

Thursday, 17 October 2013

Standing Committee on Planning, Environment and Territory and Municipal Services  
Inquiry on the issue of vulnerable road users  
ACT Legislative Assembly  
[committees@parliament.act.gov.au](mailto:committees@parliament.act.gov.au)

To the Committee Secretary:

### **NRMA Submission to the ACT Parliamentary Inquiry into Vulnerable Road Users**

The National Roads & Motorists' Association Limited (trading as NRMA Motoring & Services) comprises over 2.4 million Members in NSW and the ACT, with approximately 135,000 members in the ACT. For more than 90 years, NRMA has represented the interests of motorists in relation to road funding, road safety and other relevant public policy issues.

Addressing the needs of vulnerable road users involves appropriate road design, continual improvement in the design of vehicles and use of protective equipment such as helmets. Driver education and public awareness campaigns also play an important role in promoting safety and reducing risks for vulnerable road users.

Statistics published by Roads ACT<sup>1</sup> suggest that in terms of accident, fatality and other casualty rates, the Territory's roads are the safest in Australia. However, an upward trend in casualties for motorcyclists, cyclists and pedestrians over the last five years shows there are opportunities to improve safety for vulnerable road users in the ACT.

This submission draws upon a number of recommendations made by NRMA in its submission to the 2010 NSW Parliament Staysafe Inquiry into Vulnerable Road Users. Although this submission has a primary focus on motorcycle and bicycle safety, NRMA believes the vulnerability of pedestrians, children and the elderly must also be considered.

#### **Motorcycle Protective Clothing**

Research shows that in most cases injuries can be avoided or less severe if motorcycle protective clothing is worn, especially when involved in low-impact crashes<sup>2</sup>. However, there is no reliable and independent information available to Australian riders on the benefits or features offered by specific protective clothing. Of particular concern is the low take-up of high visibility clothing by motorcycle riders, as is strongly encouraged for cyclists.

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<sup>1</sup> 2012 Road Traffic Crashes in the ACT: Traffic Management and Safety, April 2013. Retrieved 1.10.2013 from: [http://cdn.justice.act.gov.au/resources/uploads/JACS/Road\\_Safety/PDFs/ACT\\_Road\\_Crash\\_Reports/2012\\_Road\\_Traffic\\_Crashes\\_in\\_the\\_ACT.pdf](http://cdn.justice.act.gov.au/resources/uploads/JACS/Road_Safety/PDFs/ACT_Road_Crash_Reports/2012_Road_Traffic_Crashes_in_the_ACT.pdf)

<sup>2</sup> Haworth, N., de Rome, L., Varnsberry, P., & Rowden, P.J. (2007). Motorcycle protective clothing: Are stars better than standards?; Truong, J, Cockfield, Samantha, Russell, M (2012) Motorcycle protective clothing – outcomes from a pilot testing program In proceedings 2013 Australasian Road Safety Research, Education and Policy Conference, Melbourne, Australia

Scooter riders face equivalent risks to motorcycle riders, however are less inclined to wear protective clothing. NRMA believes the ACT Government can do more to highlight the safety benefits of using protective clothing to scooter riders, and the risks associated with not doing so.

NRMA recommends that:

- **The ACT Government supports moves for the Australian and other state and territory governments develop an independent star rating program to test, rate, and promote motorcycle protective clothing available in Australia.**
- **The ACT Government undertakes a targeted education campaign to promote the benefits of wearing motorcycle protective clothing, particularly for scooter riders.**

### Road Design

Many of our roads were designed in the 1960s when traffic volume, vehicle type and road safety knowledge was very different to what it is today.

Various countries around the world are seeking to reduce motorcycle crash rates by actively considering the implications for motorcyclists in the design of road infrastructure.

### Roadside furniture

NRMA advocates the adoption of passively safe road infrastructure to ensure solid objects such as sign posts and street lights are replaced with frangible versions.

Whilst signs and street lights are regular hazards alongside the road, it is often the guardrail (and associated support posts) used to protect drivers from hitting hazards that for a motorcyclist can represent a greater hazard than having to contend with an isolated pole.

Various crash barriers are now being used in countries such as Spain and the UK that have been designed to reduce the risk for any motorcyclist colliding with the barrier. Whilst Victoria has started to adopt these new products, it appears that the ACT is currently lagging behind.

One such example of a treatment that can be retro-fitted to existing guardrail can be seen in the following picture, mounted below the standard guardrail. It has been designed to allow motorcyclists to slide along the barrier without hitting the potentially lethal support posts.



(Source: [www.ingalcivil.com.au/rubrail.html](http://www.ingalcivil.com.au/rubrail.html))

Any barriers with exposed posts present a greater risk to motorcyclists, as the barrier posts are a continuous obstacle for a dismounted and sliding motorcyclist. There are barriers and barrier products which provide continuous lower level sheeting screening the posts and allowing motorcyclists to slide along the barrier without hitting the potentially lethal posts.

NRMA recommends that:

- **The ACT Government installs motorcycle-friendly crash barriers in high-risk locations.**

### **Safer Motorcycles**

NRMA believes that motorcycles can benefit from the available vehicle safety technologies such as Anti-lock Braking Systems (ABS) and traction control.

#### **Anti-lock Braking Systems**

ABS operates by monitoring wheel rotation speed, and releasing then reapplying brake pressure when the system detects that the wheel is on the verge of stopping, or locking up. The system cycles several hundred times per second, providing maximum braking effort in slippery circumstances.

