31 January 2020

The Secretary
Economy and Infrastructure Committee
Parliament House, Spring Street
EAST MELBOURNE VIC 3002

To the Secretary

**Inquiry into the Increase in Victoria’s Road Toll**

RACV welcomes the opportunity to provide comment on the *Inquiry into the Increase in Victoria’s Road Toll*.

With more than 2.2 million members, RACV is a household name in Victoria and a highly trusted organisation. We have long represented our members on motoring and transport issues, advocating on their behalf, and expressing their views to both government and stakeholders.

How Victorians move around their state in the future is of vital importance to the good functioning of our state, and our submission outlines our feedback on the proposed changes.

If you would like any further information regarding our submission, please contact Peter Kartsidimas.

Yours sincerely

BRYCE PROSSER
Submission to

Inquiry into the Increase in Victoria’s Road Toll

to Parliament of Victoria

January 2020
RACV Submission to the Parliament of Victoria
Inquiry into the Increase in Victoria’s Road Toll

Introduction

Victorians expect their travel to be safe. RACV Members tell us that they:

- Are concerned about risky road user behaviour, such as driving under the influence of drugs or alcohol, speeding and mobile phone use
- Believe the transport system should be designed to cater for the needs of all road users and protect the vulnerable, including pedestrians and cyclists
- Recognise that education, enforcement and the engineering of our roads and vehicles all have a role to play in reducing road trauma.

In 1970, 1,061 people lost their lives on Victorian roads.

We’ve come a long way since then. The Victorian population has nearly doubled and the number of vehicles on our roads has more than tripled, however as shown in Figure 1, changes to roads, laws and vehicle design, have seen deaths dramatically reduced. It is widely acknowledged that mass media campaigns and other public educations have led to changes in community attitudes, resulting in positive changes to behaviour. Scenarios once commonplace (e.g. drinking and driving, not wearing seatbelts, not using child restraints) are now illegal and recognised as unsafe.

Yet, approximately 260 people still die each year on Victorian roads and another 6,700 are seriously injured at a cost of $3-4 billion to the economy.1 Across Australia, approximately 1,200 people die and 36,000 are hospitalised.

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We commonly measure the ‘road toll’ by the number of fatalities or lives lost. However, this is only the tip of the iceberg when it comes to the true impact and cost of road crashes. For every person killed on Victorian roads, almost 30 are hospitalised and some suffer long-term, life-changing injuries.²

To improve road safety in Victoria and save lives, we must look at all aspects of the system. RACV supports this ‘safe system’ approach to road safety.

The ‘safe system’ approach recognises that all humans make mistakes. However, a mistake on the road should not result in loss of life or serious injury. The human body is not designed to absorb the high forces involved in road crashes.

‘Towards Zero’ is the Victorian Government's plan to ensure no one is seriously injured on Victorian roads. It acknowledges we all face risks on our roads, but these risks should not cost us our lives. That is why we need to ensure there is a safe transport system for Victorians.

We need safer road users in safer vehicles on safer roads and travelling at safer speeds.

![Figure 1. Victorian Government, Safe System Approach, 2016³](image)

These road safety principles are in place across most Australian states and territories. Internationally, countries such as Sweden, Canada, United Kingdom, France, Norway and large cities in the USA including New York City, Los Angeles, Chicago and Boston have implemented these principles, often under Vision Zero branding.

RACV recently reminded members of the importance of a safe system through a feature article in RoyalAuto which interviewed family members affected by road trauma and experts from TAC, Victoria Police and RACV. A copy of this is attached as Appendix One.

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² Searchable Road Trauma Statistics*, TAC.
(1) Current Victorian Towards Zero Road Safety Strategy 2016-2020 and progress towards its aim of a 20 per cent reduction in fatalities with 200 or less lives lost annually by 2020.

Previous Road Safety Reports
There have been several reports that target road safety improvements across Victoria and Australia in recent years, including:

- National Road Safety Strategy 2011-2020 5 (NRSS)
- 2018 Inquiry into the National Road Safety Strategy 2011-2020 8
- Australian Automobile Association’s (AAA) Reviving Road Safety report 9,10
- 2019 Review of the National Road Safety Governance Arrangements11

Each of these reports sets out actions that should be implemented to achieve the next step change in road safety and avoid failure to meet our Strategy’s targets. The recommended actions are known, but there must be political will to accelerate the adoption of all recommendations.

Another factor that hinders our success in reducing road trauma is the way road safety goals are set and approached. The NRSS and the NRSS Action Plans – published by the Federal Government – outlines recommendations and key actions that generally focus on specific issues relating to each of the Safe Systems aspects (i.e. safer roads, speeds, vehicles, people). However, these recommendations often do not have clear quantifiable measures of what success looks like. The wordings also make these goals an easy yes/no dichotomy in determining if something (regardless of whether sufficient or not) has been done.

Some examples of these recommendations and goals are:

- “A substantial reduction in serious casualties due to run-off-road, head-on and intersection crashes”12
- “Significant improvement in the safety of the light commercial vehicle fleet”13
- “Prioritise and treat high-risk rural and urban roads, focusing on the main crash types and vulnerable road users.”14

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4 Ibid.
10 This report brings together 23 national and state organisations and prioritises what is needed to combat road trauma.
11 Road Safety Taskforce, Review of National Road Safety Governance Arrangements (Canberra: Commonwealth of Australia, June 2019).
13 Ibid.
• “Implement programmes to build community understanding and support for effective speed measurement measures”
• “Target infrastructure funding towards safety-focused initiatives to reduce road trauma on regional roads”
• “Strengthen efforts to reduce drink driving.”

The subsequent reports mentioned above that were conducted independently (2018 Inquiry into the NRSS, AAA's Reviving Road Safety report, and the 2019 review of road safety governance) tend to focus more on high-level overarching issues that affect the implementation of recommended actions outlined in the NRSS and Action Plans.

Key issues include; nationally integrated data collection, analysis and reporting platforms and methods, embedding the Safe System approach in all road safety and infrastructure projects and funding across all levels of government, committing to road safety goals with clear key performance indicators and good measurement and reporting methods, safety of vehicles in the market.

These issues are not new, and have been raised previously, though they tended to not have been prioritised in the NRSS and Action Plans as key recommendations. Without proper execution of the aforementioned key issues, there is no clear way to measure our success in attaining the goals set out through the NRSS and Action Plans. As the Inquiry into the NRSS found, “Failing to improve our current situation will result in 12,000 people killed and 360,000 admitted to hospital at a cost of $300 billion [nationally] over the next decade.”

Furthermore, “we accept making the roads, vehicles and users safer, but frequently miss the opportunity to make them “SAFE” outright. The distinction is subtle but vitally important.” All levels of Government need to make tough decisions to make roads safe and save lives. Studies have warned that without a system-wide view and with finite resources, governments over-rely on one aspect of the Safe Systems and neglect others. For example, increases in road trauma tend to be tackled with approaches that address the Safe People pillar – advertising and policing for behaviour – when this may not be the most effective approach to achieve Zero deaths. This over-reliance on quick and relatively low-cost solutions is typically driven by cost and the government’s need for speed and visibility.

Inquiries into road safety are only useful when their recommended solutions are taken seriously and fully implemented. Continued inaction and failure to adopt the recommendations repeatedly outlined in past reports will cause our inevitable failure to reduce road trauma. RACV insists that past actions recommended in previous inquiries and reports, in particular, the Inquiry into the NRSS and Reviving Road Safety, are implemented in full.

**Summary of 2018 crash statistics**

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15 Ibid.
17 Ibid.
19 Ibid.
20 Ibid, p. 8
RACV has reviewed the Victorian crash statistics for 2018\textsuperscript{23} that highlight the following:

- There were 213 deaths and 7,948 injuries.\textsuperscript{24} For every person that dies on Victorian roads, 37 other people are injured.
- Deaths on regional roads are over-represented: 49 per cent of all deaths are on regional roads, yet only 25 per cent of the population live in regional Victoria.
  - Crashes resulting in a hospitalisation are more likely to occur in metro than regional areas. This makes sense, as higher speeds involved in regional areas mean a crash is more likely to result in a fatality instead of an injury.
- Pedestrian, passenger and motorcyclist crashes resulting in deaths are roughly equal (16-18 per cent), while bicycle fatalities represent 3 per cent of the annual road toll.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{2018_lives_lost_by_road_user_type.png}
\caption{Proportion of 2018 lives lost by road user type}
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\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{2018_tac_claims_hospitalisation_by_road_user_type.png}
\caption{Proportion of TAC hospitalisation claims by road user type}
\end{figure}

\textsuperscript{23} "Searchable Road Trauma Statistics", TAC.
\textsuperscript{24} Based on TAC claims involving hospitalisation.
A briefing from Department of Transport to RACV on 12 December 2019 highlighted the following statistics for 2014-2018:

- **Road users**: Poor driver behaviour is estimated to contribute to fatalities and serious injuries as follows:\(^{25}\)
  - Alcohol a factor in 17 per cent of fatalities and 9 to 15 per cent of serious injuries,
  - Drugs a factor in 30 per cent of fatalities and 9 to 15 per cent of serious injuries,
  - Speed a factor in 30 per cent of fatalities and 35 per cent of serious injuries,
  - Fatigue a factor in 11 per cent of fatalities and 4 to 26 per cent of serious injuries,
  - Distraction a factor in 11 per cent of fatalities and 5 per cent of serious injuries.

- **Speeds**: Crashes on high speed roads are the highest contributor to lives lost and road trauma on Victorian roads, accounting for 45 per cent of all lives lost (37 per cent occur on rural roads, 8 percent on metropolitan roads).

- **Vehicles**: Over a five-year period (2013-2018) vehicles older than 10 years were associated with 58 per cent of fatalities and 55 per cent of serious injuries, which is over represented compared to the number of vehicles of this age.

- **Roads**: Some parts of the network have more risk.
  - High-speed rural roads record 38 per cent of fatalities, 19 per cent of serious injuries,
  - Intersections record 23 per cent of fatalities, 34 per cent of serious injuries,
  - Urban arterials record 19 per cent of fatalities, 23 per cent of serious injuries,
  - Local roads record 10 per cent of fatalities, 14 per cent of serious injuries,
  - Mid-speed roads record 8 per cent of fatalities, 6 per cent of serious injuries,
  - Other roads record 2 per cent of fatalities, 4 per cent of serious injuries.

**Fatalities and serious injuries across all road users**

Evaluations have clearly shown that Victoria, like most other Australian jurisdictions, will fail to meet the NRSS target of a 30 per cent reduction in deaths and serious injuries from 2011 to 2020, as well as the Victorian Strategy’s target of reducing serious injuries and fatalities by 15 per cent and 20 per cent respectively, with less than 200 lives lost annually by 2020.\(^{26}\)

The AAA’s *Benchmarking Report* also shows that nationwide, we will fail to meet the target number of reduced fatalities among drivers, pedestrians, motorcyclists and cyclists. In 2018, 38 per cent of fatalities and 47 per cent of hospitalisations were vulnerable road users (i.e. motorcyclists, bicyclists and pedestrians). Evidently, the safety of vulnerable road users is of significant concern and need to be a constant part of the road safety conversation in this Inquiry and beyond.

Moreover, despite the target of reduced serious injuries in national and Victoria’s road safety strategies, serious injuries continue to be overlooked and not measured well.

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\(^{25}\) Note that there are overlaps in percentages as a single crash may have multiple factors (e.g. alcohol and speed).

