

Joint Response:

Review of the Australian Road Rules and
Vehicle Standard Rules
Discussion Paper – October 2011

Contributing Organisations

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16 December 2011

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Background

This document is a response to the Review of the Australian Road Rules and Vehicle Standard Rules Discussion Paper – October 2011 (Discussion Paper). It has been compiled by the Amy Gillett Foundation, Cycling Promotion Fund, and Cycling Australia with expert input from Chamberlains Law Firm.

The process was a review of the Discussion Paper and background documentation, including research conducted by research agencies AMR and GHD. This submission includes direct responses to selected questions posed in the Discussion Paper and addresses specific issues raised in the Discussion Paper.

This submission focuses on how improved implementation of the Australian Road Rules and Australian Vehicles Standards Rules can contribute to reducing deaths and serious injuries for vulnerable road users, particularly bicyclists. Australia prides itself on having achieved a relatively low traffic crash fatality rate of 6.8 fatalities per 100,000 population. World's best practice (3.8 fatalities per 100,000 population) is achievable, and we aspire to achieve it. But Australia's overall fatality rate hides the fact that our bicyclist fatality and serious injury rates are several times higher than world's best practice, and are increasing.

International comparative data on rates on bicyclist serious injuries (see Table 1) show that Australia compares unfavourably with a number of OECD countries (Melbourne and Sydney data are included because Australia does not have national data on cycling trip distance).

Table 1: Bicyclist injury rates, international comparisons

Country (city)	Bicyclist serious injuries (per 10 million km)
The Netherlands	1.4 (KSI)
Denmark	1.7
Germany	4.7
UK	6.0
USA	37.5
Melbourne	12.4 (police data), 31.5 (hospital data)
Sydney	55.7 (police data, includes minor injuries)

Source: (Garrard, Greaves et al. 2010)

Cycling accounts for about 1% of daily trips in Australia, but bicyclists comprise 2% of road transport fatalities and 15% of serious injuries. Serious injury rates for bicyclists are

increasing as bicycle use increases (by 47% from 2000 to 2007), while for most other road users serious injury rates are steady or declining.

In Australia, the relative risk of injury per kilometre travelled is several times higher for a bicyclist than for a car occupant. A recent study reported that per kilometre travelled, bicyclist had a 5-fold to 19-fold increased risk of fatality and a 13-fold to 34-fold increased risk of serious injury relative to car occupants in Melbourne and Sydney (Garrard, Greaves et al. 2010).

While the Australian Road Rules and Australian Vehicle Standards Rules have undoubtedly led to a safer operating environment for vehicle occupants, the vehicle-centric nature of many of these measures has done little to improve bicyclist safety. Bicyclists are over-represented in fatalities and serious injuries relative to their exposure to traffic, and under-represented in measures aimed at reducing traffic fatalities and injuries. When there is potential conflict between the safety of motor vehicle occupants and the safety of vulnerable road users, it is important to optimise safety outcomes for all road users.

Cycling for transport has multiple benefits for health, the environment, traffic congestion, and community liveability, and numerous government policies. Further increases, as recommended in a range of policy documents, will lead to unacceptable bicyclist injury rates in the absence of appropriate action.

Australia's National Road Safety Strategy 2011–2020, which is based on the vision that no person should be killed or seriously injured on Australia's roads, aims to reduce the annual numbers of both deaths and serious injuries on Australian roads by at least 30% during the 10-year period. This aim will be difficult to achieve without adequately increasing safety measures for bicyclists.

International experience demonstrates that cycling can be made safer. Strategies that have been implemented successfully overseas need to be adapted to the Australian context, trialled and evaluated to ensure the benefits of improved road safety are inclusive of all road user groups. Improved bicycle infrastructure is important, but infrastructure provision is not a stand-alone, cost-effective strategy for reducing serious bicyclist injuries. The way road space is managed and used, and the way various road users interact are also important. The Review of the Australian Road Rules and Vehicle Standard Rules provides a timely opportunity to invest in action to achieve the multiple cross-sectoral benefits associated with high levels of safe cycling and walking in Australia.

The authors would welcome the opportunity to further discuss how these rules will improve the outcomes of improved road safety and efficiency of the road network and maintain a dialogue about safety outcomes for all road users.

Executive Summary

The Australian Road Rules specify rules for motorists, motorcyclists, bicyclists and pedestrians.

The framing of the current provisions of the Australian Road Rules reinforces a culture in which drivers of registered vehicles (motorists and motorcyclists) are considered by many within the community to have greater rights as road users than those road users who are unregistered (cyclists and pedestrians). Paradoxically, the road users who are unregistered are amongst those at greatest risk in terms of road safety.

From a tactical perspective, improved road safety and efficiency of the road network requires the Australian Road Rules to be consistent, equitable and inclusive of all road users.

From a strategic perspective, achieving improved road safety and efficiency of the road network through consistent, equitable and inclusive rules will require transformation of behaviour and attitudes associated with road users' sense of right to road space. Improved road safety requires a culture of respect between road users and a sense of the right of all road users to share road space.

In addition, there does not seem to be adequate resources allocated to updating the Australian Road Rules and Australian Vehicle Standards Rules. Over the past five years, only 60% of a full-time equivalent staff member has been allocated to this important area of government responsibility.

