



New South Wales

IPWEA

INSTITUTE OF PUBLIC WORKS
ENGINEERING AUSTRALASIA



IPWEA (NSW) ROADS & TRANSPORT DIRECTORATE

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14 February 2017

Mr Greg Aplin
Chair
Staysafe (Joint Standing Committee on Road Safety)
Parliament House
Macquarie St
Sydney NSW 2000

Dear Mr Aplin,

Submission to Staysafe Inquiry into Whole-of-Life Driver Education and Training

The Institute of Public Works Engineering Australasia (NSW Division) fully supports the need for a Parliamentary Inquiry into Whole-of-Life Driver Education and Training in New South Wales (NSW).

IPWEA (NSW) also appreciates the invitation to provide this submission to the Staysafe Committee. The submission deals with each of the Terms of Reference based on a wide range of inputs. We would welcome the opportunity to address the Inquiry to provide further detail on the issues raised within this submission.

Please do not hesitate to contact Mick Savage on tel: 8267 3000 or email mick.savage@ipwea.org in relation to this submission.

Yours faithfully,

Mr Garry Hemsworth
Director IPWEA NSW Board

Mr Mick Savage
Roads & Transport Directorate Manager

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STAYSAFE (Joint Standing Committee on Road Safety) Inquiry into Whole-of-Life Driver Education and Training

Submission by

**INSTITUTE OF PUBLIC WORKS ENGINEERING
AUSTRALASIA
(NSW Division) Roads & Transport Directorate**

20 February 2017

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Executive Summary

The Institute of Public Works Engineering Australasia (NSW Division) is the leading association representing Engineers, Public Works Officers and Road Safety Officers working in, or providing services to local government and the NSW Government. IPWEA (NSW) is ideally placed to advocate for road safety on behalf of local government through the knowledge and expertise of the NSW Roads & Transport Directorate and IPWEA (NSW) Road Safety Panel.

It is often overlooked that local roads comprise 85% of the road network (Verity, S & Roorda, J 2014). It is also worth noting that over the 7 year period from 2008 to 2014, there were 1,766 fatalities and 128,671 injured on roads managed by regional local councils in NSW. Deaths and injuries on these roads cost these regional communities up to \$18 billion over the 7 year period (NRMA 2015).

Local government is a key partner with state and federal governments in delivering safer road services and community-based road safety programs. Roads to Recovery (R2R) is one example of federal and local government partnerships providing direct benefits to local communities. Improving the surface condition, width and alignment of local roads, upgrading dangerous intersections and better signage, all make a real difference to road safety (ALGA 2015).

Moreover, a safe road transport system should include training and education interventions not only during the learner phase but all throughout one's driving life. Taking into account inputs by a wide range of sources including the IPWEA (NSW) Board, IPWEA (NSW) staff, IPWEA (NSW) Road Safety Panel members, council members, road users, and related literature, this submission calls for action on improving road safety through driver education and training in NSW in the following areas:

- The collection and timely dissemination of detailed road crash data to local councils and other stakeholders.
- The adoption and implementation of best practice Safe System solutions with an emphasis on safer drivers as embodied in the National Road Safety Strategy 2011-2020 and for funds to be allocated to provide Local Government Councils with training and resources to identify, plan, and strategically manage road safety outcomes effectively in their respective LGA and that there be an increase in funding allocations for maintenance programs, particularly as they relate to safer outcomes to assist Councils.
- A thorough evaluation of current driver education and training be undertaken to determine the actual impact this may have on the reduction of road crashes and whether a system of periodic retraining of all drivers should be put in place. In local government, Road Safety Officers (RSO)s could deliver training from the Centre for Road Safety (CRS) & the Roads and Maritime Services

(RMS), subject to more support and funding. Moreover, specific training needs to be expanded to include education on:

- Changing road conditions particularly at worksites
 - Navigating rural unsealed roads
 - Safety precautions when encountering flooded roads
-
- Continue to monitor older drivers crash trends by the jurisdictions in coming years and for research to be undertaken into geographical variations in the distribution of the older population, and how this affects travel and crash patterns (as recommended by Austroads in its Study on Older Road Users Emerging Trends, 2016) and that older drivers be encouraged to adopt safe driving principles through education and training.
 - That a review of the current number of compulsory supervised driving hours of Learners be undertaken to determine if it is sufficient or if an increase in the number of hours is necessary. Also, that there be additional support to learner drivers in low income status communities, indigenous communities, and remote rural areas including access to subsidised professional instruction and to consider the addition of safe driving features to the driver knowledge and qualification tests as a precaution against unsafe driving.
 - That overseas licence holders involved in road accidents be identified in crash statistics and that they be included as a target group for road safety initiatives, if necessary.
 - The development of a suite of standards of delivery and assessment for use by driving instructors to ensure the quality and consistency of the training.
 - Funding the Local Government Road Safety Program (LGRSP) well beyond the current 3 year cycle so that RSOs can continue working with local communities to address education and road safety factors. The LGRSP needs to be extended to require every local council to employ local RSOs.
 - That passengers be included in road safety campaigns and education programs emphasizing their role and responsibility in reducing distractions and enhancing vehicle safety.
 - That further research be undertaken to determine the true costs of implementing a mandatory driver training program as well as identifying the appropriate driver training standards that should be adopted.
 - A sustainable funding model that addresses the growing infrastructure backlog and infrastructure maintenance going forward to ensure that safer roads are provided for the community.

Strategic actions in these areas would likely result in the greatest benefits in terms of reduction in the number of road crashes involving drivers and overall improvements in road safety.

Introduction

IPWEA (NSW) recognises that road safety is a paramount concern all over the world. The World Health Organization reports that 1.2 million people die each year due to road deaths with road traffic crashes being the leading cause of death across all age groups. Unless governments at all levels take a comprehensive approach to address road safety, road deaths are predicted to become the 7th leading cause of death in 2030. (WHO 2015)

Road traffic death and injuries presents a massive public health challenge. So much so that in 2010, the United Nations General Assembly proclaimed a "Decade for action on Road Safety 2011-20". In response, the Australian government launched the National Road Safety Strategy, committing federal, state and territory governments to an agreed set of national road safety goals, objectives, and action priorities all aimed at reducing deaths and serious injuries from road trauma by 30 per cent by 2020.

In New South Wales, numerous measures under the NSW Road Safety Strategy, have been introduced all aimed to reduce the road casualty problem. Various road safety legislations, policies, and education and awareness campaigns involving the public and informing them of the dangers of irresponsible road use have been launched. However, in spite of these efforts, statistics still show an increasing trend in road related deaths and accidents.

On average, four people die and 90 people are seriously injured on Australian roads every day. Although deaths on Australian roads have decreased over the past decade, there has been slow progress in reducing the number of injuries.

