Introduction

The purpose of this submission is to provide some observations and suggestions on vulnerable road users. While I understand the focus of the current inquiry, it is also the case that, in many respects, every road user is a ‘vulnerable road user’.

Thinking of particular groups as ‘vulnerable’, however, does not necessarily mean focusing on groups according to how they use the road (pedestrians, cyclists, etc.); it is also important to think about population groups in terms of their road-related behavior and in relation to their likelihood of experiencing transport-related injury. Considered in this way, young males in their teens, 20s and early 30s are particularly likely to drive/ride in a dangerous manner and are also particularly likely to experience serious injuries as a result of transport accidents. Attention should also be given to the needs and vulnerabilities of older citizens as road users, particularly given the expectation of increasing numbers of older people, many of whom wish to stay as mobile as possible and many of whom will experience mobility limitations due to health conditions.

The comments which follow are not meant to constitute a comprehensive or systematic review of the issues, or a summary of what is known from the vast Australian and international literature on road safety for vulnerable road users. ACT Government has access to, and should take full advantage of, the considerable amount of knowledge and expertise regarding these issues that exist within the ACT, as well as information and advice available through expert centres such as the Centre for Accident Research and Road Safety – Queensland (CARRS-Q), the Accident Research Centre at Monash University, the Centre for Automotive Safety Research at Adelaide University, and the Transport and Road Safety (TARS) Research Group at the University of New South Wales, as well as information on road safety-related issues arising from research funded by organisations such as the National Drug Law Enforcement Research Fund. ACT-specific research on drivers’ and motorcycle riders’ attitudes and behavior, much of which has been supported by the NRMA Road Safety Trust, is particularly valuable -- as would be additional qualitative research into the factors which influence those attitudes and behavior.

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Pedestrians

1. **Countdown walk lights**: A New Zealand study of pedestrian traffic signals documents reveals something that most of us know to be true: ‘Pedestrians tend to use traffic signals as a guide, but if they become frustrated by long delays, they will likely ignore the signals entirely and cross when they perceive the risk to be acceptable, rather than accept continued delay.’

Pedestrian count-down timers, which have been in wide use internationally for some years, were recommended by the Office of Transport Safety Investigations in 2008 and the NSW Parliamentary Staysafe Committee in 2009. They are still not in general use in Australia. Countdown walk lights provide information to pedestrians either in relation to how many seconds remain for the crossing phase, or how many seconds remain for the ‘wait’ phase before pedestrians can safely cross. I saw the latter type in Washington DC in 2006; they are also apparently used in Dublin. I strongly support the use of these lights in the ACT, especially in view of research which has found that pedestrians are generally not willing to wait for more than 30 seconds before crossing a road (see NZ report at fn 3).

2. **Alcohol**: Pedestrians becomes particularly vulnerable once they are affected by alcohol. On Friday and Saturday nights in Civic, drivers are confronted by alcohol-affected groups of young people staggering backwards and forwards across pedestrian crossings or attempting to cross the road at random and unpredictable spots. I have seen this situation (where a group of alcohol-affected young people were not progressing through a pedestrian crossing in the appropriate manner) prompt a case of road-rage, with a driver becoming extremely angry and frustrated at this behavior.

3. In ‘shared zones’, pedestrians are always going to be disadvantaged and come off worst. Paths (especially narrow ones) ‘shared’ by pedestrian and cyclists are problematic, especially for older people who may have reduced hearing and mobility. All bicycles should be required to have a bell, horn, or similar warning device, in working condition, and cyclists should be given information about their appropriate use. Some cities (eg, Tucson, Arizona) have created a Pedestrian Advisory Committee to advise the City Council on creating a safer and more comfortable walking environment.

Cyclists

1. **Off-road cycleways** offer the triple benefit of maximising safety protection for cyclists by separating them from motor vehicles, making cycling journeys more pleasant (less noise and vehicle pollution), and encouraging people to cycle. At the very least, off-road cycleways should be required wherever the speed limit is more than 60kph.

2. **Cycleways need to be publicised** so that people know where they are and where they go.

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Community groups should offer guided rides to give people an opportunity to see what is involved in using these cycleways in terms of time and difficulty. There should also be an organised ‘buddy’ system so that people who want to cycle from A to B, but are uncertain about the best way to do this, can seek advice and even request a guide to show them the way.