In the next stage of the review process, we recommend that the NTC incorporate actions to:

- Acknowledge the increased value of shared modality and increased priority of vulnerable road users including bicyclists and pedestrians
- Modify learner driver education and testing in accordance with the Australian Road Rules to promote a culture of shared road usage rather than identifying bicycle riders and pedestrians as hazards – the RoadRight program is such an example
- Work in partnership with community groups to inform road users about changes to Australian Road Rules and augment these updates with behaviour change programs. The success of 'A Metre Matters' exemplifies the type of cross sector collaboration that is possible
- Review Australian Road Rules and legislation to place greater emphasis on the safety of vulnerable road users while maintaining an efficient road transport system. Such opportunities may include zoned speed limits, legislating the overtaking distance by

motorists around bicyclists, legislating that left turning motorists give way to bicyclists also turning left, changing rules around priority for parallel shared paths at intersections

- Increase financial and institutional support of programs that increase road user's knowledge of the Australian Road Rules, improves skills and safety, including children. One example is AustCycle, a nationally accredited bicycle education and safety program
- Adopt regular (three yearly) road-worthiness checks for all registered vehicles
- Adopting re-testing of a proportion of drivers at the time of licence renewal e.g. knowledge-based test, with randomly selected drivers
- Increase the level of effort dedicated to the resourcing of updates to the Australian Road Rules and Australian Vehicle Standards Rules
- Increase the investment in communicating of updates and revisions to Australian Road Rules and Australian Vehicle Standards Rules, and 'reminder' campaigns in relation to the Australian Road Rules and Australian Vehicle Standards Rules

Principal concern

Our principal concern in this review of the Australian Road Rules and the Australian Vehicle Standards Rules is the lack of a strategic, long term view that is inclusive of all road user groups. It is imperative that the road rules accommodate all road users safely and equitably.

Specifically, all unprotected, physically vulnerable road users need to be considered in the review of road rules and the potential implications on the safety of this group needs to be evaluated as part of the update of all road rules. This group includes all road users who have little physical protection, including: bicyclists, motorcyclists and pedestrians. Unprotected road users are particularly vulnerable to impacts from large-mass, fast-moving vehicles.

By adopting the viewpoint of the most vulnerable road users, there will be a consequent increase in safety for all road users.

We endorse a 'safe system' approach that is **explicitly inclusive of vulnerable road users** in assessing each element of the system in any context. Otherwise, the 'safe system' approach can be misinterpreted and used as an excuse to exclude vulnerable users from the decision making process.

While an economic estimation of the cost of road crashes is valuable, all lives have an unquantifiable value - **all** deaths and serious injuries are tragedies and are a significant cost to the nation. This is true irrespective of transportation mode or other characteristics of the individual. The Safe System and Vision Zero objectives are consistent with this moral premise and we support it as a philosophical approach. It is important that this moral position is not lost when the Safe System approach is implemented.

We recommend that the greatest safety gains will be achieved by the NTC working to review and update the Australian Road Rules in concert with other strategic initiatives such as those in health and the environment.

Recommendations

- Vulnerable road users be specifically prioritised - if the Australian Road Rules adopt the perspective of the vulnerable, all will be safer. A vision for the Australian Road Rules needs to include sharing of space with different road user groups
- An inclusive Safe System approach be adopted by all levels of Government and advocated through the Australian Road Rules to stress the value of **all** lives and improve road user performance

- Emphasis of Australian Road Rules needs to be the safe movement of **people** and **goods** not cars and motor vehicles

Specific comments to the Discussion Paper follow.

Operational perspective

By having the initial focus of the Discussion Paper on operational issues, the Discussion Paper immediately focuses on questions of State versus Federal relationships. While it is necessary to address these issues and include some historical background, greater emphasis is needed on forward-looking objectives.

The Discussion Paper does not take a very broad view of alternative regulatory frameworks, or consider how the Australian Road Rules relate to:

- The institutions charged or associated with enforcement (including the police, judiciary, advocates, the prison system, and alternative justice programs)
- Principles of jurisprudence
- Other aspects of society such as the education system
- The economic impacts of the current system, for example through the insurance industry
- The driver education and licensing industry / system (including for bicyclists)
- Whether the prescriptive style of road rule contributes to poor behaviour or paradoxically increases in unsafe behaviours

The operational perspective considered ways to create national laws and whether alternatives would be more time and cost effective. However, greater detail is needed about the existing decision making process, specifically:

- How decisions are made
- Reasons for decisions being made
- What evidence is needed to effect a change
- More detail on the decision making process when a recommendation is **not** supported

Improvements to communications are also needed. The operational process needs to be clearer and more comprehensively communicated. Whilst internally, the decision making process may be clear, the process is mysterious and lacks transparency for external agencies.

4.1 Update and implementation processes and outputs

Question

1. Should there be a standard implementation date for updated rules in states and territories? What are the strengths and weaknesses of doing this?

Background

The discussion paper identifies the longest implementation times for updates to the Australian Road Rules were for updates approved by transport ministers in 2003 and 2007. Three reasons have been cited as reasons for delays in implementation:

- i. An inability to move changes through state or territory legislatures in a timely fashion
- ii. A lack of resources
- iii. Competition between priorities

Analysis and Evidence

A standard implementation date would reduce variation between the versions of model laws enacted in each jurisdiction. Whilst a standard implementation date for updated rules may address the competition between priorities, it would not address the other causes of delay and may, in some jurisdictions, increase demand on resources. It may result in delays in implementation in jurisdictions that strongly support change – for example, the change to a default 50km/h local speed limit was already implemented in four States at the time of approval by transport ministers but took one jurisdiction nearly five years to implement. Any strategy that delays change in the Australian Road Rules to eliminate trauma may be perceived as indicating a high level of insensitivity to road trauma. Greater efficiencies in the implementation process are imperative to ensure the safety of all road users.

A standard implementation date could be achieved more efficiently if the Australian Road Rules were implemented through an applied law approach. This is discussed further in response to Question 2b.

Position of this joint submission

We consider it more efficient to adopt a standard implementation date for updated rules by implementing the Australian Road Rules through an applied law approach.