In view of this, it is imperative to closely examine the role of whole-life or continuing driver education and training and its likely benefits to achieve improved road safety outcomes in New South Wales.

In general, the IPWEA (NSW) is supportive of any measures that promote road safety such as driver training and education in addition to the other elements of the Safe System.

Background

The Staysafe Committee resolved to conduct an inquiry into whole of life driver education and training in supporting improved road safety outcomes. As noted by the Committee, while NSW's road safety efforts have been substantial, the recent surge in road fatalities is alarming with certain age groups, particularly experienced drivers

being over-represented. As such, there is a need for intervention and the Committee wishes to examine the option of mandatory driver education and training for experienced drivers.

On 16 November 2016, the Staysafe Committee called for submissions to its inquiry. The Committee's Terms of Reference are to inquire into and report on the role of whole-of-life driver education and training in supporting improved road safety outcomes in New South Wales.

This submission is structured in relation to the inquiry's Terms of Reference (TOR). IPWEA (NSW) provides recommendations where appropriate for consideration by the Staysafe Committee.

- a. Trends in road safety research and crash statistics
- b. Evaluating current driver training, including the effectiveness of refresher training and skills updating, and adaptation to changing vehicle technology
- c. The needs of any particular driver groups
- d. The needs of driver trainers, both professional and non-professional
- e. The needs of metropolitan, rural, and regional drivers
- f. The needs and expectations of passengers and other road users
- g. The cost of driver training standards and how the costs should be allocated
- h. The experience of other jurisdictions, and interstate cross border issues
- i. Other related matters

About IPWEA NSW Division

IPWEA (NSW) is a not for profit, membership based, professional organisation representing engineers and others involved in the provision of public works and services predominantly in the local government sector.

IPWEA (NSW) Mission is:

"To enhance the quality of life of NSW communities through excellence in public works and services. This is achieved through our professional association that effectively informs, connects, represents and leads public works professionals for NSW."

This submission has been prepared by the NSW Roads & Transport Directorate on behalf of the Board, council members and representatives of the IPWEA (NSW) Road Safety Panel.

The Roads and Transport Directorate was set up by IPWEA (NSW) in conjunction with Local Government NSW in 2004 to provide support to its members working in local government across the state. It is supported financially by membership contributions from local councils across NSW.

IPWEA (NSW) Road Safety Panel

The Road Safety Panel is a committee of IPWEA (NSW) and is managed by the Roads and Transport Directorate. The Panel's goal is to make a significant and measurable contribution to improve road safety awareness, knowledge and expertise in NSW. Membership of the Panel is by invitation and includes representatives from Transport for NSW, ARRB Group, LG NSW, AITPM, urban and rural councils.

Response to Specific Inquiry Terms of Reference

The following are the IPWEA's comments relating to the Terms of Reference:

a. Trends in Road Safety Research and Crash Statistics

IPWEA (NSW) relies on data collected by state and federal government agencies in relation to trends in road crashes including injury and fatality crashes - as do NSW local councils, consultants, road safety researchers and other organisations. The Centre for Road Safety, under the auspice of Transport for NSW (TfNSW), collates and provides NSW road crash statistics (previously the responsibility of the Roads & Traffic Authority) using data from the NSW Police Force. Its crash database, CrashLink, is used for road safety analysis and research work, strategic planning and policy work.

IPWEA (NSW) previously raised concerns with the Staysafe Committee regarding the collection, timeliness and usability of crash data as part of our submission to the *2009 Parliamentary Joint Standing Committee on Road Safety regarding Pedestrian Safety*. That submission focused mainly on the methods of capturing crash casualty data and the lack of agreed definitions of injury severity (IPWEA 2009) and the key issues are summarised below:

1. Lack of data regarding the severity of injury crashes which limits local councils' ability to calculate the costs of crashes and prioritise treatments.
2. The location of the crashes are not always pinpointed as the data is not always entered by Police at the scene of the crash making it difficult to accurately determine the cause of crashes later on.

3. Under reporting of crashes, especially off road crashes, as many people do not want Police involved in what they consider minor incidents or to avoid possible prosecution.

These issues continue to inhibit the ability of councils and policy makers to make truly informed decisions and develop strategies to address road safety. These are not the fault of the NSW Police, rather are more a reflection on the way the data is collected. It is also a matter of Police resourcing. As of October 2014 Police are no longer required to attend minor crashes and are now only called to attend and investigate crashes when a person is killed or injured, parties fail to exchange details or a driver is under the influence of alcohol or drugs.

IPWEA (NSW) initiated a joint project with the Ambulance Service of NSW to overcome identified deficiencies in data. An agreement was reached between IPWEA (NSW) and the Ambulance Service of NSW in September 2009 to work collaboratively on a project to identify the costs to communities of injuries due to vehicle crashes. Unfortunately a lack of funding and staff turnover prevented the project proceeding beyond feasibility stage.

The Staysafe Committee made the following recommendation as part of its final report on the 2009 inquiry:

“the Roads and Traffic Authority, in consultation with the Institute of Public Works Engineering Australasia, the NSW Institute of Trauma and Injury Management, the NSW Police Force and NSW Health, develops agreed definitions of injury severity, based on internationally recognised standards of classification. In addition to obtaining uniform data, this will also assist in estimating the costs of such injuries, enabling the design of improved treatment options and appropriate countermeasures based on reliable data”
(Staysafe Committee 2009 p. xvii).

In its response to the Committee’s recommendations, the former Roads & Traffic Authority (RTA) undertook to overview the process to distinguish between serious and minor injury data in NSW and consult with Associations and Research Centres to investigate the definitions of injury severity and to determine a process to estimate serious vs. minor injuries. The RTA also noted that definitions of injury and severity need to be determined and agreed in a national context (Borger 2010).

Despite the RTA’s commitment to investigate this issue, the need for improved crash data was again highlighted as part of the Staysafe Committee’s final report on its *2010 Inquiry into Vulnerable Road Users, specifically motorcycle and bicycle safety* (Staysafe Committee 2010 p. v), although with a greater focus on the lack of centralised data collection for off-road injuries and fatalities. Other road safety events, conferences and inquiries have also resulted in recommendations regarding improvements to the collection and dissemination of road crash data including the 2008 *Motorcycle and Scooter Summit* held in Canberra and the 2012 Victorian Parliamentary Road Safety Committee Inquiry. Data collection and analysis was

rated as the top priority by the delegates at the Canberra summit and was also a key theme at the 2012 Victorian *Inquiry into Motorcycle Safety*.

