice in the past (584 respondents or 48% in 2023, 593 respondents or 48% in 2020, and 565 respondents or 47% in 2017). Just under half of those surveyed during this wave admitted to having been fined for speeding.

For the third survey in a row, there has been a slight and positive increase in the behaviour of road users after receiving a speeding infringement notice (55% in 2023, 54% in 2020, and 48% in 2017). More than half of the respondents (55%) who received a previous speeding infringement notice stated they now slowed down all or most of the time and/or they are a more careful driver now (54%). However, 34 per cent of those who have received prior speeding infringement notices admitted that their driving/riding behaviour has not changed.

This survey found that almost nine in ten recipients of speeding infringements (88%) believed they were not driving dangerously when they received their most recent fine. In examining the responses of those who advised that their behaviour changed after receiving a speeding fine, one in three respondents admitted that they only modified their behaviour to avoid being captured speeding in the future by a road safety camera (31%). Further research is needed to gain a better insight in road users' understanding between their choice of speed and road trauma, and the risks of low-level speeding to other road users including themselves.

3.3 IMPACT OF ROAD SAFETY CAMERAS ON SPEEDING ROAD USERS

The Wave 3 Survey found that 75 per cent of surveyed respondents admitted to speeding at least some of the time, with over 41 per cent of those admitting to speeding describing their behaviour as intentional. Younger drivers (aged 18 to 29 years) were more likely to speed intentionally some of the time (52% vs 39% for those aged 30 years and over) as were male drivers (46% vs 36% for female drivers)*. Additionally, respondents who drove daily were more likely to admit to speeding some of the time (45%) compared to those who drove at least once a week or less frequently (36%).

* Surveyed respondents were given options to identify their gender including male, female, non-binary, to use a different term, or not stating a response.

The Wave 3 Survey did find that road users admitted to altering their behaviour when approaching known speed camera locations, with two-thirds of respondents admitting to slowing down when approaching a road safety camera. Independent research by the Monash University Accident Research Centre ('MUARC') previously confirmed the effectiveness of fixed road safety cameras at intersection sites, concluding that there was a 47 per cent reduction in casualty crashes on the enforcement leg of the camera system and a 26 per cent reduction when all approaches (including the non-enforcement legs) were taken into account.⁶

Although this survey confirmed that cameras assist in changing the behaviour of road users, it was also possible that respondents were speeding prior to passing a known speed camera location and electing to slow down to avoid detection – a practice known as camera surfing.

3.4 ENVIRONMENTAL CUES, SPEED LIMITS, AND SIGNAGE

The Wave 3 Survey confirmed that road users have a high awareness of the speed limits on Victorian roads (79%). There was excellent understanding of the speed limit enforced around school zones (83%), residential streets (71%), and regional freeways (70%). However, the responses also indicated confusion about the correct maximum speed limit for road users when passing aged care residences (28%), roads bordering retail strips with outdoor dining (19%), and office-lined highways approximately five kilometres outside Melbourne's Central Business District (28%).

Heightened awareness of the speed limit was more likely attributable to signage, rather than environmental cues. Less than half of all respondents agreed that the speed limit signage was displayed consistently across different areas in Victoria (47%) and that it was easy to predict what the speed limit was based on the road and the surroundings (42%). However, the data revealed a correlation with age as older Victorians were more able to accurately interpret the environmental cues. This was likely due to their greater experience with driving/riding.

