Senate Economics References Committee
Personal Choice and Community Impacts
Committee Secretariat
PO Box 6100
Parliament House
CANBERRA ACT 2600

Via email: committee.sen@aph.gov.au

30 November 2015

Dear Committee Secretariat,

Re: Supplementary Submission (to Submission No. 257) from ACRS/AIPN/RACS
Senate Inquiry into Personal Choice and Community Impacts

Thank you for the opportunity to provide a supplementary submission to the Senate Inquiry into Personal Choice and Community Impacts. Our primary submission is listed as ACRS/AIPN/RACS Submission Number 257 on the Senate Inquiry website. Representatives from the AIPN, ACRS and RACS were pleased to provide evidence at a Public Hearing in Melbourne on Monday 16 November.

We acknowledge that the Senate Economics References Committee currently has 18 Inquiries underway, and this means that sub-committees can be formed to hold hearings and gather evidence. We also acknowledge that the majority of submissions received by the Committee in relation to bicycle helmets were opposed to Mandatory Helmet Legislation (MHL), however many of these submissions were provided by individuals, and were not based on peer-reviewed scientific evidence.

We would like to note that the proportion of anti-helmet submissions is an unreliable estimate from which to extrapolate the proportion of those who want the helmet laws removed in the population. Voluntary responses, such as those responding to the question of whether MHL should remain, are known to be biased.

In contrast, the ACRS, AIPN and RACS represent a combined membership of thousands of road safety and injury prevention experts and organisations, including more than 8,000 surgeons (see Attachment 1 which outlines the membership breakdown of our three organisations). Our recommendations have been developed drawing on the best available evidence and the expertise of our combined membership across Australia and New Zealand.

The majority of witnesses and organisations that have provided evidence and submissions as part of this inquiry agree that it would be beneficial if more Australians rode bicycles, but the safety of cyclists must remain a priority. The social and economic cost of Traumatic Brain Injury is significant. We know that the cost of treating it would be higher without helmets. We refute the evidence provided that if MHL was dismantled, more people would ride, and we encourage the Committee to rely on peer-reviewed evidence rather than conjecture and personal opinion.

Cycling infrastructure has a major role to play in improving safety. We ask the Committee to consider how city designers can be encouraged and supported to improve the safety of all road users. We strongly support investment in strategies and infrastructure to facilitate increased cycling and other forms of active transport, alongside reduction of reliance on private vehicles, but believe that, given the enormous impact of traumatic brain injury on individuals and families, and the effectiveness of helmets in reducing brain injury in the event of a crash, the focus should be on improving infrastructure and maintaining helmet legislation.

Re: Questions on Notice – Bicycle Helmets

1. Question on notice concerning Australia's position in the OECD regarding cyclist serious head injuries.

This question can never be effectively answered because Australia does not routinely collect exposure data. For the years 2001-2010, the Australian Sports Commission conducted annual surveys on participation in various activities including cycling for those aged 15 years and older (Australian Government – Australian Sports Commission 2001-2010). Additionally, the National Cycling Strategy conducted more in-depth surveys with regards to cycling for years 2011 and 2013. By contrast, cycling data has been regularly collected in The Netherlands since 1978 (SWOV)

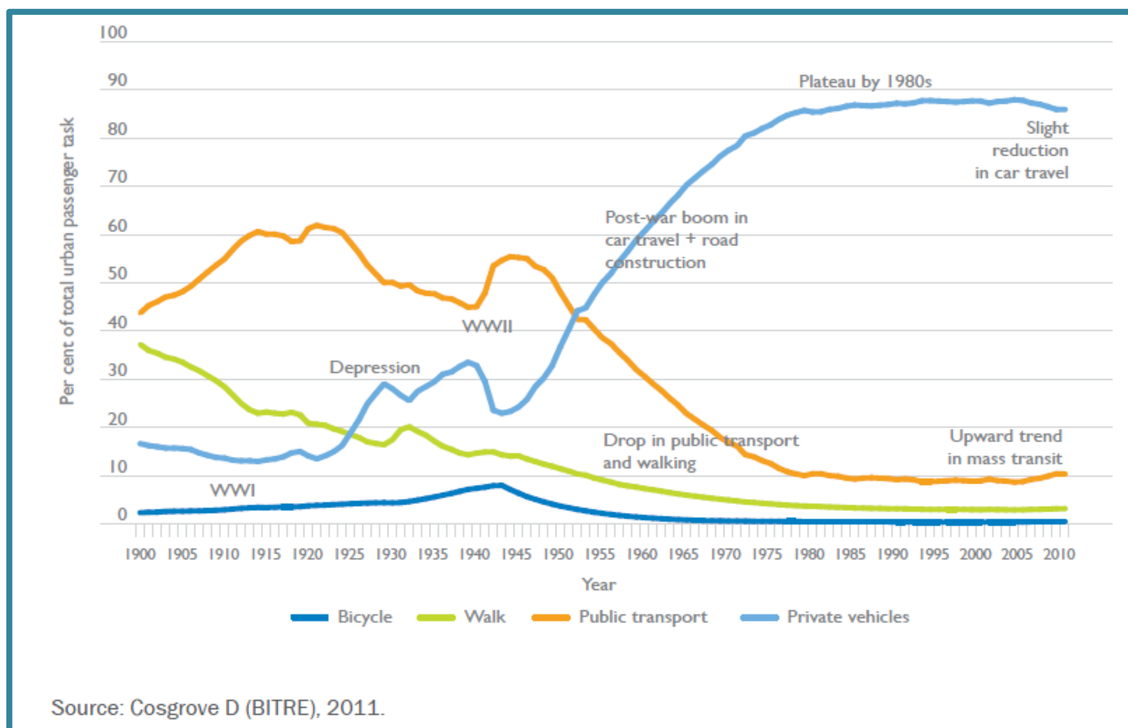
For 2014, there were 177 cycling fatalities in The Netherlands and an estimated 32,387.2 million kilometres cycled. That is 5.47 cycling fatalities/billion km. Without any cycling exposure data, it is unclear how Australia compares with any accuracy.