The Victorian Inquiry addressed the issue of 'data quality' in some depth including identifying gaps or changes in data classification, deficiencies in data gathering, and lack of data generally (Parliament of Victoria 2012, p. 28). The Inquiry also found that there is limited access to, and sharing of, data between organisations that gather and store motorcycle trauma data (p. 32). These findings are reflective of issues raised by IPWEA (NSW) in 2009 within its submission to the *Staysafe Inquiry into Pedestrian Safety*.

Recommendation:

IPWEA (NSW) recommends improved collection and reporting of detailed crash data in NSW. A better understanding of the extent of crash related injuries in particular would assist local councils and communities to determine exactly where the burden of injury is occurring and how much it is costing. This would also greatly assist councils to prioritise roads upgrades and develop other strategies - such as behavioural programs - to prevent or lessen the effects of vehicle crashes.

Road Safety Research

Throughout the years, there has been a substantial decrease in road fatalities across highly motorized countries mostly due to measures that have to do with vehicle design, infrastructure, and road user behaviours. (Hakert, Gitelman 2014). Cars have become smarter and safer and road designs have improved to seamlessly accommodate different modes of transportation. Moreover, various interventions that relate to regulation of driver behaviour such as seatbelt laws, random breath tests, setting of speed limits, and driver fatigue management, among others, are being effected.

Australia has made substantial improvements in reducing the road toll, from 3,798 deaths in 1970 to 1,300 deaths in 2016 despite an increase in population and motor vehicle registrations. The significant reduction in road toll can be attributed to improved roads, safer cars, mandatory seatbelts, setting of speed limits, use of child restraints and random breath testing, among others.

However, in spite of these efforts, road accidents continue to be a major concern. Road traffic related injuries remain to be one of the primary causes of hospitalization and death for Australians under the age of 45, considered to be the prime of their productive life (UNSW 2015). Road accidents continue to be one of the principal causes of morbidity and mortality and often come with a very high social cost. People are left permanently disabled and lives are continued to be cut short by something that is preventable.

In 2010, the United Nations General Assembly proclaimed a "Decade for action on Road Safety 2011-20". In response, the Australian government launched the

National Road Safety Strategy, compelling federal, state and territory governments to an agreed set of national road safety goals, objectives and action priorities all aimed at reducing deaths and serious injuries from road trauma by 30 per cent by 2020. It focuses on the principle that no one should ever be seriously injured or killed as a consequence of using the road system.

Subsequently, in 2012, the New South Wales government released its Road Safety Strategy for 2012-21 which aims to reduce annual road fatalities and injuries by at least 30 per cent. The strategy operates on the Vision Zero approach that aims to minimize the possibility of crashes and the gravity of the ones that ensue. It is reinforced by the Safe System approach which recognizes that each component of the system, i.e. the road user, the roads and roadsides, and the vehicles and travel speeds, all play an important role in promoting road safety. (TfNSW 2015)

There is no single solution to reduce road crashes and casualties as crashes can be caused by a range of interrelated factors such as traffic exposure, automobile safety, road design infrastructure, legal rules, and driving behaviour among others. Moreover, it may seem challenging for any government as the solutions are often multifaceted and encompass a wide range of concerns at the national, state and local government levels.

Recommendation:

The IPWEA (NSW) recommends that road authorities and local councils adopt and implement best practice Safe System solutions as embodied in the National Road Safety Strategy 2011-2020.

We also recommend that funds be allocated to provide Local Government Councils with training and resources to identify, plan, and manage road safety outcomes effectively in their respective LGA and that there be an increase in funding allocations for maintenance programs to assist Councils

Casualty Road Crashes

When compared with licence, registration and population figures, trauma rates across most road user groups have improved over time. Even casualty rates involving drivers have shown annual decreases over the period 2005-2015. Casualty rates are calculated as the number of fatalities / injuries per 100,000 of population. These are generally considered by road safety researchers and practitioners as better metrics for progress in road safety (de Rome 2014, slide 4). Contextually, cars have also become much safer over the last 10 years including improvements in vehicle technology and passive safety features.

Road Fatalities

Data on the national fatal crash and fatality obtained from the Bureau of Infrastructure, Transport and Regional Economics (BITRE) show that fatalities, fatal crashes, and deaths per 100,000 population showed a decreasing trend up to 2014 but started to trend upwards again in the subsequent years. Across Australia, there were 95 more deaths in 2016 compared to the same period last year.

Table 1. National Indicators

	2008-10	2012	2013	2014	2015	2016
Number of Deaths from road crashes	1,426	1,300	1,187	1,150	1,205	1,300
Number of crashes resulting in deaths	1,297	1,190	1,101	1,050	1,101	1,206
Number of deaths per 100,000 pop	6.5	5.7	5.1	4.9	5.1	5.4
Number of deaths per 100 mvkm	0.65	0.56	0.56	.47	.48	-
Number of deaths per 10,000 registered vehicles	.91	.54	.46	.45	.46	-

In NSW, the number of deaths brought about by road crashes peaked to 384 in 2016, an increase by 34 compared to the previous year, and the highest annual total since 2008-10.

Table 2. NSW Indicators

	2008-10	2012	2013	2014	2015	2016
Number of Deaths from road crashes	410	369	333	307	350	384
Number of crashes resulting in deaths	345	336	316	285	326	360
Number of deaths per 100,000 pop	5.8	5.0	4.5	4.1	4.6	5.0
Number of deaths per 100 mvkm	.60	.52	.46	.42	.47	.5
Number of deaths per 10,000 registered vehicles	.64	.53	.43	.40	.4	.7

Across Australia, 6,337 drivers have died over the last decade (2006-2015) or on average 638 deaths per year. The majority of those deaths (29%) have occurred in NSW, the state with the largest population and number of car registrations, followed closely by Queensland (21%) and Victoria (11%). Data for most states and territories shows flat or slight upward trend over the 10 year period.

Table 3. Annual numbers of driver deaths by jurisdiction

Year	NSW	Vic	Qld	SA	WA	Tas	NT	ACT	Aust
2006	249	155	156	58	92	26	15	6	757
2007	215	173	171	60	113	21	24	8	785
2008	194	140	141	45	104	19	24	3	670
2009	210	142	155	60	91	29	16	4	707
2010	185	130	114	57	99	16	25	10	636
2011	181	121	108	40	85	13	17	3	568
2012	164	146	125	52	87	14	19	3	610
2013	155	121	136	50	69	13	11	2	557
2014	153	112	106	51	78	18	10	4	532
2015	155	122	117	52	70	17	14	8	555

Over the period 2005 to 2016, a total of 2,283 drivers have died on NSW roads accounting for 48% of total road deaths. Car drivers accounted for the majority of drivers killed followed by passengers 19%, motorcyclists 16%, pedestrians 15% and pedal cyclists, 3%. While the trend seemed to have levelled off in 2014, a sharp rise in driver and pedestrian fatalities was experienced in the subsequent years. In contrast, the number of motorcyclist deaths in NSW per year has remained steady and as a proportion of all road deaths has actually increased. The same is true for pedal cyclists. Figure 1 below shows the fatality trends by road user from 2005-2016.

