

## Submission to the Joint Select Committee on Road Safety

The George Institute for Global Health has partnered with the Transurban Road Safety Centre at the Neuroscience Research Australia (NeuRA) and the School of Public Health and Community Health at the University of New South Wales (UNSW) Sydney to develop this submission.

### Terms of reference:

- a. the effectiveness of existing road safety support services and programs, including opportunities to integrate Safe System principles into health, education, industry and transport policy;
- b. the impact of road trauma on the nation, including the importance of achieving zero deaths and serious injuries in remote and regional areas;
- c. the possible establishment of a future parliamentary Standing Committee on Road Safety and its functions;
- d. measures to ensure state, territory and local government road infrastructure investment incorporates the Safe System principles;
- e. road trauma and incident data collection and coordination across Australia;
- f. recommending strategies, performance measures and targets for the next National Road Safety Strategy;
- g. recommendations for the role of the newly established Office of Road Safety; and
- h. other measures to support the Australian Parliament's ongoing resolve to reduce incidents on our roads, with a focus on the recommendations from the Inquiry into the effectiveness of the National Road Safety Strategy 2011–2020.

Below is our joint response to each of the items of the Terms of reference.

**(a) the effectiveness of existing road safety support services and programs, including opportunities to integrate Safe System principles into health, education, industry and transport policy.**

- **The ongoing burden of serious injury and fatalities on Australian road demonstrates ineffectiveness in current approaches:**
  - Across Australia there were 1,188 road-related deaths in the calendar year of 2019. This was 4.7% (53 deaths) more than for the calendar year of 2018 (BITRE, 2020).
  - In 2016, Australia ranked 16 out of 34 among Organisation for Economic Co-operation and Development (OECD) countries in terms of the lowest number of deaths per capita, with 50.5 deaths/1,000,000. This was a long way behind the United Kingdom (28.4) and Scandinavian countries (Denmark 36.8, Sweden 27.2 and Norway 25.8). (OECD 2019).
  
- **Cross-portfolio coordination is important to address all components and factors underpinning road trauma but this must occur at practice as well as policy levels:**
  - More than a simple integration of safe system principles into multi-sectoral policies is needed, there needs to be a cultural and political shift in the acceptance of risk on the roads.
  - We agree with the findings by Woolley and Crozier (2018) from the inquiry into the National Road Safety Strategy 2011-2020, that there appears to be a societal and political tolerance of the nearly 1,200 deaths on our roads each year. Any deaths linked with aviation or rail travel, on the other hand, are subject to intense scrutiny of the failures of the system that may have contributed to these deaths. This is not the case with road deaths.
  - We need action rather than simply principles for action:
    - We support Woolley and Crozier's (2018) recommendations for coordinated action across all sectors. Vehicle manufacturers and importers, and telecommunication companies, for example, should be part of the solution, for better speed management and reduced crashes associated with driver distraction and driver fatigue, vehicle and communications technologies to address these factors exist, but only a minority of these products are equipped with this technology.
    - Safe road design, including, removal of roadside hazards in Australia lags infrastructure development in many OECD countries. As reported in the international Journal, Injury Prevention, major benefits to road safety in Australia will be achieved through focusing on road network safety improvements (Muir et al 2018).
  
- **Land use management and urban planning policies across all levels of government may be most important of all for designing safe mobility:**
  - Road safety needs to be a central focus when wider urban-planning decisions are being made (International Transport Forum 2016, p 136).
  - A recent report on a global study of over 1600 cities (Thompson et al 2020) noted that Australia's road toll reductions over the past few decades have been largely attributed to a focus on behavioural change and results have plateaued, and even recently reversed. It notes that reductions at this point rest with greater attention to urban planning including a need for Australian cities to reduce the reliance on motor vehicles and adopt greater use of rail, other forms of safe mass transit, invest in infrastructure for safe active transport.
  - There is a need to shift focus from prioritising the use of private motor vehicles over other more sustainable forms of transport which is detrimental to the environment and population health via impacts from pollution, climate change, reduced levels of physical activity and safety.

- **There is considerable scope for government policies to encourage adoption of safe system policies and practices in industry more broadly:**
  - To encourage adoption of safe system practices beyond government there may be need to look beyond portfolios of health, education, industry and transport policy Review of economic policies are needed to see industry also adopt safe system practices in delivering their business goals.

**(b) the impact of road trauma on the nation, including the importance of achieving zero deaths and serious injuries in remote and regional areas.**

- **The economic impact of road crashes is enormous:**
  - The World Health Organization (WHO) reports that globally road trauma costs 3% of nations' GDP (WHO 2015).
  - Road trauma was estimated to cost the Australian economy \$22.2 billion in 2015 (AAA-ECON, 2017). With road deaths increasing in recent years, the figure today would be expected to be even higher.
  
- **Populations in regional and rural Australia are over-represented in road trauma statistics:**
  - Over half of road fatalities happen on rural and remote roads (AustRoads, 2016); and rates of life-threatening injury is increasing on average by 3.7% each year in rural and remote areas (Henley & Harrison, 2015).
  - In a recent review of deaths of children in cars in NSW over a ten year period, 85% of these deaths occurred on rural and regional roads and the vast majority of children who died resided in these areas (NSW Ombudsman, 2019).
  