We do not support the introduction of a standard implementation date under the current model law approach.

4.2 Ways to create national laws

Question

2b. Should the Australian Road Rules be implemented through an applied law approach in the future? What are the strengths and weaknesses of doing this?

A key strength of the applied law approach from a policy perspective is greater national consistency. The national applied law approach still requires the initial passage of legislation through all State and Territory parliaments to produce a national framework. Subject to a decision of each parliament initially, every jurisdiction adopts the laws passed in the lead jurisdiction in exactly the same form. Any subsequent changes to the law are implemented in all participating jurisdictions when the laws in the lead jurisdiction are changed.

Importantly, national law models allow for individual jurisdictions to insert sections as required, and in some cases entire Parts of an Act are jurisdiction specific. These aspects of the particular national scheme are usually part of the Intergovernmental Agreement signed by participating jurisdictions. Parliaments of each participating jurisdiction are sovereign and will decide whether to pass the Bill to apply the National Law as a law of that jurisdiction, and may insert jurisdiction-specific sections as required.

Recent examples of national applied law approaches are the *Health Practitioner Regulation National Law Act* (as in force in each State and Territory) and the *Occupational Licensing National Law Act* (as in force in each State and Territory). The primary legislation for each of these applied laws has, like the Australian Vehicles Standards rules for heavy vehicles, been passed in the Queensland parliament. One reason why Queensland is preferred for this approach is the efficiency of passing legislation through a unicameral system of parliament.

Analysis and evidence

A national applied law approach would:

- Eliminate the passing of slightly different versions of the Australian Road Rules by different jurisdictions
- Eliminate inefficient and inconsistent implementation caused by delays in some state and territory legislatures
- Eliminate costs to the individual jurisdictions of drafting changes each time the Australian Road Rules are amended
- Maintain provision for the accommodation of jurisdiction specific requirements

The initial drafting of the Australian Road Rules for a national applied law approach would be drafted centrally under the auspices of the Australian Parliamentary Counsel's Committee (APCC) on the basis of instructions issued jointly by all jurisdictions. Under the

APCC's 'Protocol on Drafting National Uniform Legislation'¹, it is the role of the APCC to clear the national applied law in a form that is acceptable, from a technical perspective, to all parliaments. This will relieve the individual jurisdictions of a major drafting task. The current Australian Road Rules are nearly 400 pages long and central drafting would seem to be a significant efficiency compared to drafting of the model law prior to it being re-drafted in eight jurisdictions.

If the Australian Road Rules were to be implemented through an applied law approach, successful passage of the primary Australian Road Rules legislation may require support of both major political parties, and/or those who hold the balance of power. A high level of national consensus has already been reached in relation to the Australian Road Rules. This should minimise the problems in reaching agreement on a national system that have delayed implementation of national reforms in other contexts².

Position of this joint submission

We support the implementation of the Australian Road Rules through a national applied law approach in the future. As explained above, this approach is likely to improve efficiency of the delivery of the outputs of the Australian Road Rules, while accommodating jurisdiction specific requirements.

¹ APCC. *Protocol on Drafting National Uniform Legislation Third Edition: July 2008*. Accessed at <http://www.pcc.gov.au/uniform/uniformdraftingprotocol4-print-complete.pdf>

² COAG Reform Council. *National Partnership to Deliver a Seamless National Economy: Report in performance 2009-10*. Accessed at <http://www.coagreformcouncil.gov.au/reports/competition.cfm>

Tactical perspective

The tactical perspective section of the Discussion Paper poses important questions about the success of the Australian Road Rules from the users' perspective, impact and relevance. However, it is of concern that the content of this section:

- Fails to reflect the diversity of road users' perspectives
- Tacit acceptance of the varied level of knowledge of road rules and the haphazard approach towards keeping updated

There is little real consideration of:

- Whether a different approach to licensing would improve knowledge of the rules
- Whether a performance based approach could be implemented broadly and how it would operate
- Whether a performance based approach could allow a change to the onus of proof / and duty of care for road users controlling different mass and speed combinations or the desirability of that outcome from a safety perspective. It is submitted that this would be a positive direction for safety and would match up with the notion that if you pose the biggest danger then you need to take the greatest precautions

Despite raising a lot of questions about the current Australian Road Rules approach, the Discussion Paper goes on to find that the current Australian Road Rules meet the safe system requirements based on a consultant's report (AMR 2011). This is unsatisfactory especially after recognising in the Discussion Paper that:

'Delays to implementing key safety reforms in the road rules across Australia are inconsistent with the outcomes sought from the National Road Safety Strategy and do not reflect a high level of intolerance to road trauma.' (p v)

This statement seems to be confined to the operational perspective, when it is also relevant to the tactical and strategic perspectives on the Australian Road Rules.

In some sections of the Discussion Paper, it is acknowledged that the Australian Road Rules are lacking, yet in other sections, the Australian Road Rules are considered effective. Satisfaction with the Australian Road Rules is largely based on a comparison with English-speaking developed-economy countries i.e. US, Canada and Britain. The possibility of adopting different principles for different outcomes is not sufficiently canvassed.

In addition, we draw attention to several points from the Discussion Paper that raised queries, referenced below by the relevant page number from the Discussion Paper.

Page 14: The observation that the NTC has used 60% of a full-time equivalent staff member during the past five years to resource the updates of the road rules and the vehicle standards rules is surprising.

This does not seem to be a significant resourcing for such an important area of government responsibility.

Page 23: Whose perspective: The target group – the users

This assumes that there is one 'users' perspective. Such a simplistic view fails to consider that there are different perspectives between road user groups, but also within road user groups.

