



# **REVIEW OF VICTORIAN CYCLING RELATED ROAD RULES & LEGISLATION**

March 2015

A report for VicRoads  
Paul Tierney, Planning Results



## REPORT DOCUMENTATION

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### Abstract:

*Cycling into the Future 2013-23: Victoria's Cycling Strategy* sets out Victoria's 10-year plan to grow and support bicycle riding in Victoria. One of the actions is to review and examine the Victorian road safety road rules and legislation to better protect the safety of bicycle riders and other road users, as well as making it easier for bicycle riders to use roads.

A literature review, crash analysis, and stakeholder and community consultation were carried out. The information from these sources was considered. General findings saw that many cycling related rules were poorly understood by road users, although bicycle riders tended to have a better knowledge of the rules compared with other road users. There was also a general view that bicycle riding in Victoria was unsafe.

The information from the review identified a series of cycling related road rules that were recommended for change; others were recommended for potential change, pending further investigation; and further rules were identified as needing communications support to improve knowledge and understanding of rules by road users.

VicRoads was identified as the key source of road rule information for cycling related road rules and it was recommended that it be responsible for coordinating and delivering road rule information as part of a broader education program.

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### Disclaimer

The views expressed in this report are those of the author and not necessarily those of VicRoads or Planning Results.

In this report the author makes comment and interpretation of Victorian legislation and road rules. When particular rules are discussed, not all parts of those rules or road user requirements relating to that rule are discussed. The rules as they appear in this report are not always a direct copy of how they appear in the legislation. Therefore, this report should not be used to inform or provide advice about the rules. For details about Victorian legislation and road rules and the requirements of road users, go to the corresponding rule number in the appropriate legislation documents (go to [www.legislation.vic.gov.au](http://www.legislation.vic.gov.au)) or seek professional legal advice.

## ACKNOWLEDGEMENTS

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- Ellen Ellis, Policy Officer
- Robyn Seymour, Manager, Road User Access & Mobility

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- **Amy Gillett Foundation (AGF):** Ms Tracey Gaudry, CEO
- **Bicycle Network:** Mr Jason den Hollander, Transport Networks Manager
- **Blind Citizens Australia:** Ms Thai Nguyen, Victorian Advocacy and Policy Officer
- **Council on the Ageing (COTA):** Dr Kathleen Brasher, Manager Community Participation
- **Cycling Victoria:** Mr Kipp Kaufman, General Manager
- **Department of Justice:** Mr William Gibbons, Senior Policy Officer
- **Department of Transport, Planning and Local Infrastructure (DTPLI):** Ms Katherine Gretch, Senior Policy Officer; Mr Aaron Hemsley, Senior Policy Adviser; Mr Ashley Cook
- **Municipal Council of Victoria:** Mr James Cleaver, Policy Adviser
- **RACV:** Mr Dave Jones, Manager, Roads and Traffic; Ms Emily McLean, Senior Engineer, Roads and Traffic
- **Transport Accident Commission (TAC):** Ms Liz Waller, Major Projects Manager; Michael Nieuwesteeg, Research Manager
- **VicRoads:** Juliet Bartels, Senior Project Manager – Road Safety; Ellen Ellis, Program Consultant - Road Safety; Alistair Cumming, Manager Integrated Transport Engineering; Tony Barton, Manager – Bicycle and Pedestrian Programs.
- **Victoria Police:** Sergeant Arty Lavos, State Bicycle Operations Coordinator
- **Victoria Walks:** Dr Ben Rossiter, Executive Officer
- **Vision Australia:** Ms Karen Taranto, Advocacy Advisor

Finally, thanks go to the 10,444 anonymous members of the Victorian community and 51 municipal council employees who gave up their time to complete the online surveys developed for this project.

## EXECUTIVE SUMMARY

### BACKGROUND

In 2013 VicRoads established a project to review and examine the Victorian road safety road rules and legislation with the aim of better protecting the safety of bicycle riders and other road users, as well as identifying opportunities to make it easier for people to take up riding and for current bicycle riders to use roads. To address this aim, this report makes recommendations based on such a review.

Information used to inform the review was collected from several sources, including:

- a review of relevant literature to consider the outcomes of other road rule reviews and recent changes to cycling related legislation in other jurisdictions
- analysis of bicycle related crash statistics over a 10 year period
- consultation with key bicycle riding stakeholders, via interviews and an online survey of municipal councils
- community consultation through an online survey of Victorian road users.

To assess whether a particular rule meets its intended purpose, it is firstly important to determine if it is associated with increased trauma or whether it limits bicycle riding. If it does either, it is important to identify why. There can be several reasons for this including:

- ignorance of the road rule
- road users deliberately disobeying the road rule
- road users thinking they have a low risk of getting caught if they break the rule
- the penalty for disobeying the road rule is too low to act as a deterrent.

Even though many of the bicycle riding issues identified in this review relate to road rules, the solution may not be to change the law. In some cases better education or reinforcement of the laws might be most effective in having the desired outcome of enhanced safety.

### REVIEW INVESTIGATION

#### Literature Review

The literature review examined the relevant literature regarding bicycle riding and road rules.

State and national cycling and road safety strategies, reviews from other jurisdictions, legislation, agenda papers from national road rules review committees, and information outlining cycling related road rule changes in other jurisdictions, were considered as part of this process.

In response to Government commitments in other jurisdictions to undertake reviews of cycling related road rules, there have been two reviews conducted in Australia in recent times:

- In 2011, the Queensland Department of Transport and Main Roads (DTMR) conducted an audit of the Queensland road rules in relation to vulnerable road users (including bicycles).

- In 2012, the Australian Bicycle Council (ABC) undertook a review of the Australian Road Rules.

The DTMR identified impediments to bicycle riding issues related to:

- bicycle lanes (Rules 132 and 153);
- priority at intersections when bicycle riders are riding on the footpath (Rules 62, 67-69, 72-73); and
- where bicycles should travel, and their priority, where there is no bicycle-specific infrastructure (Rules 119 and 150).

According to the ABC, legislation should promote safety, but at the same time should not present barriers to people walking and riding bicycles. It was acknowledged that current standards and technical specifications could possibly interrupt cycling network connectivity, or increase the number of delays experienced by bicycle riders, e.g. traffic light loops that do not pick up waiting cyclists.

The ABC project aimed to identify and propose amendments to road rules that reduce safety, or create an inconvenience for bicycle riders.

The ABC provided the results of its review to state and territory representatives across Australia for further consideration.

In addition to the rules examined as part of the DTMR and ABC reviews, other rules and legislation were expected to be raised by stakeholders during consultation for this project. Many of these are actively being discussed in other forums, such as:

- specified minimum overtaking distances for drivers when overtaking bicycle riders
- the merits of mandatory helmet wearing
- bicycle registration
- riding on footpaths.

## **Road safety legislation in Victoria**

The prime transport statute in Victoria is the *Transport Integration Act 2010*. This Act sets the charters of the state agencies charged with integrating and coordinating the State's transport system, including VicRoads. One of the primary objectives the Act lists for VicRoads is to manage the road system in a manner which supports a sustainable Victoria by seeking to increase the share of public transport, walking and cycling trips as a proportion of all transport trips in Victoria.

In addition, VicRoads is responsible for administering legislation which comes under the responsibility of the Minister for Roads and Road Safety. However, the primary focus of this review will be on the *Road Safety Road Rules 2009*. This documents the basic rules of the road for drivers, motorcyclists, bicycle riders, pedestrians, passengers and others. It includes rules which are to be obeyed by all road users and includes additional rules to be observed by particular road user groups such as bicycle riders.

The National Transport Commission (NTC) is responsible for reviewing and updating the Australian Road Rules as part of its maintenance process of its legislative reforms. The NTC has an Australian Road Rules Maintenance Group (ARRMG) which consists of representatives of road traffic

authorities and the police from the states and territories and of the Commonwealth. This group provides advice to the NTC on changes to the Australian Road Rules.

For example, a minimum passing distance rule was recently considered at a national level by ARRMG. However, it was considered that there was insufficient evidence to support the proposed rule and that the trial being undertaken in Queensland (refer below for more information) be monitored first before further consideration is given to incorporating the rule into the Australian Road Rules.

For consistency across jurisdictions, it is ideal for changes to be nationally agreed and implemented. However, it is possible for jurisdictions to adopt and implement their own changes and variations to the rules.

Some cycling related changes which have recently taken place in other jurisdictions include:

- **Riding on footpaths:** On 6 September 2013, NSW amended the riding on a footpath or shared path rule (Rule 250) to allow riders carrying a child under 10 years as a passenger on the bicycle or being towed in a bicycle trailer to ride on a footpath. In addition, on 22 January 2015, the South Australian Government announced it will develop laws to allow bicycle riders of all ages to ride on the footpath.
- **Overtaking bicycle riders:** On 7 April 2014, Queensland introduced new laws to be trialled for two years requiring drivers to maintain a minimum distance when passing bicycle riders of 1 metre when passing a bicycle rider in a 60km/h or less speed zone; or 1.5 metres where the speed limit is over 60km/h. Drivers will receive three demerit points and a \$341 fine if they don't comply. The two-year trial of the legislation will be evaluated by CARRS-Q. The ACT and South Australian Governments have also announced that they will be implementing similar laws.

Although not introducing a minimum passing distance, the Tasmanian Government have recently introduced new road rules allowing drivers to straddle or cross single or double continuous centre lines, when safe to do so, to leave a safe space when passing or overtaking a bicycle rider.

## Crash Analysis

Examining the data for crashes involving bicycle riders may be useful in identifying whether failure to understand or obey particular road rules by bicycle riders or other road users seem to contribute to particular types of crashes.

In 2013<sup>1</sup>, there were six bicycle rider deaths in Victoria, 460 serious injuries and 1,072 other injuries.

Over the 10 year period from 2004-2013<sup>1</sup>, 29,181 people were involved in crashes involving bicycle riders. Of these, 13,983 (47.9%) were bicycle riders and the rest were other road users.

In the 29,181 cases included in the analysis, 84 people were killed, 4,447 seriously injured, 9,889 sustained other injuries and 14,761 were involved in the crash but were not injured.

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<sup>1</sup> 2014 data was not available at the time of writing

Looking at the bicycle rider casualties only, 80 were killed, 4,302 were seriously injured, 9,328 had other injuries and 273 were involved without any injuries. Of the other road user casualties, four were killed, 145 were seriously injured, 561 other injuries and 14,488 were just involved.

This crash data illustrates that in crashes involving bicycle riders, only a small proportion of other road users are injured (4.7%), while the vast majority of bicycle riders sustained an injury when involved in a crash (98.0%). The data reflects the vulnerability of bicycle riders to injury when involved in a crash.

The majority of crashes involving bicycle riders occur on a Tuesday (17.3%) and week days generally see relatively more bicycle riding crashes than on weekends. Also, most bicycle crashes generally occur during day time hours; 81.5 per cent were between 6am and 6pm. When considering peak commuting times the majority of crashes occur between 6am and 10am (32.8%) and 2pm and 6pm (31.0%).

Bicycle crashes are common at intersections (60.1%). Of these intersection crashes, 48.8 per cent of crashes occur at T-intersections, and 47.0 per cent at cross intersections.

Definitions for Classifying Accidents (DCA) are a set of codes used to identify the type of crash that occurred and the movement of the vehicles involved in a particular crash. It provides a standard for comparing crashes based on the characteristics of those crashes. Each crash is allocated a DCA.

The most common bicycle related crash type is DCA 121 which is failure of a right turning vehicle to give way to an oncoming vehicle travelling straight through an intersection. The second most common DCA is 110, which is a failure of a vehicle to give way at a cross intersection, and the third is DCA 163 which is caused when a driver opens their door into the path of a passing vehicle, an incident more commonly known in bicycle riding circles as 'car dooring'.



## Stakeholder Consultation

Stakeholder consultation formed an important part of this review. Stakeholders were engaged via two channels: interviews of key stakeholders and a survey of municipal councils.

### Key stakeholder interviews

Bicycle riding and other stakeholder organisations such as Victoria Police, Council on the Ageing (COTA), Vision Australia, RACV and Victoria Walks, have valuable insights into the road safety benefits of Victoria's cycling related road rules and how bicycle riders are affected by legislation, education and compliance.

Representatives from 14 government and external organisations were interviewed regarding cycling related road rules and legislation. These organisations were selected because they offered subject matter expertise and the ensured that the views of a range of road users and special interest groups affected by cycling related issues, programs and infrastructure, were represented..

In discussions with the stakeholder groups, a variety of issues worthy of consideration were highlighted. These issues were sorted into the following categories:

- Riding equipment
- Riding on footpaths, shared paths, bicycle paths
- Allocating space on road for bicycles
- Intersections, traffic signals and signs
- Overtaking and turning
- Sharing the road
- Liability and fault
- Licensing and registration
- Signage and infrastructure
- Other matters

The following provides a high level summary of the findings from the interviews with stakeholders:

- **Cycling on footpaths:** When discussing cycling related road rules to be highlighted or considered for change as part of this review, the most frequently discussed rule was extending the maximum age of bicycle riders who are allowed to ride on the footpath. While many stakeholders were in favour of this change, there were many who were strongly opposed to it. The main reasons for extending it was to allow riders to gain a better understanding of the road rules before sharing the road with other vehicles. The main reason against was that extra riders on footpaths could create a danger for pedestrians, especially those who use footpaths for, or to access, their primary means of transport, e.g. the elderly, people with a disability.
- **Minimum passing distance:** Another rule frequently discussed, again with polarised opinions, was the introduction of a minimum passing distance. Some stakeholders supported this change considering it to be an improvement to bicycle rider safety. Others saw enforcement problems and resulting safety and traffic infringement issues if cars were required to cross solid mid lines,

- **Compulsory helmet wearing laws** are often mentioned when discussing cycling related rules. This was also the case during stakeholder consultation. The stakeholders interviewed unanimously agreed that the laws should not be repealed.
- **Other issues discussed were:**
  - The need for better education regarding use of warning devices, e.g. bells
  - The need to review enforcement protocols for mobile phone use while riding
  - Improved conspicuity through lighting and clothing
  - Rules surrounding the use of bicycle lanes and paths
  - Allowing use of bicycles in bus lanes
  - Uncertainty of rules at roundabouts
  - Riders being allowed to ride across pedestrian crossings
  - Riders being allowed to complete a left turn on red signal
  - Riders giving way to drivers turning left
  - Education and applicability of the riding two abreast rule
  - Consideration of establishing liability and fault using strict liability processes
  - Opposition to licensing and registration for bicycles
  - A variety of bicycle signage and infrastructure issues, e.g. traffic management plans, new and additional signs, traffic light loops

A common theme for discussion with the stakeholders was the lack of knowledge and understanding of the cycling related road rules by both drivers and bicycle riders. Therefore, the desire for better education, communication and enforcement of the rules was frequently expressed. Given that lack of knowledge of the rules was so frequently raised, it was decided to explore this in more detail as part of the public consultation process.

## **Municipal council survey**

Municipal councils are significant stakeholders when it comes to bicycle riding matters. To get the widest possible range of views from councils, an online survey was developed following the key stakeholder interviews.

Fifty-one participants completed the survey (30 males; 21 females) and 19 councils were represented in the survey (14 metropolitan councils; 5 regional councils):

The following provides a high level summary of the findings from the survey of council officers.

### **Information sources**

- VicRoads is the key source of information for cycling related road rule information, both for the participants and for when they refer on members of the general public.
- Bicycle Network is another main source of road rule information.

### **Rules**

- Local by-laws relating to bicycle riding were not common, but often related to use of shared paths.
- When asked about changing, removing or introducing new cycling related road rules, the most frequent response category related to allowing bicycle riders of all ages to use the footpath. Related to this was allowing bicycle riders to ride across pedestrian crossings without having to dismount.

- When considering changing, introducing or removing cycling related road rules, allowing bicycle riders to treat Stop signs as Give Way signs (i.e. not have to come to a complete stop), and to be able to turn left on red at signalised intersections, were raised.
- Having a minimum passing distance was raised as a new rule to be introduced for drivers.
- Introducing 'strict liability' where drivers are automatically liable when they crash with a bicycle rider (such as in the Netherlands), also emerged when considering new rules and changes to rules.
- When asked about reasons for the suggested changes to rules or removal of rules, the main response was that the current rules are barriers to riding or are dangerous for bicycle riders. Comparatively, understanding of road rules was mentioned less often as a reason for change or removal.
- Responses to other questions indicated that the cycling related road rules in general are less likely to be thought of as protecting bicycle riders than as protecting other road users. They were also seen as creating a barrier to riding.

## Community Consultation

Victoria's road users are well placed to highlight issues regarding cycling related road rules.

An online survey was developed to capture the views of the general public. The survey was open for responses during July 2014 and on average took 30 minutes to complete. In addition to helping identify the majority of issues that potentially exist with cycling related road rules, one of the key aims of this survey was to see how well drivers and riders understood many of the cycling related rules.

Participants were recruited via a number of methods, primarily through promotions via VicRoads, cycling organisations, other road safety agencies, and other local and state government agencies.

A total of 10,444 Victorian residents responded. The high level of response reflects the interest that many members of the community have regarding bicycle riding issues.

More than three quarters of participants cycled (most of these also used other transport modes), with 23.4 per cent of the sample being non-bicycle riding drivers and the remaining 1.0 per cent non-bicycle riders who travel only as a pedestrian, passenger or on public transport. While the sample is not representative of the Victorian population generally, it provided a good range of community views.

The following summarises the main findings of the survey.

### Understanding of road rules

Participants had good understanding of and supported rules that require a bicycle to be fitted with a bell or other warning device, and that require bicycle lights to be used at night or in hazardous weather conditions. Other rules regarding bicycle riding equipment were less well understood and generally less likely to be supported, although the level of support for the rule that prohibits the use of a handheld mobile phone was well supported despite it being less well known.

Knowledge of the rule that permits children under the age of 12 years to ride on the footpath was good, and was well supported. It was also well known that bicycle riders of all ages are not allowed to ride on the footpath, but this was supported by only half of the participants. There was some confusion in the knowledge of other rules relating to the use of the footpath, and bicycle and shared paths. The current rules relating to use of paths had a higher level of support than for the questions that related to behaviours that were not currently rules. However, two of these behaviours (allowing 12-17 year olds to ride on the footpath when accompanying a younger bicycle rider and allowing bicycle riders carrying a child in a child seat or trailer to ride on the footpath) attracted higher levels of support. A number of rules related to use of on-road space. The understanding that drivers cannot use bicycle boxes was good and this was generally supported. Most participants were aware that motorcycles are not permitted to use bicycle lanes and allowing this was not supported by the participants. The majority of participants were aware that drivers of motor vehicles can enter bicycle lanes, although there was some confusion about this. Prohibiting drivers' entry into bicycle lanes was not supported.

There was some confusion among participants as to whether drivers must leave a space of one-metre when passing bicycle riders. The majority of participants thought this should be a rule; of all the items that are not current rules, this item gained the most support. There was a very high level of support for this rule expressed by bicycle riders (92.8%) and two thirds (68.9%) of other road users.

When asked about the rules relating to traffic signs and signals the vast majority of participants were aware of the obligation of bicycle riders to obey all signs and signals. This was also supported by all participants; there did not appear to be demand for allowing bicycle riders to treat some signals, signs or crossings as give way signs, by slowing and then proceeding when safe to do so.

Rules relating to bicycle riders travelling on the left side of a left turning vehicle were not well understood. However, while the survey data suggests support for the status quo, additional communication and consideration of these rules is recommended.

Rules allowing bicycle riders to make a hook turn to turn right at an intersection, and to turn right from the left lane of a multi-lane roundabout were not well understood by participants, but were generally supported. There was also limited understanding that when bicycle riders are turning right from the left lane of multi-lane roundabouts, they must give way at any exit where a driver is leaving the roundabout.

There was a good level of understanding and clear support for the status quo regarding the rules about bicycle riders stopping at the rear of stopped trams.

The majority of participants were aware that bicycle riders can ride two abreast, but were less accurate in their understanding of the rules relating to bicycle riders passing others and how far apart they are permitted to ride when travelling beside each other. Current rules around bicycle riders riding beside each other were supported by the majority. When asked if they supported the idea that riders should only be permitted to ride single file this was very unpopular among bicycle riders but supported by half of the drivers. If this were to be made a rule there would be significant resistance to it.

### Road rule resources

Bicycle riders tend to use Bicycle Network, VicRoads and Cycling Victoria (in order of preference) as resources for cycling related road rule information. While drivers were less likely to seek it out, VicRoads was the main information source for this group and was identified as the most suitable source to be used by drivers should they wish to find this information.

### Safety and barriers to riding

All participants, and particularly bicycle riders, did not view bicycle riding in Victoria to be safe. The main problems were thought to be:

- the negative attitudes and behaviour of motorists to bicycle riders
- a lack of bicycle riding infrastructure
- problems with the road design or characteristics
- a lack of general community awareness of bicycle riding issues
- the risk of car dooring.

The misunderstanding of road rules was mentioned less frequently as a contributor to the safety problem.

Participants agreed that there are significant barriers to bicycle riding in Victoria. The main barriers were thought to be the lack of respect shown to bicycle riders and the lack of bicycle riding infrastructure. Lack of road rule knowledge was also thought to be a barrier.

## DISCUSSION AND RECOMMENDATIONS

Having conducted a literature review, crash analysis, stakeholder and community consultation, and a review of the legislation, a series of rules were highlighted for further consideration.

The review process revealed that there is a level of confusion and misunderstanding around many of the rules related to bicycle riding. Therefore, undertaking an education and communications program to inform riders and drivers of their rights and obligations, and the rights and obligations of other road users, is highly recommended.

A jurisdiction can have the most comprehensive and sensible rules available, but if the people to which they apply do not know or do not understand those rules, the rule will not work as intended. Furthermore, once a good understanding and knowledge is achieved, in some cases the rules need to be seen to be enforced to bring about better compliance. So, enforcement support is also required to support good legislation.

Three key recommendations come out of this review.

### **Recommendation 1 - Conduct an education and communications campaign regarding cycling related road rules.**

Knowledge and understanding of rules needs to be improved through an effective communications campaign. By improving knowledge, the safety of bicycle riders and other road users may also improve, and make it easier for bicycle riders to continue to ride and for others to take up riding.

The findings of the review identified the need to improve awareness of the following rules:

Road rule ref. <sup>2</sup>	Road rule title <sup>3</sup>	Generally, what is the rule about? <sup>4</sup>	Also recommended for amendment
35	Optional hook turn by a bicycle rider	Bicycle riders can make an optional hook turn at intersections.	
60A	Proceeding through a bicycle storage area before a red traffic light or arrow	Drivers can't enter a bicycle box when faced with a red traffic light or arrow.	
67	Stopping and giving way at a stop sign or stop line at an intersection without traffic lights	A driver or rider approaching a stop sign must stop at the stop line and give way.	
68	Stopping and giving way at a stop sign or stop line at other places	A driver or rider approaching a stop sign must stop at the stop line and give way.	

<sup>2</sup> Unless specified otherwise, the road rule references refer to the *Road Safety Road Rules 2009*.

<sup>3</sup> As the provision title appears in the legislation

<sup>4</sup> This is a general description about the rule based on the author's interpretation. It is not a copy of what is written in the legislation and is not a comprehensive statement of the rule. It should not be used to inform or provide advice about the rules. For details about these rules and the requirements of road users please refer to the corresponding provision number in the appropriate legislation.

Road rule ref. <sup>2</sup>	Road rule title <sup>3</sup>	Generally, what is the rule about? <sup>4</sup>	Also recommended for amendment
111	Entering a roundabout from a multi-lane road or a road with 2 or more lines of traffic travelling in the same direction	The implication for riders is that they can turn right from the left lane of a multilane roundabout (drivers must do so from the right lane). In doing so riders must comply with rule 119 and give way to those exiting a roundabout.	✓
119	Giving way by the rider of a bicycle or animal to a vehicle leaving a roundabout	A rider in the far left lane of a multilane roundabout must give way to any vehicle leaving the roundabout.	✓
141(2)	No overtaking etc. to the left of a vehicle	A bicycle rider must not ride past or overtake to the left of a vehicle turning left which is giving a left change of direction signal.	✓
144	Keeping a safe distance when overtaking	When overtaking both drivers and bicycle riders must keep a sufficient distance from the other vehicle to avoid a collision.	✓
151	Riding a motor bike or bicycle alongside more than 1 other rider	A rider cannot ride beside more than one other rider in a marked lane or on a non multilane road, unless overtaking.	✓
153	Bicycle lanes	A driver must not drive in a bicycle lane, unless they are permitted to under RR 158. RR158 provides exemptions to this rule, such as allowing drivers to drive in bicycle lanes for up to 50 metres in order to enter/leave a road, park, avoid an obstruction.	
219	Lights not to be used to dazzle other road users	Drivers must not use lights which dazzle another road user. This road rule doesn't apply to bicycles, however importantly, through various communications, bicycle riders are also encouraged not to dazzle others.	
224	Using horns and similar warning devices	Drivers and riders must not use a horn or similar warning device unless it is necessary to warn other road users or animals that they are approaching or to indicate their position.	
239	Pedestrians on a bicycle path or separated footpath	Pedestrians are not allowed on a bicycle path or bicycle section of separated footpath.	
247	Riding in a bicycle lane on a road	Riders must ride in a bicycle lane on a road if there is one available unless impracticable to do so.	
249	Riding on a separated footpath	Riders must not ride on the part of a separated path designated for pedestrians,	
250	Riding on a footpath or shared path	Bicycle riders 12 years or older can't ride on a footpath. Those aged 18 or older can if they are accompanying a child under 12 years. This rule has also been flagged for review with a view to possible minor change. Irrespective of any potential change, messages should focus on giving priority to pedestrians on footpaths and shared paths.	✓



Road rule ref. <sup>2</sup>	Road rule title <sup>3</sup>	Generally, what is the rule about? <sup>4</sup>	Also recommended for amendment
258	Equipment on a bicycle	Riders must have an effective brake and a working warning device (e.g. horn or bell)	
259	Riding at night	Requirements to have front and rear lights which can be seen for 200m when riding at night or in hazardous conditions	
269(3)	Opening doors and getting out of a vehicle etc.	Drivers and passengers must not cause a hazard to others by opening their vehicle doors.	
300	Use of mobile phones	A driver or rider of a vehicle must not use a hand held phone while driving.	✓

The main reasons that these rules have been recommended for future communication is that:

- they were either poorly understood or caused confusion for road users;
- there is a good understanding of the rule but poor compliance by road users; or
- the rule has also been highlighted for potential change which will require communications support. If the change is not implemented the rule will need to be addressed through communications support.

Based on information received through this review, it is recommended that communications be developed and delivered by VicRoads with support from cycling organisations and other organisations depending on the target audiences.

## Recommendation 2 - Consider changes to selected rules

Some cycling related road rules were identified as good candidates for change. It is recommended that the changes to the following rules be considered.

- **RR 62 - Giving way when turning at an intersection with traffic lights:** it is recommended that this rule be updated so that drivers turning at an intersection which has bicycle crossing lights must give way to bicycle riders crossing the road the driver is entering. Currently this rule states that when a driver is turning at an intersection with traffic lights they must give way to any pedestrian at or near the intersection who is crossing the road the driver is entering. The rules have not taken into account the introduction of bicycle crossing lights and riders' rights and obligations in RR 260-262.
- **RR 300 - Use of mobile phones:** It is recommended that appropriate measures be put in place to allow Police to issue an on-the-spot infringement notice to bicycle riders who do not adhere to this rule. As is the case for drivers, this rule does not allow bicycle riders to use a hand held mobile phone while riding. However, stakeholder communication revealed that this rule is difficult for Police to enforce for bicycle riders, requiring them to take an offender to court to issue them with a penalty. Offending car drivers can already be issued with an on-the-spot infringement notice. This suggested change would make it less onerous for all parties by removing the requirement to attend court. It would also bring consistency when enforcing this rule for drivers and bicycle riders.



### Recommendation 3 - Conduct a further review of selected rules with a view to change

Several rules have been identified as having scope for change, but due to complexities in the rules, they require further review to identify the most appropriate changes (if any) to achieve the optimum outcomes.

It is recommended that the following rules be considered for change and further work be carried out to confirm if a change is warranted, and if so, what that change should be.

Road rule ref. <sup>5</sup>	Road rule title <sup>6</sup>	Generally, what is the rule about? <sup>7</sup>	Reasons for considering change
111	Entering a roundabout from a multi-lane road or a road with 2 or more lines of traffic travelling in the same direction	The implication for riders is that they can turn right from the left lane of a multilane roundabout (drivers must do so from the right lane). In doing so riders must comply with rule 119 and give way to those exiting a roundabout.	<ul style="list-style-type: none"> <li>• Very few people understood or were aware of this rule and under half actually supported it.</li> <li>• Confusion around this rule was raised in stakeholder consultation.</li> <li>• The main criticism is the requirement of RR119 for riders to give way. This leads to confusion and potential safety issues.</li> <li>• Needs further review to examine the safety aspects of this rule and reassess the reasons the rule was originally implemented in this way.</li> <li>• As knowledge of this rule is poor, there is a risk that some road users who are aware of the rule will interact with those who are not. This may unintentionally lead to confusion and potentially dangerous interactions.</li> </ul>
119	Giving way by the rider of a bicycle or animal to a vehicle leaving a roundabout	A rider in the far left lane of a multilane roundabout must give way to any vehicle leaving the roundabout.	<ul style="list-style-type: none"> <li>• Needs further review; consider in conjunction with RR 111 above.</li> <li>• When travelling through or around a multilane roundabout, bicycle riders must give way to drivers exiting the roundabout. This may mean the rider has to stop one or more times within the roundabout (depending on how many exits they are riding past). This could be dangerous for the bicycle rider and other road users.</li> <li>• This requirement may make it necessary for bicycle riders to look behind them when approaching each exit to know whether they need to give way. This may affect the rider's balance and stability.</li> <li>• As knowledge of this rule is poor, there is a risk that some road users who are aware of the rule will interact with those who are not. This may unintentionally lead to confusion and potentially dangerous interactions.</li> </ul>

<sup>5</sup> Unless specified otherwise, the road rule references refer to the *Road Safety Road Rules 2009*.

<sup>6</sup> As the provision title appears in the legislation

<sup>7</sup> This is a general description about the rule based on the author's interpretation. It is not a copy of what is written in the legislation and is not a comprehensive statement of the rule. It should not be used to inform or provide advice about the rules. For details about these rules and the requirements of road users please refer to the corresponding provision number in the appropriate legislation.

