Submission No. 75

DRIVER EDUCATION, TRAINING AND ROAD SAFETY

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NSW Government submission

Staysafe Inquiry into Driver Education, Training and Road Safety in NSW

Executive Summary

The NSW Government has a State Priority target to achieve a 30 per cent reduction in deaths from 2008-2010 three-year average levels by 2021 (from 5.81 to 3.38 deaths per 100,000 people). The NSW Road Safety Strategy 2012–2021 also aims to achieve a 30 per cent reduction in serious injuries by 2021.

In December 2016, the fatality rate in metropolitan NSW was 2.5 fatalities per 100,000 people. Fatalities are over-represented in NSW country areas, with 253 road deaths in 2016 (66 per cent) occurring on country roads compared to 131 road deaths on metropolitan roads (34 per cent).

The NSW Road Safety Strategy 2012 to 2021 has been effective in reducing the fatality rate from 5.67 deaths per 100,000 people in 2010 to a rate of 4.97 in 2016. However additional measures are needed to reduce increases in the road toll in recent times.

The NSW Government has continued to invest heavily in road safety programs to address this increase and in mid-2016 launched the Towards Zero strategy including a campaign to re-engage the community about how road crashes affect us all and to highlight that we all have the power to make a difference when it comes to preventing deaths and serious injuries on our roads.

In responding to the Inquiry's terms of reference, this submission has been structured on the Safe Systems approach to road safety. Safe System principles focus attention on the design and management of safe road (Safe Roads) infrastructure, safe vehicles (Safe Vehicles) and safe travel speeds (Safe Speeds), as well as safe road user behaviours (Safe People) recognising that road trauma levels are largely determined by the interaction of these key elements.

These key elements are supported by a range of strategies to encourage safe and compliant road user behaviour such as education, regulation, enforcement and penalties.

In NSW, education combined with enforcement of penalties including fines, demerit points, and licence suspensions are key countermeasures under Safe People that aim to motivate road users to follow the rules and behave safely on and around the road. The penalty notice system including fine levels and demerit points is integrated into a broader system of deterrence that includes enforcement, safety cameras, roadside drink and drug testing, and double demerit periods.

NSW leads national and international jurisdictions, having in place a comprehensive, evidence based, best practice road safety education framework that reflects the key elements of effective school based road safety education programs.

This provides a solid foundation to embed coherent road safety messages across years to children and adolescents as their understanding evolves, consistent with best practice early intervention principles.

Similarly, best practice in young driver education and adolescent cognitive developmental principles has underpinned the development of the curriculum framework for the Safer Driver Course which highlights the safety benefits of extended supervised driving experience and low risk driving strategies for young learners.

Driver and road safety education initiatives have also been developed to support road safety strategies targeting disadvantaged drivers, motorcycle riders, older drivers, heavy vehicle drivers, high risk drivers through the Mandatory Alcohol Interlock Program (MAIP) and Traffic

Offenders Intervention program (TOIP) as well as other road user groups such as pedestrians and cyclists.

Each year, the NSW Government invests around $20 million in road safety public education campaigns. Road safety advertising campaigns are proven to play a role in educating the public on key road safety issues and changing behaviour to reduce trauma on our roads. These campaigns are developed through the incorporation of attitudinal studies as well as behavioural trends through crash statistics. In addition, previous campaign content and approaches are taken into consideration to build upon existing public knowledge.

This submission focuses on the work to date, key challenges and initiatives that the NSW Government are committed to in driver education, training and road safety in NSW. The key issues:

Developing road safety education and training programs based on research and Safe System principles

TfNSW will ensure that the road safety education and training programs are based on safe system principles in order to promote an understanding of, and a shared responsibility for, a safe system approach to road safety in the community.

The current confluence of strategic policy developments such as; the Staysafe Inquiry, Towards Zero campaign, the mid-term review of the NSW Road Safety Strategy, provides a timely opportunity to develop a high level road safety education and training policy framework. The framework will be based on Safe System principles and take a lifelong approach to road safety education and training. The aim is to encourage a culture change so that road user safety is viewed within the Safe System as a combination of skills and safe behaviours that should be maintained and enhanced rather than just achieved at a single point in time.

Specific priorities for improvement include:

- Enhancing the secondary school road safety curriculum and resources.
- Supporting community based road safety education and training programs to develop road safety programs that are based on research, Safe System and best-practice principles.
- Aligning the framework with the principles in the Future Transport Technology Roadmap and linking to the technological priorities and initiatives arising from the Roadmap.

Enhancing the design and delivery of road safety education and training programs through innovation and technology

The NSW Government embraces technology and innovation, which has the potential to revolutionise the way we live and travel, and is committed to ensuring the safety of the whole transport system.

The Future Transport Technology Roadmap sets out a vision for a technology-enabled transport future. The Roadmap aims to put NSW at the forefront of adopting new and emerging technologies to customise and personalise transport services and to unlock the full value of the road and mass public transport system.

As part of this technological transformation, TfNSW will explore digital teaching and learning platforms and customer interface technologies to provide interactive and connected learning experiences that are built into best practice road safety educational and training services and programs.

A key priority is the development of the Driver Licence Modernisation project, which is a customer centric modernisation of the current driver knowledge testing hardware, software

platforms and supporting customer service and educational materials for novice drivers, parents and supervisors.

Enhancing the Motorcycle Graduated Licensing Scheme (M-GLS)

Research suggests that young novice drivers have limited experience in the higher-order cognitive skills necessary to drive safely within the traffic environment and that further improvement in driver training and education for young novice drivers should address the development of these skills, rather than motor handling skills.

The evaluation of the M-GLS will look at extending the current M-GLS to incorporate higher-order skills, including awareness, judgment and decision-making. The Rider Training Program will be revised to align with the enhanced M-GLS and best practice education and training principles.

Strengthening the older driver licensing system to facilitate self-regulation, driving safer vehicles and transitioning to retirement from driving

The aging population poses a unique challenge for road safety. Research shows that older drivers are more likely to have functional limitations that are detrimental to driving performance, and due to the ageing process are more susceptible to road trauma. People will be healthier for longer, and will be more mobile than in the past - this will lead to a significant increase in the number of older drivers who will seek to continue driving.

An evaluation is being undertaken to assess the effectiveness of the older driver licensing system (in particular, changes made in 2008) on road safety outcomes for older drivers and other road users. The findings will inform the development of a comprehensive policy response during 2017, and may include initiatives such as the use of technological solutions to further improve communication and educational programs.

Developing responsive and efficient pathways for disadvantaged groups to achieve a driver licence and be safe and legal drivers

TfNSW recognises the barriers preventing disadvantaged groups from entering the licensing system. Priority will be given to ensuring that road safety education and training programs are accessible and tailored to the needs of individual groups.

Technological solutions offer improved road safety outcomes for Aboriginal communities, rural and remote, culturally and linguistically diverse communities and other disadvantaged groups by making road safety education and training more accessible and tailored to need. However, further work will need to be undertaken to understand the unique barriers and challenges that these groups face when it comes to designing and accessing new technologies.

TfNSW will also work with NSW Government agencies such as the Department of Justice, the Department of Family and Community Services, ServiceNSW, Multicultural NSW, and the Office of the Advocate for Children and Young People, to ensure that technology solutions to enhance road safety education and training programs are responsive to the needs of other disadvantaged groups.

1 Terms of reference

On 16 November 2016, the Parliamentary Joint Standing Committee on Road Safety (Staysafe) issued its terms of reference in relation to its Inquiry into Driver Education, Training and Road Safety in NSW.

The Committee will 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, with particular reference to:

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

2 Context

2.1 NSW Government submission

The NSW Government welcomes this Staysafe inquiry into driver education, training and road safety in NSW. For the purpose of this submission, the term “driver” is defined as any road vehicle controller including light motor vehicle drivers, heavy vehicle drivers, motorcycle riders and bicycle riders.

In preparing this submission Transport for NSW (TfNSW) has received contributions from a range of NSW Government agencies. A complete list of these contributors can be found at Appendix A.

2.2 NSW Road Safety Strategy

Road trauma is estimated to cost the NSW community around $7.6 billion per year.

The NSW Government has a State Priority target to achieve a 30 per cent reduction in deaths from 2008-2010 three-year average levels by 2021 (from 5.81 to 3.38 deaths per 100,000 people). The NSW Road Safety Strategy 2012–2021 also aims to achieve a 30 per cent reduction in serious injuries by 2021.

In December 2016, the fatality rate in metropolitan NSW was 2.5 fatalities per 100,000 people, compared to 9.7 fatalities per 100,000 people in country areas. Fatalities are over-represented in NSW country areas, with 253 road deaths in 2016 (66 per cent) occurring on country roads compared to 131 road deaths on metropolitan roads (34 per cent).

The NSW Road Safety Strategy 2012 to 2021 has been effective in reducing the fatality rate from 5.67 deaths per 100,000 people in 2010 to a rate of 4.97 in 2016. However additional measures are needed to reduce increases in the road toll in recent times.

Transport for NSW is currently undertaking a mid-term review of the NSW Road Safety Strategy, which will provide an opportunity to refocus priority areas based on recent and current road toll trends.

Additionally, Transport for NSW is leading the development of Future Transport, a 40-year strategy for transport technology, infrastructure and services in NSW.

2.3 National initiatives

Austroads is the peak organisation of Australasian road transport and traffic agencies, it supports its members in delivering safe road networks that meet the needs of the community, industry and economy.

The Austroads work agenda is structured around a number of programs and strategic priorities, which include the Austroads Safety Program. The program’s objective is to design, build and manage a road transport system that will protect road users and reduce the number of deaths and serious injuries. It is comprised of the Road Safety, Registration and Licensing and Road Design Task Force.

The NSW Government plays an active role in contributing to and leading road safety projects coordinated by Austroads. For example the development of:

- A National Graduated Licencing Scheme Framework, led by NSW.
- A Heavy Vehicle Competency Based Assessment Framework.
- A national library of scenarios for jurisdictions to use in driver and rider Hazard Perception Tests (HPT).

2.4 Safe Systems approach to road safety

In responding to the Inquiry's terms of reference, this submission has been structured on the Safe System approach to road safety.

Diagram: Safe System approach to road safety

Source: http://roadsafety.gov.au/nrss/safe-system.aspx

The Safe System approach underpins the road safety framework adopted in the NSW Road Safety Strategy 2012-2021 and guides the development of countermeasures to reduce death and injury on NSW roads.

Central to the Safe System approach is an acknowledgement of the limited ability of our human bodies to tolerate physical force. The impact forces in any major crash type are well known and, if they are exceeded, can result in death or serious injury. It also recognises human error in the system is inevitable, no matter how educated and compliant we are in obeying road rules.

Safe System principles focus attention on the design and management of safe road infrastructure, safe vehicles and safe travel speeds, as well as safe road user behaviours recognising that road trauma levels are largely determined by the interaction of these key elements.

The elements are supported by a range of strategies to encourage safe and compliant road user behaviour such as education, regulation, enforcement and penalties.

2.5 Role of driver education and training in the Safe System approach

The Safe System approach recognises road user behaviour (Safer People) as one of the key pillars to improve safety. Implementing an effective safe system strategy involves each of the following elements guided by safety evidence for effectiveness and trauma reduction outcomes:

- Law enforcement and behavioural interventions to encourage safe behaviour, compliance and manage non-compliance of the road rules.
- Understanding crashes and risks through data analysis, research and evaluation.
- Managing access to the road through licensing, training and education of drivers and riders.
- Providing appropriate vehicle regulation and management as well as vehicle registration, and supporting actions to bring safety features and technologies to fleets.
- Providing education and information to the community through public education campaigns.
- Effective coordination and communication through stakeholder engagement.
- Ensuring safe road infrastructure, treatments and highway management for all types of road transport modes and road users.
- Scoping new innovations and technologies.
- Building road safety capacity, management and performance assessment to support transformative safe system changes to provide safe mobility.

However, it is important to note that these strategies cannot be viewed in isolation but as a suite of interventions. A multi-faceted approach is required to address all the pillars of the Safe System in a coordinated and holistic manner. Whilst driver education and training is an integral component embedded within the safe system strategy, it can only be effective in conjunction with the other elements within the framework.

In NSW, education combined with enforcement of penalties including fines, demerit points, and licence suspensions are key countermeasures under Safer People that aim to motivate road users to follow the rules and behave safely on and around the road. The penalty notice system, including fine levels and demerit points, is integrated into a broader system of deterrence that includes enforcement, safety cameras, roadside drink and drug testing, and double demerit periods.

The effectiveness of this approach is demonstrated by the high proportion of licence holders who comply with the law. The NSW Government Staysafe Committee Inquiry into Speed Zoning and its Impact on the Demerit Points Scheme in 2014 found that 70 per cent of all licence holders did not have any demerit points, and 97 per cent had accrued six or fewer demerit points.

NSW crash data suggests that double demerit periods are highly effective at discouraging offending during targeted periods. From 1997 to 2013, there were 32 per cent fewer fatalities during double demerit periods than for the same periods before the introduction of double demerits.

2.6 Using technology to enhance driver education and training

The NSW Government embraces technology and innovation, which has the potential to revolutionise the way we live and travel, and is committed to ensuring the safety of the whole transport system.

TfNSW is developing the Future Transport, a 40 year strategy for planning transport to meet the demands of predicted population growth in NSW. This includes the development of the Future Transport Technology Roadmap which sets out a vision for a technology-enabled transport future. The Roadmap aims to put NSW at the forefront of adopting new and emerging technologies to customise and personalise transport services and to unlock the full value of the road and mass public transport system.

Five strategies will be executed with the aim of shaping the most customer-centric, innovative, digitally-enabled transportation system in Australia. Transport for NSW will:

- Develop and connect real-time digital information, navigation, payment and engagement platforms.
- Transform mass transit networks to improve efficiency and service frequency, and reduce transit times.
- Foster shared demand-responsive services to give customers greater choice of mobility options and flexibility.
- Pursue national standards for the road infrastructure, systems and regulatory frameworks needed to adopt greater levels of vehicle automation earlier, and identify how best to deliver community benefits.
- Create intelligent transport networks managed with data that enable increasingly efficient, flexible and dynamic service delivery with improved safety, availability, reliability and responsiveness.

As part of this technological transformation, TfNSW will explore digital teaching and learning platforms and customer interface technologies to provide interactive and connected learning experiences that are built into best practice road safety educational and training services and programs.

School based road safety education

We have made an excellent start with *Safety Town* - the first interactive curriculum based website in Australia that delivers the road safety education program for primary school children across NSW.

Safety Town represents national and international best practice in road safety education based on Safe Systems and early childhood learning principles. It was developed by the Centre for Road Safety in partnership with Department of Education, Catholic Education Commission NSW, Association of Independent Schools NSW and the Kids and Traffic Early Childhood Road Safety Education Program.

The redesign of resources for primary schools provides a best practice template for further systematic improvements in the secondary school road safety syllabus and resources. Specifically, technology can be used to strengthen the education programs for senior secondary school students by linking to the GLS and reinforcing the road safety messages. While school and community based programs aren't directly involved in designing or managing the licensing system, programs that support and encourage compliance with the GLS among students, parents and the broader community are likely to be beneficial (Williams et al, 2012).

The Driver Licence Modernisation Program provides an opportunity for links to learning pathways between the secondary school based syllabus and the end to end educational GLS based resources to be developed under this program.

Technological enhancements could also be used to enhance educational material about and links to safer vehicles information. Research has highlighted the importance of vehicle safety for young drivers and their passengers. Australian research estimates that if all young drivers killed or seriously injured in crashes over the past five years had been driving the safest vehicle there would be a reduction of death and serious injuries of more than 60 per cent. (Whelan et al, 2009).

Novice drivers

As part of the Technology Roadmap, TfNSW is embarking on the Driver Licence Modernisation project a customer centric modernisation of the current driver knowledge testing hardware, software platforms and supporting customer service and educational materials for novice drivers, parents and supervisors.

The development of a digital learner driver logbook to replace the paper-based version used by young learner drivers as part of the GLS will be linked to this project.

A range of technologies will be explored and leveraged to create world class end to end educational experiences based on the Graduated Licensing Scheme, including continuous learning, game based learning, use of virtual reality for driver learning and connecting real time learner driver data to continuously improve safety. Technological solutions may also include on-line, interactive customer facing pathways to existing programs such as the Safer Driver Course and the Driver Licensing Access Program.

Road safety educational resources will be enhanced to include content on safe behaviours that address the road safety needs of vulnerable road user groups such as motorcyclists, pedestrians and cyclists. These education resources will be important in harmonising road user behaviour to increase awareness of the road safety risks and improve road safety outcomes for all road users.

Older road users

Older people, like any other demographic group, are not homogenous, and there are important distinctions in their technology adoption patterns, beginning with age itself.

The baby boomer generation (born between 1945-1964) is the largest, most educated, healthiest, most economically secure generation to start reaching retirement age and as such could have a profound influence on the acceptance of technology in road safety.

Having been raised alongside technology and educated about its use and benefit, baby boomers are more familiar with and therefore more likely to trust in-vehicle systems to help them monitoring, self-assess and self-regulate safe driver behaviour and practices through the use of in-vehicle technology.

Technologies that prevent crashes in situations previously avoided by older drivers may support the emerging population of older drivers allowing them to continue to drive safely without the same self-restrictions as they age as a key component of quality of life.

Technology can also be better utilised for older road user safety education and training. In addition to designing technology for older people, opportunities should be explored to link road safety education and messaging to the development of other potential customer interface platforms for older people for example *First Stop Transport.*

Transport for NSW has developed First Stop Transport for anyone in the community wanting to learn how to use public transport. It is available free of charge and can be accessed from the transportnsw.info website.

This resource is complemented by First Stop Transport eLearning which brings the travel training process to life through scenarios and practical activities. It can be used by anyone wanting to train someone to use public transport – either in a formal setting or for a family member or friend. It includes four typical transport training scenarios: an older person who has retired from driving, a teenager with an intellectual disability changing schools, a person using a wheelchair and a group of people who have newly arrived in Australia. The eLearning module also incorporates training materials for those seeking accreditation as a Travel Trainer through a Registered Training Organisation.

The learnings from multi agency cross-functional driver licence modernisation project will provide the opportunity to explore end to end educational experiences for older road users that include self-regulation, driving safer vehicles, retiring from driving as well as linking to other technological customer facing and education pathways in other agencies that support the health and wellbeing of older people.

Aboriginal communities, rural and remote, culturally and linguistically diverse communities and other disadvantaged groups.

Technological solutions offer improved road safety outcomes Aboriginal communities, rural and remote, culturally and linguistically diverse communities and other disadvantaged groups by making road safety education and training more accessible and tailored to need. However, further work will need to be done to understand the unique barriers and challenges that these groups face when it comes to designing and accessing new technologies.

TfNSW will work with agencies such as Justice, Family and Community Services, Service NSW, Multicultural NSW, and the Office of the Advocate for Children and Young People ensure that technology solutions such as the Driver Licence Modernisation project are responsive to the needs of disadvantaged groups.

Agency partnerships will also be important to leverage opportunities to link to customer facing platforms and e-learning pathways between agencies in order to facilitate ease of access to road safety education and training initiatives as well as other supports that enhance licensing outcomes as well as social and economic benefits.

Online learning opportunities and the use of interactive educational resources and other technologies can increase educational productivity by accelerating the rate of learning; reducing costs associated with instructional materials or program delivery; and expanding connected learning and teaching experiences.

Transport for NSW will continue to identify opportunity for technological solutions to enhance road safety education and learning experiences as part of the mid-term review of the NSW Road Safety Strategy, Future Transport planning and the Future Transport Technology Roadmap.

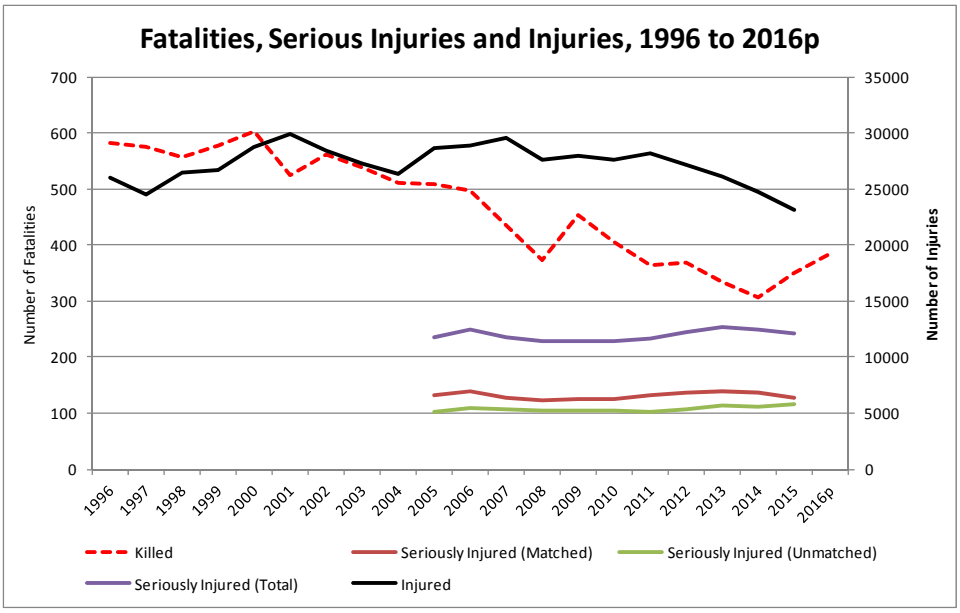
3 Trends in NSW road safety data

3.1 General trends

There has been an underlying, decreasing trend in fatalities since 1996, Figure 1.

The number of fatalities in 2014 (307 fatalities) was the lowest annual total recorded since 1923. However, since 2014 the number of fatalities has increased by 25 per cent to 384 in 2016 (provisional figure as at 1 January 2017).

Figure 1



Serious injuries refer to persons admitted to hospital. Transport for NSW obtains this data as a result of the data linkage between crash data, health data and State Insurance Regulatory Authority claims data. Serious injury data is only available for 2005 to 2015.

Serious injury crashes (both matched and unmatched) have been trending differently to fatal crashes. Generally these have been increasing from 2008 to 2013 but then declining in 2014 and 2015.

Matched serious injuries refer to those persons with a hospital admission record who have been matched with a person in a police crash report. Unmatched serious injuries are persons with a hospital admission who are not matched with a person in police crash report.

In 2015, despite population growth and greater vehicle travel, the number of serious injuries admitted to hospital was 12,121, an overall reduction from more than 25,000 in 1996. This hidden road toll is an important area of focus for future road safety efforts.

3.2 Class of road user

Decreases in fatalities, up to 2014, were driven by declines among pedestrians, passengers and drivers (Figure 2).

Motorcycle fatalities have been increasing slightly over this time period – though this pattern is partly attributed to significant growth in motorcycle registrations in NSW (on average over this period motorcycle registrations increased by at least twice the per annum increase compared with light passenger vehicles).

Figure 2

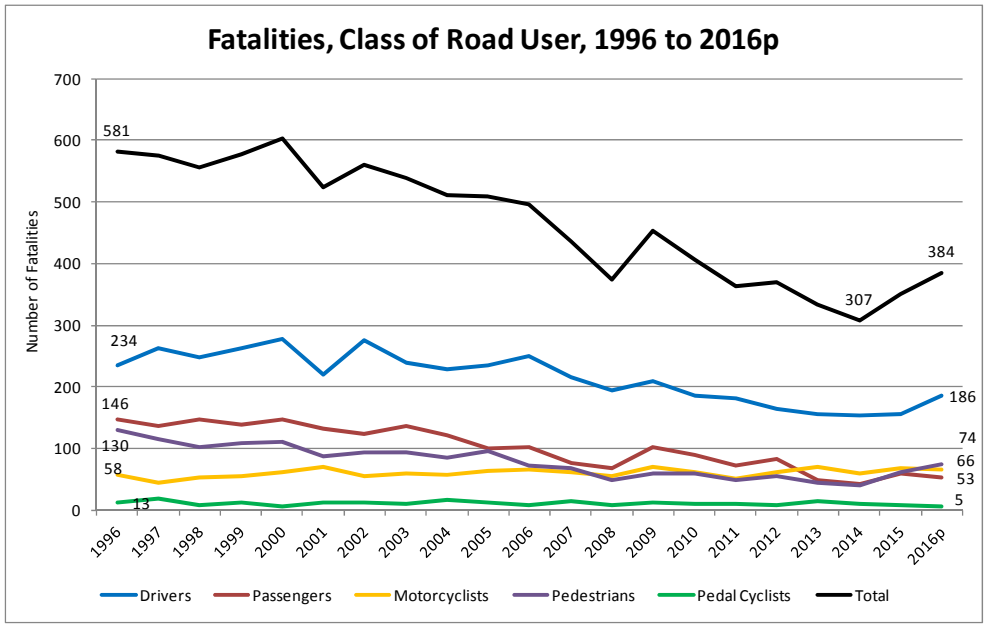
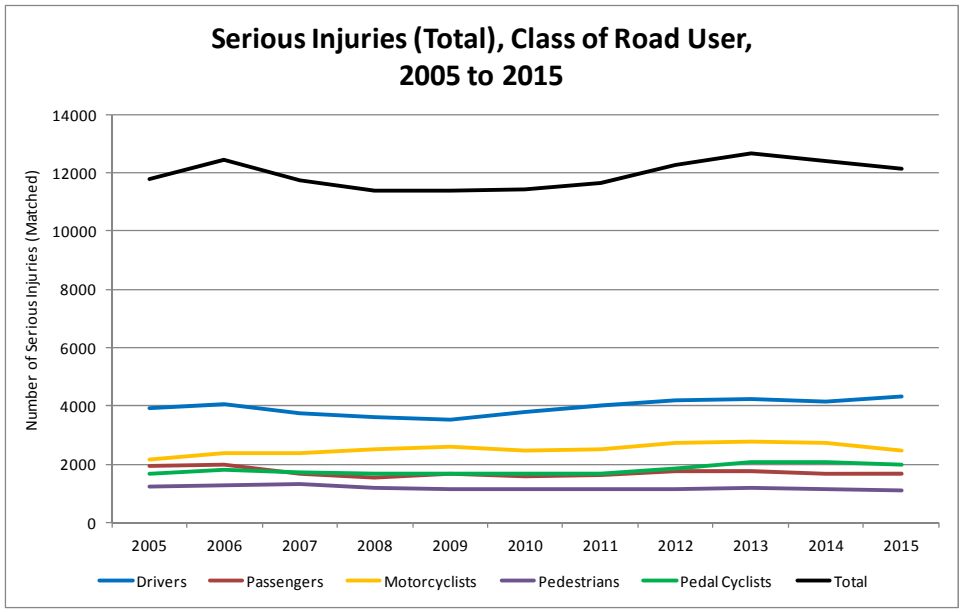


Figure 3 shows that drivers are the largest road user class to receive serious injuries in a crash.

Figure 3



3.3 Type of crash

Figure 4 shows the incidence of fatal crashes by crash type. Car/car derivatives (defined as including a sedan, station wagon, utility (based on car design), panel van (based on car design), coupe, hatchback, sports car, passenger van and four wheel drive passenger vehicle) account for a majority of fatal crashes, whilst heavy truck and motorcycle crashes are over-represented if compared with the numbers of these vehicles on NSW roads.

The increases in fatal crashes since 2014 have largely been driven by increases in car/car derivative crashes and light truck crashes.