Page 24: 'To assess the objective of introducing uniform regulations throughout Australia for all road users'

Does this mean *between* road user groups (i.e. rules the same for drivers, bicyclists, motorcyclists and pedestrians) or *within* road user groups across jurisdictions (i.e. rules the same for all pedestrians across Australia)? The NTC might consider greater clarity in the language used to reference the diversity of road user groups and their different perspectives and safety requirements.

Section 5: The survey, which forms the basis of much of this section, is based on a questionable premise.

The questions arise because:

- Focus groups are arguably not the best method of assessment of effectiveness
- Effectiveness may not be the best concept to evaluate existing Australian Road Rules given ambiguity of the term in relation to transport outcomes. Specific indicators for safety, congestion, environment, equity, enforceability, comprehension are needed rather than the catch all of 'effectiveness'

Page 28: Figure 7 shows that almost 20 per cent of the community have been involved in a road crash in the last 3 years.

It is an alarming statistic that almost **one in five** people in Australia have been involved in a road crash in the last 3 years. This type of data needs to be emphasised when proposing a change in approach.

Figure 8: Factors affecting speed choice for drivers

The label 'Driver's speed choice' may be misleading. Speeding is multi-factorial and is likely to be a result of choice, mistake, habit, modelled behaviour, conditioning or a combination of all of these.

Table 9: Mobile phone use while driving

The data highlights that mobile phone use remains a considerable distraction to drivers. However, road user distraction is a broader issue that is not well understood. Greater data

collection is needed to understand the causal role of distracting devices, (i.e. mobile phones, portable music devices) in crashes involving all road users.

5.1 Assessing goal achievement

Question

5a. To what extent have the agreed objectives for the Australian Road Rules been reached?

A key objective of the Australian Road Rules is to:

‘enhance mobility and safety by updating and simplifying traffic regulations’

While it might be difficult to quantify the precise contribution of the Australian Road Rules to ‘enhanced mobility and safety’ there is a considerable body of evidence that road rules are an effective tool for improving safety. It is well-established in the Australian road safety literature that rules such as those pertaining to seat-belt wearing, BAC levels, speed limits and helmet-wearing for motorcycle and bicycle riders have increased compliance with the recommended behaviours and contributed to lower crash fatalities and serious injuries.

Based on historical evidence that appropriate road rules improve safety, it is likely that further evidence-based changes in the Australian Road Rules will make an important contribution to achieving a 30% reduction in the annual numbers of both deaths and serious injuries on Australian roads as set out in the National Road Safety Strategy 2011–2020.

In particular, we argue that achievement of enhanced safety, and mobility for people using non-motorised travel modes, requires changes to the Australian Road Rules aimed at improving safety for vulnerable road users.

The second set of objectives refers to the main functions of the Australian Road Rules. This functional analysis should be significantly expanded and brought to more prominence through the Discussion Paper. These objectives are:

- i. resolve conflicts (e.g. who has to give way)
- ii. prescribe behaviour that is necessary for the orderly operation of the system (e.g. keeping a vehicle in a single lane)
- iii. prohibit behaviour that is detrimental to the operation of the system (e.g. driving to the right of unbroken double lines)

These objectives have not been achieved in relation to active travel users (walking and cycling). Specific examples are given for the first two objectives/functions below:

Resolution of conflict (e.g. who has to give way):

Current Australian Road Rules are not well understood and in the example of who has to give way, the Australian Road Rules do not resolve conflict between bicyclists and drivers. For example, there is confusion about who gives way when a driver wants to turn left across a bike lane (Johnson, Charlton et al. 2010).

Greater clarity is needed between road user groups to ensure intuitive, common sense resolution of conflict.

Prescribe behaviour that is necessary for the orderly operation of the system (e.g. keeping a vehicle in a single lane):

Prescriptive behaviour that has been created by the introduction of some cycling infrastructure has led to increased confusion between bicyclists and drivers, for example, the placement of some ‘advanced stop’ bike boxes.

In some jurisdictions, at signalised intersections a bike box has been painted onto the road at the front of the vehicular lane behind the pedestrian crossing. The intention of the bike box is to create a safe space for bicyclists to wait during the red light phase, ahead of the stationary vehicular traffic (Daff and Barton 2005).

However, confusion is created when this bike box is positioned at the front of a vehicle lane that has a left turn filter (see Figure 1). The bike box is clearly marked with a painted bicycle symbol and the bicyclists interpret this as the correct place for them to wait until they continue straight through the intersection. Yet, the left turn traffic signal indicates to drivers that they are able to drive through, however they are unable to due to the waiting bicyclists.

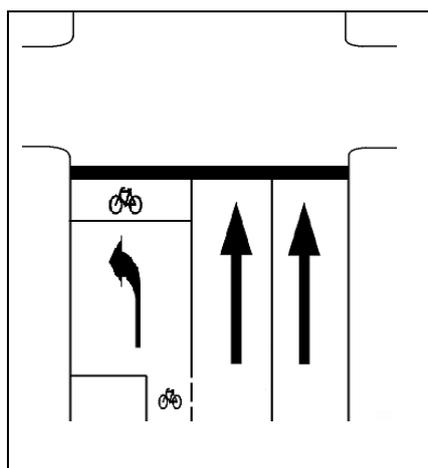


Figure 1. Bike box positioned in front of vehicle lane with left turn filter

This is an example of when infrastructure is used to create an expectation of prescriptive behaviour however this is compromised for drivers and bicyclists by the implementation. It

is not clear where the breakdown occurs in the implementation process, whether it's a forced decision made by the transport engineers in trying to fit a bicyclist space into a narrow or existing road space or if the decision for placement is made *in situ* at the site.