Road rule ref. <sup>5</sup>	Road rule title <sup>6</sup>	Generally, what is the rule about? <sup>7</sup>	Reasons for considering change
141(2)	No overtaking etc. to the left of a vehicle	A bicycle rider must not ride past or overtake to the left of a vehicle turning left which is giving a left change of direction signal.	<ul style="list-style-type: none"> <li>The requirements of the rule seem to conflict with other rules.</li> <li>Raised as a confusing and poorly understood rule in stakeholder and community consultation.</li> <li>There was relatively strong support for the rule.</li> <li>Needs further review with a view to change due to complications when examined next to other rules.</li> </ul>
144	Keeping a safe distance when overtaking	When overtaking drivers and bicycle riders must keep a sufficient distance from the other vehicle to avoid a collision.	<ul style="list-style-type: none"> <li>Some advocacy groups want to see a minimum passing distance introduced.</li> <li>Many people already thought this was a rule. Bicycle riders strongly support it and a moderate majority of other road users support it.</li> <li>No change at this stage – substantial evaluation required. Monitor the trials in Queensland and ACT to see whether there is evidence of safety outcomes. Other infrastructure issues may also need to be considered in the Victorian context.</li> </ul>
151	Riding a motor bike or bicycle alongside more than 1 other rider	A bicycle rider cannot ride beside more than one other rider in a marked lane or on a non multilane road, unless overtaking.	<ul style="list-style-type: none"> <li>Consultation showed that it can be frustrating for drivers when bicycle riders ride two or more abreast, but there can be safety benefits for bicycle riders.</li> <li>The majority of people understand the rule, but levels of support differ between road users.</li> <li>Consider changing to provide that by using new regulatory signage at selected locations riding 2 abreast is not allowed e.g. on particularly windy narrow roads.</li> </ul>
154	Bus lanes	Unless drivers are the driver of a bus, they can't drive in a bus lane, unless otherwise permitted.	<ul style="list-style-type: none"> <li>Stakeholder consultation raised the issue of allowing bicycle riders to ride in bus lanes under certain conditions.</li> <li>Consider a change to this rule to allow bicycles to travel in bus lanes under certain conditions.</li> </ul>
250	Riding on a footpath or shared path	Bicycle riders 12 years or older can't ride on a footpath. Those aged 18 or older can if they are accompanying a child under 12 years.	<ul style="list-style-type: none"> <li>Community consultation showed footpath riding rules regarding under 12s were well understood and accepted. Extending the rule to all bicycle riders of all ages was not supported.</li> <li>There was uncertainty about whether 12-17 year olds could accompany under 12s on a footpath, but this was reasonably accepted.</li> <li>Consider change to include riders of any age being permitted to ride on the footpath if they are accompanying a child under the age of 12 years.</li> <li>Refer also to RR 257.</li> </ul>
257	Riding with a person on a bicycle trailer	Rule allows riders 16 years or older to tow a child under 10 years in a bicycle trailer. Currently they can't ride on a footpath.	<ul style="list-style-type: none"> <li>Poor understanding of rule but high acceptance that footpath riding be allowed.</li> <li>Change recommended to consider allowing riders 16 years or older, towing a child under 10 years, to ride on a footpath.</li> <li>Refer also to RR 250.</li> <li>Consider similar change allowing riders 16 years or older, carrying a passenger (under the age of 10) in a seat designed for passengers, to ride on a footpath. Refer to RR 246 and RR250.</li> </ul>

Road rule ref. <sup>5</sup>	Road rule title <sup>6</sup>	Generally, what is the rule about? <sup>7</sup>	Reasons for considering change
405	Vehicles must not be driven with an empty bicycle carrier attached	A vehicle must not be driven with an empty bicycle carrier attached to the rear of the vehicle.	<ul style="list-style-type: none"> <li>• This rule is an additional rule included in the Victorian version of the road rules.</li> <li>• It is understood the reason for the rule is to not cause a hazard to other road users and to avoid obstruction of number plates.</li> <li>• Consider reviewing this rule with the view to removing it.</li> </ul>

Other legislation	Section	Description	Reasons for considering change
Road Safety Act 1986 Section 99A	Conduct of works or activities on a highway	This section applies when conducting any non-road activity on a highway. A person must ensure that the works or non-road activities are conducted in a manner that is safe for road users and people engaged in carrying out the activities.	<ul style="list-style-type: none"> <li>• It was raised in consultation that it is an unnecessarily onerous process to apply to hold a cycling event on the road.</li> <li>• It was also raised that when road works are carried out there is not always adequate consideration given to the safe movement of bicycles through a road works site.</li> <li>• Needs further review to see whether the system can be simplified and the current safety measures be retained or improved.</li> <li>• Guidelines and policies around road work arrangements regarding the safe movement of bicycle riders should be reviewed.</li> </ul>

## NEXT STEPS

As is usual practice of reports of this type, VicRoads may decide to support or not support the recommendations.

Readers of this report should understand that these recommendations have been made in response to a brief issued by VicRoads and does not represent the views or decisions of VicRoads.

If any of these recommendations are supported, particularly those relating to changes to road rules, VicRoads will need to undertake extensive consultation with stakeholders and other groups and potentially prepare a Regulatory Impact Statement. Even after this process is completed, the proposed changes in this report may not be adopted.

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## SECTION 1: INTRODUCTION

There was a significant increase in bicycle riding between 2003 and 2012, with more than 1 million Victorians riding a bicycle each week. Bicycle riding for recreation has grown by more than two per cent each year from 2001 to 2011, while trips to work by bicycle have grown by five per cent each year. Bicycle riding in Melbourne has grown 23 per cent during the same period (Victorian Government, 2012a).

More recently, as part of the 2013 National Cycling Participation Survey (Austroads, 2013) it was reported that the bicycle riding participation rate in Victoria had decreased between 2011 and 2013. This decrease was mainly due to a decrease in the participation rate in regional Victoria, but there was no detectable change in Melbourne.

However, acknowledging the general increase in bicycle riding activity and recognising the important role that bicycle riding plays in Victoria, the State Government released a cycling strategy in December 2012.

*Cycling into the Future 2013-23: Victoria's Cycling Strategy* (Victorian Government, 2012a), sets out the Victorian Government's 10-year plan to grow and support bicycle riding and build a more bicycle-friendly state. The strategy recognises bicycle riding as a part of the transport system, acknowledges that it is an enjoyable recreation activity, a healthy form of exercise and a tourism drawcard. Consequently in the 2013-14 financial year the then Government committed to investing more than \$30 million in bicycle riding related projects.

During its 10-year life, the strategy will be supported by a series of Action Plans, which will be periodically updated as work is completed. The current *Victorian Cycling Action Plan 2013 and 2014* (Victorian Government, 2012b), is divided into six key directions, each consisting of specific actions to be addressed and implemented by the relevant Government agencies and stakeholders. One of these directions aims to reduce the safety risks associated with bicycle riding.

Regulations and enforcement is identified as one area which has a significant role to play in helping to reduce those risks.

The law recognises all road users including bicycle riders and motorists are legitimate road users, and therefore each has a responsibility to follow the road rules, respect each other and share the road safely.

Bicycle riders are highly vulnerable road users and the rules must be effective in protecting them from injury and fatalities. Bicycle riders also need to follow the rules and not place other road users, or themselves, at risk.

Within the Action Plan, the Government has indicated its support for programs and actions to increase awareness of road rules relating to bicycle riding, to encourage safe and respectful behaviours from all road users and to ensure bicycle riders and other road users have appropriate rights and responsibilities (Victorian Government, 2012b).

VicRoads is undertaking one of the actions listed under the Action Plan. This action is to review and examine the Victorian road safety road rules and road safety legislation to protect bicycle riders' safety, ensure bicycle riders do not put other road users at risk, and identify opportunities to make it easier for bicycle riders to use roads.

This report aims to address this action and sets out to discuss and make recommendations based on a review of Victoria's cycling related road rules and legislation.

Information used to inform the review was collected from several sources, including:

- a review of relevant literature
- analysis of bicycle related crash statistics
- consultation with key bicycle riding stakeholders, via interviews and a survey of municipal councils
- community consultation through a survey of Victorian road users.

## SECTION 2: LITERATURE REVIEW

This literature review is the first of several steps to reviewing Victoria's cycling related road rules and legislation. It examines the relevant literature regarding bicycle riding and road rules.

Consistent across Australia, are calls to review and examine the road rules and road safety legislation to protect bicycle riders' safety, ensure bicycle riders do not put other road users at risk, and identify opportunities to make it easier for bicycle riders to use roads.

In addition to Victoria's cycling strategy (Victorian Government, 2012a) discussed in the introduction, the following is a list of some of the other State and National strategy documents that cite the need or have published an action to undertake such a review:

- *Victoria's Road Safety Strategy 2013-2022* (Victorian Government, 2013a) and *Victoria's Road Safety Action Plan 2013-2016* (Victorian Government, 2013b);
- *National Road Safety Strategy 2011-2020* (Australian Transport Council, 2011);
- *National Cycling Strategy 2011-2016* (Australian Bicycle Council, 2010).

So far, in response to these Government commitments, there have been two reviews of bicycle riding related road rules undertaken in Australia in recent times.

In 2011, the Queensland Department of Transport and Main Roads (DTMR) worked on a range of programs and policies to increase participation in active transport, but at the same time maintain the safety of road users. As part of the process, DTMR engaged the Centre for Accident Research and Road Safety - Queensland (CARRS-Q) to conduct an audit of the Queensland road rules providing an opportunity to identify and amend road rules that reduce the safety of vulnerable road users (which include bicycle riders) on the road network, or act to inconvenience bicycle riders and pedestrians (Haworth, Schramm, Palk, & King, 2011a; 2011b).

In 2012, the Australian Bicycle Council commenced a review of the Australian Road Rules. The focus of the project is to gather information and provide a position from which it could negotiate amendments to the Australian Road Rules. The ultimate aim of the project is to remove any barriers to bicycle riding from the rules and highlight amendments which would improve the safety and encouragement of bicycle riding (Australian Bicycle Council, 2012a; 2012b, 2013).

These will be discussed in more detail in the following sub-sections.

### 2.1 Victoria's cycling strategy

*Cycling into the Future 2013–23* aims to grow and support bicycle riding in Victoria by making it easier for more people to take up bicycle riding and safer for those who already do (Victorian Government, 2012a).

The strategy is intended to take a holistic, co-ordinated and strategic approach to bicycle riding by considering the needs of all bicycle riders and developing policies, programs and actions to address these needs. Currently, a number of barriers prevent the growth of bicycle riding, including gaps in bicycle riding networks, how people think and feel about bicycle riding, and the way investment in bicycle riding is supported by government systems and processes.

For example, attracting people to take up bicycle riding requires more than building bicycle riding infrastructure. Sometimes it is a lack of confidence that stops people from bicycle riding; at other

times, it is concerns about safety, uncertainty about how to get around by bicycle, a lack of places to securely store a bicycle or difficulty in bringing a bicycle with you. *Cycling into the Future 2013–23* aims to help make bicycle riding easier and safer, so that Victorians feel confident about bicycle riding.

One of the six key directions in the strategy specifically targets reducing the safety risks associated with bicycle riding. The reason for this is that serious injuries and fatalities involving bicycle riders can have a devastating impact on the individuals involved, their families, colleagues and communities. They also impose a significant burden on the health system and the state's economy. The cycling strategy reported that in the five years to 2011, the average number of bicycle riding fatalities each year was 7.4 (two per cent of all road deaths) and an average of 454 bicycle riders were seriously injured each year (seven per cent of all serious injuries on the roads reported to police).

Regulations and enforcement of those regulations can help reduce the risks for bicycle riders. Hence the action in the *Victorian Cycling Action Plan 2013 and 2014* (Victorian Government, 2012b) to review road safety legislation to make bicycle riding safer and to make it easier for bicycle riders to use the roads.

Everyone has a responsibility to follow the road rules. Both bicycle riders and motorists are legitimate road users and need to respect each other. To reduce road trauma, it is important that all road users share the road safely with each other (Victorian Government, 2012a).

We should be reminded that the primary reason for having road rules is safety. They are in place to ensure the safe movement of all road users and to avoid crashes and the resultant trauma. However, they are more commonly used to apportion blame and establish fault. As a result this often leads to a rise in tension on the road, especially if individuals or road user groups do not adhere to the rules. Although a legitimate application of the rules, it should be acknowledged that when used for establishing fault for insurance claims or enforcement, it is in fact a secondary purpose of the rules.

In addition to the actions listed under the Victorian cycling strategy and action plan, Victoria's Parliamentary inquiry into serious injury recommended that the Victorian Government develop terms of reference for an inquiry into bicycling, its challenges and opportunities (Road Safety Committee, 2014).

## 2.2 Transport and Main Roads - Queensland

The Queensland Department of Transport and Main Roads project to increase participation in active transport, and maintain the safety of road users sought to:

- Identify legislative impediments to walking and bicycle riding which can be changed without compromising the original safety intent of the legislation;
- Identify the impact of the likely changes of these legislative impediments and prioritise these based on the likely increase to walking/bicycle riding; and
- Develop options and recommendations for legislative amendments or changes.

According to Haworth, Schramm, Palk, and King (2011a), who carried out this review, legislation can impede increased walking and bicycle riding by making these modes less safe (objectively or in user perceptions), by making them slower or less convenient, or by preventing or increasing the cost of changes to infrastructure designed to promote walking or bicycle riding. The extent to which

legislation is an impediment is limited by the extent to which people comply with it, which in turn relates to the level of knowledge of the legislation and the degree of enforcement.

Some pieces of legislation which are potentially strong impediments to bicycle riding were not considered to be high priorities for legislative change in the CARRS-Q review because of current low levels of compliance.

The pieces of legislation that were identified as impediments to bicycle riding fell into the following categories:

- those related to bicycle lanes (Rules 132 and 153);
- those related to priority at intersections when bicycle riders are riding on the footpath (Rules 62, 67-69, 72-73); and
- those related to where bicycles should travel, and their priority, where there is no bicycle-specific infrastructure (Rules 119 and 150).

For each of these rules the authors of the review explored various options for change to the legislation if deemed necessary.

## 2.3 Australian Bicycle Council

According to the Australian Bicycle Council (2012a), legislation should promote safety, but at the same time should not present barriers to people walking and riding bicycles. It was acknowledged that current legislation could interrupt cycling network connectivity, or increase the number of delays experienced by bicycle riders.

Therefore, limiting the impact of legislation on the mobility of active transport users has the potential to encourage a greater mode share.

The Australian Bicycle Council (2012a) project aimed to identify and propose amendments to road rules that reduce safety, or create an inconvenience for bicycle riders.

The project team aimed to:

- Identify legislative impediments to bicycle riding that have the scope to be changed without compromising the original safety intent of the legislation;
- Identify the impact of the likely changes of these legislative impediments and prioritise changes based on the potential to increase bicycle riding mode share; and
- Develop options and recommendations for legislative amendments or changes.

The Australian Bicycle Council is reviewing the Australian Road Rules (ARR) from the perspective of bicycle riders, and will produce a list of proposed amendments to the rules which it will circulate to state and territory representatives across Australia for further consideration and submit to the National Transport Council for consideration (Australian Bicycle Council, 2013). At the time of writing this report, the Australian Bicycle Council was yet to finalise its list of proposed amendments for submission to the NTC.

Table 1 lists some of the road rules identified as having potential for change by the Australian Bicycle Council and CARRS-Q in the Queensland report.

**TABLE 1. ROAD RULES IDENTIFIED BY ABC AND CARRS-Q AS HAVING POTENTIAL FOR CHANGE**

ARR <sup>8</sup>	Rule title	ABC	Qld
27	Starting a left turn from a road (except a multi-lane road)	✓	
31	Starting a right turn from a road (except a multilane road)	✓	
48	Giving a right change of direction signal	✓	
62	Giving way when turning at an intersection with traffic lights	✓	✓
64	Giving way at a flashing yellow traffic arrow at an intersection	✓	
65	Giving way at a marked foot crossing (except at an intersection) with a flashing yellow traffic light	✓	
67	Stopping and giving way at a stop sign or stop line at an intersection without traffic lights	✓	✓
68	Stopping and giving way at a stop sign or stop line at other places		✓
69	Giving way at a give way sign or give way line at an intersection (except a roundabout)	✓	✓
72	Giving way at an intersection (except a T-intersection or roundabout)	✓	✓
73	Giving way at a T-intersection	✓	✓
74	Giving way when entering a road from a road-related area or adjacent land	✓	
92	Traffic lane arrows	✓	
119	Giving way by the rider of a bicycle or animal to a vehicle leaving a roundabout	✓	✓
129	Keeping to the far left side of a road	✓	
131	Keeping to the left of oncoming vehicles	✓	
132	Keeping to the left of the centre of a road or the dividing line		✓
133	Exceptions to keeping to the left of the centre of a road	✓	
134	Exceptions to keeping to the left of a dividing line	✓	
150	Travelling in road shoulders		✓
153	Bicycle lanes		✓
208	Parallel parking on a road (except in a median strip parking area)	✓	
208A	Parallel parking in a road-related area (except in a median strip parking area)	✓	
239	Pedestrians on a bicycle path or separated footpath	✓	
239A	Pedestrians on a shared path (rule does not currently exist)	✓	
247B	Giving way while entering or in a bicycle storage area	✓	
250	Riding on a footpath or shared path	✓	
253	Bicycle riders not to cause a traffic hazard	✓	

## 2.4 Other common road rule issues

<sup>8</sup> The cells of the Australian Road Rules (ARR) that are common to both reviews have been shaded.

In addition to the rules examined as part of the CARRS-Q and ABC reviews, there are other rules and legislation which are expected to be raised by stakeholders during consultation for this project. Many of these are actively being discussed in other forums.

#### **2.4.1 Overtaking bicycle riders**

The first of these issues relates to Road Rule 144 - Keeping a safe distance when overtaking. The Amy Gillett Foundation (AGF), in particular, is a strong advocate for mandating a minimum overtaking distance for motor vehicles overtaking bicycle riders.

The AGF has contacted Members of Parliament around Australia asking them to lead the introduction of a Bill in their respective State or Territory Parliaments for an amendment to the Australian Road Rules which would introduce a regulation requiring motor vehicles to leave a minimum of one metre when overtaking bicycle riders (Amy Gillett Foundation, 2013).

Media articles and media releases have also highlighted this as an issue. On 7 June 2013, the Queensland Transport Minister, Scott Emerson announced that the Queensland Government had ordered a review of Queensland's bicycle riding laws, including whether a one metre rule would provide a safer environment for bicycle riders (Emerson, 2013). Likewise, NSW Greens MP, Jamie Parker, on 29 May 2013, gave notice of a Bill to require at least a one metre overtaking distance when passing bicycle riders. This was in response to NSW being named the worst state for bicycle rider fatalities (Parker, 2013).

On 29 November 2013 the Transport, Housing and Local Government Committee tabled a report following its Inquiry into cycling issues (Transport, Housing and Local Government Committee, 2013). Among other issues, the terms of reference for the inquiry covered examining existing or alternative road rules such the one metre rule. The report recommended the introduction of minimum passing distance legislation, which ultimately lead to a trial of the laws commencing in Queensland in April 2014 (see section 2.7 for more information).

Although not emphasising the minimum overtaking issue, the ACT Legislative Assembly conducted an Inquiry into Vulnerable Road Users more generally. One of the terms of reference included examining national and international best practice approaches to protecting and encouraging vulnerable road users, through regulation, infrastructure, design, education and funding arrangements (ACT Legislative Assembly, 2013).

Two of the recommendations from the Inquiry (ACT Legislative Assembly, 2014) were that the ACT Government consider amending the ACT Road Rules to mandate a minimum overtaking distance of:

- one metre in speed zones 60km/h and below (Recommendation 15);
- one and a half metres in speed zones above 60km/h (Recommendation 16).

In September 2014, the ACT Government in its response to the Inquiry, agreed to the recommendations to trial a minimum passing distance in the ACT (Justice and Community Services, 2014).

#### **2.4.2 Mandatory helmet wearing**



Bicycle helmet wearing laws were not included in the ABC and CARRS-Q reviews. There is a strong body of research evidence that shows that helmets and helmet wearing legislation are effective in reducing serious trauma among bicycle riders (e.g. Newstead, Cameron, Gantzer, & Finch, 1994; Carr, Skalova, & Cameron, 1995, Haworth, Schramm, King, & Steinhardt, 2010). Furthermore, while it is considered that the introduction of helmet wearing laws discouraged people from bicycle riding when the laws were first introduced, there is little evidence that it continues to discourage bicycle riding, nor is there evidence that a large body of people would take up bicycle riding if the legislation was changed (Haworth, Schramm, King, & Steinhardt, 2010).

### **2.4.3 Bicycle registration**

Some people argue that like motor vehicles, bicycles should be registered (e.g. Dow & Greco, 2014). The rationale many use for this is that riders will be made to be more accountable for their behaviour. The Queensland Parliamentary inquiry into bicycle issues specifically included in its terms of reference 'the potential benefits and impacts of bicycle registration'. The Committee recommended that registration of bicycles not be introduced in Queensland. It was concerned that the continuing debate over whether bicycles should be registered is not in the interests of improving interaction between bicycle riders and other road users and that the reasons bicycles are not subject to registration is little understood by motorists. The Committee was also concerned that the debate takes the focus away from the real issues and improvements that are required to make bicycle riding a mainstream activity, thereby improving the interaction between bicycle riders and other road users (Transport, Housing and Local Government Committee, 2013).

Furthermore, bicycle interest groups such as Bicycle Network, do not support bicycle registration, suggesting it will discourage people from riding and the cost burden of setting up and administering such a scheme would be prohibitive (Bicycle Network, 2013a).

### **2.4.4 Riding on footpaths**

Bicycle Network is calling on the State Governments in Victoria, NSW, SA and WA to raise the legal riding age on footpaths to 16 (Bicycle Network, 2015). The current laws in these states do not allow riders aged 12 or older to ride on footpaths.

Bicycle Network cites research that students up to the age of 16 are much more likely to take risks when riding on the roads making footpaths the best place for younger riders. They add that their ability to assess risks on the road and their visual and perceptual skills are not fully developed, so allowing them to ride on footpaths means they can learn these skills in an environment with far less traffic.

Victoria Walks has released a position statement which opposes any change to legislation for a number of reasons, especially the impact it will have on the safe mobility of pedestrians (Victoria Walks, 2015), in particular the more vulnerable walkers, e.g. seniors, children, people with vision impairment or other disability.

Victoria Walks cites research and argues that:

- riding on footpaths is no safer for cyclists than cycling on the road;
- teenagers can engage in risk taking behaviour, so there is no guarantee they will ride in ways that protect their own safety or the safety of others;
- moving cyclists to footpaths will not reduce the risk to the cyclist, but it will present new risks to pedestrians;



- at 12 years of age bicycle riders have an adult-like capacity to choose gaps in traffic and children aged 12-14 years have the same response time as adults when cycling;
- it is essential that 12-16 year olds learn the skills required to ride safely, but this does not mean footpaths are the only option.

This position is also supported by Vision Australia, National Disability Services and the Council on the Ageing (Victoria Walks, 2015).

Conversely, Haworth and Schramm (2011) when examining footpath cycling in Queensland (where it is legal for all riders to ride on the footpath), concluded that riding on the footpath is associated with fewer serious injuries to cyclists than riding on the road and does not appear to cause many serious injuries to pedestrians.

#### **2.4.5 Views of key bicycle riding advocacy groups**

In addition to bicycle registration (see Section 2.4.3) and footpath riding (see Section 2.4.4) discussed above, Bicycle Network has published its position on a number of road rules and legislation issues (Bicycle Network, 2013b). These include:

- supporting the efforts of the police to enforce the traffic regulations, reasoning that when followed, they help reduce and prevent collisions between bicycles and motor vehicles.
- supporting a bicycle riding culture where bicycle riders are courteous to other road and path users and adhere to all traffic regulations. Stricter compliance will reduce and prevent crashes.
- working to change the traffic regulations as they relate to bicycle riders and especially to modify inappropriate regulations which undermine efforts to build a culture of compliance. For example, Bicycle Network supports a change to the regulation that penalises riding on the footpath.
- supporting the change that was made to the penalty for going through a traffic signal so that it is now the same for motor vehicles and bicycles.
- working to change the traffic regulations as they relate to motor vehicle users especially to reduce behaviours that threaten, injure or kill bicycle riders.
- working to introduce community reporting of hand held mobile phone use.
- working to include a category in the Crimes Act which allows a culpable driving charge to be pursued for sleep deprivation in addition to negligence, recklessness, and driving under the influence of alcohol and drugs.
- establishing a hierarchy of penalties for bicycle riders with more emphasis on prevention and less on secondary issues.
- supporting the police emphasis on education as well as issuing penalty notices.
- supporting the approach followed in the Safe Cycle program, which encourages police to reward positive behaviour, and penalise inappropriate behaviour.
- even though there is no move by Victoria Police or the Victorian Government to apply demerit points to riders, there have been calls from some sections of the community for this to be the case. Bicycle Network does not support such a move.

In addition, to minimum passing distance (see Section 2.4.1), the Amy Gillett Foundation has published its position on a number of road rules and legislation issues (Amy Gillett Foundation, 2014a). These include:

- Bicycle rider education (skills): supports adequately funded bicycle rider skills training for all bicycle riders.

- Child riding education: supports road safety education and bicycle skills training for all Australian children.
- Bicycle lights: supports the use of front and rear bicycle lights for all bicycle riders and the use of bicycle lights by bicycle riders at all times to increase bicycle rider visibility.
- Bicycle rider conspicuity: encourages all bicycle riders to increase their conspicuity by wearing light coloured high visibility clothing.
- Helmets: supports the current Australian legislation for mandatory helmet use by all bicycle riders.
- Bicycle rider-vehicle door crashes (car dooring): view that vehicle occupants are responsible for this collision type and should be penalised appropriately.
- Bicycle registration and licensing: does not support the introduction of a licensing or registration system for bicycle riders or bicycles.
- Drivers: would like to see a driver education, training and licence testing process which includes a minimum requirement about sharing the roads with bicycle riders and the associated road rules, and introduction of mandatory driving skills related to interacting with bicycle riders.
- Cycling cameras: supports bicycle riders video recording their bicycle riding trips.
- Safer speeds: supports measures that facilitate safe bicycle riding in urban areas while recognizing the need to maintain the viability of the road transport system.
- Bicycle paths on arterial roads: supports bicycle riders riding on arterial roads.
- Bicycles and bus lanes: supports permitting bicycle riders to travel in dedicated bus lanes.
- Motorcycles in bicycle lanes: supports the exclusion of motorcycles from all on-road facilities dedicated for bicycle riders.
- Bicycle rider/bicycle detection technology: supports technology that alerts drivers of other road users, to bicycle riders and pedestrians.
- Bicycle maintenance: supports and encourages regular bicycle maintenance.
- Bicycle trailers: supports the safe use of bicycle trailers and bicycle attachments.

## 2.5 Road safety legislation in Victoria

In ultimately considering whether there is a perceived failure or deficiency in a road rule, and whether it needs changing or another approach, it is important to consider the road safety legislation 'landscape' in Victoria before making recommendations.

The prime transport statute in Victoria is the Transport Integration Act 2010 (Office of the Chief Parliamentary Counsel, 2013a). This Act establishes and sets the charters of the state agencies charged with integrating and coordinating the state's transport system and, as part of that activity, providing roads, managing network access and providing registration and licensing services. The Act establishes the Department of Transport as the agency responsible for the overall integration and planning of Victoria's transport system. In addition, the Act creates Victoria's key road agency, the Roads Corporation or VicRoads (Department of Transport, 2013). One of the primary objectives the Act lists for the Roads Corporation is to manage the road system in a manner which supports a sustainable Victoria by seeking to increase the share of public transport, walking and cycling trips as a proportion of all transport trips in Victoria.

In addition, VicRoads is responsible for administering all or part of the Acts and the Regulations which come under the responsibility of the Minister for Public Transport and Roads (VicRoads, 2013). Those relevant to the current investigation include:

- *Road Safety Act 1986* (Re: definition of vehicle including bicycles, licensing and registration, unauthorised use of freeways)
- *Road Safety Road Rules 2009* (Re: road rules legislation)
- *Road Safety (Vehicles) Regulations 2009* (Re: registration legislation)
- *Road Safety (Drivers) Regulations 2009* (Re: licensing legislation)
- *Road Safety (General) Regulations 2009* (Re: traffic infringement notices)
- *Road Safety (Traffic Management) Regulations 2009* (Re: on-road bicycle events/race, traffic control items, e.g. bicycle lane signs)

The major focus of this review will be on the *Road Safety Road Rules 2009* (Office of the Chief Parliamentary Counsel, 2013). The *Road Safety Road Rules 2009* is the document where the Australian Road Rules (ARR) are incorporated into Victorian legislation, along with any Victorian specific road rules.

The Australian Road Rules contain the basic rules of the road for motorists, motorcyclists, bicycle riders, pedestrians, passengers and others. They include rules which are to be obeyed by road users and include additional rules to be observed by particular road user groups such as bicycle riders.

The rules are 'model laws' that were initially created in 1999 under an agreement that each Australian state and territory would adopt the Australian Road Rules into its own laws. The purpose of the agreement was to provide for uniformity across Australia in relation to road rules so that people were not confronted with different requirements as they travelled from one state or territory to another. Thus the Australian Road Rules now form the basis of the road rules in each state and territory. As 'model laws', however, they have no legislative force of their own.

Because the Australian Road Rules form the basis of the road traffic laws of each state and territory, it is important that they continue to be as up to date as possible. To this end they are changed frequently.

The National Transport Commission (NTC) is responsible for reviewing and updating the Australian Road Rules as part of its maintenance process of its legislative reforms. The NTC has an Australian Road Rules Maintenance Group (ARRMG) which consists of representatives of road traffic authorities and the police from the states and territories and of the Commonwealth. This Group provides advice to the NTC on changes to the Australian Road Rules (National Transport Commission, 2013a).

## 2.6 Australian Road Rules Maintenance Group

In the past few years the NTC has undertaken work on the 9<sup>th</sup> and 10<sup>th</sup> Australian Road Rules Amendment packages.

Since the national implementation of the Rules, state and territory road agencies have highlighted some aspects of the Rules that require improvement or updating to take account of subsequent innovations in engineering or technology that impact on drivers. These amendment packages are developed by the NTC with the assistance of the ARRMG to help implement the necessary changes (National Transport Commission, 2011b).

The following summarises road rules affecting bicycle riding that have been discussed or are on the agenda of the ARRMG.

The main bicycle riding related change to the rules proposed by the 9th Package of Amendments (National Transport Commission, 2011b) is:

- Rule 262 – cyclists crossing the road at lights. A clarification was included allowing a bicycle rider to complete their crossing of a road (i.e. to the far side of the road as intended) if the lights change while they are crossing the road. Previously they would have been required to return to the nearest side of the road where they commenced their crossing.

The main bicycle riding related changes to the rules proposed by the 10th Package of Amendments (National Transport Commission, 2013b) are:

- Rule 153 (4) – bicycle lanes. To clarify that road markings, and not only signs, can be used to commence or end a bicycle lane (comprising a white painted bicycle symbol and the word “lane”, and including the word “end” as appropriate).
- Rule 197 – stopping on a path, dividing strip, nature strip, or painted island. To make it clear that drivers are prohibited from stopping (parking) on traffic islands (excluding bicycles).
- Rule 260 – stopping for a red bicycle crossing light. To clarify the operation of the bicycle crossing light rules and to ensure consistency throughout the Rules.
- Rule 261 – stopping for a yellow bicycle crossing light. To clarify the operation of the bicycle crossing light rules and to ensure consistency throughout the Rules.
- Dictionary: definition of bicycle. To amend the definition to include power-assisted pedal cycles as defined under the Motor Vehicle Standards Act 1989 (Cwlth.), pursuant to recent amendments that allow for vehicles referred to as pedalecs to be regarded as bicycles and not motor vehicles.

According to the ACT Government response to the Inquiry into Vulnerable Road Users (Justice and Community Services, 2014), a minimum passing distance rule was recently considered at the national level by ARRMG. However, it was considered that there was insufficient evidence to support the proposed rule and that the current trial in Queensland should be monitored first before further consideration is given to incorporating the rule into the Australian Road Rules.

When considering the cost benefits of recommending changes to road rules or legislation, it is also important to consider the process and framework under which those changes will have to take place.

For consistency across jurisdictions, it is ideal for changes to be nationally agreed and implemented. However, it is possible for jurisdictions to adopt and implement their own changes and variations to the rules. Some such changes are outlined in the following section.

## 2.7 Recent road rule changes

During the course of this review there have been several cycling related road rule changes in other Australian jurisdictions.

### 2.7.1 Riding on footpaths

On 6 September 2013, NSW introduced *Road Amendment (Riding on a Footpath) Rules 2013*, which amended the riding on a footpath or shared path rule (Rule 250) to allow riders carrying a child under 10 years as a passenger on the bicycle or being towed in a bicycle trailer to ride on a footpath. Previously they were not permitted to ride on the footpath (New South Wales Government, 2013).

On 22 January 2015, the South Australian Government announced it will develop laws to allow bicycle riders of all ages to ride on the footpath. It expects consultation for these changes to be completed by June 2015 (Government of South Australia, 2015).

### 2.7.2 Overtaking bicycle riders

On 7 April 2014, Queensland introduced new laws for motorists passing bicycle riders. This law is being trialled in Queensland for two years (Queensland Government, 2014).

Specifically the laws require motorists to stay wider of bicycle riders by giving a minimum of:

- 1 metre when passing a bicycle rider in a 60km/h or less speed zone; or
- 1.5 metre where the speed limit is over 60km/h.

Drivers will receive three demerit points and a \$341 fine if caught not giving the minimum distance when passing a bicycle rider. If the matter goes to court, a maximum fine of \$4,554 can apply.

The two-year trial of the legislation will be evaluated by CARRS-Q. In the meantime the program has attracted some criticism in the media (Ironsides, 2014). One of the criticisms was how the legislation could be practically enforced by Police (Saunders & Wuth, 2014). It was reported by Ironsides (2014) that from commencement in April 2014 up until July 2014, four motorists were fined for breaching these rules.

Feedback reported in the ACT Government response to the Inquiry into Vulnerable Road Users (Justice and Community Services, 2014), suggested that the trial is operating acceptably so far and that there has been a noticeable positive change in behaviour and attitude from motorists towards bicycle riders.

Furthermore, according to a November 2014 press release on its website, the AGF gave the top line findings from market research it commissioned to look at road users' reactions to and acceptance of Queensland's minimum overtaking distance laws. The AGF concluded that the results showed "an extremely positive shift in driver behaviour and attitudes towards bicycle riders after just six months of the Queensland Government's two-year minimum overtaking distance legislative trial" (Amy Gillett Foundation, 2014b). As previously discussed, the ACT has also agreed to trial a minimum passing distance (Justice and Community Services, 2014) and on 22 January 2015, the South Australian Government indicated that it has plans to develop laws to ensure motorists leave a gap of at least one metre when they overtake a bicycle rider (Government of South Australia, 2015).