Figure 1. Fatality Trends by Road User NSW, 2005 to 2016

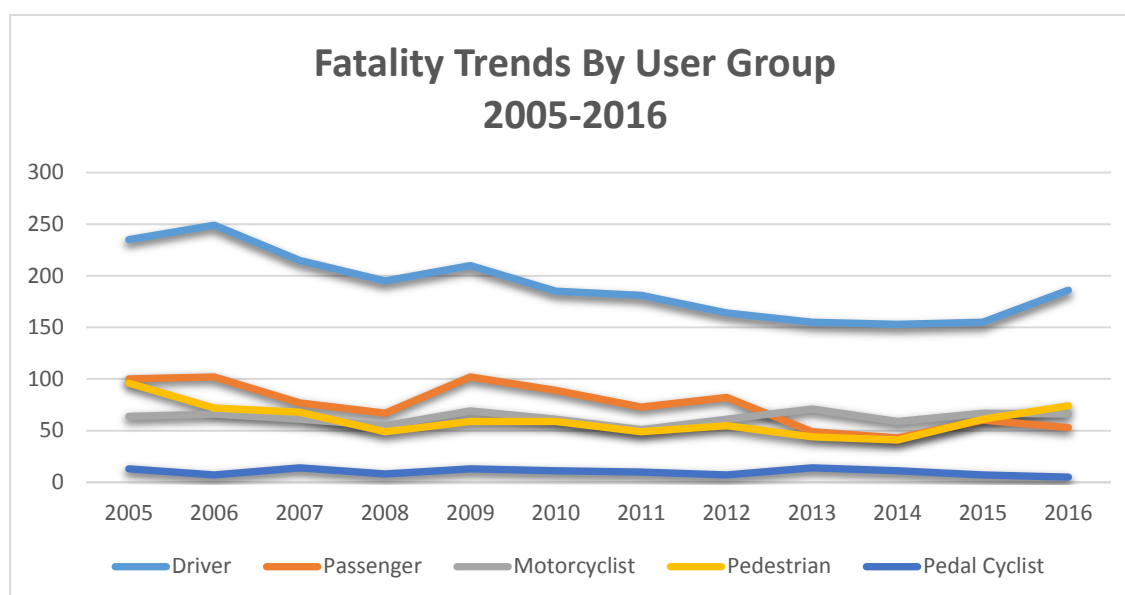
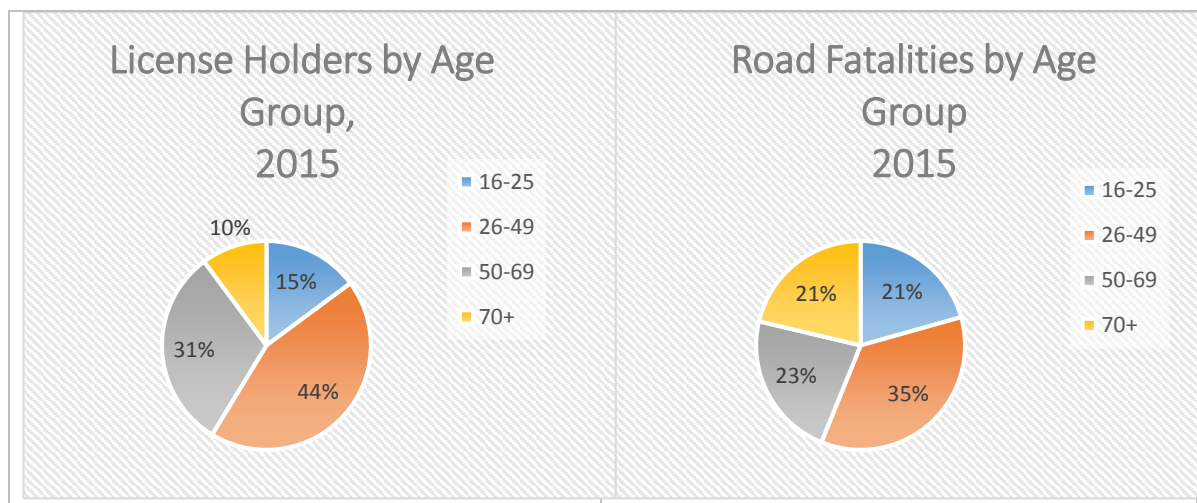


Figure 2 below shows that in 2015, young drivers from the 16-25 age group accounted for 21% of road fatalities in NSW while only making up 15% of total licence holders. Similarly, older drivers aged 70+ also made up 21% of road fatalities while only comprising 10% of total licence holders. Both age groups are over represented in road fatalities.

Figure 2. NSW Licence Holders and Road Fatalities by Age Group, 2015



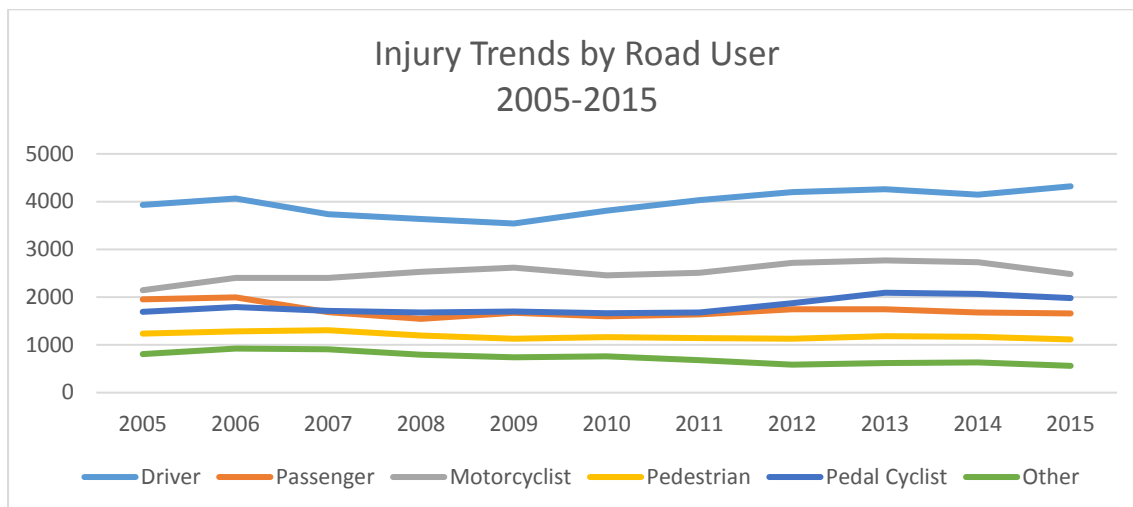
Driver injuries

In 2015, a total of 12,121 persons were hospitalized as a result of sustaining injuries from road traffic crashes in NSW. This is down by 2% compared to the previous year's figure of 12,420. There was a reduction of hospitalizations across all user groups with the exception of car drivers which went up by 4% compared to the previous year and the highest driver total since records began in 2005. Moreover, driver injuries made up 36% or the largest proportion of hospitalizations in 2015.