\(^{26}\) AAA, *Benchmarking the Performance of the National Road Safety Strategy* (Canberra: AAA, October 2019)
Safe Systems engagement across all levels of government

As previously alluded, there is a need for greater leadership and political will at the state and federal levels to implement the recommended actions to reduce road trauma is undoubtedly critical. It is equally important to engage all levels of government in this road safety vision. A strong focus in the 2019 *Review of National Road Safety Governance Arrangements* was that while the Safe Systems approach is used as a guide from federal to local government, it is “not entrenched and mandated for consideration.” 

The review also highlighted that local government should be empowered to adopt the national vision and plan for road safety. Doing this instead of the current approach where local governments each have their individual long-term goals allows for a more consistent implementation of the Safe Systems approach state and nation-wide.

Local governments are the most direct link to the community and are indispensable for the adaptation of road safety consciousness at the individual and community levels. Despite this, they remain insufficiently resourced and engaged with higher levels of government in the road safety discourse.

Consultation with local governments in all 79 Victorian municipalities conducted by the Transport Accident Commission (TAC) identified that most local governments are already delivering road safety initiatives. However, among other barriers, they lacked resources, had poor understanding of Safe System principles, and were restricted by legacy infrastructure when implementing the Safe System. Local government representatives also highlighted the value of training, resource support, and better government funding approaches.

All levels of government must be engaged in the road safety discourse to ensure the implementation of a shared vision and plan to achieve zero deaths on Victorian roads. With the numerous restrictions that local governments face, state and federal governments must support local governments by ensuring that they have sufficient funding, resources and support to develop local road safety schemes and initiatives.

### Recommendations

1. **Adopt the actions set out by previous reports, in particular the Inquiry into the NRSS and Reviving Road Safety.**

2. **Stronger emphasis on all road users for this Inquiry.**

3. **Empower local governments to adopt the national vision and plan for road safety by providing sufficient funding, resources and support**

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(2) Adequacy and scope of the current driver drug and alcohol testing regime.

With the introduction of random breath testing in 1976 in Victoria (the first Australian jurisdiction to do so)\(^{29}\), there has been a significant shift over the decades in attitudes towards drink driving, such that it is now deemed culturally unacceptable. Considering that random roadside drug testing (RDT) was only introduced in Victoria in 2003, drug driving technology, research and social attitudes are not as well-established as those pertaining to drink driving despite its importance as a road safety issue.

The National Drug Driving Group (which Victoria Police, Department of Transport and Transport for Victoria are members of) released a report in October 2018 about the current approach to drug driving.\(^{30}\) The report proposes and explains 11 recommendations for consideration by all Australian jurisdictions.

There are numerous ongoing studies across Victoria focusing on improving drug driving in various aspects, such as understanding trends in drug use and drug driving, and improving the efficiency of RDT and general deterrence. Organisations conducting research in the drug and drug driving space include Victoria Police, Austroads, Monash Accident Research Centre (MUARC), the Victorian Institute of Forensic Medicine, and the Burnet Institute.

RACV has also conducted qualitative research (unpublished) conducted in 2018-19 which explored Victoria’s approach to drug driving and identified potential future policy directions.\(^{31}\) Broadly, there were four key opportunities to improve our approach to drug driving. Many of the findings and discussions in this research can be applied in the management of drink driving as well.

Drug driving as a public health issue

In 2018, 109,780 random roadside drug tests\(^{32}\) and 3,646,342 random breath tests\(^{33}\) (235 and 7,601 tests per 10,000 licenced Victorian drivers respectively) were conducted in Victoria. This discrepancy in scale is because RDT is resource extensive. Given the restrictions on available resources, research and technology, the RDT program was deemed to be currently working as well as possible.

Recent amendments have resulted in harsher penalties for drug driving and drink driving from April 2018. All interviewees from RACV’s research believed that the current penalties are sufficiently severe and that even harsher penalties are unlikely to reduce drug driving and drink driving.\(^{34}\) Particularly for drug driving, it was noted that penalties do not work for some audiences whose drink and drug driving behaviour is not easily influenced by penalties or self-


\(^{34}\) K. Alexander, Drug Driving in Victoria, p. 8-9.
regulation. This includes people who are addicted to or dependent on drugs, and those who are marginalised and may continue to drive unlicensed.

Thus, the first key opportunity for improvement commonly noted in interviews was that drug driving should not be treated solely as a road safety issue, but as part of a larger public health issue regarding drug use. To address the root cause of the drug driving issue, public health models which focus on therapeutic and educational interventions should be examined alongside enforcement models of behaviour change.

An example of this approach is the Behaviour Change Program, implemented as part of the current drink and drug driving penalties. Every driver convicted of a drink and/or drug driving offence is required to complete this group program, which was developed to help participants explore the reasons behind their offences, provide an opportunity to explore the consequences of their offence on themselves and others, and identify the benefits of not re-offending. The program enables participants to develop an action plan to assist them to avoid recidivism and provides referral support for those with further alcohol or drug use concerns.

For repeat offenders and those who had both alcohol and drugs in their system, the program is more intensive and includes a one-on-one counselling session and further referral if required. Those referred for further support are followed up several times after the program to encourage them to take up the referral and to identify if they require further assistance.

For a public health approach to drug driving to be effective and support the roadside testing regime, there must be collaboration between road safety agencies and organisations with expertise and services for rehabilitation. Furthermore, the drink and drug driving demographic must be well understood, in order to ensure that the most appropriately targeted preventative measures, interventions and sanctions that cater to their specific needs are implemented.

**General deterrence**

The second and third opportunities for improvement identified in RACV’s research was the improvement of general deterrence through improvement to the roadside testing regime and through education about the separation of legal and illicit drugs/alcohol and driving.

**Legitimacy of random drug testing**

The visibility and possibility of undertaking a roadside test is an important form of general deterrence. RACV believes the statistics for roadside alcohol and drug testing should be made public and openly accessible to increase visibility and perceived certainty that illegal drink and drug driving behaviours will be penalised.

This openness – together with increasing quantities and randomness of drug testing – would improve the legitimacy of roadside testing. In the Bureau of Infrastructure, Transport and

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35 Ibid.
36 Ibid.
Regional Economics’ (BITRE) dashboards charting random breath testing\(^{40}\) and drug testing\(^{41}\) across Australia, Victorian breath testing data is noticeable absent. In Victoria, as with the rest of Australia, there does not appear to be regular data collected or reported on drink or drug driving as a contributor to crashes, (e.g. number of deaths from crashes where alcohol and/or drugs were contributory factors).

As we strive to expand and expend more on alcohol and drug testing, it is important that the programs are implemented with integrity for them to be an effective deterrent. The public needs to perceive the roadside drink and drug testing programs to be a fully trusted, legitimate form of authority.

A 2018 independent investigation found that at least 1.5 per cent of all random breath tests were highly likely to have been falsified (258,509 of the 17,726,244 tests conducted between FY2012/13 to FY2016/17 and the first half of F72017/18)\(^{42}\). The investigation explored themes relating to the falsification of breath tests, accountability and governance, ethics and integrity of the regime, and unrealistic, non-evidence-based numerical targets for breath tests as a cause of falsification. Recommendations were made to rectify the problem of test falsification.

RACV strongly believes there should be continued commitment to implement these recommendations, because this has a strong impact on the legitimacy and effectiveness of roadside alcohol and drug testing as methods of general deterrence.

**Awareness and Education**

General deterrence can also be achieved through education and raising awareness, especially relating to their potentially impairments caused by prescription medication. RACV research identified that aside from the three drug types tested for in RDT (i.e. THC component in cannabis, methamphetamine, MDMA), the next more prevalent drugs in fatalities and serious injuries in Victoria are heroin, antidepressants and antipsychotics.\(^{43}\)

Evidently, there is a developing issue of prescription medications which may cause significant impairment to one’s driving ability, especially when combined with the consumption of alcohol. For this subset of motorists, it is likely that most who drive after consuming prescribed medication are unaware of the potentially impairing effects of these drugs on driving ability.

Because it is problematic to add prescription medication into the RDT program as the current technology cannot demonstrate impairment levels corresponding to legal medication, self-regulation is the dominant approach to addressing the issue of legally prescribed drugs and driving.\(^{44}\) There needs to be increased awareness among consumers and health professionals to reduce the incidences of driving when taking potentially impairing medications.

In Australia, medications that can potentially impair one’s driving ability must display a warning label which require those using the medication to monitor its effects and self-assess their

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\(^{42}\) Victoria Police, Investigation into the Falsification of Preliminary Breath Tests within Victoria Police (November 2018)

\(^{43}\) K. Alexander, Drug Driving in Victoria, p. 6.

\(^{44}\) Ibid.
impairment. However, research has demonstrated low levels of knowledge among Australian drivers about the effects of prescription medications on driving, and how much time they should wait to resume driving after consuming medications such as analgesics, benzodiazepines. Considerable lack of recall about the warning label and disregard of warning labels when deciding whether to drive have also been reported amongst outpatients in an Australian public hospital pharmacy. Therefore, a review of the warning labels on medications could help drivers better understand the associated driving risks, and make more informed decisions about their driving.

It would be beneficial to adopt a public health approach to tackle the issue of prescription medications and driving as well. This will involve extensive collaboration with the medical industry and public health organisations to improve driver awareness about the impairing effects of certain prescription or over-the-counter medications, attitudes and compliance with medication warnings.

**Continued funding for research and development**

The fourth key future direction was the need for increased research into drug use, drug driving, and technology development. Given that the RDT regime is much newer than the well-established alcohol testing program, this strategy would allow for a broader drug testing program in the future. This is especially important in light of emerging issues of prescription medication, increasing use of heroin and polydrug use, the development of new synthetic drugs and the legalisation of medicinal cannabis.

Research and development of new testing practices would also increase efficiency and reduce costs for RDT. Using Lean Thinking principles, Victoria Police is undertaking an investigation to identify how drug testing processes can be designed to be more streamlined.

**Recommendations**

2.1 Treat drug driving as a public health issue, with therapeutic and educational interventions to be supported alongside enforcement models of behaviour change involving collaboration between road safety agencies and rehabilitative services. A public health approach can also be adopted to address the issue of prescription medications and driving.

2.2 Transparent drink and drug testing enforcement to improve perceived legitimacy and deterring effect of enforcement practices.

2.3 Education campaigns to improve driver awareness of the impact of prescription medication, illicit drugs and alcohol on the ability to drive safely.

2.4 Continued funding for research and development into drug driving including testing practices, technology development and drug use.

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45 Centre for Accident Research & Road Safety – Queensland (CARRS-Q), *Medication & Driving Fact Sheet* (Queensland: CARRS-Q, August 2015).
48 CARRS-Q, *Medications & Driving Fact Sheet*.
50 Ibid. p. 10-12.
(3) Adequacy of current speed enforcement measures and speed management policies.

Speed Enforcement

Enforcement is an important aspect of road safety. RACV members tell us that they understand why enforcement is necessary, but they need to be confident that enforcement efforts are focussed on delivering maximum road safety benefits.

Current speed enforcement in Victoria shows that over 99 per cent of drivers who pass a mobile or fixed speed camera are not detected to be speeding.\(^52\) While this shows speed enforcement is a deterrent especially in areas where cameras have been installed, research shows that there is a sizable minority who still believe it is acceptable to speed while driving safely.

- A 2017 federal government report showed that 27 per cent of Australian participants believe it is acceptable to speed.\(^53\)
- TAC’s 2017 Road Safety Monitor indicated that 9 per cent drive over the speed limit in 100km/h zones at least half the time and 42 per cent do so at least some of the time.\(^54\) Similar figures were reported for 60km/h zones (7 per cent and 37 per cent respectively).
- The TAC report also noted that on a 0-10 scale of perceived danger, the perceived danger of driving a few kilometres over a 60km/h and 100km/h speed limit was rated as 6.1 and 6.2 respectively. This is a stark contrast to the perceived danger ratings for Drink driving and driving while drowsy (9.5 and 9.2 respectively)\(^55, 56\).