It is possible to compare fatalities per population, although this method is flawed. In 2014, there were 45 cycling fatalities in Australia. The respective population estimates for 2014 are 23,472,138 for Australia and 16,877,351 for the Netherlands. The rate of cycling fatalities per 100,000 population for 2014 is therefore 0.19 for Australia and 1.05 for the Netherlands. Although an imperfect comparison, the rate ratio is 0.18 (95% CI: 0.13 – 0.25) in the direction that Australia is better.

2. <u>Question on notice – information about travel modes dating 1900 to 2010</u>

Cycling mode share in Australia peaked during WWII at around 8-9% and declined steadily thereafter (Australian Government - Department of Infrastructure and Transport Report, 2012) (Figure 1).

Figure 1: **Proportion of metropolitan travel by kilometres travelled, by mode, 1900-2010** (Australian Government – Department of Infrastructure and Transport Report, 20102)



Since the first Ride to Work survey in 1976, there has been very little change in cycling mode share, and nothing compared to the collapse of cycling following WWII. From this data it is clear helmet laws of the 1990's have had no major influence on cycling mode share.

An important point is that helmets are not contested by certain cycling subcultures such as sport cyclists, recreational cyclists or commuters. Transport or utilitarian cyclists are the subculture most critical of helmet legislation. The data presented suggests cycling for transport as well as other active modes (i.e., public transportation and walking) has declined due to greater uptake of private motor vehicles. However, the Australian Government's *Participation in Exercise, Recreation and Sport Reports* (2001-2010 – separate reports for each year) reports that cycling participation rates have risen slightly from 9.5% in 2001 to 11.9% in 2010. The attribution of bicycle helmet laws as a cycling deterrent is ultimately a red herring.

3. Question on notice - clarification of costs

The Senate Economics References Committee has asked for clarification on a statement in our submission about results from a letter to the Editor of the Medical Journal of Australia, (Dinh *et al*, 2013b). Our statement in the submission requires correction as the results in that letter to the Editor referred to cost of head injuries sustained by both cyclists and motorcyclists combined, rather than for cyclists alone. To clarify the issue, a re-analysis of the dataset was conducted by the authors (unpublished data), to include *only* bicyclists with severe head injuries (n=15), and it was found that the median hospital costs for non-helmeted cyclists ($47,900, IQR 16,000-127,000) were more than double those for helmeted cyclists ($22,900, IQR 13,000-25,000).

There are few other research studies or reports that have examined the issue, but of those that do the results suggest significant costs can be averted with increased use of helmets.

Schulman et al found that 107,000 bicycle related head injuries could have been prevented in 1997 in the United States, and that these preventable injuries and deaths represent an estimated $81 million in direct and $2.3 billion in indirect health costs.

From the UK, Chapman reported on a basic cost-benefit analysis of a helmet promotion campaign in West Berkshire (total population 450,000; 0-15 years population 120,000). They estimated that, in 1997, the use of helmets by injured cyclists reduced inpatient care costs by £291,703. Using loss of life potential and the ‘willingness to pay' approach, an attempt was also made to quantify the indirect cost of the accidents. The costing reflected human cost (pain, suffering, grief); medical costs and direct economic cost e.g. loss of output. The estimated total savings over the 10-year period of the helmet-promotion programme (without special education provision) was £4.2 million.

Chapman states that anti-helmet advocates like Mayer Hillman fail “to take into account any of the physical, mental and social morbidities that can be caused by even quite mild head injuries and the cost to the State of special education and employment provision and of supporting families as a result of relationship breakdowns secondary to head injury.”

We trust the information outlined above clarifies the Questions on Notice raised during the Public Hearing on 16 November 2015, and look forward to receiving the subsequent Report from this Inquiry.