Figure 4

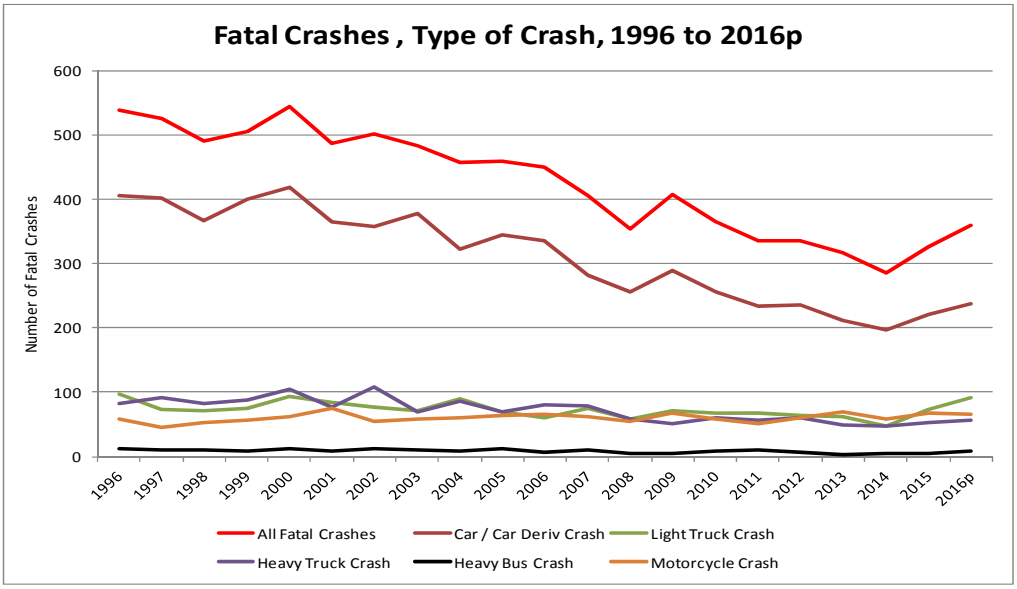
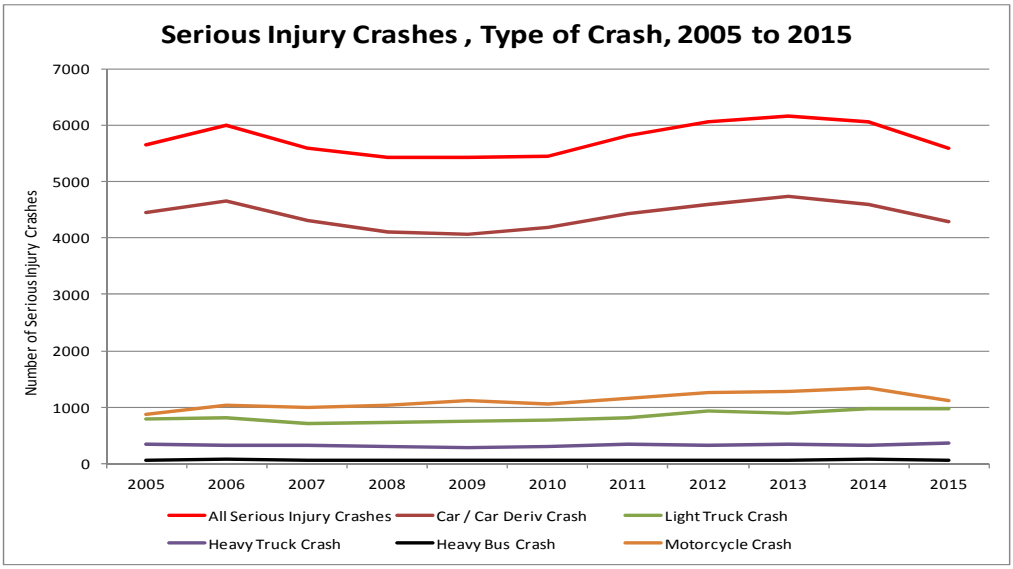


Figure 5 shows a similar pattern for matched serious injury crashes by crash type. Car/Car derivative crashes account for the majority of crashes, followed by motorcycle crashes, both reduced in 2015.

Figure 5



3.4 Location of crash

Figure 6 and Figure 7 show the distribution of fatal and serious injury crashes (matched) by urbanisation. The majority of fatal crashes occur on country roads, whilst the majority of serious injury crashes occur on metropolitan roads.

The strongest decrease in fatal crashes since 1996 has occurred on metropolitan roads. Increases since 2014 have occurred on both metropolitan and country roads.

Figure 6

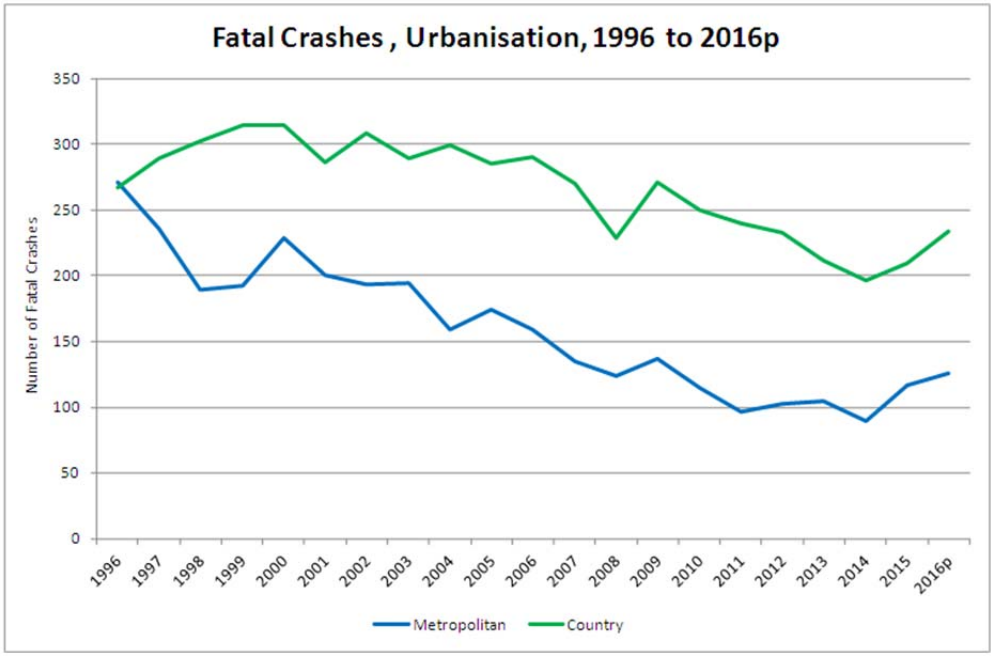
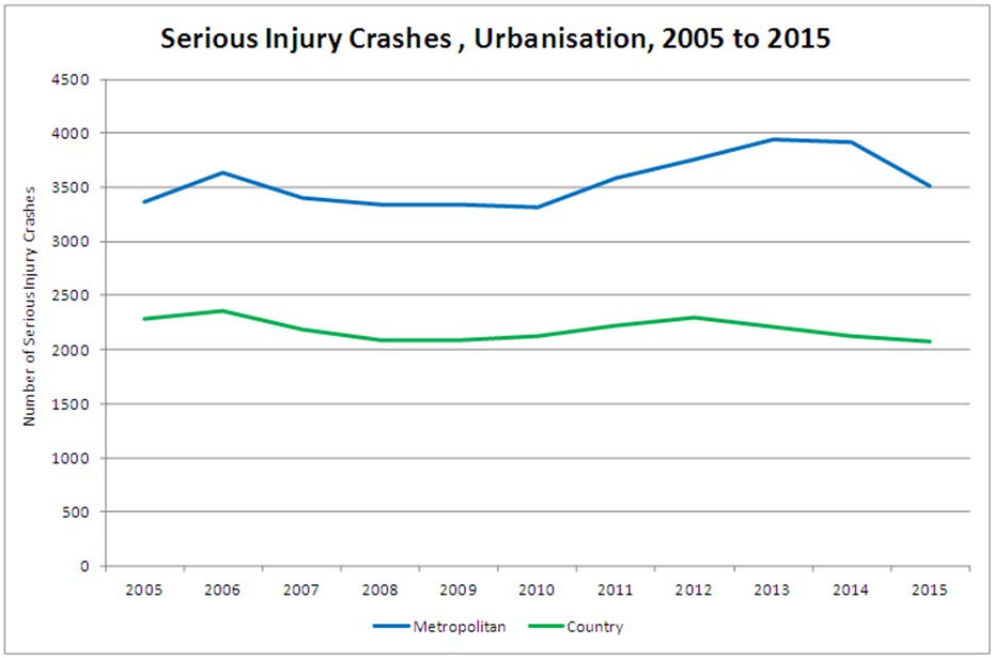


Figure 7



3.5 Behavioural factors

Figure 8 and Figure 9 below show fatal and serious injury crashes (matched) by behavioural factor.

Speed (excessive or inappropriate) is the leading behaviour factor involved in fatal and serious injury crashes. Fatigue and illegal alcohol are found in similar levels for fatal crashes though fatigue is more common amongst serious injury crashes.

Figure 8

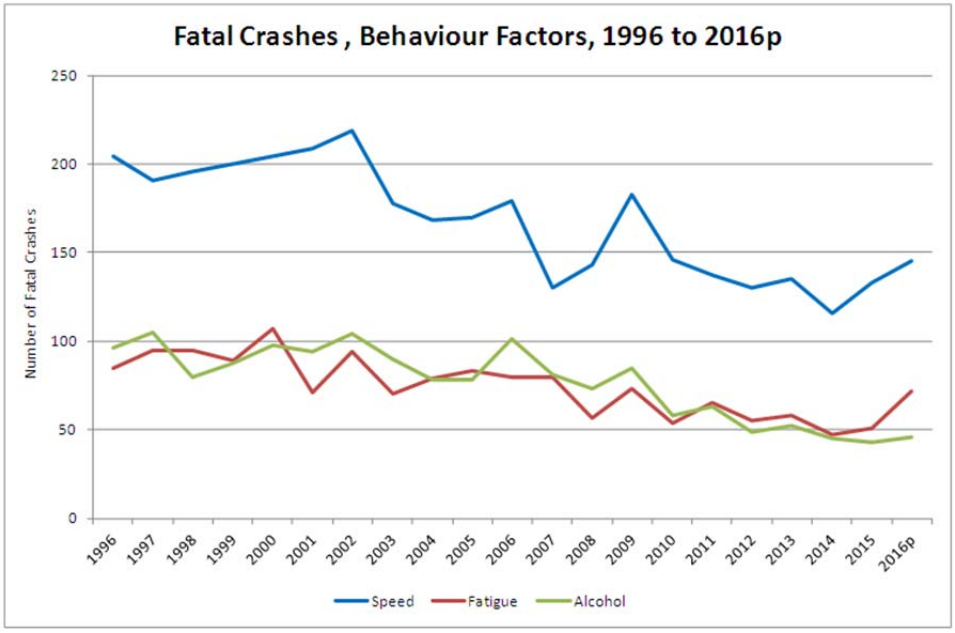
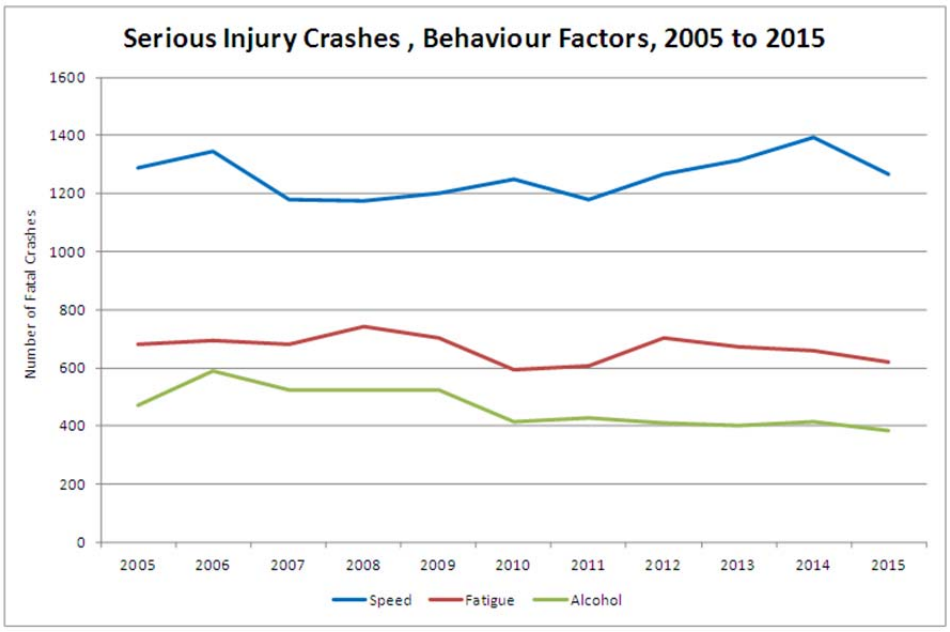


Figure 9



3.6 Driver type

Figure 10 and Figure 11 detail the number of fatal crashes and serious injury crashes (matched) involving a driver within a particular age group.

In terms of fatal crashes, young driver crashes (under 26 years) have decreased by the highest percentage since 2005; these decreases are not accompanied by a decrease in licence numbers for this demographic.

Data also indicates no decrease in elderly driver crashes (75 years and over). This reflects increases in elderly licence holders.

The increase in fatal crashes since 2014 have been driven by increases in middle aged driver crashes (since 2014) and young driver crashes (since 2015). Similar trends were found for serious injury crashes, although there has been a more consistent increase in elderly driver crashes over the past decade.

Figure 10

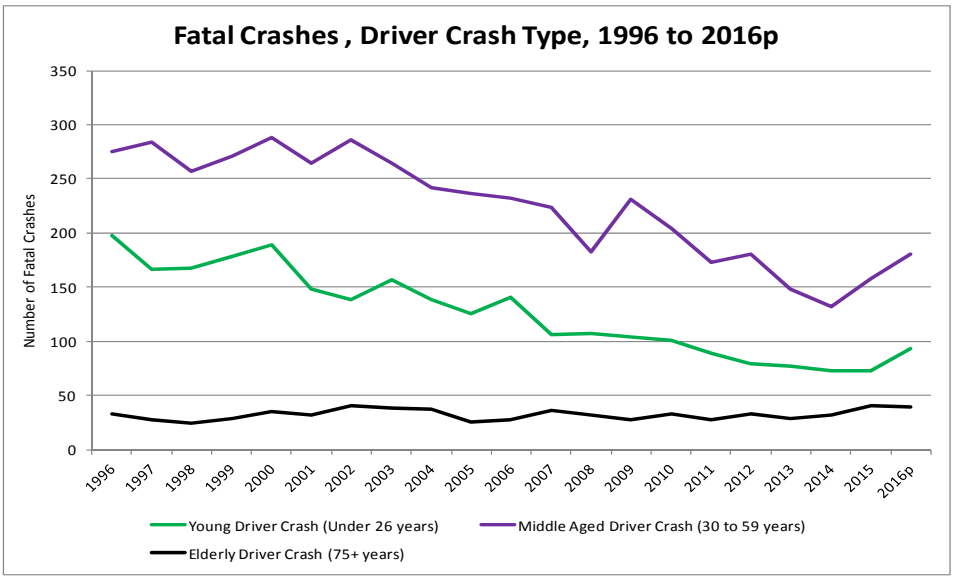
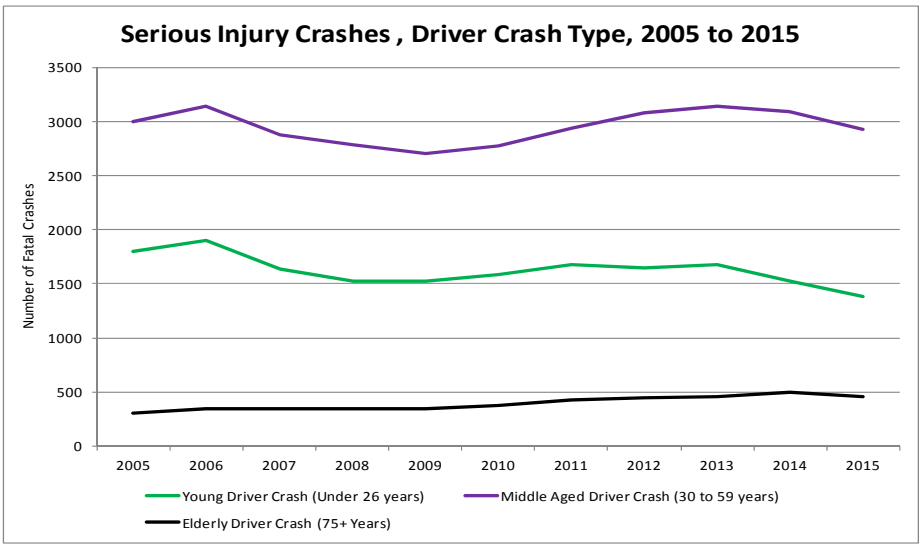


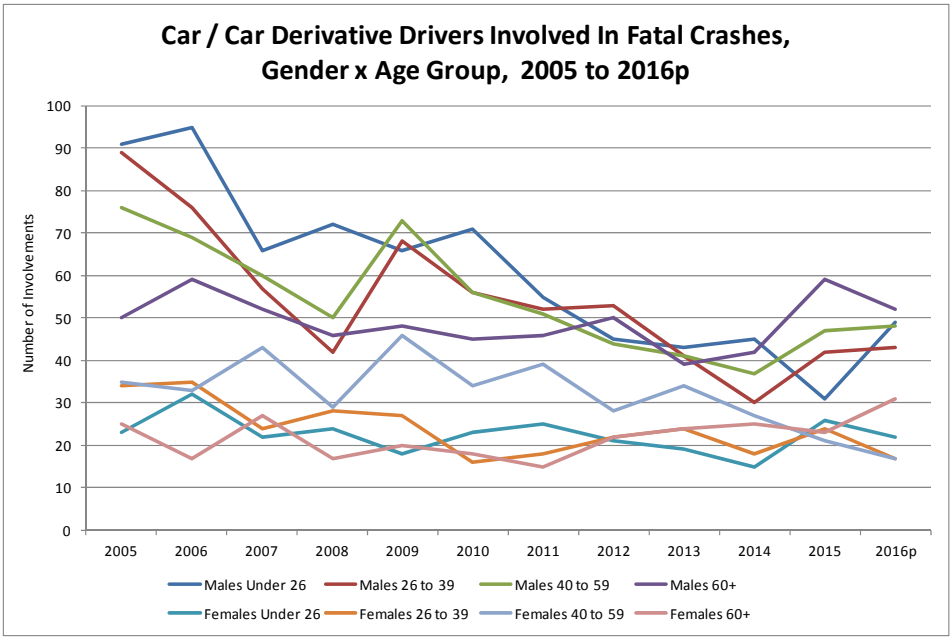
Figure 11



3.7 Car drivers

The majority of car/car derivative drivers involved in fatal crashes were males, Figure 12.

Figure 12



Over the past decade there have been strong reductions in crash involvements amongst young males aged less than 26 years, particularly for fatal crashes, but strong percentage increases amongst older drivers aged 60 years or more.

Country roads account for the majority of car / car derivative driver involvements in fatal crashes whilst metropolitan roads account for the majority of car / car derivative driver involvements in serious injury crashes (Appendix B Figure 23 and Figure 24).

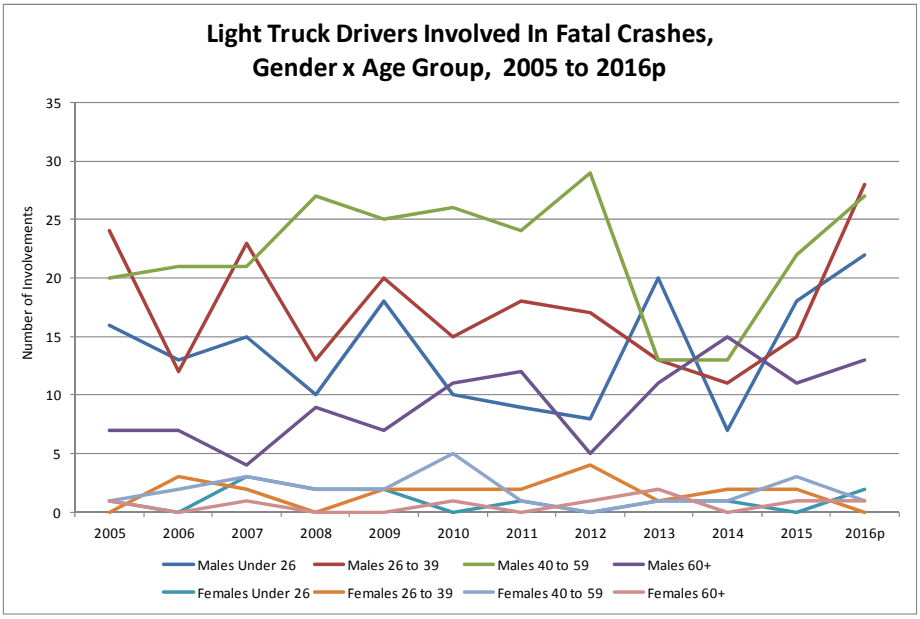
Speed, fatigue and illegal alcohol are the leading behaviour factors for car / car derivative drivers involved in fatal and serious injury crashes. Restraint non-usage is also significant for car / car derivative drivers involved in fatal crashes. The use of hand-held phones is believed to be under-reported (Appendix B Figure 25 and Figure 26.)

The majority of car / car derivative drivers involved in fatal and serious injury crashes had an unrestricted licence. The incidence of unauthorised driving is elevated for those car / car derivative drivers involved in fatal crashes (Appendix B Figure 27 and Figure 28).

3.8 Light truck drivers

In recent years there have been strong increases in light truck (defined as: Including a panel van (not based on car design), utility (not based on car design) and mobile vending vehicle.) driver involvements in fatal crashes for those aged less than 60 years. This trend is driven by the 26 to 39 and 40 to 59 categories (Figure 13).

Figure 13



Light truck involvements in serious injury crashes have also steadily increased (Appendix B Figure 29).

Country roads account for the majority of light truck driver involvements in fatal crashes whilst metropolitan roads account for the majority of light truck driver involvements in serious injury crashes (Appendix B Figure 30 and Figure 31).

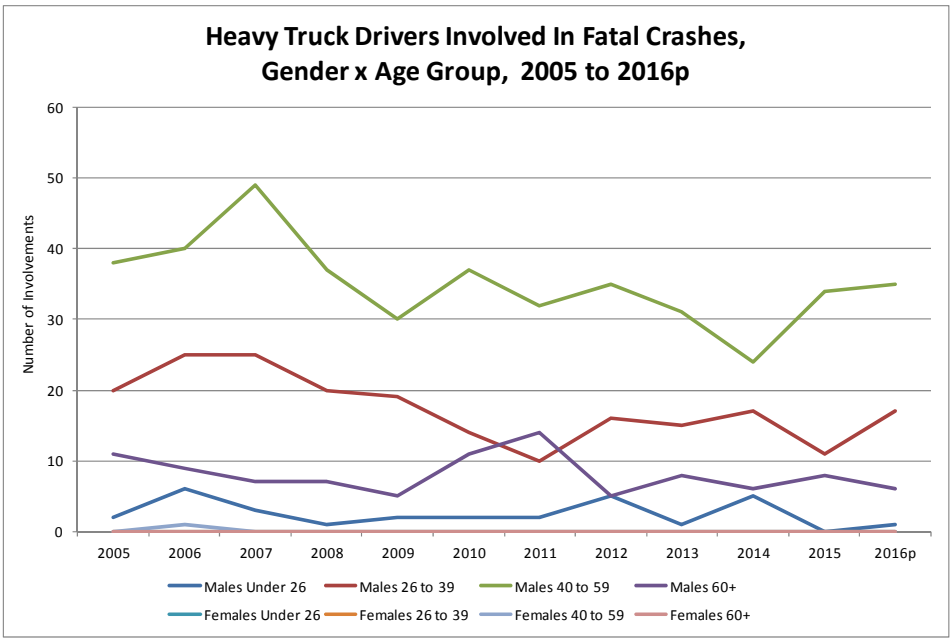
Speed, fatigue and illegal alcohol are the leading behaviour factors for light truck drivers involved in fatal crashes. Restraint non-usage is also significant for light truck drivers involved in fatal crashes. The incidence of speed and driver fatigue in serious injury crashes has increased over the past five years. As with car / car derivative drivers the use of hand- held phones is low and likely to be due to under-reporting (Appendix B Figure 32 and Figure 33)

The majority of light truck drivers involved in fatal and serious injury crashes had an unrestricted licence. The recent increases in fatal crash involvements and serious injury crashes for light truck drivers have been amongst unrestricted licence holders (Appendix B Figure 34 and Figure 35).

3.9 Heavy vehicle drivers

Over the past decade there has been little change in heavy truck driver involvements in fatal crashes for the various age groups, Figure 14.

Figure 14



Country roads account for the majority of heavy truck driver involvements in fatal crashes but metropolitan area fatal crash involvements have increased in recent years. Only in recent years have the metropolitan areas overtaken country areas for heavy truck driver involvements in serious injury crashes (Appendix B Figure 37 and Figure 38). Investigations into the data suggest that the type of heavy trucks is shifting from articulated trucks to heavy rigid trucks – the latter are more commonly used for transporting goods and building materials in the metropolitan area, with this result reflecting increased home and infrastructure build in the growth areas of Sydney.

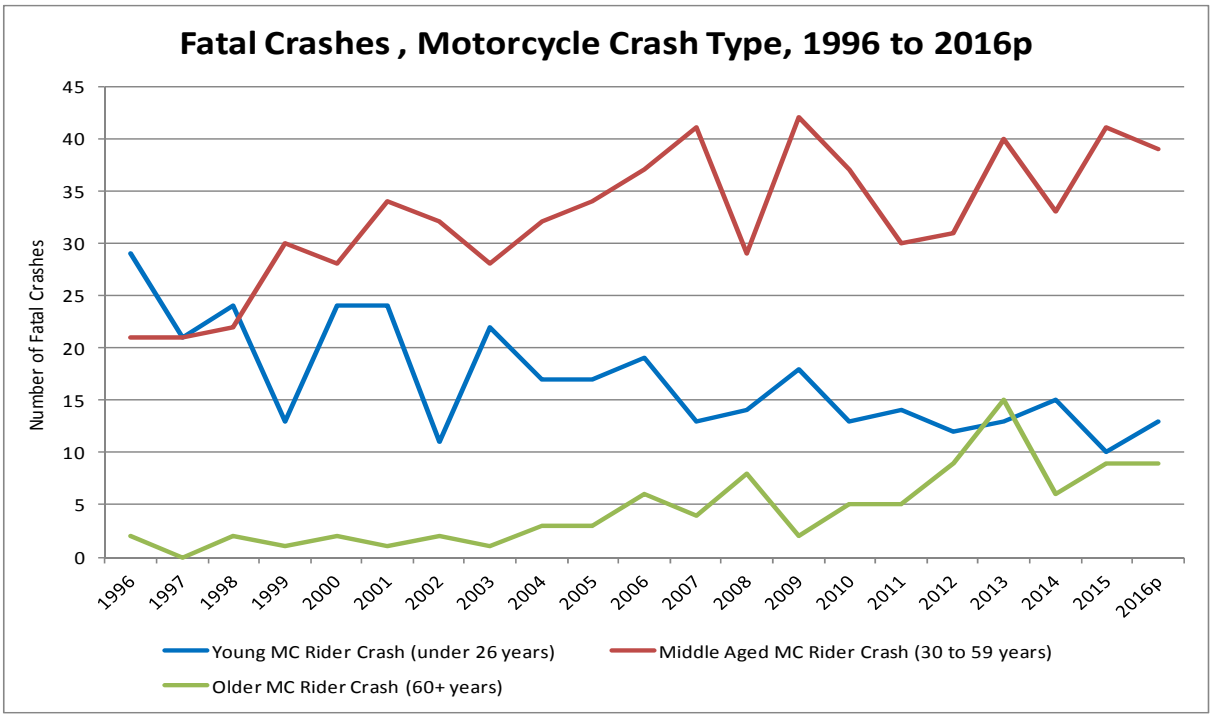
Speed, fatigue and restraint non-usage were the leading behaviour factors for heavy truck drivers involved in fatal and serious injury crashes. For heavy truck drivers involved in fatal and serious injury crashes the incidence of illegal alcohol is quite low, whilst the use of hand-held phones is very rare (Appendix B Figure 39 and Figure 40).