Even more recently, the Tasmanian Government confirmed that on 25 February 2015 it will introduce new road rules allowing motorists to straddle or cross single or double continuous centre lines, when safe to do so, to leave a safe space when passing or overtaking a bicycle rider. Although not mandated, it is advised that a 'safe distance' is one metre at speeds of up to 60 km/h and 1.5 metres at speeds above 60 km/h (Tasmanian Government, 2015).

## 2.8 Assessing road rules for change

In assessing the rules for change, in the first instance, it is important to determine if a particular rule is associated with increased trauma or whether it limits bicycle riding. If it does, then it is important to identify why. There can be several reasons including:

- ignorance of the road rule
- deliberately disobeying the road rule
- road users think they have a low risk of getting caught if they break the rule
- penalty for disobeying the road rule is too low.

For example, regarding ignorance of the road rules, a study by Johnson and Le (2012) showed that knowledge of bicycle riding-related guidelines and road rules was closely correlated with the bicycle riders' own bicycle riding status, that is the bicycle riders were more aware of the guidelines and rules than the drivers. Johnson and Le (2012) also reported on numerous studies conducted on bicycle rider behaviour and the attitudes and perceptions of bicycle riders and drivers. They showed that driver attitudes have been reported to affect driver behaviour towards bicycle riders, and bicycle rider safety. Positive attitudes towards bicycle riders are most frequently associated with drivers who also ride bicycles. In Australia, negative driver attitudes towards bicycle riders have been associated with poorer knowledge of road rules and lower tolerance of bicycle riders on the roads.

Even though many of the bicycle riding issues discussed in this literature review relate to road rules, the solution may not always be changing the legislation. In some cases better education or reinforcement of the laws might be most effective in having the desired outcome of enhanced safety.

## SECTION 3: CRASH ANALYSIS

### 3.1 Introduction

Examining the data for crashes involving bicycle riders may be useful in identifying whether failure to understand or obey particular road rules by bicycle riders or other road users seem to contribute to particular types of crashes.

This report summarises some of the data analysis carried out for this task.

### 3.2 Data analysis

In 2013, there were six bicycle rider deaths in Victoria, 460 serious injuries and 1,072 other injuries.

Data from crashes involving bicycle riders over the 10 year period from 2004 to 2013, was also extracted for this analysis. The data from 29,181 people were included in this dataset. Of the 29,181 people, 13,983 (47.9%) were bicycle riders and the rest other road users.

The following sub-sections report on some of the analyses undertaken.

#### 3.2.1 Casualty crashes

Of the 29,181 cases from the dataset, 84 people were killed, 4,447 seriously injured, 9,889 sustained other injuries and 14,761 were involved in the crash but were not injured. Table 2 shows a summary of the injury data for bicycle riders and other road users in crashes involving a bicycle rider.

Looking at the bicycle rider casualties only, 80 were killed, 4,302 were seriously injured, 9,328 had other injuries and 273 were involved without any injuries.

Of the other road user casualties, four were killed, 145 were seriously injured, 561 other injuries and 14,488 were just involved.

This crash data illustrates that when considering crashes involving bicycle riders, only a small proportion of other road users are injured (4.7%), while the vast majority of bicycle riders sustained an injury when involved in a crash (98.0%). The data reflects the vulnerability of bicycle riders to injury when involved in a crash.

**TABLE 2. INJURY DATA FOR BICYCLE RIDERS AND OTHER ROAD USERS IN CRASHES INVOLVING A BICYCLE RIDER**

	Killed	Serious injury	Other injury	Non injury	Total
Bicycle riders	80	4,302	9,328	273	13,983
Other road users	4	145	561	14,488	15,198
Total	84	4,447	9,889	14,761	29,181

#### 3.2.2 Demographics



Males make up 76.6 per cent of the bicycle riders involved in crashes and 59.6 per cent of the other road users involved in bicycle related crashes.

Table 3 summarises the involvement of bicycle riders and other road users in bicycle related crashes by age group. The table shows that of bicycle riders involved in crashes, the 26-35 year old bicycle riders have the greatest involvement with 26.9 per cent. The 36-45 year old age group is next with 19.7 per cent and 16-25 year olds are third with 17.8 per cent. Children and young people aged up to 15 years made up nearly 10 per cent of those riders involved in crashes (9.8%). For other road users involved in bicycle crashes, across the age groups from 16 to 55 years, the level of involvement did not vary greatly ranging from 14.5 per cent for 46-55 year olds to 17.0 per cent for 26-35 year olds. Nothing unexpected stands out from these age based results. However, using bicycle riding exposure data to compare across age groups would be informative.

**TABLE 3. PERCENTAGE OF BICYCLE RIDERS AND OTHER ROAD USERS INVOLVED IN BICYCLE CRASHES BY AGE GROUP**

Age range	Other road users	Bicycle riders
0-15	4.2%	9.8%
16-25	15.7%	17.8%
26-35	17.0%	26.9%
36-45	16.3%	19.7%
46-55	14.5%	13.7%
56-65	10.0%	6.6%
66 or older	7.4%	3.2%
Unknown	15.0%	2.4%

The most recent age related statistics produced by VicRoads (2015) showed that 10 bicycle riders were killed in 2014. Of those:

- all were aged 47 years or older
- 80 per cent were aged 50 years or older
- 60 per cent were aged 65 years or older
- 60 per cent occurred on 100 km/h roads in regional Victoria.

### 3.2.3 When and where?

The majority of crashes involving bicycle riders occur on a Tuesday (17.3%) and week days generally see relatively more bicycle riding crashes than on weekends. Table 4 shows the number and percentage of bicycle riding crashes that have occurred on each of the days of the week. Note that this table summarises only bicycle rider data so as to avoid ‘double counting’ that would occur if all road users were considered (the data would be weighted to vehicles with more passengers if all road users were counted). This applies for the subsequent analyses presented in this section.

Most bicycle crashes generally occur during day time hours; 81.5 per cent were between 6am and 6pm. When considering peak commuting times the majority of crashes occur between 6am and 10am (32.8%) and 2pm and 6pm (31.0%).



Bicycle crashes are common at intersections (60.1%). Of these intersection crashes, 48.8 per cent of crashes occur at T-intersections, and 47.0 per cent at cross intersections.

**TABLE 4. DAY OF THE WEEK IN WHICH BICYCLE RIDERS WERE INVOLVED IN A CRASH.**

Day of week	Frequency	%
Sunday	1268	9.1
Monday	1922	13.7
Tuesday	2433	17.4
Wednesday	2259	16.2
Thursday	2374	17.0
Friday	2101	15.0
Saturday	1626	11.6
Total	13983	100.0

### 3.2.4 Crash types

Definitions for Classifying Accidents, or DCAs, are a set of codes used to identify the type of crash that occurred and the movement of the vehicles involved in a particular crash. It provides a standard for comparing crashes based on the characteristics of those crashes. Each crash is allocated a DCA.

Table 5 shows the most common bicycle riding crash types as identified through DCA codes (see Appendix A for diagrams showing the vehicle movements for each DCA). The 11 DCAs shown account for 77.8 per cent of the crashes. Note that this table summarises only bicycle rider data so as to avoid 'double counting' that would occur if all road users were considered.

The most common crash type shown in Table 5 is DCA 121 which is failure of a right turning vehicle to give way to an oncoming vehicle travelling straight through an intersection. The second most common DCA is 110, which is a failure of a vehicle to give way at a cross intersection, and the third is DCA 163 which is caused when a motorist opens their door into the path of a passing vehicle, a practice more commonly known in bicycle riding circles as 'car dooring'.

Each of these DCAs highlights a failure on the part of one of the parties to obey a road rule. The road rules associated with the DCAs listed in Table 5 will be examined more closely in a subsequent stage of this project when the road rules are reviewed in more depth.

When examining DCA 121, VicRoads data for the 2014 calendar year shows that there were 217 casualties involving a bicycle rider and a motor vehicle. Of these, 90.3 per cent involved the motor vehicle making a right hand turn and the bicycle travelling straight through (VicRoads, 2015).

**TABLE 5. MOST COMMON TYPES OF CRASHES IN WHICH BICYCLE RIDERS WERE INVOLVED.**

DCA <sup>9</sup>	Description	Cases	%
121	Right through	1614	11.5
110	Cross traffic	1368	9.8
163	Vehicle door	1294	9.3
148	From footway	1036	7.4
147	Emerging from driveway - lane	1012	7.2
174	Out of control on carriageway	874	6.3
137	Left turn side swipe	839	6.0
133	Lane side swipe	795	5.7
130	Rear end	721	5.2
116	Left near	664	4.7
113	Right near	642	4.6
		<b>Total</b>	<b>77.8</b>

### 3.2.5 Infringements

Table 6 shows the five most common infringements issued to bicycle riders for cycling related offences for the 2009-10 to 2013-14 financial years (inclusive). Collectively the infringements shown make up 95.2 per cent of the total infringements issued to bicycle riders.

**TABLE 6. INFRINGEMENTS ISSUED TO BICYCLE RIDERS FROM 2009-10 TO 2013-14.**

Offence	2009-10	2010-11	2011-12	2012-13	2013-14	Total	%
Fail to wear approved bicycle helmet	6,589	5,095	5,093	5,946	5,452	68,175	71.2
Fail to obey traffic lights	845	554	646	676	900	3,621	9.1
Fail to have lamps and equipment	631	521	381	630	745	2,908	7.3
Misuse bicycle path	271	370	302	425	458	1,826	4.6
Fail to obey a traffic sign	118	120	452	152	286	1,128	2.9

The overwhelming majority of infringements issued are for failing to wear an approved helmet (71.2%). Failing to wear a helmet is a relatively easy offence to detect and enforce and it is an important safety issue considering that 21.3 per cent of riders killed and 11.5 per cent of those seriously injured were not wearing a helmet<sup>10</sup>.

<sup>9</sup> Diagrams illustrating the vehicle movements in each of these DCAs is provided in Appendix A.

<sup>10</sup> Cases where it was unknown whether the rider was wearing a helmet were excluded from this analysis and the type of injury was not taken into account, e.g. it is unknown whether these riders sustained head injuries in the crash.

## SECTION 4: STAKEHOLDER CONSULTATION

### 4.1 Introduction

Stakeholder consultation formed an important part of this review.

Bicycle riding stakeholder organisations have valuable insights into the road safety benefits of Victoria's cycling related road rules and how bicycle riders are affected by legislation, education and compliance.

In addition, Municipal Councils are a significant stakeholder when it comes to bicycle riding matters. Councils are often responsible for bicycle riding infrastructure and facilities and therefore are well placed to offer insights into bicycle riding matters and road rules and legislation involving bicycle riding.

One of the aims of the review was to get an understanding of the views of stakeholders, including councils.

### 4.2 Methodology

VicRoads identified the following list of stakeholders to be consulted as part of this review (in alphabetical order):

- Amy Gillett Foundation
- Bicycle Network
- Blind Citizens Australia
- Council on the Aging (COTA) Victoria
- Cycling Victoria
- Department of Justice
- Department of Transport, Planning and Local Infrastructure
- Municipal Association of Victoria (MAV)
- RACV
- TAC
- VicRoads
- Victoria Police
- Victoria Walks
- Vision Australia

Each of these organisations was approached and invited to engage in a discussion regarding cycling related road rules and legislation. All organisations accepted the invitation. The majority of discussions were conducted face-to-face, and a small number via telephone.

The interviews lasted up to one-hour.

**Error! Reference source not found.** was prepared for the interviews. The guide contained information about the project and general questions which the interviewer could draw from to help guide discussions. The interviewer took notes during the interview.

In order to get the widest possible range of views from municipal councils, an online survey was developed using the online survey tool - *Survey Gizmo*. The survey consisted of a mixture of forced choice, prompted and open ended questions.

The survey explored:

- Where councils get their information about road rules, and where they send others to get that information.
- Respondents' views about the relative safety of bicycle riding in Victoria and if and how road rules and legislation affect the safety of bicycle riders in Victoria or their participation in bicycle riding.
- Whether respondents felt that any cycling related road rules needed to be changed, removed, or whether any new rules were required, and why.
- Whether there are any rules or by-laws regarding bicycle riding that are unique to an individual council.

The MAV kindly agreed to distribute the link to the survey to councils through its various distribution channels, giving all councils the opportunity to provide a response to the survey.

### 4.3 Results from stakeholder interviews

In discussions with the stakeholders, a variety of issues worthy of consideration were highlighted for this review.

These issues were sorted into the following categories:

- Riding equipment
- Riding on footpaths, shared paths, bicycle paths
- Allocating space on road for bicycles
- Intersections, traffic signals and signs
- Overtaking and turning
- Sharing the road
- Liability and fault
- Licensing and registration
- Signage and infrastructure
- Other matters

The issues raised will be discussed under each of these headings.

#### 4.3.1 Riding equipment

Here riding equipment generally refers to items additional to the bicycle that a rider could or should use while riding.

##### 4.3.1.1 HELMETS

The compulsory wearing of helmets was discussed with most interviewees. Very few suggested that the need to wear a helmet limited participation in bicycle riding or reduced the spontaneity of riding. All interviewees unanimously agreed that the mandatory wearing of helmets rule should be retained, citing the strong body of evidence that demonstrates the safety benefits of helmet wearing.

##### 4.3.1.2 WARNING DEVICES

Better education about the use of warning devices by bicycle riders, e.g. bells, when sharing space with pedestrians was raised. Some stakeholders said that their members report that when bicycle

riders ring their bells at them, they feel it is a form of harassment. However, riders are often doing this to make pedestrians aware of their presence for the safety of all parties.

Better education was recommended for:

- bicycle riders about when they should use their bells, and
- other road users such as pedestrians about what it means when a bicycle rider rings a bell.

#### 4.3.1.3 MOBILE PHONES

As for motorists, it is illegal for bicycle riders to use a hand held mobile phone while riding. However, practically it is difficult for Police to enforce, because usually it can only be dealt with by going to court.

It was recommended through discussions that a separate infringement, which doesn't incur demerit points, be developed for bicycle riders.

#### 4.3.1.4 CLOTHING

There were differing views among the stakeholders about whether wearing bright coloured clothing would make it easier for other road users to see bicycle riders. Most suggested that it probably would, but no one agreed with mandating the colour or type of clothing bicycle riders should wear. Primarily, this would serve as a barrier to bicycle riding. Most had no objections that the wearing of bright coloured clothing could be encouraged and promoted through education and communications programs.

One of the reasons put forward as to why bright coloured clothing should not be mandated was that at night, in darkness, brighter clothing will have little effect. Instead in this environment, reflective safety gear, as opposed to bright gear, would be the only type of clothing that could provide some benefit to the rider. Even though mandating clothing found little support amongst the stakeholders it was suggested that if any clothing were to be mandated, wearing a reflective vest, strip or tape when riding at night, would have the most merit and could be investigated to determine whether this would reduce trauma.

It should be noted that 18.5 per cent of bicycle riding crashes occur between 6pm and 6am (see Section 3.2.3).

Another suggested approach was to engage and work with manufacturers to get them to design reflective properties into garments used by bicycle riders.

#### 4.3.1.5 LIGHTING

Lighting was discussed with many of the stakeholders. There was agreement that the current rules requiring lighting at night time should remain.

Given the evidence shows that daytime running lights have safety benefits for other vehicles, the merit of lights on for bicycles during the day was discussed. The general view was that this should not be mandated. It was seen as a potential barrier, and discriminatory as it is not mandated for any other vehicle types.

The issue that lighting has now become better and brighter was raised. Anecdotally there are more complaints by other road users (particularly pedestrians) that they are being dazzled by the lights of bicycle riders. There are no guidelines or rules about how lights should be mounted on a bicycle to

ensure they can be seen at 200 metres and do not dazzle other road users. Currently there is a rule (RR 219) that applies to other vehicles making it an offence to dazzle other road users with lights fitted to the vehicle. This rule does not apply to bicycle riders.

To address this, the question was raised of whether regulations governing the power output of lights for bicycles and the angle they are mounted, should be explored.

While failure to have lights and equipment on the bicycle is the third most common infringement issued to bicycle riders (see Section 3.2.5), some stakeholders suggested that enforcement of lighting requirements should be increased.

Note: Recommendation 28 of the recent Queensland parliamentary inquiry (Transport, Housing and Local Government Committee, 2013) was to make it compulsory for riders to have a light on the front and rear of the bicycle at all times. This recommendation was not supported by the Queensland Government, citing conflicting research, the cost to bicycle riders to purchase suitable lighting, and the need to constantly recharge those lights.

### **4.3.2 Footpaths, shared paths, bicycle paths**

#### **4.3.2.1 RIDING ON FOOTPATHS**

The current rule regarding riding on a footpath (RR 250) was discussed with most of the stakeholders. Currently, those under 12 years (and adults accompanying them) are allowed to ride on footpaths. There was strong support among the bicycle riding advocacy groups for raising this age limit, at least to 16 years.

The rationale for 16 years is that this is the age when people can first apply for a learner permit in Victoria. So, it is not until the age of 16 that individuals will start to get a comprehensive knowledge of the road rules. The question raised was ‘why force a 12 year old out onto the dangerous road environment before they have learned the necessary rules that will help them interact safely with other road users?’.

It was also recommended that older or elderly bicycle riders be allowed to ride on the footpath, given their increased frailty and potentially diminishing perception and control skills.

Also raised as an issue was that people aged 18 years and older can currently ride on a footpath if they are accompanying a rider under 12 years, but those aged 12-17 years cannot. It was proposed that it is not uncommon for siblings to ride together and depending on their ages, they would have to ride separately – one on the road and one on the footpath. A change in rule to allow 12-17 year olds to accompany children under 12 was suggested.

One stakeholder recommended that at some high risk locations for bicycle riders, the footpath down one side of the street could be declared a shared use footpath by the local council, enabling riders to ride off road. As the shared zone would only apply down one side of the street, it leaves the other side free for pedestrians who do not feel confident mixing with bicycles.

One further aspect of footpath riding raised during consultation was that riders towing a child under the age of 10 in a bicycle trailer were not permitted to ride on the footpath. It was thought this must be an unintended consequence of the current rules and that riding with children in a bicycle trailer should be allowed on footpaths.

Given that walking or the use of the footpath is the primary mode of transport for many sections of the community (e.g. the elderly; those with a disability), stakeholders representing elderly citizens, visually impaired people, and walking advocacy groups were also interviewed as part of this review. While these groups were welcome to comment more broadly on bicycle riding issues, they were specifically asked to provide their views on the suggestions of others to the rules to allow more people to ride on the footpath.

On behalf of the people they represent, these groups were strongly opposed to any measures that would increase the number of bicycle riders on footpaths, and do not support any rule changes that would increase the number of people who can ride on a footpath.

There were a number of reasons for this including:

- Walking is the primary mode of transport for everyone, especially those without access to driving.
- Seniors, people with disabilities and children are dependent on walking for transport.
- Seniors rely on walking to access their community for physical and mental health.
- Slips, trips and falls are a significant problem for older people and they are fearful of falling. What might be considered a slight injury, for this demographic, means a long recovery.
- Bicycle riding creates a barrier to walking in places where bicycle riding is permitted in shared spaces.
- The unpredictable nature of bicycle riders is cited as a reason why the elderly will avoid shared spaces.
- If footpath riding is increased, older people will have fewer options for when they can access their community, as they will only pick those times when the volume of bicycle riders is low.
- Extra hazards on footpaths would discourage vision impaired people from walking.
- Footpaths are for pedestrians. Other areas are for other modes of transport. Where this is not possible, paths should be made wider to accommodate both modes.
- Vision impaired people rely on audible signals for cues. Bicycle riders do not necessarily make much noise, so they can startle and confuse vision impaired pedestrians.
- Bicycle riders have other options for travel, many pedestrians do not.
- Footpath bicycle riding meets the needs of a minority

#### 4.3.2.2 BICYCLE LANES

It is believed that many riders don't understand that they must ride in a bicycle lane if one is available (unless it is impracticable – RR 247). When bicycle riders don't ride in a bicycle lane this leads to abuse by drivers.

It is also considered unclear what 'impracticable' is or extends to. If riding in the lane is impracticable, riders are allowed to ride outside of a bicycle lane. There was a suggestion that examples be included in the road rules.

In addition there seems to be some confusion about what is legal regarding riding two abreast in a bicycle lane. If the second rider is outside the lane, are they legal or not? Does the first rider in the bicycle lane make it 'impracticable' for the other rider to ride in the lane?

Some motorcycle advocates have suggested that motorcycles should be allowed to ride in bicycle lanes to filter through traffic. There was no support from bicycle riding stakeholders for this notion,



citing safety concerns for bicycle riders given the differentials in speed and potential conflicts between bicycle riders and motorcyclists.

Better education to both bicycle riders and motorists about the use of bicycle lanes was recommended.

#### 4.3.2.3 BICYCLE PATHS

One stakeholder raised that off road riding on paths needs to be considered in this review.

Off road bicycle paths or lanes which run parallel to the road are not always suitable for use by the rider. It was suggested that motorists currently don't understand that it is not a requirement for riders to use these. This misunderstanding can lead to heightened tension.

#### 4.3.2.4 BUS LANES

It is understood that bicycle riders are allowed to ride in some bus lanes, but there was support from several stakeholders that bicycles should, by default, be able to ride in all bus lanes. Bicycles could then be excluded from particular bus lanes by exception (presumably through a sign) if required.

Questions often asked when this idea is raised is that because of the speed differentials how do buses and riders practically share the space? The answer proposed by stakeholders was that riders can use the lanes but they must stop (and not overtake) at the rear of a stopped bus, in a similar fashion as the tram rules. This way the bus and bicycles will not have to continually overtake one another due to the bus regularly stopping.

### 4.3.3 Allocating space on road for bicycles

#### 4.3.3.1 MINIMUM PASSING DISTANCE

The potential introduction of a minimum passing distance rule was discussed with most of the interviewees. There was mixed support for such a rule.

Of interest, not all bicycle riding advocate groups agreed to introducing this rule. All agreed that if it was introduced, it would need to be supported by extensive education and communications to ensure the intended safety benefits were realised.

Some of the barriers to introducing the rule were:

- difficulties in enforcement , due to difficulties in determining a breach in the rule.
- on particular types of roads, in order to pass bicycle riders, drivers will be faced with either breaking the passing distance rule or the rule concerning crossing over a single or double-white line
- what if the driver is leaving the required space and the bicycle rider closes the gap? Is the driver still breaking the law.

There was a feeling by some that if Victoria was to ultimately introduce this rule, it should not do so independently of the other jurisdictions, but instead should do so if the rule is agreed to at the national level and made part of the model rules.

#### 4.3.3.2 ROUNDABOUTS

Stakeholders suggested there was confusion due to lack of knowledge about bicycle rider requirements when riding through roundabouts, in particular multi-lane roundabouts.



The confusion comes because riders can be in the left hand lane of the roundabout in order to turn right. In doing so, they must give way to any other vehicle exiting the roundabout and any exits they need to cross when making that turn.

Stakeholders are of the impression that this is a commonly misunderstood or unknown rule by both riders and drivers. This misunderstanding creates a crash risk.

#### **4.3.4 Intersections, traffic signals and signs**

##### **4.3.4.1 RIDING ACROSS PEDESTRIAN CROSSINGS**

Currently it is a requirement that bicycle riders dismount and walk across pedestrian crossings. It was raised by some stakeholders that bicycle riders should be allowed to ride across crossings. This was particularly raised in the context that when some shared paths cross a road, there are often signalised pedestrian crossings to assist those using the path to cross. Unless the crossing has bicycle crossing lights then riders are required to dismount in order to cross the crossing despite it being connected to a shared path.

##### **4.3.4.2 LEFT TURN ON RED SIGNAL**

Although regularly raised in discussions about bicycle riding, only two stakeholders raised the issue of allowing bicycles to turn left on a red signal at intersections. One was proposing it should be investigated as an option and the second highlighted the safety issues against allowing this, particularly for pedestrians crossing the road which the bicycle rider is turning into.

It was also pointed out generally, when discussing this point, that road users are often complaining and lobbying for the same rights as other road user groups. Introducing such laws for the unknown benefit of one road user group, could only serve to create additional tension and polarisation.

#### **4.3.5 Overtaking and turning**

##### **4.3.5.1 DRIVERS TURNING LEFT**

There was some discussion about RR 141(2) regarding not overtaking a vehicle turning left.

There was no mention by the stakeholders to change this rule in terms of who needs to give way, but instead the discussion relating to this rule was around better education of it. Firstly, there needed to be better understanding of the rule by both riders and drivers. Secondly, there was the view that drivers could be given more guidance about what they can do to help make these situations safer, such as:

- specifying how far in front of a rider a driver must be before starting to merge across to make a turn
- giving sufficient warning when turning left, by indicating early. It was suggested that drivers be encouraged to indicate for minimum number of seconds before merging or commencing a turn. This would give any bicycle riders who are unseen by the motorists a chance to react and give way according to the rule.

Another perspective given with this rule is that drivers and bicycle riders are meant to be treated as equals, yet this law is an example of where this is not the case.

Another issue raised was about the requirement to make a left turn from the left most lane of a road. There seems to be a lack of clarity regarding roads with a bicycle lane, and whether the bicycle lane is considered the left most lane. The question was raised as to whether drivers are required to

turn from within the bicycle lane or the left most driving lane? Clarification needs to be sought regarding this issue.

See Section 6.2.2 for a more detailed discussion about this rule and how it interacts with other road rules.

### **4.3.6 Sharing the road**

#### **4.3.6.1 RIDING WITH OTHER BICYCLE RIDERS**

Rules about riding two-abreast were discussed by many of the interviewees. It was a common perception that tension exists between bicycle riders and motorists regarding this rule. Bicycle riders are permitted to ride two-abreast under certain conditions, but it is believed that motorists either do not understand that this is the rule or are not accepting of it. Almost all of the interviewees who discussed this rule believed better education of this rule to road users was required.

In terms, of how this rule might be improved or changed, some believed that perhaps it may be safer and potentially cause less tension between road users if riding two-abreast wasn't permitted on certain types of roads or in certain conditions, e.g. on two-way single lane roads divided by a single continuous line or a double white line. There could be blanket rules on certain types of roads, such as the example used, or signs could be developed and placed on roads where it is not permitted because these roads have been identified as being potentially problematic.

#### **4.3.6.2 LIABILITY AND FAULT**

Several stakeholders suggested there should be a hierarchy on the roads based on vulnerability, i.e. bicycle riders are responsible for ensuring pedestrians are safe, and motorists are responsible for ensuring bicycle riders and pedestrians are safe. Therefore, in a crash involving a bicycle and pedestrian, the bicycle rider would automatically be considered at fault, in a crash involving a car and bicycle, the driver would automatically be considered at fault.

This reflects 'strict liability' laws that operate elsewhere. Under these laws, motorists are assumed liable for collisions involving vulnerable road users (and bicycle riders if a rider collides with a pedestrian) until proven otherwise. They have been introduced in many European countries (e.g. the Netherlands) and similar laws are in place in parts of North America.

There are no published evaluations of the effects of these laws on bicycle riding safety.

Under the current system it is up to the individuals to try and get a court to determine fault or liability. In order to do this, a police report is required. Through stakeholder consultation it was raised that a common complaint amongst bicycle riders is a difficulty in obtaining the necessary police report and resultant follow up by police. Consequently, many bicycle riders don't pursue claims against other road users when they otherwise would. Through the Victorian road safety partnership, VicRoads may wish to obtain more information and data regarding this from Victoria Police.

In a related issue, one stakeholder raised whether the Road Safety Act is the right place to address bicycle riding related issues and whether there should be separate vulnerable road user legislation.

#### **4.3.6.3 LICENSING AND REGISTRATION**

The issue of licensing riders and registering bicycles was discussed with several of the interviewees. Consistent with findings from other jurisdictions from around the world, and as recently concluded in

the Queensland Parliamentary inquiry (Transport, Housing and Local Government Committee, 2013) it was considered not to be practical, economical, nor beneficial. Furthermore it will only serve to create a barrier for current riders to continue riding and others to take it up.

There was no support for registering bicycles or licensing bicycle riders.

However, regarding licensing there was support among bicycle riding advocacy groups that learner drivers be required to learn the cycling related road rules and that some questions about these rules be incorporated in the learner driver test.

#### **4.3.7 Signage and infrastructure**

This section lists some of the issues raised in discussions with stakeholders regarding road signage and other infrastructure issues. These do not necessarily relate to specific rules, but have been included in this report to VicRoads, so that it is aware these issues are being discussed in the community and can consider them through parts of the organisation if required. It is recommended that for the following issues in this section, consultation take place with traffic engineers and others to help identify possible initiatives.

##### **4.3.7.1 TRAINING AND COMMUTER ROUTES**

It is common place that riding and riding training takes place on defined routes. It was suggested by some that these ‘training’ routes or venues be signed to alert and remind motorists that they are more likely to encounter bicycle riders on these roads and that they should be cautious.

It was raised by several stakeholders that while separation between riders and motorists on individual roads should be the ultimate aim for the safety of riders, it was acknowledged that this is not always possible. Therefore, it is suggested that reducing speeds on known training routes or popular commuting routes, would bring about safety benefits. It was even suggested that variable speed zones may be beneficial at some sites. These could show reduced limits during peak commuter times, or at times when training is in progress.

##### **4.3.7.2 SHARED PATH SIGNS**

It was pointed out by one stakeholder that there is no height restriction for mounting shared path signs. Anecdotally, they were aware of examples where the signs were mounted on existing posts, which were too high for most of the pedestrians and bicycle riders to see.

##### **4.3.7.3 SIGNALS AND SIGNAL TIMES**

There was criticism that when signal times are set at intersections, they do not account for the movement of bicycles and assume that bicycles have the same operating speeds as cars. Therefore bicycles often have difficulty making it through a set of lights and completing their crossing of the intersection, before vehicles from the adjacent directions are permitted to proceed.

##### **4.3.7.4 TRAFFIC LIGHT LOOPS**

It was raised that traffic light loops at signalised intersections are not activated by bicycles. What this means is if there are no other vehicles at the intersection that can trigger the lights to change, bicycle riders either resort to running the red light, or have to leave the road to push the pedestrian crossing button.

It was suggested that this issue be addressed so that riders do not resort to putting themselves in dangerous positions by breaking the rules and going through red lights.

#### 4.3.7.5 TRAFFIC MANAGEMENT PLANS

There was criticism that when road works are conducted, that there are no set guidelines for managing the movements of bicycles through the road works, or what does exist is vague. Anecdotally, there are occasions when roadwork signs are placed in bicycle lanes which creates an obstruction and hazard for riders.

The extent to which riders are considered in traffic management plans will be examined as part of the council survey (see Section 4.4.2).

#### 4.3.7.6 NEW AND ADDITIONAL SIGNS

There was a suggestion to investigate the use of advisory signs at intersections reminding bicycle riders and motorists about looking out for one another when a motorist is turning left.

Also flashing signs activated by the movements of bicycle riders could be used on high volume routes to warn drivers when there are bicycles present. This might be particularly useful in right-turn against crashes when a turning vehicle may not see an oncoming bicycle rider, or the rider is obscured by traffic travelling in the opposite direction.

It was also suggested that more signs be placed on bicycle paths and shared paths, telling bicycle riders to give way to pedestrians.

### 4.3.8 Other matters

#### 4.3.8.1 EDUCATION, COMMUNICATION AND ENFORCEMENT

Some stakeholders were of the opinion that VicRoads was not doing enough generally to educate road users about road rules and their obligations as road users. Regardless, most stakeholders raised the need for cycling related road rules to be better communicated to both riders and drivers.

More specifically, in addition to what has already been mentioned in this section, stakeholders wanted to see:

- Better education of drivers about the legitimacy of bicycle riding
- A campaign about how car registration does not contribute to infrastructure and therefore this is not a justification to register bicycles
- Guidance for drivers about when it is OK to overtake and turn left in front of a bicycle rider.
- VicRoads add more bicycle riding information to driver handbooks.
- VicRoads add cycling related road rules questions in the learner permit test.
- Both riders and drivers reminded that they have the same rights and responsibilities and therefore need to share the road.
- Riders need to be patient with pedestrians and slow down around them. It may not be obvious, but some pedestrians could be visually impaired or have other disabilities.

In road safety, it has been long established that enforcement supported by effective communications brings about the greatest effect on behaviour change than either one on its own. During the stakeholder consultation, it was raised that more enforcement of the cycling related road rules is required, because without enforcement merely having the rules is ineffective.