This is an example of where a bicyclist-perspective is required in ensuring the prescriptive behaviour generated by Australian Road Rules is considered and included.

Although this example relates to the implementation of the road rule, rather than the rule itself, it is a clear example of how compliance with Australian Road Rules can be compromised. This example also highlights the need for a Safe System approach across all stages of the road rule decision making and implementation and the inclusion of all road users in that decision making process.

Question

5b. Are the updates to the road rules and the implementation by states and territories sufficient to realise the agreed objectives.

No, as we have highlighted throughout this submission, the current approach to the Australian road rules is not inclusive of all road users. A shift is needed in the understanding and interpretation of 'road user' to be inclusive of all non-driving modes is needed to ensure future updates realise the agreed objectives.

Question

5c. Are there any other available data that might inform this assessment?

Improved safety for bicyclists (and presumably for timely updates to Australian Road Rules that contribute to improving bicyclist safety) is a consistently and commonly expressed need in surveys of Australian adults who are asked questions such as whether they would like to cycle more and, if so, what constrains them. Recent survey results from a survey of 1000 Australians aged 18 and above in 2011 (CPF and NHF 2011) are typical:

- Unsafe road conditions (46%)
- Speed/volume of traffic (42%)
- Don't feel safe riding (41%)
- Lack of bicycle lanes/trails (35%)

Unsafe road conditions are the main reason parents do not permit their children to walk or cycle to school.

Questions

6a. To what extent have the agreed objectives for the Australian Vehicle Standards Rules been reached?

6b. Are the updates to the vehicle standards rules and the implementation by states and territories sufficient to realise the agreed objectives?

6c. Is there any other available data that might inform this assessment?

The response provided above to Question 5a is also relevant to Question 6a.

The response provided above to Question 5c is also relevant to Question 6c.

5.2 Assessing impact

Questions

7a. Is it possible or feasible to move the Australia road rules and vehicle standards rules from a mainly prescriptive rule approach to a more performance-based rule approach over time? How might this be achieved?

7b. How can performance-based rules be better enforced?

While, in Australia, the concept of performance-based rules has typically been applied to vehicle design rather than driver behaviour, there is an argument to be made for extending the concept to include driver behaviour, particularly for the purpose of improving safety for vulnerable road users.

In several countries such as the Netherlands, which have high rates of relatively safe cycling, safe driving behaviour around bicyclists and pedestrians is enhanced by establishing a higher duty of care. For example, in The Netherlands, road markings provide clear and connected routes for bicyclists, pedestrians and vehicles and active road users are prioritised above motor vehicles in central areas and neighbourhoods. Behaviour is less prescribed, however the consequences in the event of a crash are linked to the injury of a bicyclist or pedestrian.

While knowledge of the Australian Road Rules is important to ensure predictability amongst road users, as cited in the Discussion Paper, knowledge of the Australian Road Rules is not currently thought to be a critical factor in crash involvement. Crashes are multi-factorial and include factors such as: fatigue, inexperience, poor gap selection between vehicles, visibility, driver distraction and risk taking behaviours.

Questions

8a. Can a mix of advisory and performance-based approaches replace the mainly prescriptive approach to the rules currently used in Australia?

8b. Would this have an impact on safety or efficiency?

It would be desirable to have a mix of advisory and performance-based approaches to replace the mainly prescriptive approach. It is likely that a mixed approach would lead to improvements in both safety and efficiency for road users.

Questions

9a. What are the unintended positive and negative effects of the Australian Road Rules and Australian Vehicle Standards Rules, and their implementation by states and territories?

9b. Do the positive effects outweigh the negative effects?

It is important to recognise that some measures that improve the safety of motor vehicle occupants may actually increase injury risk for vulnerable road users (e.g. larger and heavier vehicles, bull bars) (Watson and Cameron 2006).

It is not practicable to determine if the unintended positive effects outweigh the unintended negative effects across all Australian Road Rules and Australian Vehicle Standards Rules. The cost benefit analysis of positive and negative effects needs to be evaluated and determined for individual Australian Road Rules. What is essential, is that such evaluations are inclusive of the potential consequences for all road users.

We support the introduction of Global Technical Regulation (GTR) 9, an international vehicle standard developed by the United Nations, which requires vehicle manufacturers to design the front of vehicles to absorb the energy of a collision with a pedestrian or other 'vulnerable' road user.

The introduction of GTR 9 needs to be supported with modifications to laws supporting 'bull bars'. These, and similar modifications, make survivable impact speeds much lower than they need to be and possibly reinforce a feeling of invulnerability in drivers of vehicles equipped with them.

Bicycles and bicycle equipment also need to comply with safety standards. For example, the street use of un-braked fixed-wheel bicycles needs to be addressed.

The past emphasis on promoting conspicuity for pedestrians and bicyclists can be maintained. However, there is likely to be an increasing prevalence of utility bicycling in 'normal' clothes. The system needs to be sufficiently safe to allow for this type of riding and avoid the approach of 'blaming the victim'. Similarly, safety measures which promote the

use of reflective clothing among pedestrians could be considered as virtually an admission of failure on the part of the safety authorities.

5.3 Assessing relevance

Question

10a. Are there areas where the Australian Road Rules or Australian Vehicle Standards Rules are not meeting the needs and priorities of community users? If so, please provide further information about this including what these needs and priorities are.

Throughout the Discussion Paper, there appears to be tacit agreement that the current lack of awareness of Australian Road Rules amongst drivers and the ‘passive’ or ‘haphazard’ approach to updating knowledge is acceptable. While this approach may be acceptable for the dominant road user group, it is not acceptable for vulnerable road users.