RACV supports covert and overt speed enforcement as it reinforces the “anywhere, anytime” message that drivers can expect their speed to be measured on a regular basis in all locations. Technology such as speed limiting devices (Intelligent Speed Assist – ISA) should be fitted in the vehicles of repeat speeding offenders in conjunction with behavioural programs to address the underlying issues.

Legitimacy of speed enforcement

However, fines are sometimes viewed as ‘revenue raising’ by the public rather than a genuine road safety measure. RACV has successfully advocated that the location of all fixed cameras should be made public and they are now available on the Victorian Government’s Cameras Save Lives website.\(^57\) Revenue collected from speeding and red-light camera fines is now dedicated to fund road improvements, a move that RACV has long supported to reaffirm the link between enforcement and road safety.

\(^52\) “Driver compliance”, Cameras Save Lives, Department of Justice and Community Safety, updated 26 September 2019.
\(^55\) Ibid. p. 3
\(^56\) DAN1A-J: Using a scale where 0 is “Not at all dangerous” and 10 is “Extremely dangerous”, how dangerous do you think it is to; Total sample; Weighted sample; base n= from 759 to 1721.
More should be done to restore public confidence in speed cameras and dispel the myth that they are used to generate revenue by Government. We note that the page that explains revenue raising on the Cameras Save Lives website is currently not accessible 58, returning an ‘access denied’ error message. This does not help public confidence in the system.

Furthermore, we have obtained reports from some members who have received speed or red-light camera infringements, and have sought information about how the systems work from a technical perspective. Members report contacting the Road Safety Camera Commissioner, Victoria Police, Department of Justice, Fines Victoria and others, and that they have been unable to get the clarification they sought. This lack of clarity and the unwillingness of Government agencies to provide information, reinforces public concerns about the road safety camera system, and that it is an obscure system that doesn’t open itself up for transparency.

In regard to low-level speeding, RACV research (unpublished) shows that the majority of drivers tend to think of speeding as high-level speeding, with the view that there is a ‘tolerance’ of a few km/h or 10 per cent to the posted speed limit. RACV believes the demerit points system in Victoria should be reviewed in light of reforms a number of years ago in South Australia that resulted in the fine for low-level speeding being decreased from $260 to $155, and the demerit points being increased from one to two points for each offence. The change sends a clear message to the community that speed enforcement is about safety and not revenue raising, while reinforcing that any speed above the posted speed limit is unacceptable.

**Speed enforcement technology**

In terms of the speed enforcement technology, identifying motorcycles to enforce road rules is also an issue for Victoria Police and the Department of Justice. Motorcycles don’t have a regular front numberplate, and with most speed cameras photographing the front of speeding vehicles, speeding motorcyclists have been able to avoid penalties that are enforced for other road users. Consequently, an evaluation of all the available options to address this is required, including modifying existing and future speed camera installations.

The *Inquiry into the NRSS* suggests that the “under-used Time over Distance or Point to Point approaches have great potential for expanded operations. The latter approach is strongly endorsed by the Royal Australasian College of Surgeons and is capable in some instances of capitalising on existing roadside infrastructure; importantly Point to Point measures average speed over a specified distance rather than a spot speed and is therefore likely to reflect deliberate actions.” 59 Point to point cameras can operate over long lengths of the road network, and therefore can encourage compliance with speed limits across a greater length of the road network.

RACV supports the use of fixed point to point cameras and their increased roll-out if they are evaluated to have road safety benefits. We are cautious about the use of mobile point to point cameras and the risk for error to be introduced into a mobile system where co-ordinates of cameras or distance between two points is inaccurate.

*Lack of data collection*


In Victoria, as with the rest of Australia, there is no regular data collection or reporting around speed as a contributor to crashes (e.g. the number of deaths from crashes where speed was a contributory factor), or around motorists travelling at inappropriate speeds (i.e. speeds that are at or below the posted speed limit but are inappropriate for the conditions). Additionally, there is no public data around how many vehicles on the network are checked, and whether speeding offences are trending up or down.

Without clear data, it is hard to say whether speed enforcement in Victoria is adequate. We have however raised a number of areas that can be improved. For more information on data issues, see point 8.

### Recommendations

3.1 Technology such as speed limiting devices (Intelligent Speed Assist – ISA) should be fitted in the vehicles of repeat speeding offenders in conjunction with behavioural programs to address the underlying issues.

3.2 More should be done to restore public confidence in speed cameras, ensure the system is transparent, stands up to public scrutiny and dispel the myth that they are used to generate revenue by Government.

3.3 The demerit points system in Victoria be reviewed to decrease fines for low-level speeding and increase demerit points.

3.4 Evaluate available speed enforcement options to ensure all vehicles are able to be detected by road safety cameras.

3.5 Investigate the increased use of point to point speed cameras if determined to have road safety benefits.

3.6 More systematic and quality data collection around speed enforcement and speed as a contributor to crashes.

### Speed management

Speed management is an important component of a safe and efficient road system. Higher speeds increase not only the risks, but also the likely severity of injury to those involved.

#### Appropriate speed limits

Speed management is an important component of a safe and efficient road system. Speed is critical to road safety as higher speeds increase not only the risks, but also the likely severity of injury to those involved.

Speed limits should account for the road standard, roadside conditions, abutting land use, traffic volumes and the mix of traffic types (including bicycle riders, pedestrians, on-road public transport and commercial vehicles). As TAC states, “The Safe Speed component of Towards Zero is concerned with setting appropriate speed limits and travelling at safe speeds that are
right for the conditions”. Not only must we ensure that roads with higher speed limits and/or traffic volume due to high levels of intra and inter-state travel are safe, the speed limits in areas with lower speed limit and/or higher pedestrian volume must also be evaluated to ensure they are appropriate for the conditions.

Even the Inquiry into the NRSS acknowledges that “Eliminating harm through speed management is not all about reducing travel speeds. The relationship between travel speeds and road design and infrastructure is an important one. For example, the presence of flexible barrier systems roadside and as a central median provides an error-tolerant environment that can accommodate much higher travel speeds. Similarly, the installation of well-designed roundabouts slows vehicles down through intersections so that any collision is unlikely to lead to serious outcomes.”

Just because a road has always had a certain speed limit, doesn’t mean that the speed limit is safe for that road. Our thinking has progressed since many of Victoria’s speed limits were set years ago.

Reducing speed limits

Broadly speaking, reducing the speed limit provides a better reaction/stopping time and reduces the impact speed of any crash, which ultimately improves the severity of any injuries. The probability of fatality and serious injuries increases exponentially with vehicle speed. This means that even a small increase in motion and impact speeds result in large increases in the forces acting upon vehicle occupants and other road users.

According the Power Model, reducing travelling speed from 100km/h to 90km/h (i.e. 10 per cent reduction) reduce the number of crashes resulting in death or serious injury by about 35 per cent and 25 per cent respectively. A newer exponential model predicts bigger reductions of about 50 per cent and 33 per cent respectively. Speed is not always the cause of a crash, but the speed a vehicle is travelling at the point of impact will always affect how severely people are injured.

RACV research (unpublished) shows that Victorians are currently more likely to accept speed limit reductions in places or situations where there is a perceived higher risk to other road users. Time-based speed limits can be an effective means of lowering speeds when risks are high to other road users like pedestrians and bicycle riders around schools.

Therefore, RACV supports targeted, time-based 40km/h speed limits such as those in school zones and high-risk pedestrian crash zones. We have recently called for the State Government to reduce all 60km/h school speed zones to 40km/h to save lives. We also

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62 Ibid.
64 R. Elvik, “A re-parameterisation of the power model of the relationship between the speed of traffic and the number of accidents and accident victims,” Accident Analysis & Prevention 50, no. 1(2013), p. 854-860.
support variable speed limits for major freeways to smooth traffic flow and increase safety when road conditions are poor or when there are hazards or incidents on the roadway.

Appropriate infrastructure and speed limits

RACV believes that where infrastructure supports it, higher speeds should be maintained. On important movement routes, infrastructure should be upgraded to ensure high speed limits are appropriate. In areas where infrastructure investment is not economically sound, or may be some years away, the safety of the road can also be improved by reducing the speed limit.

The Inquiry into the NRSS states that “many speed limits currently across the Australian road network are not conducive to eliminating harm. Many local streets which are often used by pedestrians and cyclists have speed limits of 50km an hour, a limit well in excess of the biomechanical tolerances of pedestrians and cyclists of around 30km an hour. Similarly, a regional back road with no shoulders, narrow profile, and no line markings share the same 100km an hour limit with a high volume, multi-lane highway, with protective barriers. These anomalies need to be rectified and speeds better aligned with the road infrastructure.”

In many instances, such as the Victorian country roads over the page in Figures 4-6, it is not possible to drive safely at the 100km/h speed limit along these types of roads. However, these roads share the same limit as the Geelong Ring Road (Figure 6), parts of which are rated 5-star for safety as it is sealed, divided and with multiple lanes in each direction.

Figure 4. C229, Jeparit west of Warracknabeal

Figure 5. C511, Woods Point

Figure. 6. Geelong Ring Rd

The Inquiry into the NRSS highlighted that there “is a vast network of 100km/h roads that offer no protection from the severe “head-on” or “run-off-road hit fixed object” crashes. Maintaining

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68 Woolley et al., Inquiry into the NRSS 2011-2020, p. 58
69 Fig. 4-5 from Google Maps, Figure 6 from RACV.
the current speed setting on this road type is unacceptable; governments have a responsibility to advise drivers of the appropriate travel speeds on these roads – a setting of 70 or 80km/h will save lives.70

We are already seeing pushes for this to occur in Victoria, with Councils such as Mornington Peninsula calling for speed limits to be cut in their region as part of a two-year trial.71

The recent Side Road Activated Rural Speeds initiative rolled out by the Department of Transport is a good example of targeted speed limit reductions where risk is high. The new variable speed-limit system on highways is triggered by sensors that detect cars approaching from side roads and temporarily reduce the highway speed from 100kmh to 70kmh. A similar program in New Zealand has reduced serious and fatal crashes at intersections by 89 per cent since 2012.72

**Speed management on country roads**

RACV estimates there are over 180,000 kilometres of regional roads with 100km/h speed limits in Victoria. We have estimated that upgrading these roads to a minimum 3-star safety standard would likely take around 1,000 years at the current rate of funding. Even if funding were to be doubled, this timeline is clearly not acceptable, and many thousands of people will have lost their lives due to road trauma in Victoria. See point 6 for more about star ratings.

Therefore, RACV calls for an urgent review of speed limits on country and outer urban roads, prioritising roads where crashes are occurring, or are most likely to occur. Data on road crashes shows this is often secondary roads (such as local and C class roads) with lower traffic volumes. We note that the current VicRoads Speed Zoning Guidelines allow for a reduction in the posted speed limit from 100km/h to 80km/h where the road is rural (typically B or C class or local roads), carries a low volume of traffic, has a low safety standard and has a high crash rate or risk but is unlikely to attract funding.73 However, historically these roads have been sign posted at 100 km/h, and there has been trepidation in reducing these limits.

**Community buy-in on safe speeds**

For any speed reductions made, any gains only arise if the new limit is obeyed, which requires education and enforcement.

RACV’s market research (unpublished) shows drivers are more accepting of reduced speed limits once the Safe Systems concept is explained (i.e. they understand that speed reductions mean people are less likely to die or be seriously injured). TAC research also shows “93% agree that a safe journey is more important than a quick journey, and 88% believe Victoria should aim for zero road deaths.”74 Evidently, there is support for reduced limits, provided the reasons are explained and the community is engaged in this safe system and road safety.