The majority of heavy truck drivers involved in fatal and serious injury crashes held an unrestricted licence (Appendix B Figure 41 and Figure 42).

3.10 Riders

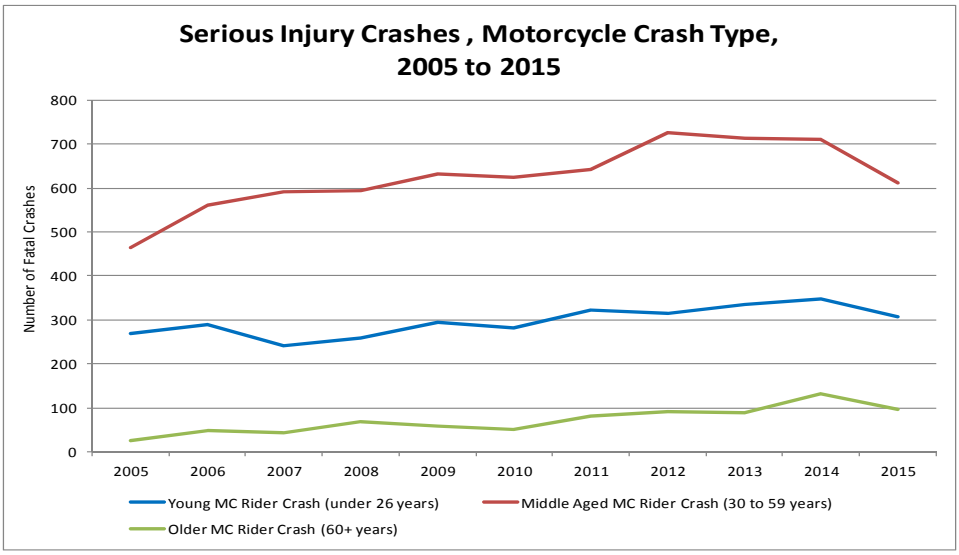
Involvement in fatal crashes for young riders (under 26 years) has been decreasing whilst fatal crashes involving middle aged riders (aged 30 to 59 years) has been increasing. Over the past decade there has also been an increase in fatal crashes involving an older aged rider (60+ years), Figure 15 and Figure 43 (Appendix B).

Figure 15



Amongst serious injury crashes over the past decade, all three crash types had been increasing up until 2014 but improved in 2015, Figure 16 and Figure 44 (Appendix B).

Figure 16



Country roads account for the majority of motorcycle rider involvements in fatal crashes whilst metropolitan roads account for the majority of motorcycle rider involvements in serious injury crashes (Appendix B Figure 45 and Figure 46). Serious injury crash involvements had been increasing strongly on metropolitan roads until 2014, but decreased across the State in 2015.

Speed is far and away the leading behaviour factor for motorcycle riders involved in fatal and serious injury crashes. The incidence of alcohol for motorcycle riders is somewhat higher in fatal crashes, compared with other motor vehicle controllers (Appendix B Figure 47and Figure 48).

Whilst the majority of motorcycle riders involved in fatal and serious injury crashes held an unrestricted licence, there were elevated levels of unauthorised riding compared with other motor vehicle controllers (Appendix B Figure 49 and Figure 50).

4 Overview of evidence on driver education and training

4.1 Effectiveness of driver training and education programs

Although young driver deaths have more than halved in two decades, young drivers continue to be over-represented in road crashes. This increased risk is due to a range of factors including inexperience, especially in complex driving situations, motivational factors, the impact of peers, and broader lifestyle factors relating to this age group.

The research literature suggests that real road experience, under the supervision of an experienced driver or instructor, is more effective than driver training programs and courses in reducing casualty crashes or traffic offences.

The accumulation of on-road driving experience is perhaps the major potential contributor to reduced crash risk in solo driving for novice drivers. Learners with greater levels of supervised, real world experience have been shown to have a reduced post-licence crash involvement by up to about 35 per cent.

In an international review of literature of effectiveness of driver training in reducing crash risk, Christie (2001) put forward a series of compelling points as to why the conventional ideologies of driver training and education are outdated. Firstly, Christie (2001) states that advocating driver training and education to improve skill and knowledge as a solution to the young novice driver problem assumes that there is an initial deficiency in basic skill and/or knowledge which is a major contributor to crash risk. Christie (2001) continues by proposing that the risk behaviours, particularly of young novice drivers, have far less to do with physical skill and/or knowledge but are more due to motivations and higher-order cognitive skills, and this idea is well supported in the literature (Catchpole, Cairney, & Macdonald, 1994; Engstrom et al., 2003; McKnight & Resnick, 1993; Senserrick and Haworth, 2005).

In a general sense, higher-order cognitive skills refer to skills such as question asking, critical thinking, systematic/lateral thinking, decision making, problem solving, evaluative thinking, and knowledge transfer (Zoller & Pushkin, 2007). Application of these skills to driving facilitate hazard and risk perception, self-calibration (ability to moderate tasks based on one's ability), attentional control, time sharing (sharing limited attentional resources between driving tasks) and situational awareness (Christie, 2001; Senserrick & Haworth, 2005). In contrast, lower-order cognitive skills are a basic recall or application of memorised information to familiar situations or applying set procedures or rules to repetitious exercises (Zoller & Pushkin, 2007).

There is also considerable evidence that driver training that attempts to impart advanced skills such as skid control to learner and novice drivers may contribute to increased crash risk, particularly among young males (15-17 years of age). This pattern of results has been confirmed and replicated across numerous studies conducted in Australia, New Zealand, North America, Europe and Scandinavia over the last 30 years.

While it has been suggested that the physical handling of a motor vehicle as well as the learning of traffic laws can be acquired with 15 hours of driving experience (Hall & West, 1996), Deery (1999) states that young novice drivers have limited experience in the higher-order cognitive skills necessary to drive safely within the traffic environment.

The literature indicates that the future development of driver training and education initiatives for young novice drivers should support the development of higher-order cognitive skills necessary to drive safely not on motor handling skills.

4.2 Principles of effective community-based safe driving programs

Many organisations, community groups and the general public are concerned about the level of trauma among young drivers and are motivated to address it. The NSW Government recognises that community organisations play an important role in supporting its Road Safety Strategy and initiatives to encourage safe road user behaviours. Community based organisations are encouraged to develop road safety programs that are based on research or best-practice principles.

The available research indicates that effective community road safety initiatives need to be multi-faceted and be delivered consistently over a sustained period. There is evidence to suggest that the following areas are more likely to be effective in assisting young high risk people and these should be supported by community road safety groups:

- Initiatives to reduce and limit social disadvantage in the driver licensing system by encouraging local driver licensing access programs that include learner driver mentoring.
- Community based programs that minimise general risk factors among young people such as proven youth mentoring programs or preventative programs that encourage school completion and employment for at-risk young people.

To improve the safety of young road users in local communities, groups should focus on the following principles to design, implement and manage their programs:

- Researching the needs of the community and address these using planned approaches that rely on evidence based interventions.
- Promoting and implementing effective multi-faceted community wide programs and policies.
- Delivering consistent and sustained approaches that are more likely to change the safety culture of communities and, in turn, have a positive impact on the safety of community members.
- Taking measures to engage and inform key community leaders.
- Evaluating program outcomes.

The NSW Government is currently reviewing the principles developed in 2002 by the then Roads and Traffic Authority for the purpose of developing community based programs.

4.3 Effectiveness of driver training for experienced drivers

A review by the RACV (2016) suggests that there is no sound evidence that either advanced or defensive driving courses reduce the crash involvement of experienced drivers who attend them. This is well supported by the research literature (Christie, 1996; Watson et al, 1996; Ker et al 2005).

Research has shown that periodic re-testing of all drivers is not an effective method for influencing driver compliance and reducing crashes (Elvik, Hoye, Vaa & Sorenson, 2009). This indicates that for the general driving population, deficits in driving ability play much less of a role than factors such as experience, motivation, social norms, behaviours and risk taking. This is also supported by CRS crash data which demonstrates that driver behaviours, such as speeding, drink and drug driving and driving tired are clear challenges on NSW roads. These

behaviours are not necessarily related to lack of driving skill or proper vehicle control, but to underlying motivations, over confidence, social norms, lack of consequences for unsafe behaviour and beliefs about safe driving practices. Driver error also plays a significant role in crashes regardless of experience, skill or knowledge.

As with young novice drivers, promoting conventional driver training/education as the way to improve car-handling driving skills and knowledge assumes that there is an initial deficiency in skills or knowledge of drivers, or that these have not completely developed, and that these can be improved via training or education. It also assumes that these skill deficiencies increase the risk of crash involvement. However, these assumptions are largely false and based on beliefs not supported by the weight of research evidence (Christie, 2001).

NSW drivers on unrestricted licences are not currently required to re-sit theory or practical tests when renewing their driver licence.

At present, there are no plans to introduce periodic retesting of all drivers. However, targeted re-testing is already in place in NSW for high-risk groups, as outlined in section 5.7.

The main avenue of education for the broader community of unrestricted licensed road users is through media communication channels to disseminate updates and reinforce existing road safety content. Major road safety campaigns also target aberrant driver behaviours such as speeding, drink and drug driving, fatigue and seatbelt compliance.

An opportunity has already been identified to improve benchmarks for good to best practice post-licence driver/rider education courses. At present, a myriad of driver education and training courses exist for post-licenced drivers/riders, some with little research or evidence to support their road safety efficacy.

4.4 Efficacy of driving simulators in improving road safety outcomes

Driving simulators are most commonly used for research purposes, but have also been proposed as driver education and training tools. The main areas of application for driving simulators have been to investigate acceptability issues of innovative transport elements (e.g. in-vehicle devices), to research and assess safety issues (e.g. impact of a new road design on crashes) as well as the driving behaviour under certain circumstances without real world crash risk (e.g. effects of alcohol or fatigue).

However, the research literature suggests that there is no conclusive evidence as to whether simulator training in procedural skills transfers to safer unsupervised on-road driving compared to novices who learned to drive without simulators (Filtness, Tones, Bates, Watson, & Williamson 2013). While there is some research evidence suggesting that simulator training may facilitate improvements to hazard perception skills in the short term, there are still gaps in the literature on long term on-road safety benefits and whether there is a transfer of skill from the simulator to on-road naturalistic driving (Caird & Horrey, 2011; Filtness, Tones, Bates, Watson, & Williamson 2013).

A comprehensive literature review was undertaken to identify evidence regarding the efficacy of driving simulators in providing safety benefits. Findings from the literature review show that few studies examined the long term effects of the training on change in attitude or behaviour, but these were assessed in the same simulated environment and did not examine whether the change in attitudes or behaviour transferred to real world driving situations.

Caird and Horrey (2011) identified a number of disadvantages to using simulators as a training tool. Firstly, simulated driving does not have the same risks as real driving and this lack of perceived risk may be critical in mediating risk taking behaviour on the road. Further,

simulated crashes do not have the same consequences as a real crash and may affect subsequent behaviour. Crashes in a simulator may have an unknown psychological impact on participants, which has never been assessed by research. Secondly, the real world can never be perfectly reproduced in a simulated environment.

The specific combinations of real-world information and feedback that are important to driving are not completely known, and therefore cannot be addressed in a simulated driver training tool. Thirdly, if drivers do not believe in the authenticity of the simulation at a fundamental level, their driving and subsequent learning will be affected based on this perception. Lastly, and of critical importance, many confounding variables that occur in on-road driving are controlled for in driving simulations, such as weather, traffic, lighting, frequency of vulnerable road users, wind, potholes, proportion of vehicle types, irrational or unexpected behaviour of other drivers. These dynamic variables are important to learning in a multitude of environments and key to developing a vast depth of driving experience.

As such, use of simulators to teach or improve driving skills is not supported by strong research evidence. Driving simulators therefore cannot be seen as a comparable substitute for real-world driving experience. On-road driving experience, such as that offered by the Safer Drivers Course in NSW, offers a more effective approach to providing young driver training.

5 Safer People

The following sections outline how the NSW Government is addressing the driver education and training needs of specific road user groups in NSW. It follows a driver's lifecycle from pre-licensing groups through to older drivers.

It looks specifically at professional drivers, high risk driving groups, as well as passengers and other road user groups.

5.1 School based road safety education

Effective school based approaches

- A number of reviews into school based road safety education have concluded that effective approaches include the following elements:
- A comprehensive approach: Road safety content needs to be provided on a regular basis over a child's school career to reinforce key concepts and introduce new skills as children develop.
- Interactive programs: Interactive programs that involve a discussion format to explore content have been found to be between two and four times more effective than non-interactive approaches (Tobler and Stratton, 1997). Interactive programs that generate an exchange of ideas and experiences can provide a catalyst for change and opportunities to practise new skills and obtain feedback on the skills that are practised (McBride, 2003).
- Focus on the social competency of the students: Programs need to build and increase the competency of students to act in safe ways when presented with opportunities to engage in risky behaviour. This includes assertive behaviours training to teach students about social influences and specific skills for effectively resisting these pressures alone or in combination with broader-based life-skills training. The aim of this is to help students develop resilience, refusal and coping skills.
- Delivery and training of educators: Trained teachers or specifically selected and trained peer educators have been found to be the most appropriate providers of health and safety programs in schools.
- Whole school approach and capacity building: Schools need to develop a whole school approach to health and safety (SDERA, 2009). For example in the road safety context this includes:

- Creating links and expectations with parents about being good road safety role models.
- Creating links with the local community organisations that promote safety and health behaviours among young people.
- Having sound traffic management strategies around the school at drop-off and pick-up times.
- Having a school policy that considers safe transport options – such as only using buses with seatbelts etc.
- Encourage strong school engagement and connectedness: School connectedness, which is the extent to which students feel accepted and included within a school

community, is positively associated with school retention and healthy emotional health and well-being. Research has shown that students who had high levels of school connectedness were less likely to engage in risky behaviours, such as riding with dangerous drivers, with drink drivers and to engage in underage driving. Strong levels of school connectedness were found to be a protective factor for risk-taking behaviours extending beyond the school setting to after children had left high school completely (Chapman et al, 2011).

NSW Road Safety Education Program

The Road Safety Education Program is the key educational strategy to influence positive road use behaviour of children and young people in NSW.

In NSW there are approximately 3,083 schools educating more than one million students and more than 3,500 early childhood services.

NSW leads national and international jurisdictions with its comprehensive, evidence based, best practice road safety education framework that reflects the key elements of effective school based road safety education programs. It provides the foundation to present coherent road safety messages across years to children and adolescents as their understanding evolves, consistent with best practice early intervention principles.

Research shows that evidence based road safety education includes the following elements:

- It is part of the school curriculum, rather than irregular events.
- Includes content for each stage of school.
- Does not include driver training.
- Is taught by professional school teachers with extra training in road safety.
- Includes teaching safe system principles as well as personal responsibility, to embed road user understanding and demand for a Safe System, the ultimate solution to the road safety problem.

Since 1986, the NSW Road Safety Education Program has provided educational resources and professional development to teachers and childhood educators throughout NSW. The program is a partnership with the Association of Independent Schools, Catholic Education Commission, Department of Education, and Kids and Traffic, the Early Childhood Road Safety Education Program at Macquarie University. The partnership supports the delivery of road safety education to students by classroom teachers. It is part of the formal school curriculum and pre-service training for teachers.

Road safety is taught in NSW schools as part of the Personal Development, Health and Physical Education (PDHPE) curriculum. This is a mandatory subject for students from Kindergarten to Year 10. The focus is on the development of knowledge, values, attitudes and behaviours to enable students to make informed decisions as safer road users.

In the senior school years, students in government schools address Safe Travel content within the Crossroads Course. This is a mandatory 25 hour course for all government schools. In Catholic and Independent Schools, road safety education is delivered in the senior years through their pastoral care and student wellbeing programs.

The aims of the Road Safety Education Program are to:

- Produce behavioural and attitudinal changes through education programs and campaigns.
- Act as an advocate for children and young people in road safety.
- Provide appropriate resources for teachers and students.
- Promote best practice in road user behaviour.

The Program was developed closely with the then NSW Board of Studies, Education and Teaching Standards (BOSTES) and the school education sectors during the curriculum development processes. No other state in Australia (and very few other countries) has been able to achieve mandatory, prescriptive road safety content within its school curriculum.

The funding is used by the education sectors to provide road safety education specialists. The road safety education specialists provide professional development services to NSW teachers, schools, and early childhood services including programming road safety education, using current resources and providing quality advice on linking road safety to other curriculum areas.

Road safety education specialists in each sector provide teachers and schools with subject matter expertise, curriculum and policy advice and manage the professional development processes required during the implementation of each newly-released road safety teaching resource.

Resource development is conducted in collaboration with the education sectors to ensure syllabus outcomes are addressed, teaching strategies are engaging and relevant for the intended student audience, and that resources reflect the philosophies, policies and perspectives of each of the education sectors.

Early childhood road safety education

Kids and Traffic, the Early Childhood Road Safety Education Program, is funded by the Centre for Road Safety and delivered in partnership with Macquarie University. The program provides professional development workshops, road safety education information, resources, advice and other strategies to:

- Families and carers of young children, including grandparents.
- Educators in early childhood services and transition-to-school programs.
- Early childhood education students in universities and TAFE colleges.
- State and local government, including road safety officers.
- Early intervention and family support services.
- Peak early childhood and road safety organisations.

Kids and Traffic teaching and learning resources, including videos are available for educators, carers and other adults to share with young children. On the *Kids and Traffic* YouTube channel, you can watch the video stories *Five Little Girrawaa*, *Look who's buckled up* and *Here we go walking holding hands*.

Primary schools (Kindergarten – Year 6)

Safety Town is a suite of digital and non-digital curriculum based teaching and learning resources to support the teaching of road safety from Kindergarten to Year 6 in NSW primary schools, with the potential to reach over 650,000 students. The website at www.safetytown.com.au includes interactive activities, comprehensive teaching notes, links to relevant transport information, and updated information for parents and carers.

The Safety Town website houses a suite of 30 interactive activities that have been tested and trialled by teachers from government, independent and Catholic schools. There were more than 50,000 visitors to the site in 2016.

The site has comprehensive teaching notes for teachers to plan quality road safety lessons. There is also a number of off-line teaching and learning activities for teachers to use in the teacher only log-in section of the site. Important road safety information for families has also been developed to help parents reinforce road safety messages and concepts that are taught at school.

Secondary schools

On the Move houses all the resources for secondary schools. This website has been developed in partnership with the education sectors to provide information for teachers, parents and students about road safety education in high school.

The focus of the educational content in the syllabus is on challenging attitudes of young people as both drivers and passengers and assist students in developing the knowledge, understanding, communication and decision-making skills needed to deal with driver-associated issues. As part of the syllabus, students learn about:

- Responsible driver and passenger behaviour.
- Factors influencing road use behaviour.
- Causal factors in road and traffic related injuries, e.g. human (speeding, drug use, fatigue, occupant restraint), environmental, vehicular.
- Consequences of unsafe road use behaviour.
- Skills and attitudes that support safe road behaviour e.g. hazard perception, road sharing and tolerance.

The website has road safety material for teachers to complement the Years 7-10 PDHPE, Student Wellbeing and Senior English programs. These are:

- Road Risks – Your Choice (Years 7 and 8 PDHPE): Explores identifying and reducing risk, making safe decisions, and being proactive about personal safety on the roads as a pedestrian, passenger, cyclist and a future driver.
- Shifting Gears (Years 9 and 10 PDHPE): Allows students to explore the social-cultural, economic, political and environmental factors of everyday life as a novice driver. This includes addressing and dealing with some of the influences and attitudes that affect driving behaviour, as well as the necessary individual l knowledge and skills required to be a responsible and safe road user.
- Limiting Risks, Protecting Lives: Choices for novices drivers and their passengers (Year 10 and Senior Wellbeing programs): Provides activities to challenge students attitudes and thinking about road safety as a driver and passenger. Key topics include exploring road trauma statistics, getting a licence, hazard and influences on driving, peer influence and the impact of crashes, inexperience in the road environment, drugs, alcohol and driving.
- In the driver's seat - The nature of authority (Year 11 Preliminary HSC English): Allows students to explore the idea and operation of authority in the community and in texts. It is designed to assist students to familiarise themselves with issues of driving safely, through examining advertising campaigns and texts. A new resource, titled 'Cruise

Control' will be published on 'On the Move' in 2017. This resource will replace 'In the driver's seat - the nature of authority' and supports the new Stage 6 English Syllabus.

A new video and teaching materials focusing on the Mobile Drug Testing process will also be added to On the Move in 2017. The focus of the resource is to assist students to make safe decisions in relation to drug driving or getting into a car with someone who may be affected by drugs.

In Years 11 and 12 students in NSW government schools also explore road user safety as part of the mandatory Crossroads Course. Students have the opportunity to address issues of health, safety and wellbeing as independent road users at a time when they face significant changes and challenges in their lives. Students' skills are strengthened around planning for safe travel, using protective behaviours, being assertive in risky road-related situations, making safe decisions as a road user and looking out for others to promote safe travel for all. These road safety issues are explored in NSW Catholic and Independent schools as part of their student wellbeing and pastoral care programs.

The focus of driver education is on student attitudes, values and behaviour, the NSW school curriculum does not include in-vehicle driver training. Research into school based driver training programs has consistently found that there is little or no evidence of reduced crash involvement as a result of participating in these courses. There is also evidence that some programs have led to earlier licensing for students. This may increase the exposure for young drivers and increase their involvement in accidents (Rafferty and Wundersitz, 2011; Wooley, 2003). Driver training programs may also lead to a level of over confidence in young drivers that is not consistent with their practical driving skills. Evidence suggests that young people who obtain their licences later on have less chances of having a crash.

bstreetsmart

bstreetsmart is a one-day event, presented by the Westmead Hospital Trauma Service, designed to deliver road safety related educational material to Year 10-12 students in NSW. The objective of the program is to reduce the fatality and injury rates of high school students in Years 10 - 12 by promoting safe behaviour as drivers, riders and passengers. It provides students with a realistic look at the trauma caused by road crashes and gives them information and strategies in an attempt to reduce serious injuries and deaths. In 2016, the event was held over three days and attended by 19,802 students from 1887 public, Catholic and independent schools.

In 2016, all 1869 schools across Australian were invited to watch the event live with the bstreetsmart website. In addition, an 'On Demand' option to watch the event afterwards was also made available. Results of the live streaming found that 60 schools watched the event live with preliminary data suggesting the event was viewed more than 99 times.

An independent evaluation of the program in 2014, which included a pre-event and post-event survey of students (approximately 5 per cent of attendees), a survey of teachers (31 percent response rate), focus groups and stakeholder interviews showed modest but consistent knowledge gains and an increased sense of risk aversion in relation to:

- The perceived risks of speeding, driver fatigue and mobile phone use while driving.
- Knowledge of the legal blood alcohol content for learner and provisional drivers.
- Preparedness to speak up as a passenger if a driver was exhibiting unsafe behaviour.
- The perceived importance of modern safety features and making a decision about buying a new car.
- Knowledge of the ANCAP and Used Car Ratings schemes and the likelihood of using them for guidance.

While short-term gains were demonstrated based on this evaluation, there is currently no evidence to suggest that this effect would be sustained in the longer term without continued educational effort.

A key recommendation from the evaluation was to promote existing teaching and learning resources to teachers that attend the event and develop additional teaching materials. In 2016, the Centre for Road Safety collaborated with the education sectors to develop teaching and learning materials to complement the event. These materials were showcased in the teachers' area for the duration of bstreetsmart and emphasised to teachers to continue teaching and learning about road safety after the event.

Other driver education programs

In addition to 'bstreetsmart', the Centre for Road Safety provides funding to a number of organisations that provide road safety experiences for students outside of the classroom context. These include:

- 'RYDA Program'. This is a road safety awareness program for senior secondary students offered in most Australian States and New Zealand. It takes students through six sessions of activities based around driver and passenger safety.
- 'Wheelchair Sports NSW Road Safety Program'. This program focuses on the consequences of road trauma. It provides guest speakers about the consequences of taking risks on the road.

Schools make local decisions to attend these events. These programs/events are not part of the mandatory road safety education program and are viewed as supplementing not replacing the content that is required to be taught by teachers.

Future action and initiatives

The redesign of resources for primary schools provides a best practice template for further systematic improvements in the secondary school road safety syllabus and resources. Specifically programs for senior secondary school students should support:

- The Graduated Licensing System – while school and community based programs aren't directly involved in designing or managing the licensing system, programs that support and encourage compliance with the GLS among students, parents and the broader community are likely to be beneficial (Williams et al, 2012).
- Safer vehicles –research has highlighted the importance of vehicle safety for young drivers and their passengers. Australian research estimates that if all young drivers killed or seriously injured in crashes over the past five years had been driving the safest vehicle there would be a reduction of death and serious injuries of more than 60 per cent. (Whelan et al, 2009).
- Enforcement and deterrence – education both at school and community level does have an important role in enabling and expanding interventions that work. For laws to

be effective, especially at a deterrent level young people need to be aware of the laws and understand and accept that there is a reasonable chance of detection if they breach these laws and that penalties will be applied. For young people, being aware of the relevant road safety laws, the level of enforcement and the legal consequences are important in creating the basis for effective enforcement systems. For example the Mobile Drug Test (MDT) resource which has been developed for Year 10 – 12 students includes a video presenting the process of drug testing, enforcement in NSW and the consequences of being caught.

The NSW Government recognises the value of engaging with young people early in the program design process. This is supported by advice from the Advocate for Children and Young People (ACYP), which recommends that children and young people should be engaged in designing spaces which support road safety and promote active transport and liveability.

5.2 Novice drivers

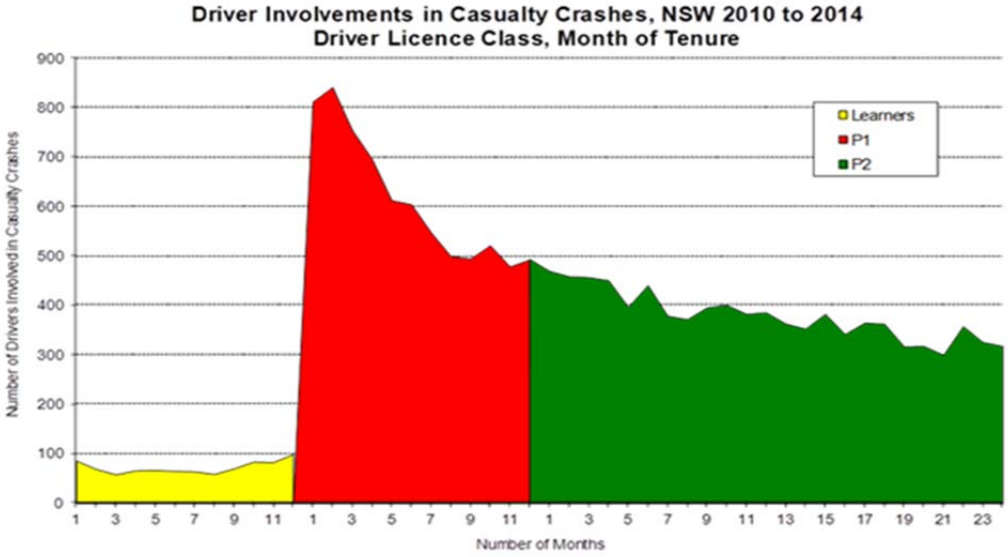
NSW Driver Graduated Licensing Scheme

A graduated licensing scheme (GLS) is designed to maximise the development of safe driving skills of novice drivers, via staged training and practice over a protracted period of time. Under a GLS, driving/riding restrictions are gradually lifted to allow experience to be gained in lower-risk situations. In turn, drivers experience more complex conditions over time as restrictions are gradually lifted to allow driving experience under more challenging conditions before obtaining an unrestricted licence.

Despite improvements in the last decade, young drivers in NSW are still more likely to be involved in crashes that lead to death than the rest of the driving population. Data for 2016 shows 21 per cent of all drivers and motorcycle riders involved in fatal crashes were aged 17 to 25 years, while this age group accounted for only 14 per cent of licence holders.