- **Targeted action to reduce deaths and serious injury in remote and regional areas is critical to reducing the current inequity in the burden of road trauma:**
  - People living outside capital cities are more likely than those in capital cities to be in the lowest household income quintile.
  - 65% of Aboriginal and Torres Strait Islander people live outside of major cities
  - The NSW Ombudsman's review of deaths of children in cars over ten years in NSW demonstrated these stark inequities.
    - The rate of child passenger deaths is 11 times high in remote areas compared to capital cities.
    - The rate of child passenger deaths is 5 times higher in the most disadvantaged areas compared to least disadvantaged areas.
    - The rate of child passenger deaths is 4.2 times higher among Aboriginal and Torres Strait children than non-Indigenous children.

**(c) the possible establishment of a future parliamentary Standing Committee on Road Safety and its functions.**

- **There is a current gap in road safety oversight that might be filled by a parliamentary standing committee. However, better oversight could also be achieved by the establishment of a government appointed body e.g. ombudsman/commissioner:**
  - Potential roles of this group could be the oversight of coordinated multi-sectoral policies, forensic analysis of all crash events and recommendations to government. The Child Death Review Team (2019) report on child passenger deaths in NSW, is an example of detailed forensic analysis of fatalities on our roads which provided a set of recommendations for a reduction in these tragic and preventable deaths.
  - Such a body should sit outside of government, investigate crashes for all ages and road user groups across Australia, make recommendations to state governments, and advocate for funding potentially through the Medical Research Future Fund (MRFF) to address the public health problem of road trauma.

**(d) measures to ensure state, territory and local government road infrastructure investment incorporates the Safe System principles.**

- **All levels of government need to see the Safe Systems approach as “standard practice”:**
  - We support the recommendation by Wolley and Crozier (2018) that road safety, and specifically the adoption of a safe systems approach, needs to be made a genuine part of business as usual within Commonwealth, state, territory and local governments, for projects of all sizes.
  - We support the establishment of minimum safe system practices in all policies – across all government sectors, and that responsibility be shared by the private sector. It should be applied to employees, contractors, and fleet purchasing. A Safe Systems analysis to be conducted at the start and completion of all projects.
  - The Safe Systems approach also includes a focus on urban planning, and focus on reducing exposure to driving through better land and transport planning. This must be better prioritised going forward.
- **There is a need for consistent data collection across all states and territories.**
- **Better use of available data sources to better understand the factors that affect the road toll trend:**
  - Most states and territories have forensic data collected by Police Crash Investigation Units that is underutilised and not well linked to other data sources such as hospital data or infringement data. Odometer readings at vehicle registration could provide better exposure data.
- **Need in depth data for all fatal crashes and representative sample of serious injury crashes or ongoing targeted crash investigation studies**
  - Several other countries have comprehensive national data and research on road crashes, such as the United States with its Fatal Accident Reporting System (FARS) and its Insurance Institute for Highway Safety and the Highway Loss Data Institute supported by insurance companies.

**(f) recommending strategies, performance measures and targets for the next National Road Safety Strategy.**

- **Harm elimination targets:**
  - We support the need for harm elimination targets as described in the Woolley report.
  - Zero deaths in major cities is achievable now as demonstrated in Scandinavian cities and we support the call for zero deaths by 2050 with interim targets of zero for CBDs of major cities and high volume highways by 2030.
  
- **Strategies, performances measures and targets need to be based on implementation of high priority actions with known effectiveness:**
  - As noted by the Wooley report, we have clear implementation failure in delivering a safe road system in Australia.
  - The next Road Safety Strategy should set performance measures based on action taken in delivery of a safe system.
  
- **Greater focus on implementation of vehicle safety technology, infrastructure improvements and speed management measures:**
  - For vehicle safety technologies there is also a need for a focus on introducing measures to increase the rate of uptake across the fleet and in particular in vehicles driven by the most vulnerable drivers; younger drivers, older drivers, people living in rural and remote areas and in areas of most economic disadvantage.
  - Similarly for infrastructure investments and speed management actions, these also need to be targeted to highest priority areas and communities.
  - Vehicle safety technologies and infrastructure improvements that reduce risk of death and serious injury among motorcyclists, pedestrians and cyclists need to be prioritised.
  
- **Reducing inequity in the road trauma burden should also be a focus of the next National Road Safety Strategy:**
  - While there has been little work in this area, it would appear highly likely that 'closing the gap' in death rates between those living in rural and remote areas and major cities; those living in socioeconomically disadvantaged areas and those that are not; and among Aboriginal and Torres Strait Islander people would deliver substantial reductions in deaths and serious injuries on Australian roads.
  - There is a clear need to increase understanding of what is driving these gaps from a safe system delivery perspective.