A total of 4,321 drivers were injured on NSW roads accounting for 36% of total road injuries followed by motorcyclists (20%) and pedal cyclists (15%).

While injury trends for all other user groups remains steady, driver injuries have been slowly increasing. Figure 3 below presents injury trends in NSW 2005-2015.

Figure 3. Injury Trends by Road User NSW, 2005-2015



Heavy Vehicles

In 2015, 211 people were killed in crashes involving heavy vehicles. Of this total, the proportion of persons killed in crashes which involved an articulated truck, heavy rigid truck or bus were 53.0 per cent, 37 per cent and 10 per cent respectively. (BITRE database 2015). Figure 4 below shows that distribution of deaths by type of heavy vehicle.

Vehicle occupants (driver or passenger) account for 73.0 per cent of fatalities from crashes involving a heavy vehicle. Of total vehicle occupant deaths, 24.1 per cent are heavy vehicle occupants. Moreover, BITRE estimates that over 1,600 people are hospitalized from crashes involving heavy vehicles, or approximately 4.8% of all road traffic crash hospitalized injuries.

Figure 4. Deaths from Crashes involving Heavy vehicles

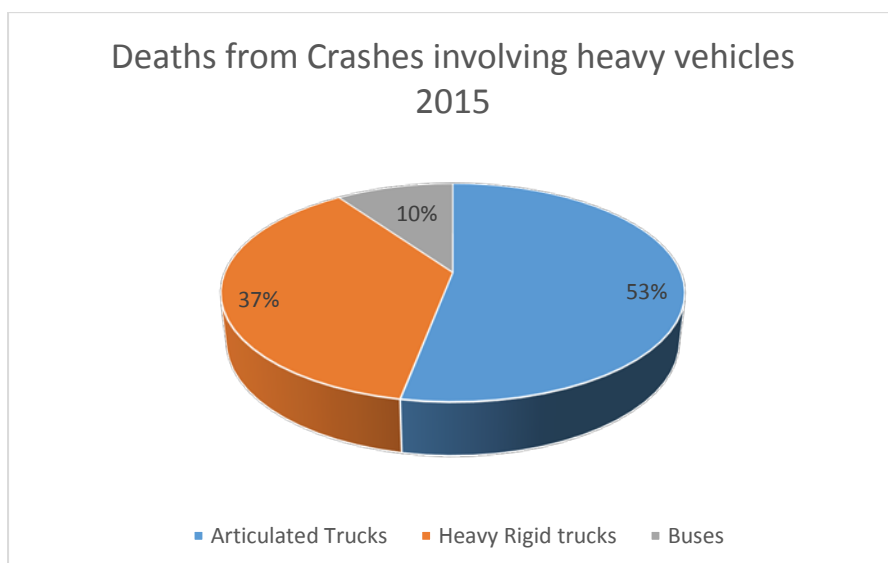
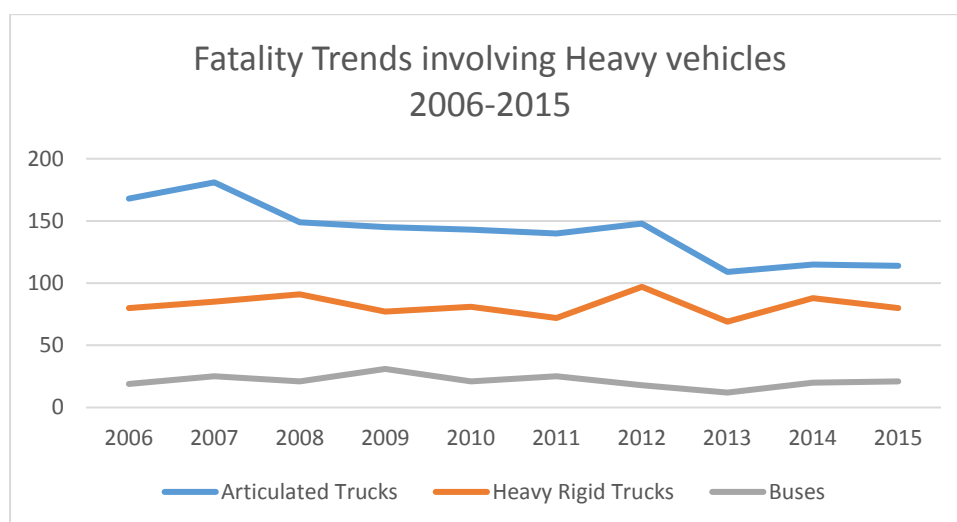


Figure 5 shows that over the last ten years, total annual deaths from crashes involving heavy vehicles have been decreasing. BITRE estimates a 3.2% reduction per year.

Figure 5 Fatality Trends Involving Heavy Vehicles 2006-2015



b. Evaluating current driver training including effectiveness of refresher training and skills updating, and adaptation to changing vehicle technology

A safe road transport system should include training and education interventions not only during the learner phase but all throughout one's driving life. Currently, no mandatory driver education and training is required in order to obtain a drivers licence. In Australia, the primary type of training that learners undergo are one-on-one in-vehicle on-road lessons usually with a private instructor from a driving school or a parent, older sibling, friend, or relative. The main objective of these lessons is primarily to teach the learner about the basics of how to handle a vehicle in order to pass the practical driving test. There are other programs, albeit optional, which involve group classroom sessions, PC based programs, and in-vehicle drives at off-road facilities, all aimed at teaching safety aspects and hazard discernment.

There are also community-based programs such as the RYDA program across Australia which is structured to deliver practical road safety information that targets attitudes and awareness of young drivers and passengers. There are also federally sponsored initiatives such as the keys2drive program which provides a free lesson for eligible learner driver, parent or carer, and a driving instructor.

Apart from educational interventions, other existing initiatives have likewise demonstrated significant crash reductions such as lengthy learner driver periods and night time and peer passenger restrictions for drivers who have just obtained their licences. (ACRS 2008)

In NSW, the Safer Drivers Course helps young L-plate holders prepare for solo driving once they graduate to provisional licences. The course teaches learners to have an understanding on reducing road risks, managing speed, developing safe driving behaviour, gap selection, hazard awareness, and safe following distances and other concerns which parents or professional driving lessons may have failed to cover. It is not mandatory but it allows learners to earn 20 hours of logbook credit once completed thereby lowering the mandated logbook hours to just 100. It also charges a fee of \$140 and is available in almost 250 locations across NSW.