3. **Pedestrian crossings:** There is a fundamental issue concerning how cyclists are regarded under the law and in their own mindset. Cyclists tend to regard their vehicles as simply a form of road transport without a motor; the alternative view is that bicyclists are pedestrians on wheels and should be required to dismount and walk across pedestrian crossings (as they are in many parts of the world, including parts of Canada). I believe that the ACT Road Rules require cyclists to dismount and walk across pedestrian crossings, but many cyclists are either unaware of it or choose to ignore it. In the interest of safety, cyclists should always be required to dismount and to walk across pedestrian crossings.

4. In terms of cyclists’ own safety, the requirement for the wearing of a bicycle helmet should be enforced, rather than ignored (as seems to be the case at present) by ACT Policing. At the very least, cyclists riding without a helmet should be issued with a warning. Pressure to relax the helmet requirement should be firmly resisted.

If it is not already, it should be a requirement for cyclists riding at night to have functioning front and rear lights (and this requirement should be enforced); cyclists should also be encouraged to wear reflective clothing (see comment re motorcyclists, below).

5. Children’s bicycle training initiatives should reflect best-practice and should take into account previous evaluations of ACT initiatives and other recent recommendations.

Consideration could also be given to cycling education and training for adults. For example, the City of Tucson and Pima County in Arizona provide training by certified instructors for adults, children, women and others interested in starting to ride. Program participants receive a free helmet, lock or lights for their bike.

**Motorcyclists**

1. Road infrastructure such as barrier systems should enhance rather than decrease survivability for all road users. The NSW Motorcycle Strategy 2012-2021 includes a specific commitment to developing and promoting technical support to encourage road asset owners to consider motorcycle safety when designing, constructing and maintaining the road network. In the ACT, however, we see the continued use of wire rope barriers (WRBs), which pose particular dangers.

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7 See, for example, the NSW RTA’s response to Recommendation 11 of the report of the 2010 NSW Parliamentary Inquiry into Vulnerable Road Users (http://www.parliament.nsw.gov.au/prod/parlment/committee.nsf/0/9e5130abd1fd436a3ca2577ed0002ded3/SFILE/Vulnerable%20Road%20Users%20Inquiry%20-%20Govt%20Response.pdf).

8 http://cms3.tucsonaz.gov/bicycle
to motorcyclists. RoadsACT has been asked to monitor the results of a trial of modified WRBs being conducted in Victoria. If the trial is shown to be effective and to improve motorcycle safety, then he will ask that the additional measures be adopted in the ACT.

Any genuine examination of the evidence (which is currently based largely on studies from overseas -- and which makes insufficient use of techniques such as crash simulations and computer modeling -- since funding for Australian studies has been lacking) indicates that the approach being taken to WRBs is contrary to accepted approaches to other public health risks. Where ‘ironclad’ evidence is lacking for a potentially serious health risk, a ‘precautionary’ approach should be taken. This is especially the case where alternative measures are available that pose lower levels of risk and which do not require the health and safety of one group to be sacrificed for the sake of those of another group. Also, where there is a suspicion, but no clear scientific consensus, that something is a risk to health, those wishing to take the action may be asked to provide evidence that it is not harmful. Viewed from this perspective, those who advocate the use of WRBs should be expected to demonstrate that WRBs do not pose an unacceptable safety risk to motorcyclists.

Motorcycle safety representations from the national Ulysses Motorcycle Club have called for improved police crash investigation and reporting. The Australian Motorcycle Council also believes that Austroads’ current research programs do little to improve motorcycle safety and has criticised Austroads for what it believes is a lack of knowledge, understanding and interest in motorcycle safety issues.

It should not be beyond our capability to provide roadside infrastructure with improved outcomes for riders which would not disadvantage other road users. There are indications that the WRB manufacturers are taking note of motorcyclists’ concerns, and in some countries, including New Zealand, are proposing to introduce modifications to the barriers specifically designed to address these concerns. Some European countries have either removed, or instituted a moratorium on, WRBs.

By working in consultation with accident research authorities, safety barrier manufacturers and representatives of all road users, it should be possible to reach agreement on the use of barriers which are effective but are less likely to cause catastrophic injuries to motorcyclists.

A positive development is that funding has been allocated for the revision of the Australian Standard for Roadside Barriers. I understand that the Australian Motorcycle Council will be represented on the committee which is undertaking this revision.