#### 4.3.8.2 PUBLIC TRANSPORT

An issue raised as a barrier to riding a bicycle was the limited ability to take a bicycle on public transport. While they can be taken on metropolitan trains, there are difficulties on V/Line trains.

Although bicycles can be carried free on V/Line trains, their carriage depends on the space available. V/Line conductors determine whether there is sufficient room for bicycles to be taken on V/Line trains. The problem raised is that this decision is made close to the time of departure, which may mean the rider will have to leave their bicycle behind.

It was recommended that a system be implemented where riders can pre-book space, so they can have some assurance that they will be able to take their bicycle with them. This service may be helpful in promoting the tourism aspects of bicycle riding.

#### 4.3.8.3 UNDER-REPORTING OF BICYCLE CRASHES

It was raised by several stakeholders that bicycle crashes are under reported in crash and trauma statistics. Unless there is a police report or property damage, the crash is unlikely to be recorded in the statistics.

There is a concern that without a true reflection of the number of crashes and amount of trauma, bicycle riding may not get its true, relative share of funding and initiatives to improve safety and improve riding facilities and infrastructure.

#### 4.3.8.4 PERMITS FOR EVENTS

Section 99A of the Road Safety Act 1986 relates to obtaining permits for arranging and participating in on-road events, e.g. charitable rides etc. It was raised that the application process was overly onerous in some instances and didn't match the size and location of the event, because the same procedures apply regardless of where the event is being held.

It was proposed that the process be examined, to see if the application process could be simplified, which would encourage more participation in the events and potentially improve the safety of the events too.

#### 4.3.8.5 CARRIAGE OF IDENTIFICATION

The fact that riders do not have to carry identification with them when riding was raised as an issue. It was proposed that this makes it harder for police to enforce and impose infringements and penalties.

#### 4.3.8.6 VEHICLE TECHNOLOGY

With various blind spot warning devices and other crash avoidance technology becoming available in cars, it was proposed to approach vehicle and components manufacturers to see if a technology is available or could be developed to detect when a bicycle was approaching a parked car to pass it. Once the bicycle rider is detected, the driver will be warned or prevented from opening their door until the bicycle has passed. Jaguar Land Rover has already commenced development of this type of technology (Jaguar Land Rover, 2015).

#### 4.3.8.7 COUNCIL BYLAWS

It was raised by one stakeholder that councils may have their own bylaws that could affect bicycle riding.

This will be investigated as part of this review in the council survey (see Section 4.4.2).

### 4.3.9 Summary of main findings from stakeholder consultation

The following provides a high level summary of the findings from the interviews with stakeholders:

- **Cycling of footpaths:** When discussing cycling related road rules to be highlighted or considered for change as part of this review, the most frequently discussed rule was extending the maximum age that bicycle riders are allowed to ride on the footpath. While many stakeholders were in favour of this change, there were many who were strongly opposed to it.  
The main reasons for extending it was to allow riders to better develop their cognitive skills and to gain more knowledge of the road rules before sharing the road with other vehicles. The main reason against this was that extra riders on footpaths could create a danger for pedestrians, especially those who walk as a primary means of transport, e.g. the elderly, people with a disability.
- **Minimum passing distance:** Another rule frequently discussed, again with polarised opinions, was the introduction of a minimum passing distance.
- **Compulsory helmet wearing laws** are often mentioned when discussing cycling related rules. This was also the case during stakeholder consultation. Worthy of note is that the stakeholders unanimously agreed that the laws should not be repealed.
- Other rules or categories discussed were:
  - Use of warning devices, e.g. bells
  - Mobile phone use while riding
  - Improved conspicuity through lighting and clothing
  - Use of bicycle lanes and paths
  - Bicycle use of bus lanes
  - Uncertainty of rules at roundabouts
  - Riders being allowed to ride across pedestrian crossings
  - Riders being allowed to complete a left turn on red signal
  - Riders giving way to drivers turning left
  - Ability to ride two abreast
  - Establishing liability and fault
  - Introducing licensing and registration for bicycles
  - Bicycle signage and infrastructure

A common theme for discussion with the stakeholders was the lack of knowledge and understanding of the cycling related road rules by both drivers and riders. Therefore, the desire for better education, communication and enforcement of the rules was frequently expressed. Given that lack of knowledge of the rules was so frequently raised, it was decided to explore this in more detail as part of the public consultation process (see Section 5).

## 4.4 Results from council survey

Dr Allison McIntyre, an experienced and respected road safety and research consultant, was engaged to manage the data collected from the survey and carry out the necessary analysis.

### 4.4.1 Participants

A total of 51 participants<sup>11</sup> completed the survey. This consisted of 30 males and 21 females. Eighty-four per cent reported that they rode a bicycle. Almost a third ride several times a week and 14 per cent daily. A similar number of people reported riding their bicycles weekly and daily in the municipality where they worked.

There are 79 local councils in Victoria. Representatives from all councils were given the opportunity to respond to the survey. In the survey, participants were not required to disclose which council they were representing. Of the 51 participants, the council they represented was known in 42 cases and unknown in nine. There were some councils that were represented by more than one person. A total of 19 known councils were represented in the survey (14 metropolitan councils; 5 regional councils).

A large number of participants (15) were from the Bass Coast local government area (LGA). Four were from Port Phillip, three from Wyndham, and two from each of Boroondara, Yarra, Whitehorse and Shepparton. The remaining municipalities had only one participant (see Table 7).

**TABLE 7. COUNCILS REPRESENTED IN THE SURVEY**

<b>Council</b>	<b>Number of participants</b>	<b>% of participants</b>
Ararat	1	2
Banyule	1	2
Bass Coast	15	29.4
Boroondara	2	3.9
Cardinia	1	2
Dandenong	1	2
Glen Eira	1	2
Manningham	1	2
Maroondah	1	2
Monash	1	2
Moonee Valley	1	2
Moreland	1	2
Macedon Ranges	1	2
Port Phillip	4	7.8
Shepparton	2	3.9
Whitehorse	2	3.9
Wyndham	3	5.9
Yarra	2	3.9
Yarra Ranges	1	2
Unknown	9	17.6
<b>Total</b>	<b>51</b>	<b>100</b>

<sup>11</sup> Given the relatively small number of participants in this survey, the results are generally limited to descriptive statistics and frequencies. The results are intended to highlight potential trends and issues but do not hold any statistical significance and on their own do not constitute as evidence for making changes to legislation.



The roles of the participants in their respective councils varied from admin staff, to IT officers, to Councillors. However, road engineers (17.6%) and project officers (17.6%) were the most common occupations of the respondents to the survey.

Just under half (45.1%) of the participants reported that up to 25 per cent of their role within their council involved bicycle riding or bicycle riding related matters. Just over one-fifth (21.5%) reported that over 50 per cent of their role involved bicycle riding or bicycle riding related matters. About another one-fifth (19.6%) reported that their role did not involve any bicycle riding matters.

Over half (56.9%) of the respondents indicated that road rules and legislation had an effect on their bicycle riding related work. For about 37 per cent of respondents it had minor or no effect.

Almost half (49.1%) of the participants indicated that they often or always take the legislation into account in their bicycle riding work.

#### **4.4.2 Bicycle riding considerations for councils**

The stakeholder interviews (see Section 4.3) identified two issues relating to councils that were investigated as part of this survey:

- Whether any local by-laws exist in council relating to bicycle riding or that have an impact on bicycle riding.
- When road works are carried out within a council on roads with bicycle lanes and bicycle paths, are the movements of bicycles considered in traffic management plans and the placement of roadwork signs.

Regarding by-laws, few participants identified any by-laws specific to their council that impacted on bicycle riding. Dogs being allowed or not allowed to be walked off a lead near shared paths was mentioned, along with bicycle riding not being allowed in parks co-located with facilities such as children's centres, thus creating a barrier to bicycle riding at these locations.

One respondent wanted the power to restrict the speed of bicycle riders on shared paths, but by-laws did not grant them that power.

Regarding road works, respondents indicated that all except one council considered bicycle riders to some degree when road works were carried out, the remaining respondent didn't know. Forty-five per cent of respondents indicated that their council often or always considered bicycle riders in their traffic management plans, while 31 per cent rarely or only sometimes considered bicycle riders.

It is interesting to note, that there was a lack of consistency of response for those councils where more than one person responded to the survey.

#### **4.4.3 Sources of road rule information**

The survey asked participants what source of information they consulted to find out about cycling related road rules and what sources they recommended to people who contacted them at the council.

These questions were asked because stakeholder consultation identified that better education and communications of the road rules was required. Depending on the outcomes and recommendations of this review it will be valuable to know which sources people consult for cycling road rule information. It is recommended that the role of the most popular sources be considered in any communications plans regarding bicycle riding developed in the future.

Participants were asked an unprompted open question about the sources they use to learn about cycling related road rules and legislation, and where they send members of the public who ask about the rules (see Table 8 and

Table 9 respectively).

**TABLE 8. WHERE PARTICIPANTS GO TO LEARN ABOUT CYCLING RELATED ROAD RULES (UNPROMPTED)**

Source	% of participants
VicRoads	43.1
Road Safety Road Rules 2009	29.4
Internet	17.6
Council, including supervisor, colleague, committees, on the job	15.7
Bicycle group, including Bicycle Network and Cycling Victoria	13.7
Other government source.	7.8

**TABLE 9. WHERE PARTICIPANTS DIRECT MEMBERS OF THE PUBLIC WHO ASK ABOUT CYCLING RELATED ROAD RULES (UNPROMPTED).**

Source	% of participants
VicRoads	25.5
Road Safety Road Rules 2009	19.6
Bicycle group, including Bicycle Network and Cycling Victoria	11.8
Answer it myself	7.8
Council	5.9

Table 10 and Table 11 show how participants responded when asked to choose from a list of potential sources of information which they have consulted in the past year regarding cycling related road rules and where they have sent members of the public who have asked about cycling related road rules (51% of participants reported having received enquiries from the public).

Consistently, VicRoads, Bicycle Network and Road Safety Road Rules 2009 were the most commonly used resources for finding out information about cycling related road rules.

**TABLE 10. WHERE PARTICIPANTS HAVE GONE IN THE PAST YEAR TO LEARN ABOUT CYCLING RELATED ROAD RULES.**

Source	% of participants
VicRoads	64.7
Bicycle Network Victoria	45.1
Road Safety Road Rules 2009	33.3
Cycling Into the Future 2013-2023 Strategy	17.6
Cycling Victoria	15.7
Road Safety Act 1986	13.7
Amy Gillett Foundation	11.8
Road Safety Victoria ( <a href="http://www.roadsafety.vic.gov.au">www.roadsafety.vic.gov.au</a> )	11.8
Dept of Transport, Planning & Local Infrastructure	11.8
TAC	5.9
Driving in Victoria: Rules and Responsibilities handbook	5.9
Other (specify)	5.9
RACV	3.9
Road To Solo Driving	0
Haven't accessed cycling related road rules or legislation	13.7
Don't know	3.9

**TABLE 11. WHERE PARTICIPANTS HAVE DIRECTED MEMBERS OF THE PUBLIC IN THE LAST YEAR FOR INFORMATION ABOUT CYCLING RELATED ROAD RULES.**

Source	% of participants
VicRoads	31.4
Road Safety Road Rules 2009	21.6
Bicycle Network Victoria	17.6
Other (specify)	7.8
Road Safety Victoria ( <a href="http://www.roadsafety.vic.gov.au">www.roadsafety.vic.gov.au</a> )	5.9
Road Safety Act 1986	5.9
TAC	3.9
Cycling Victoria	3.8
Amy Gillett Foundation	2.0
RACV	2.0
Cycling Into the Future 2013-2023 Strategy	2.0
Road To Solo Driving	2.0
Driving in Victoria: Rules and Responsibilities handbook	2.0
Dept of Transport, Planning & Local Infrastructure	2.0
Haven't directed anyone to cycling related road rules or legislation	3.9
Don't know	0

#### 4.4.4 Perceptions about the safety of bicycle riding

The survey asked participants a series of questions about:

- whether they thought bicycle riding was safe in Victoria
- to what degree they thought that road safety rules and legislation relating to bicycle riding protected bicycle riders and other roads
- the degree to which those rules acted as a barrier to riding.

Generally, participants felt that bicycle riding in Victoria was unsafe and that the cycling related road rules were not good at protecting bicycle riders. There was also a general view that the road rules and legislation relating to bicycle riding are good at protecting other road users and that they present a barrier to bicycle riding, making it difficult for people to take up riding or continue to ride.

The main reasons why respondents felt that bicycle riding was unsafe were:

- High speed traffic (40%)
- Lack of bicycle infrastructure (36.0%)
- More separation is needed between motorists and bicycle riders (28.0%)
- Driver behaviour and attitudes towards riders (28.0%)

The main reasons why respondents felt that road rules and legislation were not good at protecting bicycle riders were:

- Rules are made for drivers (23.5%)
- Liability for crashes should be assigned to drivers (23.5%)
- Lack of rule knowledge mostly by drivers (17.6%)
- Lack of enforcement/penalties for drivers (17.6%)

When examining the reasons why respondents felt that road rules and legislation were not good at protecting other road users, only one category was mentioned by more than one person. Fifty per cent of those that responded to this question suggested that bicycle riders did not share the roads with others as well as they should, especially in reference to pedestrians.

When examining the reasons why respondents felt that road rules and legislation relating to bicycle riding present a barrier to bicycle riding, no two people responded with the same issue. The following reasons were each raised by one respondent:

- Mandatory helmet wearing
- Implementation of bicycle infrastructure is restricted
- Speed limits are too high
- Bicycle riders are not protected
- Need for more bicycle lanes
- Rules are not obeyed
- Rules are not understood

#### 4.4.5 Rules to change

Participants were asked whether there were any cycling related road rules they thought should be changed. Of the 51 participants, 29 felt that there were. Many participants nominated more than one rule as needing to be changed.

Table 12 shows the rules that participants believed should be changed.

TABLE 12. LIST OF RULES PARTICIPANTS WANT CHANGED.

Road rule change	Number of participants
Riding on the footpath extended to all ages	12
Riders allowed to ride across pedestrian crossings	6
Making helmets non compulsory	5
Bicycle riders should ride single file	4
Bicycle riders should be able to turn left on red light at intersections	4
Full liability assigned to motorists which crash with a bicycle	3
Legislated minimum passing distance e.g. 1 metre	2
Use of bicycle lanes when available should not be compulsory	2
Bicycle riders to treat stop signs as give way signs	2
Give way to bicycle riders on the left	2
Cars should give way to bicycle riders in multi lane roundabouts	2
Not allow motor vehicles to use bicycle lanes for 50m	2
Allow motorists to pass bicycle riders over unbroken or double lines	2
No Bicycles signs are misleading	1
Increase car dooring penalty	1
Better enforcement of bicycle rider behaviour	1
Cars should give way to bicycle riders at T intersections	1
Bicycle riders should be able to go straight from a left turn lane	1

The most commonly mentioned rule for change was that bicycle riders of all ages should have the right to ride on a footpath, not just those under 12 years. This was followed by allowing riders to ride across pedestrian crossings without having to dismount their bicycle, and repealing helmet laws, so the wearing of helmets was not compulsory.

Not allowing bicycle riders to ride two abreast was also mentioned by several participants, as was allowing riders to turn left on a red traffic signal at traffic lights.

Participants were also asked why they thought the rules should be changed.

Regarding the footpath laws, the majority thought they should be extended because limiting it to under 12 years was (in order):

- a barrier to bicycle riding
- a danger to bicycle riders to be forced to ride on the road,
- a danger to other road users
- riders ignore the rule anyway.

For the ability to ride across a crossing the majority felt current rules were:

- a barrier to bicycle riding
- a danger for bicycle riders
- riders ignore the rule anyway.

The rationale for repealing the helmet laws were that it was a barrier to people riding bicycles and people ignoring the rules anyway; while allowing riders to ride two abreast was considered dangerous to other road users as well as riders.

#### 4.4.6 Rules to remove

Participants were asked whether there were any cycling related road rules they thought should be removed. A small number of participants, almost 25 per cent of the sample thought there were. Many participants nominated more than one rule as needing to be changed.

Table 13 shows the rules that participants nominated as needing to be removed.

The most commonly mentioned rule for removal was the rule preventing riders over 12 years from riding on the footpath. This was followed by helmet wearing laws, and the requirement to come to a complete stop at a stop sign.

Participants were also asked why they thought the rules should be removed.

Regarding the footpath laws, the majority thought they should be removed because limiting it to under 12 years was (in order):

- a barrier to bicycle riding
- a danger to bicycle riders to be forced to ride on the road,
- a danger to other road users
- riders ignore the rule anyway.

For removing the helmet laws the majority felt the current rule was:

- a barrier to bicycle riding
- a danger for bicycle riders
- riders ignore the rule anyway.

The rationale for not requiring a rider to stop at a stop sign was that riders ignore the rule anyway and that it is a barrier to bicycle riding.

**TABLE 13. LIST OF RULES PARTICIPANTS WANT REMOVED.**

Road rule change	Number of participants
Riding on the footpath not permitted for those over 12 years	5
Compulsory helmet wearing	5
Having to stop at a stop sign	2

#### 4.4.7 New rules

Participants were asked whether there were any new cycling related road rules they thought should be made. About one-third thought there were rules that should be introduced for bicycle riders, and just over one-third (37.3%) thought there should be new rules related to bicycle riding for other road users.

Table 14 outlines the rules for bicycle riders that participants felt needed to be added.

Regarding rules for bicycle riders, again allowing all riders to ride on the footpath was the number one response.

**TABLE 14. NEW RULES FOR BICYCLE RIDERS PARTICIPANTS THOUGHT SHOULD BE INTRODUCED**

Proposed new rule	Number of participants
Riding on the footpath allowed for all ages	3
Bicycle riders able to turn left on red traffic light	2
Allow bicycle riders to travel in contra-flow direction on one-way streets	2
Riders allowed to ride across pedestrian crossings	2
Introduce registration for bicycle riders	2
Introduce online testing of bicycle riders	1
No lane filtering	1
Introduce measures to create better visibility of bicycle riders	1
Bicycle riders to treat stop signs as give way signs	1
Bicycle riders should be able to give way at pedestrian lights and not be required to stop	1
Vehicle drivers should automatically be assigned liability in a crash	1
Riding not allowed on roads with speed limit greater than 60km/h unless separated from traffic	1

Table 15 outlines the bicycle related rules for other road users that participants felt needed to be added.

Legislating for a minimum passing distance was the number one response, followed by motorists being assigned automatic liability in a crash involving a bicycle rider.

**TABLE 15. NEW CYCLING RELATED RULES FOR MOTORISTS THAT PARTICIPANTS THOUGHT SHOULD BE INTRODUCED.**

Proposed new rule	Number of participants
Minimum passing distance (e.g. 1 metre)	4
Vehicle drivers should automatically be assigned liability in a crash	3
Bicycle riders should give way to all others at intersections	1
Aggressive behaviour to bicycle riders should be illegal	1
No tooting horn when behind a bicycle rider	1
Reduce speed limits	1
Make 'sharing the road' rules clearer	1
No turning left immediately after overtaking a bicycle rider	1
Drivers should be responsible for the passengers not car dooring bicycle riders	1



#### 4.4.8 Summary of main findings from the council survey

The following provides a high level summary of the finding from the survey for council officers:

##### 4.4.8.1 DEMOGRAPHICS

- 51 participants completed the survey (30 males; 21 females)
- 84 per cent rode a bicycle
- 19 known councils were represented in the survey (14 metropolitan councils; 5 regional councils).
- road engineers (17.6%) and project officers (17.6%) were the most common occupations of the survey respondents.
- about one-fifth (19.6%) reported that their role in council did not involve any bicycle riding matters.

##### 4.4.8.2 INFORMATION SOURCES

- VicRoads is the key source of information for cycling related road rule information, both for the participants and for when they refer on members of the general public.
- Bicycle Network is another main source of road rule information
- Cycling related road rules were influential on the work carried out by participants

##### 4.4.8.3 COUNCILS

- Participants were from a range of metropolitan and regional councils so the diversity in the representation would be expected to influence responses. Unfortunately with so few respondents comparisons between metropolitan and regional councils could not be made.
- Local by-laws relating to bicycle riding were not common, but often related to use of shared paths.

##### 4.4.8.4 RULES

- When asked about changing, removing or introducing new cycling related road rules, the most frequent response category related to allowing bicycle riders of all ages to use the footpath. Related to this was allowing bicycle riders to ride across pedestrian crossings without having to dismount.
- Compulsory helmet wearing was raised among several participants as a rule to change or remove.
- Another issue when considering changing, introducing or removing cycling related road rules was to allow bicycle riders, to treat Stop signs as Give Way signs (i.e. not have to come to a complete stop), and to be able to turn left on red at signalised intersections.
- Having a minimum passing distance was raised as a new rule to be introduced for motorists.
- Introducing 'strict liability' where drivers are automatically liable when they crash with a bicycle rider (such as in the Netherlands), also emerged when considering new rules and changes to rules
- When asked about reasons for the suggested changes to rules or removal of rules, the main response was that the current rules are barriers to riding or are dangerous for bicycle riders. Comparatively, understanding of road rules was mentioned less often as a reason for change or removal.
- Responses to other questions indicated that the cycling related road rules in general are less likely to be thought of as protecting bicycle riders than as protecting other road users. They were also seen as creating a barrier to riding.

## 4.5 Summary of rules identified for consideration by stakeholders

As a result of the stakeholder consultation process, many different cycling related road rules were highlighted as being problematic for a variety of reasons. Given that these rules were specifically highlighted by individuals and organisations with unique insights into bicycle riding, these rules have been recorded and each one will automatically be considered as part of this review.

Table 16 summarises the cycling related rules which were highlighted through the stakeholder consultation process (i.e. stakeholder interviews and survey of council officers). It should be noted that the review will not be limited to the rules shown in Table 16. This table simply illustrates the rules highlighted through this part of the review.

**TABLE 16. ROAD RULES IDENTIFIED FOR REVIEW FROM STAKEHOLDER CONSULTATION PROCESS**

Road rule no. <sup>12</sup>	Road rule title	Action
59	Proceeding through a red traffic light	Review
62	Giving way when turning at an intersection with traffic lights	Review
68	Stopping and giving way at a stop sign or stop line at other places	Review
88	Left turn signs	Review
92	Traffic lane arrows	Review
98	One-way signs	Review
111	Entering a roundabout from a multi-lane road or a road with 2 or more lines of traffic travelling in the same direction	Review
119	Giving way by the rider of a bicycle or animal to a vehicle leaving a roundabout	Review
132	Keeping to the left of the centre of a road or the dividing line	Review
134	Exceptions to keeping to the left of a dividing line	Review
141	No overtaking etc. to the left of a vehicle	Review
144	Keeping a safe distance when overtaking	Review
151	Riding a motor bike or bicycle alongside more than 1 other rider	Review
153	Bicycle lanes	Review
154	Bus lanes	Review
219	Lights not to be used to dazzle other road users	Review
240	Wheeled recreational devices and toys not to be used on certain roads	Review
247	Riding in a bicycle lane on a road	Review
248	No riding across a road on a crossing	Review
250	Riding on a footpath or shared path	Review
256	Bicycle helmets	Review
257	Riding with a person on a bicycle trailer	Review
258	Equipment on a bicycle	Review
259	Riding at night	Review
269	Opening doors and getting out of a vehicle etc.	Review
300	Use of mobile phones	Review
Road Safety Act 1986 Part2, Division 2	Registration	Review
Road Safety Act 1986 Part 3	Licensing of drivers	Review
Road Safety Act 1986 Section 99A	Conduct of works or activities on a highway	Review

<sup>12</sup> See *Road Safety Road Rules 2009* (Office of the Chief Parliamentary Counsel, 2013c).

## SECTION 5: COMMUNITY CONSULTATION

### 5.1 Introduction

With nearly 4.5 million registered vehicles using Victoria's roads (Australian Bureau of Statistics, 2014) and more than 1 million people riding a bicycle each week (Victorian Government, 2012a), Victoria's road users can have valuable insights and are well placed to highlight issues they have experienced regarding cycling related road rules when they use the roads.

An online survey was developed to capture the views of the general public. Some of the questions included in the survey were guided by the findings from the literature review, crash analysis and stakeholder consultation, which were already conducted as part of this review.

In addition to helping to identify the majority of issues that potentially exist with cycling related road rules, one of the key aims of this survey was to see how well drivers and riders understood many of the cycling related rules.

Feedback was consistently received through the stakeholder consultation process, that cycling related road rules are commonly misunderstood by both bicycle riders and drivers, but drivers in particular.

Ultimately, it is important to see whether those rules which are least understood by road users, are linked to the most common types of crashes involving bicycle riders that occur on the roads.

It may be that if particular rules are identified as contributing to a high number of crashes, changing those rules or adding to them may not be the best course of action. Rules only work if they are known by road users, understood by road users and observed by road users.

If a rule is shown to be misunderstood, then the most effective action may be to better educate road users about the rule, rather than modifying the rule.

### 5.2 Methodology

An online survey was developed using the online survey software - *Survey Gizmo*. On average the survey took about 30 minutes to complete.

The survey contained questions relating to the following topics:

- Demographic details – including age, gender, residential location, membership of bicycle riding and other road user interest groups
- Transport – use of different modes of travel, frequency of travel, bicycle ownership, reasons for riding and locations of riding
- Perceptions of bicycle safety in Victoria and barriers to bicycle riding
- Use of a range of web-based and other resources as information sources for road rules
- Issues and road rules related to:
  - bicycle riding equipment
  - riding on footpaths, shared paths or cycle paths
  - on-road space for bicycles
  - intersections, traffic signals and turning
  - sharing the road and riding with others
- Who is and should be considered at fault in a crash with a bicycle rider

Part of the survey examined participants' knowledge and understanding of some of the cycling related road rules. In order to do this effectively, current rules along with other statements which were not current rules were presented in the survey.

Participants were recruited via a number of methods:

- Promotion via the VicRoads media channels, including a Ministerial media launch and related PR activity, resulting in state-wide print, radio and TV coverage
- Promotion by cycling bodies
- Promotion by other road safety agencies and
- Promotion by local and state government agencies.

A total of 10,444 Victorian residents participated in the research. This exceeded the number of people expected to respond to the survey, especially given the survey was quite long. The high level of response reflects the passion that many members of the community feel regarding bicycle riding issues.

Over three quarters of the participants rode bicycles, with 23.4 per cent of the sample being non-bicycle riding drivers and the remaining 1.0 per cent non-bicycle riders who travel only as a pedestrian, passenger or on public transport. The bicycle riders in the sample were a highly engaged group, who tended to be male, to live in inner Melbourne and be commuter or work bicycle riders (in addition to most also being recreational riders).

This sample should not be considered to be representative of the broader Victorian population. This is particularly so for the relatively small sample of pedestrians and public transport users. The results from this group should be thought of as indicative rather than as conclusive regarding the opinions of pedestrians and public transport users.

### 5.3 Results from the community survey

Dr Allison McIntyre, an experienced and respected road safety and research consultant, was engaged to manage the data collected from the survey and carry out the necessary analysis.

The main findings from the report are included and discussed in this section. For consistency with the stakeholder consultation, the issues examined in this survey assessing overall understanding of the some of the rules, were sorted into the following categories:

- Riding equipment
- Riding on footpaths, shared paths, bicycle paths
- Allocating space on road for bicycles
- Intersections, traffic signals and signs
- Overtaking and turning
- Sharing the road
- Liability and fault

The relevant issues explored in the survey will be discussed in this section under each of these category headings. For many of the rules, a preliminary assessment has been made as to whether changes may be required to the rule or not based on the information gathered through the review so far. A more definitive assessment and recommendation will be made in the final sections of this report.

### 5.3.1 Riding Equipment

A series of questions was asked to ascertain the level of knowledge of road rules around the use of equipment on bicycles. These included the rules regarding the requirements to fit a warning device to a bike (RR 258), the use of lights on a bike (RR 259) and the use of mobile phones while riding (RR 300).

#### 5.3.1.1 BICYCLE BELLS AND HORNS

The participants' responses indicated that the requirement for a bell (or other warning device) was well understood (78.6%) and that bicycle riders (81.8%) were better informed about this than were other road users (68.6%). The majority of the participants supported this rule (66.9%), although less so among bicycle riders (58.7%) and among bicycle riders who commute (57.7%) compared to non-commuters (61.0%). Amongst the pedestrian group (pedestrians and public transport users who don't drive or ride bicycles), 88.3 per cent supported this rule.

**Preliminary assessment:** The findings suggest that the rule does not require change, is well understood and does not require significant focus in communications.

What was less clear among participants was whether they were required to use the bell to warn other road users that they are approaching. Bicycle riders are often advised to use a warning device when approaching others (particularly pedestrians), but it is not a road rule. Relatively few riders knew this was not a rule (41%), but the majority didn't support it being a rule (62.1%). Other road users however supported the idea that bells must be used to warn other road users (77.8%), with 69.3 per cent of pedestrians thinking this should be the case.

**Preliminary assessment:** On the basis of these responses such a rule is likely to be unpopular among bicycle riders. Advice around use of the bell seems to be more acceptable to bicycle riders than mandating the use of it. Communications should also target other road users, to educate them what it means when a bicycle rider uses their bell. Both parties should understand that it is meant to be a polite and courteous warning to pedestrians.

#### 5.3.1.2 BICYCLE LIGHTS

There was a very high level of understanding that bicycles (or bicycle riders) must be fitted with the appropriate lights when riding at night or in bad weather conditions. This was almost universally known to be a rule among bicycle riders (92.0%) and also showed high levels of knowledge among other road users (81.3%). Support for this rule is almost unequivocal.

**Preliminary assessment:** These results suggest that further communication or explanation is not required and that the rule is widely accepted to be appropriate and therefore not requiring change.

General advice from VicRoads and others is that bicycle lights should not dazzle other road users, however RR 219 which makes it an offence for a driver to dazzle other road users with their lights, is not currently a rule for bicycle riders.

There was some confusion when the issue of bicycle lights dazzling other road users was raised. About one-third were accurate in their knowledge (33.0%). There was however support for the idea that bicycle lights should not have a negative impact on others by dazzling them (70.3%).

Also relating to bicycle lights was the issue of the distance from which lights should be visible. The road rules state that visibility of lights must reach 200 metres. This was not well understood by the participants (29.4%), who generally underestimated the distance by selecting 100 metres as the

rule. When asked to indicate support for lights being visible from a distance of 200 metres, the sample showed a reasonable level of agreement (70.8%).

**Preliminary assessment:** The findings indicate that further communication about the requirements of bicycle lights would be acceptable to this group of bicycle riders and beneficial in informing them of their responsibilities when riding at night. Also given the results and feedback through stakeholder communications, there seems to be support for better communication about the most appropriate bicycle lights and how to mount them so they do not affect (dazzle) others.

#### 5.3.1.3 HEAD PHONES AND MOBILE PHONES

While the majority of participants understood that handheld mobile phones are not permitted to be used by bicycle riders (60.6%), there is room for improvement in the understanding that this is a rule. The results also showed that the rule disallowing bicycle riders to use mobile phones was very well supported (90.5%).

**Preliminary assessment:** Based on the results, there are still a substantial number of people who do not realise that like motorists, bicycle riders cannot use a hand held mobile phone while riding. However, considering that the majority of people think it should be a rule, it is a good candidate for being better communicated to bicycle riders. The degree to which it needs to be communicated is unknown, because the extent of the problem (i.e. how many riders talk on the phone while riding) is unknown. As reported in the stakeholder consultation, it appears that this offence is under enforced due to the difficulties in issuing infringements.

While it is advisable not to use headphones when riding, it is not a rule. Bicycle riders (54.6%) when compared with other road users (39.3%) were better informed about there not being a rule prohibiting the wearing of headphones while bicycle riding, although there was a substantial amount of uncertainty. The survey data indicated that if this were a rule it could be supported (by 60% of bicycle riders) but there is a substantial proportion who would not support it.

**Preliminary assessment:** It is unknown whether the use of headphones by bicycle riders is a widespread problem or a contributor to trauma, although it makes sense that having an unimpaired ability to hear while riding, should be safer than having traffic noises and cues inhibited by headphones. Therefore advice on the use of headphones when riding through communications, appears to be an appropriate approach. This is more likely to be tolerable to bicycle riders than a rule prohibiting them. This is especially so considering pedestrians can legally wear headphones and vehicle drivers are exposed to a range of distracting devices in their vehicles.

### 5.3.2 Footpaths, shared paths and bicycle paths

A series of questions was asked to ascertain the level of knowledge of road rules around riding on footpaths, shared paths or bicycles paths. These included rules regarding who is permitted to ride on a footpath (RR 250), riders giving way to pedestrians (RR 250), drivers not obstructing bicycle access to bicycle paths (RR 198), and pedestrians not using the part of a separated footpath intended for bicycle riders (RR 239).