NSW crash data indicates that young drivers in the first 12 months of unsupervised driving are the group most likely to be involved in a crash in NSW (**Figure 17**).

Figure 17



The introduction of the NSW driver GLS in 2000 resulted in an increase to the provisional licence tenure from a minimum one year (prior to GLS) to a minimum of three years (after GLS), and significant additions were made between 2004 and 2008, including licence restrictions. Under the current GLS, novice drivers must progress through three stages and

four tests before obtaining an unrestricted driver licence, with the minimum time to move from a learner licence to an unrestricted driver licence being four years.

The NSW driver GLS consists of the following three stages:

- Learner – held for a minimum of 12 months. Where young drivers (16-25 years) must complete at least 120 hours of supervised on road driving. All learners must pass an on road driving assessment to be eligible to progress to a P1 licence.
- Provisional P1 – held for a minimum of 12 months. All licence holders must pass the Hazard Perception Test (HPT) to be eligible to progress to a P2 licence. Restrictions are in place including 90km/h speed limit, low demerit point threshold (four points), zero blood alcohol content (BAC) limit, high performance vehicle restrictions, mobile phone ban and peer passenger restrictions (11pm and 5am) for young drivers (16-25 years).
- Provisional P2 – held for a minimum of 24 months. All licence holders must pass the Driver Qualification Test (DQT) to be eligible to progress to an unrestricted licence. Restrictions in place include a 100km/h speed limit, low demerit point threshold (seven points), zero BAC, high performance vehicle restrictions and mobile phone ban.

Figure 18: NSW Driver Graduated Licensing Framework

***NOTE:** The NSW Driver Graduated Licensing Framework will be amended in November 2017 to reflect the GLS enhancements.

Enhancements to the GLS to align with best practice

The development of the Australian GLS (AGLS) policy framework was led by Transport for NSW on behalf of the Austroads Road Safety Taskforce. The framework outlines an evidence based best practice approach that includes three levels: a 'Standard GLS', an 'Enhanced GLS' and an 'Exemplar GLS'. This approach recognises that each jurisdiction has a different starting point, and that improvements to existing GLS systems may be incremental. The intent of the AGLS is for all jurisdictions to adopt as many of the 'exemplar' elements as feasible to promote national consistency around a stronger licensing model.

In July 2016, the NSW Government announced enhancements to the existing NSW GLS to align with the AGLS:

- From 1 December 2016:

- Extending the total ban on mobile phone use that applies to Learner and Provisional P1 licence holders to include Provisional P2 licence holders.
  - From November 2017:
- Repositioning the Hazard Perception Test (HPT) from the end of the Provisional P1 stage to the end of the Learner stage.
- Removing the Driver Qualification Test (DQT) as an exit criterion for Provisional P2 licence holders. Replacing it with extended licence tenure for Provisional P2 licence holders by six months, for each suspension they receive due to committing one or more road traffic offences.

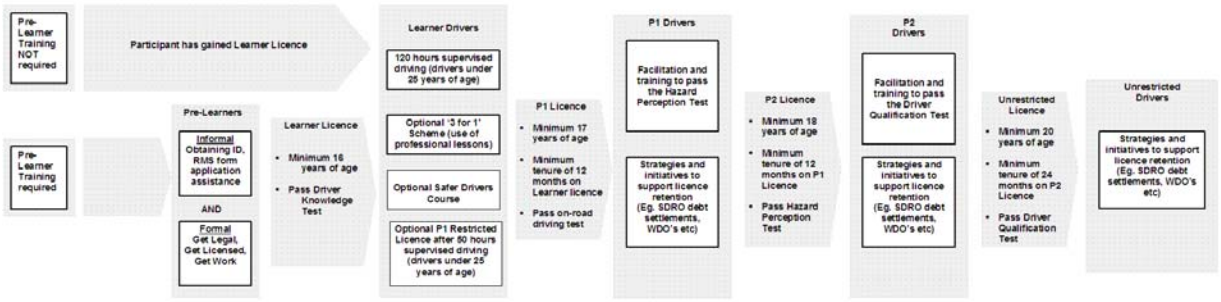
A communication strategy is being developed to support the introduction of these changes.

Current education and training approaches

Figure 19 below outlines the current GLS education and training pathway in NSW. It should be noted that it will be amended to reflect the GLS enhancements.

This pathway is consistent with evidence provided in Section 3 and supports the NSW Government's approach to driver licensing, where a minimum of four years is required on restricted conditions prior to obtaining an unrestricted licence.

Figure 19: Current NSW GLS education and training pathway



Safer Driver Course

The Safer Driver Course (SDC) for young (16-25 years) learner drivers commenced in NSW on 1 July 2013. An Australian first, it aims to address the higher crash rate for young provisional drivers in the first years of driving solo.

The curriculum framework for the course was developed by a board of independent road safety experts and is based on best practice in young driver education and adolescent cognitive developmental principles which highlight the importance of extended supervised driving experience and low risk driving strategies for young learners.

It integrates with the learner period of the NSW Graduated Licensing Scheme and enables learners to receive a discount of 20 hours from the current requirement of 120 hours of supervised driving when they successfully complete the course.

Seventeen accredited providers deliver the course across 250 locations in NSW. As of 1 July 2016 approximately 66,000 young learner drivers across NSW have completed the course and progressed to their provisional P1 licence, since it commenced.

The course is available to learners NSW at a set fee, set at an affordable level by the NSW Government. Additional costs are met by the NSW Government through the Community Road Safety Fund to ensure that all learners have access to the Course at the same price.

Course framework

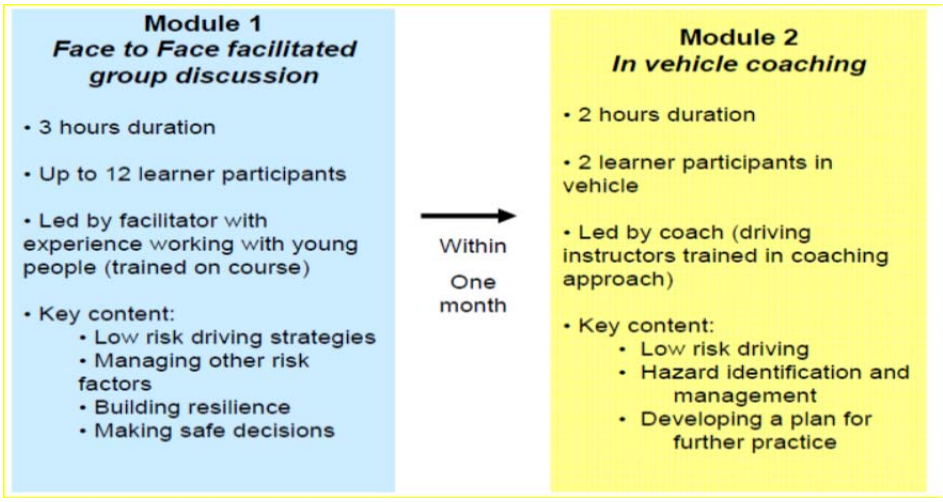
The Course framework includes two modules:

- **Module 1: Face-to-face facilitated group discussion** (3 hours duration)
  The aim of the face-to-face facilitated group discussion is to build awareness of risks, decisions and safe driving behaviours. A maximum of 12 participants is permitted in each module to promote discussion and participation from all participants. The key content discussed includes low-risk driving strategies, making safe driving decisions and building resilience among young drivers.
- **Module 2: In-vehicle coaching** (2 hours duration)
  The in-vehicle coaching module, conducted with two learners and a driving coach, provides on-road in-vehicle coaching and peer mentoring to reinforce and practise low risk driving behaviours. A key feature of Module 2 is its focus on providing feedback to participants with the aim of assisting on-road driving practice with a supervising driver following Course completion.

Both modules must be completed by the participant within one month for the participant to receive the 20 hours credit in their learner driver log book.

An overview of key content and delivery features of each module are illustrated in Figure 20, below.

Figure 20



Program delivery

The SDC is provided in over 250 locations across NSW. DRIVES data shows as at 31 January 2017 the total number of learner drivers who have completed the Course since it began is now 65,562. This represents 29.5 per cent of all eligible learner drivers in NSW.

SDC trainers

A key focus of course delivery is ensuring that appropriately qualified trainers are selected. Roads and Maritime Services engages providers through a tender process.

Only Roads and Maritime Services accredited providers are permitted to deliver the course with trainers that have the required qualifications and have completed a specifically designed SDC Training Program for Facilitators and Coaches. The Training Program addresses the

course curriculum, delivery modes, road safety information and building the capacity of trainers to facilitate or coach more effectively. Providers are required to deliver the course in accordance with the materials developed by the Centre for Road Safety, Transport for NSW.

Program evaluation

Evaluation of the SDC commenced in June 2014. Three primary review processes were established; a provider management audit, a quality assurance and course evaluation into processes and outcomes.

The provider management audit and quality assurance were both conducted in 2015. At present, a consultant has been commissioned to conduct the course evaluation to inform the program's ongoing refinement and to understand whether it is meeting intended objectives. The evaluation will be conducted in two parts over four years to measure process and outcomes. Results of this process evaluation are expected in late 2017. The outcomes evaluation will occur over 2017-2019.

Outcomes of the provider management audit conducted in 2015 revealed issues with providers, including WHS policies, ensuring trainers' accreditation, administration of management processes as well as recording management.

Later in 2015, the quality assurance assessment identified issues in the delivery of Module 2 (in-vehicle coaching). These arose from the tendency of some driving coaches to adopt the more traditional driving instructor role, straying away from the coaching and peer mentoring approach. For example coaches providing tips for passing the driving test, little use of questioning and limited discussion of crash risk.

As findings from both the process and outcomes evaluations become available, TfNSW will continue to work with stakeholders to ensure improvements to the SDC design and delivery are in line with evidence based, best practice approaches.

'3 for 1' Scheme

As part of the NSW GLS, young learner drivers (16-25 years) are required to complete 120 supervised driving hours recorded in their learner log book prior to attempting an on-road driving test. To assist learners in achieving this requirement, learner drivers who complete a one hour structured driving lesson with a fully licensed driving instructor can record three hours driving experience in their learner driver log book under the '3 for 1' scheme.

To be eligible for the scheme, the driving instructor must develop each structured lesson in conjunction with the supervising and learner drivers. Each lesson must aim to develop and enhance the learner driver's practical application of low risk driving principles, as outlined in the learner driver log book.

A maximum of 10 hours of lessons will be accepted and recorded as 30 hours in the learner driver log book. This means that learners who undertake 10 hours of professional instruction obtain a 20 hour discount from learner driver log book requirements. The result is that these learners are only required to undertake 100 actual hours of driving practice.

High-risk road users in regional areas - TAFE Partnership

A large proportion of courses within TAFE NSW include the core high-risk group for road fatalities and injuries – young males and provisional licence holders. These students are at further risk due to high speed roads in regional locations and the longer distances travelled for work and education.

There is an opportunity for targeted communications to this group at a time where many are driving solo for the first time – including messaging around key road safety issues of speed, fatigue, animals on rural roads, mobile phone use and drink and drug driving.

Roads and Maritime Services in Western Region has partnered with TAFE Western to deliver *Towards Zero* road safety workshops to apprentices in Dubbo and Orange campuses, as part of the programs funded under the Community Road Safety Fund managed by the Centre for Road Safety. The partnership provides road safety education in the TAFE setting and targets students who are at high risk of crashes due to their age, inexperience and long travel distances.

The program includes a one hour road safety workshop delivered face-to-face by Roads and Maritime road safety staff, recognising that parents and employers play an important role in influencing the road safety choices and behaviours of young drivers such as helping to choose the safest vehicle for them to drive, encouraging young drivers to stick to the speed limit and taking regular breaks when they travel.

TAFE and Roads and Maritime are also developing further materials to support the expansion of the program to include resources for teachers, parents and employers. Draft resources include an animated video, online learning modules and resources for parents and employers.

It is proposed that the partnership be expanded following this initial rollout. Transport for NSW will consult with stakeholders for further expansion of the program.

‘Helping Learner Drivers Become Safer Drivers’ Workshops

The ‘Helping Learner Drivers Become Safer Drivers’ workshops were developed by Transport for NSW and Roads and Maritime Services for parents/guardians or supervisors of learner drivers to support them in their role as supervising drivers. The workshops are run by Local Government Road Safety Officers and other Roads and Maritime Services employed contractors. They are free of charge.

More than 70 workshops across the state have been delivered in 2016 to almost 800 participants. Each workshop runs for two hours and aims to provide parents with information and strategies to help their learner drivers to become safer drivers. Roads and Maritime Services regions develop a planning schedule each financial year for these workshops to be delivered across local government areas of New South Wales.

The workshops offer practical advice on how to help learner drivers become safer drivers, and cover topics such as:

- How to use the Learner Driver Log Book.
- Planning driving sessions.
- How to deal with difficulties that may arise during driving practice.
- The importance of giving your learner constructive feedback.

Cost of driver training and allocation of costs

In planning for future needs – we need to better understand the costs and benefits associated with obtaining and retaining a driver licence.

Recent research undertaken by the Advocate for Children and Young People (the Advocate) with homeless young people found that the costs associated with learning how to drive and get a licence, including paying for lessons, were prohibitively expensive. Transport for NSW will

work with the Advocate to address these challenges, building on analysis that investigated the benefits of young people from socio-economically disadvantaged backgrounds both obtaining an retaining a driving licence.

For those living in rural areas a lack of licence severely limits their ability to access work and education, especially on weekends or after hours. Young people told the ACYP that the costs of getting a licence and maintaining a car are a major barrier to employment, including being able to get to job interviews and to jobs. These concerns have also been highlighted in a recent report by Brotherhood of St Laurence, which found that transport was identified as a reason for not being able to find work for 25 per cent of unemployed young people.1

The Advocate is also aware that young people with disability can have additional needs to become an independent driver.

Future action and initiatives

The Roads and Maritime Services (RMS) knowledge test platform is integral to the delivery of the GLS computer based licence tests for driver licence applicants to obtain or upgrade a driver licence. The current system is more than 15 years old, and is reaching end of life capacity.

TfNSW is currently working with RMS to modernise the driver knowledge test platform and optimise the efficient and effective delivery of licence testing in NSW. It will be based on an interactive online system and a supporting customer service and educational strategy for novice drivers, parents and supervisors.

Austroads is currently leading a project to develop a national library of Hazard Perception Test (HPT) clips for use by Australian jurisdictions. These new clips will enable Roads and Maritime Services to update the HPT, reflecting current hazards on the Australian road network and using contemporary technology. Phase two of the project is expected to be delivered in the second half of 2017.

The TAFE Partnership initiative is to be expanded to TAFE Hunter, New England, North Coast, Illawarra and Riverina regions, following this initial rollout, Transport for NSW will consult with South-West, Southern and Sydney regions for further expansion of the program.

The outcomes of the SDC process evaluation are due in late 2017 and the outcomes evaluation will become progressively available over 2017 -2019. TfNSW will continue to work with stakeholders to ensure improvements to Course design and delivery are in line with evidence based best practice approaches.

A new SDC delivery period will be established for the next three years. For service providers this will commence 1 July 2017 – 30 June 2020, for Training Providers it will commence 1 June 2017 – 30 May 2017. The earlier delivery date for Training Providers allows for the new providers to train facilitators and coaches from any new Service Providers. Service Providers are expected to have trained staff to deliver SDC as of 1 July 2017.

Transport for NSW and Roads and Maritime Services are currently developing a Request for Proposal (RFP) which will allow interested parties (including existing Safer Drivers Course Providers) to express an interest to deliver the Safer Drivers Course.

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1 http://library.bsl.org.au/jspui/bitstream/1/9347/1/BSL_Uturn_transport_woes_of_young_jobseekers_2016.pdf

5.3 Disadvantaged drivers

Driver Licensing Access Program

The GLS requirement to obtain 120 log book hrs of on-road supervised driving experience ensures novice drivers gain on-road experience before driving solo. However it poses challenges for learner drivers who are disadvantaged, have limited access to supervising drivers, roadworthy vehicles and other supports that enable them to successfully obtain a driver licence.

In addition to the road safety benefits, having a driver licence provides mobility for people to have better access health, education and employment opportunities thereby increasing their potential for social and economic success.

The achievement of these objectives is even more important for rural, culturally and linguistically diverse and Aboriginal communities, where the absence of a driver licence can exacerbate the disadvantage experienced by some people.

The NSW Government recognises the barriers preventing young people entry to the licensing system and has established the Driving Licensing Access Program (DLAP).

Program objectives

The objectives of the program are to:

- Improve road safety outcomes among disadvantaged Aboriginal people and other disadvantaged communities by supporting them to meet the GLS requirements, leading to reduced crash and injury rates.
- Provide culturally appropriate support and resources that assist disadvantaged Aboriginal people and other disadvantaged communities to obtain, retain and regain their driver licence across all stages of the licensing pathway.
- Contribute to improved access to education, employment, health and other community participation services for disadvantaged people through the attainment of a driver licence.
- Increase equity of opportunity for disadvantaged Aboriginal people and other disadvantaged communities to obtain a driver licence and to be safer and legal road users.

Range of driver licensing access services and support

The range of driver licensing access services and support is varied depending on the needs of the individual and the stage they are at in the licensing system. Service providers will be required to deliver one or more of the following services and supports:

- Licensing enrolment support and assistance.
- Literacy, numeracy and familiarity with computer based licence testing.
- Learner driver supervision, mentoring and instruction.
- Access to a roadworthy vehicle for driving practice and the driving test.
- Mentoring individuals through the licensing system.
- Debt negotiation and management.
- Facilitating employment through driving skills and community networking.
- Facilitating access to other driver licensing, and road safety programs e.g. the Safer Drivers Course, '3 for 1' professional driving instruction lessons and 'Keys 2 Drive'.

It is not mandatory for the service provider to directly deliver the complete suite of services and supports. However, the service provider is expected to proactively support participants to access other services if they are required, but are not being directly delivered by the service provider.

Provider requirements

In meeting the objectives of the Program, approved DLAP providers are expected to fulfil the following requirements:

- Address barriers that prevent entry to the licensing system and successful progress through the various stages of the Graduated Licensing Scheme (Pre-Learner, Learner, Provisional P1, Provisional P2 and Unrestricted).
- Tailor support to the needs of disadvantaged Aboriginal people and other disadvantaged communities and ensure it is delivered in a flexible and culturally appropriate manner.
- Facilitate access to existing driver licensing and road safety programs e.g. the Safer Drivers Course.
- Apply best practice in delivering driver licensing support programs.
- Link to and integrate with existing education, employment, health, life skills, diversionary and local community support programs.
- Promote locally-based partnerships and coordinated inter-agency service delivery at the same locations.

Program delivery

TfNSW provided $1.2m in funding across 8 providers in 2015/16. In 2015/16, 502 people obtained their Ls and 312 their Ps through the program, in addition to supervised driving hours, help with the driver knowledge test and proof of ID.

In 2016/17 TfNSW provided funds of $1.49m and expanded the program to 14 providers covering more than 50 geographic locations with targets of achieving 630 Learner licences and 586 Provisional licences.

The 14 providers include Ace Community Colleges Limited (ACE), Australian Red Cross, Bara Barang Corporation Limited, Birrang Enterprise Development Company, Dubbo Local Aboriginal Land Council, Gordon Solutions, Great Lakes Community Resources, Salvation Army, Shellharbour Aboriginal Community Youth Association (SACYA), TAFE New England, TAFE Illawarra, TAFE Western Sydney, Top End Training, and, Weave Youth and Community Services.

The program will have coverage across more than 50 locations including: Albury, Auburn, Ballina, Bega, Blacktown, Bourke, Bowraville, Brewarrina, Broken Hill, Campbelltown, Coffs Harbour, Collarenebri, Condobolin, Coonabarabran, Coonamble, Coraki/Lismore, Dareton, Dubbo, Eden, Eurobodalla, Forster, Glen Innes, Gosford, Grafton, Great Lakes, Griffith, Gunnedah, Inverell, Lightning Ridge/Goodooga, Liverpool, Maitland, Maroubra, Marrickville, Menindee, Moree, Mount Druitt, Nambucca, Narrabri, Narrandera, Nepean, Newcastle, Nowra, Orange, Penrith, Queanbeyan, Raymond Terrace, Redfern, Shellharbour, Tamworth, Taree, Tweed, Wagga Wagga, Walgett, Warren, Wilcannia, and Wyong.

Department of Justice has contributed $363,000 in 2016/17 for a court diversion project to specifically support people who are referred to DLAP by courts for the purpose of assisting them to access the driver licensing system.

Safer Driver Course – Disadvantage Learner Initiative

The Disadvantage Learner Initiative offers 1,000 subsidised Safer Driver Course places per year to assist young learner drivers from disadvantaged backgrounds and Aboriginal communities, with limited financial means, to access the course using a fee exemption. It enables disadvantaged young learner drivers in NSW to benefit from the road safety outcomes provided by the Course. The Initiative is implemented under the governance arrangements that are already in place for the program management and delivery of the SDC.

Eligible applicants under the SDC Initiative must meet the following criteria:

- Hold a valid learner licence
- Under 25 years
- Have completed a minimum of 50 hours driving experience as evidenced in their log book.
- Hold a current Pensioner Concession Card issued by Department of Human Services – Centrelink and assessed as eligible under the RMS Concessions Policy.

Based on DRIVES data and the state-wide take-up rate of the SDC of approximately 20 per cent it was estimated that approximately 1,083 would be eligible for the initiative in 2015/16.

The take up rate will be monitored closely and the eligibility criteria will be reviewed after 12 months of operation to ensure that it is being targeted appropriately.

Children and young people in care

Ministerial guidelines on assistance after leaving out-of-home care have provisions for the payment of ten driving lessons where this would improve a young person's employment prospects. In cases where the young person has no access to a private vehicle, the payment of additional lessons may be considered.

While this can reduce barriers to accessing driving licensing for young people in care, these young people still need to find a way to get the remaining 90 hours required to meet the log book requirements.

Future action and initiatives

Consultation and research by the Advocate has identified that while many of the driver licencing access programs offer well needed support for young people, program coverage is patchy, the service delivery model is variable, and there are equity issues which can impose significant barriers to young people experiencing disadvantage, including young people in out of home care, young people experiencing homelessness, in rural and remote areas, and Aboriginal young people.

Given the importance of obtaining a driver licence to enable access to education and training, employment, and health and support services, it is critical that young people experiencing disadvantage have inexpensive and efficient pathways to achieve a driver licence to ensure they have equal opportunities to succeed.

In recent consultations undertaken by the Advocate, young people experiencing homelessness told the Advocate that access to a sufficiently licenced driver in order to log the required 120 hours of supervised driving, is a significant barrier to getting their license. Another reported barrier is access to an adequately insured car. Difficulties are magnified for young people in residential care and Specialist Homelessness Services (SHS). During the consultations young people suggested that SHSs be able to teach them how to drive as part of their case management plans. Access to volunteer driver reimbursements such as for fuel can also be a barrier to enabling community based organisations including SHS to provide volunteer supervision for young drivers. Young people have also reported that they may not have 100 points of ID or have difficulty in obtaining it, which can be a barrier to meeting the requirements to obtain a driving licence.

The Advocate also recognises the imperative in continuing to improve access to driver licensing for young people who are culturally and linguistically diverse. The ACYP emphasises that barriers to driver licensing can include a lack of knowledge about Australian laws and transport-related fines, restrictive costs and a lack of understanding of the system. Other barriers to obtaining driver's licence can include attaining required driving experience with limited access to fully-licensed drivers in the community. It is important that there are appropriately targeted programs to address the specific needs of these young people to support them to attain a driver license.

The DLAP will reviewed in 2017/18 to ensure program planning addresses the driver licensing needs of a broader group of disadvantage young people, program design reflects best practice in community based road safety education and training and program delivery is expanded to targeted locations. As part of this process TfNSW will continue to consult and work with stakeholders such as existing service providers, community organisations and other government departments including Family and Community Services (FACS) and ACYP.

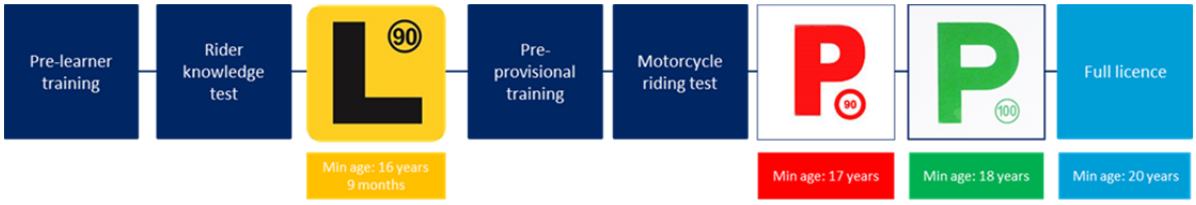
5.4 Motorcycle Riders

Current licensing system for motorcycle riders

In NSW, a GLS for novice motorcyclists was introduced on 1 June 2009. This represented alignment with the existing GLS for driver licensing and the associated road safety imperatives.

Figure 57 presents the current NSW motorcycle GLS, which echoes the approach taken by the NSW driver graduated licensing scheme, preparing novice riders to be safe, low risk road users through a staged approach to rider licensing.

Figure 21: NSW Motorcycle Graduated Licensing Framework



The Motorcycle Rider Training Scheme component of the GLS covers the key skills required for riding on the road and is delivered across two stages. The Motorcycle Rider Training Scheme is compulsory in areas where it is available (declared areas). If the training scheme is not available in an area (an undeclared area), the licence applicant is required to pass the Motorcycle Operator Skill Test (MOST). Declared areas cover approximately 95 per cent of the NSW population.

Declared area – Rider Training Scheme

If a licence applicant lives in an area where there is a training centre, the licence applicant must attend and satisfactorily complete rider training and testing, before they can be issued with a learner rider licence.

There are five steps to progress from a learner rider licence to a full rider licence in a declared area:

- Successfully complete the pre-learner course
- Pass the rider knowledge test to obtain a learner rider licence. The Rider Knowledge Test is a computer-based road rules knowledge test. The computer selects the questions at random from a bank of more than 600 questions.
- Hold a learner rider licence for at least three months, and successfully complete the pre-provisional course to get a provisional P1 rider licence
- Hold a P1 rider licence for at least 12 months before applying for a provisional P2 rider licence
- Hold a P2 rider licence for at least two years before application for a full rider licence.

Undeclared area – tests

In areas where rider training courses are unavailable, which accounts for less than five per cent of the NSW population, the licence applicant needs to pass two tests before they are issued with a rider licence. A licence applicant has the option to attend a rider training course in a declared area, even if they live in an undeclared area.

There are four steps to progress from a learner rider licence to a full rider licence in an undeclared area:

- Pass the Rider Knowledge Test to obtain a learner rider licence
- Hold a learner rider licence for at least three months and then pass the riding test to get a provisional P1 rider licence
- Hold a P1 rider licence for at least 12 months before applying for a provisional P2 rider licence
- Hold a P2 rider licence for at least two years before application for a full rider licence.

In addition to age and longer tenure requirements, other key elements of the NSW GLS include restrictions on speed and the motorcycle ridden (LAMS power to weight restriction of 150 kW/tonne & an engine capacity of 660 ml), a zero blood alcohol level and graduated demerit points.

Unlike some jurisdictions (including Queensland), it is not necessary to hold a car driver licence to be eligible for a learner rider licence in NSW. However, an individual must be at least 16 years and nine months of age to be issued with a learner rider licence. To gain a full open license, novice riders are required to accumulate at least 36 months of provisional experience before graduating to a full rider licence. This represents an extra two years on a

provisional licence relative to the scheme that existed prior to the introduction of the GLS. This also means that speed, alcohol, motorbike and demerit point restrictions will apply for an extra two years.

Novice drivers over the age of 25 years are exempt from the Provisional P2 phase of the motorcycle GLS.

Motorcycle Rider Training Scheme

The Motorcycle Rider Training Scheme is a training and testing program underpinning the current M-GLS specifically designed to help people gain basic riding skills, before riding on the road. There are two levels of training pre-learner and pre-provisional. The training includes both on and off-road activities.