A workshop will be held in November 2013 which will include information about recent updates to the testing standards for roadside safety hardware in Australia and the USA.9

2. Like driver training, motorcycle training needs to emphasise ‘roadcraft’: the judgment and skills required for riding safely on the road. Too many L-plate and P-plate riders are over-confident in their belief that knowing how to operate the vehicle means that they know how to ride. In NSW, the RTA has supported the investigation of strategies to improve the skills of motorcyclists.

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novice riders and of strategies for post-licensing mentoring.

3. Being in control of a motorcycle and riding safely leave less margin for error than driving a car. As the Queensland Government has noted: ‘Riding a motorcycle requires different and supplementary skills compared to driving a car. A number of research studies have identified the extra skills needed (e.g. balance and coordination of multiple controls), and argue that riding is typically a more complex task than that of driving a car.’\(^1\) For this reason, the NSW Parliamentary Joint Standing Committee on Road Safety recommended in 2010 (Recommendation 13) that the maximum permissible BAC for fully licensed motorcyclists should be .02.

4. Many motorcyclists have a particular mindset when it comes to speed: they like it. The problems come when public roads are treated as race-tracks and when motorcyclists disregard posted speed limit signs in preference to a philosophy of ‘riding within your own limits’. Wakefield Park and Eastern Creek have ‘ride day’s to provide opportunities for riders with the need for speed.

I have observed what seems to be a popular and promoted view among motorcyclists that the right speed is whatever speed you feel is safe, within your own limits and abilities and prevailing road conditions. Experienced motorcyclists can pose particular problems due to their confidence which leads them to believe that posted speed limits and warning signs should be regarded as merely ‘advisory’ and can be safety disregarded. I have seen a particular tendency for riders to ignore speed limits on country roads, on ‘sweepers’ and on tight corners on the grounds that the posted speeds indicate safe speeds for cars and are irrelevant for motorcycles – and are manifestations of ‘the government’, the purpose of whose rules is seen as preventing people from having ‘fun’ and ‘enjoying life’.

**Road safety issues with relevance for vulnerable road users**

1. **Drink-driving**: Alcohol makes all road users ‘vulnerable road users’ because all road users are vulnerable to the risks posed by driver and riders under the influence of alcohol. Current approaches to drink-driving are in urgent need of an overhaul.

Specifically, there is a need to supplement deterrence theory-based reliance on RBT-based enforcement -- which only addresses the problem once it occurs -- with a more sophisticated range of strategies focusing on primary prevention. Examples of primary prevention would include making alcohol interlocks a standard feature on all motorised vehicles and ensuring the availability of other transport options.

Law enforcement authorities continue to be frustrated that so many drivers do not ‘get the message’ about not drinking and driving. Drivers will not ‘get the message’, however, as long as there is a ‘disconnect’ between the ‘message’ and the behavior. The consequence of driving with an elevated BAC is a law enforcement issue; it does not necessarily follow, however, that the issue should be treated as purely a law enforcement problem.

\(^1\)Introduction of zero blood alcohol concentration (0.00 BAC) for novice motorcycle riders (http://www.tmr.qld.gov.au/~/media/Safety/Driver%20guide/Alcohol%20and%20drugs/Anti%20drink%20driving/Zero_bac_novice_motorcycle.pdf)
Once people are under the influence of alcohol – which affects mood and judgment after a relatively small amount – the capacity for rational decision-making is diminished, so strategies that rely heavily on drinkers making the ‘right’ decisions will have very limited success, particularly in the absence of other forms of support.

ACT-specific qualitative research investigating the reasons that people drink and drive would better inform new and hopefully more effective approaches to discouraging drink-driving. While much of the research and analysis in this area is located within the research of disciplines such as marketing, social marketing, and consumer behaviour, it is actually surprising how little qualitative research has been conducted into behaviourally-based road safety problems such as drink-driving. A study by researchers at the University of Newcastle and Bond University and presented at an international marketing conference in 2007 is a rare example of qualitative Australian research into young adults’ drink-driving behaviour. [Fry ML and Holden S, 2007. Drink-driving: An examination of intrinsic and extrinsic exchange benefits, 34th International Research Conference in Marketing: Marketing Communications and Consumer Behavior. La Londe les Maures, France. June. At: http://epublications.bond.edu.au/business_pubs/45] This is exactly the sort of research that should be expanded if we are serious about addressing road safety in meaningful ways.