#### 5.3.2.1 RIDING ON THE FOOTPATH



It was well understood by participants (79%), bicycle riders (83.4%) in particular, that bicycle riders under the age of 12 years are allowed to ride on the footpath. This was also well supported by those surveyed (90%). There was also a good level of understanding that bicycle riders of all ages are not permitted to ride on the footpath (77%), although around half of bicycle riders (53.3%) and under half of other road users (42.3%) supported it. Of the small sample of non-driving and non-riding pedestrians, passengers and public transport users, the majority (67.0%) knew that those aged under 12 are permitted to ride on the footpath, with 79.2 per cent supporting this rule, and while about half (53.8%) the pedestrians knew that riders of all ages are not allowed to ride on the footpath, support for allowing this was low (36.3%).

**Preliminary assessment:** There does not appear to be widespread demand for allowing all bicycle riders to ride on the footpath. Also given the strong opposition to such a notion expressed by pedestrian and disability advocacy groups during the stakeholder consultation, a change to the rules allowing all bicycle riders to ride on the footpath may not be warranted.

However, there was some confusion about who else is permitted to ride on the footpath. Just over half of the participants (57.7%) knew that a rider aged 18 years or older could ride on the footpath if they were supervising a rider under the age of 12 years. Also, even though these are not currently rules, there was uncertainty about whether bicycle riders could ride on the footpath if:

- they were aged between 12 to 17 years and were riding with another rider aged under 12 years (18.4% correctly identified this as not being a rule; 43.4% were uncertain)
- they were 16 years or older and carrying a child under 10 years in a trailer or child seat (21.6% correctly identified this as not being a rule; 52.1% were uncertain).

However, despite the uncertainty, there was relatively good support (74.9% and 72.0% respectively) for both of these being rules, provided the bicycle riders give way to pedestrians.

When looking at the results of the small sample of participants who were pedestrians or public transport users only:

- knowledge that riders over 18 years could ride on a footpath when accompanying a child under 12 years was relatively low (40.8%), however the rule was supported (69.0%)
- few were aware that 12 to 17 year olds were not permitted to ride on a footpath when riding with a child under 12 years. However, the a moderate majority supported this rule (64.4%).
- few (18.4%) were aware that carrying a child under 10 years in a trailer or child seat was not allowed on footpaths, although just over half (58.8%) supported the rule.

**Preliminary assessment:** Based on these results it appears that these may be good candidates to be considered for rule changes. However, it should be noted that during stakeholder consultation, pedestrian and disability advocacy groups were strongly opposed to any increases in riding on footpaths. It should be noted that the overall sample in this survey is not well represented by non riding and non-driving pedestrians, so any opposition these groups have to these rules would not show up with any significance in analysis. Potential changes to these rules will be discussed more in the next section of the report. Ultimately, if it is decided to explore changes to these rules, consultation with pedestrian advocacy groups should be directly sought early in the process.



#### 5.3.2.2 SHARING SPACE WITH PEDESTRIANS

The rules around sharing paths with pedestrians were not well understood. Just over half of bicycle riders (56.3%) and less than half of other road users (39.8%) understood that when riding on a footpath or shared path, they must keep to the left and give way to pedestrians. However, there was a high level of support for this rule among both bicycle riders (79.9%) and other road users (88.7%). Even less well known was the rule that states that pedestrians must not travel on a dedicated bicycle path, or the designated bicycle section of a shared path, unless they are crossing it. Less than a third were aware of the rule (31.1%). However, there was a reasonable level of support for this rule (73.8%).

When looking at the results of the small sample of participants who were pedestrians or public transport users only:

- under half (42.8%) were aware that a bicyclist on a footpath or shared path must keep left and give way to pedestrians, however 85.0 per cent supported this rule.
- few (38.8%) were aware that pedestrians must not use the bicycle path or the part of the separated footpath for bicycles, unless crossing, but 72.7 per cent supported this rule.

**Preliminary assessment:** Given there are high levels of support for these rules, but relatively low knowledge, better education of riders and pedestrians about their obligations is warranted, and is likely to be well received. Anything more than communications support is not recommended at this stage as the true extent of trauma between bicycle rider and pedestrian interactions is unknown. As raised in stakeholder consultation, crashes involving pedestrian and bicycles on shared paths/footpaths are under reported in crash data, as they do not involve a motor vehicle and are not TAC compensable. Therefore, getting an accurate picture of the injury consequences of the lack of understanding of these rules is difficult.

#### 5.3.2.3 OTHER BICYCLE PATH RULES

The majority of the participants were unaware that drivers must not stop in a position that blocks access to bicycle paths or other bicycle riding infrastructure (37.7% correctly identified it as a rule). There was general support for the rule with over 90 per cent of bicycle riders and two thirds (65.2%) of other road users endorsing it.

**Preliminary assessment:** There is room to improve awareness of this issue through improved communications. Based on the results, messages regarding these rules are unlikely to be met with opposition.

The majority of bicycle riders (60.7%) were aware that there is not a requirement to use an off-road bicycle path when there is one available, while the level of knowledge was much lower among other road users (35.8%). Support for requiring bicycle riders to use an off-road path polarized the sample, with less than a quarter of bicycle riders (23%) supporting it and more than three quarters (76.2%) of other road users supporting it.

When looking at the results of the small sample of participants who were pedestrians or public transport users only, few (31.7%) were aware that there was no requirement for riders to use an off road bicycle path if available, however a moderate majority (65.0%) supported this being a rule.

**Preliminary assessment:** The fact that other road users support a rule for bicycle riders to use an off road path when there is one available, and that the majority of these people either think it is already

a rule or are uncertain as to whether it is a rule, potentially helps to explain why tension is often reported between riders and drivers when sharing the road space. Better education about this rule may be beneficial.

There is no recommendation that this is a rule that should be introduced. If such a rule was introduced, it would be likely to act as a barrier to riding, and furthermore, there is likely to be opposition among the bicycle riding community.

Not only is better educating other road users about the requirements for bicycle riders warranted, but it seems tackling some of the misperceptions, like the one just described, and bicycle registration regarding the misperception that registration pays for the road network, would be beneficial.

### 5.3.3 Allocating space on road for bicycles

A series of questions was asked to ascertain the level of knowledge of road rules around riding on the roads and using on-road facilities specifically for bicycle riders. These included rules regarding the requirements of bicycle riders to use bicycle lanes (RR 247), and the use of bicycle lanes (RR 153; RR158) and bike boxes (RR 60A) by motorists. It also explored participants understanding of whether a minimum passing distance rules currently exists.

#### 5.3.3.1 MINIMUM PASSING DISTANCE.

Participants were asked if there is a current rule that required drivers to allow a space of one metre when overtaking a bicycle riders travelling in the same direction. This is currently not a rule but is advice given by VicRoads and others (VicRoads, 2014). There was a substantial proportion of participants who already thought this was a rule (43%) and a similar number who thought it was not (42%). The remaining were unsure. Regardless, there was a very high level of support for this rule expressed by bicycle riders (92.8%) and two thirds (68.9%) of other road users also supported the rule. This safety issue has been the subject of a public education campaign by the Amy Gillett Foundation and this campaign was probably effective in contributing to its high level of support and perceptions, by some, that it is a rule.

**Preliminary assessment:** Based upon the survey results it is possible that such a rule would be supported by the community should it be introduced. Currently, a trial of minimum passing distance is being conducted in Queensland and one is to commence in the ACT and South Australia. Once the Queensland trial is completed, evidence will be available as to whether the introduction of such laws are workable and contribute to a net safety benefit for road users. It is recommended that, VicRoads awaits the results of the trial in Queensland. If the results show there is a safety benefit to bicycle riders and no safety disbenefit to other road users, and the rule works well in practice, then introducing such a rule here could be revisited. In the meantime, VicRoads and others should continue recommending leaving at least a one-metre passing distance when passing bicycle riders, and reminding motorists that a rule does exist (RR 144) which requires drivers when overtaking another vehicle to do so at a sufficient distance to avoid a collision.

It should be noted that other rules, besides RR 144 (passing distance) would be affected if this rule were introduced. For example, changes to rules regarding keeping to the left of the centre of the road or the dividing line (RR 132) would also need to be considered.

#### 5.3.3.2 BICYCLE BOX

Two items assessed the understanding that drivers must stop at the first line of a bicycle box and cannot stop in the bicycle box even if there are no bicycle riders using it. The results indicated that the majority understood these rules and the level of support for them was high.

**Preliminary assessment:** While the level of knowledge of this rule could be improved, the use of bicycle boxes does not appear to be the rule most in need of education, nor does it appear to be controversial. It could be included as part of a suite of information to road users in an education program, but should not be the main focus of a communications program.

#### 5.3.3.3 BICYCLE LANES

The majority of the participants (69.2%) understood that drivers are not completely prohibited from entering a bicycle lane. There was very little support for the idea that drivers be prohibited completely from entering bicycle lanes (25.2%). There appears to be very little demand for this, even among commuter bicycle riders who were most supportive of this rule, less than a third endorsed it (30.3%).

While it was well known that there are times when drivers of other vehicles can enter a bicycle lane, the specific details of when and for what purpose drivers may do so appears less clear among the group surveyed. When asked about whether drivers are permitted to enter the bicycle lane for up to 50 metres (as long as they indicate and give way to bicycle riders), around 60 per cent of bicycle riders understood this to be a rule and 41 per cent of other road users. There is room for improvement in the understanding of this rule. However, this rule generally attracted endorsement from 75 per cent of bicycle riders and over 80 per cent of other road users.

Only around half (52%) of the participants (53.2% bicycle riders; 48.3% other road users) were aware that bicycle riders are required to use the bicycle lane where it is available. Yet, support for this rule was very high among other road users (91.7%) compared with bicycle riders (66%). There is room for improvement in the knowledge of this rule.

**Preliminary assessment:** Mismatches between what people think should be a rule and what they actually think is the rule, potentially helps to explain why tension is often reported between riders and drivers when sharing the road space. The mismatch observed regarding the ability for other road users to use a bicycle lane for up to 50 metres and the requirement for rider to use a bicycle lane when there is one available, may serve to contribute to this tension.

The rules as they stand are sound, and no changes are proposed, but carefully crafted communications to educate all road users about obligations and rights around using bicycle lanes is recommended. Based on the results, such communications are unlikely to receive widespread opposition.

It was understood that motorcycles are not permitted to ride in bicycle lanes (66.8%), although this was better understood by bicycle riders (70%) than other road users (56.8%). There was very little support for the idea that motorcycles should be allowed to use bicycle lanes (16.3%). On the basis of safety and the results reported here, this issue does not warrant a road rule change.

#### 5.3.4 Intersections, traffic signals and signs

A series of questions was asked to ascertain the level of knowledge of road rules around the requirements for bicycle riders to obey traffic control items at intersections and crossings. These

included rules regarding obeying traffic signals, stop signs and give way signs (Part 2), and stopping at and giving way at intersections or crossings (Part 7).

The road rules regarding obeying of traffic signals and signs by bicycle riders were well known and indicated that there is not a strong demand for changing these rules. Almost all participants (90.4%) understood that because bicycles are considered to be vehicles they must obey all traffic signals and signs, just as motorists do. This also gained a high level of support (86.6%).

It was very well understood that bicycle riders must stop at a red traffic signal or stop sign. This was also well supported by the participants with 83 per cent of bicycle riders and 97 per cent of other road users endorsing the rule. While support was lower among commuting compared to non-commuting riders, 80 per cent endorsed it. There does not appear to be a strong demand for change to the rule requiring bicycle riders to stop at lights and stop signs, nor is there an argument that road users need to be significantly better informed about this rule. While the percentages were a little lower, both in terms of understanding of the rule (78.1%) and support for it (88.7%), the trends were similar for the rule requiring bicycle riders to give way to others at a give way sign.

Along similar lines, the majority of the sample (74.2%) was aware that bicycle riders are required to stop at pedestrian and zebra crossings and that they are not permitted to ride straight through. Less than a third (30.9%) supported change to the status quo in allowing bicycle riders to ride through pedestrian or zebra crossings without stopping.

When looking at the results of the small sample of participants who were pedestrians or public transport users only, around half (51.0%) were aware that riders were required to stop, however the idea of allowing riders to give way at crossings instead of stopping, was not supported (24.8%).

Related to the above items, participants well understood (83.7%) that bicycle riders are not permitted to treat a red traffic signal as a give way sign, and just ride through the intersection when it is safe to do so. There was very little support for the idea that it should be the case (23.3%). The strongest support was among commuter bicycle riders, 28 per cent of whom thought that giving way then riding through red traffic when safe to do so was a good idea.

**Preliminary assessment:** There is nothing reported in the survey data that would suggest any changes are required to the current rules regarding traffic signals and signs for bicycle riders. Currently there is clear understanding about signals and signs, and what road user obligations are when faced with them.

A suggestion from stakeholder consultation (in particular the council survey), was that bicycle riders be allowed to turn left on red signals. Given that current laws are well understood and have a sound safety basis, changing the rule would only introduce a level of confusion and serve to create tension. In 2001, the fines for disobeying traffic signals and signs for bicycle riders were brought into line with motorists, to create a level of equality amongst road users. Changing this rule would only serve to polarise the two groups.

Even though there is a good understanding of these rules, 'Failure to obey traffic lights' and 'Failure to obey a traffic' sign are among the top five infringements issued to bicycle riders by Police, collectively making up 12 per cent of all infringements issued from 2009-10 to 2013-14 (see Section 3.2.5). The issue seems to be one of compliance to the rules rather than lack of understanding.

### 5.3.5 Overtaking and turning

A series of questions was asked to ascertain the level of knowledge of road rules around the requirements for overtaking and turning for bicycle riders and other road users when a bicycle rider is involved. These included rules regarding bicycles not overtaking to the left of a left turning vehicle (RR 141), bicycle riders having the option to complete a hook turn at any intersection, unless prohibited (RR 35; RR36), and turning right and giving way in a multilane roundabout by bicycle riders (RR 111; RR 119).

#### 5.3.5.1 TURNING LEFT

There was some uncertainty about the rules around vehicles turning left when there are bicycle riders travelling on the left side of that vehicle. There is some room to improve knowledge about bicycle riding on the left side of left turning vehicles. A relatively small majority of bicycle riders (64.1%) understood that they are not permitted to overtake on the left of a left turning vehicle. By comparison less than half of other road users (46.9%) understood this to be a rule. However, more than three quarters of bicycle riders (77.5%) and almost 90 per cent of other road users supported this rule.

There was even less certainty when asked about bicycle riders overtaking to the left of a vehicle that is indicating to turn left, with only half of the sample aware of the rule (49.6%). The majority of the sample supported this rule (70.6%), with other road users (85.8%) supporting it more than bicycle riders (65.7%).

Similar to the other questions about this issue, less than a third of participants (29.7%) understood that motorists turning left are not required to give way to bicycle riders travelling in the same direction and approaching the left side of the vehicle. While two thirds of bicycle riders (67.9%) supported this becoming a rule, less than half of other road users (41.8%) endorsed this.

**Preliminary assessment:** There appears to be an evident lack of clarity among this sample, about the rules relating to riding on the left of a left turning vehicle or a vehicle indicating to turn left. The mismatch between knowledge of the rules and general acceptance of the current rules does not provide a rationale for changing the rule based on the survey data.

Confusion surrounding this rule is further exacerbated when considering road rules 27, 28, 141, 148, 153 and 158 in conjunction with one another. These rules relate to turning left, overtaking to the left of a vehicle, giving way when moving from a marked lane or line of traffic to another, riding and driving in bicycle lanes. These will be discussed in more detail in the following section (see Section 6.2.2).

However, because the rules are poorly understood by both riders and drivers, there is a high risk of driver or rider errors leading to injury. In fact DCA 133 - Left turn side swipe, contributes to 5.7 per cent of crashes involving bicycle riders and is the seventh most common crash type involving bicycle riders.

It may be possible that this lack of understanding of the rules, could be contributing to trauma. However, this is not certain.

A more detailed review of these rules and how they interact is warranted. In the meantime, one approach is to better communicate these rules to all road users. Given the level of confusion and its potential contribution to crashes, this particular rule should form a major focus of any bicycle riding related education or communications initiatives.

### 5.3.5.2 ROUNDABOUTS

There was limited understanding among the participants (29.2%) that bicycle riders are allowed to turn right from the left lane in multi-lane roundabouts as long as they give way to drivers leaving the roundabout. Furthermore, this rule did not gain majority support (44.6%), not even from bicycle riders (45.5%).

**Preliminary assessment:** Better education of this rule may be required. Raising awareness of the rule will be important but communicating the reasons for it might assist in obtaining a higher level of support for the rule. From the crash data there was nothing that seemed to suggest that crashes involving riders and drivers in this situation are common. A more in depth investigation about changes to the rules involved may be warranted. See Section 6.2.1 for more discussion regarding this rule.

### 5.3.5.3 HOOK TURNS

About half of bicycle riders (51.2%) correctly understood that they are allowed to make a hook turn to turn right at an intersection, while less than a quarter of other roads users (22.6%) knew this to be the case. There is room for further education about this issue. This rule attracted a relatively high level of support among bicycle riders (79.3%), while only half of other road users endorsed it.

**Preliminary assessment:** Communication with bicycle riders and drivers about this issue may be warranted. Crash data from Section 3.2.4 shows that 'right through' crashes (DCA 121) where a right turning vehicle collides with a vehicle from the opposite direction travelling straight through, is the most common type of crash involving bicycle riders. The 2014 crash data shows that 9.7 per cent of casualties from this DCA resulted where the bicycle rider was the right turning vehicle. If riders were more aware of their ability to perform hook turns, maybe those crashes where the bicycle rider is the one turning right, could be reduced.

## 5.3.6 Sharing the road

A series of questions was asked to ascertain the level of knowledge of road rules around the requirements for bicycle riders when sharing the road with trams and other bicycle riders. These included rules regarding bicycles stopping at the rear of a stopped tram (RR 163), and riders being allowed to ride two-abreast (RR 151).

### 5.3.6.1 TRAMS

The participants surveyed showed that there was a fairly good level of understanding about the responsibilities of bicycle riders around stopped trams. Almost 90 per cent of bicycle riders were aware they are required to stop at the rear of a stopped tram and are not permitted to proceed while pedestrians are crossing to or from the tram. This was less well known among other road users (62.8%). However, the vast majority of all road users endorsed the rule (90.6%).

When looking at the results of the small sample of participants who were pedestrians or public transport users only, the majority were aware that bicycle riders must stop at the rear of a stopped tram and not go if the doors are open or pedestrians crossing. This rule was well supported (89.0%).

**Preliminary assessment:** Regarding the rules around bicycle riders and trams, no changes to the rules are required. They are well understood by bicycle riders and well supported.



#### 5.3.6.2 BICYCLE RIDERS

Over 80 per cent of participants understood that bicycle riders are permitted to ride alongside one other rider, however further details about riding alongside other riders were less well understood. Just over one third of participants (35.4%) were aware that bicycle riders are permitted to ride beside more than one other rider when overtaking another bicycle rider. Fewer than 14 per cent of participants were aware that bicycle riders must ride no more than 1.5 metres apart when riding alongside each other. Bicycle riders were more accurate in their knowledge than other road users for all these items.

All of the above issues attracted support from the participants; with around 70 per cent of bicycle riders supporting the rule allowing bicycle riders to ride alongside one other rider and to be no more than 1.5 metres apart when riding beside each other. Three quarters supported being able to ride beside more than one other when overtaking. The level of support for these three items was lower among other road users. The survey results suggests that a small majority of other road users would support limiting bicycle riders to riding single file (57%), with only half supporting the idea that riders be allowed to ride alongside one other or more than one other rider when overtaking. Having to ride single file was not advocated by bicycle riders (13%).

**Preliminary assessment:** Based on this survey data alone there does not appear to be a consensus view about riding single file or beside others; it is dependent on road user status. Considering the survey data alone, it seems to support maintaining the status quo, as around half of other road users support it, while changing the rules to single file riding would probably be a very unpopular move as it was supported by far fewer bicycle riders.

However, stakeholder consultation through the council survey, identified that some recommended that this rule be changed. This will be discussed in more detail in the following section (see Section 6.2.4).

#### 5.3.7 Liability and fault in crashes

Several questions were asked to ascertain the level of understanding about who is considered at fault in a crash involving a motor vehicle and bicycle.

Participants generally understood that in Victoria, fault for a crash between a bicycle and a motor vehicle is determined on a case by case basis for the purposes of a police or insurance reports. Fault is not automatically assigned to the motorist. The data does not indicate the need to change this, as less than 30 per cent of bicycle riders agreed this should be the case.

#### 5.3.8 Overall road rule themes and trends

Overall when looking at the results of the road user survey, not surprisingly knowledge of and support for current road rules was generally better than the knowledge and support for items that are not current rules. The bicycle rider subgroup almost always had more accurate knowledge of the road rules than did the other road user group. Often commuting bicycle riders had better knowledge of the cycling road rules than did the non-commuter group. When it comes to support for road rules, bicycle riders were often (but not always) less likely to support rules that place requirements on bicycle riders, but more likely to support rules which place the onus for action on other road user groups. They were also more likely to support rules that remove restrictions on bicycle riders. Similar trends were often observed with the commuter bicycle rider group when compared with non-commuters.



Among the items which were not current rules, the highest levels of support were observed for the following three rules:

- Drivers of vehicles leaving a one metre space between the vehicle and the bicycle riders when overtaking bicycle riders
- Allowing a rider aged 12 to 17 years to ride on the footpath if riding with a bicycle rider aged under 12
- Allowing bicycle riders who are carrying a child under the age of ten in a child seat or a trailer to ride on the footpath

There was considerable confusion among participants as to whether these are current road rules and are flagged for further attention as possible candidates for new or changed road rules.

There were some significant differences between the male and female participants in their knowledge and support of road rules. Where there were differences, it was usually the male bicycle riders who had better knowledge of rules than female bicycle riders. In contrast, where the differences in support for rules were significant, female bicycle riders were often more likely to offer support for road rules that apply to bicycle riders than were male bicycle riders. It is possible that because male bicycle riders were more likely to be commuters that these results reflect commuter versus non-commuter trends. Likewise the bicycle riders from inner Melbourne tended to have better road rule knowledge but were less supportive of rules that made requirements of bicycle riders, probably reflecting the above trends related to commuter bicycle riders who were most likely to be inner Melbourne residents.

## 5.4 Sources of road rule information

Participants were asked to indicate the resources they had referred to in the last 12 months to find information about cycling related road rules. Participants could select as many options as applicable. The list of resources included a range of organisations (with the accompanying website address) and publications.

The results from the survey showed that around 70 per cent of bicycle riders had referred to cycling related road rule information in the last year. Fewer than half of other road users had done so. Bicycle Network, VicRoads and Cycling Victoria were cited most often as the sources consulted for road rule information.

Undoubtedly these are important resources, and there is benefit for VicRoads in working with cycling member organisations to assist with communications to bicycle riders. However, it should be noted that these results may have been affected by the way in which participants were recruited into the study. VicRoads and networks of cycling organisations were primarily used to promote participation in the survey.

As the Victoria's roads authority, responsible for road rules and related legislation, it is not surprising that VicRoads is recognised as a key information source (especially for those who do not cycle) and therefore is best placed to make sure road rules information is easy to find, clear and comprehensive.

Many other road users did not seek out cycling related road rule information, and because other road users had less accurate knowledge around cycling related road rules, consideration should be

given to how to best inform and educate those who are not proactive in seeking out the most relevant information.

## 5.5 Perceptions about safety and barriers to bicycle riding

While judging the level of community understanding of road rules was the primary purpose of the survey, a number of additional questions were asked to explore briefly the issue of bicycle riding safety and the barriers to bicycle riding.

Overall, the results showed that the participants did not view bicycle riding in Victoria to be safe. Bicycle riders were less likely to perceive bicycle riding to be safe than were other road users. When asked to explain the reasons for this the main concerns were:

- Negative attitudes and behaviour of motorists towards bicycle riders
- The lack of dedicated bicycle riding infrastructure
- Problems with road design or characteristics of the road
- General community awareness of bicycle riding
- The risk of 'car-dooring'.

Road rules around bicycle riding were thought to be poorly understood by 8 per cent of bicycle riders and 10 per cent of other road users, ranking sixth among the concerns of bicycle riders and fourth among the concerns of drivers. While clarifying the road rules around bicycle riding may assist in increasing the perceptions of safety, the participants' main concerns related to other issues.

Dealing with these other issues is more likely to impact on the perceptions of safety than is improving the awareness of road rules. This finding may be helpful in informing other actions under *Victoria's Cycling Strategy* (Victorian Government, 2012a). However, the most frequently cited issues are neither quick nor easy to fix; changing attitudes is a long term prospect and infrastructure requires significant investment. Exploring the impact of recent changes to rules related to car dooring and communicating relevant information to the community could be considered. It has the potential to impact on perceptions of safety which was the fifth most frequently cited problem among bicycle riders.

Participants also indicated that there are significant barriers to bicycle riding in Victoria, bicycle riders felt this more than other road users, and commuter bicycle riders more so than non-commuter bicycle riders. Among the response options provided the most common barriers cited (by both bicycle riders and other road users) were the lack of respect shown to bicycle riders from others and the lack of bicycle riding infrastructure. The third most frequent response among bicycle riders was the lack of road rule knowledge among other road users. Bicycle riders not following road rules was also frequently mentioned by other road users.

These responses indicate that the knowledge of and adherence to road rules contributes to making bicycle riding an attractive and viable form of transport in Victoria. A substantial proportion (around 20%) of the sample listed barriers to bicycle riding in the 'other (specify)' free text response option. The most frequent response mentioned in the free text was the issue of mandatory helmet wearing, by about 5 per cent of the total bicycle rider sample. While the frequency of this unprompted response should not be compared to the frequencies of the barriers selected from the provided list (prompted responses), this is quite a small proportion and does not present as being a widespread barrier to bicycle riding.

As outlined earlier, there were a number of road rules which were not well understood. It may be that better education about some of these road rules has the potential to not only contribute to increased safety but also to make bicycle riding a more attractive form of transport.

Clearly, the results show that education about road rules alone will not address all concerns and that improving the relationship and respect between bicycle riders and other road users, and expanding dedicated bicycle riding infrastructure, are also likely to contribute to perceptions of increased safety and fewer barriers to bicycle riding.

## 5.6 Summary of main findings from the road user survey

### 5.6.1 Understanding of road rules

Participants had good understanding and support of the rules that require a bicycle to be fitted with a bell or other warning device and require bicycle lights to be used at night or in dangerous weather. Other rules regarding bicycle riding equipment were less well understood and generally less likely to be supported, although the level of support for the rule that prohibits the use of a handheld mobile phone was well supported despite it being less well known.

Knowledge that children under the age of 12 years are permitted to ride on the footpath was good, and this was also well supported. It was also well known that bicycle riders of all ages are not allowed to ride on the footpath but this was supported by only half of the participants. There was some confusion in the knowledge of other rules relating to the use of the footpath, and bicycle and shared paths. The current rules relating to use of paths tended to gain a higher level of support than the question relating to behaviours that were not rules. However, two of the 'non-rules' (allowing 12-17 years old to ride on the footpath when accompanying a younger bicycle rider and allowing bicycle riders carrying a child in a child seat or trailer to ride on the footpath) attracted higher levels of support. These rules are flagged for further consideration for change.

A number of rules related to use of on-road space. The understanding that drivers cannot use bicycle boxes was good and this was generally supported. Most participants were aware that motorcycles are not permitted to use bicycle lanes and allowing this was not supported by the participants. The majority of participants were aware that drivers of motor vehicles can enter bicycle lanes, although there was some confusion about this. Prohibiting drivers' entry into bicycle lanes was not supported.

There was some confusion among participants as to whether drivers must leave a space of one metre when passing bicycle riders. The vast majority of participants thought this should be a rule; of all the items that are not currently rules this item gained the most support. This rule is flagged for further consideration for change.

When asked about the rules relating to traffic signs and signals the vast majority of participants were aware of the obligation of bicycle riders to obey all signs and signals. This was also supported by all participants; there did not appear to be demand for allowing bicycle riders to treat some signals, signs or crossings as give way signs, by slowing and then proceeding when safe to do so.

Rules relating to bicycle riders travelling on the left side of a left turning vehicle were not well understood. However, while the survey data suggests support for the status quo, and additional communication about these rules is recommended, these rules and related rules are flagged for further consideration and review, to be discussed in the next section.

Rules allowing bicycle riders to make a hook turn to turn right at an intersection and to turn right from the left lane of a multi-lane roundabout were not well understood by participants, but were generally supported.

There was a good level of understanding and clear support for the status quo regarding the rules about bicycle riders stopping at the rear of stopped trams.

The majority of participants were aware that bicycle riders can ride two abreast, but were less accurate in their understanding of the rules relating to bicycle riders passing others and how far apart they are permitted to ride when travelling beside each other. Current rules around bicycle riders riding beside each other were supported by the majority. When asked if they supported the idea that riders should only be permitted to ride single file this was very unpopular among bicycle riders but supported by half of the drivers. If this were to be made a rule there would be significant resistance to it. Nevertheless these rules have been flagged for further consideration in the next section.

### **5.6.2 Road rule resources**

Bicycle riders tend to use Bicycle Network, VicRoads and Cycling Victoria as resources for cycling related road rule information. The majority of bicycle riders had looked for cycling related road rule information in the last 12 months. While drivers were less likely to seek it out, VicRoads was the main information source for this group and was identified as the most suitable source to be used by drivers should they wish to seek this information.

### **5.6.3 Safety and barriers**

Participants, especially bicycle riders, did not view bicycle riding in Victoria to be safe. The main problems were thought to be:

- the negative attitudes and behaviour of motorists to bicycle riders
- a lack of bicycle riding infrastructure
- problems with the road design or characteristics
- a lack of general community awareness of bicycle riding
- the risk of car dooring.

The misunderstanding of road rules was mentioned less frequently as a contributor to the safety problem.

Participants agreed that there are significant barriers to bicycle riding in Victoria. The main barriers were thought to be the lack of respect shown to bicycle riders and the lack of bicycle riding infrastructure. Lack of road rule knowledge was also thought to be a barrier.

## 5.7 Conclusions

From the survey results the following rules were identified as the strongest candidates for change. However, this survey data along with a host of other information including stakeholder views, crash data and other literature need to be considered before any changes are recommended. The rules for consideration are:

- drivers allowing bicycle riders minimum space when overtaking
- allowing 12-17 year old bicycle riders to travel on the footpath when riding with a younger bicycle rider
- allowing bicycle riders carrying or towing a child aged under 10 years to ride on the footpath.
- making riding two-abreast conditional under certain circumstances
- no passing or overtaking to the left of a driver turning and indicating to turn left. Also of interest is how this rule relates and possibly conflicts with other road rules.

The rules which showed a lack of knowledge or seemed to cause significant confusion, and therefore could be considered for clarification, were the rules around:

- left turning vehicles
- bicycle riders turning right at intersections (i.e. hook turns) and roundabouts
- riding in and exiting roundabouts
- riding on footpaths and shared paths
- the use of bicycle lights (i.e. mounting of and dazzling others).

Working with organisations who have existing relationships with bicycle riders (Bicycle Network and Cycling Victoria) may help in getting relevant safety and rule related information to bicycle riders.

As a key source of bicycle riding information for drivers, VicRoads needs to ensure that it's cycling related information is communicated effectively.



## SECTION 6: DISCUSSION

Having conducted a literature review, crash analysis, and stakeholder and community consultation, a series of rules were identified for review as part of this project. A number of other rules were also identified when reviewing the legislation more closely.

Each of these rules was examined using the available data and information and a recommendation given about whether any changes should be made to the rule.

A summary of the rules and the recommendations is included in Table 17.

It should be noted that there are many other road rules that apply to bicycle riders that are not listed in this table. They are best described as general rules that may apply to other road users as well. These were examined as part of this review and only those identified as having a particular relevance to this review were included.

In reviewing the rules and making recommendations, it was important to consider a number of factors:

- Stakeholder and community consultation was not considered to be a referendum to identify which rules should be changed. They were important in identifying rules that need to be examined but popularity was not a factor in making recommendations.
- The reasons why the rules were identified, coupled with safety, road use and bicycle riding enabling/inhibiting factors were considered when making final recommendations.
- Identifying the level of understanding of certain rules was important. Even though the intent behind a rule may be sound, if road users were unaware or misunderstood a rule, this helped to guide final recommendations.