Likewise in NSW, the Roads and Maritime Services (RMS) fund workshops to help learner drivers become safer drivers. The workshops are for parents and supervisors of learner drivers and are conducted around NSW and offer practical advice on how to help learner drivers become safe drivers. The focus is primarily on mentoring and teaching good habits and not so much on handling skills.

There are also several post-licence driver training courses available across Australia with a diverse range of services that include driver risk assessments, on-line driver training courses, driving clinics, driver training simulators, and in-vehicle training courses. These post-licence courses employ strategies that are supported by several older driver education programs that are currently available covering topics such as road rules refresher, safe driving tips, pedestrian safety, health and driving, older driver licensing, and mobility alternatives.

These programs have all been available for quite some time now but have yet to be evaluated in terms of their value in preventing crashes from occurring as well as their effect on driver attitudes and behaviour.

Research shows that a considerable percentage of crashes can be attributed to driver error. (Isler and Starkey 2012). Errors are mostly a product of two key issues that have mainly to do with driver attitudes and driver behaviour as approximately 95 per cent of all road crashes are due to these two factors. As such, driver education and training should be structured to address the crash causes that are linked to driver attitude and behaviour which often leads to driver error such as inattention and distraction, speeding, driver aggression, disregard for road rules, tailgating, driving under the influence, and driving while tired.

While there is a need for improved research and development regarding driver education programs, including rigorous evaluation, there is also a need to educate the public on true risks and effective intervention. (ACRS 2008).

Moreover, further training and skills updating on situations like overtaking, right of way, roundabouts, judging road conditions, wildlife incursions, fatigue, navigating complex traffic environments, inclement weather, identification of and driving through work sites, motorway driving, and mobile phone distractions, should also be considered.

Recommendations:

Realizing the importance of driver education and training as a road safety measure, the IPWEA (NSW) recommends that a thorough evaluation of current driver education and training be undertaken to determine the actual impact this may have on the reduction of road crashes and whether a system of periodic retraining of all drivers should be put in place. Refresher training on road rules should also be done through work places where they have high levels of driving by staff. In local government, RSOs could deliver training from the Centre for Road Safety (CRS) & the Roads and Maritime Services (RMS), subject to more support and funding. Moreover, specific training needs to be expanded to include education on:

- Changing road conditions particularly at worksites
- Navigating rural unsealed roads
- Safety precautions when encountering flooded roads

c. The needs of particular driver groups

1. Older drivers

The Australian Bureau of Statistics reports that as of June 2015, 16% of NSW residents (1.20 million people) were aged 65 years and over. Of these, 164,100 people were aged 85 years and over. Between 2010 and 2015 the number of people in NSW aged 65 years and over grew by 18%, reflecting the continuing ageing of the NSW population.

As Australia and some parts of the world prepare for an aging population, this phenomena must also be considered in crafting and implementing a comprehensive road safety strategy. According to the OECD, the percentage of the population aged 65 or more in Australia is projected to rise from 12.6% in 2000, to 22.1% in 2030 and 25.2% in 2050. People aged 85 years and over as a proportion of the population is projected to rise from 1.2% in 1997 to between 4.4% and 4.8% in 2051. The combined effects of an aging population, increasing activity levels and demand for travel, and higher licensure will result in a significant increase in older road users. (Austroads 2016)

Because of their increased frailty and reduced tolerance to injury, older drivers are more at risk of sustaining a fatal or serious injury than younger road-users and as such tend to be over-represented. Crash statistics for Australia show that when numbers are adjusted to account for different circumstances, older drivers figure in more serious and fatal crashes than their younger counterparts. Therefore, in the absence of proper interventions, it is expected that this problem may increase over the following decades, considering the projected increase in the proportion of older persons in the population and the changes that go with in relation to their patterns of mobility. (Charleton et al 2003)

Thus, it is worthwhile to consider the needs of this particular age group in the whole road safety framework since it is predicted that older people will continue to have travel needs after retirement with the private car remaining to be the preferred mode of transportation especially since driving is associated with freedom, independence, and self-reliance. (Whelan et al 2006). With this in mind, it is also important to identify whether this age group will be an increased road safety risk going forward.

Lastly, with the advent of autonomous vehicles, we can expect older drivers to remain on the road. Countermeasures that go beyond ensuring older drivers' fitness to drive may be required. Hence, the need for driver education/training to refresh them on road rules, changing vehicle technologies, and adopting safe driving practices is worth looking into. Research suggests that older drivers can benefit from receiving better information with regard to vehicle choice and from an array of infrastructure changes. (Lydon et al 2014)

Recommendations:

The IPWEA (NSW) recommends that older driver crash trends by the jurisdictions continue to be monitored going forward. We also endorse Austroad's recommendation in their 2016 report entitled "Older Road Users: Emerging Trends" that "research be undertaken into geographical variations in the distribution of the older population, and how this affects travel and crash patterns". Moreover, we recommend that older drivers be encouraged to adopt safe driving practices through specific training which centres on depth perception, driving skills and behaviours, update on road rules and its application in different traffic conditions, and anticipation of hazards that they may encounter in the course of their driving.

2. Young Learner/Novice drivers

Similar to old drivers, young drivers continue to be overrepresented in road crashes and fatalities. In 2015, young drivers from the 16-25 age group accounted for 21% of road fatalities while only making up 15% of total licence holders.

Research suggests that this over-representation of young people in road accidents can be attributed to a range of reasons including risky driving behaviours such as speeding, driving when fatigued, and driving under the influence of alcohol or other drugs; underestimation of risks; and the lack of higher order skills such as hazard perception and the ability to balance risks taken in traffic situations against skills as a driver. This is all said to be related to inexperience and stages of brain development. (AIHW 2012) These higher order skills can only be obtained through continuous learning and training with professional instructors. (FIA 2016).

Younger drivers are faced with many challenges when learning how to drive a vehicle which is why they are made to go through a series of stages before obtaining a full license through the graduated licensing scheme. The graduated licensing scheme allows young learner drivers to progressively familiarize themselves with more complicated road conditions as they build on-road experience in lower-risk

situations. Experience is strengthened as they pass from one stage to another under a system of compulsory supervised driving hours. This allows them to become more confident and develop a deeper understanding and knowledge of road rules, and respect for other road users. Therefore, it may be worthwhile to look into whether the current number of compulsory supervised driving hours is sufficient or whether an increase in the number of hours is necessary to ensure that learners are able to thoroughly build substantial experience before obtaining a full licence.