Therefore, there is a need for speed limit reductions to be supported by strong community campaigns and education, especially in regional areas, to ensure drivers understand these

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70 Woolley et al., *Inquiry into the NRSS 2011-2020*, p. 60
71 B. Preiss, “*We Want to See Change*: Calls to Slash Speed on Mornington Peninsula”, *The Age*, November 8, 2019.
73 TAC, *Road Safety Monitor 2017*, p. 2
74 TAC, *Road Safety Monitor 2017*, p. 2
changes, and obey them. These initiatives would also explain the safety implications and reinforce the safe system. Reducing speed limits on lower-order roads would also encourage drivers to travel on higher speed / higher standard roads wherever possible, and reinforces that these are the preferred roads to be travelling on, which is likely to lead to further improvements in road safety.

While an increase in travel times has typically been raised in opposition to reductions in speed limits, in most instances this is likely to translate to modest increases in the travel time, with a significant reduction in the risk of crashing. We acknowledge delays will have an impact on freight costs, this needs to be weighed up against the existing cost of fatalities and serious injuries to the economy. Community education about safe speeds should include the greater road safety benefits of reduced speeds compared to the cost of slightly longer trips.

Other speed management issues

With regard to roadworks sites, past RACV inspections across Melbourne identified problems with speed limit signage at about 30 per cent of locations. RACV market research found that “79% of motorists believe that speed limit signs around roadworks are often left up after the works are finished.”75 Incorrectly or poorly signed sites can mislead motorists and put the lives of road workers at risk if drivers start ignoring speed limit signs or prematurely increasing their speed after seeing too many poorly signed sites. Whilst there has been increased investment in the past, this appears to be an ongoing issue and RACV calls for stronger oversight of contractors implementing roadworks speed limits to ensure limits are fair and credible.

Vehicle manufacturers also have their part to play in the roll-out of speed management technologies which are being included as part of Intelligent Cruise Control and Intelligent Speed Assist. Such systems can be set to help drivers not exceed the speed limit, and adjust speeds when another vehicle is detected ahead. See point 5 for more information.

Recommendations

3.7 Speed limits should account for the road standard, roadside conditions, abutting land use, traffic volumes and the mix of traffic types (including bicycle riders, pedestrians, on-road public transport and commercial vehicles).

3.8 Reduce all 60km/h school speed zones to 40km/h to save lives.

3.9 On important movement routes, infrastructure should be upgraded to ensure high speed limits are appropriate.

3.10 An urgent review of speed limits on country and outer urban roads, prioritising roads where crashes are occurring, or are most likely to occur.

3.11 Speed limit reductions to be supported by strong community campaigns and education.

3.12 Stronger oversight of contractors implementing roadworks speed limits.

3.13 Vehicle manufacturers to adopt speed management technologies.

(4) Adequacy of current response to smart phone use, including the use of technology to reduce the impact of smart phone use on driver distraction.

As one of the Fatal Five (speeding, intoxication drugs and/or alcohol, failure to wear a seat belt, driver fatigue and distraction), distraction is a significant road safety risk which has been identified to be a factor in at least 16 per cent of serious crashes on Australian roads where a vehicle occupant was hospitalised for a minimum 24 hours. However, driver distraction is difficult to measure and tends to be under-reported, so it is likely that this figure is an underestimation. A recent naturalistic study found that driver distraction is very prevalent and that drivers engaged in a non-driving activity while driving every 96 seconds.

While the smart phone is undoubtedly a significant distraction for road users, RACV strongly believes that the Committee should broaden the scope of this Term of Reference to focus of behaviours that distract drivers from the driving task, rather than a specific technological device. This would better align with the National Transport Commission’s (NTC) ongoing project to develop technology-neutral road rules for driver distraction.

The rationale for this shift in focus is because driver distraction is the diversion of attention away from activities towards a competing activity. This means that it is the behaviour of engaging in the distracting activity (regardless of whether it involves technology or not), and not specific devices, that is important in our approach to tackle driver distraction. In particular, current literature has identified that visual and manual interactions (i.e. actions that take the motorists’ ‘eyes off the road’ and ‘hands off the wheel’) are especially dangerous.

However, the current rules pertaining to driver distraction – Rule 297(1), 299, and 300 – only prevent or limit the use of particular technological devices (mobile phones, visual display units, and television receivers) such that they can only be used as driver’s aids. The rules do not adequately address the key factors that cause driver distraction, and inconsistently treats the sources of distraction and the safety risks associated with certain behavioural interactions (i.e. visual, manual, and visual-manual).

Furthermore, technology-specific rules tend to become outdated quickly and the current rules implemented in 1999 are unable to deal with the continuous evolution of technology. It can thus be confusing for road users about whether certain newer technologies, such as smart watches, are regulated or pose a significant distraction risk.

The new, technology-neutral rules will focus on behaviours associated with distraction that directly impact driving performance negatively. These rules will be designed to be applicable in various contexts, be capable of addressing diverse causes of distraction be able to reduce confusion among road users over what is illegal, risky behaviour and what is acceptable.

More specifically, NTC recommends that the new rules be a hybrid of prescriptive and performance-based approaches. The prescriptive aspect will outline specific high-risk visual and visual-manual interactions that have been found to significantly increase crash risk (e.g. texting, writing). The performance-based aspect acknowledges that some interactions have variable effects on driving performance, and will address any evidence of impairment of the driver to drive safely, regardless of the causal distracting activity.

RACV, with other organisations, stakeholders and experts, has made submissions\textsuperscript{80,81} to the NTC’s driver distraction Issues Analysis Paper and Regulatory Impact Statement.

Recommendations are currently being prepared, and it is expected that:

- A ministerial council meeting will be held in May 2020 to decide on major policy;
- Amendments to the Australian Road Rules will be drafted by mid-2020; and
- These amendments will be decided upon by the ministerial council in November 2020.

Any changes to driver distraction road rules will take extensive time. Considering that driver distraction is a significant contributor to road trauma, RACV believes government should prioritise this NTC project to ensure the new rules and the corresponding public education and awareness are implemented as soon as possible.

Enforcement is also necessary to accompany education on the risk distraction poses. Enforcement of some areas of distraction is likely to be complex given it if often not easily measured or recorded. Given that handheld mobile phone use has been shown to significantly increase drivers’ crash risk and is labelled as a high-risk interaction, and that technology exists to enforce mobile phone use, RACV encourages government to pilot and implement mobile phone detection cameras to deter driver distraction due to illegal mobile phone use while driving as soon as possible.

This technology has recently been officially introduced across New South Wales (NSW) on 1 December 2019, after a successful six-month pilot program from January to June 2019.\textsuperscript{82} The technology utilises artificial intelligence software analysis to determine whether each driver photographed is likely to be engaged in illegal mobile phone use and whether there is no evidence of such behaviour. Images filtered into the former category of high likelihood of illegal mobile phone use are verified by trained personnel.

Modelling undertaken by MUARC based on reported crash data estimates that the rollout of these mobile phone detection cameras will reduce road trauma of about 100 fatal and serious crashes over five years in NSW. Despite the potential for this technology to deter driver distraction and illegal mobile phone use, the results of the pilot program and the outcomes of this recent enforcement in NSW should be evaluated and carefully considered prior to any implementation on Victorian roads.

\textsuperscript{80} RACV, \textit{Submission to the NTC Issues Paper for Developing Technology-Neutral Road Rules for Driver Distraction} (2019).

\textsuperscript{81} RACV, \textit{Submission to the NTC Consultation Regulatory Impact Statement for Developing Technology-Neutral Road Rules for Driver Distraction} (2019).

\textsuperscript{82} “Mobile phone detection cameras”, Transport for NSW (TfNSW), updated 2 December 2019.
Recommendations

4.1 The scope of the Terms of Reference be widened to focus of behaviours that distract drivers from the driving task, rather than a specific technological device.

4.2 Government prioritise the NTC project to develop technology-neutral road rules for driver distraction to ensure that the new rules – and the corresponding public education and awareness – are implemented as soon as possible.

4.3 If found to be effective in NSW, pilot and implement mobile phone detection cameras to deter driver distraction due to illegal mobile phone use while driving.

(5) Measures to improve the affordability of newer vehicles incorporating driver assist technologies.

Awareness, not affordability, is the problem

RACV involvement in the Used Car Safety Ratings and Australasian New Car Assessment Program tells us that blockers to the purchase of safer vehicles is not necessarily the cost of them, but rather awareness of the fact that safe vehicles can be bought for relatively modest budgets. There are a wide range of vehicles 5-Star ANCAP vehicles available for less than $20,000. An even larger selection of 5-Star Used Car Safety Rating available for under $10,000. The Victorian Government is a partner in both these programs and may consider expanding its investment to increase their exposure particularly targeting lower income.

Younger and novice drivers who are over-represented in the crash statistics also tend to be those with less to spend on a vehicle. Used Car Safety Ratings, with its emphasis on rating older vehicles, is of particular benefit to individuals looking to purchase a safe vehicle on a budget. RACV would strongly support activities that promote this aspect of the ratings. Tools such as the TAC’s ‘How Safe is Your Car’ database could be expanded to add a price point search function to assist buyers on a budget.

Incentivising uptake of newer, safer vehicles

Understanding the reasons behind behaviour associated with older vehicle ownership is important. RACV has participated in a VicRoads research program about why people hold on to older, less safe vehicles and what discourages and what triggers change. RACV encourages the full use of the research findings to inform future programs to get people into safer cars. However, the issue must be accurately scoped. Much emphasis is placed on the average fleet age being in the region of 10 years, but this is only a coarse measure. A more nuanced study of what segments and demographics this manifests in would be helpful to target education and incentive programs, rather than use a broad-brush approach.

Incentives, such as stamp duty discounts, to discount safer vehicles may be considered, but caution must be applied to avoid inadvertently creating a market for less safe vehicles at even lower price points. RACV, via peak organisation AAA, has called on the Federal Government to abolish tariffs and luxury car tax for vehicle imports with high safety performance.

Fleet Vehicle Safety

Fleets, particularly Government have a considerable role to play. New vehicles are generally better than old ones, but not all new vehicles are equally safe. Different new vehicles offer different packages of safety technologies including lane keep assist, lane departure warning and advanced autonomous emergency braking. These features help prevent crashes and reduce the severity of those crashes that do occur. The Victorian Government can lead the way by ensuring that its fleet purchases specify a 5-star ANCAP safety rating with a tested date stamp no more than three years old to ensure inclusion of the latest collision avoidance technologies and road user protection.

Ex-fleet vehicles make up a significant quantity of cars entering the used market. By specifying vehicles with high safety levels in their fleets, Government could greatly increase the overall penetration of safety features in the second-hand market.

Private sector fleets also represent a significant percentage of new vehicle sales. Government may also consider incentivising non-Government fleet operators to only purchase 5-Star vehicles for their passenger and light commercial fleets.

More stringent requirements for safety features in vehicles

Vehicle standards in Australia are administered federally through The Motor Vehicle Standards Act 1989 and Motor Vehicle Standards Regulations 1989 which make it an offence to import, sell or present new or used imported vehicles to the Australian market for the first time unless they meet the National Standards detailed in the Australian Design Rules (ADR). The individual state and territory vehicle registration authorities then individually reference the federal regulations and standards in their roadworthiness and registration process. Therefore, most actions to mandate a particular vehicle safety technology are typically undertaken at the federal level. However, a State Government unilaterally mandating a technology ahead of a national requirement is not without precedence.