After reviewing the rules, recommendations were categorised into four main categories:

- No changes or further action recommended.
- Change to the rule recommended.
- A potential change to the rule may be beneficial, but further investigation is needed to identify the impacts of a change on all road users
- No change to the rule, but better education and communication about the rule recommended.

Except for the rules where no change or further action is recommended, the rules classified under these categories are discussed in more detail in the Sections 6.1 to 6.3.



TABLE 17. SUMMARY OF THE RULES REVIEWED IN THIS PROJECT AND RECOMMENDED ACTION

Road rule ref.	Road rule title	Why was it included in the review? <sup>13</sup>	Generally, what is the rule about? <sup>14</sup>	Other supporting information	What is the Recommendation?
Road Safety Road Rules 2009					
15	What is a vehicle	<ul style="list-style-type: none"> <li>Specific reference to bicycle in the rule</li> </ul>	Definition of a vehicle to include bicycle	N/A	<ul style="list-style-type: none"> <li>No change</li> <li>No action</li> </ul>
17	Who is a rider	<ul style="list-style-type: none"> <li>Specific reference to bicycle in the rule</li> </ul>	Defining rider to include a bicycle rider	N/A	<ul style="list-style-type: none"> <li>No change</li> <li>No action</li> </ul>
27	Starting a left turn from a road (except a multi-lane road)	<ul style="list-style-type: none"> <li>Specific reference to bicycle in the rule</li> <li>Included in ABC review</li> </ul>	Requires drivers and riders to turn left from as far to the left of the road as possible.	N/A	<ul style="list-style-type: none"> <li>No change</li> <li>No action</li> </ul>
28	Starting a left turn from a multi-lane road	<ul style="list-style-type: none"> <li>Specific reference to bicycle in the rule</li> </ul>	Requires drivers and riders on a multilane road to turn left from the left lane of the road. In a bicycle box the rider must turn from the part of the box that is directly in front of the left most lane.	Stakeholder consultation highlighted that the requirement to turn from the left most lane, means that if a bicycle lane is present, drivers must turn from this lane. If they turn from the left most driving lane in this situation, they are breaking the rules. See also RR 153 and RR 158.	<ul style="list-style-type: none"> <li>No change</li> <li>Seek further clarification as to whether a bicycle lane is considered to be the left most lane for the purposes of this rule and establish whether this is the true intent of the rule.</li> <li>Better education of rule required</li> </ul>

<sup>13</sup> There may be more than one source identified that provided justification for including a rule in the review. Please note that the reason for inclusion may not be the same from each source listed.

<sup>14</sup> This is a general description about the rule. It is not a copy of what is written in the legislation and is not a comprehensive statement of the rule. It should not be used to inform or provide advice about the rules. For details about these rules and the requirements of road users please refer to the corresponding rule number in the appropriate legislation documents.

Road rule ref.	Road rule title	Why was it included in the review? <sup>13</sup>	Generally, what is the rule about? <sup>14</sup>	Other supporting information	What is the Recommendation?
29	Making a left turn as indicated by a road marking	<ul style="list-style-type: none"> <li>• Raised in stakeholder consultation</li> </ul>	If there are road markings which show how a turn should be made at an intersection, drivers and riders should make the turn according to those markings.	Stakeholder consultation suggested that riders should be able to ignore these markings and use these lanes to ride straight through an intersection if they want. The rationale is that they don't have to undertake risky lane changes if they are already at the far left of the road. See Table 12, p.37	<ul style="list-style-type: none"> <li>• No change</li> <li>• No action</li> <li>• The rationale is that sometimes there are more than one left turn lane or the second one is a straight through or left turn lane. There is potential for confusion which would cause an increased risk of crashing.</li> </ul>
31	Starting a right turn from a road (except a multilane road)	<ul style="list-style-type: none"> <li>• Included in ABC review</li> <li>• Specific reference to bicycle in the rule</li> </ul>	Requires drivers and riders to turn right from the left of and as near as possible to the dividing line or median strip.	N/A	<ul style="list-style-type: none"> <li>• No change</li> <li>• No action</li> </ul>
32	Starting a right turn from a multi-lane road	<ul style="list-style-type: none"> <li>• Specific reference to bicycle in the rule</li> </ul>	Requires drivers and riders on a multilane road to turn right from the right lane of the road. In a bicycle box the rider must turn from the part of the box that is directly in front of the right marked lane.	N/A	<ul style="list-style-type: none"> <li>• No change</li> <li>• No action</li> </ul>
35	Optional hook turn by a bicycle rider	<ul style="list-style-type: none"> <li>• Raised in community consultation</li> <li>• Specific reference to bicycle in the rule</li> <li>• There is a potential link to most common crash type - DCA 121 (see Appendix A for DCA definitions).</li> </ul>	Bicycle riders can make an optional hook turn at intersections.	Poorly understood but supported by road users. See Section 5.3.5.2	<ul style="list-style-type: none"> <li>• No change</li> <li>• Better education of rule required</li> </ul>
36	Bicycle rider making a hook turn contrary to no hook turn by bicycles sign	<ul style="list-style-type: none"> <li>• Specific reference to bicycle in the rule</li> </ul>	Bicycle riders must not disobey a 'no hook turn by bicycle' sign.	N/A	<ul style="list-style-type: none"> <li>• No change</li> <li>• No action</li> </ul>

Road rule ref.	Road rule title	Why was it included in the review? <sup>13</sup>	Generally, what is the rule about? <sup>14</sup>	Other supporting information	What is the Recommendation?
59	Proceeding through a red traffic light	<ul style="list-style-type: none"> <li>• Raised in stakeholder consultation</li> <li>• Raised in community consultation</li> </ul>	If traffic lights at an intersection or a crossing are showing red, the driver must not enter the intersection or crossing. If there is a 'left turn on red after stopping' sign, the driver may turn left after stopping.	<p>Stakeholder consultation suggested that bicycle riders should be allowed to treat signalised intersections as if there is a 'left turn on red after stopping' sign. See Section 4.3.4.2.</p> <p>Due to the additional risk to bicycle riders and pedestrians crossing the street into which the bicycle riders are turning, this suggestion is not supported.</p> <p>It was well understood and supported that bicycle riders must stop at red signals and it was well supported. See Section 5.3.4.</p>	<ul style="list-style-type: none"> <li>• No change</li> <li>• No action</li> </ul>
60A	Proceeding through a bicycle storage area before a red traffic light or arrow	<ul style="list-style-type: none"> <li>• Specific reference to bicycle in the rule</li> <li>• Raised in community consultation</li> </ul>	Drivers can't enter a bicycle box when faced with a red traffic light or arrow.	Majority of people understand rules around bicycle boxes, although it could be improved. Support for these rules is high. See Section 5.3.3.2.	<ul style="list-style-type: none"> <li>• No change</li> <li>• Drivers should be reminded of this requirement in communication, however because the rule is well understood it should not be a primary focus of any education initiatives.</li> </ul>

Road rule ref.	Road rule title	Why was it included in the review? <sup>13</sup>	Generally, what is the rule about? <sup>14</sup>	Other supporting information	What is the Recommendation?
62	Giving way when turning at an intersection with traffic lights	<ul style="list-style-type: none"> <li>• Included in ABC review</li> <li>• Included in CARRS-Q review</li> </ul>	When turning at an intersection drivers and riders must give way to other vehicles and any pedestrians crossing the road they are entering.	Rule doesn't provide any priority for bicycles crossing roads at signalised bicycle crossings. Currently drivers are required to give way to pedestrians who are crossing the road the driver is turning into at controlled and uncontrolled intersections, but similar priorities are not ascribed to bicycle riders. This is particularly an issue for riders crossing a road with a green bicycle crossing light. The intent is that the rider should have right of way if the rider is riding across the crossing (as per RR 260), but this rule does not oblige the driver to give way to the rider unless they are walking their bike across the crossing.	<ul style="list-style-type: none"> <li>• Change required.</li> <li>• See Section 6.1.1.</li> </ul>

Road rule ref.	Road rule title	Why was it included in the review? <sup>13</sup>	Generally, what is the rule about? <sup>14</sup>	Other supporting information	What is the Recommendation?
65	Giving way at a marked foot crossing (except at an intersection) with a flashing yellow traffic light	<ul style="list-style-type: none"> <li>Included in ABC review</li> </ul>	A driver approaching a marked crossing with flashing yellow traffic light must give way to any pedestrians on the crossing.	ABC recommended that this rule be extended to give riders riding across a marked foot crossing the same rights as pedestrians.	<ul style="list-style-type: none"> <li>No change</li> <li>No action</li> <li>Given that there are safety reasons why certain riders are allowed to ride on a footpath (i.e. children with limited cognitive and hazard perception skills), it would be safer for these riders to dismount and walk the bicycle across the road. They are then classified as pedestrians and therefore are already covered under this rule.</li> </ul>
67	Stopping and giving way at a stop sign or stop line at an intersection without traffic lights	<ul style="list-style-type: none"> <li>Raised in stakeholder consultation</li> <li>Raised in community consultation</li> <li>Included in ABC review</li> <li>Included in CARRS-Q review</li> <li>There is a potential link to common crash types - DCA 110, 113 &amp; 116 (see Appendix A for DCA definitions).</li> </ul>	A driver or rider approaching a stop sign must stop at the stop line and give way.	<p>Raised in stakeholder consultation that riders should be allowed to treat a stop sign like a Give Way sign and not come to a complete stop.</p> <p>There is good understanding that bicycle riders must stop at a stop sign or signal and a high level of support from bicycle riders and other road users. See Section 5.3.4.</p>	<ul style="list-style-type: none"> <li>No change</li> <li>Riders should be reminded of this requirement in communication, however because the rule is well understood it should not be a primary focus of any education initiatives.</li> </ul>

Road rule ref.	Road rule title	Why was it included in the review? <sup>13</sup>	Generally, what is the rule about? <sup>14</sup>	Other supporting information	What is the Recommendation?
68	Stopping and giving way at a stop sign or stop line at other places	<ul style="list-style-type: none"> <li>• Raised in stakeholder consultation</li> <li>• Raised in community consultation</li> <li>• Included in CARRS-Q review</li> <li>• There is a potential link to common crash types - DCA 110, 113 &amp; 116 (see Appendix A for DCA definitions).</li> </ul>	A driver or rider approaching a stop sign must stop at the stop line and give way.	<p>Raised in stakeholder consultation that riders should be allowed to treat a stop sign like a Give Way sign and not come to a complete stop.</p> <p>There is good understanding that bicycle riders must stop at a stop sign or signal and a high level of support from bicycle riders and other road users. See Section 5.3.4.</p>	<ul style="list-style-type: none"> <li>• No change</li> <li>• Riders should be reminded of this requirement in communication, however because the rule is well understood it should not be a primary focus of any education initiatives.</li> </ul>
69(3)	Giving way at a give way sign or give way line at an intersection (except a roundabout)	<ul style="list-style-type: none"> <li>• Included in ABC review</li> <li>• Included in CARRS-Q review</li> </ul>	A driver at an intersection with a give way sign must give way to any pedestrian at or near the intersection who is crossing the road the driver is entering.	<p>ABC and CARRS-Q recommended that this rule be extended to give riders riding on the footpath the same rights as pedestrians. This makes sense in Queensland from a CARRS-Q perspective because all bicycle riders can ride on the footpath there. It does not have the same relevance in Victoria.</p>	<ul style="list-style-type: none"> <li>• No change</li> <li>• No action</li> <li>• Given that there are safety reasons why certain riders are allowed to ride on a footpath (i.e. children with limited cognitive and hazard perception skills), it would be safer for these riders to dismount and walk the bicycle across the road. They are then classified as pedestrians and therefore are already covered under this rule.</li> </ul>

Road rule ref.	Road rule title	Why was it included in the review? <sup>13</sup>	Generally, what is the rule about? <sup>14</sup>	Other supporting information	What is the Recommendation?
72(5)	Giving way at an intersection (except a T-intersection or roundabout)	<ul style="list-style-type: none"> <li>Included in ABC review</li> <li>Included in CARRS-Q review</li> </ul>	A driver at an intersection without traffic control must give way to any pedestrian at or near the intersection who is crossing the road the driver is entering.	ABC and CARRS-Q recommended that this rule be extended to give riders riding on the footpath the same rights as pedestrians. This makes sense in Queensland from a CARRS-Q perspective because all bicycle riders can ride on the footpath there. It does not have the same relevance in Victoria	<ul style="list-style-type: none"> <li>No change</li> <li>No action</li> <li>Given that there are safety reasons why certain riders are allowed to ride on a footpath (i.e. children with limited cognitive and hazard perception skills), it would be safer for these riders to dismount and walk the bicycle across the road. They are then classified as pedestrians and therefore are already covered under this rule.</li> </ul>
73	Giving way at a T-intersection	<ul style="list-style-type: none"> <li>Included in ABC review</li> <li>Included in CARRS-Q review</li> </ul>	A driver at a T intersection without traffic control must give way to any pedestrian at or near the intersection who is crossing the road the driver is entering.	ABC and CARRS-Q recommended that this rule be extended to give riders riding on the footpath the same rights as pedestrians. This makes sense in Queensland from a CARRS-Q perspective because all bicycle riders can ride on the footpath there. It does not have the same relevance in Victoria.	<ul style="list-style-type: none"> <li>No change</li> <li>No action</li> <li>Given that there are safety reasons why certain riders are allowed to ride on a footpath (i.e. children with limited cognitive and hazard perception skills), it would be safer for these riders to dismount and walk the bicycle across the road. They are then classified as pedestrians and therefore are already covered under this rule.</li> </ul>



Road rule ref.	Road rule title	Why was it included in the review? <sup>13</sup>	Generally, what is the rule about? <sup>14</sup>	Other supporting information	What is the Recommendation?
88(2)	Left turn signs	<ul style="list-style-type: none"> <li>• Raised in stakeholder consultation</li> </ul>	If there is a 'left lane must turn left' sign at an intersection, drivers in the left lane must turn left at the intersection.	Stakeholder consultation suggested that riders should be able to ignore these signs and to use these lanes to ride straight through an intersection if they want. The rationale is that they don't have to undertake risky lane changes if they are already at the far left of the road. See Table 12, p.37	<ul style="list-style-type: none"> <li>• No change</li> <li>• No action</li> <li>• Changing the rule creates potential for confusion given that different rules apply to different road users. This could cause an increased risk of crashing.</li> </ul>
92	Traffic lane arrows	<ul style="list-style-type: none"> <li>• Raised in stakeholder consultation</li> <li>• Included in ABC review</li> </ul>	If a driver is driving in a marked lane at an intersection with traffic arrows applying to that lane they must travel in the direction of that arrow or if there are two arrows, one of those directions.	Stakeholder consultation suggested that riders should be able to ignore these arrows and to use these lanes to ride straight through an intersection if they want. The rationale is that they don't have to undertake risky lane changes if they are already at the far left of the road. See Table 12, p.37.	<ul style="list-style-type: none"> <li>• No change</li> <li>• No action</li> <li>• Changing the rule creates potential for confusion given that different rules apply to different road users. This could cause an increased risk of crashing.</li> </ul>
98	One-way signs	<ul style="list-style-type: none"> <li>• Raised in stakeholder consultation</li> </ul>	A driver must drive on a road only in the direction of a one-way sign	N/A	<ul style="list-style-type: none"> <li>• No change</li> <li>• No action</li> </ul>

Road rule ref.	Road rule title	Why was it included in the review? <sup>13</sup>	Generally, what is the rule about? <sup>14</sup>	Other supporting information	What is the Recommendation?
111	Entering a roundabout from a multi-lane road or a road with 2 or more lines of traffic travelling in the same direction	<ul style="list-style-type: none"> <li>• Raised in stakeholder consultation</li> <li>• Raised in community consultation</li> </ul>	The implication for riders is that they can turn right from the left lane of a multilane roundabout (drivers must do so from the right lane). In doing so riders must comply with rule 119 and give way to those exiting a roundabout.	Very few people understood or were aware of this rule and under half of people actually supported it. Confusion around this rule was raised in stakeholder consultation. The main criticism is the requirement of RR119 for riders to give way.	<ul style="list-style-type: none"> <li>• Needs further review to examine the safety aspects of this rule and reassess the reasons the rule was originally implemented in this way.</li> <li>• Education and communications about this rule is critical due to the confusion</li> <li>• See Section 6.2.1</li> </ul>
119	Giving way by the rider of a bicycle or animal to a vehicle leaving a roundabout	<ul style="list-style-type: none"> <li>• Raised in stakeholder consultation</li> <li>• Raised in community consultation</li> <li>• Included in ABC review</li> <li>• Included in CARRS-Q review</li> <li>• There is potentially a link to a common crash type - DCA 137 (see Appendix A for DCA definitions)</li> </ul>	A rider in the far left lane of a multilane roundabout must give way to any vehicle leaving the roundabout.	See RR 111	<ul style="list-style-type: none"> <li>• Needs further review.</li> <li>• Education and communications about this rule is critical due to the confusion</li> <li>• See Section 6.2.1</li> </ul>
141(2)	No overtaking etc. to the left of a vehicle	<ul style="list-style-type: none"> <li>• Raised in stakeholder consultation</li> <li>• Raised in community consultation</li> <li>• There is link to 7<sup>th</sup> most common crash type - DCA 137 (see Appendix A for DCA definitions)</li> </ul>	A bicycle rider must not ride past or overtake to the left of a vehicle turning left which is also giving a left change of direction signal.	Raised as a confusing rule in stakeholder consultation. A small majority of bicycle riders knew the rule and just under half of other road users. There was relatively strong support for the rule. See Section 5.3.5.1	<ul style="list-style-type: none"> <li>• Education and communications about this rule is critical due to the confusion.</li> <li>• Needs further review due to complications when examined next to other rules.</li> <li>• See Section 6.2.2 for further discussion.</li> </ul>

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144	Keeping a safe distance when overtaking	<ul style="list-style-type: none"> <li>• Raised in stakeholder consultation</li> <li>• Raised in community consultation</li> <li>• There is a potential link to common crash types - DCA 130 &amp; 133 (see Appendix A for DCA definitions).</li> </ul>	When overtaking drivers must keep a sufficient distance from the other vehicle to avoid a collision.	<p>Many advocate groups want to see a minimum passing distance specified when a motorist passes a bicycle rider.</p> <p>Many people already thought this was a rule. Bicycle riders strongly support it and a moderate majority of other road users support it.</p> <p>See Section 5.3.3.1.</p>	<ul style="list-style-type: none"> <li>• No change at this stage. However, monitor the trials in Queensland and ACT to see whether there is evidence of safety outcomes.</li> <li>• See Section 6.2.3</li> </ul>
150	Driving on or across a continuous white edge line	<ul style="list-style-type: none"> <li>• Included in ABC review</li> <li>• Included in CARRS-Q review</li> </ul>	Drivers must not drive on or over continuous white edge lines except under certain conditions. This does not apply to bicycles.	CARRS-Q raise the issue that because road shoulders end, there is a requirement for riders to merge with other traffic causing conflict.	<ul style="list-style-type: none"> <li>• No change</li> <li>• No action</li> </ul>
151	Riding a motor bike or bicycle alongside more than 1 other rider	<ul style="list-style-type: none"> <li>• Raised in stakeholder consultation</li> <li>• Raised in community consultation</li> </ul>	A rider cannot ride beside more than one other rider in a marked lane or on a non multilane road, unless overtaking.	<p>It was raised in consultation that it can be frustrating for drivers when riders ride two or more abreast. But under some circumstances there are safety benefits for riders.</p> <p>The majority of people understand the rule about riding 2 abreast, but there are differences in the level of support between road users.</p> <p>See Section 5.3.6.2.</p>	<ul style="list-style-type: none"> <li>• Consider changing the rule requiring riders to ride single file, in certain situations or prohibit riding 2 abreast at specific locations, e.g. through the use of a new regulatory sign</li> <li>• See Section 6.2.4.</li> <li>• This should be supported with communications.</li> </ul>

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153	Bicycle lanes	<ul style="list-style-type: none"> <li>• Raised in stakeholder consultation</li> <li>• Raised in community consultation</li> <li>• Included in ABC review</li> <li>• Included in CARRS-Q review</li> </ul>	A motorist must not drive in a bicycle lane, unless they are permitted to under RR 158.	There is a degree of mismatch between riders and drivers about the rules for using bicycle lanes. See Section 5.3.3.3.	<ul style="list-style-type: none"> <li>• No change</li> <li>• Due to the confusion, education and communications about this rule is recommended.</li> </ul>
154	Bus lanes	<ul style="list-style-type: none"> <li>• Raised in stakeholder consultation</li> </ul>	Unless drivers are the driver of a bus, they can't drive in a bus lane, unless otherwise permitted.	Stakeholder consultation raised the issue of allowing riders to ride in bus lanes under certain conditions. See Section 4.3.2.4.	<ul style="list-style-type: none"> <li>• Consider a change to this rule to allow bicycles to travel in bus lanes under certain conditions.</li> <li>• See discussion in Section 6.2.5.</li> </ul>
158	Exceptions to driving in special purpose lanes etc.	<ul style="list-style-type: none"> <li>• Specific reference to bicycle in the rule</li> </ul>	Rule outlines the exceptions to when other vehicles can use special purpose lanes.	See RR154	<ul style="list-style-type: none"> <li>• See RR154</li> <li>• This is particularly relevant to special purpose lanes on high speed roads, e.g. cycling on freeways, which is often allowed out of the metro area</li> </ul>
174	Stopping at or near bicycle crossing lights (except at an intersection)	<ul style="list-style-type: none"> <li>• Specific reference to bicycle in the rule</li> </ul>	Rules for drivers about stopping or parking near bicycle crossings	N/A	<ul style="list-style-type: none"> <li>• No change</li> <li>• No action</li> </ul>
178	Stopping in an emergency stopping lane	<ul style="list-style-type: none"> <li>• Specific reference to bicycle in the rule</li> </ul>	A driver must not stop in an emergency stopping lane except under certain conditions. The rule doesn't apply to bicycles.	N/A	<ul style="list-style-type: none"> <li>• No change</li> <li>• No action</li> </ul>
197	Stopping on a path, dividing strip or nature strip	<ul style="list-style-type: none"> <li>• Specific reference to bicycle in the rule</li> </ul>	Rule prevents drivers from stopping on a path, dividing strip or nature strip. The rule doesn't apply to bicycles.	N/A	<ul style="list-style-type: none"> <li>• No change</li> <li>• No action</li> </ul>

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198	Obstructing access to and from a footpath, driveway etc.	<ul style="list-style-type: none"> <li>• Raised in community consultation</li> <li>• Included in ABC review</li> </ul>	A driver must not stop on a road in a position that obstructs access to a footpath, bicycle path, or passageway.	The majority of people were unaware of this rule, but there was strong support for it.	<ul style="list-style-type: none"> <li>• No change</li> <li>• Communications to improve awareness of this rule should be conducted.</li> </ul>
219	Lights not to be used to dazzle other road users	<ul style="list-style-type: none"> <li>• Raised in stakeholder consultation</li> <li>• Raised in community consultation</li> </ul>	Drivers must not use lights which dazzle another road user. This rule doesn't apply to bicycles.	There was some confusion about whether this was a rule for bicycles or not, but there was support for it. See Section 4.3.1.5	<ul style="list-style-type: none"> <li>• No Change</li> <li>• Given the level of confusion about lighting better education about the use of lighting is required.</li> <li>• See Section 6.3.2.3.</li> </ul>
224	Using horns and similar warning devices	<ul style="list-style-type: none"> <li>• Raised in stakeholder communication</li> </ul>	Drivers and riders must not use a horn or similar warning device unless it is necessary to warn other road users or animals that they are approaching or to indicate their position.	Majority of people understood the requirement for a warning device and there was moderate (although majority) acceptance for it. Issues were raised about how they are used. See Section 4.3.1.2 See also RR 258.	<ul style="list-style-type: none"> <li>• No change</li> <li>• Undertake education and communications to riders about when to use a warning device and to others about why it is being used.</li> </ul>
239	Pedestrians on a bicycle path or separated footpath	<ul style="list-style-type: none"> <li>• Specific reference to bicycle in the rule</li> <li>• Included in ABC review</li> </ul>	Pedestrians are not allowed on bicycle path or bicycle section of separated footpath.	See RR 249.	<ul style="list-style-type: none"> <li>• No change</li> <li>• Communications to both riders and pedestrians about obligations on bike paths and separated footpaths required.</li> </ul>

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240	Wheeled recreational devices and toys not to be used on certain roads	<ul style="list-style-type: none"> <li>Raised in stakeholder consultation</li> </ul>	A person can't ride a wheeled recreational device or wheeled toy on a roads with a speed limit above 50 km/h	There was a suggestion from a stakeholder that bicycles be subject to similar rules and not be allowed to travel on roads above 60 km/h unless separated. This is considered to act as a barrier to riding and discourage sustainable transport.	<ul style="list-style-type: none"> <li>No change</li> <li>No action</li> </ul>
243	Travelling on rollerblades etc. on a bicycle path or separated footpath	<ul style="list-style-type: none"> <li>Specific reference to bicycle in the rule</li> </ul>	A person travelling on roller-skates/blades or wheeled recreational device on a bicycle path or section of separated path for bicycles, must keep out of the way of bicycles.	N/A	<ul style="list-style-type: none"> <li>No change</li> <li>No action</li> </ul>
245	Riding a bicycle	<ul style="list-style-type: none"> <li>Specific reference to bicycle in the rule</li> </ul>	While riding, riders must face forward, riding in the seat, with at least one hand on the handlebars.	Currently the Australian Road Rules Maintenance Group is looking at making an amendment to this rule to reflect common practice and allow cyclists to ride while standing on the pedals.	<ul style="list-style-type: none"> <li>No change</li> <li>No action and wait for outcomes of national decision.</li> </ul>

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246	Carrying people on a bicycle	<ul style="list-style-type: none"> <li>Specific reference to bicycle in the rule</li> </ul>	Riders shouldn't carry more passengers than the bicycle is equipped for and the passengers must sit in a seat designed for passengers.	When considered with RR 250 (riding on a footpath) and RR 257 (riding with a person in a bicycle trailer), if a child is being carried on a bicycle in a seat designed for the passenger by a rider 12 years or older, they are not permitted to ride on the footpath. See also RR 250 and RR 257.	<ul style="list-style-type: none"> <li>No change</li> <li>Change to be considered to RR 250 to allow a rider 16 years or older (in line with RR 257) to ride on a footpath if carrying a passenger (under the age of 10) in a seat designed for the passenger.</li> <li>See RR 250</li> </ul>
247	Riding in a bicycle lane on a road	<ul style="list-style-type: none"> <li>Raised in stakeholder consultation</li> <li>Raised in community consultation</li> <li>Specific reference to bicycle in the rule</li> </ul>	Riders must ride in a bicycle lane on a road if there is one available unless impracticable to do so.	Understanding of the rule is low, although generally supported by road users. See Section 5.3.3.3.	<ul style="list-style-type: none"> <li>No change</li> <li>Undertake education and communications to riders about requirement to use the lane and given useful examples of what 'impracticable' means.</li> </ul>
247A	Entering a bicycle storage area	<ul style="list-style-type: none"> <li>Specific reference to bicycle in the rule</li> </ul>	Riders are required to enter a bicycle box from a bicycle lane if possible.	N/A	<ul style="list-style-type: none"> <li>No change</li> <li>No action</li> </ul>
247B	Giving way while entering or in a bicycle storage area	<ul style="list-style-type: none"> <li>Specific reference to bicycle in the rule</li> <li>Included in ABC review</li> </ul>	Riders must give way to vehicles in the bicycle box they are about to enter	N/A	<ul style="list-style-type: none"> <li>No change</li> <li>No action</li> </ul>



Road rule ref.	Road rule title	Why was it included in the review? <sup>13</sup>	Generally, what is the rule about? <sup>14</sup>	Other supporting information	What is the Recommendation?
248	No riding across a road on a crossing	<ul style="list-style-type: none"> <li>• Raised in stakeholder consultation</li> <li>• Specific reference to bicycle in the rule</li> </ul>	A rider must not ride across a crossing unless there are bicycle crossing lights.	Bicycle riders are required to dismount and act as pedestrians. Some stakeholders claim that this affects the continuity of travel, especially when a bicycle or shared path crosses a road and there are no bicycle crossing lights. They would like to see riders allowed to ride across crossings. See Section 4.3.4.1	<ul style="list-style-type: none"> <li>• No change</li> <li>• No action</li> <li>• For the safety of pedestrians there should not be a blanket allowance for bicycles to ride across crossings. However, bicycle crossing lights should be installed at locations where bicycles should be allowed to cross, i.e. where there is continuation of bicycle infrastructure. Alternatively, in these situations, consideration could be given to developing a sign permitting riders to use pedestrian crossing at appropriate locations, e.g. Cyclists may use crossing sign.</li> </ul>
249	Riding on a separated footpath	<ul style="list-style-type: none"> <li>• Specific reference to bicycle in the rule</li> </ul>	Riders must not ride on the part of a separated path designated for pedestrians,	Obligations for sharing paths with pedestrians were not well understood. Less than half knew that they must keep left and give way to pedestrians. See Section 5.3.2.2 See also RR 239 in this table.	<ul style="list-style-type: none"> <li>• No change</li> <li>• Better education of riders and pedestrians about their obligations on separated footpaths is required.</li> </ul>

Road rule ref.	Road rule title	Why was it included in the review? <sup>13</sup>	Generally, what is the rule about? <sup>14</sup>	Other supporting information	What is the Recommendation?
250	Riding on a footpath or shared path	<ul style="list-style-type: none"> <li>• Raised in stakeholder consultation</li> <li>• Raised in community consultation</li> <li>• Specific reference to bicycle in the rule</li> <li>• Included in ABC review</li> </ul>	Bicycle riders 12 years or older can't ride on a footpath. Those aged 18 or older can if they are accompanying a child under 12 years.	Stakeholder consultation showed the tension around this issue with some stakeholders calling to increase the age to ride on a footpath to 16 years. On the other hand there was strong opposition to increasing levels of riding on footpaths. Community consultation showed footpath riding rules regarding under 12s were well understood and accepted. Extending the rule to all riders of all ages was not supported. There was uncertainty about whether the rule allowed 12-17 year olds to accompany under 12s on a footpath or not. Although there was reasonable acceptance of this being a rule. See Section 5.3.2.1	<ul style="list-style-type: none"> <li>• Consider change to include riders of any age being permitted to ride on the footpath if they are accompanying a child under the age of 12 years.</li> <li>• Consider a change to allow a rider 16 years or older (in line with RR 257) to ride on a footpath if carrying a passenger (under the age of 10) in a seat designed for the passenger.</li> <li>• Undertake communications to bicycle riders about the importance of giving priority to pedestrians and provide advice as to how to share with pedestrians.</li> <li>• Consider ways to better educate 12-16 year olds about road rules for the purposes of riding bicycles on the road prior to the commencement of the learning to drive process. See Section 6.2.6</li> </ul>
251	Riding to the left of oncoming bicycle riders on a path	<ul style="list-style-type: none"> <li>• Specific reference to bicycle in the rule</li> </ul>	Riders must keep to the left of oncoming riders on a path.	N/A	<ul style="list-style-type: none"> <li>• No change</li> <li>• No action</li> </ul>

Road rule ref.	Road rule title	Why was it included in the review? <sup>13</sup>	Generally, what is the rule about? <sup>14</sup>	Other supporting information	What is the Recommendation?
252	No bicycles signs and markings	<ul style="list-style-type: none"> <li>Specific reference to bicycle in the rule</li> </ul>	Riders must not ride where there are no bicycle signs or markings.	N/A	<ul style="list-style-type: none"> <li>No change</li> <li>No action</li> </ul>
253	Bicycle riders not to cause a traffic hazard	<ul style="list-style-type: none"> <li>Specific reference to bicycle in the rule</li> <li>Included in ABC review</li> </ul>	Riders must not cause a hazard by moving into the path of other road users.	ABC recommends change to include "unreasonably obstruct"	<ul style="list-style-type: none"> <li>No change</li> <li>No action</li> </ul>
254	Bicycles being towed etc.	<ul style="list-style-type: none"> <li>Specific reference to bicycle in the rule</li> </ul>	Riders must not be towed by another vehicle.	N/A	<ul style="list-style-type: none"> <li>No change</li> <li>No action</li> </ul>
255	Riding too close to the rear of a motor vehicle	<ul style="list-style-type: none"> <li>Specific reference to bicycle in the rule</li> </ul>	Riders should not ride too close to the rear of a moving vehicle	N/A	<ul style="list-style-type: none"> <li>No change</li> <li>No action</li> </ul>
256	Bicycle helmets	<ul style="list-style-type: none"> <li>Raised in stakeholder consultation</li> <li>Raised in community consultation</li> <li>Specific reference to bicycle in the rule</li> </ul>	Bicycle riders must wear an approved helmet.	Good understanding and high acceptance of rule. Low proportion who believe it is a barrier to riding. See Section 4.3.1.1	<ul style="list-style-type: none"> <li>No change</li> <li>No action</li> <li>The evidence of the safety benefits regarding helmet wearing is too strong to contemplate the repeal of this legislation. Bicycle riding stakeholders indicated that they would not support a repeal of helmet wearing legislation.</li> </ul>
257	Riding with a person on a bicycle trailer	<ul style="list-style-type: none"> <li>Raised in stakeholder consultation</li> <li>Raised in community consultation</li> <li>Specific reference to bicycle in the rule</li> <li>Recent change in rule in another jurisdiction</li> </ul>	Rule allows riders 16 years or older to tow a child under 10 years in a bicycle trailer. Currently they can't ride on a footpath.	Poor understanding of rule but high acceptance that they be allowed to ride on footpath. See Section 5.3.2.1 Currently the Australian Road Rules Maintenance Group is examining whether to remove the age restriction of 10 years from the rule.	<ul style="list-style-type: none"> <li>Change required.</li> <li>See Section 6.2.6 for discussion.</li> <li>Wait for the outcomes of the national decision regarding the removal of the age restriction.</li> </ul>