Roads and Maritime Services currently require riding instructors to:

- Hold a full rider licence.
- Meet the requirements of the *Driving Instructors Act, 1992* and accompanying Regulation.
- Complete an instructor training course provided by an accredited rider training provider.

A previous Staysafe Committee inquiry into motorcycle safety recommended that Roads and Maritime Services introduce a number of measures to provide greater support to riding instructors. Roads and Maritime Services is currently reviewing and updating training materials and support services available to trainers and participants.

The Committee also recommended that Roads and Maritime Services works with training providers to ensure adequate availability and accessibility of rider training courses in metropolitan, regional and rural NSW. Roads and Maritime Services will undertake a review to ensure availability of rider training and testing services to customers across NSW.

Based on findings from the review Transport for NSW will work with Roads and Maritime Services to consider options for improving availability and accessibility in metropolitan, regional and rural NSW. The current Motorcycle Rider Training Scheme will be included as part of a broader review of the NSW GLS for motorcycles.

Post Licensing Rider Training

Motorcyclists aged 40 years and over are making up an increasing proportion of the road toll, in particular those in the 50 to 59 year age group. Fatalities in this age group have tripled over the last ten years, and 48 were killed on NSW between 2013 and 2015.

There has been a similar trend with serious injuries. Between 2005 and 2015, serious injuries among motorcyclists aged 40 years and over have almost doubled, with the 50 to 59 age group increasing by 125 per cent and the 60 to 69 age group more than doubling. Lack of recent riding experience and appropriate training was identified as a key issue.

NSW does not currently have a specific training program targeting infrequent or returning motorcycle riders. In Victoria, returning and mature aged riders are specifically targeted through a webpage and brochure called ‘Chasing the Dream’. It discusses topics such as the difference between driving and riding, selecting an appropriate motorcycle, protective gear, updating skills, carrying a pillion and vehicle maintenance.

South Australia targets returning riders through a dedicated webpage that promotes the need for training and appropriate protective wear, and raises awareness of changes in bike design. Queensland, Tasmania and Western Australia more generally target infrequent riders through their respective Motorcycling Rider Guide/Handbooks.

A literature review conducted by CRS in 2013 to investigate the issue of returning riders highlighted the general issue of unfamiliarity as a key risk factor likely to be faced by infrequent riders of motorcycles. While there are a number of post-licence rider training options offered in NSW, these are largely variable across providers. Further, while the pre-learner and pre-provisional rider training are subsidised, training outside of these parameters is not. High cost may act as a deterrent to riders pursuing additional training such as refresher training.

CARRS-Q (2016) was commissioned to investigate the extent to which existing commercial post-licence rider training courses in NSW target identified rider skills and competencies to address high risk motorcycle crashes. A desktop review of post-licence motorcycle rider training options available in NSW from 10 providers provided an overview of relevant course content, locations and costs. Interviews were also conducted by Skype with 8 of the 10 training providers to gather information on course structure, components, delivery, promotion and the characteristics of course participants.

The research identified a large number of post-licence training options currently available. Providers reported participants have vastly different characteristics, needs and objectives for undertaking training. The need for a diverse range of course offerings for motorcycle riders appears to be largely met across NSW as a whole. For instance, returning riders, female riders, inexperienced riders, commercial riders and aspirational racers are all catered for. However, there are apparently no post-licence courses available in central, western or far southern NSW.

Improvement of skills such as scanning, buffering, setting up brakes, basic motorcycle handling, cornering, and lane positioning is a core objective of most courses, but there is no standard curriculum. The provision of flexible programs tailored to individual needs appears to be a key strength of post-licence motorcycle rider training in NSW.

‘Ride To Live’ campaign

Transport for NSW launched the ‘Ride to Live’ motorcycle risk management campaign in November 2014. The first large-scale campaign in NSW aimed at increasing awareness of motorcycle safety and assisting riders to better manage risks on the road. The campaign also targets drivers and their role in improving the safety of motorcyclists on our roads.

Findings from crash data and attitudinal research in 2012 to understand the attitudes and behaviours of NSW riders and drivers in relation to motorcycle safety were instrumental in developing an evidence-based campaign, along with strong collaboration with key stakeholder groups including NSW Motorcycle Alliance and Motorcycle Council of NSW.

The ‘Ride to Live’ campaign was designed around acknowledging motorcyclists’ passion for riding, whilst challenging riders to better manage their risks on the road. Campaign executions highlight common scenarios for commuter and recreational riders and illustrate the consequences of different choices riders can make in response to each hazard. It aims to encourage riders to make the safer choice – by anticipating the hazard and preparing early through good lane positioning, buffering and setting up brakes – without being too prescriptive and authoritarian.

A tailored driver execution was also developed to challenge drivers to think about how closely they look for motorcyclists and to remind drivers to check blind spots and look out for motorcyclists at all times. It links to the rider creative through the tagline ‘help motorcyclists ride to live’ which is relevant to them.

The television campaign is fully integrated and supported with a website (ridetolive.nsw.gov.au), which includes online hazard tests based on key crash types for

commuter and recreational riders (using real footage), safety tips, and a trip planner of popular recreational riding routes in NSW featuring hazard information, recent crashes, weather, traffic and places to stop. This provides a strong call to action, particularly to drive riders to the digital and social environment to access further information on hazards and risk management strategies, which is a significant element of the campaign. Radio, Youtube, digital and outdoor advertising have also been used for this campaign.

As part of the campaign tracking process, online surveys were conducted before and after the campaign launch, with key findings relating to riders including:

- Recognition of the campaign was very high across all media channels.
- Majority of riders thought the 30 second television commercial was relevant to them and communicated the need to be aware of potential hazards on the road when riding.
- Majority of riders thought the relevant 30 second commercial made them think about the consequences of different choices motorcyclists can make when riding.
- It is unlikely that riders will self-report a change in behaviour as 80-90% of riders already self-report riding in a safe manner.

Key findings relating to drivers included:

- Overall the campaign achieved strong levels of recall amongst drivers, but the rider targeted executions were also highly visible to drivers.
- There was strong agreement among drivers that the driver execution communicated the need for drivers to 'look for motorcyclists' and for drivers to 'be aware of the risks they pose to motorcyclists' when driving.
- When looking at change in behaviour due to campaign exposure, those exposed to the campaign indicated that they specifically looked out for motorcyclists on the roads around them compared to those who were not exposed to the campaign.

Since the launch of the ridetolive.com.au website in October 2014, there have been more than 99,000 users, spending an average of more than 3 minutes on the site (as at 14 July 2015). More than 70,000 tests have also been completed, sharing the benefit of providing relevant and useful information in an interactive and engaging format. Further, there have been more than 277,000 YouTube views of the television commercials.

Further evolution of the campaign will be considered in the future to ensure continued awareness, relevance and effectiveness for riders in the target audience.

Future action and initiatives

The NSW Motorcycle Safety Action Plan 2017-19 is next phase in delivering the NSW Motorcycle Safety Strategy 2012 - 2021. It builds on the key achievements in the first Action Plan and contains 19 key actions to improve motorcycling safety over next 3 years.

A key priority to be implemented in the first 12 months of the new plan is the evaluation of the current motorcycle GLS (M-GLS).

Research indicates that inexperience is a major contributor to motorcycle crashes. Casualty trends among motorcyclists by age are variable. However, younger riders have the highest casualty rate per licence. Riders under the age of 30 still have the highest number of fatalities. Riders in this age group also make up more than 40 per cent of all motorcyclist serious injuries.

Research suggests that young novice drivers have limited experience in the higher-order cognitive skills necessary to drive safely within the traffic environment. The literature indicates

that the further improvement in driver training and education for young novice drivers should address the development of higher-order cognitive skills necessary to drive safely not on motor handling skills.

The evaluation of the M-GLS will look at extending the current M-GLS to incorporate higher-order skills, including awareness, judgment and decision making. The introduction of an enhanced M-GLS will need to be underpinned by a revised Rider Training Scheme.

The NSW Government will continue to promote the use of motorcycles with anti-lock braking systems and traction control for all riders, which have proven road safety benefits (Australian Government, 2015). In regard to post licence rider training, there is opportunity for CRS to develop accreditation guidelines for post licence rider training to provide consistency of courses content state-wide to ensure that course content is evidence based incorporating key rider skills and competencies that contribute to reducing motorcycle crash risk.

Transport for NSW will also work with Roads and Maritime Services and training providers to better promote appropriate courses identified from the review among infrequent riders, such as returning riders.

Pre-learner and pre-provisional rider training courses are subsidised by the NSW Government however, training outside of these parameters is not. High cost may act as a deterrent to riders pursuing additional training such as refresher training.

5.5 Older drivers

The aging population poses a unique challenge for road safety. On one hand there will be a significant increase in the number of older drivers who will seek to continue driving; the population will be healthier for longer, and will be more mobile than in the past. On the other hand, research shows that older drivers are more likely to have functional limitations that are detrimental to driving performance, and due to the ageing process are more susceptible to road trauma.

Projections by the Australian Bureau of Statistics (ABS) indicate that the population of those aged 75 years and over within NSW is likely to increase substantially in future years. While the total NSW population is predicted to increase by 30 per cent by 2042, the population aged 85 years and over is projected to increase by 167 per cent.

The number of driver licence holders aged 75 or older in NSW has increased by 25 per cent over the period 2010 to 2015. For drivers aged 85 years or more the increase has been even greater, increasing by 54 per cent over the same period. Close to 90 per cent of drivers aged 85 and over continue driving – and over a third of these drivers opt for a modified licence.

Research suggests that the impact of ageing on physical and cognitive functioning can have an effect on driving performance, and performance declines as age increases. Medical conditions that have a strong association with age and which can affect driving performance and crash risk include dementia, ocular disease, cardiovascular diseases, diabetes epilepsy and arthritis.

Dementia is increasing in prevalence for people aged over 75 in NSW and the proportion of people affected by dementia progressively increases with age. Alzheimer's Australia suggests that one in four people over the age of 85 have dementia. It is also being under-diagnosed as a key factor impacting fitness to drive. Alzheimer's Australia has advised that, on average, symptoms of dementia are noticed by families three years before a firm diagnosis is made.

Crash data indicates that common older driver crash types are consistent with increased driver errors from physical, cognitive and sensory decline associated with the ageing process.

Indeed, behaviours that lead to older driver crashes tend to be more related to inattention, fatigue and declined perception and responses, rather than more deliberate or risky behaviours that are more common among younger drivers, such as speeding and drink-driving.

The road safety challenge is to ensure the older driver licensing system supports active lifestyles of older people while decreasing the risk of crashes and maintaining road safety of all road users.

Current older driver licensing framework

The current approach to older driver licensing, in place since 2008, is designed to balance the safety of road users and the general community, with the continuing independence and mobility of older drivers.

Older drivers are required to have an annual medical assessment from age 75 and undertake an on-road driving assessment every two years from age 85 to maintain an unrestricted licence.

Drivers aged 85 and over also have the option of a modified licence, which is an alternative to an unrestricted licence. Holders of a modified licence are not required to complete the on-road assessment; these licences typically have a radius restriction or a home to town restriction in regional areas.

The on-road assessment for older drivers differs to the assessment undertaken by learner drivers as it focuses on driving safely and to the road rules rather than a comprehensive assessment of vehicle control skills.

Drivers can choose to undertake the assessment at a RMS or Services NSW Registry free of charge, or through a driving instructor accredited by RMS on a 'fee for service' basis.

Older Driver Taskforce

In 2011, the Older Driver Taskforce was established to review the NSW older driver licensing system. Key recommendations of the Taskforce were announced by Transport for NSW in September 2013 and included:

- Retaining the current older driver licensing system as it was found that it provided the right balance between mobility for older drivers and safety for all road users.
- Developing a comprehensive communication and education strategy to improve communication to older road users and their families/carers about licensing and medical assessment processes, their options in the licensing system, safer vehicles, alternative transport options, and planning to retire from driving.
- Improving understanding of the medical assessment/review and decision making process for health professionals, family members and carers.
- Undertaking research to identify how self-regulation and in-vehicle technology can help older drivers drive more safely to help understand how to best support older road users.
- Implementing a comprehensive evaluation of the effectiveness and impact of the older driver licensing system after five years of crash data is completed.

Communication and education

In response to the Taskforce recommendations, TfNSW developed a comprehensive communication and education guide for older road users known as *On the road 65Plus*. The

guide covers how changes in health can affect abilities as a road user, information on safer driving habits, walking safely, using public transport safely, licensing options, planning to retire from full-time driving, choosing a safer vehicle, other transport options and using mobility scooters safely.

On the road 65Plus forms the basis for educational workshop presentations that are delivered through RMS regions and the Local Government Road Safety Program. The guide has also been translated into 10 community languages and these have been published on the Transport for NSW website. They were also distributed to key agencies that support older people from culturally and linguistically diverse backgrounds.

The guide is available on the Centre for Road Safety website and hardcopies of the guide are widely distributed during events such as 'seniors week' activities as well as the Royal Easter Show.

Transport for NSW has also developed a comprehensive on-line travel training resource known as First Stop Transport for to support people including older people to travel safely and independently on the NSW public transport system. It is available free of charge and can be accessed on-line.

The on-line resource contains hyperlinks to *On the road 65Plus* to enhance the education benefits assisting older people planning to retire from driving and maintain their independence and participation in their local communities. The eLearning module also incorporates training materials for those seeking accreditation as a travel trainer through a registered training organisation.

On-line medical reporting and links to education and training

Roads and Maritime Services established the development of an on-line medical reporting process as part of a project to digitise medical records for licensing purposes. The aim is to secure the online transfer of medical assessment information direct from health professionals.

Online reporting will include linkages to standards in the Australian Fitness to Drive (AFTD) Guidelines. General Practitioners (GP) will have context sensitive access to relevant AFTD information as needed while they are completing the medical assessment. This capability will improve the accuracy of recording and the breadth of information collected by GP to assess the individual's fitness to drive safely. It will also facilitate enhanced education and understanding for the older person about their capacity to drive safely.

Other education and training based resources and products can be linked to the on-line facility including resources such as *On the Road 65Plus* and education/training webinars for health professionals.

A medical practitioner working group has been established to support the transition from the current paper-based system to online reporting. The group will also have a role as 'champions' within the profession to help raise awareness and understanding about the on-line system, the fitness to drive medical assessment process and the AFTD Guidelines.

Evaluation of the NSW Older Driver Licensing System

In response to the Older Driver Taskforce recommendation, The George Institute for Global Health has been commissioned to undertake a comprehensive evaluation of the current older driver licensing system. The evaluation aims to assess the effectiveness of the older driver licensing system (in particular, changes made in 2008) on road safety outcomes for older drivers and other road users. The evaluation will also consider the effect of licensing policy on

the independence and ability of older drivers to access services and maintain social connections.

A draft evaluation report is expected in early 2017. The findings of the evaluation will be used to inform the development of a comprehensive policy response during 2017 including initiatives to further improve communication and educational programs. For example educational programs that inform older people, in particular their families and carers, of the benefits of self-regulation, driving safer vehicles, transitioning and retiring from driving.

5.6 Professional drivers

Heavy Vehicle Drivers

The NSW Heavy Vehicle licensing framework requires drivers to progressively build and gain experience before progressing from smaller to larger heavy vehicles. It requires drivers to undertake knowledge and practical testing relevant to the vehicle in which they are applying to drive.

The Heavy Vehicle Competency Based Assessment (HVCBA) scheme is available to existing driver licence holders wanting to upgrade their licence to drive a heavy vehicle. It provides training in the operation of a heavy vehicle as well as training in securing loads. Heavy vehicle driver licence applicants have the flexibility to choose their own trainer and are assessed against clearly-defined criteria relating specifically to heavy vehicle driving.

The framework uses the assessment rules and criteria identified by the National Heavy Vehicle Competency Based Framework, which was jointly development by jurisdictions across Australia. The criteria cover all areas of heavy vehicle driving, including pre-inspection checks, load security and driving under load. All criteria must be successfully demonstrated by a licence applicant and provides a more thorough and demanding assessment than the standard driving test.

Under this framework, training and assessment is provided by suitably qualified heavy vehicle driving instructors who have been approved as accredited assessors with a Registered Training Organisation (RTO). In order to improve the integrity of the scheme and mitigate fraud and corruption risks RMS has mandated:

- The separation of training and assessment which means an assessor that conducts an applicant's assessment (Final Competency Assessment or Competency Test) must not be the same person who delivered the training course for that applicant.
- The introduction of in-cabin cameras which record the on-road components of the Final Competency Assessments and Competency Tests.

There are two options for completing HVCBA: a Final Competency Assessment (FCA) or Competency Test (CT). An applicant's progress through the criteria by way of training and assessment is recorded in the Heavy Vehicle Competency Based Assessment log book. Once all of the criteria are complete, the applicant undergoes an FCA and, if successful, is issued with a Certificate of Competency.

Alternatively, applicants may elect to enter into heavy vehicle driving by taking a CT with an accredited assessor. HVCBA assessors are required to record the applicant's criteria assessment results and FCA or CT results via an online system, the Heavy Vehicle Competency Online Reporting System (HVCORS). This data is then automatically submitted to RMS.

Roads and Maritime/ Service NSW Driving Tests are still available at some regional locations where there are no HVCBA assessors, and for specific licence applications including

advanced age, drivers with a disability and driving instructor applicants. The Certificate of Competency (CoC) that is issued to successful applicants is accepted by all Australian states and territories for the purpose of a licence upgrade.

To improve and strengthen the Heavy Vehicle Competency Based Assessment (HVCBA) scheme, RMS has recently required the separation of training and assessment roles to mitigate any potential conflict of interest that could arise in the heavy vehicle license assessment process. RMS also introduced a requirement for in-cabin cameras to be in operation in order to record end-to-end on-road assessments.

Work is currently underway to consider further how the scheme can be improved to deliver better regulatory outcomes. A project has commenced aimed at, amongst other things, improving compliance by better managing registered training organisations, streamlining the process for management, education, auditing and sanctioning in addition to introducing a robust policy to enable better communication between relevant stakeholders.

RMS has been working to strengthen governance of the HVCBA scheme since the release of the Independent Commission Against Corruption (ICAC) report in 2014. Efforts undertaken include the introduction of a number of scheme-specific policies and procedures, in-cabin cameras and a requirement for separation of training from assessment by the same person.

TAFE NSW Programs to improve heavy vehicle safety

TAFE NSW also conducts Heavy Vehicle Induction & Refresher programs, providing units of competency from TLI31216 (Certificate III in Driving Operations) that target licenced heavy vehicle drivers. This Certificate has been included on the NSW Skills List since 2015.

In addition, as part of TAFE NSW's project to address skill shortages in the transport industry and the growth of road freight, a survey of transport operators was conducted from across Australia to identify the critical skills required by truck drivers. The necessity for safety skills among truck drivers was a common theme throughout the survey. For example, 99 per cent of 75 respondents considered fatigue management and the associated chain of responsibility, to be safety skills of critical or high importance.

An outcome of the project is that TAFE NSW has proposed a Certificate III in General Heavy Vehicle Operations qualification as a Transport Operator Apprenticeship. This proposal is currently being considered at the national level by Australian Industry Standards.

Cost of driver training and allocation of cost

HVCBA is a user pay based system. An estimation of the total price paid by an applicant for training and assessment would be between $600 and $2,000 depending on the licence class.

Once drivers have successfully completed training and assessment they can attend a motor registry (or Service NSW centre) and collect their licence.

HVDART is available for licence class Medium-Rigid (MR) and Heavy-Combination (HC), and are generally offered in regional areas where HVCBA is not available. The cost of the test is $55 inclusive of GST.

HVDART is offered at selected locations throughout NSW and conducted by Heavy Vehicle Testing Officers, as part of a Service NSW offering.

Whilst Roads and Maritime Services works collaboratively with RTOs in the delivery HVCBA to customers across NSW, it does not regulate the costs associated with the services (except for HVDART).

The costs for the HVCBA are set by the private market with no involvement by RMS.

Point to Point drivers

Point to Point transport includes all flexible transport services using vehicles with 12 seats or less (including the driver) that can take customers on the route they choose, at the time that suits them.

On 22 June 2016, the *Point to Point Transport (Taxis and Hire Vehicles) Act 2016* was passed by NSW Parliament. The Act introduces a number of safety requirements to the point to point transport industry, which will commence in the first half of 2017.

The new Act stipulates that the provider of a passenger service has a duty to ensure, as far is reasonably practicable, the health and safety of drivers, passengers or other persons in connection with the provision of the service.

The Point to Point Transport Regulation 2016 will include specific safety standards. These safety standards supplement and support the general safety duties that a duty holder must meet. Safety standards will cover specific matters relating to vehicle roadworthiness and registration, taxi security standards, vehicle insurance, driver standards and record keeping.

Point to Point drivers are not required to undertake any additional training as long as they meet the current legal requirements. In terms of licensing, this means that they must hold a valid Driver Authority, appropriate to the service they are going to provide, issued by RMS. Education will be a key aspect of ensuring minimum safety standards are met by Point to Point drivers to ensure the safety of all road users.

5.7 High risk groups

NSW takes a targeted approach to high-risk drivers through re-testing and increased sanctions for some offences. Re-testing provides an opportunity to ensure the driver understands the road rules, the risks of unsafe driving and recognises how to change their behaviour.

In 2015, the Increased Traffic Offender Penalties (ITOP) scheme was introduced for drivers who repeatedly take risks and put others in serious danger. Specifically all drivers with an unrestricted licence who have reached their demerit point threshold twice in five years are required to re-sit and pass the Driver Knowledge Test and complete a driver education course (such as the Traffic Offender Intervention Program - TOIP) at the offenders expense. Approximately 1,000 people have been referred so far to ITOP scheme since 2015.

Traffic Offender Intervention Program

The Traffic Offender Intervention Program (TOIP) is a Local Court based driver education program targeting offenders who have pleaded guilty to, or been found guilty of, a traffic offence. It is administered by the Department of Justice (DoJ).

TOIP has been regulated as an intervention program under the *Criminal Procedure Act 1986* since 2007. The program aims to provide offenders with the information and skills necessary to develop positive attitudes towards driving and safer driving behaviours.

The program is delivered across NSW by volunteers and community organisations such as Police Citizens Youth Club (PCYC). To become an approved TOIP provider, applications are assessed against DoJ guidelines. The assessment is made by a panel involving representatives from Department of Justice and the Centre for Road Safety.

In 2016, DoJ initiated a review of the TOIP, in consultation with CRS, to identify options to improve the overall standard of the program. DoJ reviewed the governance and implementation of TOIP to inform improvements to the program. Transport for NSW engaged

a consultant to identify best practice in driver education programs to inform improvements to program design and content.

The best practice review commissioned by Transport for NSW recommended that the current TOIP content be greatly enhanced by providing greater detail around topics, key road safety messages and delivery in the Guidelines. Opportunity for behaviour change can be enhanced through greater interactivity in sessions including facilitated discussions and self-reflection activities. Both agencies are currently working together to update the Operating Guidelines to incorporate recommendations from the review from both an administration and road safety outcome perspective.

Whilst the efficacy of the current TOIP has not been evaluated, similar traffic offender programs have demonstrated positive results. Evaluation of the NSW Traffic Offender Program between 1993 and 1995 found that the re-offence rate of TOPs participants (19.6 per cent) was about one-third less than that of non-TOPs offenders (29.1 per cent). However, further analysis revealed that when a number of demographic variables were controlled out of the analysis, TOIPs participation had an independent effect on re-offending behaviour with participation in a program reducing the probability of re-offending by 25 per cent. Another evaluation was the Blacktown Traffic Offender Program (BTOP) in 2012 which revealed that only 15.2 per cent of BTOP program entrants committed an offence, and 10.5 per cent committed a traffic offence in the 2 years following program commencement.

Reach of program across regional metro and rural areas

There are six TOIP providers in NSW; PCYC, Blacktown TOP, Port Macquarie Neighbourhood Centre, Road Sense, ROAD Awareness, and SMART Driver. PCYC is the largest TOIP provider, conducting courses at over 50 locations across the state, many of which are in regional locations.

Providers are currently seeking approval from DoJ to expand the number of provided in additional locations, including a number of regional areas and DoJ seek to approve these locations 2017.

Driver trainers

TOIP is presently administered by DoJ and delivered by community organisations. To become an approved provider, the organisation must submit an application, including their proposed course outlines, to the DoJ for approval against the TOIP Operating Guidelines. These guidelines are set to be reviewed and amended in 2017, to better meet address road safety issues.

Mandatory Alcohol Interlock Program

The Mandatory Alcohol Interlock Program (MAIP) applies to drivers who are convicted of high range, repeat and other serious drink driving offences on or after 1 February 2015. The program is an action of the NSW Road Safety Strategy and demonstrates NSW's commitment to improving road safety and reducing drink driving on NSW roads. The MAIP replaces a voluntary alcohol interlock program, which operated in NSW since 2003.

On 1 February 2015, the *Road Transport Act 2013* was amended by the *Road Transport Amendment (Mandatory Alcohol Interlock Program) Act 2014* to prescribe certain driving offences as 'mandatory interlock offences'. The interlock licence conditions and offences relating to the program are contained in the Road Transport (Driver Licensing) Regulation 2008. Other Australian States and Territories with mandatory interlock programs currently in place include the Australian Capital Territory, Queensland, Victoria, South Australia and Tasmania.

The aim of the interlock program is to reduce drink driving-related deaths and injuries on NSW roads. Research shows that drivers previously convicted of drink driving are around four times more likely to be involved in a fatal crash than an average driver (AIP, 2015). The interlock program is designed to help drink drivers separate drinking and driving and reduce this road safety risk. This is achieved by keeping offenders in the licensing system on a closely monitored basis, with the interlock physically preventing drink driving.

Research also shows that interlock programs lessen the number of offenders who reoffend while a device is installed in a vehicle (MAIP, 2015). Best practice programs include shorter up-front licence disqualifications followed by an interlock participation period to ensure the separation of drinking from driving as soon as possible after the offence. These programs are most often applied to offenders that are considered to be at a higher risk of reoffending. Based on other jurisdictions' experiences, it is estimated that the NSW mandatory program could cut the reoffending rate of program participants from the current one in six, to one in twelve. This is estimated to reduce drink driving offences by about 500 a year and increase safety on NSW roads.

Offenders are able to receive an Exemption Orders for the Mandatory Alcohol Interlock Program. Offenders with an interlock exemption order are required by Roads and Maritime Services to complete a drink drive education program before they can re-apply for their licence to return to driving. For these offenders, the Sober Drive Program has been identified as a suitable drink drive education course. The Sober Driver Program is an existing drink drive rehabilitation program delivered through Corrective Services NSW. Offenders who have a court supervision order in addition to an interlock exemption order can continue to complete the program through Corrective Services. A community-based Sober Driver Program is administered through a commercial provider for those without a court supervisory order.

ARTD Consultants has been commissioned to independently evaluate the NSW Mandatory Alcohol Interlock Program, to help improve the program and to understand its road safety effects. ARTD Consultants will be interviewing and surveying participants, providers and partner agencies, and analysing road safety data. The first survey of participants has commenced in June 2016 and aims to understand participants' experiences of the program.

Sober Driver Program

The NSW Sober Driver Program is a state-wide education and relapse prevention program for repeat drink drive offenders convicted of two or more offences within five years. The program has been in place since 2003 and was developed by a whole-of-government expert group, based on best practice adult learning principles.

The program is fully funded by Transport for NSW and is delivered by Corrective Services NSW (CSNSW) under a Memorandum of Understanding (MoU). The current MoU covers the period 1 July 2016 to 30 June 2019 and includes funding of up to $850,000 per year. Eligible offenders are most commonly referred to the program through their Community Corrections Officer but can also be referred by a magistrate as part of a person's sentence.

Since 30 June 2005, 2,091 offenders had completed the program. The Sober Driver Program is 20 hours including 18 hours of group work and two hours of take home tasks. The standard program is a nine week (two hours per week) educational and therapeutic program that addresses issues such as the consequences of drink-driving, the effects of alcohol on driving, managing drinking situations, alternatives to drinking and driving, relapse prevention and stress management. The condensed program is delivered across three weeks (one 6-hour session per week).