**(g) recommendations for the role of the newly established Office of Road Safety.**

- **Advocacy for, and Coordination of multi-sectorial action:**
  - As noted above there is a need to encourage adoption of safe system practices and policies across a number of different government and industry areas beyond the typical transportation portfolio.
- **Coordination and oversight of state level delivery of the safe system:**
  - While the delivery of the safe system largely occurs at the State Level, a Federal Office of Road Safety could set minimum standards of practice for implementation of effective actions at the State Level.
  - Benchmarking of practices and polices introduced by State and Local government may be a useful tool for encouraging best practice.
  - Linking federal funding to state government to safe system delivery performance.
- **Ensuring Australians have access to safe vehicle technologies:**
  - The Office of Road Safety should be responsible for ensuring Australian Design Rules for all vehicle types entering the Australian market require world's best practice vehicle safety technologies.
  - The Office should also work across other portfolios to implement strategies to see safe vehicle technologies are accessible to the most vulnerable (as noted above).
- **Working with bodies like the National Health and Medical Research Council and the Medical Research Future Fund to see targeted calls for road safety and road injury research:**
  - Unlike other high priority areas of health there are no, and historically have been no targeted calls for research related to reducing the burden of death and serious injury due to road trauma.
  - The absence of such targeted funding exists within the stark reality of the many thousands of Australians killed and injured on Australia's roads each year and the huge burden this has on the health system, the economy and lives of those impacted.
  - Road transport injuries are the third leading cause of total burden of disease for males in the 15-24 age group (5.7% of total burden) and the ninth leading cause for females in the 15-24 age group (3.3% of total burden) (AIHW 2019)  
Road transport injuries are the fourth leading cause of total injury burden in Australia (15%), the second leading cause in those aged 0-14 years and 15-24 years, and the third leading cause in those aged 25-64 years (AIHW 2019).



**(h) other measures to support the Australian Parliament's ongoing resolve to reduce incidents on our roads, with a focus on the recommendations from the Inquiry into the effectiveness of the National Road Safety Strategy 2011–2020.**

- **Innovation is required in current approaches to delivering a safe system:**
  - Road trauma needs to be acknowledged and addressed as a public health problem.
  - The implementation failures like that identified in the Woolley report need to be systematically studied to identify how barriers to implementation of actions known to be effective can be overcome.
  - In other areas of public health implementation science and system science methods are routinely being used to identify how effective solutions can be optimally implemented and systems optimised to deliver desired outcomes.
  - In the short terms targeted calls for research applying these methods to road safety and safe system issues may be an effective way to encourage the much needed innovation.

## References

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## Who we are

**The George Institute for Global Health** is a not-for-profit global medical research institute established and headquartered in Sydney, with major centres in China, India and the UK, and an international network of experts and collaborators. Our mission is to improve the health of millions of people worldwide by using innovative approaches to prevent and treat the world's biggest killers: non-communicable diseases (NCDs) and injury. Our work aims to generate effective, evidence-based and affordable solutions to the world's biggest health challenges. We research the chronic and critical conditions that cause the greatest loss of life and quality of life, and the most substantial economic burden, particularly in resource-poor settings. The George Institute is a leading injury research centre and its Injury Division is a designated WHO Collaborating Centre in Injury Prevention and Trauma Care. The Injury team investigates solutions to prevent the world's most significant injury problems and transform injury and trauma care globally. Harnessing the power of governments, markets and communities through research, advocacy and thought leadership, we are at the forefront of innovations to reduce the burden of injury. The George Institute currently leads over 30 injury-related projects in Australia, India, Bangladesh, China, Uganda and South Africa, including developing Australia's National Injury Prevention Strategy, and a specific focus of projects that aim to deliver tangible reductions in road trauma worldwide. As our overall strategic aim is to reduce the burden of injury, we support any move towards the reduction of trauma in Australia.

**Neuroscience Research Australia (NeuRA)** is an independent medical research institute that undertakes health and medical research on the brain and nervous system in order to enhance human health and wellbeing. It is one of the nation's leading institutes with over 300 neuroscience researchers and clinicians working on research programs on ageing and neurodegenerative disorders; movement, sensation and balance; mental illness; advanced brain mapping and imaging; and neural injury and its prevention. NeuRA houses the Transurban Road Safety Centre's which is Australia's only research-dedicated crash test lab. The Road Safety Centre combines world-class research with state-of-the-art facilities and equipment to provide a source of ongoing innovation in the area of road safety research. Our researchers identify risk factors for injury, develop countermeasures and evaluate the effectiveness of these countermeasures. Researchers working within this centre have a particular interest in prevention and mitigation of transport injuries and have published around 150 articles and 45 reports commissioned by government and other organisations in this area. Their work has also had significant real world impact, particularly related to the prevention of injury to children where their research has helped to shape product standards, educational campaigns and legislation.

**The University of New South Wales (UNSW) Sydney** is a powerhouse of cutting-edge research, teaching and innovation. UNSW is one of the top 70 universities in the world, with more than 62,000 students and a 7,000-strong research community. Located in Sydney, Australia, the University was established in 1949 with a specific focus on the scientific, technological and professional disciplines. UNSW is committed to making a difference through pioneering research and preparing the next generation of talented global citizens for career success. UNSW is a founding member of the Group of Eight, a coalition of Australia's leading research-intensive universities, and the prestigious Universitas 21 international network.