ABS has been fitted to cars since the 1970s and is now almost universal on new cars and commercials. However, ABS is only fitted to a small number of new motorcycles and it cannot be economically retrofitted to any vehicle.

Motorcycles are single-track vehicles and are therefore inherently unstable – if the tyres lose traction, bikes are at high risk of skidding and crashing. Lock up and subsequent loss of traction on the front wheel is particularly dangerous and a crash can happen essentially instantaneously. There is little even a skilled rider can do in this situation. ABS on motorcycles can prevent wheel lock and therefore loss of traction which may potentially avoid a crash.

NRMA recommends that:

- **The ACT Government proposes to the Australian Government the adoption of an Australian Design Rule for Anti-lock Braking Systems for motorcycles.**

#### **Traction Control**

Traction control operates by monitoring front and rear wheel speeds and reducing engine power when it detects a difference.

A difference can occur if the rear wheel breaks traction due to excessive engine power overcoming the friction between the tyre and the road (a “burnout”). A difference can also occur if the front wheel leaves the road due to the torque reaction from the application of power to the rear wheel (a “wheelie”).

With the high power to weight ratios of modern sports bikes, it is easily possible that a rider will unintentionally wheelie a bike due to the application of excessive power catching them unawares, to the extent that the bike flips over backwards.

Traction control can prevent both of the above circumstances by reducing engine power.

NRMA recommends that:

- **The ACT Government proposes to the Australian Government the adoption of an Australian Design Rule for traction control for motorcycles with a power/weight ratio more than 150 kW/tonne (the limit for LAMS bikes).**

## Motorcycle Rider Education

The Stay Upright course for learner riders is very effective in fostering safety-conscious attitudes in motorcycle riders. NRMA supports the ongoing retention of these courses and encourages greater utilisation of other courses designed for experienced riders. Many licenced motorcycle riders lose confidence if they stop riding for a period of time. A top-up course in defensive riding and general safety can help these riders to feel safe enough to get back onto a motorcycle.

NRMA recommends that:

- The ACT Government actively promote Stay Upright courses for experienced riders as a top-up course for defensive riding skills.

## Safer Cyclists [Bicycles]

NRMA supports the promotion of cycling for commuting and leisure, however efforts to promote cycling must be supported by campaigns to educate cyclists on the risks to themselves and other road users, including pedestrians. Where cyclists are required to share paths with pedestrians, it is particularly important that mutual safety considerations are paramount and conflict is avoided as much as possible. Targeted awareness campaigns would be the most effective means of conveying this message.

The ACT Government should consider providing optional all-ages safe cycling courses to highlight the vulnerability of cyclists on ACT roads and promote safe practices, similar to those offered by the City of Sydney.

NRMA recommends that:

- The ACT Government promote safety awareness on shared pedestrian-cyclist paths and in areas where conflict has, or is likely to occur.
- The ACT Government establish optional safe cycling courses for cyclists of all ages and experience levels.

Cyclists' visibility is a significant factor in road crashes as cyclists are more difficult to see than vehicles. More needs to be done to ensure cyclists are visible during the day and night and can be seen in advance by motorists.

High visibility clothing is now commonly worn by employees who work in high risk environments such as commercial drivers, road workers, Police, etc. Visibility of cyclists can be improved through the use of high visibility clothing. This applies equally to training cyclists, commuters and recreational cyclists.

NRMA recommends that:

- **The ACT Government actively encourages cyclists to wear high visibility clothing through an education campaign.**

During the period of 2004 to 2008, 33% of cyclists killed in NSW were not wearing a helmet<sup>3</sup> (RTA, 2008). Bicycle helmets substantially reduce the risk of death or brain injury for cyclists and still needs to be actively promoted and policed to encourage compliance.

<sup>3</sup> Roads and Traffic Authority. (2008). Road traffic crashes in New South Wales: Statistical statements 2004 to 2008. Retrieved August 2010 at: [www.rta.nsw.gov.au/roadsafety/downloads/accident\\_statistics\\_d14.html](http://www.rta.nsw.gov.au/roadsafety/downloads/accident_statistics_d14.html)

NRMA recommends that:

- **The ACT Government undertakes a targeted education campaign paired with enforcement activities to improve cyclists' helmet usage rates.**

#### **Safer Roads for Cyclists [Bicycles]**

NRMA supports cycling in areas that are safe for both cyclists and other road users. We believe the ACT Government should not be encouraging cyclists to use high speed roads, as the speed differential with motor vehicles is simply too great. Preference should be given to encouraging the use of alternative routes that avoid high traffic volumes and high speed roads. The use of low traffic, local streets is preferable as bicycles have the flexibility to take alternative routes to destinations, such as back streets, parallel roads and bike paths in some areas.

We are concerned about the practice of reducing traffic lane widths to accommodate on-road cycle paths, when this occurs without proper consideration for whether motor vehicles will be able to fit within the traffic lanes. Northbourne Avenue is an example of a high volume corridor where the introduction of cycle lanes has led to an increase in conflict between cyclists and motorists. High frequency bus services along this corridor also pose a particular safety risk to cyclists. NRMA recommends that:

- **The ACT Government promotes the use of low traffic, local streets and off-road paths to cyclists to reduce the potential for conflict with motor vehicles.**

NRMA asks that the Committee consider the above recommendations for implementation in the ACT. Should you require any additional information about our submission, I encourage you to contact Mr Luke Turner, Senior Policy Adviser, Road Safety on (02) 9276 7233.

Yours sincerely



**Wendy Machin**  
**President**