Evaluation conducted by ARTD Consultants (2006) showed that after two years reoffending for the 2002-2005 cohort was about 5 percentage points lower among Sober Driver participants compared with the comparison group: 4.9 per cent of program participants had re-offended compared with 10.2 per cent among the comparison group. Those who were deterred from re-offending in the period following the program remained deterred – the program did not simply delay their reoffending. The difference remains at about five percentage points.

The reduction effect equates to one less case of recidivism after two years for every 19 people in the target population who complete the program. Based on the program enrolments over two years, it was estimated the program prevents 46 fewer people from being charged with a repeat drink driving offence within two years. However, because detection rates are low, many more instances of drink driving may be prevented. The evaluation found that the Sober Driver Program is being implemented as intended, administered effectively and is well received by participants.

A follow up evaluation was conducted ARTD Consultants (2010) assessing the 2006/07 cohort of program participants which demonstrated a similar pattern of reoffending to the original evaluation in 2006. After three years follow-up, the absolute difference between the groups was about four percentage points. In relative terms, after accounting for confounding variables of Indigenous status and high offending, the Sober Driver Program group was 44 per cent less likely to re-offend compared with the comparison group.

At this rate, 25 people need to do the program to prevent one person from re-offending which represents a cost of $13,913 (in 2010) to prevent one person from being caught re-offending. However, for every detected re-offender, the Sober Driver Program prevents many more people driving drunk because not all those who do drive while drunk get caught. A cost benefit analysis following the 2006 evaluation showed that for every dollar spent on the program the return for road safety was over $2. As the measured impact of the program was similar for the 2006/07 cohort of program participants, the cost benefit is likely to be similar.

Driver trainers

Sober Driver program resources include a comprehensive facilitator manual which was recently updated in 2015 and supporting resources to ensure consistent delivery of the program. Facilitators deliver the program in pairs to ensure quality and maintain engagement of participants. Facilitators are required to have experience in group work skills and must also attend a three-day Sober Driver Training Workshop before they can facilitate a program. One day refresher training courses are also available for facilitators who have previously attended a workshop, but have not delivered the program recently. Corrective Services is currently developing e-learning modules to replace the face-to-face refresher training workshops.

Reach of program across regional areas

The Sober Driver Program is delivered at over 30 Community Corrections offices across NSW including regional locations. The SDP team continue to promote the program at key regional locations and where data indicates high conviction rates for drink driving offences.

5.8 Other road user groups

Transport for NSW and Roads and Maritime Services are working closely to review the current Driver Knowledge Test, which will involve a review and update of the driver syllabus. The review will include current content around awareness of other road user groups such as

motorcyclists and other vulnerable road users. As part of the review of the Driver Knowledge Test, the Hazard Perception Test will be re-designed.

CRS is exploring avenues to review various components of the GLS to ensure references to vulnerable road users, including cyclists, promote positive interactions to maintain safety for all road users. These components include the Driver Knowledge Test, Driving Test, Hazard Perception Test and Helping Learner Drivers Become Safer Drivers Workshop (for supervising drivers). CRS will also determine whether it is appropriate to include additional vulnerable road user competencies in these tests. The tests were designed to ensure novice drivers, at the various stages of their licence, have sufficient knowledge and hazard perception skills to reduce their risk of a crash.

CRS is also reviewing the Safer Drivers Course following recommendations from a recent quality assurance audit of the course. As part of this process, CRS seeks to ensure references to vulnerable road users are consistent with promoting positive road user interactions. In addition, CRS will review publications aimed at learner drivers and existing road users to ensure they promote positive interactions with vulnerable road users. Publications that will be reviewed are the Driver Qualification Handbook, Hazard Perception Handbook and Road Users Handbook.

In addition, other specific road safety education initiatives target the needs of road user groups other than drivers and riders of motor vehicles. A short summary is provided in the following sections.

Children

The Kids and Traffic Early Childhood Road Safety Education Program provides information and resources to early childhood educators, families and other carers of young children. Road safety education resources and consultancy assistance are provided free to all licensed children's services in NSW, including preschools, long day care and family day care. Information is also available online to help reduce fatalities from children being run over in home driveways.

The NSW road safety education program addresses pedestrian safety issues for children from kindergarten to Year 12 in all NSW schools with a range of resources for principals, teachers and educators. Teachers deliver the program as part of the Personal Development, Health and Physical Education curriculum in Years Kindergarten - 12. Resources include strategies for communicating road safety information with parents, carers and the school community.

Passengers

Effective road safety needs to be developmentally appropriate and relevant to the needs of the students. The majority of young people are passengers and so a key focus area of driver education in schools is passenger safety, teaching assertiveness, negotiation and refusal skills, and managing stress as a road user. Students learn about the role of being a supportive passenger as well as being a responsible driver.

Current road safety campaigns also provide education for passengers on targeted road safety issues. The ‘They’re Counting on You’ campaign encourages the correct use of child car seats and raises awareness that many seats are not fitted correctly. The campaign started in June 2014 to support the launch of a new Child Car Seats website, where parents and carers can compare more than 200 different types of seats and find Authorised Restraint Fitting Stations.

Pedestrians

The ‘Look Out Before You Step Out’ campaign was the first NSW public education campaign aimed to improve pedestrian safety, particularly on higher risk urban roads. Key objectives of the campaign were:

- Encourage pedestrians to be more aware of their own safety and to think before taking risks when crossing.
- Highlight the risks associated with being distracted or inattentive when crossing or making the decision to cross the road.

As part of the 2016 Road Rules Awareness Week, drivers were reminded that when turning left or right at an intersection, they must give way to any pedestrian crossing the road that they are about to enter.

Cyclists

As part of the It’s a Two Way Street campaign, the Centre for Road Safety developed ‘drive rules’ and ‘ride rules’ to communicate the responsibilities of both drivers and bicycle riders to reduce bicycle rider serious injuries and fatalities.

The Connecting Centres Partnership Program supports non-infrastructure programs such as cycling skills and confidence training programs that encourage safe cycling behaviours or educate and inform customers about cycling for transport.

Other Road Users

The Slow Down and Give Us Space campaign reminds drivers to look out for situations where other road users could be in danger on the roadside and ensure they slow down and give them enough room. The campaign also reminds drivers to slow down around emergency workers and roadside workers.

The Be Bus Aware campaign reminds drivers that buses can’t stop quickly. Drivers must therefore give way to buses, not merge too closely in front of buses and reduce speed to 40km/h when bus lights are flashing.

5.9 Overview of community based road safety programs and public education campaigns

Community based road safety programs

Local Government road safety program

The NSW Local Government Road Safety Program (LGRSP) is a partnership program between Transport for NSW, Roads and Maritime Services and local councils. Annual funding for the LGRSP is approximately $5 million. The LGRSP provides funding contributions of up to 50 per cent towards council road safety officer salaries and provides funding for local road safety projects. The program funds over 70 road safety officer positions across over 80 councils, with some officers working across a number of councils.

The LGRSP is administered by Roads and Maritime regional road safety staff, who assist road safety officers and local stakeholders to implement road safety projects. Councils can apply for funding each year, and applications are assessed on a competitive basis within each Roads and Maritime region.

Through the LGRSP, a wide range of programs and projects are delivered directly to local communities, many of which address driver and rider education. These include:

- Running Helping Learner Drivers Become Safer Drivers workshops.
- Running Older Road User Workshops, using our On the Road 65 Plus materials targeting older road users.
- Running road safety workshops for culturally and linguistically diverse local communities.
- Road Rules Awareness Week promotions and education
- Promoting the entire range of TfNSW road safety campaigns (e.g. targeting driver distraction, drink driving, fatigue, speeding, restraint use, motorcycle safety), which all seek to engage and educate the community to help change unsafe behaviour on the roads.

Community Road Safety Grants Program

The Community Road Safety Grants Program helps community groups across NSW to deliver local safety projects. Locally run projects by local groups help to increase road safety awareness and support safer road use. They also help community organisations to develop road safety partnerships with other local groups.

The program will award up to $1.6 million in grants over four years from 2015-16 to 2018-19.

Grants of up to $5,000 are available for road safety projects that involve community engagement and improve road safety awareness in local communities. Larger grants of up to $30,000 are also available, for which more detailed project plans are required.

Grants awarded under the program have included a range of projects targeting driver education, such as:

- Workshops, presentations and other initiatives to help educate young and learner drivers, including disadvantaged youths (e.g. ROADwhyz; Blue Datto Foundation; Red Bend Catholic College Forbes).
- Older road user workshops and other presentations (e.g. Australian Road Safety Foundation; Jubilee Community Services Inc; Illawarra Road Safety Group).
- Workshops, presentations and other initiatives targeting culturally and linguistically diverse communities, refugee groups, Aboriginal communities (e.g. Multicultural Communities Council of Illawarra; MiiMi Aboriginal Corporation; Metro Assist Inc; Passion of Welfare Incorporated Association; SCARF Incorporated).
- Projects to provide road safety instruction for people with disabilities (e.g. Family Resource and Network Support Inc; Giant Steps Sydney).

5.10 Public education campaigns

The following section provides an overview of the suite of road safety public education campaigns currently in market that help to improve road user education of key road safety issues for specific target audiences.

Road safety advertising campaigns are proven to play a role in educating the public on key road safety issues and changing behaviour to reduce trauma on our roads. These campaigns are developed through the incorporation of attitudinal studies as well as behavioural trends

through crash statistics. In addition, previous campaign content and approaches are taken into consideration to build upon existing public knowledge.

Each year, the NSW Government invests around $20 million in road safety public education campaigns. This year, road safety public education campaigns include:

- Umbrella road safety campaign – ‘Towards Zero’.
- Speeding (behavioural) – ‘Mistakes’.
- Speeding (enforcement) – speed cameras, Don’t Rush and school zones.
- Non-restraint use (child) and driveway safety (child) – ‘They’re counting on you’.
- Non-restraint use (adult) – ‘Clip every trip’.
- Fatigue – ‘Don’t Trust Your Tired Self’.
- Enforcement – double demerits and ‘You’re in our sights’.
- Drink driving – ‘Plan B’.
- Drug driving – ‘Mobile Drug Testing (MDT)’.
- Distraction – ‘Get Your Hand Off It’.
- Motorcycle safety – ‘Ride to Live’.
- Pedestrian – ‘Look Out Before You Step Out’

It should be noted that the NSW Police Force generally and the Traffic and Highway Patrol Command (THPC) deliver significant community engagement designed to encourage safe interaction with road users in the broader community and open discussions which can be used to deliver road safety messaging and encourage safer road user behaviours. These are delivered by way of static displays at major events, such as iconic motor sport carnivals such as the “Sydney 500” and the ‘Bathurst 1000’ through to large regional fairs and shows.

6 Issues associated with driver trainers

6.1 Needs of Professional Driver Trainers

Driving Instructors (Needs of Driver Trainers)

In order to safeguard the professionalism and standards of driving instruction, a strict application process must be followed. The following are required:

- Documents and checks.
- Medicals, Criminal & Police Checks.
- Working with Children Check.
- Tests (theory and practical).
- Pass an extended Driver Knowledge Test on road rules (90 questions).
- Pass a driving test (95 per cent pass rate).
- Rider instructors must pass a Motorcycle Operator Skills Test (MOST) with a 100 per cent result.
- Letter of eligibility.
- Driving Instructor training course.
- Cert IV in Transport & Logistics (Car, Truck, Motorcycles).
- Regulator Final Assessment.

There is also an expectation that Driving Instructors (as part of the RMS Fit & Proper policy) are proficient and competent in Language, Literacy and Numeracy.

Older Driver Assessors

The following are required:

- Possess an ACN or ABN certificate.
- Unrestricted Australian Driver Licence.
- Current NSW Driving Instructor licence (Class C).
    - Applicants for Driving Instructor Licenses' must complete a course delivered by an approved course provider accredited by Roads and Maritime Services.
- Signed copy of an Industry Code of Practice from an industry association.
- Curriculum Vitae of work history.
- Current Insurance policies for:
    - $1 million professional indemnity insurance.
    - $10 million public liability insurance.
    - Comprehensive vehicle insurance.
    - Workers compensation as required by law (if applicable).
- Applicants are required to demonstrate an Understanding and Comply with:
    - Roads and Maritime Fit and Proper Person Policy.

- The Code of Conduct for Older Driver Assessment.
- Assessors must successfully complete a Roads and Maritime Older Driver Assessor Workshop.
- Certificate IV in Training and Assessment (TAE40110) including these units:

– TAEASS401 Plan assessment activities and processes and TAEASS402 Assess competence.
or

– TAAASS401 Plan and organize assessment and TAAASS402 Assess competence.
or

– A Roads and Maritime approved equivalent qualification.

There is also an expectation that Older Driver Assessors (as part of the RMS Fit & Proper policy) are proficient and competent in Language, Literacy and Numeracy

Safer Drivers Course

As outlined earlier, a policy, program management and delivery framework was established that enables CRS to monitor accuracy, quality and consistency of presentation and delivery of the Safer Driver Course to ensure the objectives of the course curriculum are being met.

TOIP

TOIP is presently administered by DoJ and delivered by community organisations. To become an approved provider, the organisation must submit an application, including their proposed course outlines, to the DoJ for approval against the TOIP Operating Guidelines. These guidelines are set to reviewed and amended in 2017, to better meet address road safety issues.

Sober Driver Course

Sober Driver program resources include a comprehensive facilitator manual which was recently updated in 2015 and supporting resources to ensure consistent delivery of the program. Facilitators deliver the program in pairs to ensure quality and maintain engagement of participants. Facilitators are required to have experience in group work skills and must also attend a three-day Sober Driver Training Workshop before they can facilitate a program. One day refresher training courses are also available for facilitators who have previously attended a workshop, but have not delivered the program recently. Corrective Services is currently developing e-learning modules to replace the face-to-face refresher training workshops.

Training for heavy vehicle drivers

To become a Heavy Vehicle Assessor in NSW, applicants must meet the following pre-requisite requirements and provide documentary evidence of the following:

- Hold a current Australian Driver's Licence.
- Hold a current NSW Driving Instructors licence.
- Hold two units of competency from the Cert IV in Training and Assessment – TAE40110 (for example, TAESS401 Plan Assessment Activities and Processes).
- Undertake a National Criminal Check.
- Meet the requirements of RMS Fit and Proper Person guidelines.
- Successful completion of the HVCBA Assessor training course approved by Roads and Maritime Services.
- Attend an RMS Code of Conduct training course.

All Driver Trainers need to remain current by updating their training qualifications, licensing details and relevant insurances through their RTO's.

To improve and strengthen the Heavy Vehicle Competency Based Assessment (HVCBA) scheme, RMS has recently required the separation of training and assessment roles to mitigate any potential conflict of interest that could arise in the heavy vehicle license assessment process. RMS also introduced a requirement for in-cabin cameras to be in operation in order to record end-to-end on-road assessments.

Work is currently underway to consider further how the scheme can be improved to deliver better regulatory outcomes. A project has commenced aimed at, amongst other things, improving compliance by better managing registered training organisations, streamlining the process for management, education, auditing and sanctioning in addition to introducing a robust policy to enable better communication between relevant stakeholders.

RMS has been working to strengthen governance over the HVCBA scheme since the release of the Independent Commission Against Corruption (ICAC) report in 2014. Efforts undertaken include the introduction of a number of scheme-specific policies and procedures, in-cabin cameras and a requirement for separation of training from assessment by the same person.

Training for motorcycle riders

A previous Staysafe Committee inquiry into motorcycle safety in NSW identified several issues associated with the delivery of motorcycle rider training in relation to competencies for the NSW motorcycle GLS. Concerns were raised regarding the current level of support provided for service provider contractors affecting their ability to continue to deliver a high-quality service.

The Staysafe Committee recommended that RMS introduce an adequate support system for riding instructors, trainers and contractors; and conducts regular compliance audits of and provides on-going professional development to motorcycle riding instructors. RMS is currently reviewing and updating training materials and support services available to trainers and participants. TfNSW will work with RMS on the outcomes of the review.

The Committee also recommended that RMS works with training providers to ensure adequate availability and accessibility of rider training courses in metropolitan, regional and rural NSW. RMS will undertake a review to ensure availability of Rider Training and Testing Services to customers across NSW. Based on findings from the review, TfNSW will work with RMS to consider options for improving availability and accessibility in metropolitan, regional and rural NSW. The current Motorcycle Rider Training Scheme will be included as part of a broader review of the NSW GLS for motorcycles.

Issues Associated with Commercial Post Licensing Rider Training

As outlined earlier, TfNSW recently commissioned a review of existing post-licensing courses that target key competencies necessary for safe motorcycle riding rather than developing a new returning rider course.

Currently no jurisdiction has developed a specific training program targeting infrequent motorcycle riders, such as returning riders. In Victoria, returning and mature aged riders are specifically targeted through a webpage and the release of their brochure entitled 'Chasing the Dream'. The Brochure is aimed at riders aged 30 years and over, riders riding for the first time or returning to riding after a number of years. The subjects covered in the brochure include the difference between driving and riding, selecting an appropriate motorcycle, protective gear, updating skills, carrying a pillion and vehicle maintenance.

South Australia also targets returning riders through a dedicated webpage that promotes the need for training and appropriate protective wear, and raises awareness of changes in bike design.

Queensland, Tasmania and Western Australia more generally target infrequent riders through their respective Motorcycling Rider Guide/Handbooks.

Transport for NSW will work with Roads and Maritime Services and training providers to better promote appropriate courses identified from the review among infrequent riders, such as returning riders.

6.2 Needs of non-professional driver trainers

'Helping Learner Drivers Become Safer Drivers' Workshops

The Auditor General's 2011 performance audit (Audit Office of NSW, 2011) recognised the critical role parents play to ensure Learners undertake the necessary supervised driving hours, and recommended expanding the program and increasing attendance at these workshops.

The 'Helping Learner Drivers Become Safer Drivers' workshops were developed by Transport for NSW and Roads and Maritime Services for parents/guardians or supervisors of learner drivers to support them in their role as supervising drivers. The workshops are run by council Road Safety Officers and other Roads and Maritime Services employed contractors, and are free of charge.

More than 70 workshops across the state have been delivered in 2016 to almost 800 participants. Each workshop runs for two hours and aims to provide parents with information and strategies to help their learner drivers to become safer drivers. Roads and Maritime Services regions develop a planning schedule each financial year for these workshops to be delivered across local government areas of New South Wales.

The workshops offer practical advice on how to help learner drivers become safer drivers, and cover topics such as:

- How to use the Learner Driver Log Book.
- Planning driving sessions.
- How to deal with difficulties that may arise during driving practice.
- The importance of giving your learner constructive feedback.

As part of the review and modernisation of the Driver Knowledge Test platform, CRS will ensure that the reference material for these workshops aligns with the revised resources and evidence based road safety education principles.

TAFE Partnership

The recent partnership between the NSW Government and TAFE NSW will deliver road safety workshops to apprentices at regional TAFE institutes across NSW. It also recognises that parents and employers play an important role in influencing the road safety choices and behaviours of young drivers. From helping to choose the safest vehicle for them to drive to encouraging young drivers to stick to the speed limit and take regular breaks when they travel. Resources will be developed to assist these groups in ensuring that young drivers receive consistent road safety messages outside the classroom.

6.3 Cost of driver training standards and allocation of costs

Training for Motorcycle Riders

While the NSW pre-learner and pre-provisional rider training are subsidised, training outside of these parameters is not. High cost may act as a deterrent to riders pursuing additional training, such as refresher training. In NSW some independent driver and rider training providers offer refresher rider training courses for returning and other riders. The Motorcycle Council of NSW provides a list of some rider training providers in NSW, some of whom provide rider refresher training.

Training for heavy vehicle drivers

HVCBA is a user pay based system. An estimation of the total price paid by an applicant for training and assessment would be between $600 and $2,000 depending on the licence class.

Once drivers have successfully completed training and assessment they can attend a motor registry (or Service NSW centre) and collect their licence.

HVDART is available for licence class Medium-Rigid (MR) and Heavy-Combination (HC), and are generally offered in regional areas where HVCBA is not available. The cost of the test is $55 inclusive of GST.

HVDART is offered at selected locations throughout NSW and conducted by Heavy Vehicle Testing Officers, as part of a Service NSW offering.

Whilst Roads and Maritime Services works collaboratively with RTOs in the delivery HVCBA to customers across NSW, it does not regulate the costs associated with the services (except for HVDART).

The determination of costs for HVCBA is set by the private market with no involvement by RMS.

7 Safer Vehicles

7.1 Connected and automated vehicles (CAVs)

Road safety benefits and risks

One of the key strategies in the Future Transport Technology Roadmap is to enable CAVs to safely move people, goods and services.

CAVs have a range of automation levels. Vehicles with low levels of automation are commonly available now, with an increasing number of vehicles with higher levels of automation such as automatic longitudinal and lateral control. However these vehicles still require the human driver to monitor the roadway and be prepared to take back full control of the vehicle.

While increased automation will reduce human involvement in controlling a motor vehicle the Safe System approach will still require road environments, vehicle systems and user behaviour to continue to work together to minimise crashes. This may be particularly important for road users outside of the vehicle (e.g. pedestrians, cyclists and motorcyclists) whose safety risks may remain even as automated vehicle technology becomes more wide-spread.

It is recognised that driver error is a contributing factor in as much as 90 per cent of crashes (Rumar, 1990; Singh, 2015) and, as vehicles become increasingly automated, the level of driver errors will fall. Full automation of most of the vehicle fleet could result in a drastic reduction of crashes due to driver error, and it may also largely eliminate road safety harm from high risk and/or illegal behavioural factors of speeding, drink and drug driving, fatigue, unsafe following distances and driver distraction.

Over-reliance on technology

Over-reliance on CAV technology may occur when drivers delegate full responsibility for driving tasks to an automated vehicle system. Over-reliance has been observed in a number of studies, where drivers, for example, forget to correct the speed of their vehicle upon entering a different speed zone (Comte, 1998; Hjälmdahl & Várhelyi, 2004).

Educating users of CAVs about the capabilities and limitations of automated vehicle technology will be essential.

Loss of driver skill

Automating components of the driving task may lead to a loss of skill, this problem is likely to grow as the level of vehicle automation increases (Toffetti et al., 2009). Loss of skill can lead to particular problems in the event of automation failure where the driver is required to regain manual control.

Driver education and training

CAVs will provide drivers with new functions that are currently not taught in driver training. New requirements, such as handing over and resuming control of the vehicle, may need to be incorporated into the training regimes for drivers and driving instructors.

The driver education and training regime would benefit from a thorough assessment of potential risks from improper human behaviour. Findings from such assessments should inform regulatory actions to mitigate risks.

Requiring manufacturers to provide vehicle training should be considered. For example, manufacturers could train drivers on a pre-approved curriculum and provide a proof of training for submission to Roads and Maritime Services. Roads and Maritime Services could 'endorse' an individual's existing driver's license for the operation of a CAV.

Alternatively drivers could be required to certify that they have received and understood manufacturer-provided instructions on the safe and lawful operation of the vehicle.

Input into national work on CAV technology

The NSW Government, along with all other Australian jurisdictions, is providing input into work currently undertaken by both the National Transport Commission (NTC) and Austroads to identify and address issues that may currently impede the safe and reliable introduction of automated vehicle technology on Australian roads.

In addition, CAVs was also the subject of a recent Staysafe Inquiry into Driverless Vehicles. Detailed information was provided by TfNSW in the submission to this Inquiry.

8 Experience of other jurisdictions and related issues

Driver education and training requirements vary significantly between Australian jurisdictions. While jurisdictions have worked together to achieve higher levels of consistency, for example the development of an Australian Graduated Licensing Scheme and National Heavy Vehicle Competency Based Framework, it is acknowledged that there is still opportunity for greater alignment.

8.1 Light Vehicle Drivers

In 2014, Australian jurisdictions, led by NSW developed an Australian Graduated licensing scheme policy framework. The framework recognised that while some jurisdictions have comprehensive schemes in place, which have been effective in reducing casualties and fatalities among young drivers, further measures could be put in place to increase road safety. The paper acknowledges that each jurisdiction has a different starting point and therefore implementation of an exemplar scheme may take longer for some States and Territories. The framework outlines the fundamental components of a GLS and guides, rather than prescribes the implementation of an increasingly effective GLS.

While inconsistencies remain, jurisdictions have agreed that the conditions in the licensing home state determine the conditions to be enforced.

The key differences between the jurisdictions are:

- The ACT and Northern Territory don't have a Provisional P2 stage however they have longer Provisional P1 stages, in comparison to other jurisdictions (three years in the ACT and two years in the Northern territory if you are under 25).
- NSW requires learner drivers to hold their learner license for at least one year. This is the same as all other jurisdictions except the ACT and Northern Territory, where it is only six months.
- NSW and Victoria have the most restrictive laws on mobile phone use for novice drivers. Both jurisdictions have banned the use of mobile phones for both Provisional P1 and P2 drivers.
- Victoria and South Australia have greater restrictions on the number of peer passengers (which means passengers between the ages of 16 and 20/22) that Provisional P1 drivers can have in their vehicle. While NSW restricts the number of peer passengers a Provisional P1 drivers can have between the hours of 23H00 – 05H00, both Victoria and South Australia restrict peer passengers to 1 at all times.
- The minimum age for an unrestricted licence is 20 years in all states including NSW, except in Victoria where it is 22 years. This is because you are unable to apply for a Provisional P1 licence until you are 18, which you must hold for a minimum of one year. And then must hold a Provisional P2 licence for three years.

All drivers nationwide must take a driver knowledge test prior to obtaining a learner licence and a driving test prior to a Provisional P1 licence. While the type of tests novice drivers must complete are relatively similar around Australia the positioning of these tests vary:

- Victoria, South Australia and Western Australia also require learner drivers to take a Hazard perception test prior to obtaining a Provisional P1 licence. These states then

require drivers to have zero demerit points before they obtain their Provisional P2 licence.

- Currently NSW and Queensland require Provisional P1 drivers to take their hazard perception test before obtaining their Provisional P2 licence.
- NSW is the only state that currently requires drivers to take a further test before obtaining an unrestricted licence. Victoria and Western Australia require drivers to have no demerit points before an unrestricted licence will be issued.

8.2 Motorcycle Riders

Similar to driver training, rider training and licensing varies between jurisdictions. Notably:

- All jurisdictions require riders to take a knowledge test prior to obtaining a learner permit.
- NSW requires riders to take a practical assessment prior to obtaining a leaners permit. Only the Northern Territory, Victoria and South Australia have similar requirements.
- Queensland is the only state that requires a rider to have held a car licence (at least a Provisional P1) for at least 12 months in the previous 5 years.
- Victoria and Queensland require riders to be 18 before they can apply for a learners permit, the oldest minimum age in Australia. Most other states issue learner rider licences at approximately 16 years.
- In order to hold an unrestricted motorbike licence in NSW you must be 20 years, the same age as an unrestricted car licence. Only Victoria requires riders to be 21 before they obtain an unrestricted licence.
- NSW and Victoria have the longest minimum tenure period for a restricted rider licence (3 years).
- Victoria is the only state that requires learner riders to wear high visibility clothing and to ride with headlights on at all times.
- New Zealand have night time restrictions for learner and provisional riders

8.3 Heavy Vehicle Drivers

Heavy vehicle training and education like all other license classes varies between jurisdictions.

NSW is the only jurisdiction that requires drivers to take a knowledge test specific to the class of licence they are applying for.

In Victoria drivers are only required to pass a VicRoads heavy vehicle knowledge test when applying for a heavy vehicle licence for the first time. This means that drivers can progress to holding a licence that enables them to drive larger vehicles without resitting a knowledge test. However, a knowledge test is required as a component of the compulsory MC (licence that enables you to drive the largest heavy vehicles) training course.

In Queensland drivers are required to re-sit a knowledge test however the test is not specific to the category of licence they are applying for.