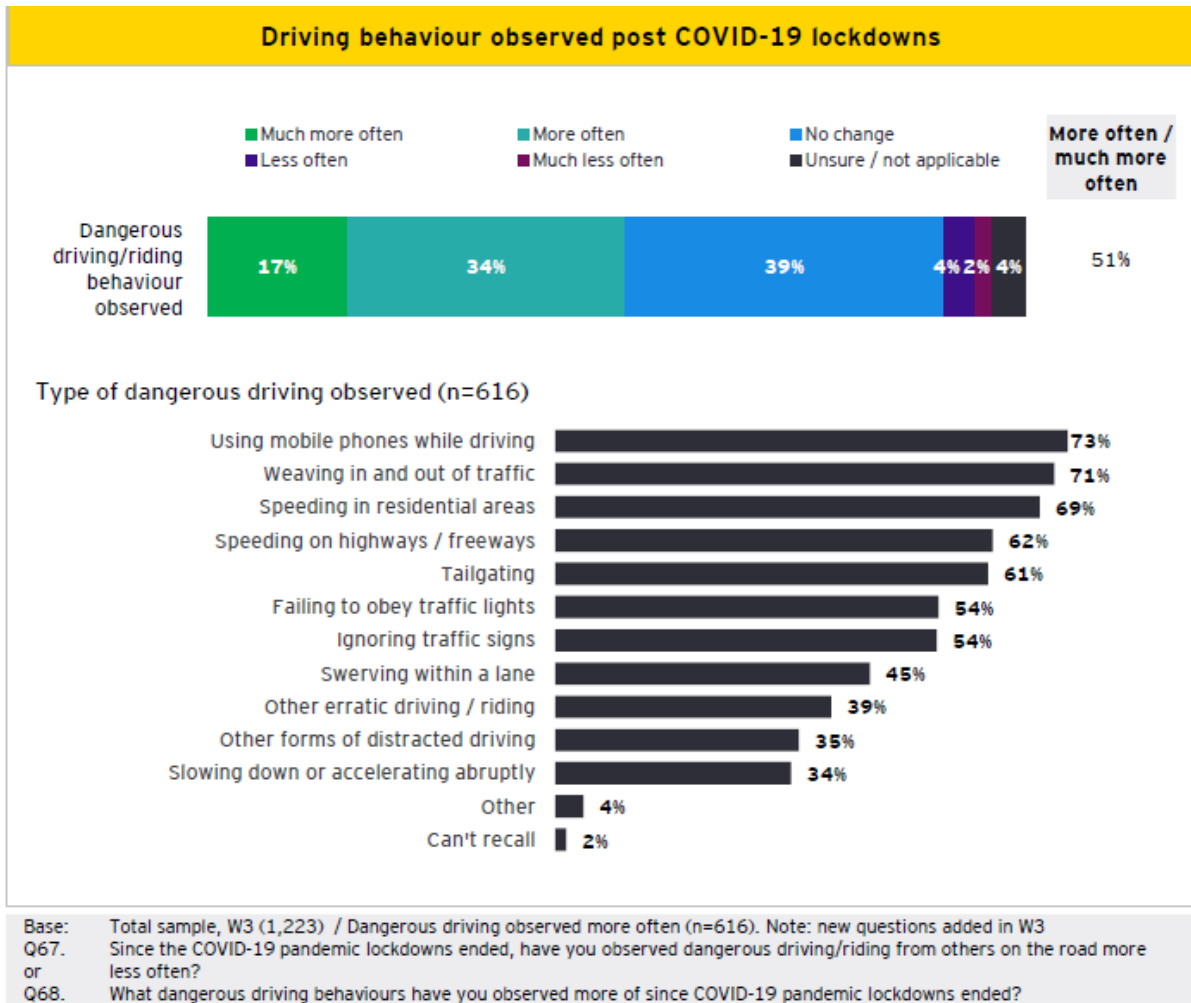
Interestingly, professional road users were less likely to accurately identify the speed limits in the various scenarios presented to them in the Wave 3 Survey, compared to those that have never driven for employment reasons in their lives.

3.5 OBSERVED DRIVING BEHAVIOURS POST-COVID-19 LOCKDOWNS

New questions were inserted in this survey to capture the observations of Victorians on the driving/riding behaviour of road users since the end of all COVID-19 lockdowns. This section of the Wave 3 Survey would be of interest to this Committee with the current Inquiry into the *"changes to road safety behaviours during and post the COVID[-]19 pandemic and impacts on vulnerable road users."*

Half of all Victorians (51%) believed there were more dangerous driving behaviours exhibited on the roads following the conclusion of all COVID-19 lockdowns. The most cited behaviours are indicated in the following table:

⁶ L Budd, J Scully, and S Newstead, *Evaluation of Crash Effects of Victoria's Fixed Digital Speed and Red-Light Cameras*, Monash University Accident Research Centre, May 2011.



Interestingly, professional road users were more likely to note a reduction in dangerous driving behaviours they have witnessed.

3.6 INTEGRITY OF THE ROAD SAFETY CAMERA SYSTEM

Six years of surveyed responses have consistently revealed that the majority of Victorians believe that road safety cameras are just revenue raisers (65% in 2023, 53% in 2020, and 69% in 2017). The Wave 3 Survey revealed that only one in three respondents perceived the enforcement of speed was fair, while only slightly more perceived they were accurate (37%). Although the majority of respondents (55%) indicated they modified their behaviour after receiving a speeding infringement notice, that is still only slightly more than half.

Independent research from the MUARC over the years have consistently confirmed the effectiveness of various road safety camera technologies (fixed cameras at intersections, mobile road safety cameras, distracted driving and seatbelt cameras, and highway point-to-point cameras) in reducing the incidences of lives lost and serious injuries sustained on the roads.

