Submission No. 44

DRIVER EDUCATION, TRAINING AND ROAD SAFETY

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Mr Greg Aplin MP
Chair, Staysafe (Joint Standing Committee on Road Safety)
Legislative Assembly
Parliament House
Macquarie Street
Sydney NSW 2000

Dear Mr Aplin:

INQUIRY INTO DRIVER EDUCATION, TRAINING AND ROAD SAFETY

Thank you for your invitation to Transport and Road Safety (TARS) Research at The University of New South Wales regarding this inquiry, to which I respond on behalf of TARS Research. Rather than address individual terms of reference in detail, we would like to respond in regards to the introductory term "whole-of-life driver education and training".

Based on approaches we have received from media representatives, it seems this term has been interpreted in some circles as suggesting the inquiry is exploring routine (e.g. potentially yearly or every few years) mandatory training and assessment for all licensed drivers. While this is not specifically proposed in the terms of reference, we anticipate that public and professional proposals for such a recommendation will be received and therefore, would like to share why such an initiative would not only be cost prohibitive, but is lacking any substantive research evidence to suggest it would result in significant reductions in road trauma.

First, while crash fatalities and serious injuries are escalating in New South Wales (NSW) and we support efforts to address this, only a small proportion of licensed drivers contribute to road trauma numbers. For example, in NSW in 2015 the total number of casualty crashes was 18, 275[1] while the total number of car driver licences issued at 31/12/2016 was 4,830,982[2]. Even if a licensed car driver was somehow involved in each of these crashes, this would equate to less than 0.4% of all licensed drivers. Moreover, at least 639 of these crashes involved an unlicensed driver: those unlikely to be captured in general training initiatives. Therefore, training all licensed drivers to capture the fractional percentage involved in crashes would clearly be cost prohibitive and not capture other high-risk (unlicensed) drivers.

Second, it could be argued that the burden (for the road administration and for individuals) of any initiative to educate and train all drivers on a regular basis would only be worthwhile if such an initiative resulted in reduced road casualties. In this regard, there is *no known current effective program* to guarantee such an outcome. Multiple evaluations of programs, both those targeting the general driving population and high-risk groups, have failed to demonstrate conclusively any consistent or sustained benefits in terms of actual reductions in crashes or crash casualties.[3] In fact some young driver programs for example have resulted in *increased* crash risk.[4]

While this is in part due to a lack of evaluations and methodological issues in many existing evaluations, there are many contributing factors to the lack of success of such initiatives. The reality is that some crashes occur due to non-trainable human limitations (such as in vision and ability to process multiple sources of information simultaneously, for example) or otherwise occur not due to deficiencies in what drivers are capable of doing but rather what they chose to do. This relates to poor choices that can sometimes be due to deficiencies, such as under-developed cognitive-perceptual skills for example, but also due to risk-taking tendencies (such as speeding, which persists as the largest single contributor to fatal crashes in NSW (41%; and 15% of all casualty crashes[5]), which are much more difficult to shift.

Before any education and training initiative is recommended on a large scale, high quality evidence of its efficacy and effectiveness (i.e. ability to deliver the intended education/ training and ability to achieve the desired outcome, such as a reduction in crash casualties) should be determined. In the absence of this, the Committee could consider recommending more effort into supporting these critically needed evaluations, such as for promising initiatives targeting specific high-risk groups (for example, resilience training for young drivers[6] and low-cost computer-based programs for traffic offenders[7] and older drivers[8]).

Sincerely

Teresa Senserrick, PhD
Associate Professor

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[1] Transport for NSW, Centre for Road Safety (2016). *Road Traffic Casualty Crashes in New South Wales: Statistical Statement for the year ended 31 December 2015*. Available at: http://roadsafety.transport.nsw.gov.au/downloads/crashstats2015.pdf (last accessed 13/2/2017).

[2] At 31/12/2016 the total number of licences issued was 5,985,084, including 562,988 heavy vehicle licences and 591,114 motorcycle licences, with individuals able to hold more than one licence type. Source: Roads and Maritime Services (2017). *Table 2.1.1 Quarterly trend in licence class*. Available at: http://www.rms.nsw.gov.au/about/corporate-publications/statistics/registrationandlicensing/tables/table211.html (last accessed 13/2/2017).

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[4] Reviewed in: Senserrick T, Mitsopoulos-Rubens E (2003). Behavioural adaptation and novice drivers. In M Rudin-Brown & S Jamson (Eds). *Behavioural Adaptation and Road Safety: Theory, Evidence and Action* (pp.245-263). Taylor and Francis.

[5] Transport for NSW, Centre for Road Safety (2016). *Road Traffic Casualty Crashes in New South Wales: Statistical Statement for the year ended 31 December 2015*. Available at: http://roadsafety.transport.nsw.gov.au/downloads/crashstats2015.pdf (last accessed 13/2/2017).

[6] Senserrick T, Ivers R, Boufous S, Chen H-Y, Stevenson M, Norton R (2009). Young driver education programs that build resilience have potential to reduce road crashes. *Pediatrics*, 124(5):1287-1292.

[7] af Wahlberg, AE 2011, Re-education of young driving offenders: Effects on recorded offences and self-reported collisions, *Transportation Research Part F*, 14: 291-299.

[8] Musselwhite CBA (2017). Assessment of computer-based training packages to improve the safety of older people's driver behaviour. *Transportation Planning and Technology*, 40:64-79.