The approach could be modeled on one which has been used to investigate other complex problems, such as responses by socio-economically disadvantaged people to multiple health risks. This involves focusing on 3 critical aspects of behavioural change:
- finding out what people think about the actual threats (how do their perceptions relate to the actual risks that they face?);
- what the barriers are to dealing with those threats; and
- response efficacy.

The fact that, in Australia, the legal age for the purchase of alcohol coincides with the legal driving age is seen by many as a formula for disaster. If this situation is to remain unchanged, it means, at the very least, that the messages and interventions need to acknowledge and address the place of alcohol consumption and driving in context of young people’s lives.

There are a number of specific measures that I believe warrant serious consideration as elements of a strategy to reduce drink-driving, including its perceived acceptability and inevitability. These include:

- ending all sponsorship-related alcohol advertising of motor sport
- prohibiting the sale of branded alcohol promotional products designed for use in or on motor vehicles, either in association with specific events or for any other reason
- ending alcohol promotional gifts with purchase
- ending discounted multi-buys for the purchase of alcohol
- ending the pricing system in licensed premises whereby the cost of non-alcoholic drinks is artificially inflated to keep the cost of alcohol low
- prohibiting alcohol promotions which encourage excessive consumption
- prohibiting alcohol advertising which associates alcohol consumption with social, occupational, economic or other form of success, and which portray alcohol consumption as an intrinsic part of a full and happy life
- changing the pricing structure of alcohol to take account of the amount of alcohol by volume in the product
- ensuring that, in all towns and cities, social venues and activities are available, particularly for young people, which are not based around the consumption of alcohol
- having licensed premises provide free or inexpensive non-alcoholic drinks and other benefits for designated drivers
- having licensed premises provide transport options such as shuttle buses
- making greater use of car interlocks (not only for repeat offenders)
- encouraging social norms which do not associate alcohol consumption with sociability
- undertaking initiatives to build young people’s self-esteem so that the consumption of alcohol is not seen as a requirement for social confidence.

2. Mobile phones: The use of mobile phones (hand-held and hands-free) by drivers should be prohibited whenever vehicles are on a public road. Until regulatory measures can be adopted, other measures should be encouraged, such as in-car reminders to drivers about turning off their phones. It would be helpful if cars had places designed for the storage of mobile phones (to say nothing of ladies’ handbags, which, when placed on the passenger front seat next to the driver, leave the phone within easy reach). In the USA, there have been campaigns, promoted by prominent television celebrities, encouraging drivers to ‘pledge’ not to use a phone while driving, and providing stickers advertising this commitment. There have been no such campaigns in Australia.

It is a concern that information about the hazards of mobile phone use while driving has not been communicated in a way that resonates with drivers; as a result, many drivers (and passengers) believe that the risks are overstated and that talking on a phone is no different than talking with passengers.

3. Information-sharing: Many individuals and organisations are repositories of information about road safety and its various elements. This information needs to be shared in order to facilitate the development and evaluation of various initiatives. For example, it is my understanding that information about the age, gender and level of BAC of drink-driving offenders in the ACT in 2012 is not made public by ACT Policing. Why not? Age and gender (but not BAC) information made available to me, as a researcher, clearly showed that drink-driving was not primarily a problem of young people, but of male and female drivers over the age of 25.

In order to help answer questions about the extent to which drink-driving is associated with travelling to and from licensed premises vs other types of venues, we need information about where drivers’ drinking occurs and what their transport needs are to and from those locations.

There is valuable information about this but, again, it is not shared. ACT Policing gathers and records a wealth of information about the circumstances leading up to a drink-driving offence, including whether the driver was alone or with passengers, driver’s last place of drink, time of last drink, first place and time of that drink, how many drinks consumed, what type, what size, who the drivers were with when drinking, whether drivers ate before having a drink, and whether they ate during the time they were drinking.