From 1 January 2011, the Victorian Government required all new passenger cars, off-road passenger vehicles, and forward-control passenger vehicles when first registered in Victoria, to be fitted with electronic stability control (ESC), a proven lifesaving technology. 84 This preceded the federal requirement through the ADR by 11 months. Such an approach was effective in expediting roll-out of ESC in Victoria and could be considered again with other technologies particularly in light of Australia no-longer having a significant local vehicle manufacturing industry. Since many safety features are now available on entry level vehicles, importing manufacturers may be encouraged by this approach to specify their vehicles to the most stringent requirements in the market, thus benefiting all states.

Safe Motorcycles

The issue of motorcycle safety needs consideration. According to the TAC in the last 10 years, more than 10,000 riders and pillion passengers have been seriously injured on Victorian roads, and 414 have lost their lives. This alarming number represents over 18 per cent of all lives lost on the road and 17 per cent of hospitalised claims over the decade. 85

Motorcycles represent less than 4 per cent of the number of registered vehicles in Victoria, and account for under 1 per cent of vehicle kilometres travelled.  

From November 2019, the Government has mandated that all new model road-registerable motorcycles sold must be equipped with anti-lock braking (ABS) as standard, with all legacy models phased in by 2021. In effect, the new rules are harmonising with the current EU standards. MUARC studies suggest that Motorcycle ABS could reduce the risk of crashes resulting in death or injury by 31 per cent.  

Further opportunities to focus on motorcycle safety should be prioritised. RACV, together with VicRoads and TAC, is a partner in The Motorcycle Clothing Assessment Program (MotoCAP) which tests the protection levels of protective riding gear sold in Australia. Motorcycle and scooter riders involved in crashes are at risk of impact and abrasion injuries; well-designed protective gear can help to prevent or reduce the severity of these injuries.

RACV encourages the Victorian Government to continue and expand their involvement in motorcycling safety programs such as MotoCAP and other initiatives such as ‘Spokes’ rider education and ‘Driver think rider. Rider think driver.’ which looks at the issue from a car and motorcycle perspective.

**Recommendations**

5.1 Consider expanding ANCAP and Used Car Safety Ratings investment to increase exposure of these programs, particularly targeting lower income.

5.2 Expand tools such as the TAC’s ‘How Safe is Your Car’ database to add a price point search function to assist buyers on a budget.

5.3 Research into older vehicle ownership to develop better targeted education and incentive programs.

5.4 Federal Government to abolish tariffs and the luxury car tax for vehicle imports with high safety performance.

5.5 Victorian Government to ensure its fleet purchases specify a 5-star ANCAP safety rating with a tested date stamp no more than three years old.

5.6 Consider Incentives for non-Government fleet operators to only purchase 5-Star vehicles for their passenger and light commercial fleets

5.7 Consider using registration requirements as a means of expediting effective safety technology into all cars being registered in Victoria.

5.8 Increase efforts to make riders in the second-hand market, particularly novices, aware of motorcycle safety technology.

5.9 Continue and expand involvement in motorcycling safety programs such as MotoCAP and other initiatives such as ‘Spokes’ rider education and ‘Driver think rider. Rider think driver.’

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(6) Adequacy of current road standards and the road asset maintenance regime.

Adequacy of current road standards

Most crashes on Victorian roads occur when someone makes a mistake, but the design of the road can ensure a simple mistake doesn’t end in death. The current standard and designs of many Victorian roads is inadequate and do not sufficiently prevent death and serious injuries.

In many industries, including rail, aviation and workplace safety, it is recognised that to make mistakes is only human. They design their systems to protect against mistakes, and when one does occur it is investigated, and measures put in place to ensure it does not happen again. Therefore, the perception that deaths of the roads are inevitable is an unacceptable one. Road safety and the prevention of road trauma should be approached the same way as prevention of injuries in the workplace, and in the rail and aviation industries.

Safe roads and safe speeds protect road users by reducing crash risks and if a crash does occur, reducing its severity.

*Australian Road Assessment Program (AusRAP)*[^88]

RACV and AAA developed AusRAP, a simple and easily understandable measure of how safe a road is. AusRAP assigns a star rating from 1-star (least safe) to 5 stars (safest) by assessing the safety features built-in to the road.

Through AusRAP star ratings, we explain the features that make a road safe or unsafe (Fig 7).

![Example of AusRAP star rating](image)

**Figure 7. Example of AusRAP star rating.**

In Australia, AusRAP assessments have focused on the national highway network for car occupants. However, the assessment can also be applied to various urban and regional areas, and for various road users including motorcyclists, pedestrians and cyclists.

In country areas, if a driver leaves their lane because of a moment of inattention, rumble strips can alert them, sealed shoulders provide space to recover, and barriers prevent them from hitting a tree, pole, or another vehicle.

In city areas, we need to look at traffic calming measures including roundabouts, speed humps and chicanes, better infrastructure to keep bicycle riders safe, and better management of intersections. RACV has identified a priority network of cycling routes across Melbourne.89

**Funding AusRAP assessments for the Victorian road network**

On our major country highways, RACV has called for:

- A minimum 3-star standard of safety on existing major highways.
- Newly constructed sections of highway to achieve a safety rating of no less than 4-stars. The 4-star criteria include protection from head-on crashes.

In 2013, RACV assessed the safety of major highways and found that 14 per cent did not achieve the expected minimum standard of a 3-star rating. We calculated that an investment of approximately $580 million across the major highways would allow the achievement of the minimum 3-star standard on Victoria’s major highways. This would save at least 2,800 people from serious injury or death on these roads over the next 20 years. All recommended investments have a benefit-cost-ratio (BCR) equal to or greater than one.

While significant safety improvements have undoubtedly been carried out since the 2013 AusRAP assessment, the above analyses indicate the quantum of the scale of investment needed for major Victorian highways.

However, there is no current and publicly available information to indicate what improvements and funding is needed on the major highways or other state roads. This is despite a State Government announcement in late 2017, after advocacy by RACV, that they would assess the safety of Victoria’s country roads by star-rating them.91 We have yet to see any information released to the public to help them better understand the safety of Victoria’s state highway network.

RACV wants the release of AusRAP star ratings for the Victorian network, in partnership with RACV, commencing with the 20 highest-risk country roads. This will show Victorians both the safety benefits that have been achieved from the recent mass-action treatments delivered by the TAC and VicRoads, and where further road safety investments can be expected.

Funding improvements in road safety also have an economic argument with a high rate of return. The *Inquiry into the NRSS* presents two studies that indicate the likely costs and benefits of investing in road infrastructure.92

- A high-level global analysis estimated that if Australia invested in road infrastructure to achieve more than 75 per cent of travel on 3-star or better roads for all road users, this would reduce fatalities and serious injuries by more than 30 per cent. Over the life of the improvements, this is estimated to avoid more than 88,000 deaths and serious injuries, saving over $100 billion in crash related costs.

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A more detailed analysis of Victorian roads found that road infrastructure improvements could take the network from:

- 40 per cent being 4-star or better to 78 per cent for vehicle occupants; and
- 54 per cent 3-star or better to 87 per cent for motorcyclists.

Based on the BITRE cost model, the combined private and social benefit of this investment would be approximately $323.8M and would have a benefit cost ratio of approximately 9.7 and an internal rate of return of 130 per cent.

**Adequacy of the road asset maintenance regime**

In 2016, RACV commissioned an expert on road maintenance to provide an independent assessment of the State’s highways by reviewing publicly available data, and to inspect some of the worst roads. The expert, Mr Geoff Webb, considered State budget papers, VicRoads annual reports, a 2008 Auditor General’s report and ten years of road condition data collected by VicRoads. Mr Webb met with representatives of Glenelg Shire, Corangamite Shire and South Gippsland Shire, and inspected some of the problem roads.

**Declining maintenance on Victoria’s growing road network**

The assessment found that the actual expenditure on capital works to rehabilitate and maintain the State’s road network peaked in 2009/10 and has declined by over 40 per cent since then. In the same period, the value of the State’s road assets has grown by about 10 per cent, probably from projects like Peninsula Link, regional highway duplications and other road upgrades. The decline in spending on rehabilitation and maintenance, despite a bigger network, might be explained in part by new contracting methods delivering efficiencies. But overall, significantly less is being spent on road maintenance and rehabilitation.

The assessment also considered how much of the network is being resurfaced each year. Resurfacing delivers benefits to the network such as maintaining waterproofing, better skid resistance and correcting the share of the road. It found that resurfacing was down around 30 per cent on 2006/07 levels.

![Figure 8. Area resurfaced each year and the variation](image-url)
Distressed regional roads

The condition of the network is reported in State Budget papers each May. In 2008, the Victorian Auditor General reported that the State’s regional arterial road network was under stress, maintenance expenditure was not keeping pace with inflation, and that the condition and performance of the regional road infrastructure had deteriorated.56

Road condition has been reported in the State Budget papers as the proportion of travel on ‘smooth roads’ (2007/08 to 2010/11), and the percentage of the road network exhibiting cracked and/or ‘distressed’ pavement (from 2011/12). The calculation of distressed pavement is not explained, so we combined the two separate ways of reporting on the basis that we think one is the inverse of the other (Table 1).

Table 1. Proportion of ‘smooth’ roads in urban and rural areas, 2007/08 to 2010/16. Data from 2011/12 derived from State budget papers.

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<tr>
<td>Metropolitan %</td>
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<td>92</td>
<td>92.4</td>
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<tr>
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The numbers in the tables are averages for the metropolitan and regional areas. There is no indication of the best and worst, and the ‘key performance indicator’ of smooth/distressed pavements in budget papers and annual reports seems to be hiding the real problem.

For example, long lengths of much needed highway duplications involve building new road surfaces. They are probably balancing out the fact that some highways are in extremely poor condition. The network is also growing in size, and the relatively constant percentage hides that the number of kilometres in a distressed condition is higher each year.

In 2015/16, the distressed 7.4 per cent of the 19,630-kilometre network in regional Victoria was equivalent to 1,452 kilometres of road. That is the same distance as driving from Melbourne to Mildura 2.6 times.

Delving deeper, RACV’s expert assessment considered ten years of VicRoads data. The VicRoads condition data records cracking, surface texture, roughness and rutting. When roughness data for all roads in regional Victoria is considered, outside of the ten largest regional cities, we find that the network is gradually declining in condition (Fig. 9).

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56 Victorian Auditor-General, Maintaining the State’s Regional Arterial Road Network (Melbourne: Victorian Auditor-General’s Office (VAGO), June 2008).
To strengthen and resurface regional roads costs about $80-90 per square metre. With roads typically being about nine metres wide, including narrow sealed shoulders, 600 kilometres of distressed roads will cost about $486 million to repair. That means that over one term of government, RACV estimates that about $120 million a year will be needed to fix distressed roads in South-West Victoria alone.

If there are about 1,500 kilometres of distressed roads across regional Victoria, as estimated above, then $1.2 billion is needed to strengthen and resurface them. That will be $304 million a year, for four years – and it will not slow down the deterioration of other roads.

Such works must also incorporate extra safety improvements, such as sealing shoulders and adding rumble strips, to provide minimum 3-star safety on these roads. That should be possible because large-scale works should enable the work to be undertaken at a lower cost per square metre of road to be fixed. This will require much greater short-term investment in the maintenance program, however the likely safety benefits and efficiencies of combining safety improvements into the resurfacing program provides long term savings and benefits.

Our 2016 assessment found that despite eight years elapsing since the Auditor General identified shortcomings in the funding for road maintenance in Victoria, successive Governments have not addressed the issue. The condition of the network is not transparently reported and therefore there can be no informed community debate about what Victorians want and how much they will be prepared to pay for their roads.

Need for transparency

The data assessed for RACV shows a continuing decline in road conditions, with extremely poor road conditions in some areas of the State and the urgent need for new and upgraded roads hidden in the data by good roads elsewhere. Data suggests that in some areas, roads are at least twice as bad as what is reported in annual State budget papers.