Finally, there is the issue concerning availability of driver training and education to youth living in rural areas as these areas also have limited multi-lane roads, complex intersections & traffic environments compared to their large city counterparts. Focus group research conducted with young drivers living in rural NSW identified that there is limited access to driving instructors (Knight, Iverson, Harris 2012). Young novice drivers living in rural areas are not given the same level of access to driver training and education as young drivers living in the metropolitan areas. Also, the cost of professional driving fees can be too much of a burden and may serve as an obstacle to learner drivers from lower income and indigenous backgrounds. As such, additional support may be needed for young drivers with limited or no access to such services while on learner status.

Recommendation

The IPWEA (NSW) recommends that a review of the current number of compulsory supervised driving hours of Learners be undertaken to determine if it is sufficient or if an increase is necessary. We likewise recommend that additional support be made available to learner drivers belonging to low income status communities, indigenous communities, and remote rural areas including access to subsidised professional instruction and to consider the addition of safe driving aspects to the driver knowledge and qualification tests as a precaution against unsafe driving.

3. Overseas driver's licence holders/International Travellers

According to the ABS, a total of 7.7 million short-term and long-term visitors arrived in Australia for the period January-November 2016, almost surpassing the 2015 full-year figure. Tourism Research Australia predicts this number to grow by 8% in 2017. As these figures increase, so does the potential for crashes involving international drivers.

While there is no data that specifically shows overseas licence holders' involvement in road crashes, it is still worthwhile to examine. At present, there is no requirement for these road users to understand the Australian road rules and are allowed to drive on overseas licences for the length of their visit or in some cases indefinitely while on visas. This could be a potential road safety issue, if it is not already.

Also, although the usual concerns of speed, alcohol and fatigue apply to all tourist drivers, Australia has some specific issues that international drivers should be made aware of before they attempt to drive. These include driving on the left hand side of

the road; the legal requirements of having to wear a seat belt at all times; a lower legal blood alcohol limit compared to other countries; the use of child restraints; an awareness of the length of the road network and the distances involved in travel; wildlife incursions and other animal hazards; and unusual road and environmental conditions. (Wilks, 1998; Wilks & Watson, 1998 as cited in Wilks and Watson, 1999).

There is no required training or even a briefing before international travellers are allowed to drive. In most Australian states and territories, one is allowed to drive on an overseas licence so long as it is valid/current. Also, there are no regulations in place for overseas licence holders who apply for an Australian licence but fail to pass the examination. They are still allowed to drive using their overseas licence even though it was clearly established that they are not competent and equipped to drive on Australian roads.

Also, laws and driving regulations differ from state to state. Some states require that an International Licence be carried along with a current foreign licence. Other states require carrying a current foreign driver's licence together with a formal translation of the licence into English.

Recommendation

The IPWEA (NSW) recommends that overseas licence holders involved in road accidents be identified in crash statistics and that they be included as a target group for road safety initiatives, if necessary.

d. The needs of driver trainers

The certification of professional driving instructors is regulated by the Driving Instructors Act of 1992, with the purpose of ensuring that professional driving instructors meet minimum standards of driving instruction competency, integrity and character. Therefore, the role of the driver trainer industry is pivotal as they have the primary task of administering driver training and education. The principal objective of the professional driver trainer is to provide an educational experience to learner drivers which promotes the necessary knowledge, attitude, and skills base for the efficient and safe operation of a motor vehicle on the public road system. Moreover, under contracted accreditation schemes, they are responsible for the training and assessment of motorcycle novice riders and heavy vehicle drivers and for the conduct of older driver assessments for re-licensing after the age of 85. In addition, the driving instructor industry guides learner drivers through local government and federal government sponsored programs. Driver trainers need to be aware of road users' needs and expectations and be able to positively influence behaviour as well as equip learners with the skills and knowledge necessary to become lifelong responsible drivers. There is also a need for professional driver trainers to undergo intensive re-training to ensure a continuous process of advancement in their field.

Recommendation

The IPWEA (NSW) recommends the development of a suite of standards of delivery and assessment for use by driving instructors to ensure the quality and consistency of the training.

e. The needs of metropolitan, rural, and regional drivers

While two thirds of the Australian population live in metropolitan areas, more than half of road fatalities occur on rural roads. (ACRS 2011). Almost half of all hospitalised transport injuries in Australia occur outside our major cities, but the rates per head of population in regional and remote areas are 50 to 100% higher than in major cities. Road crashes on rural roads are also more severe. According to the Bureau of Infrastructure and Transport Research and Economics (BITRE), an estimated 18.2% of total road crashes occur on rural roads, but 67% of fatal crashes occurred on rural roads.

Moreover, travel on rural roads usually occurs at higher speeds. Single-vehicle crashes typically account for 30-40% of injury-producing crashes and mostly involve vehicles leaving the roadway and colliding with rigid objects or overturning. Multi-vehicle collisions are also an important source of road trauma in rural areas, such as head-on, rear-end and intersection collisions. (Oxley et al 2004)

Council Road Safety Officers (RSOs) do a commendable job working with local communities, engineers, planners and other stakeholders to address road safety issues. Transport for NSW (TfNSW) and Roads and Maritime Services (RMS) also work in partnership with local councils to partly fund the Local Government Road Safety Program (LGRSP) including project funding and up to 50% funding for the RSO positions. The funding contribution is capped at \$60,000 per annum. The current funding agreement expires on 30 June 2017 leading to uncertainty about the future of the LGRSP among RSOs and councils (TfNSW 2015, p. 2 & 3).

Recommendation

IPWEA (NSW) recommends funding the Local Government Road Safety Program well beyond the current 3 year cycle so that RSOs can continue working with local communities to address education and road safety factors.

f. The needs and expectations of passengers and other road users

Passengers make up a substantial proportion of road toll because their safety is said to be entirely the responsibility of the driver. While the driver or vehicle controller has always been at the centre of road safety campaigns, there is not much being done to study the role of passengers in crash prevention. (Regan & Mitsopoulos, 2001) Moreover, passengers play an important safety role as they can influence driver behaviour to enhance both driver and passenger safety.

Recommendation

The IPWEA (NSW) recommends that passengers be included in road safety campaigns and education programs emphasizing the important role and responsibility that passengers play in reducing distractions and enhancing vehicle safety.

g. The cost of driver training standards and how the costs should be allocated

While there is wisdom to the idea of mandating periodic driver education and training for all existing licence holders, this may not be acceptable to the general public as it is guaranteed to have financial implications that translates to costs that drivers may not be willing to shoulder. After a fee structure is determined, the State could place a maximum training fee to ensure affordability and to avoid excessive charging by prospective training providers. Moreover, the State could waive licence renewal fees for drivers who opt to participate in a driver training program. Insurance companies can also support this initiative by giving out discounted premiums to drivers who opt to complete a driver's training course.

A standard should be put in place to ensure the quality and consistency of the training and its availability to all road users.