The integrity of enforcement programs is influenced by the public perception of the credibility of these programs based on their accuracy, fairness, and reasonableness. The available research from road safety experts is persuasive in the effectiveness of road safety cameras to reduce road trauma. However, that level of persuasiveness is not shared by the community. The Wave 3 Survey provides invaluable feedback to identify pathways to bridge this perception gap.

4 2022 NEPEAN HIGHWAY INVESTIGATION

In addition to the Wave 3 Survey, I would also like to draw the Committee's attention to the conclusions in my most recent formal investigation conducted under powers accorded to me within the RSCC Act.

In 2022, I investigated complaints about the road safety cameras at the intersection of Nepean Highway and Davey Street in Frankston.⁷ In brief, the Nepean Highway Investigation arose from a significant increase in road users receiving infringements for speeding following the reduction of the speed limit from 60 km/h to 40 km/h southbound along the Nepean Highway through the Davey Street intersection. This was a complex investigation from which I concluded that based on the unusual and exceptional circumstances in the work by a number of authorities in implementing that speed limit reduction, motorists detected travelling through the Davey Street intersection in excess of 40 km/h, but below the former speed limit of 60 km/h, should have their offending conduct excused.

One significant matter identified in that investigation provided evidence of the existence of an inherent behaviour of road users relating to speed. I refer to this as *'factors influencing road users' choice of speed when driving.'*

Findings and conclusions with several investigations by Commissioners over recent years, including this Nepean Highway Investigation, have been consistent with the findings identified from significant academic research. These findings have shown that at times, road users will elect to drive at a speed that is influenced by factors other than the posted speed limit signage. This recent investigation found that this driving/riding behaviour by road users was very prevalent in 2022, post the COVID-19 lockdown period, when driving on a multi-lane arterial road. Having passed what they considered to be the hazard – in this case the outdoor roadside dining infrastructure – road users chose to increase their speed before the end of the reduced speed limit zone, which was situated within a high pedestrian activity area.

I was very pleased to see that the road safety partners accepted all the conclusions and recommendations of my investigation and implemented changes to that section of roadway to increase the way in which the road network explained to road users of the recently lowered and safer speed limit. The new speed limit of 40 km/h reduced the risk to vulnerable road users in an area that has a history of road trauma, particularly with pedestrians.

I am continuing to monitor how the road safety partners are progressing with implementing the Nepean Highway Investigation recommendations. This includes building a more sustainable and reliable collaboration between the road safety partners and local governments to learn from the lessons of this investigation, particularly in reducing the risk of road users being confused in future instances of speed limit reductions within the proximity of road safety cameras.

⁷ Road Safety Camera Commissioner, *Nepean Highway Investigation*, Office of the Road Safety Camera Commissioner, 19 October 2022, cameracommissioner.vic.gov.au/publications/nepean-highway-investigation

5 CONCLUSION

I can confirm that I am available to present before the Committee on any areas of interest that relate to my work and the Wave 3 Survey that aligns with the Terms of Reference of the Inquiry.

I have provided the Wave 3 Survey along with my advice to the Minister on these key finding callouts of interest. I have also socialised the report with the road safety partners. By the end of December 2023, I anticipate being able to publish this survey and the key findings on the Camera Commissioner website for public consumption.

The rich set of data now available from three waves of surveys over the last six years can be made available and used for further exploration by the road safety research community. I look forward to discussing this opportunity with the road safety partners and others from the road safety research community. I can confirm that I have already observed significant interest from members of the Reference Group to pursue this opportunity.

6 GLOSSARY

ACRONYM / ABBREVIATION	DEFINITION
Commissioner	Road Safety Camera Commissioner
Committee	Legislative Assembly Economy and Infrastructure Committee
Inquiry	Inquiry into the impact of road safety behaviours on vulnerable road users
Minister	Minister for Police
MUARC	Monash University Accident Research Centre
Office	Office of the Road Safety Camera Commissioner
Reference Group	Road Safety Camera Commissioner Reference Group
RSCC Act	Road Safety Camera Commissioner Act 2011
VAGO Report	2011 Road Safety Camera Program report by the Victorian Auditor-General's Office
Wave 3 Survey	Office of the Road Safety Camera Commissioner Road Safety Camera Perceptions Wave 3 Survey

7 ATTACHMENT

A copy of the embargoed Office of the Road Safety Camera Commissioner Road Safety Camera Perceptions Wave 3 Survey report is attached separately to this submission.