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The 2017 Victorian Auditor General report confirmed RACV’s findings.\textsuperscript{98} The new investigation identified that insufficient funding and serious concerns about VicRoads processes were contributing to the deteriorating condition of the network.

As part of the State Government’s commitment to improving Victorian roads, a dashboard showing the condition of the network was released in September 2017. Since the announcement, the basic dashboard of potholes and crashes in each Council area have not improved, with some of the data no longer being updated. When RACV searched for this dashboard for this Inquiry, we were unable to locate it\textsuperscript{99}. This is despite one of the recommendations from the 2017 VAGO report being to “meaningfully report on road condition and performance against established levels of service so that the public and government are fully informed of the outcomes of the road pavement maintenance program”.\textsuperscript{100}

In 2017/18, VicRoads reports doubling their maintenance budget.\textsuperscript{101} Despite this, there is still a massive backlog to be funded before VicRoads can adequately keep up with road maintenance and fund work as they become distressed.

There must be greater transparency about the condition of Victoria’s roads, and how much is being spent. RACV also wants more funding for road asset maintenance to give Victorians the safe roads they expect, and to ensure the roads remain that way.

\textit{Funding}

There is the opportunity to embed road safety targets into infrastructure funding at a State and Federal level. This ensures new or upgraded projects are being built with safety in mind and a minimum star rating target achieved rather than it being an afterthought, or an add-on at the end with a road safety audit. Under this mechanism, an unsafe road design would not receive funding. This further ensures that road safety becomes ‘business as usual’ rather than needing to be funding separately to road projects.

This was highlighted in the \textit{Inquiry into the NRSS} which recommends:

\begin{itemize}
  \item Reporting bi-annually to parliament on road safety progress linked to government input and funding;\textsuperscript{102}
  \item Managing and funding local government to address the higher rates of trauma,\textsuperscript{103} and
  \item All Commonwealth infrastructure funding to include star rating and safety performance criteria with Safe System Assessments to be used at the planning and completion stages on all projects.\textsuperscript{104}
\end{itemize}

\textsuperscript{98} Victorian Auditor-General, \textit{Maintaining State-Controlled Roadways} (Melbourne: VAGO, June 2017).
\textsuperscript{99} https://app.powerbi.com/view?r=eyJrIjoiZTYxYTYxMDNiYTQtMDk1Ny00MGZmLTk0NjMtMDc3MjlyZDBINjBmlzdC16jiUwOTRjN2E3LTA3NDgtNDY2ZS05NDFLTcyODgyYzMwOTdiYSI2MlMiQjEwQ%3D%3D
\textsuperscript{100} Ibid.
\textsuperscript{101} “Road Maintenance”, VicRoads, published 1 August 2019.
\textsuperscript{102} Woolley et al., \textit{Inquiry into the NRSS 2011-2020}, p. 34-37.
\textsuperscript{103} Ibid, p. 41
\textsuperscript{104} Ibid, p. 65-68.
Recommendations

6.1 A minimum 3-star standard of safety on existing major highways.

6.2 Newly constructed sections of highway to achieve a safety rating of no less than 4-stars.

6.3 Release of AusRAP star ratings for the Victorian network, in partnership with RACV, commencing with the 20 highest-risk country roads.

6.4 Increased funding for road maintenance to fix the $1.2 billion backlog, and ensure adequate funding into the future.

6.5 Maintenance works to also incorporate extra safety improvements, to provide minimum 3-star roads.

6.6 Greater transparency about the condition of Victoria’s roads, and how much is being spent.

(7) Adequacy of driver training programs and related funding structures such as the L2P program.

Adequacy of Driver training

Driver training is often seen by the community as the measure that will stop drivers from making mistakes or taking risks, and that improved training will lead to a reduction in road trauma. However, conventional driver training and education is suggested to be inadequate in reducing crash involvement or crash risk, regardless of the drivers’ age or driving experience. Such programs that aim to increase vehicle-handling and manoeuvring skills have previously been related to an increased crash rate among young drivers.105 This reason for this is because their involvement in such programs are suggested to foster overconfidence in one’s driving skills, which may lead to young drivers not taking appropriate precautions to avoid driving in dangerous situations.106

Additionally, the provision of conventional driver training beyond what is currently required to gain a learner driver licence can also lead to increased crash risk among novice drivers. Research explains that this is because the training can encourage earlier full licensing, increase exposure-to-risk and/or unduly increase the confidence of novices about their driving abilities.107

For the reasons above, it is important that driver training and young driver education programs are evidence-based and well evaluated, and those without scientifically-evidenced benefits should be avoided.108 Furthermore, the implementation of ineffective conventional driver education/training may divert limited funds and community attention away from more effective initiatives that are likely to reduce crash risk.

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An example of a research and trialling done for driver training and education was the P Drivers Project. This project was conducted from 2011-2017, and was funded by the Australian, NSW and Victorian Government, TAC, the Federal Chamber of Automotive Industries (FCAI), Insurance Australia Group (IAG) and RACV. Targeted at young novice drivers who had just attained their probationary licence, the program focused on the development and delivery of a behavioural range program based on best practice to this demographic in their initial months of solo driving when crash risk is highest. A process evaluation and an outcome evaluation was conducted, and the learnings from these should be applied to the development of future programs.

Research and trials such as the P Drivers Project are important steps to ensure only the best possible programs are being promoted. They also provide important learning points that should be considered when developing future programs. For these benefits, government should continue supporting quality research into driver training and education.

RACV’s literature review highlighted alternatives to conventional driver training and education, such as increased supervised driving, graduated licensing and on-road driving experience, are effective ways to develop higher-order cognitive skills related to driving, especially for novice drivers. Research shows that learners who received about 118 hours of supervised experience had up to 35 per cent fewer crashes than those who received only 41-47 hours. Furthermore, those who practised more as learner drivers had lower crash involvement after licensing and fewer safety-critical driving errors in an on-road assessment.

Graduated Licensing System (GLS)

RACV is supportive of the requirement for learner drivers in Victoria through the GLS to obtain 120 hours of driving experience before they can take the drive test for their probationary license. Currently, learner drivers 21 years and older are not required to complete a minimum number of supervised driving hours. Extensive supervised on-road driving experience is fundamental in developing hazard perception skills in learner drivers to reduce crash risk. Without this experience some learners will not undertake complex driving situations until they are driving solo which increases their risk.

Extending mandatory hours of driving experience to 25 years

The evaluation of the Victorian GLS found a 20 per cent reduction in fatal and serious injury crashes for young drivers aged 18-20 years. However, there has been no significant

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109 Ibid.
reduction in crashes for 21-23 years old drivers where 120 hours of driving experience is not mandatory.\textsuperscript{115}

The lack of reduced crash risk in older youth novice drivers was attributed to the fact they are not required to complete the minimum 120 hours of supervised driving, which provides a crash protective effect for drivers during their first year of solo driving; They are also not subject to peer passenger restrictions and a mobile phone ban.\textsuperscript{116,117}

The GLS should be extended to require drivers younger than 25 to obtain 120 hours of supervised driving experience before they can take the drive test for their probationary license. Extending the 120 hours of supervised driving experience requirement for those under 25 years will also align Victoria with NSW and Queensland; both of these states require learner drivers under 25 years to have 120 or 100 hours respectively before being eligible to apply for their probationary licence.

\textit{Maintaining licensing age at 18 years}

From 2016 to 2017, a Parliamentary Inquiry into lowering the probationary driving age in Victoria to 17 was conducted. The inquiry cited young people finding the lack of transport affecting their social trips and ability to get employment as reasons for the recommendation to lower the licencing age.\textsuperscript{118} However, an RACV survey found that only a few young people said it impacted their employment ability.\textsuperscript{119} Overall, other strategies such as improving alternative transport options especially in regional areas should be undertaken to increase freedom of mobility among youths without compromising their safety.\textsuperscript{120}

Furthermore, RACV market research\textsuperscript{121} has shown that 64 per cent of RACV members and 65 per cent of Victorians do not support a reduction in licencing age. The most common reason cited for not supporting was that 17-year-olds are too young/immature to be driving.

More importantly, a considerable amount of research in Australia and internationally have associated a higher provisional licensing age with reduced crashes and fatalities.\textsuperscript{122} Research has shown that the learner period is a relatively low risk period for driving. However, the first year on a provisional licence is the riskiest time for a driver – especially for teenage drivers.\textsuperscript{123} Raising the licencing age can therefore reduce this risk by allowing learner drivers to have more opportunities to gain more supervised driving experience and time. When South Australia’s minimum licensing age was 17 years in 2011, it was estimated that if South Australia raised the minimum provisional licensing age to 18 years, there would be five to six per cent reduction in all serious and fatal crashes in the state, and a 20 per cent reduction in such crashes within the 16-24-year-old age group.\textsuperscript{124}

\textsuperscript{116} Ibid, p. 28.
\textsuperscript{117} N. P. Gregersen, ‘Evaluation of a 16-Years Age Limit for Driver Training’ (1997).
\textsuperscript{118} Law Reform, Road and Community Safety Committee, \textit{Inquiry into Lowering the Probationary Driving Age in Victoria to Seventeen} (Mebourne: Parliament of Victoria, March 2017).
\textsuperscript{119} “Victoria’s Driving Age Should Remain 18, says RACV”, RACV, published Mar 22, 2017.
\textsuperscript{120} RACV, \textit{Submission for the Inquiry into Lowering the Probationary Driving Age to 17 Years} (April 2016).
\textsuperscript{121} Ibid.
\textsuperscript{122} Ibid.
\textsuperscript{124} Ibid.
If Victoria were to lower the age of first licensure from 18 to 17 years, it is estimated that it would result in an increase each year of 10 fatalities, 241 serious injuries, and 714 minor injuries.\textsuperscript{125} Drawing on 2014 NSW licensing rates for 17 to 18-year-olds and 2014 Victorian licensing and population data, Department of Transport road safety experts have also estimated that the projected trauma due to the lowering of licensing age will increase cost to the Victorian community by about $247 million per year.\textsuperscript{126}

For these reasons, RACV does not support lowering the licensing age below 18 years.

\textbf{L2P Program}

The \textit{L2P: Learner Driver Mentor Program} was introduced to assist disadvantaged young people obtain 120 hours of supervised driving experience, as it was recognised that for some disadvantaged young people this might be very difficult to achieve. The program is funded by the TAC and is co-ordinated by VicRoads.

With many participants from socio-economically disadvantaged areas and rural regions\textsuperscript{127}, L2P Program provides assistance and funding for local councils to develop and implement driver mentor programs in their municipality. The program relies on community volunteers. The locally run program trains the volunteers, provides a car for practice sessions and matches volunteers with young learners. RACV supports and calls for ongoing funding for programs to assist young people to obtain 120 hours of supervised driving experience.

A 2012 qualitative evaluation of L2P utilising information from program committee members, coordinators, volunteers and learners revealed great community support for the program, and all stakeholders perceived the program to have positive, holistic outcomes.\textsuperscript{128} There was great community support for the program and learners were reported to have experienced prior unlicensed and unsafe driving practices, which ceased since starting L2P.

Correspondingly, a more recent 2019 evaluation\textsuperscript{129} has also shown the program has a benefit-cost ratio of 1.68 due to significant road safety, mobility and social benefits for learner drivers. Over 4,400 have gained their probationary licence through the program since 2012. The evaluation found that the L2P program increases learn drivers’ life aspirations, confidence, social and behavioural outcomes, and reduced their social isolation.