Road rule ref.	Road rule title	Why was it included in the review? <sup>13</sup>	Generally, what is the rule about? <sup>14</sup>	Other supporting information	What is the Recommendation?
258	Equipment on a bicycle	<ul style="list-style-type: none"> <li>• Raised in stakeholder consultation</li> <li>• Raised in community consultation</li> <li>• Specific reference to bicycle in the rule</li> </ul>	Riders must have an effective brake and a working warning device (e.g. horn or bell)	Majority of people understood the requirement for a warning device and there was moderate (although majority) acceptance for it. Issues raised about how they are used. See Section 4.3.1.2 See also RR 224.	<ul style="list-style-type: none"> <li>• No change</li> <li>• Undertake education and communications to riders about when to use a warning device and to others about why it is being used.</li> </ul>
259	Riding at night	<ul style="list-style-type: none"> <li>• Raised in stakeholder consultation</li> <li>• Raised in community consultation</li> <li>• Specific reference to bicycle in the rule</li> </ul>	Requirements to have front and rear lights which can be seen for 200m when riding at night or in hazardous conditions	High level of understanding and acceptance of rules. See Section 4.3.1.5. Issues raised around lights dazzling other road users. See RR 219 in this table. It was not well understood that lights must be visible for up to 200m (most thought it was 100m)	<ul style="list-style-type: none"> <li>• No change</li> <li>• Undertake education and communications to riders about how to avoid dazzling other road users with lights.</li> <li>• Undertake education to improve knowledge about the requirement for light to be seen at 200m.</li> </ul>
260	Stopping for a red bicycle crossing light	<ul style="list-style-type: none"> <li>• Specific reference to bicycle in the rule</li> </ul>	Riders must stop at a red bicycle crossing light	N/A	<ul style="list-style-type: none"> <li>• No change</li> <li>• No action</li> </ul>
261	Stopping for a yellow bicycle crossing light	<ul style="list-style-type: none"> <li>• Specific reference to bicycle in the rule</li> </ul>	A rider must stop if possible when there is a yellow bicycle crossing light	N/A	<ul style="list-style-type: none"> <li>• No change</li> <li>• No action</li> </ul>
262	Proceeding when bicycle crossing lights change to yellow or red	<ul style="list-style-type: none"> <li>• Specific reference to bicycle in the rule</li> </ul>	If the lights change from green while crossing, the rider must complete the crossing as quickly as possible.	Recently clarified in ARR 10th Amendment package	<ul style="list-style-type: none"> <li>• No change</li> <li>• No action</li> </ul>
269(3)	Opening doors and getting out of a vehicle etc.	<ul style="list-style-type: none"> <li>• Raised in stakeholder consultation</li> <li>• Raised in community consultation</li> <li>• Link to 3<sup>rd</sup> most common crash type - DCA 163 (see Appendix A for DCA definitions)</li> </ul>	Drivers and passengers must not cause a hazard to others by opening their vehicle doors.	Penalties were significantly increased for this offence in August 2012	<ul style="list-style-type: none"> <li>• No change</li> <li>• Continued enforcement and education about strategies for preventing 'car dooring' required.</li> </ul>

Road rule ref.	Road rule title	Why was it included in the review? <sup>13</sup>	Generally, what is the rule about? <sup>14</sup>	Other supporting information	What is the Recommendation?
288	Driving on a path	<ul style="list-style-type: none"> <li>Specific reference to bicycle in the rule</li> </ul>	Prohibits drivers from driving on a path, except if certain conditions are met. Rule excludes bicycle riders which are covered elsewhere.	N/A	<ul style="list-style-type: none"> <li>No change</li> <li>No action</li> </ul>
300	Use of mobile phones	<ul style="list-style-type: none"> <li>Raised in stakeholder consultation</li> </ul>	A driver or rider of a vehicle must not use a hand held phone while driving.	It was raised in stakeholder consultation that this rule is difficult to enforce with having to take the offender to court. See Section 4.3.1.3	<ul style="list-style-type: none"> <li>No change to the rule</li> <li>Consider change to introduce a separate infringement notice for riders.</li> </ul>
301	Leading an animal while in or on a vehicle	<ul style="list-style-type: none"> <li>Specific reference to bicycle in the rule</li> </ul>	A rider must not lead an animal while riding a bicycle	N/A	<ul style="list-style-type: none"> <li>No change</li> <li>No action</li> </ul>
405	Vehicles must not be driven with an empty bicycle carrier attached	<ul style="list-style-type: none"> <li>Specific reference to bicycle in the rule</li> </ul>	A vehicle must not be driven with an empty bicycle carrier.	This rule is an additional rule included in the Victorian version of the road rules. It could be argued that this acts as a potential barrier if a driver has to make trips in the car after unloading the carrier, before having to load it again. It is understood that the reason for the rule is to avoid obstruction of number plates and not to cause a hazard to other road users.	<ul style="list-style-type: none"> <li>Consider reviewing this rule with the view to removing it.</li> <li>See Section 6.2.7.</li> </ul>

Road rule ref.	Road rule title	Why was it included in the review? <sup>15</sup>	Generally, what is the rule about? <sup>16</sup>	Other supporting information	What is the Recommendation?
Road Safety Act 1986					
Part 2, Division 2	Registration	<ul style="list-style-type: none"> <li>• Raised in stakeholder consultation</li> <li>• Raised in community consultation</li> </ul>	This section outlines the purposes of registration and that motor vehicles must be registered to be used on the roads. Bicycles are not subject to registration.	It is often debated, whether bicycles should be registered as cars are. Queensland Parliamentary inquiry considered it not to be practical, economical, nor beneficial and would serve as a barrier for current riders to continue riding and others to take it up.	<ul style="list-style-type: none"> <li>• No change</li> <li>• No action</li> </ul>
Part 3	Licensing of drivers	<ul style="list-style-type: none"> <li>• Raised in stakeholder consultation</li> <li>• Raised in community consultation</li> </ul>	This section outlines the purposes of licensing and that those using a motor vehicles on a road must be licensed. Bicycle riders are not subject to licensing.	It is often debated, whether bicycles riders should be licensed as car drivers are. It is not practical, economical or beneficial.	<ul style="list-style-type: none"> <li>• No change</li> <li>• No action</li> </ul>

<sup>15</sup> There may be more than one source identified that provided justification for including a rule in the review. Please note that the reason for inclusion may not be the same from each source listed.

<sup>16</sup> This is a general description about the rule. It is not a copy of what is written in the legislation and is not a comprehensive statement of the rule. It should not be used to inform or provide advice about the rules. For details about these rules and the requirements of road users please refer to the corresponding rule number in the appropriate legislation documents.

Road rule ref.	Road rule title	Why was it included in the review? <sup>15</sup>	Generally, what is the rule about? <sup>16</sup>	Other supporting information	What is the Recommendation?
Section 99A	Conduct of works or activities on a highway	<ul style="list-style-type: none"> <li>• Raised in stakeholder consultation</li> </ul>	This section applies when conducting any non-road activity on a highway. A person must ensure that the works or non-road activities are conducted in a manner that is safe for road users and people engaged in carrying out the activities.	<p>It was raised in consultation that it is an unnecessarily onerous process to apply to hold a cycling event on the road.</p> <p>It was also raised that when road works are carried out there is not always adequate consideration given to the safe movement of bicycles through a roadworks site.</p>	<ul style="list-style-type: none"> <li>• Needs further review to see whether the system can be simplified and the current safety measures be retained or improved.</li> <li>• See Section 6.2.8</li> <li>• Review guidelines and policies around road work arrangements regarding the safe movement of bicycle riders.</li> </ul>
68A(1A)	Unauthorised use of freeway	<ul style="list-style-type: none"> <li>• Specific reference to bicycle in the section</li> </ul>	A bicycle rider must not ride on any part of a freeway other than where permitted.	N/A	<ul style="list-style-type: none"> <li>• No change</li> <li>• No action</li> </ul>
Transport (Compliance and Miscellaneous) Act 1983					
221ZE	Travelling in a place not intended for travel etc.	<ul style="list-style-type: none"> <li>• Specific reference to bicycle in the section</li> </ul>	A rider must not attach themselves to a rail or road vehicle.	N/A	<ul style="list-style-type: none"> <li>• No change</li> <li>• No action</li> </ul>



## 6.1 Rules recommended for change

This section outlines the rules which have been identified as having scope for change in Victoria following this review.

### 6.1.1 RR 62 - Giving way when turning at an intersection with traffic lights

Currently this rule says that when a driver is turning at an intersection with traffic lights they must give way to any pedestrian at or near the intersection who is crossing the road the driver is entering.

With the introduction of signalised bicycle crossings, there may be situations where a bicycle path or shared path intersects with another road. If there are bicycle crossing lights (RR 260-262), riders are not required to dismount to cross the road. In such cases they are no longer classified as pedestrians and therefore technically vehicles turning at the intersection and travelling over the crossing are not required to give way to bicycle riders.

#### 6.1.1.1 RECOMMENDATION

RR 62 be changed to require drivers turning at an intersection with bicycle crossing lights to give way to bicycle riders crossing the road the driver is entering.

### 6.1.2 RR 300 - Use of mobile phones

As is the case for motorists, RR 300 does not allow bicycle riders to use a hand held mobile phone while riding.

This rule is moderately understood by bicycle riders (63.4%), and supported by 90.5 per cent of road users.

While there is room to increase the understanding of the rule, stakeholder communication revealed that it is difficult for Police to enforce, requiring them to take an offender to court to issue them with a penalty. Consequently, this offence is rarely pursued by Police.

Like with car drivers the incidence of mobile phone use by bicycle riders in bicycle crashes is unknown. It is possible it could play a part in many of the most common DCAs if the rider was distracted, but currently this can't be verified.

#### 6.1.2.1 RECOMMENDATION

Appropriate measures be put in place to allow Police to issue an on-the-spot infringement to bicycle riders who do not adhere to RR 300.

## 6.2 Rules that need further consideration with a view to change

This section outlines the rules which have also been identified as having scope for change in Victoria following this review. However, due to complexities in the rules, they require further review to either come up with an appropriate solution or to test a suite of possible solutions to ensure that they will achieve the desired outcome, i.e. improved understanding and compliance, improved safety.

#### **6.2.1 RR 111 - Entering a roundabout from a multi-lane road or a road with 2 or more lines of traffic travelling in the same direction, and RR 119 - Giving way by the rider of a bicycle or animal to a vehicle leaving a roundabout.**

The implication for riders in RR 111 is that they can turn right from the far left lane of a multilane roundabout (drivers must do so from the right lane). In doing so bicycle riders must comply with rule 119 and give way to any vehicle exiting the roundabout when riding in the:

- far left marked lane of a roundabout with two or more marked lanes, or
- far left line of traffic in a roundabout with room for two or more lines of traffic.

The community consultation showed that there was limited understanding about the rule (29.2%) allowing bicycle riders to turn right from the left lane in multi-lane roundabouts (RR 111), provided they give way to drivers exiting (RR 119). Furthermore, these requirements did not gain majority support (44.6%), not even from bicycle riders (45.5%). It is presumed that this lack of support from riders was due to the requirement to give way rather than the ability to turn right from the left lane.

The lack of knowledge and support for these rules needs to be addressed, by either changing the rules, clarifying them, and irrespective of any changes, better educating road users about them.

RR 119 was also flagged in both the ABC and CARRS-Q reviews.

CARRS-Q summarised the issue well. It pointed out that RR 119 would not be an issue if a bicycle rider was confident enough to make a right turn from the right lane of a roundabout. However, if a bicycle rider chooses to make a right turn at a roundabout from the left lane, as permitted in RR 111, they would be required to:

- make frequent shoulder checks to check for following vehicles that are exiting, and shoulder checks have been shown to affect the stability of the bicycle (Godthelp & Wouters, 1980, cited in Haworth, Schramm, Palk, & King, 2011a); and
- stop or slow down in the middle of the traffic lane to give way to exiting vehicles. The other vehicles (following the bicycle) may not expect this behaviour, i.e. a bicycle stopping (Haworth, Schramm, Palk, & King, 2011a).

##### **6.2.1.1 POSSIBLE SOLUTIONS**

Some possible solutions are:

1. Remove reference to rider of a bicycle in RR 111(6), RR 111(7) and RR 119. This would mean that bicycle riders would have to turn right from the right hand lane, as do other vehicles. This change would have a small impact considering the current rule is not well known, however the new requirement could be more intimidating for less experienced riders. Communications, would have to provide advice to riders about alternatives, such as dismounting and crossing the roundabout at crossing points as a pedestrian.
2. Removing reference to bicycle riders in RR 119. This means that bicycle riders are not required to give way to exiting vehicle when in the far left lane. This would then require other road users to give way to the bicycle rider. This could cause a danger to bicycle riders, as it

may be difficult to signal their intention to turn right, and this may be missed by one or several following vehicles, causing a conflict at the exit point. This rule change could work if motorists were only permitted to exit from the left lane. But as the Example 3 diagram in RR 111 (Office of the Chief Parliamentary Counsel, 2013c) shows, both lanes are permitted to exit at the various exit points. To make it otherwise would require lane changes to occur within the roundabout which would cause other conflict.

#### **6.2.1.2 RECOMMENDATION**

Some action needs to be taken to increase the understanding and acceptance of rules governing this scenario.

It is recommended that the impacts of changing the rules be investigated further, examining the likely safety impacts on bicycle riders by changing the rules and the impact on traffic flows through roundabouts. If a rule change in warranted Scenario 1 is recommended as the preferred option.

If a rule change cannot bring about benefits, an education and communications program is required to enhance understanding of this rule and rider and driver obligations in multi-lane roundabouts.

#### **6.2.2 RR 141(2) - No overtaking etc. to the left of a vehicle**

Community consultation showed a clear lack of clarity about the rules relating to riding on the left of a left turning vehicle which is indicating to turn left. Even though there is a mismatch between knowledge of the rules and general acceptance of the current rules, on its own the results of the survey do not provide a rationale for changing the rule.

However, because the rules are poorly understood by both riders and drivers, there is a high risk of driver or rider errors leading to injury. In fact DCA 133 - Left turn side swipe (see Section 3.2.4), contributes to 5.7 per cent of crashes involving bicycle riders and is the seventh most common crash type involving bicycle riders.

In the case of RR 141, it cannot be considered on its own. When looked at in parallel with other related rules it is possible to see why there is so much confusion regarding the rule. This confusion may be very difficult to address using communications on its own.

RR 141 needs to be considered along with:

- RR 27 - Starting a left turn from a road (except a multi-lane road)
- RR 28 - Starting a left turn from a multi-lane road
- RR 148 - Giving way when moving from one marked lane or line of traffic to another marked lane or line of traffic
- RR 153 - Bicycle lanes
- RR 158 - Exceptions to driving in special purpose lanes etc.

Confusion around RR141 may also be exacerbated by drivers' and riders' understanding of RR 148. When moving from one marked lane to another, this rule requires a driver to give way to any vehicle travelling in the same direction as the driver, who is in the marked lane that the driver is moving into.

A bicycle lane is a marked lane, and RR 153 allows drivers of motor vehicles to enter a bicycle lane and travel for up to 50 metres for various reasons including entering or leaving the road which involves turning.

The following scenarios illustrate how these five rules interact with one another and can be applied.

#### 6.2.2.1 SCENARIO 1

**Road type:** Not a multi-lane road, no bicycle lane

**Road users:** A motor vehicle and bicycle travelling in the same direction. Bicycle on the left.

**Action:** Motorist wants to turn left and is indicating to turn left at the intersection.

**Road user obligations<sup>17</sup>:**

- Under RR 27 the motorist is required to approach the intersection as close as practicable to the far left side of the road.
- Under RR 141(2) the bicycle rider must not drive past or overtake to the left of a vehicle that is turning left and indicating to turn left.

Here RR 141 seems clear. In summary, the motorist is indicating to turn left and under this scenario the bicycle rider must not ride past or overtake the vehicle as the motorist moves to the left side of the road to make the turn.

#### 6.2.2.2 SCENARIO 2

**Road type:** A multi-lane road, with a bicycle lane

**Road users:** A motor vehicle and bicycle travelling in the same direction. Bicycle on the left in the bicycle lane.

**Action:** Motorist wants to turn left and is indicating to turn left at the intersection.

**Road user obligations<sup>18</sup>:**

- Under RR 28 the motorist is required to approach and enter the intersection from the far left lane. The bicycle lane could be considered the far left lane.
- Under RR 153 and 158 the motorist is allowed to travel in the bicycle lane for up to 50 metres in order to make their turn. However they must give way to the bicycle rider when entering a bicycle lane.
- Yet under RR 141(2) the bicycle rider must not drive past or overtake to the left of a vehicle that is turning left and indicating to turn left.

Here RR 141 seems very unclear. Confusion now exists as to who should give way. There seems to be two conflicting rules saying each has to give way to the other. It is presumed that in the first movement when the vehicle is moving into the bicycle lane (RR 153 & 158), it must give way to the bicycle, but once the vehicle is in the bicycle lane the bicycle rider must not pass or overtake the motorist.

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<sup>17</sup> Please note that this is the author's interpretation of how the rules should be applied. It should not be taken as legal advice or used as evidence to attribute fault if a similar incident has occurred. Seek professional legal advice if required.

<sup>18</sup> Ibid.

An added complication was raised in stakeholder consultation. There was confusion about whether a bicycle lane is classified as the left most lane, in which case left turning vehicles would be required to turn from it according to RR 28. A bicycle lane is a 'special purpose lane' which is defined as 'a marked lane, or the part of a marked lane that is a bicycle lane' etc. Further clarification of this rule and how it applies to bicycle lanes is required. Currently the road user requirements are not clear.

#### 6.2.2.3 POSSIBLE SOLUTIONS

Through stakeholder and community consultation came the suggestion that RR 141(2) should be reversed and motorists should give way to bicycle riders when turning left or indicating to turn left. As expected this came from bicycle riders and groups, more so than motorists.

The main safety concern with this suggestion is that in some cases it is extremely difficult or impossible for the motorist to know if a bicycle rider is beside them when they want to turn. Heavy vehicles are a perfect example of this. It is presumed by the author that this is the reason RR 141(2) exists in its current form. Changing this rule could lead bicycle riders to rely on the rules to assume that they have been seen. However, even when assuming the best intentions of drivers to look out for riders, such a change in the rules would not necessarily improve the safety of riders.

On the other hand RR 153 and 158 already set a precedent for this change, by requiring motorists to give way to riders when entering a bicycle lane. So, it is not necessarily a stretch to extend that to all road environments. Of course the difference with a bicycle lane is that it potentially acts as a visual cue for motorists, alerting them to the possibility that riders may be nearby and to take extra caution.

There are three feasible changes that could improve the confusion around these rules:

1. Make it a requirement for motorists to give way to bicycle riders when changing lanes, turning left and indicating to turn left (RR 141).
2. Pending further clarification about whether a bicycle lane is classified as the left most marked lane, change RR 28, to exclude bicycle lanes, so that motorists turn from the 'normal' traffic lane, meaning that bicycle riders must not pass or overtake the vehicle and must allow a left turning vehicle to turn in all scenarios, as drivers will not be required to enter the bicycle lane to turn.
3. Make it a requirement for motorists to give way to bicycle riders when entering a bicycle lane (current rule), but also specifying that motorists must give way to bicycle riders when turning left on a road that has a marked bicycle lane. On roads without a marked bicycle lane, riders must give way to motorists as is currently the case in RR 141(2).

#### 6.2.2.4 RECOMMENDATION

It is recommended that a change be made to these rules to remove the current ambiguity. Given the complexities surrounding the interaction of these rules, further consultation is required between VicRoads, stakeholders and the Australian Road Rules Maintenance Group (ARRMG). This should include examining and clarifying whether a bicycle lane is or should be considered the left most lane where one exists. Pending further information solution 3 is proposed as the preferred approach.

It has been raised anecdotally and by some in the community consultation that there is potential confusion regarding the rules when it comes to drivers turning left and needing to enter a slip lane, while a bicycle rider wants to continue straight on the road. While the same rules apply here (although there are additional rules when driving on a slip lane, i.e. RR 69(2)(b); 69(3A)(b)), the layout and geometry of the slip lane may potentially be causing some uncertainty amongst road

users. As part of examining the rules regarding left turns, the requirements for making a turn and giving way when entering a slip lane should also be examined, with the view of clarifying these requirements for road users.

In the meantime, communications to road users about how to safely interact in these scenarios is recommended. This would include reminders to riders that it is difficult and sometime impossible for motorists to see riders and therefore they should be prepared to stop or give way, even if they have the right of way. Messages to motorists, should include being extra vigilant in looking out for riders and they should indicate their intentions to turn as far in advance as possible, giving riders more time to make decisions and take action. Drivers should also make sure that their indicators are in proper working order.

### **6.2.3 RR 144 - Keeping a safe distance when overtaking**

It is possible that failure to leave a safe distance when overtaking is involved in between 5.7-10.9 per cent of crashes involving bicycle riders. DCA 133 (5.7% of crashes) and DCA 130 (5.2% of crashes) are the eighth and ninth most common crash types involving a bicycle rider.

Stakeholder consultation indicated that many advocate groups want to see a minimum overtaking distance introduced when motorists pass a bicycle rider. Equally there were some stakeholders who opposed it, citing difficulties in enforcement and also putting motorists in a position such that if they wish to pass a bicycle rider they have no choice but to break a law. For example on single lane roads with a continuous or double centre lines, drivers will either have to pass too closely to the rider or cross the centre lines to comply.

Community consultation indicated that many people already thought it was a rule, which indicates that the public education campaign from the Amy Gillett Foundation recommending a minimum passing distance has had some effect. The community consultation also revealed that there is strong support for the rule from bicycle riders, but only moderate support from other road users.

In the time since this review commenced two Australian jurisdictions have introduced a trial of minimum overtaking laws - Queensland and the ACT. Also, the South Australian Government has recently indicated that it will introduce such laws.

The Queensland trial commenced in April 2014 and is set to run for two years. An evaluation of the two year trial will be carried out, to see whether there are any practical issues with implementing such a rule and what effects it has had on safety.

One of the changes implemented in Queensland for the trial was allowing motorists to cross continuous or double centre lines, provided the driver has a clear view of any approaching traffic and it is safe to do so, when passing a bicycle rider on a single lane road. This is to enable motorists to comply with the rules. This would have been a change to the Queensland equivalent rule of *RR 132 - Keeping to the left of the centre of a road or the dividing line*. Recently, the Tasmanian Government also introduced this law allowing drivers to cross the centreline when passing bicycle riders (see Section 2.7.2).

The road safety partners in Victoria make road safety decisions based on evidence. To make a significant change such as introducing a minimum passing distance, real world evidence of its safety benefits are required. It is beneficial that two Australian based trials are currently working towards obtaining that evidence.



### 6.2.3.1 POSSIBLE SOLUTIONS

There are a number possible solutions for increasing the distance between bicycle riders and motorists when they overtake. They include:

1. Amend RR 144 to introduce a minimum passing distance as is being trialled in Queensland and ACT, where drivers must keep a minimum of one metre distance from bicycle riders on roads with a speed limit of 60 km/h or less, and 1.5 metres on roads with a speed limit over 60 km/h. This would also include a change to RR 132 allowing drivers to cross centre lines, straddle lane-lines and drive on painted islands to pass bicycle riders, provided the driver has a clear view of any approaching traffic and it is safe to do so.
2. Amend RR 132, to allow drivers when driving on single lane roads to only cross centre lines, straddle lane-lines and drive on painted islands to pass bicycle riders, provided the driver has a clear view of any approaching traffic and it is safe to do so (as has been recently introduced in Tasmania).
3. Amend RR 132, to allow drivers when driving on single lane roads to only cross single continuous centre lines, straddle lane-lines and drive on painted islands to pass bicycle riders, provided the driver has a clear view of any approaching traffic and it is safe to do so. This then gives roads authorities the ability to paint double white lines at locations where drivers can't have a clear view of approaching traffic such as on corners on mountainous tourists routes. Thus prohibiting passing at those points.
4. Continue to promote and encourage a minimum one metre passing distance to road users as being best practice.

### 6.2.3.2 RECOMMENDATION

It is recommended that Victoria wait to review the results of the Queensland trial. If there are positive safety benefits for bicycle riders and no negative safety benefits as a result of implementing this rule (e.g. an increase in head on collisions due to the change in RR 132), then Victoria could support a change to this legislation. However, legislation like this would be best introduced at the national level so that laws are consistent across jurisdictions.

In the meantime continuing to encourage drivers to allow more room when passing a bicycle is recommended.

### 6.2.4 RR 151 - Riding a motor bike or bicycle alongside more than 1 other rider

This rule allows riders to ride beside one other rider on roads that are not multi-lane roads, and beside one other rider within a lane on a multi-lane road. A third rider can ride beside these riders if they are overtaking. The rule also specifies that riders cannot ride more than 1.5 metres apart.

Riding two abreast is a hotly debated and polarising issue in bicycle riding discussions. Motorists get frustrated with riders, believing they are unnecessarily and purposely blocking the road, while bicycle riders see it as a defensive riding technique to enhance their safety.

Bicycle riding groups say this is a defensive riding technique because it means motorists usually have to overtake in a similar manner to overtaking a car rather than attempting to overtake in the same lane and squeezing bicycle riders towards the kerb. Also if bicycle riders were required to ride in single file, motorists will often assume they can overtake in places that are not safe and will not leave the bicycle rider enough room (Brisbane CBD BUG cited in Transport, Housing and Local Government Committee, 2013).



From this it is agreed that riding two abreast has safety benefits in some circumstances.

However, it does remain, as identified in stakeholder communications, that riders riding two abreast can be frustrating and confusing in some contexts.

There is current confusion about whether riding two abreast in a bicycle lane is permitted. According to RR 151 it is because a bicycle lane is a marked lane, but in doing so the second rider may have to ride alongside the other rider in the 'normal' traffic lane. The question here is whether they are breaching RR 247 which requires riders to use the bicycle lane if there is one available, unless it is 'impracticable' to do so. In this case is having another rider beside you 'impracticable'?

It is presumed that the intent of RR 247 is to minimise interactions and separate riders from other vehicles. By allowing riders to ride two abreast in bicycle lanes it either forces one rider to enter the adjacent traffic lane, or pushes the first rider further to the left hand side of the lane, which if running adjacent to parked cars puts them in a more vulnerable position of being struck by a door (the third most common bicycle crash type - DCA 163).

Regardless of its safety benefits to riders there are certain situations where riding two abreast causes particular frustration to drivers. These are on non-multilane roads which have a single centre continuous or double white line. Is there a case in certain situations that riding two abreast is not a desirable option?

For example, on mountainous tourist roads which are single-lane, two-way roads separated by a double white line or single continuous line. For a driver to overtake a bicycle rider, or two bicycle riders riding two abreast safely, they would probably need to break the rules and cross over the centre line to pass. Even though the result of applying the current rules require it, it results in the impractical traffic flow situation of remaining behind the slow moving bicycle riders (uphill) until a legal passing opportunity presents itself.

In practice, many motorists would, knowingly break the law to pass bicycle riders by crossing over solid or double white lines. When bicycle riders are riding two abreast, the driver would have to periodically move the majority of their vehicle into the oncoming lane, which if they misjudge their manoeuvre are likely to cause a crash with the an oncoming vehicle or the bicycle riders. If the driver only had to pass the bicycle riders in single file, less of the vehicle would have to cross over to the other side of the road leaving more room for evasive action if required.

The counter argument is that the vehicle is on the other side of the road for longer because it has to pass two bicycles in single file, than when they are side by side.

#### 6.2.4.1 POSSIBLE SOLUTIONS

The following are some potential solutions for consideration:

1. Amend RR 151 to prohibit riding two abreast in bicycle lanes, unless overtaking. It is believed this will eliminate some confusion and be a safer practice. It is envisaged that this shouldn't have a big impact on riding as it is probably common practice already.
2. Amend RR 151 to prohibit riding two abreast on single lane roads with a single centre continuous or double white line.
3. In conjunction with solution 2, amend RR 132, to allow drivers when driving on single lane roads to cross centre lines, straddle lane-lines and drive on painted islands to pass bicycle riders, provided the driver has a clear view of any approaching traffic and it is safe to do so.

4. In conjunction with solution 2, amend RR 132, to allow drivers when driving on single lane roads to only cross single continuous centre lines, straddle lane-lines and drive on painted islands to pass bicycle riders, provided the driver has a clear view of any approaching traffic and it is safe to do so. By limiting this to single continuous lines, this gives roads authorities the ability to paint double white lines at locations where it is believed that drivers can't have a clear view of approaching traffic such as on corners on mountainous tourists routes. Thus prohibiting passing at those points.

#### 6.2.4.2 RECOMMENDATIONS

It is recommended that:

- Consideration be given to amending RR 151 prohibiting riding two abreast in bicycle lanes, unless overtaking.
- While generally there are safety benefits to be argued for riding two abreast, it is recommended that, further investigation be undertaken to see whether it would be safer for riders and drivers under certain conditions to prohibit riding two abreast on certain types of roads, or on particular roads. For example, single lane roads with a single centre continuous or double white line. This could be handled through imposing a blanket restriction on certain road types, or imposing a restriction at particular locations through the installation of appropriate signage. Further work would need to be undertaken to ascertain which approach would be best.
- As a trade off and as a potential enhancement to safety, consideration could be given (as in Section 6.2.3.1) to allowing drivers to cross over the centre line when passing a bicycle rider on these roads, if safe to do so.

#### 6.2.5 RR 154 - Bus lanes

This rule states that unless a driver is the driver of a bus, they cannot drive in a bus lane. RR 158 outlines the exceptions to driving in special purpose lanes. It was raised in stakeholder consultation that while bicycle riders can use some bus lanes, they should be allowed to use all bus lanes by default and be excluded on a case by case basis (presumably through a sign) if required.

One of the problems with allowing this is the speed differentials between buses and bicycles. Buses are faster but stop frequently, while bicycle riders are slower but are endeavouring to move continuously. So, it is possible that a bus and a bicycle are continually overtaking one another if they are sharing the same space, and to do this they need to move outside of the bus lane.

There is also a concern in this scenario, that there is mixing of a particularly vulnerable road user with a heavy vehicle with limited manoeuvrability and larger blind spots.

The solution proposed for riders to use the lanes is that they must stop (and not overtake) at the rear of a stopped bus, in a similar fashion as the tram rules (RR 164) but they would not be permitted to overtake. This way the bicycles can utilise the additional space the bus lane has to offer and have separation from other vehicles. The bus can avoid the possibility of having to continually overtake bicycles travelling at slower speeds, requiring them to move into the general traffic stream to do so.

##### 6.2.5.1 RECOMMENDATION

That traffic flow and modelling work be done to see whether safety benefits could be derived for bicycle riders by changing this rule as described, with little or no disruption to the mobility of buses.

If there are benefits for the former and a neutral result for the latter, consideration should be given to changing RR 154 and 158 to allow bicycles to use bus lanes.

#### **6.2.6 RR 250 - Riding on a footpath or shared path, and RR 257 - Riding with a person on a bicycle trailer.**

RR 257 allows someone over the age of 16 years to tow a child under 10 years in a bicycle trailer. However under RR 250 they are not permitted to ride on a footpath.

On 6 September 2013, NSW amended the riding on a footpath or shared path rule (Rule 250) to allow riders carrying a child under 10 years as a passenger on the bicycle or being towed in a bicycle trailer to ride on a footpath. Previously, as is currently the case in Victoria, they were not permitted to ride on the footpath.