Recommendation:

The IPWEA (NSW) recommends that further research be undertaken to determine the true costs of implementing a program of periodic driver education and how these costs should be allocated as well as identify the appropriate driving training standards that should be adopted.

h. The experience of other jurisdictions, and inter-state cross border issues

Driver education and training across all age groups is also identified as an ongoing concern in a number of other jurisdictions. A parliamentary Inquiry was held in Queensland in 2003 focusing the role of education on reducing the road toll of young Queenslanders. This was also the focus of a 2008 NSW StaySafe Inquiry into Young Driver Safety & Education Program. The Parliament of Australia Senate Standing Committees on Rural and Regional Affairs and Transport References Committee likewise conducted an inquiry into the Aspects of Road Safety in Australia in 2015.

i. Other related matters

Support for Local Government Roads

State Agencies are mandated to work with and support Local Government Councils in the area of road safety. The National Road Safety Strategy 2011-2020, the National Road Safety Action Plan 2015-2017 and subsequent state strategy documents outline the action items, targets, and goals to achieve this mandate.

However, despite a strong government focus at the strategic level, efforts at the ground level have not been sufficient, partly because of conflicting priorities and funding obligations. There must be a shared commitment to road safety to help mitigate future problems that may reverse the efforts that have been achieved.

In NSW, local councils are “Road Authorities” under the Roads Act, 1993. Local government has responsibility for 85 percent of the road network and this portion of the road network accounts for around 60 percent of road accidents. The estimated investment to replace the NSW local transport infrastructure is \$65.7 billion based on the values reported in financial statements of all 152 councils at 30th June 2014. The assets are reported as being consumed at an estimated \$907 million per annum.

The *2014 Road Asset Benchmarking Report* shows that NSW councils are responsible for managing 163,850 km of regional and local roads and 10,067 bridges with a replacement cost of \$65.7 billion. The life cycle cost of the road and bridge network is estimated at \$1.53 billion per annum for 2013/14. Expenditure of \$1.08 billion was 71% of the life cycle cost. Current service levels and expenditure levels are not sustainable.

Table 4. Regional & local road lengths for responding councils

	Road Length in km		
	Sealed	Unsealed	Total
Regional Roads	15,117	3,201	18,317
Local Roads	65,885	79,647	145,533
Total	81,002	82,848	163,850

The net result of this funding shortfall is that the condition of the local and regional road networks is deteriorating, which is producing a corresponding deterioration in the safety of the network for road users.

Recommendation:

While recognising that both the Australian and NSW governments have increased spending on roads in NSW, IPWEA (NSW) calls for a sustainable funding model that addresses the growing infrastructure backlog and infrastructure maintenance going forward to ensure that safer roads are provided for the community.

Conclusion

The NSW Roads and Transport Directorate is a recognised leader in the field of traffic, transport and road safety. We believe there is an opportunity to make some relatively simple changes that could lead to a reduction in road trauma in NSW.

Summary of recommendations:

- 1. IPWEA (NSW) recommends improving the collection and reporting of detailed crash data in NSW. A better understanding of the extent of crash related injuries in particular would assist local councils and communities to determine exactly where the burden of injury is occurring and how much it is costing. This would also greatly assist councils to prioritise roads upgrades and develop other strategies and programs - to prevent or lessen the effects of vehicle crashes.*
- 2. The IPWEA (NSW) recommends that road authorities and local councils adopt and implement best practice Safe System solutions as embodied in the National Road Safety Strategy 2011-2020. We likewise recommend that funds be allocated to provide Local Government Councils with training and resources to identify, plan, and strategically manage road safety outcomes effectively in their respective LGA and that there be an increase in funding allocations for maintenance programs to assist Councils*
- 3. Realizing the importance of driver education and training as a road safety measure, the IPWEA (NSW) recommends that a thorough evaluation of current driver education and training be undertaken to determine the actual impact this may have on the reduction of road crashes and whether a system of periodic retraining of all drivers should be put in place. Refresher training on road rules should also be done through work places where they have high levels of driving by staff. In local government, RSOs could deliver training from Centre for Road Safety (CRS) & the Roads and Maritime Services (RMS), subject to more support and funding. Moreover, specific training needs to be expanded to include education on:*
 - Changing road conditions particularly at worksites*
 - Navigating rural unsealed roads*
 - Safety precautions when encountering flooded roads*

4. *The IPWEA (NSW) recommends that older driver crash trends by the jurisdictions continue to be monitored going forward. We also endorse Austroad's recommendation in their 2016 report entitled "Older Road Users: Emerging Trends" that "research be undertaken into geographical variations in the distribution of the older population, and how this affects travel and crash patterns". Moreover, we recommend that older drivers be encouraged to adopt safe driving practices through specific training which centres on depth perception, driving skills and behaviours, update on road rules and its application in different traffic conditions, and anticipation of hazards that they may encounter in the course of their driving.*
5. *The IPWEA (NSW) recommends that a review of the current number of compulsory supervised driving hours of Learners be undertaken to determine if it is sufficient or if an increase is necessary. We likewise recommend that there be additional support to learner drivers in low income status communities, indigenous communities, and remote rural areas including access to subsidised professional instruction and to consider the addition of safe driving features to the driver knowledge and qualification tests as a precaution against unsafe driving.*
6. *The IPWEA (NSW) recommends that overseas licence holders involved in road accidents be identified in crash statistics and that they be included as a target group for road safety initiatives, if necessary.*
7. *The IPWEA (NSW) recommends the development of a suite of standards of delivery and assessment for use by driving instructors to ensure the quality and consistency of the training.*
8. *IPWEA (NSW) recommends funding the Local Government Road Safety Program (LGRSP) well beyond the current 3 year cycle so that RSOs can continue working with local communities to address education and road safety factors. The LGRSP needs to be extended to require every local council to employ local RSOs.*
9. *The IPWEA (NSW) recommends that passengers be included in road safety campaigns and education programs emphasizing the important role and responsibility they play in reducing distractions and enhancing vehicle safety.*
10. *The IPWEA (NSW) recommends that further research be undertaken to determine the true costs of implementing a program of periodic driver education and how these costs should be allocated as well as identify the appropriate driving training standards that should be adopted.*
11. *While recognising that both the Australian and NSW governments have increased spending on roads in NSW, IPWEA (NSW) calls for a sustainable funding model that addresses the growing infrastructure backlog and infrastructure maintenance going forward to ensure that safer roads are provided for the community.*

We welcome the opportunity to address the inquiry to provide further detail on the issues raised within this submission.

Contact

Please do not hesitate to contact Mick Savage on tel: 8267 3000 or email mick.savage@ipwea.org in relation to this submission.

Yours faithfully,



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Mr Mick Savage
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