Appendix C, it is clear that there is a general lack of knowledge about cycling-related Australian Road Rules:

‘Rights of bicyclists: Issues about uncertainty related to a general lack of knowledge about rights of bicyclists, as well as more specific issues including how bicycle lanes operate, when to overtake bicyclists, who is at fault if a bicyclist is hit by a motorist and who is at fault if a bicyclist crashes into an open car door’ (p81)

According to the AMR report, commissioned by the NTC, 20% of respondents were less confident/unsure of their knowledge of the Australian Road Rules related to bicyclists. Unlike other areas of the Australian Road Rules, where a ‘common sense’ approach may appear sufficient, in relation to cycling-related Australian Road Rules, this lack of knowledge is potentially fatal.

There are also assumptions made in Discussion Paper that suggest a lack of understanding of issues relating to vulnerable road users, for example in reference to the respondents of the AMR survey:

‘Many cyclists would not, however, be regular or intensive users of the roads, which would reduce the impact of a lack of knowledge on the risk of crashing’ (p81)

However, the majority of all respondents were licensed drivers (92%) (AMR 2011). As bicyclists in this survey were likely to be drivers, they are as likely to use the road as drivers who do not ride a bicycle. Bicyclists’ knowledge, or lack of knowledge in relation to the risk of crashing, would be comparable to any other driver.

When people choose active travel options, including walking or cycling, their road use is as regular and intensive as when they choose to drive. The notion that people's road use is diminished when they choose non-driving options suggests a lack of understanding of people's mixed mode choices.

The education of all road users is critical to the overall safety of the road network.

We submit that there are serious inequalities in the way different road user groups are represented in the Australian Road Rules that have a direct negative impact on the safety of vulnerable road users such as bicycle riders.

The introduction of programs to educate and develop respect towards vulnerable road users would be expected to reduce the incidence of bicycle injuries. Program campaigns such as the AGF Road Right and 'A Metre Matters', promotes an awareness and changed culture for the safe sharing of roads for all users.



Changes in behaviour can also be brought about by incentives. Changing the onus on liability for insurance purposes to the vehicle with the much larger weight and capacity to injure other more vulnerable road users is likely to/has been shown to bring about pressure for behaviour change in favour of greater avoidance of impacts with vulnerable road users. This would also be promoted by insurance companies who are likely to encourage drivers to respect the interests of vulnerable users if their compensation payouts are likely to be affected.

Review of Australian Road Rules to address common situations where drivers place bicyclists at risk would also bring about improved awareness and culture change.

'Safe vehicles' in the context of reducing bicyclist injuries refers to both bicycles and motor vehicles. The contribution of poor bicycle design or assembly, or bicycle mechanical failure to serious bicyclist casualties in Australia (and elsewhere) is currently unknown, but a number of motor vehicle characteristics are known to increase the risk of bicyclist serious casualties. In Victoria, heavy vehicles are over-represented in fatal crashes investigated by coroners, with over 27% of bicyclist fatalities involving heavy vehicles. Research in the UK found that most bicyclist/heavy vehicles casualties occur at low speed (<10 mph) when trucks are manoeuvring, particularly left-turns and at roundabouts.

Better design of cars and heavy vehicles can reduce the risk of injuries for bicyclists and pedestrians. Design measures include crash-friendly car fronts, and side-underrun protection on trucks that prevents the dangerous underrun of bicyclists and riders of other

two-wheeled vehicles. Both open and closed side-underrun protection are in the top 10 list of relevant and cost-effective measures in the Netherlands to reduce the number of casualties as a result of crashes involving trucks. Other vehicle design options include equipping cars with exterior airbags, intelligent speed adaptation devices, and other technologies that assist in reducing crash involvement.

Recommendations

- The licensing system be reviewed such that motor vehicle license holders are assessed on their awareness of vulnerable users
- The onus of proof be re-examined such that vulnerable users (who may not be in a position to give evidence on their own behalf) are treated equitably and incentives offered for particular care on the part of motor vehicle operators
- Regular ongoing license testing be introduced rather than lifetime licensing
- The Australian Road Rules should support behaviour change and information programs such as the 'A Metre Matters' campaign and the RoadRight Program
- Australian Road Rules be reviewed to introduce legislation that maximises the safe sharing of roads and protects vulnerable road users, such as; legislating that motorists provide one metre when passing bicyclists, permanently reduced speed limits in the CBD, in neighbourhood and community areas including school zones, legislating that motorists, when turning left must give way to bicyclists also turning left
- Training of vulnerable road users in the area of safe bicycling, motorcycling be addressed as a matter of priority

Question

10b. Are there better ways to communicate changes about the rules to the community?

Better communication of rules to the community is definitely needed and all forms of communication need to be utilised, including social networking and websites as well as traditional mass media methods.

In relation to the current review, the NTC website itself was difficult to navigate. Throughout the Discussion Paper repeated references were made to supporting documentation on the NTC website with a generic ntc.gov.au address. Suggestions to improve this process would be to enable author, company names or report titles to be searched via the NTC front page search engine. Alternatively, instructions could be included next to each reference that the report can be found online under the menu 'News and Publications – Other Reports'.

Question

12. Are there areas that the Australian road rules or vehicle standards rules are not meeting the needs and priorities of government users? If so, please provide further information about this, including what these needs and priorities are.

' 5.3.3 Government users

There are different users within government, which can be classified by the following interests:

- policy development*
- infrastructure*
- enforcement*

These users are from all three levels of government—local, state or territory, and Australia.

Government users interested in policy development aspects of the rules include the areas of road safety, sustainable transport, environmental policy and enforcement, as well as departments of justice.