Through stakeholder consultation the merits of introducing a similar change in Victoria was raised and discussed. One of the arguments for amending the rule was that it was inconsistent with other legislation which allows riders aged 18 years or over to ride on a footpath if accompanying a child under the age of 12 years.

However, it can be argued that in the case of an 18 year old accompanying an 11 year old, the 11 year old is in control of the bicycle (in a trailer they are not) and they should be allowed on a footpath (and be accompanied) because they have diminished cognitive and decision making skills compared with an adult. In the case of the trailer, the adult is in control of the bicycle and presumably has the cognitive and decision making skills needed to ride safely on the road.

While this may be the case, the ability to manoeuvre the bicycle is reduced when the trailer is attached. This could cause difficulties in the high speed road environment when an unexpected event occurs.

Community consultation revealed a poor understanding of the rule regarding carrying a child in a trailer with only a small number knowing that this was not a rule. However, it attracted a relatively strong level of support (72%).

In addition to the rules about carrying passengers and towing trailers on a bicycle, RR 250 does not allow riders aged 12-17 to ride on a footpath if they are accompanying a bicycle rider under the age of 12 years. Yet a rider aged 18 years or older can.

Some stakeholders were supportive of extending the rule to 12-17 years olds while some were not. Information put forward to support the case for not allowing it, was firstly an increased barrier for pedestrians, and that footpath riding is not necessarily safer for children, particularly if travelling at speed, as vehicles emerging from driveways can be a danger.

The bicycle crash statistics show that 7.2 per cent of crashes involving a bicycle rider involves a vehicle emerging from a driveway or lane (DCA 147). It is not known how many of these were riding on a footpath versus riding on the road, but those who can legally ride on a footpath (i.e. under 12 year olds), make up 14.8 per cent of those crashes recorded against DCA 147.

Participation in bicycle riding tends to drop off from about 12 -18 years. An ABS report shows that in Victoria 70.1 per cent of nine to 11 year olds participate in bicycle riding, while 45.7 per cent of 12 to 14 year olds participate (Australian Bureau of Statistics, 2013). So, the impact of allowing 12-17 year olds to ride on a footpath, only when accompanying a rider under 12 years, may have minimal impact.

Community consultation showed that there was poor understanding of this rule with only 18.4 per cent understanding that 12-17 year olds could not ride on a footpath if riding with a child under the age of 12 years, but 79.4 per cent believed that they should be.

#### **6.2.6.1 RECOMMENDATION**

Further investigation and consultation be carried out to give consideration to changing RR 250 to:

- allow riders over 16 years to ride on a footpath if they are carrying a child under 10 years as a passenger (as per RR 246) on the bicycle or in a bicycle trailer (as per RR 257). This gives the rider a choice to choose the safest environment as the road infrastructure changes throughout the ride. This is equivalent to the rule recently introduced in NSW (see Section 2.7.1).
- allow riders aged 12-17 years to ride on a footpath if they are accompanying a rider under the age of 12 years. This would need to be accompanied by communications regarding the rule change and tips for safe riding.

#### **6.2.7 RR 405 - Vehicles must not be driven with an empty bicycle carrier attached**

This rule requires that a vehicle not be driven with an empty bicycle carrier. RR 405 is a rule which is not included in the Australian Road Rules model regulations. It is an additional rule added to the Victorian version of the road rules.

It is presumed that this rule exists so that carriers do not cause a hazard to other road users and to avoid obstruction of number plates. Although rules 48(1)(d) and 48(3) of the Road Safety (Vehicles) Regulations 2009 requires number plates to be clearly visible at 20 metres and if the number plate is obscured by a bicycle carrier, it may be securely affixed to the bicycle carrier so that it is visible.

It could be argued that the existence of this rule acts as a potential barrier to participation in bicycle riding especially if a car needs to make trips in between unloading the carrier, and loading it again.

##### **6.2.7.1 RECOMMENDATION**

Further review this rule to establish the reasons for its existence. If it was introduced due to safety concerns for other road users, consideration should be given to whether this is still a risk. If not, consideration can be given to removing this rule.

#### **6.2.8 Road Safety Act, Section 99A - Conduct of works or activities on a highway.**

This section applies when conducting any non-road activity on a highway. A person must ensure that the works or non-road activities are conducted in a manner that is safe for road users and people engaged in carrying out the activities. The section requires applicants to obtain permits when arranging and participating in on-road events, e.g. charitable rides etc.

It was raised in the stakeholder consultation that the application process was overly onerous in some instances and often was not proportional to the size and location of the event. For example, the same procedures apply regardless of whether the event is being held in the CBD, as on a rural training circuit.

This can often lead to shortcuts being taken or arrangements being made to ensure that certain procedures don't have to be implemented, e.g. limiting number of participants in an event.

It was also raised through stakeholder consultation that there are no set guidelines for managing the movements of bicycles through road works, especially when they occur in or near bicycle lanes.

#### 6.2.8.1 RECOMMENDATION

It is recommended that:

- the application process be examined, to see if it can be simplified and improved. This may encourage more events to be run, leading to more participation in such events. It also has the ability to improve safety by ensuring that applicants are not looking for ways to short cut the process.
- the guidelines for managing the movements of bicycles through road works be reviewed and if necessary changed with the view to improving the safety of bicycle riders.

### 6.3 Rules that need to be better educated and communicated

Having clear, easy to understand and logical road rules is important. However, it doesn't matter how good the rules are, they are useless in achieving their intent unless people know them, understand them and comply with them.

While the previous two sections dealt with potential changes that can be made to rules to remove ambiguity, increase understanding and improve safety, this section outlines some of the rules identified in this review as being poorly understood or interpreted.

In these cases, there may be nothing wrong with the rules or their intent, and therefore no changes are required, instead better education and communication surrounding these rules is required to boost understanding, remind road users about their obligations, and reduce confusion.

The following sections have divided the rules needing communications support into higher, medium and lower priority.

#### 6.3.1 Rules for communication - Higher priority

In this section the following rules have been recommended as needing change or needing further consideration with the view to change as previously discussed in Section **Error! Reference source not found.** This is because they have been identified as causing confusion and if amended could hopefully reduce the number of crashes involving bicycle riders.

If it is decided that these rules are to be changed they will be need to be supported with communications to educate road users about the rules.

If it is decided not to change these rules, it is strongly recommended that a communications program be undertaken to strengthen the understanding of these rules by road users and their obligations.

Because these rules have previously been identified for potential change, and have been identified as needing communications support irrespective of whether they are changed, they are considered the highest priority for communications support.

##### 6.3.1.1 RR 111 - ENTERING A ROUNDABOUT FROM A MULTI-LANE ROAD OR A ROAD WITH 2 OR MORE LINES OF TRAFFIC TRAVELLING IN THE SAME DIRECTION, AND RR 119 - GIVING WAY BY THE RIDER OF A BICYCLE OR ANIMAL TO A VEHICLE LEAVING A ROUNDABOUT.

Regardless of whether there are any changes to this rule, it is very highly recommended that education through communications be conducted for this rule. Section 6.2.1 highlights the confusion regarding this rule.

Key messages should clearly outline the requirements of all road users in the various scenarios they are likely to encounter as a result of these rules.

#### 6.3.1.2 RR 151 - RIDING A MOTOR BIKE OR BICYCLE ALONGSIDE MORE THAN 1 OTHER RIDER

Regardless of whether there are any changes to this rule, it is highly recommended that communications target riders and drivers about the existence of this rule and road user obligations. Section 6.2.4 highlights some of the issues around this rule.

Key messages to drivers should include information that bicycle riders are permitted to ride two abreast, and in certain situations there is a safety benefit for bicycle riders and arguably for drivers as well. Messages for riders should include reminders about the obligations of this rule (including riding within 1.5 metres of one another) but to also be mindful of situations where riding single file may be a better option. Further work would be required to identify examples of when this might be the case.

#### 6.3.1.3 RR 144 - KEEPING A SAFE DISTANCE WHEN OVERTAKING

Regardless of whether there are any changes to this rule, it is highly recommended that communications continue recommending a minimum passing distance to drivers where possible. Section 6.2.3 highlights some of the issues around this rule.

Key messages to drivers should include that for the safety of riders drivers must give riders as much space as they can to avoid a collision or to avoid causing the bicycle rider to have a collision with another vehicle or part of the road environment.

#### 6.3.1.4 RR 141(2) - NO OVERTAKING ETC. TO THE LEFT OF A VEHICLE

If no changes are made to this rule, it is highly recommended that education through communications be conducted. Section 6.2.2 highlights the confusion regarding this rule.

Key messages should clearly outline the requirements of all road users in the various scenarios they are likely to encounter as a result of this rule.

If any changes are ultimately made to the rules, extensive communications should also be undertaken to inform road users of their obligations.

#### 6.3.1.5 RR 250 - RIDING ON A FOOTPATH OR SHARED PATH

Regardless of any changes to this rule, it is strongly recommended that communications target riders who are permitted to ride on a footpath. Messages should focus on giving priority to pedestrians and being mindful that it is the primary form of transport for many people and that interactions with bicycles, particular at high speeds can cause significant injuries.

Key messages include:

- Riders must give priority to pedestrians in shared spaces; reduce speeds around pedestrians and give pedestrians as much space as possible. If necessary give pedestrians a warning that you are approaching and make it clear to them that you intend to pass.
- Riders should keep to the left of the path where possible.
- Pedestrians must not use areas that are exclusively allocated for bicycles.

The arguments for allowing people up to the age of 16 years to ride on a footpath, centred largely around their lack of road rule knowledge prior to undertaking the learning to drive process.



Therefore, if this age limit is not extended, communications and methods to increase road rule knowledge amongst this age group should be explored.

### **6.3.2 Rules for communication - Medium priority**

Through this review the following rules have been identified as being poorly understood by road users. The rules themselves are sound but road users need to be better educated about them and therefore it is strongly recommended that they be part of an education and communications program to road users.

It is suggested that no further consideration needs to be given to changing these rules. Therefore, if its agreed that communications regarding these rules should proceed, planning for these communications could commence.

The rules are:

#### **6.3.2.1 RR 35 - OPTIONAL HOOK TURN BY A BICYCLE RIDER**

This rule is poorly understood by road users, but is well supported.

DCA 121 is the most common type of crash involving bicycle riders (11.5%). This involves a crash between a right turning vehicle and another travelling straight through. The 2014 crash data shows that 9.7 per cent of casualties from this DCA resulted where the bicycle rider was the right turning vehicle. For those crashes where the bicycle rider is the vehicle turning right, performing an optional hook turn could help prevent these types of crashes.

Performing hook turns also avoids riders having to cross lanes or traffic streams (particularly on multilane roads) so they can perform their right hand turn from the right most lane or middle of the road.

Therefore it is strongly recommended that better education through communication be carried out regarding the existence and benefits of this rule. This should include information about positioning on the road while waiting to make a turn. Key messages include:

- Bicycle riders are allowed to make an optional hook turn at intersections (unless a sign says otherwise)
- There are safety benefits to riders performing hook turns at intersections.

#### **6.3.2.2 RR 153 - BICYCLE LANES**

The majority of people understood that drivers are not completely prohibited from driving in a bicycle lane, but there is room for improvement. While it was known that there are times when drivers can enter a bicycle lane, the specific details of when and for what purpose appeared less clear.

When this rule is considered with RR 247 below (Section 6.3.2.5), the mismatches between what people think should be a rule and what they actually think is the rule, may contribute to the reported tension between riders and drivers when sharing the road space.

Therefore it is strongly recommended that carefully crafted communications be developed to educate all road users about obligations and rights around using bicycle lanes.

Key messages include:



- A driver must not drive in a bicycle lane unless they are entering or leaving the road, overtaking a vehicle, avoiding an obstruction, or a traffic sign indicates that it is allowed.
- Drivers can drive in a bicycle lane for up to 50 metres.
- See also key messages in Section 6.3.2.5

#### 6.3.2.3 RR 219 - LIGHTS NOT TO BE USED TO DAZZLE OTHER ROAD USERS AND RR 259 RIDING AT NIGHT

There was confusion about RR 219 and whether the requirement not to dazzle other road users applies to bicycle riders as it does to other vehicles. Currently the rule does not apply to bicycles, but there was support for it to also be applied to riders.

Due to the level of confusion it is recommended that this be tackled through education first, rather than resort to the legislation process.

Regarding RR 259, while there is strong acceptance that bicycles should use lights when riding at night or in hazardous conditions, knowledge of the requirement for front and rear lights to be seen for 200 metres was poor.

Key messages should include advice about how to best mount and use bicycle lights so that they provide maximum benefit to riders by being seen by other road users, but at the same time not dazzle other road users, particularly pedestrians on shared paths.

#### 6.3.2.4 RR 239 - PEDESTRIANS ON A BICYCLE PATH OR SEPARATED FOOTPATH AND RR 249 - RIDING ON A SEPARATED FOOTPATH

Obligations for bicycle riders and pedestrians when sharing paths were not well understood. Just over half of bicycle riders (56.3%) and less than half of other road users (39.8% all others; and 42.8% of pedestrians) understood that when riding on a footpath or shared path, riders must keep to the left and give way to pedestrians. Even less well known was the rule that states that pedestrians must not travel on a dedicated bicycle path, or the designated bicycle section of a separated path, unless they are crossing it. Less than a third were aware of the rule (31.1%). However, there was a high level of support for both rules among all road users.

Due to the low level of understanding surrounding these rules, it is recommended that riders and pedestrians are better educated through communications about their obligations when using shared paths.

Key messages include:

- Riders should slow down around pedestrians and give polite warning when they are approaching pedestrians.
- Riders should stick to their sections of a separated path.
- When sharing paths riders should keep to the left and give way to pedestrians.
- Pedestrians are not allowed to use a part of a separated path intended for bicycle riders. They should check the signs and stick to their section of the path unless they are crossing it.
- See also key messages in Section 6.3.3.3.

#### 6.3.2.5 RR 247 - RIDING IN A BICYCLE LANE ON A ROAD

Understanding of this rule is generally low but supported by road users. It is highly recommended that more practical guidance be given to riders about what constitutes as 'impracticable' to ride in a bicycle lane.

Key messages include:

- Bicycle riders must ride in a bicycle lane on a road if there is one available unless it is impracticable to do so.
- 'Impracticable' refers to, an obstruction caused by another vehicle (except another bicycle), or damage to the road surface. Other examples should be considered and included in the final communications.

#### 6.3.2.6 RR 269(3) - OPENING DOORS AND GETTING OUT OF A VEHICLE ETC.

DCA 163 which involves opening a vehicle door into the path of another vehicle, is the third most common crash type involving bicycle riders and is a commonly discussed topic regarding bicycle riding.

The penalties for this offence were increased in August 2012. Because this behaviour is not an intentional act by the majority of road users, it is strongly recommended that better education through communication constantly remind drivers about the dangers of opening doors, and provide strategies for avoiding these incidents.

Key messages include:

- It is an offence for drivers and passengers to cause a hazard to others by opening car doors, and significant penalties apply.
- Bicycle riders are particularly difficult to see when getting out of a vehicle so you need to take extra care and look out for them
- Include strategies to help vehicle occupants avoid these types of crashes.

#### 6.3.3 Rules for communication - Lower priority

The following rules have been identified as having a relatively poor understanding by road users or they need reminding of their obligations. The rules themselves are sound but road users could be better educated about them. It is recommended that they form part of an education and communications program but they are secondary to other rules with higher priority.

There are many other cycling related road rules not listed here. These too could be listed as having lower priority for communications, or at least communications should provide reference to where more information about these rules can be found.

##### 6.3.3.1 RR 60A - PROCEEDING THROUGH A BICYCLE STORAGE AREA BEFORE A RED TRAFFIC LIGHT OR ARROW

There was a good understanding of these rules among road users although it could be improved. There are also reports of non-compliance by drivers.

Key messages include:

- Drivers are not allowed to enter a bicycle storage area (bicycle box) when facing a red traffic light or arrow.

#### 6.3.3.2 RR 67 - STOPPING AND GIVING WAY AT A STOP SIGN OR STOP LINE AT AN INTERSECTION WITHOUT TRAFFIC LIGHTS AND RR 68 - STOPPING AND GIVING WAY AT A STOP SIGN OR STOP LINE AT OTHER PLACES

There was a good understanding of these rules among road users, however there are frequent reports of non-compliance by riders.

Key messages include:

- All vehicles, including bicycle riders are required to come to a complete stop at a stop sign or stop line and give way, before proceeding.

#### 6.3.3.3 RR 224 - USING HORNS AND SIMILAR WARNING DEVICES AND RR 258 - EQUIPMENT ON A BICYCLE

There was good understanding of the requirement for a bicycle to have a bell or other warning device. However, it was less clear about when the bell should be used. Stakeholder communications also revealed that anecdotally pedestrians misunderstood the intent of bicycle riders when ringing their bells on approach to a pedestrian. Many thought the intent was aggressive, telling pedestrians to get out of the way, while for most bicycle riders, it is intended to be a friendly warning that they are approaching.

Communications recommending to bicycle riders when warning devices should be used and communications to pedestrians about the meaning of these warnings, and how to react to them, is warranted.

Key message include:

- Riders use your bell in advance of reaching pedestrians to warn them that you are approaching. Slow down and use your voice to let them know you are passing and politely thank them as you pass.
- Walkers, listen out for riders ringing their bells. They are trying to let you know that they are approaching and are going to pass you. They are not necessarily telling you to get out of the way.

#### 6.3.3.4 RR 300 - USE OF MOBILE PHONES

There was moderate understanding of this rule, but it could be improved.

Key messages include riders being reminded that like drivers they are prohibited from using a hand held phone while riding.

### 6.4 Communicating to road users

This review has highlighted that there is misunderstanding about many of the cycling related road rules. Better educating road users about these rules is one way to help address this issue.

Through stakeholder and community consultation it was revealed that VicRoads is considered the authoritative source on cycling related road rules. Considering VicRoads is responsible for administering the *Road Safety Act 1986* and its subordinate legislation, including the *Road Safety Road Rules 2009*, it is best placed to provide an authoritative and credible voice about the requirements of bicycle riders and drivers when using Victoria's roads.

Therefore, the recommendations for communications highlighted in Section 6.3 would best be coordinated and delivered by VicRoads, but it should work with other credible and popular sources of information, such as Bicycle Network, to help distribute and promote this information.

In communicating the road rules, simply re-stating what is written in the legislation should be avoided. Communicating in simple, user friendly language and through communications techniques that are engaging to the target audience is necessary to bring about a change in knowledge and hopefully behaviour.

A series of media channels which will best reach the target audiences, needs to be identified. However, at this preliminary stage having an online or digital source of information, to which all other media channels lead, would be an effective first step in the strategy.

The other benefit in doing this is that a digital presence can also be a permanent presence. That means that the information is always available to be accessed and can be supported by promotions through other channels from time to time.

This is particularly important because the communications recommended in this report should not be performed as a one off campaign. To maintain and improve levels of understanding and knowledge, communications need to be ongoing, especially considering that there are new cohorts of drivers and riders continually entering the road network.

Regarding education of drivers about cycling related road rules, consideration should be given to how education about cycling rules and sharing the road with bicycle riders could be included in the various stages of learning to drive.

A final note on communications: feedback received during stakeholder communications, suggested that generally correspondence responded to by VicRoads regarding road rules, was overly bureaucratic and often merely a cut and paste from the legislation. It is understood that it is difficult not to be seen to be providing legal advice or an interpretation of the legislation in such responses. However, it is recommended that methods be explored whereby VicRoads can aim to provide simple and useful information about road rules in all forms of its communications.

## 6.5 Other considerations for VicRoads

The primary purpose of this report was to review the cycling related road rules and legislation in Victoria. However, through this process other issues outside of the scope of this review, were identified. Some of these are briefly described in the following list and can be considered by VicRoads outside of this review to ascertain whether there is potential to improve the safety of riders or riding participation. The list includes:

### 6.5.1 Infrastructure issues

- At some high risk riding locations, where separation and speed reductions cannot be implemented to reduce risks, Councils and VicRoads could consider turning the footpath on one side of the road into a shared or separated path, while keeping the footpath on the other side free for pedestrians. The amenities accessed by these paths would need to be carefully considered, to ensure barriers are not created for pedestrians.
- It was suggested that at some intersections, particularly wider intersections, signal phases do not adequately allow for the movements of bicycles. Bicycle riders can enter intersections, after which the signals can soon change. Sometimes, these signals are phased such that

there is not enough time for riders to complete their crossing of the intersection before vehicles from the adjacent directions start entering the intersection.

- Often when a rider is the only vehicle at an intersection, the traffic light loops are not sensitive enough to detect the bicycle. This results in the lights not being triggered. This can lead to riders deciding to run red lights or having to leave the road to push a pedestrian operated signal button.
- A suggestion was given to investigate the merits of bicycle activated warning lights at high risk intersections. These would warn drivers when a bicycle is approaching from the opposite direction when a driver is making a right hand turn.

#### **6.5.2 Signage**

- Develop a new regulatory sign, requiring bicycle riders to ride single file. This would be used at selected locations where it is considered safety can be improved for all road users if riders were to be prevented from riding two abreast.
- There are reports that some shared and separated path signs are mounted too high for pedestrians and riders to see. It was suggested that these signs are sometimes attached to existing infrastructure and the optimum viewing position is not considered. It was suggested that a height and placement for mounting these signs be specified to ensure riders and pedestrians can see them.

#### **6.5.3 Speed and speed limits**

- Reduce speed limits on known bicycle training routes, or introduce time based or variable speed signs where lower speeds coincide with training times.
- Reduce speed limits along popular riding or commuter routes, or introduce time based or variable speed signs where lower speeds coincide with peak riding times.
- Consideration be given to creating the provision for implementing speed restrictions for bicycles on shared paths.

#### **6.5.4 Education**

- The addition of more bicycle information and questions into the driver handbooks and learner tests was suggested.
- Undertake communications to the motoring public dispelling the commonly held belief that vehicle registration pays for the road network and therefore those who pay it have exclusive rights to use the network. Understanding how registration fees are used may help ease some of the animosity some motorists, who also call for the registration of bicycles, feel towards riders.

#### **6.5.5 Other**

- The implementation of a booking system on V/line trains was recommended. This would give riders a guarantee of being able to take their bikes with them if they are planning a bicycle touring holiday in regional Victoria. Currently there are no guarantees of being able to take a bicycle before physically arriving at the train station.
- Engage with clothing manufacturers to encourage them to design reflective properties into garments worn by bicycle riders. These can include fashion items. By promoting these

properties, manufacturers will help spread messages about the importance of bicycle riders being seen.

- Work with manufacturers and advocate for the accelerated introduction of technologies that can warn drivers that a bicycle rider is close to their vehicle and a collision is imminent. This can be particularly useful in preventing car dooring. Jaguar Land Rover have already started developing bicycle collision warning technology.

These issues have been documented for further consideration by VicRoads. As they sit outside the primary focus of this review, no assessment has been made as to their merits at this stage.

## SECTION 7: CONCLUSIONS AND RECOMMENDATIONS

Through reviewing the literature, undertaking crash analysis, and conducting stakeholder and community consultation, this review of the Victorian cycling related road rules and legislation has revealed that there is a level of confusion and misunderstanding around many of the rules related to bicycle riding.

Therefore, undertaking an education and communications program to inform riders and drivers of their own rights and obligations and the rights and obligations of other road users, is highly recommended.

A jurisdiction can have the most comprehensive and sensible rules available, but if the people to which they apply do not know or do not understand those rules, the rule will not work as they are intended. Furthermore, once a good understanding and knowledge is achieved, in some cases the rules need to be seen to be enforced to bring about better compliance when required. So, enforcement support is also required to support good legislation.

### **Recommendation 1 - Conduct an education and communications campaign regarding cycling related road rules.**

Even if no changes are made to the cycling related road rules, knowledge and understanding of these rules needs to be improved through an effective communications campaign. By improving this knowledge, the aim is to also improve the safety of bicycle riders and other road users, and make it easier for bicycle riders to continue to ride and for new riders to take up riding.

While all cycling related road rules can be included in the campaign in some form (i.e. supporting documentation), the rules highlighted in Section 6.3 should be prioritised.

These communications will be best coordinated and delivered by VicRoads.



The review has also highlighted several rules that could benefit from being changed.

### **Recommendation 2 - Consider changes to selected rules**

Some cycling related road rules were identified as good candidates for change. It is recommended that the changes to the following rules as outlined in Section 6.1 be considered.

- RR 62 - Giving way when turning at an intersection with traffic lights
- RR 300 - Use of mobile phones

Finally, the review has highlighted several rules that could benefit the safety of riders if they were to be changed, but further consideration, review and consultation is required to ensure safety benefits are delivered to bicycle riders and other road users.

### **Recommendation 3 - Conduct a further review of selected rules with a view to change**

Several rules have been identified as having scope for change, but due to complexities in the rules, they require further review to come up with the most appropriate changes to achieve the optimum outcomes.

It is recommended that the following rules as outlined in Section **Error! Reference source not found.** be considered for change and further work be carried out to confirm if a change is warranted and if so what that change should be.

- RR 111 - Entering a roundabout from a multi-lane road or a road with 2 or more lines of traffic travelling in the same direction,
- RR 119 - Giving way by the rider of a bicycle or animal to a vehicle leaving a roundabout.
- RR 141(2) - No overtaking etc. to the left of a vehicle
- RR 144 - Keeping a safe distance when overtaking
- RR 151 - Riding a motor bike or bicycle alongside more than 1 other rider
- RR 154 - Bus lanes
- RR 250 - Riding on a footpath or shared path
- RR 257 - Riding with a person on a bicycle trailer
- RR 405 - Vehicles must not be driven with an empty bicycle carrier attached
- Road Safety Act, Section 99A - Conduct of works or activities on a highway.

It is proposed that VicRoads consider the recommendations outlined in this report.

#### **6.5.6 Next steps**

As is usual practice of reports of this type, VicRoads may decide to support or not support the recommendations.

Readers of this report should understand that these recommendations have been made in response to a brief issued by VicRoads and does not represent the views or decisions of VicRoads.

If any of these recommendations are supported, particularly those relating to changes to road rules, VicRoads will need to undertake extensive consultation with stakeholders and other groups and potentially prepare a Regulatory Impact Statement. Even after this process is completed, the proposed changes in this report may not be adopted.



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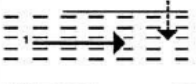
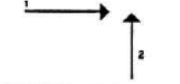
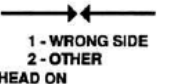




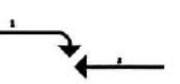
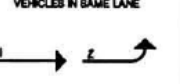

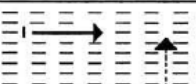
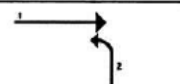
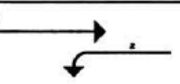


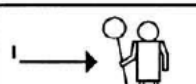
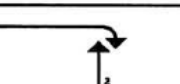
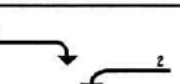
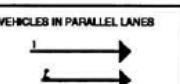


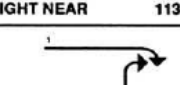
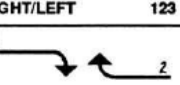

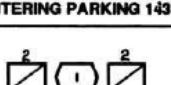
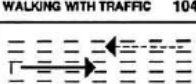
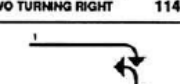
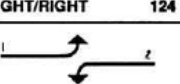

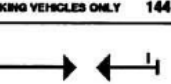


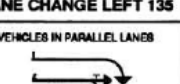
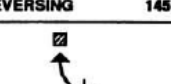

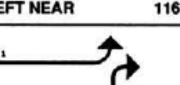


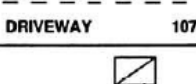
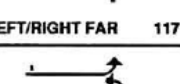
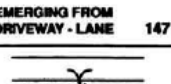
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## APPENDIX A - DEFINITIONS FOR CLASSIFYING ACCIDENTS (DCA)

				
PEDESTRIAN ON FOOT IN TOY / PRAM	VEHICLES FROM ADJACENT DIRECTIONS (INTERSECTIONS ONLY)	VEHICLES FROM OPPOSING DIRECTION	VEHICLES FROM SAME DIRECTION	MANOEUVRING
 NEAR SIDE 100	 CROSS TRAFFIC 110	 1 - WRONG SIDE 2 - OTHER HEAD ON (not overtaking) 120	 VEHICLES IN SAME LANE REAR END 130	 U' TURN 140
 EMERGING 101	 RIGHT FAR 111	 RIGHT THROUGH 121	 VEHICLES IN SAME LANE LEFT REAR 131	 U' TURN INTO FIXED OBJECT PARKED VEHICLE 141
 FAR SIDE 102	 LEFT FAR 112	 LEFT THROUGH 122	 VEHICLES IN SAME LANE RIGHT REAR 132	 LEAVING PARKING 142
 PLAYING, WORKING, LYING, STANDING ON CARRIAGEWAY 103	 RIGHT NEAR 113	 RIGHT/LEFT 123	 VEHICLES IN PARALLEL LANES LANE SIDE SWIPE 133	 ENTERING PARKING 143
 WALKING WITH TRAFFIC 104	 TWO TURNING RIGHT 114	 RIGHT/RIGHT 124	 VEHICLES IN PARALLEL LANES LANE CHANGE RIGHT (not overtaking) 134	 PARKING VEHICLES ONLY 144
 FACING TRAFFIC 105	 RIGHT/LEFT FAR 115	 LEFT/LEFT 125	 VEHICLES IN PARALLEL LANES LANE CHANGE LEFT 135	 REVERSING 145
 ON MEDIAN/FOOTPATH 106	 LEFT NEAR 116		 VEHICLES IN PARALLEL LANES RIGHT TURN SIDE SWIPE 136	 REVERSING INTO FIXED OBJECT - PARKED VEHICLE 146
 DRIVEWAY 107	 LEFT/RIGHT FAR 117		 VEHICLES IN PARALLEL LANES LEFT TURN SIDE SWIPE 137	 EMERGING FROM DRIVEWAY - LANE 147
 STRUCK WHILE BOARDING OR ALIGHTING VEHICLE 108	 TWO LEFT TURN 118			 FROM FOOTWAY 148
OTHER PEDESTRIAN 109	OTHER ADJACENT 119	OTHER OPPOSING 129	OTHER SAME DIRECTION 139	OTHER MANOEUVRING 149

1. Definition for classifying accidents (DCA) should be determined by first selecting a column using the text above & then by diagrammatic sub-division.
2. The sub-division chosen should describe the general movement of vehicles involved in the initial event. It does not assign a cause to the accident.
3. Supplementary codes have been defined for most sub-divisions. These codes give further detail of the initial event.

OVERTAKING	ON PATH	OFF PATH ON STRAIGHT	OFF PATH ON CURVE	PASSENGER AND MISCELLANEOUS
 HEAD ON (not sideswipe) 150	 PARKED 160	 OFF CARRIAGEWAY TO LEFT 170	 OFF CARRIAGEWAY RIGHT BEND 180	 FELL IN/FROM VEHICLE 190
 OUT OF CONTROL 151	 DOUBLE PARKED 161	 LEFT OFF CARRIAGEWAY INTO OBJECT - PARKED VEHICLE 171	 OFF RIGHT BEND INTO OBJECT/PARKED VEHICLE 181	 LOAD OR MISSILE STRUCK VEHICLE 191
 PULLING OUT 152	 ACCIDENT OR BROKEN DOWN 162	 OFF CARRIAGEWAY TO RIGHT 172	 OFF CARRIAGEWAY LEFT BEND 182	 STRUCK TRAIN 192
 CUTTING IN 153	 VEHICLE DOOR 163	 RIGHT OFF CARRIAGEWAY INTO OBJECT - PARKED VEHICLE 173	 OFF LEFT BEND INTO OBJECT/PARKED VEHICLE 183	 STUCK RAILWAY CROSSING FURNITURE 193
 PULLING OUT - REAR END 154	 PERMANENT OBSTRUCTION ON CARRIAGEWAY 164	 OUT OF CONTROL ON CARRIAGEWAY 174	 OUT OF CONTROL ON CARRIAGEWAY 184	 PARKED CAR RUN AWAY 194
	 TEMPORARY ROADWORKS 165	 OFF END OF ROAD 'T' INTERSECTION 175		
	 STRUCK OBJECT ON CARRIAGEWAY 166			
	 ANIMAL (not ridden) 167			
				<b>OTHER</b> 198
<b>OTHER OVERTAKING</b> 159	<b>OTHER ON PATH</b> 169	<b>OTHER STRAIGHT</b> 179	<b>OTHER CURVE</b> 189	<b>? UNKNOWN</b> 199

4. The number 1,2 identify individual vehicles involved when the DCA is linked with other vehicle/driver information.  
5. These codes were used for 1987 accidents and replace the Road User Movement (RUM) code.