Additionally, program participation was shown to improve road safety by reducing the prevalence of unlicensed driving, reducing crash risk after obtaining a licence, and improving youth perceptions of risky driving. It is estimated that L2P has allowed the prevention of eight fatal and serious injury crashes and 26 casualty crashes from 2015-19. There will be an ongoing requirement for this program in the future, so ongoing funding is required to ensure that the initiative continues.\textsuperscript{130,131}

\begin{flushright}
\textsuperscript{125} VicRoads, VicRoads Submission to the Law Reform, Road and community Safety Parliamentary Committee: Inquiry into Lowering the Probationary Driving Licence to 17 Years and Tackling Transport and Other Barriers to Youth Employment and Study (May 2016), p. 17.
\textsuperscript{126} Ibid.
\textsuperscript{129} J. Thompson, ‘Economic Evaluation of Victoria’s L2P’ (2019).
\textsuperscript{130} Ibid.
\textsuperscript{131} C. J. Freethy, ‘L2P – Learner Driver Mentor Program’ (2012)
\end{flushright}
Recommendations

7.1 Driver training and young driver education programs should be evidence-based and well evaluated, and those without scientifically-evidenced benefits should be avoided.

7.2 Continue supporting quality research into driver training and education to ensure that the best possible programs are being promoted.

7.3 Ongoing funding for L2P and similar programs to assist young disadvantaged people to obtain 120 hours of supervised driving experience.

7.4 Extend the Graduated Licensing System to require drivers younger than 25 to obtain 120 hours of supervised driving experience before they can take the drive test for their probationary license.

7.5 Maintain the current licensing age of 18 years.

(8) Adequacy and accuracy of road collision data collection.

Accurate and insightful road crash data is necessary to ensure measures to improve road safety are based on sound data, and improvements as a result of any implemented measures can be measured.

As mentioned consistently through this submission, the road collision data that is currently collected in Victoria is not adequate to give a good picture of contributory causes to crashes, where trends are occurring, or even allow improvements to be tracked.

For example, the analysis presented in the NRSS Statistical Progress Measures shows that irresponsible road use, safe speeds and safe vehicles are not measurable. The Inquiry into the NRSS recommended to “Establish and commit to key performance indicators in time for the next strategy that measure and report on how harm can be eliminated in the system, and publish these annually”.

There is currently no reliable national collection of serious injury data, because of jurisdictional differences in injury definitions and reporting arrangements. In the June 2019 independent Review of National Road Safety Governance Arrangements commissioned by the Australian Government, one of the 8 key findings was that road safety data remains an issue as there is “no agreed national framework for road safety performance information. Development of better performance information and a national framework for monitoring and evaluation to better measure, target, monitor and evaluate data performance will provide a results framework and support the objectives of the next NRSS”.

The Inquiry into the National Road Safety Strategy states that “[t]he nation is overly reliant on fatality crash data and therefore misses the opportunity to properly manage the serious injury burden”. And that “[t]here are many gaps in knowledge regarding injury numbers to the point

133 Woolley et al., Inquiry into the NRSS 2011-2020, p. 8.
134 Road Safety Taskforce, Review of NRSS Governance Arrangements, p. 4.
that different sources contradict each other in relation to an increasing or decreasing trend. Furthermore, alternative databases provide quite different snapshots of the injury situation.

Other issues regarding the collection of road crash data in Victoria includes the lack of granularity of vehicle types (e.g. e-bikes are coded the same as bicycles; mopeds and motorbikes are coded the same, as are scooters and e-scooters) and the lack of data in some areas (contributory causes to crashes such as speed, drink and drug driving).

These data issues are not new, and have been highlighted many times over the years including in the following reports:

- 2005 Inquiry into Crashes Involving Roadside Objects
- 2005 Inquiry into the Country Road Toll
- 2006 Inquiry into Driver Distraction
- 2008 Inquiry into Improving Safety At Level Crossings
- 2010 Inquiry into Pedestrian Safety in Car Parks
- 2011-2020 National Road Safety Strategy
- 2012 Inquiry into Motorcycle Safety
- 2014 Inquiry into Serious Injury
- 2019 Review of National Road Safety Governance Arrangements

As the Road Safety Camera Commissioner, John Voyage, stated in his 2018-19 annual report about data collection and analysis, “[w]e need to listen to, and reconsider acting upon, these important and repeated recommendations.”

AAA’s Reviving Road Safety Report recommended that a national road safety data hub be established through the Office of Road Safety to:

- coordinate Australia’s road safety data collection, analysis and reporting capabilities. Robust data must be used to inform road safety interventions and this data must underpin measurable targets, transparent reporting and real accountability.
- decide upon a measurement of serious injury with the Commonwealth, state and territory governments and regularly report on it.
- administer a national AusRAP hub to maximise the life-saving potential of Australian Government infrastructure investment and meet the agreed policy targets for 3-star and better roads across Australia.

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143 Road Safety Committee, Inquiry into Serious Injury (Melbourne: Parliament of Victoria, May 2014)
144 Road Safety Taskforce, Review of NRSS Governance Arrangements.
146 AAA, Reviving Road Safety (2019).
Recommendations

8.1 Development of better key performance indicators to measure and report on the objectives of road safety strategies.

8.2 Reliable and more consistent collection of serious injury data across jurisdictions.

8.3 More granular coding of crash data to better inform the road safety

8.4 More systematic and quality data collection around contributing factors to crashes.

8.5 Establish a national road safety data hub through the Office of Road Safety.

(9) Others

There are a number of other areas RACV wishes to raise that haven’t specifically been asked for in the terms of the Inquiry but should be considered.

Unlicensed drivers and unregistered vehicles

Unlicensed drivers and riders are over-represented in road crashes. RACV is concerned about unregistered vehicles on the road because of the risk that they may not be roadworthy, creating both a road safety and legal issue. RACV supports the further rollout of enforcement technology such as Automatic Number Plate Recognition (ANPR), to an increased number of police vehicles and at red-light and speed camera sites to detect unlicensed drivers and unregistered vehicles.

Child Restraint laws

Child restraint legislation must be reviewed and updated to reflect research evidence and best practice recommendations to keep children as safe as possible when travelling in motor vehicles. Specifically, children:

- Up to 12 months of age should be legally required to travel rearward facing
- Up to 145cms or 12 years of age should be legally required to travel in a booster seat
- Up to 145cms or 12 years of age should be legally required to travel in the rear seat
- Taxis should not be exempt from child restraint legislation.

Extend the rearward facing child restraint laws

Child restraint legislation should be changed to require that children up to 12 months of age should be legally required to travel rearward facing.

Current legislation states that children aged under 6 months must use a rearward facing restraint, and children aged from 6 months to 4 years must be properly restrained in either a rearward or forward-facing child restraint.

Numerous field studies indicate that rearward facing child restraints offer 8896 per cent reduction in the risk of fatal and serious injuries to properly restrained infants compared to no
restraint. While current research does not advise on the actual optimum age/size until which rearward facing child restraints are most effective, the evidence indicates that children should stay rearward facing as long as they fit within a rearward facing restraint.

The Australian Standard for Child Restraints AS/NZ:1754 2013 specifies three types of rearward facing child restraints, with the ‘A4’ type allowing children to remain rearward facing until approximately 2.5 years of age. Further, research suggests that most parents are following best practice advice on child restraints and keeping children rearward facing until at least 12 months of age, but the discrepancy between best practice advice and the current law is confusing.

Extend the booster seat laws

Child restraint legislation should be changed to require that children up to 145cms or 12 years of age should be legally required to travel in a booster seat.

Current legislation permits children above 7 years old to travel in a seat belt instead of a booster seat. However, seat belts are designed for adults. Children are shorter than adults, have smaller hip bones, and have proportionally larger heads. If a child under 145cms travels in a lap-sash seat belt, the sash portion of the belt will lie across their face or neck, rather than their shoulder, and the lap portion will lie across their abdomen, rather than their waist. This increases their chances of serious injury in a crash. Poor seat belt fit has also been associated with a 1.7 to 4.2 times higher risk of serious abdominal injuries.

Despite most children being shorter than 145cm until about the age of 12 years, parents believe that their children will be safe if they follow current legislation and allow their child to travel in an adult seatbelt at the age of seven. The height percentile charts for boys and girls show that less than 2 per cent of children at nine years of age are 145cms. Therefore, if parents are only following the minimum requirements of the legislation, the vast majority of children up to 9 years old are not appropriately restrained and are at serious risk of injury in the event of a crash.

Internationally, many jurisdictions have child restraint laws that require children remain in a booster seat to an older age than Australia and include a height minimum. For example, in the UK, Spain and Denmark children are required to use a booster seat until they are 12 years of age or 135cms tall, and in Germany and Switzerland children are required to use a booster seat until they are 12 years of age or 150cms tall.

Increase the minimum age for travel in the front seating position

Seatbelts are designed for adult use and airbags are designed and tested for adults. While airbags are a proven safety feature there is a chance that young children can be injured from the force of an airbag. Therefore, RACV believes that children should not occupy a front seating position until they are adult sized (i.e. 145cm or 12 years of age).

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148 Ibid, p. 33-34.
153 Ibid, p. 49.
Remove the exemption on the use of child restraints in taxis

Taxis should not be exempt from child restraint legislation. The current Victorian child restraint road rules do not apply to taxis. The law requires that children:

- Aged under 1 year must travel in the back seat, but do not have to use a child restraint
- Aged 1 year and over must be in their own seat, with their own properly fastened seatbelt if there is no child restraint or booster seat available.

The risk of injury to children who are unsuitably restrained applies equally to children travelling in any vehicle, regardless of the vehicle’s function. Private vehicles, rideshare services (e.g. Uber), and commercial vehicles are not except for child restraint laws, yet current laws allow children to travel unsafely in taxi services where a suitable restraint is not available.

NeuRA’s Best Practice Guidelines are currently undergoing an update, and the changes will add private hire cars and rideshare services to the recommendation for children to use their recommended restraint in taxis.154

The safety of children when travelling should be paramount and RACV believes that this exemption for the use of child restraints in taxis should be removed from the regulations.

Metre Passing Distance Legislation

Following an Inquiry into the Road Safety Road Rules 2009 (Overtaking Bicycles) Bill 2015, in March 2017, the Government announced that it will implement a two staged approach to reduce the number of crashes with motorists and cyclists.

Stage One comprised a comprehensive yearlong community education campaign designed to change motorists’ behaviours and attitudes towards cyclists. Stage Two is to comprise a trial of a mandated minimum passing distance for motorists to leave when passing a cyclist. The regulatory response will only be trialled if the community education campaign is ineffective in achieving safety benefits for cyclists, equivalent to those achieved with regulatory overtaking distance changes in comparable jurisdictions.

Since the Safety Road Rules 2009 (Overtaking Bicycles) Bill 2015 155 was first tabled in the Victorian Parliament, every other Australian state and territory has passed legislation (trial in Western Australia) for a minimum bicycle passing law.156

Furthermore, TAC statistics show that the number of cyclists killed or hospitalised on Victoria’s road network continues to rise significantly from 386 in 2014 to 522 in 2018 (Table 2).

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Table 2. Number of cyclists killed and hospitalised per year from 2014-2019.*\(^{157}\)

<table>
<thead>
<tr>
<th>Year</th>
<th>Hospitalised</th>
<th>Lives Lost</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>386</td>
<td>10</td>
</tr>
<tr>
<td>2015</td>
<td>390</td>
<td>10</td>
</tr>
<tr>
<td>2016</td>
<td>423</td>
<td>8</td>
</tr>
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<td>2017</td>
<td>510</td>
<td>12</td>
</tr>
<tr>
<td>2018</td>
<td>515</td>
<td>7</td>
</tr>
<tr>
<td>2019</td>
<td>287(^*)</td>
<td>10</td>
</tr>
<tr>
<td>TOTAL</td>
<td>2,511</td>
<td>57</td>
</tr>
</tbody>
</table>

\(^{157}\) Correct as of 7 January 2020.
\(^{*}\) NB: Data only available from Jan - Jun 2019 due to six-month reporting lag for claims involving hospitalisation data.