NSW and Victoria require drivers to undertake a HVCBA (NSW also gives the option of a heavy vehicle driving test with an RMS testing officer in areas where the HVCBA is not available), prior to obtaining any heavy licence. Queensland does not use the HVCBA, drivers

in Queensland still take a practical driving test for each licence class, but do not go through the HVCBA process.

8.4 Point to Point Drivers

Over recent years there has been significant change to the structure of the point to point travel industry, with many of the Governments around Australia responding to these industry driven changes.

Response packages around Australia have, in a number of cases, seen the removal of knowledge tests and the introduction of new driver authorisations or accreditations.

In Queensland point to point drivers must hold a passenger transport driver authorisation. There are four categories of driver authorisation; the driver must hold the category applicable to the service being provided. Similar to NSW, Queensland requires medical and criminal history checks. In addition Queensland also checks a driver's traffic history to ensure the public's safety is not at risk when travelling in a point to point service.

Victoria requires point to point drivers to hold a Driver Accreditation. To obtain accreditation a driver no longer needs to complete knowledge test however, a knowledge test is still required to driver a wheelchair accessible taxi.

8.5 Older Drivers

NSW has the most comprehensive older driver licensing framework in Australia. It is the only jurisdiction that requires a driving assessment once the licence holder reaches a certain age and provides an option to have a modified licence.

Western Australia, Queensland, South Australia and the ACT require drivers over a certain age to either take a medical or hold a medical certificate when driving. Western Australia only requires a practical driving assessment if recommended by a doctor.

In recent years other jurisdictions have relaxed requirements for older drivers as these drivers were not considered an unacceptable risk to themselves or other road users. In 2013 Western Australia removed the need for drivers over 85 years to take a driving assessment to renew their C class licence. In 2014 Tasmania removed the need for compulsory medical assessments for drivers over 75 years.

All states provide guidance to actively encourage older drivers to self-assess their fitness to drive.

8.6 Interstate Cross-Border Issues

Driver GLS Consistency

There is no nationally consistent licensing framework for novice drivers in Australia. However, the states and territories agreed that jurisdictions would recognise and enforce the license conditions set by the issuing jurisdiction. While this means states are able to set conditions they consider appropriate for novice drivers it also means that although a condition may be set in one state for road safety reasons; inter-state licence holders may not be required to comply with it, limiting the effectiveness of the condition.

Transfer of Interstate Licences

Change to driving test requirements when transferring an interstate learner licence have recently come into effect. From 22 December 2015, all interstate learner licence holders aged

17 to under 25 years must produce interstate documentation showing a minimum of 120 hours supervised driving experience, before attempting a NSW driving test. This will align interstate learner driver licence testing with NSW requirements.

Also in alignment with NSW drivers aged 25 and over, interstate learners are not required to complete or present driving hours and may attempt one driving test without first transferring to a NSW learner licence.

Differences in Road Rules and Road Safety Programs

In NSW there is a peer passenger rule that limits the P1 licence holder to no more than one passenger under the age of 21 between the hours of 11pm and 5am.

The Victorian law (regulation 61 of the Road Safety (Drivers) Regulations 2009) provides that a peer passenger restriction applies to a P1 probationary driver or a corresponding novice driver and, unlike NSW, it is not time limited. The way a corresponding novice driver is defined under the Victorian regulation captures our NSW Provisional P1 licence holders. Victoria introduced this regulation in 2008 as part of its Graduated Licensing Scheme.

TfNSW is updating relevant communication materials to clarify appropriate licence conditions that apply for customers.

Similar interstate border issues may exist with regard to existing driver education and training programs in NSW. For example, there may be issues with interstate drivers that are convicted of alcohol offences by a NSW court and given a MAIP order. TfNSW continues to resolve these issues with relevant jurisdictions and at the national level to work toward national consistency for key road safety issues where possible.

Heavy Vehicle Driver Issues

Under the Austroads Registration and Licensing Task Force a project team called the National Heavy Vehicle Driver Competency Working Group (NHVDCWG) was established to develop the National Heavy Vehicle Driver Competency Framework. The framework establishes nationally consistent minimum competency standards for heavy vehicle drivers. In March 2011, the Standing Committee on Transport endorsed the National Heavy Vehicle Driver Competency Framework. To date only NSW and Victoria have implemented the framework. Tasmania proposes to introduce it in January 2017.

RMS have identified a number of operational inconsistencies in heavy vehicle training between jurisdictions, these include:

- The pre-requisite requirements that applicants must meet (e.g. knowledge test and learner log book requirements).
- The training and assessment method (e.g. quality training and assessment process vs driving test only).
- Differences in the quality of interstate Heavy Vehicle Licence holders, operating within NSW.
- Currently, the interstate Certificate of Competency is only accepted from Victorian providers for eligible NSW licence holders.

Point to Point Drivers

The Mutual Recognition Act 1992 entitles people holding an occupational licence or registration in one state or territory to an equivalent licence in another state or territory provided the work is licensed in both. RMS has advised that from a compliance perspective there are no enforcement issues.

As outlined earlier, NSW will implement a new regulatory framework for point to point drivers. The framework will use a chain of responsibility approach and focus on regulating operators, rather than drivers.

Educational resources and programs

NSW is the only state with specific road safety content as part of the school syllabus. Western Australia engages consultants to support road safety education in schools.

Other jurisdictions provide resources, both on-line and hard copy, to use in schools for teaching road safety in the classroom.

Nationally the Road Safety Education Reference Group Australia (RSERGA), a network of road safety education professionals, meets four times a year to share and discuss school and early childhood road safety education initiatives.

9 Other related matters

9.1 Driver training and CTP insurance

The State Insurance Regulatory Authority advises that the NSW Government does not set Green Slip prices. Green Slip prices are set by the six licensed private Compulsory Third Party (CTP) insurers based on an assessment of industry data and their claims experience, but within Guidelines set by the SIRA. The prices for different types of vehicles reflect the cost and frequency of injury claims against a particular vehicle class (e.g. passenger vehicle, motorcycle, taxi cab) in one of five CTP rating districts.

Having set the base Green Slip price, CTP insurers use a variety of risk-rating factors to offer a discount to drivers considered to have a low risk profile or to impose a loading to those with a higher risk profile. The CTP insurers use the age of the owner or driver as the primary risk-rating factor. The insurers also use other factors such as the age of the vehicle, the geographical zone in which the vehicle is garaged and driver safety record. In identifying safe motorists, the CTP insurers may consider factors such as the number of at-fault accidents in which the motorist has been involved, their demerit point record, comprehensive insurance claims history and no-claim bonus status.

10 Appendix A – Contributing stakeholders

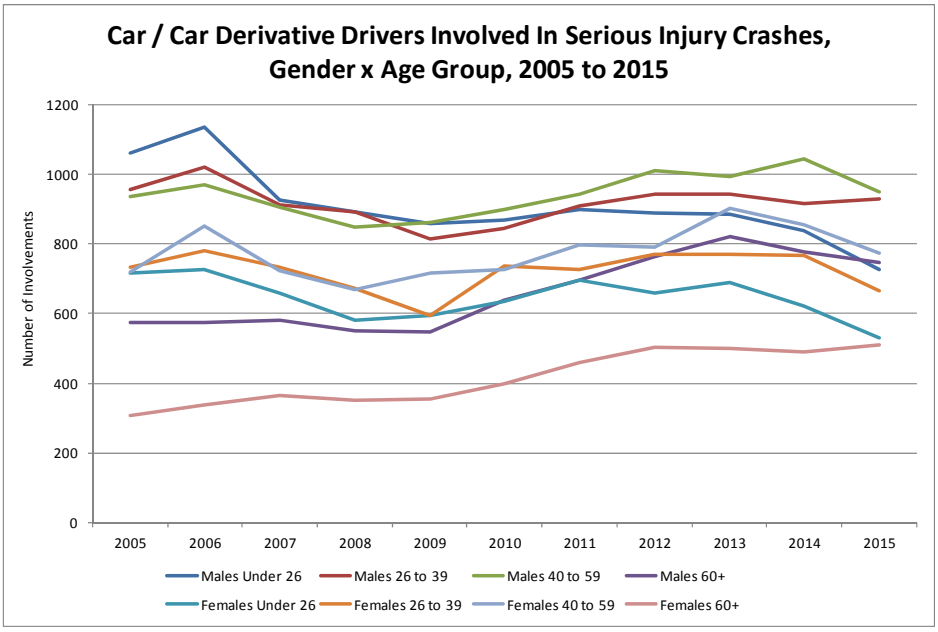
Table 1

External agencies	TfNSW departments
Department of Education	Transport Policy
TAFE NSW	Innovation Research & Reform
State Insurance Regulatory Authority	Centre for Road Safety
Department of Justice/Police	
Roads and Maritime Services	
Office of Local Government	
SafeWork NSW	
Office of the Advocate for Children and Young People	

11 Appendix B – Detailed NSW trauma data

Car/car derivative drivers

Figure 22



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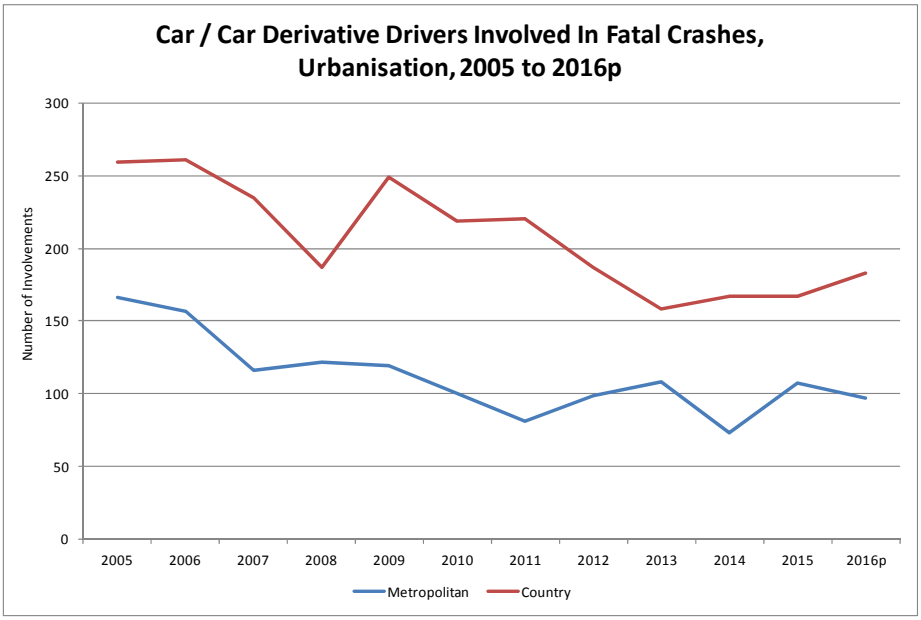

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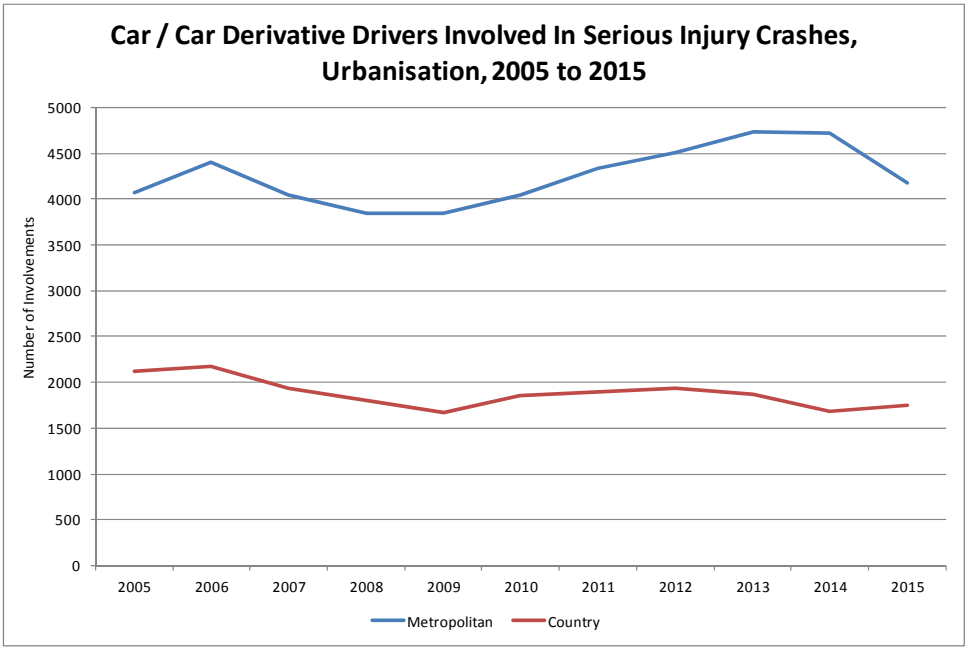

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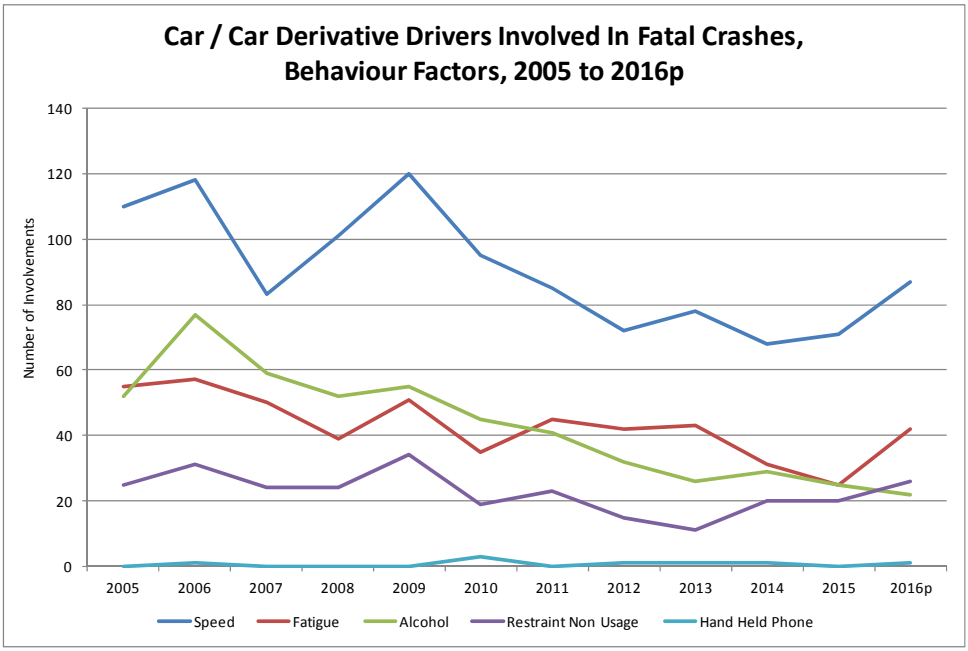

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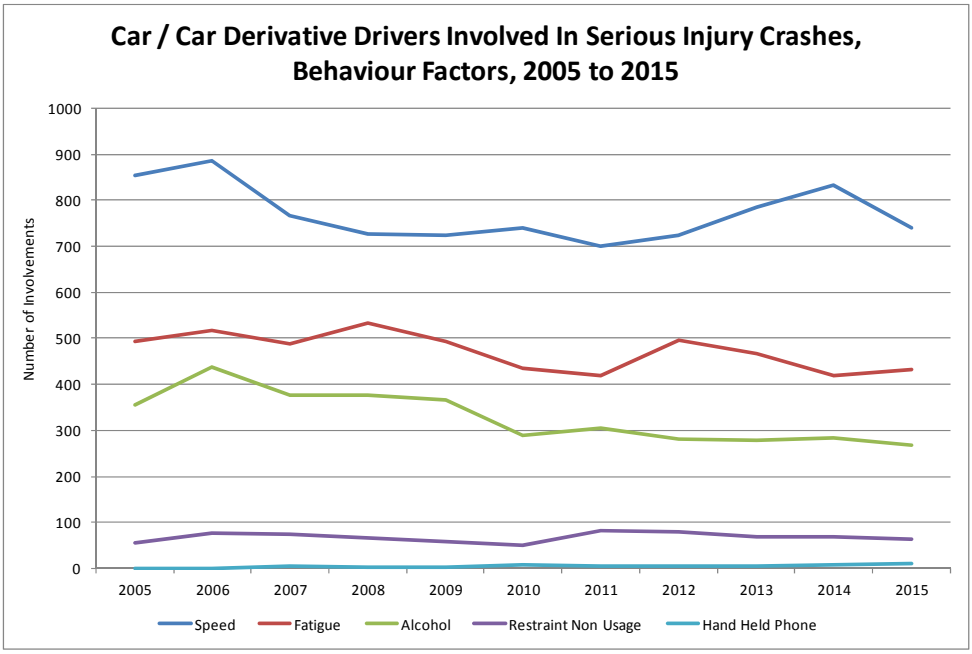

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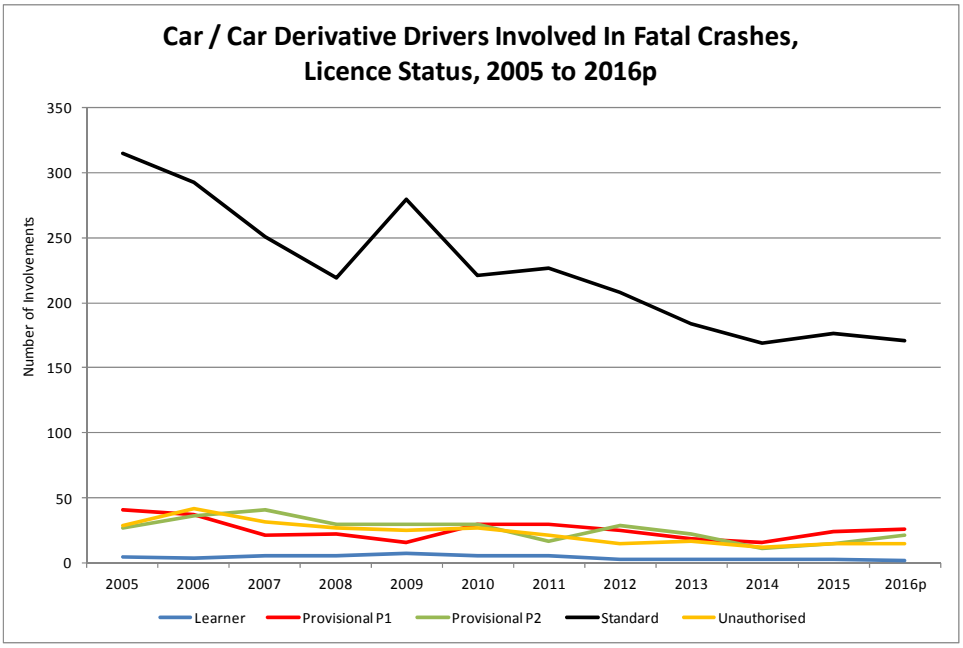

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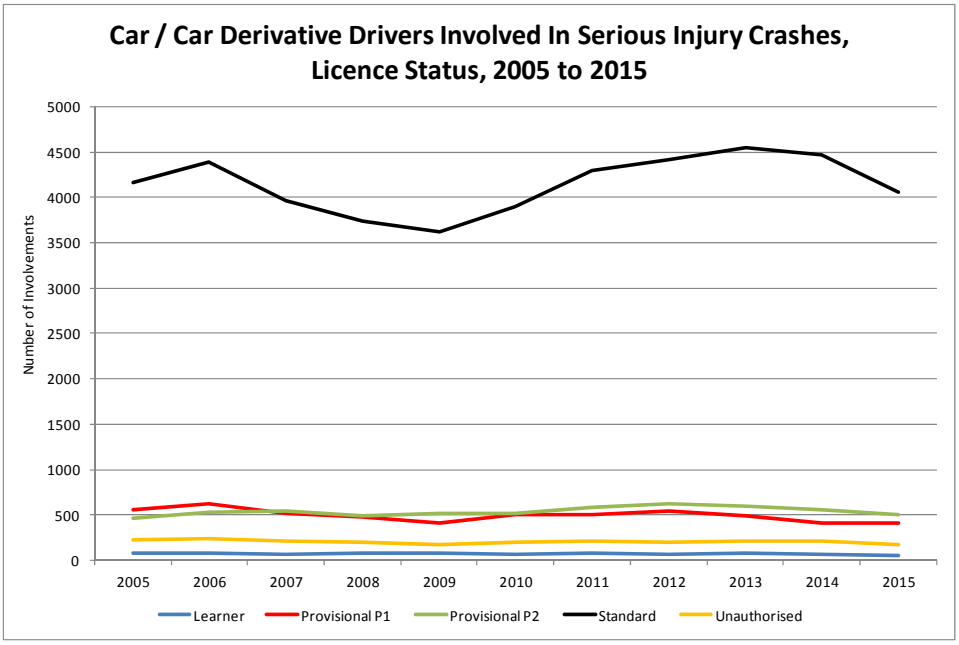
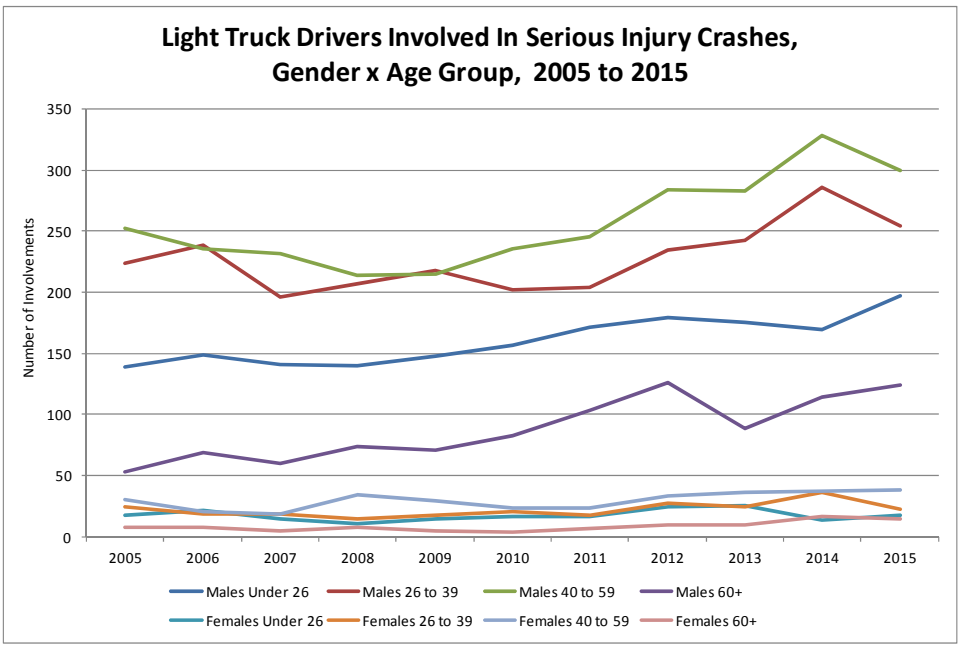


Light truck drivers

Figure 29



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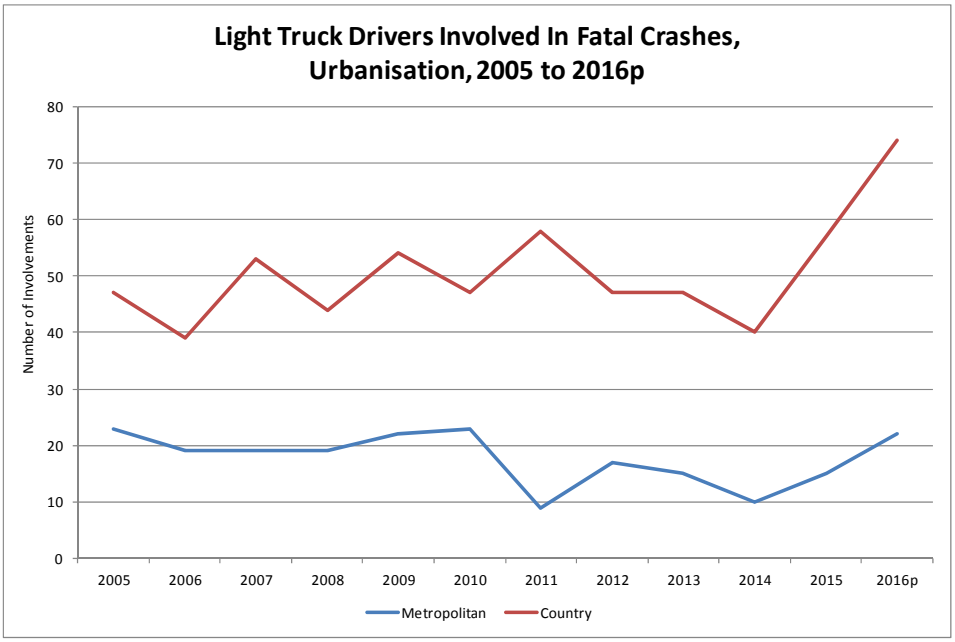

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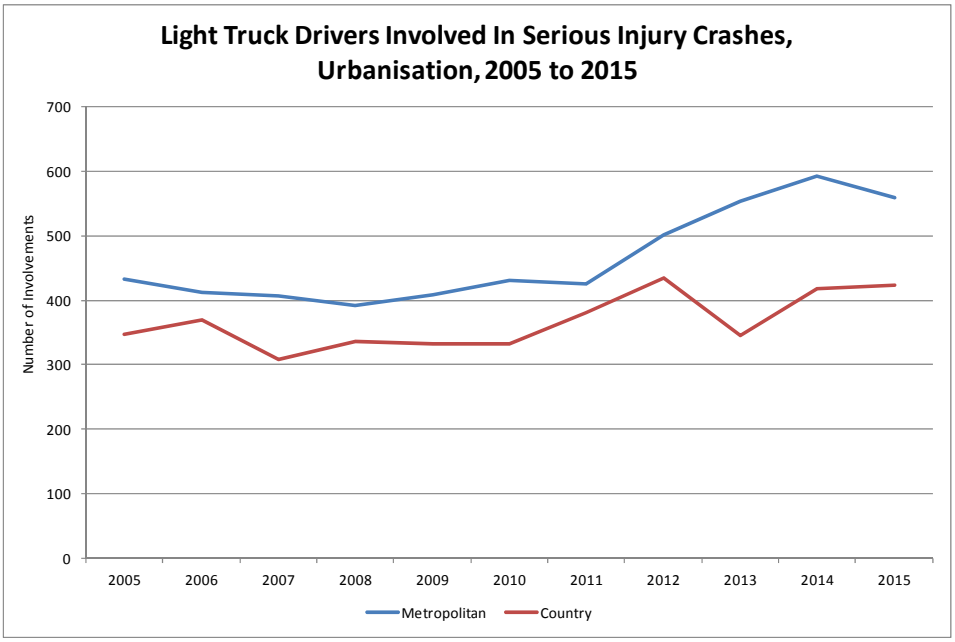

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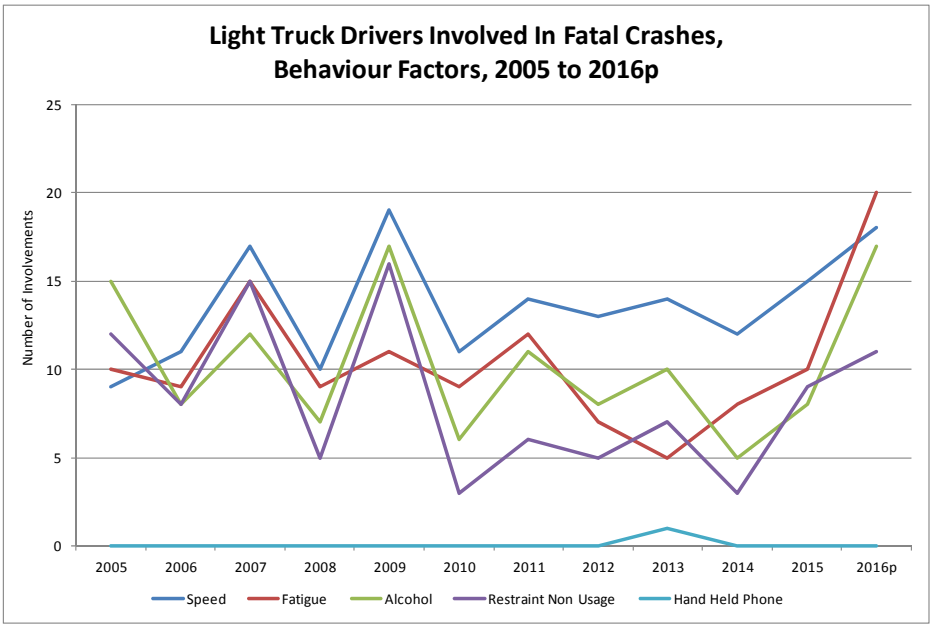