Submitted via Claire Howe, ACRS Executive Officer (eo@acrs.org.au), on behalf of:

The Australasian College of Road Safety (ACRS)

The Australian Injury Prevention Network (AIPN)

The Royal Australasian College of Surgeons (RACS)

Bibliography (Supplementary Submission)

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3. **SWOV** Retrieved 30 November 2015, from http://www.swov.nl/UK/Research/Cijfers/ Toelichting-gegevensbronnen/Personenmobiliteit-UK.html

4. **Australian Government - Department of Infrastructure and Transport Report (2012)** *'Walking, Riding and Access to Public Transport'* Draft Report for Discussion October 2012. Retrieved 30 November 2015 from https://infrastructure.gov.au/infrastructure /pab/active_transport/files/active_travel_discussion.pdf

5. **Chapman HR, Curran ALM (2004).** Bicycle helmets — does the dental profession have a role in promoting their use? British Dental Journal 2004; 196: 555–560. (http://www.nature.com/bdj/journal/v196/n9/abs/4811227a.html)

6. **Schulman J, Sacks J, Provenzano G (2002)** State level estimates of the incidence and economic burden of head injuries stemming from non-universal use of bicycle helmets. Injury Prevention 2002;8:47–52. (http://injuryprevention.bmj.com/content/8/1/47.full)

Attachment 1 – ACRS, AIPN, RACS Membership

About the Australasian College of Road Safety:

The **Australasian College of Road Safety** was established in 1988 and is the region's peak association for road safety professionals and members of the public who are focused on saving lives and serious injuries on our roads. The College Patron is His Excellency General the Honourable Sir Peter Cosgrove AK MC (Retd), Governor-General of the Commonwealth of Australia.

Australasian College of Road Safety membership consists of the following:

- All Australian and New Zealand road safety research agencies
- Australian and New Zealand universities
- Injury prevention, brain injury and neuroscience research organisations
- Australasian medical representative groups
- Australian federal government road safety & health promotion agencies
- State and Territory road transport agencies
- Local government agencies
- Policing agencies (both federal and state)
- Emergency services agencies
- Road safety research funding organisations
- Medical associations
- Safety promotion and training agencies
- Carer advocacy groups and associations
- Independent road safety consultants
- State vehicle and personal insurance agencies
- Driving schools and instructor associations
- Road safety advocacy groups, including motorcycles, children, youth, pedestrians, cyclists
- Road industry groups, including vehicles, trucks, roads
- International road safety consultants, agencies and advocacy groups
- Fleet safety associations
- Independent economist consultants and companies
- Engineers & engineering associations
- Legal firms
- Trucking companies
- Vehicle manufacturing companies
- Vehicle safety advocacy and testing organisations
- Other public or private companies interested in or working in the field of road safety
- Secondary, tertiary and post-graduate students currently studying in the road trauma field
- Interested members of the public

About the Australian Injury Prevention Network:

The **Australian Injury Prevention Network (AIPN)** was established in 1996, and is the peak national body advocating for injury prevention and safety promotion in Australia. Through national conferences, publications, events, advocacy activities and research, the Network benefits from its high profile, influential membership base of leading injury prevention researchers, and those working to reduce the incidence of injury and harm throughout Australia.

The Australian Injury Prevention Network (AIPN) has representation from most States and Territory's across Australia (NSW, Victoria, Queensland, South Australia, and Western Australia). In addition to individual members the AIPN has national and state based non-government organisation members, including Youthsafe, Kidsafe NSW, the Royal Life Saving Society of WA, the Royal Automobile Club of Victoria, and the Injury Control Council of WA.

About the Royal Australasian College of Surgeons:

The **Royal Australasian College of Surgeons (RACS)** is the leading advocate for surgical standards, professionalism and surgical education in Australia and New Zealand. The College was formed in 1927 and is a non-profit organisation training surgeons and maintaining surgical standards in Australia and New Zealand. The College's purpose is to be the unifying force for surgery in Australia and New Zealand, with FRACS standing for excellence in surgical care.

The College represents around 7,000 surgeons and 1,300 surgical trainees and International Medical Graduates. RACS also supports healthcare and surgical education in the Asia-Pacific region and is a substantial funder of surgical research.

The College currently consists of members across nine regions; the eight states and territories of Australia, and New Zealand.

- Australian Capital Territory
- New South Wales
- Northern Territory
- Queensland
- South Australia
- Tasmania
- Victoria
- Western Australia
- New Zealand

For further information please contact:

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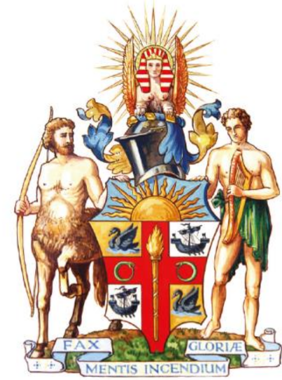

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