In the absence of a Government report into the Share the Road campaign\(^{158}\), particularly the effectiveness of the campaign, RACV has called on the Government to implement bicycle passing laws which are consistent with those implemented across the country to improve cyclist safety.

RACV advocates for and strongly recommends a trial of a minimum bicycle passing distance rule to be conducted to support the implementation of such a law in legislation.

\(^{158}\) "Share the Road", VicRoads.
APPENDIX ONE: Royal Auto Article 159

For whom the road tolls: Why is Victoria’s death toll on the rise?

Moving Well | Story: Peter Wilmoth | Photos: Shannon Morris | Posted on 24 January 2020

Victoria’s road toll in 2019 was the highest in three years. What went wrong?

On 14 December 1991 Tanya Suhr, a 19-year-old visual arts student at Melbourne University, was a passenger in a car being driven by her boyfriend’s brother. They were heading through Chirnside Park in Melbourne’s north-east towards his parents’ house when they were hit by another vehicle. The car Tanya was in was split in half.

Four hours later Tanya’s brother Paul and their mother Jeanette were at home in Boronia when the doorbell rang. It was 12.30am. Paul called out words no parent wants to hear: “Mum, there's two policemen at the door.” The news delivered that day changed a family’s life forever.

The pain of losing her daughter never leaves Jeanette. She still occasionally catches up for lunch with Tanya’s best friend. “We still talk about Tanya as if she were here,” says Jeanette. “Her friend has a little girl. I sometimes think that if it hadn’t happened Tanya might have got married and had children. I sometimes reflect on that.”

Losing a child changes a person in fundamental ways. “Your hopes and dreams are gone,” says Jeanette. “You learn to change your thinking. My husband and I had always talked about how lucky we were, but we became afraid to hope. Today we take life as it comes. You find a new normal.”

Dr Helen Sergiou has seen the lives of many teenagers slip away.

Increasing road deaths taking their toll
Jeanette is far from alone in her grief. At a time when both cars and roads are safer than they have ever been, the number of people killed on Victoria’s roads spiked in 2019 to 263 – 50 more than the previous year. (Although road deaths eased in the second half of 2019, the annual toll was still the highest since 2016.)

The death toll came as a shocking reality check after decades of fairly constant decline in road fatalities. In 1970, the year compulsory seatbelts were introduced, 1061 people died on Victorian roads. By 2018, despite a threefold increase in registered motor vehicles, the number of people killed had dropped to 213, the lowest since records began. But early last year road deaths began to climb. By early May the road toll was 50 per cent higher than for the same period in 2018.

The usual fatalism that sadly accompanies road toll reports turned to shock. The state government called a road safety summit bringing together Victoria Police, the Transport Accident Commission, VicRoads, RACV and other experts to address the emerging crisis. Next came a series of eight regional community forums across the state to try to understand why country drivers and country roads are so heavily represented in the death toll (around 50 per cent of fatal crashes involve country drivers on regional roads).

Then, in July, the government announced a parliamentary inquiry to consider, among other things, the adequacy of current drug and alcohol testing, the impact of smart phones on driver distraction, speed management and enforcement and the role of road standards and maintenance.

The experts agree that all those elements: – drugs and alcohol, driver distraction, speed and road conditions – play a role in road deaths, but they are at a loss to explain the sudden spike, let alone how to ensure it never happens again.

TAC’s Lead Director Road Safety Samantha Cockfield says it is not unexpected to see spikes and troughs when looking at the road toll over time and that the underlying reasons for the majority of fatal crashes are quite well understood. “We know how the crashes are happening and on the whole why,” she says. “We also know the actions we to need to take to address most of the fatalities on Victorian roads. But we’re not perfect. We don’t yet have all the answers and must continue to invest in ways of tackling the problem.”

People will always make mistakes, but a mistake shouldn’t cost someone their life… So why do so many people accept death on our roads as inevitable?

What does seem beyond doubt is that there is no room for complacency. “People will always make mistakes, but a mistake shouldn’t cost someone their life,” says Emily McLean, RACV’s senior engineer of roads and traffic. She notes that in the workplace, fatalities and serious
injuries are not considered an acceptable cost of doing business. “So why do so many people accept death on our roads as inevitable?”

Emily has spearheaded the RACV’s submission to the parliamentary inquiry, calling for an urgent review of speed limits on country roads, where so many fatal crashes occur, and for upgrades to safety infrastructure on major highways and other high-traffic roads.

“Simple and affordable measures can help make our roads safer,” Emily says. “In country areas, this means rumble strips on the edge of the lane to prevent run-off road crashes, sealed shoulders to allow time for a driver to recover if they do leave their lane, and wire-rope barriers along the centre and side of roads to prevent them hitting a tree, pole or another vehicle.”

This year the government has announced plans to install 1600 kilometres of rumble strip line-markings and 340 kilometres of new safety barriers on the state’s roads, adding to the more than 2300 kilometres of safety barriers already installed. But while the government says these measures have had a dramatic impact, more than halving the number of fatalities and serious injuries on stretches where they are in place, Emily McLean says it is simply not viable to upgrade every kilometre of secondary road across the state.

“At the current rate of funding we estimate it would take over 1000 years to upgrade every road to an acceptable safety standard – or we could act immediately to make roads safer by reviewing speed limits.”

Is slowing down the answer?

The RACV’s parliamentary inquiry submission calls for an urgent review of speed limits across the state, starting with low-traffic secondary roads with 100kmh speed limits. “That’s where people are dying,” says Emily. “In many instances it’s just not possible to drive safely at 100kmh on these roads, yet they have the same speed limit as the Geelong Ring Road which is sealed, divided and with multiple lanes in each direction.”

Higher speed limits, she says, should be applied only when a road is safe enough to allow it. “We know people need to get around, and safe roads with higher speed limits are critical on important routes. But in other areas we need to review whether the speed limits are correct. Just because a road has always had a certain limit doesn’t mean it’s a safe speed for that road.”

While rethinking speed limits has huge potential to reduce both the number of crashes and the severity of injuries when crashes do occur, Emily says speed is just one aspect of a four-pronged approach needed to save lives. “We need not just safer speeds and safer roads, but also safer cars and, crucially, safer drivers.”

Driver attitudes and behaviour are the wild card in the road toll crisis, especially as many of us tend to overestimate our driving ability. “We think we can go a little bit faster, quickly check a
map on the phone, have a little bit to drink, and that [a crash] won’t happen to us,” says Emily. “But it does happen to ordinary people every day.”

And some seem to court disaster. Despite almost universal awareness of the dangers of drink driving and not wearing a seatbelt, alcohol is a factor in about 17 per cent of fatal crashes, and more than one in four vehicle occupants killed on our roads in 2018 was not wearing a seatbelt.

And now new threats are emerging – chief among them our addiction to mobile phones, which we use for navigating, playing music and a multitude of functions that might tempt us to take our eyes off the road for one fatal moment.

Minister for Roads, Road Safety and TAC, Jaala Pulford, has described mobile phone distraction as “the drink driving of this generation”.

Jeanette Suhr has had to try to find “a new normal” following the death of her 19-year-old daughter, Tanya, in a car crash.

Why are young drivers at increased crash risk?
While government figures show driver distraction and fatigue were a factor in around one in five fatal crashes last year, the TAC’s Samantha Cockfield says about a third of Victorian drivers admit to having used their phone while driving, and one in 10 say they’ve texted while at the wheel.

Young people, says Samantha, are particularly vulnerable. “The younger you are, the less likely you are to think using your phone is a highly risky thing to do.”

Indeed young drivers are overrepresented in the death toll, with 18 to 25-year-olds accounting for almost a quarter of drivers killed over the past 10 years. But there’s also a problem at the other end of the age spectrum: TAC statistics show that drivers over the age of 75 have a greater chance of dying in a crash than any other age group.
Factors such as frailty, reduced vision and slower reaction times associated with age undoubtedly play a part in those figures, but former Victoria Police Assistant Commissioner Road Safety Stephen Leane (now Road Safety Camera Commissioner) points out that both older and younger people are also more likely to drive older, less safe cars which lack the latest life-saving features such as side airbags, ABS brakes, automatic braking and lane assist.

“Many of those who lost their lives were driving older cars,” he says. “So, while it may not be something they really want to do, we encourage people over 65 to invest in a more modern, safer car.”

**What is the biggest road policing challenge for the next decade?**

But if there’s one thing that keeps Stephen awake at night, it’s the growing problem of drug driving, which he has described as “the road policing challenge for the next decade”.

He says drivers involved in a fatal crash are now more likely to have drugs in their system than alcohol – not surprising given a driver under the influence of methamphetamines is 18 to 200 times more likely to crash (compared to five to seven times more likely for a driver with a blood alcohol level of 0.05 to 0.1).

And so the tragedies continue. What is news for one day for the community is a lifetime of pain for grieving families. For every person killed on our roads, another 30 are hospitalised, many suffering long-term, life-changing injuries.

Dr Helen Stergiou has worked as an emergency physician and trauma consultant at The Alfred Hospital since 2003. As the first point of contact when a patient arrives at the hospital after road trauma, she has seen many accident victims with traumatic brain injuries and has watched the lives of teenagers slip away.

One of the toughest parts of her job is telling family members their loved one has died. “You may gradually build but you reach the point when you have to say, ‘I’m very sorry, your son is dead’. And then you stop. You don’t fill the gap with words. I wait. They need to feel it and think about it. Then the wailing starts.”

When she leaves the trauma ward she looks at cars being driven slightly erratically and wonders if the driver may be affected by drugs. And when she sees a driver texting, she feels a rush of anger. “I’ll think ‘if you only knew what I did two hours ago’. If you text and drive you are so much more than a bloody idiot. People are dying for the sake of a single text.”
Ambulance Victoria paramedic Michelle Murphy has spent 25 years at the front line.

At the front line
Ambulance Victoria paramedic Michelle Murphy has spent 25 years at the front line. She remembers attending a crash scene involving seven young people crammed into a 4WD vehicle in bayside Melbourne. Not all were wearing seatbelts. As the car rolled passengers were ejected, and two of the seven died. “One girl was dead on the road,” recalls Michelle. “One was critically unwell in the vehicle, the roof had crushed in on him. That first image of the scene stays with you forever. You can never unsee that.” Her advice? “Don’t get into a car if you feel unsafe. Peer-group pressure can be extreme. Have a plan B to get home if plan A doesn’t work.”

What you can do
We all think road trauma won’t happen to us, but RACV’s general manager corporate affairs and communications Bryce Prosser says there are steps you can take to minimise the risks:

- Buy the safest car you can afford. Car makers are constantly introducing new life-saving safety features, but if you’re buying second hand, check Monash University Accident Research Centre’s Used Car Safety Ratings, which rate the safety of 389 models manufactured from 1982 to 2017. Find out more at racv.com.au/ucsr.
- Make sure you and your passengers are safely restrained. All adults must wear a seatbelt and children must be appropriately restrained for their height. It’s recommended children move from a booster seat to an adult seatbelt when they reach 145 centimetres.
- Do not drive when affected by alcohol, drugs or fatigue.
- Do not allow yourself to be distracted – activate the driver distraction app that comes with your phone or download one and put your phone in your glovebox to remove
temptation. TAC research indicates that taking your eyes off the road for just two seconds while driving at 50kmh is the equivalent of travelling blind for 27 metres.

- Drive within the safe legal speed limit or to the conditions. If it’s wet or foggy, slow down and allow more distance between you and the car in front.