According to ACT Policing’s Annual Report for the financial year 1 July 2011-30 June 2012, ACT Policing uses ‘last place of drink’ information to target drink-driving ‘hot spots’. This
allows the police to allocate resources ‘to proactively target drivers under the influence of alcohol’. It does little, however, to prevent that drink-driving from occurring, other than challenge drivers to risk ‘getting caught’. In other words: while the police may consider that conducting RBTs in ‘hot spots’ to be ‘proactive targetting’, this strategy is purely reactive in public health terms in the sense that it addresses drink-driving only once the driver is behind the wheel. I have been advised by ACT Policing that the ‘last place of drink’ information is not shared with other agencies or researchers. This is disappointing, particularly as only de-identified information would be needed to shed more light the circumstances under which drink-driving occurs.

4. Driver training: As a parent of children who have undertaken driver and motorcycle training in the ACT, I am concerned about the combination of inexperience and over-confidence on the part of provisional drivers/riders who believe that competent driving or riding consists of being able to control the vehicle in a technical sense.

Many of these young people – for whom driving/riding carries symbolic importance in terms of ‘freedom’ and ‘independence’ – have not acquired the skills or judgment required for a range of common yet challenging conditions on the road. These include not only adapting their behavior to weather and road conditions, but knowing how and when to safely overtake; what constitutes appropriate driving behavior in overtaking lanes and how to deal with others’ poor driving behavior in overtaking lanes; how to drive in proximity to, and to overtake, large trucks (see, for example: http://www.mynrna.com.au/motoring/road-safety/safer-driving/country/trucks.htm); and how to negotiate more challenging and high-accident-risk roads including the Hume Highway, the Princes Highway, the Kings Highway, and the Snowy Mountains Highway (as well as a number of local ‘back roads’ on which young drivers seem to believe that speed limits do not apply). It is my belief that no young driver should attempt to drive these roads without first doing so accompanied by an experienced licensed driver.

Drivers/riders will encounter a range of roads and road conditions, some more challenging than others. Inexperienced drivers need to understand that driving to Sydney, Melbourne, the NSW coast, or the ski fields is not simply a longer version of driving to the local shopping mall. Even driving late at night, and with the distraction of 2 or more passengers, has been found to increase the risks for inexperienced drivers.11

More emphasis needs to be place on ensuring that new drivers/riders exercise patience and understand that skills and judgment come with experience. Gender should be regarded as a key factor when it comes to developing approaches to driver education and training and to road safety messages12. As the NRMA says, ‘learning to drive isn’t as straightforward as you may think’ (http://www.nrmasaferdriving.com.au/how-to-drive-safely.htm).

5. Road maintenance and enforcement of parking requirements: Two other issues which make us all ‘vulnerable road users’ are the failure to maintain safe ACT roads and the failure to ensure that drivers comply with parking requirements.

11 There is a substantial literature on these issues. An example of Australian data: http://www.dpti.sa.gov.au/__data/assets/pdf_file/0009/48717/Young_Drivers_Road_Safety_FactSheet.pdf

Earlier this year, it took 38 days from the date of notification for several deep potholes in a heavily-travelled street in Belconnen to be repaired, with the repairs occurring only after a follow-up reminder was lodged via Canberra Connect. A lack of action has also plagued the parking situation at Jamison Plaza, where drivers continue to create visual obstructions by parking in no-parking areas (including directly beneath ‘No Parking’ signs!), despite this problem having been the subject of complaints made via Canberra Connect and through Ministerial correspondence.

6. Urban planning and driving: While much has been said recently about ‘planning issues’ such as residential density, mixed-purpose centres and public transport, it is also worth noting, in the context of road use, that decisions about the location and operation of particular facilities have a direct impact on where, when, and how often people drive. These issues also influence risks to vulnerable road users, as minimising the need to drive means fewer cars on the road.

Despite the rhetoric about creating walkable communities (which is what Canberra’s original suburbs were, each with its own primary school and shopping centre), land use decisions and the approval of development applications have worked in direct opposition to such notions. For example, the rise of ‘big box’ retail outlets and of large retail centres on the urban fringe mean that reaching these places and transporting goods home (often bulk purchases, in order to maximise ‘savings’) require journeys by car.

Another example of the necessity of driving in the ACT involves disposing of unwanted/un-useable bulky goods, greenwaste, and other rubbish that is not suitable for ‘trashpacks’. For many ACT residents, the only option is to transport (or prevail upon someone else to transport) this material to resource management centres. This often involves the use of a trailer, which many drivers handle with minimal proficiency and for which no special training is generally provided.