Some government users view the Australian road rules and the vehicle standards rules as one way to implement new policy. For example, road safety officers seek to improve road safety outcomes and sustainable transport officers seek to improve the environmental sustainability of transport. Traffic engineers seek rules to enable efficient outcomes for transport.' (p 58)

No reference is provided as to the health benefits of active travel and how road safety concerns and high injury rates are barriers to achieving health benefits. Improvements can be made across the four components of the Safe System approach.

Question

13a. Do you agree with the conclusion that the Australian Road Rules and the Australian Vehicle Standards Rules are currently consistent with the safe systems approach?

No, especially as the safety performance is currently largely irrelevant under the prescriptive rule based approach and there is poor awareness of Australian Road Rules as illustrated by the data on road rule knowledge.

Question

13b. If you disagree, what data can you provide to show this inconsistency?

The Safe System approach is not being considered from the perspective of active travel users, examples of this include Australian Road Rules related to bull bars, window tinting and truck side protection. Rules such as these pertain to the safety and needs of vehicle occupants with little or no consideration given to the safety implications of these vehicle modifications to road users outside the vehicle.

Questions

14a. Are the Australian road rules and vehicle standards rules in keeping with needs and priorities of users?

Question 14b Should the direction be changed?

Question 14c Should the rules be continued, modified or terminated

Australian road rules are not in keeping with the changing needs and priorities of road users. The needs and priorities of non-driver road users, bicyclists, motorcyclists and pedestrians are not adequately addressed.

A change to a more road-user inclusive direction is needed. Greater protection is needed for vulnerable road users. Consideration needs to be given to the international examples of a default responsibility with the operator of larger mass/speed combination in the event of a crash. This would place responsibility with truck drivers in a truck-car collision, with car drivers in a car-bicycle collision. While responsibility would be mitigated by circumstances that is responsibility would shift to the smaller vehicle operator, this fundamental shift in responsibility places the onus of care on the operator of the vehicle that has the greatest potential to cause damage to other road users.

Placing the onus of proof on drivers involved in collisions with pedestrians and bicyclists has been adopted in several countries. This change increases the burden of responsibility for drivers to be accountable for their actions to a level which is commensurate with the level of vulnerability in the event of collision.

In addition, we disagree with the findings on p 51:

NTC commissioned a consultancy to examine whether the current rules are consistent with the safe system approach to road safety. The consultancy came to the following conclusions.

Australian Road Rules

- The road rules generally take on the role of preventing crashes, and not to prevent death or injury from crashes that have occurred. The road rules therefore do not have a major role to play in the safe systems context of controlling crash forces in the event of a crash, other than through speed management to limit kinetic energy.*
- The safe systems assessment found that the road rules are consistent with the safe systems approach to the extent that they can be, noting that many aspects of the safe systems approach fall mostly within the purview of traffic enforcement and road design engineering.*
- The assessment found that the Australian Road Rules are consistent with the safe systems approach.*

As discussed above, there is currently no data collection following road crashes to determine the involved road users' level of knowledge about Australian Road Rules.

Therefore, it is inaccurate to categorically conclude from one consultancy report that lack of knowledge does not contribute to road crashes. As discussed above, crashes are multi-factorial and it is likely that many factors contribute to individual crashes however there is not sufficient evidence currently available to exclude knowledge of Australian Road Rules as a potential contributing factor.

Strategic perspective

The strategic perspective is arguably the most important section of the Discussion Paper. This section could easily have been positioned first in the Discussion Paper and set the agenda for the operational and tactical perspectives. Instead the section is sparse with little discussion of the strategic objectives as they relate to the processes for updating the Australian Road Rules.

Vision

The broad vision of the NTC as an organisation is:

Australia's prosperity and community liveability is enhanced by the movement of people and goods

Despite the vision of the NTC, the focus of the Australian Road Rules is related to the movement of **vehicles**, not the movement of **people** and **goods**.

There is a clear role for active travel, both cycling and walking, to contribute to achieving this vision. However, the vision and the role of those who walk and bicycle is not clearly identifiable in the Discussion Paper. It is important that the vision of the NTC is carried through to the review to ensure that all resulting changes promote improvements in line with the vision.

In Section 6, the intention is to explore some of the trends, issues and challenges related to transport in the future (p56). However, this exploration is cursory and the text does not address the issues identified in the headings.

6.1.3 Continued reliance on the private motor vehicle

How does this trend/issue/challenge fit with the strategic goals of other areas of government?

Figure 20 Crash problem areas mapped to the safe systems approach

The assumption that there is only 'some or indirect benefit' to be gained for bicyclist safety by investing in 'Safe Vehicles' and 'Safe People' needs to be constantly challenged.

The behaviour of motorists towards bicycle riders has a critical impact on the safety of all bicycle riders, as well as a person's willingness to ride a bike. Recent research from the Monash University Accident Research Centre (Johnson, Charlton et al. 2010), reported that in 87% of incidents between cars and bicycles, cars drivers were at fault. The study reported that the most prevalent incidents were a result of the motorist 'side swiping' the bicyclist or turning left in front of rider.

Most of the questions raised in this section can be answered by including cycling as a priority in the Australian Road Rules.

6.2 Aspects that relate to the rules

Question

15. Do you agree with the current objectives of the Australia road rules and vehicle standards rules, or should they be changed?

Question

16. Do the outputs of the update processes for the Australia road rules and vehicle standards rules, and the implementation by the states and territories represent value for money? What improvements do you suggest?

No, the current processes do not represent value for money. Improvements could be gained through greater inclusion of bicyclists in the Australian Road Rules. The direct financial benefits from improved bicyclist safety and increased cycling participation have not been fully realised in Australia.

A recent economic review of cycling in Australia reported the following per annum figures (Australian dollars):

- \$1b the value of the bicycle and accessories market value
- \$254m generated by cycle tourism events and tourist trials
- \$139m income tax revenue from the 10,000 people employed in the bicycle industry
- \$61.9m the savings for businesses per year as regular riders take 1 less sick day than non-riders

The benefit-to-cost ratio for developing bicycle infrastructure has been accepted as a positive return. In the past two years, there have been a number of Demand Assessments and Economic Appraisals completed which identify a positive Benefit Cost Ratio (BCR) for bicycling infrastructure. These reports have included; Inner Sydney Regional Bicycle Network 2010, Economic Feasibility Assessment of the Active Transport Queensland 2009, and Evaluation of the costs and benefits to the community of financial investment in the Naremburn to Harbour Bridge Active Transport Corridor 2010. Each report has utilised a range of values for a variety of influencing factors providing positive ratios. The BCR for the construction of roads needs to incorporate a full analysis that includes the broader co-benefits and impacts to health, environment and air quality.

To support greater development of the infrastructure supporting safer bicycling, an agreed BCR framework should be identified and promoted.

Recommendations

- The NTC would recognise national compliance regulations for minimum standards of bicycle infrastructure in road designs
- The Australian Road Rules be reviewed and updated to permit the safe design and operation of separated cycleways and bicycle lanes within the road corridor and to explicitly require vehicles travelling along a through road to give way when attempting to turn across the path of bicyclists using bicycle facilities (either on- or off-road) along the same road
- Members of traffic committees (local road authority representatives, council staff, planners and Police) to complete training courses on design for vulnerable road users as part of their regular in-service training requirement. Places could also be offered to Road Safety Officers and Sustainable Transport/Access Officers of local Councils for skill development
- Introduction of permanent 30km/hr speed restrictions in school zones, some residential areas and active places and spaces
- Introduction of permanent 40km/hr speed restrictions in CBD zones

Question

17. Do the processes for updating and implementing the Australia road rules and vehicle standards rules provide the flexibility to address the socio-economic aspects such as the growing and ageing population? What improvements do you suggest?

Cycling provides a low cost transportation option for Australians from all socio-economic groups. For those Australians who are not able to afford the costs associated with a motor vehicle, a bicycle offers the options to extend their transportation options for short trips and provide greater flexibility and self-reliance to link and access other transport options such as public transport.

Question

18. Do the processes for updating and implementing the Australia road rules and vehicle standards rules provide the flexibility to address the environmental impacts and for the use of more sustainable forms of transport? What improvements do you suggest?

No. Greater emphasis on active travel and public transport is essential to make a substantial difference to the environmental impact of transport.

Questions

19. Do the processes for updating and implementing the Australia road rules and vehicle standards rules provide the flexibility to address current and future technology aspects?

What improvements do you suggest?

20a. Do the current institutional arrangements for updating and implementing the Australian road rules and vehicle standards rules enable good policy outcomes?

No. Greater flexibility is needed to accommodate rapidly changing transport technology. A current example is the rules related to electric bikes. Electric bicycles have the potential to extend active travel options to a broader section of the community who are currently unable or unwilling to use a pedal bicycle for transport. However, the rules related to electric bikes are inconsistent and confusing and a new national standard, currently under consideration, is needed.

For this example, improvements would be achieved by including the industry in every stage of the decision making process. Expert advice needs to be part of the decisions making process for new or updated rules to ensure the safety issues and impact of electric bikes on the existing road environment and benefits to the community are considered.

Question

20b. What improvements do you suggest for the institutional arrangements?

The decision making committee needs to be more inclusive of all road users. This would be achieved by including on the decision making committee a representative from each of the road user groups including pedestrians, bicyclist and motorcyclists, as well as older road users and children.

Use the existing peak organisations to review modifications to Australian Road Rules, for example the Australian Bicycle Council.

6.3 Questions about the strategic perspective

Questions

21a. Do the positive impacts from the rules justify the ongoing need for the rules?

21b. Do users support the ongoing need for the rules?

The safe system approach is that no road user should be killed or be subject to non-recoverable injuries as a result of a crash. It recognises that, although much can be done to reduce road user error, human nature means that errors of judgement will still occur. It is therefore desirable to have vehicles and infrastructure designed to minimise impact forces of occupants and other road users in the event of collisions.

The safe system approach recognises that even with a focus on prevention, road crashes will occur. Therefore, the road system must be designed to be more forgiving of human error and attempt to manage crash forces to survivable levels, while reducing the contribution of unsafe road user behaviour to road crashes.

The safe system approach identifies the shared responsibility of the road system and vehicle designers, providers and users in achieving this outcome. Achieving a safe system of road travel is based on an understanding that the human body is vulnerable and unlikely to survive an uncushioned impact at a speed of more than 30 km/h.

Even relatively low speeds can kill or seriously injure a person, unless the vehicle, road and roadside environment take into account the physical vulnerability of all road users. The safe system approach encourages a better understanding of the interaction between the key elements of the road system: road users, vehicles, roads and roadsides, and travel speeds.

'It is safe to drive over the speed limit'

There is widespread community acceptance that increased vehicle speeds lead to more accidents and injuries. However, the public hold mixed beliefs about what constitutes 'speeding' and also mixed attitudes to a range of circumstances under which speeding is considered acceptable. The widely held belief (79% of Victorians) that:

'Speeding is driving too fast to be safe given your ability as a driver, the weather conditions, the state of the road and the condition of your car'

is of particular concern for the safety of bicyclists and pedestrians. Drivers' perceptions of a safe speed are often car-centric and fail to take into account the risks to vulnerable road users.

<http://casr.adelaide.edu.au/publications/researchreports/CASR002.pdf> (Australian Design Rules)

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