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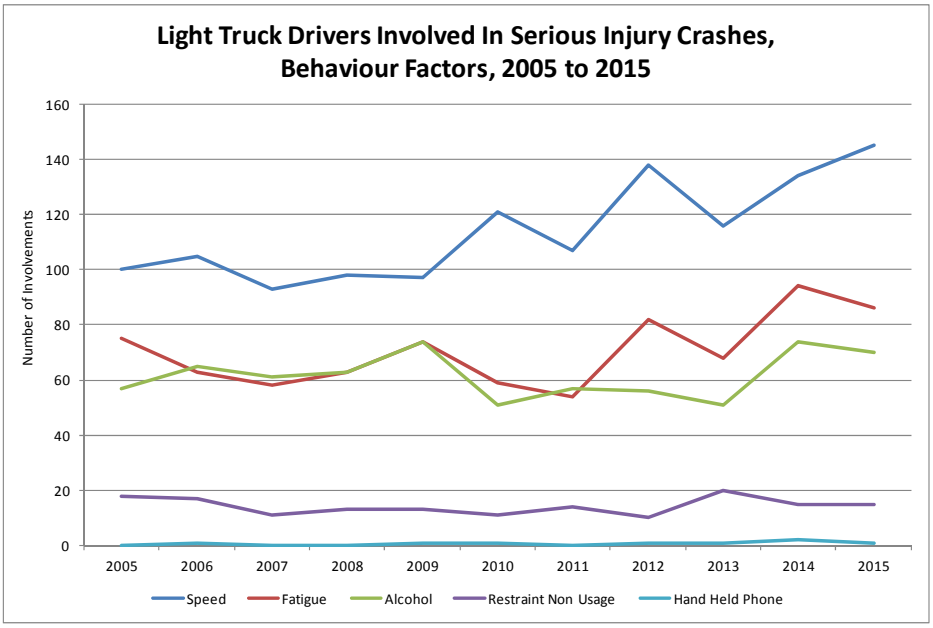

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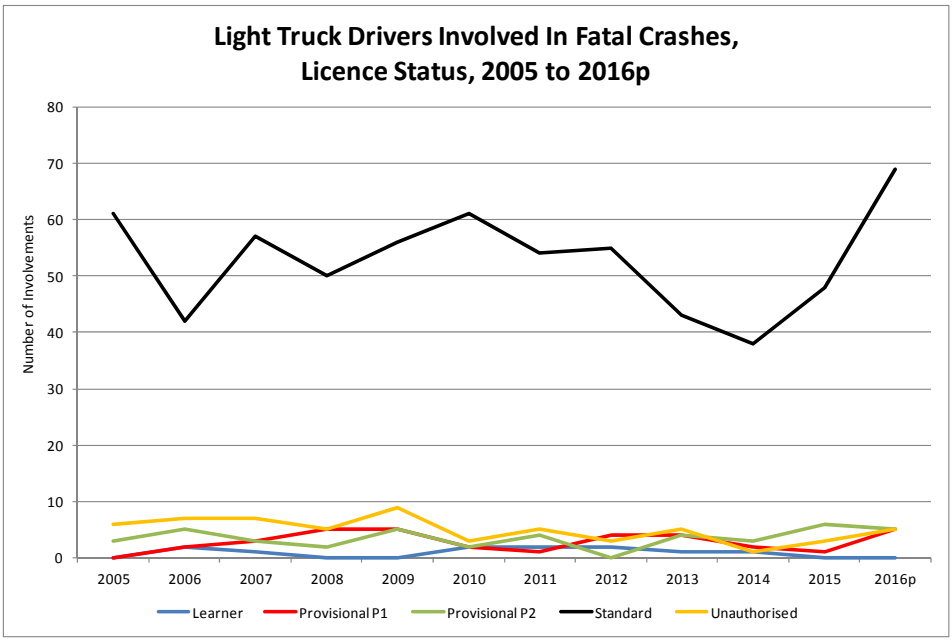
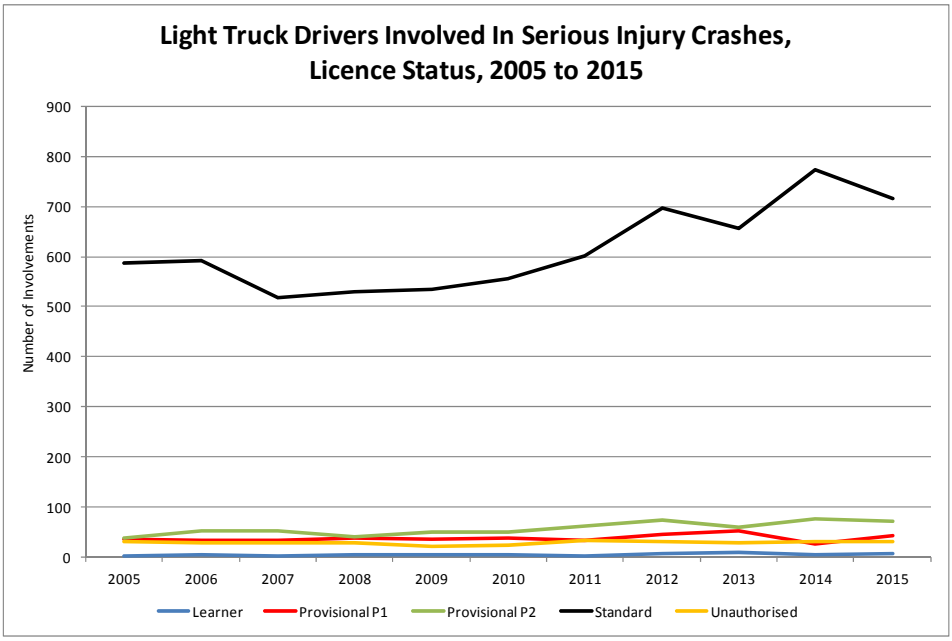


Figure 35



Heavy vehicle drivers

Figure 36

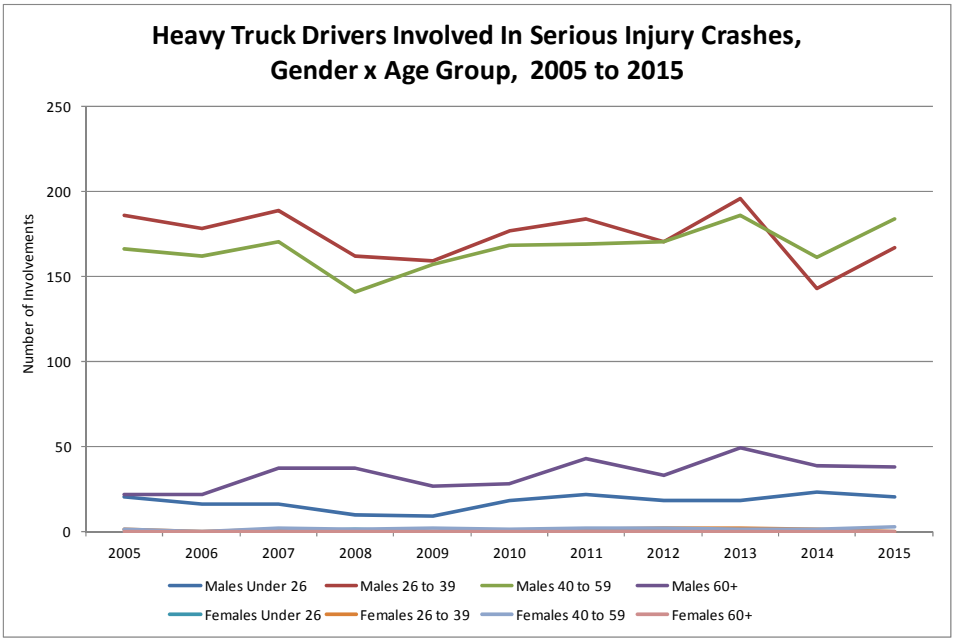


Figure 37

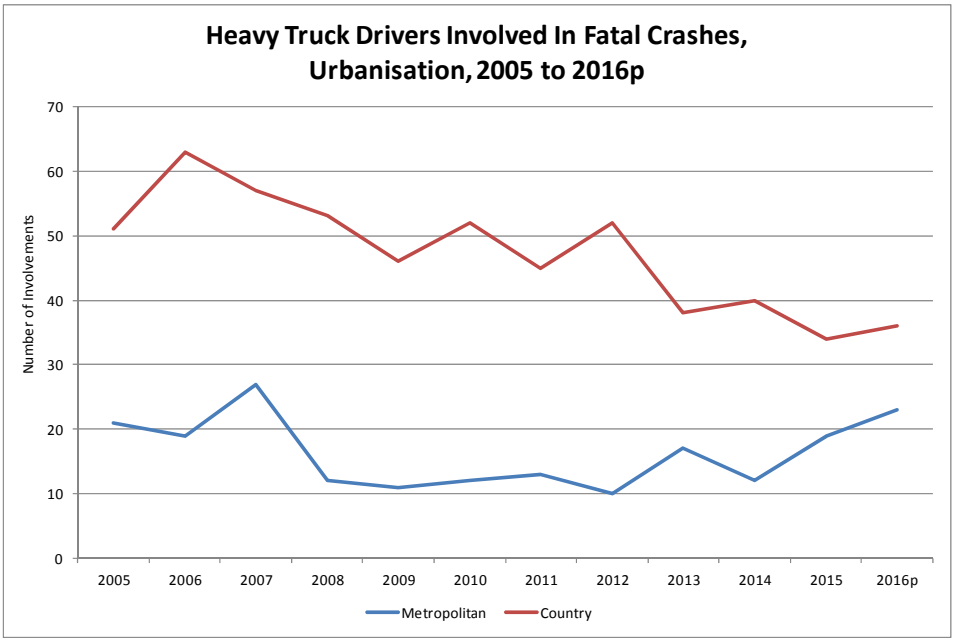


Figure 38

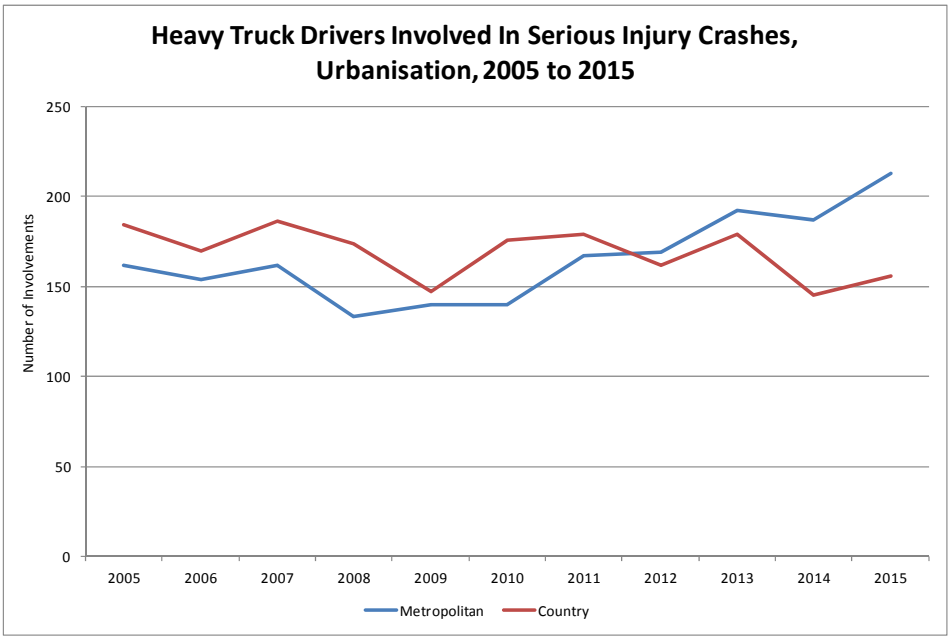


Figure 39

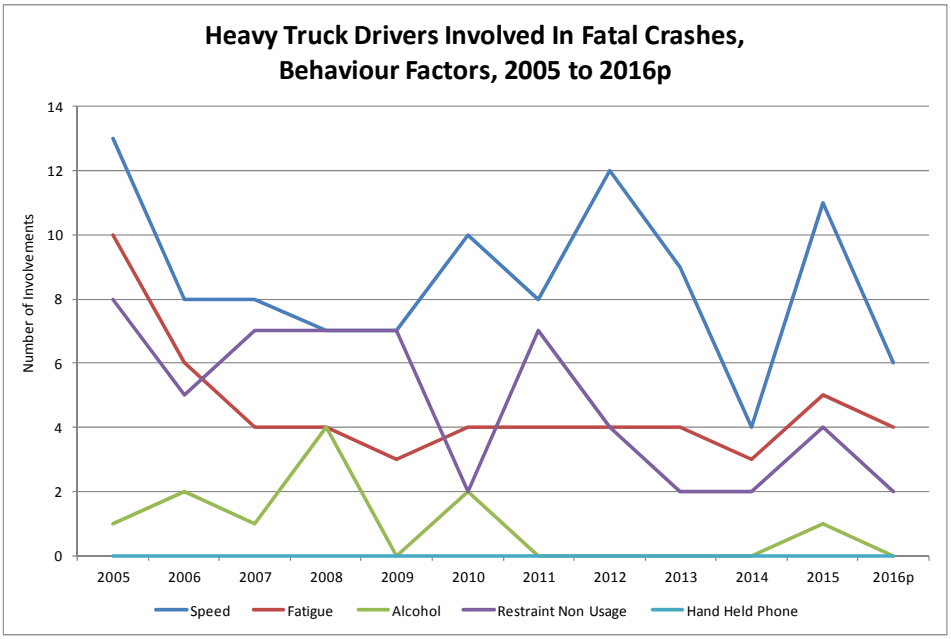


Figure 40

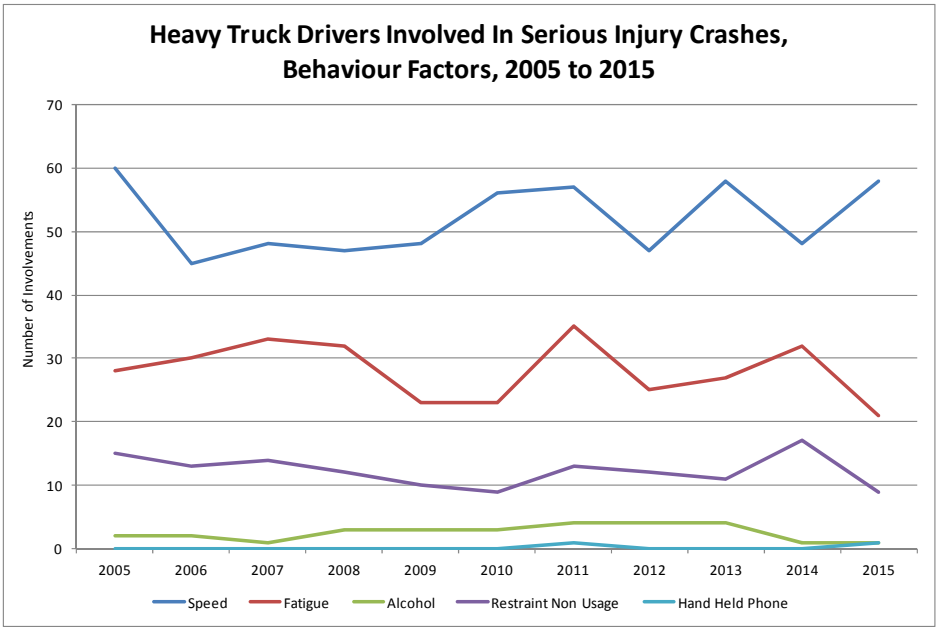


Figure 41

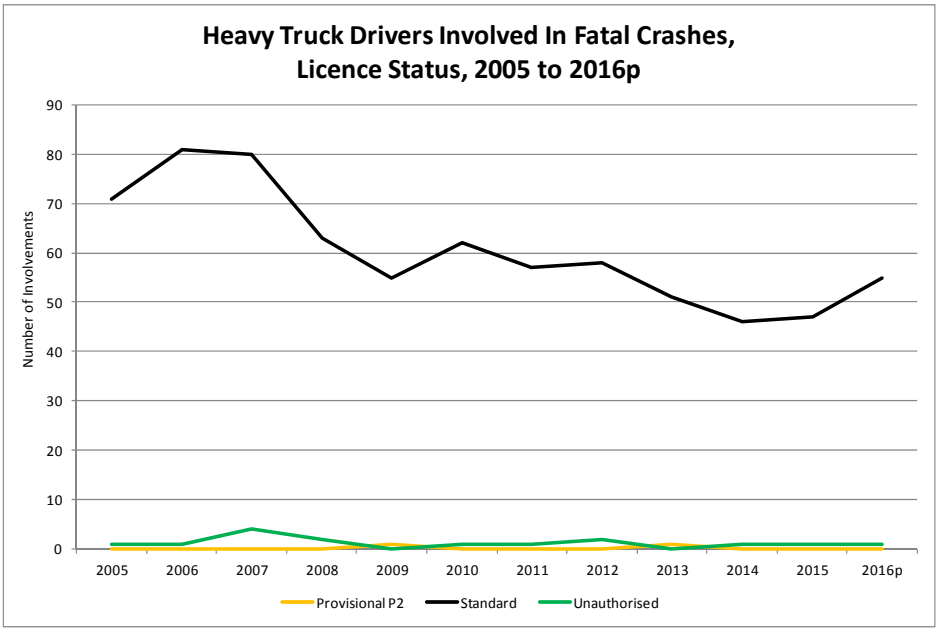
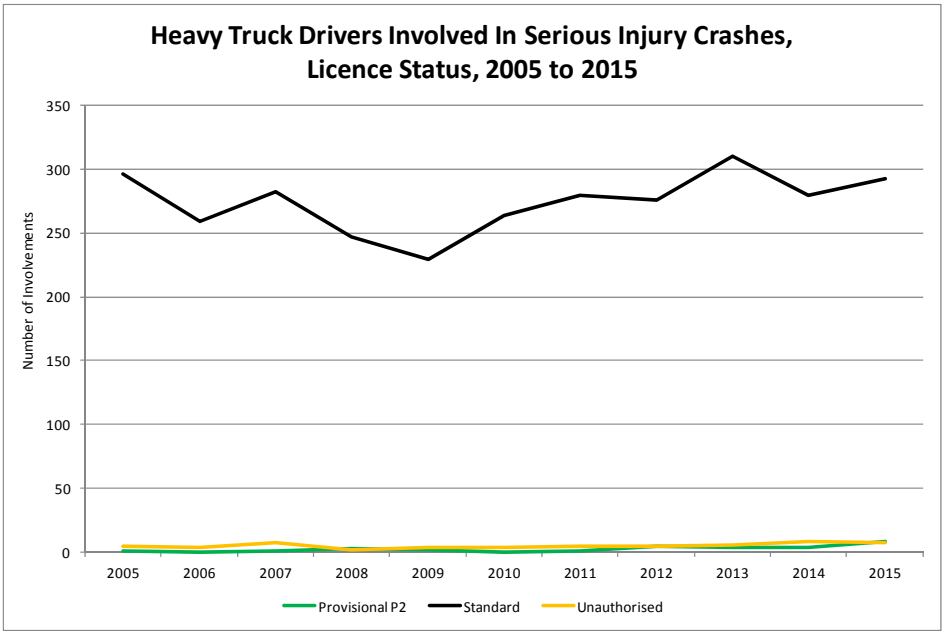


Figure 42



Motorcycle riders

Figure 43

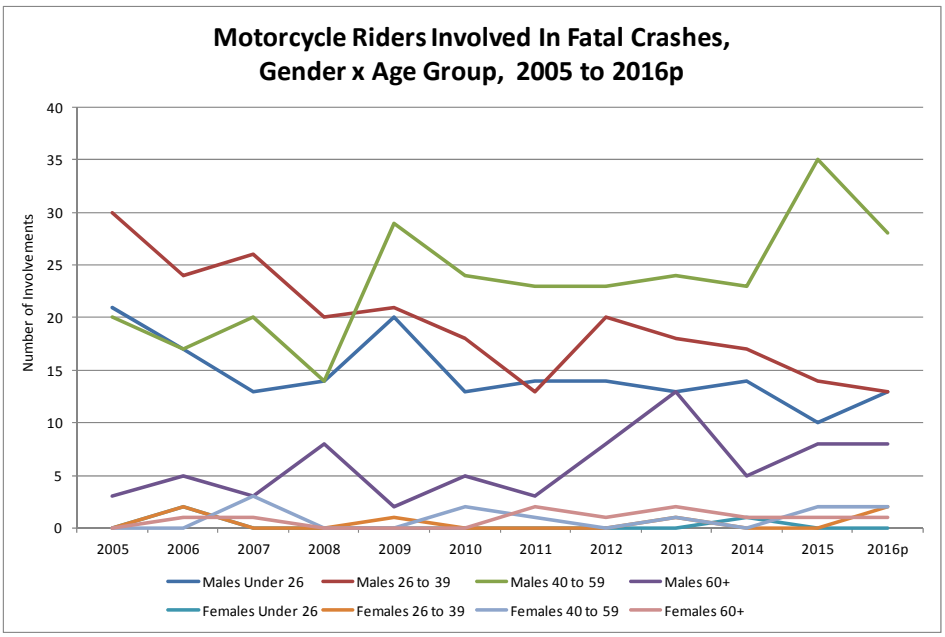


Figure 44

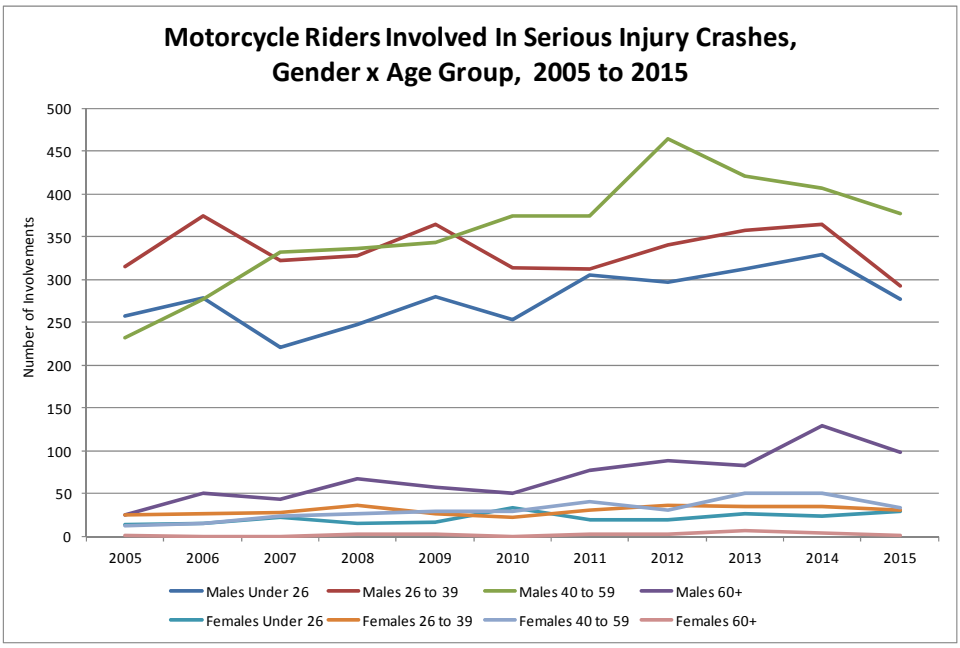


Figure 45

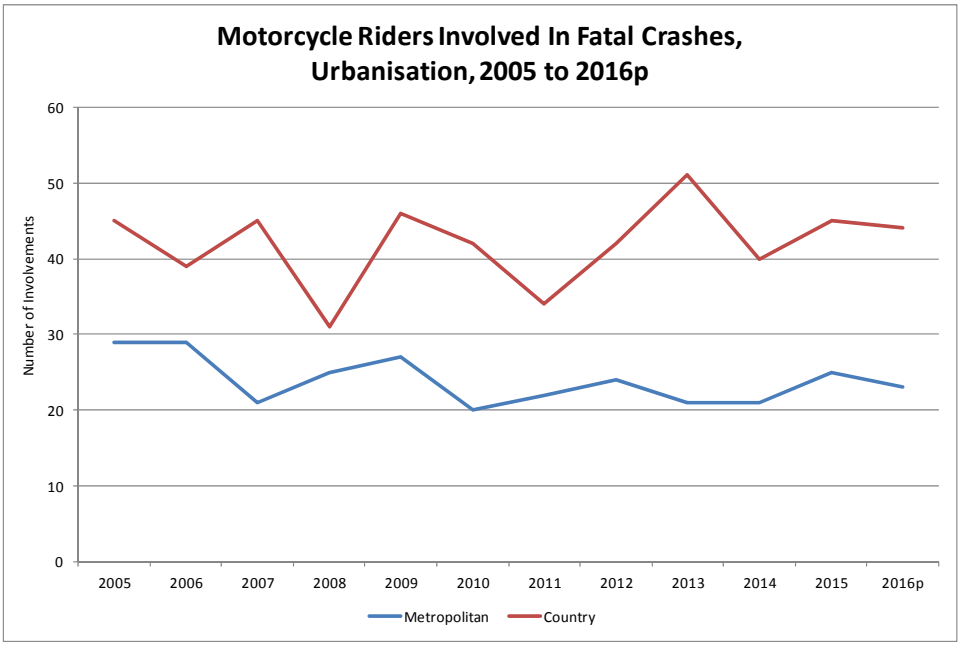


Figure 46

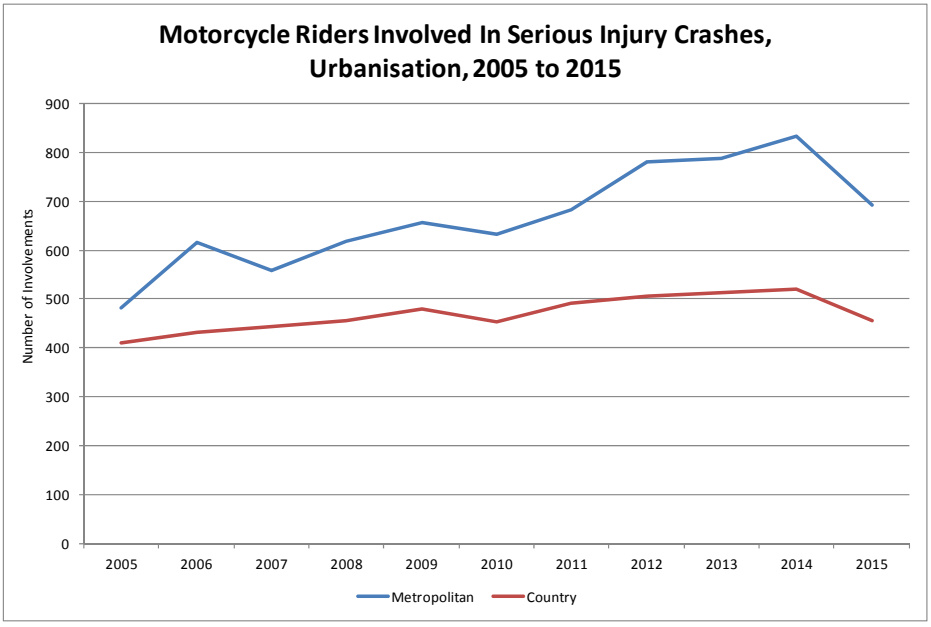


Figure 47

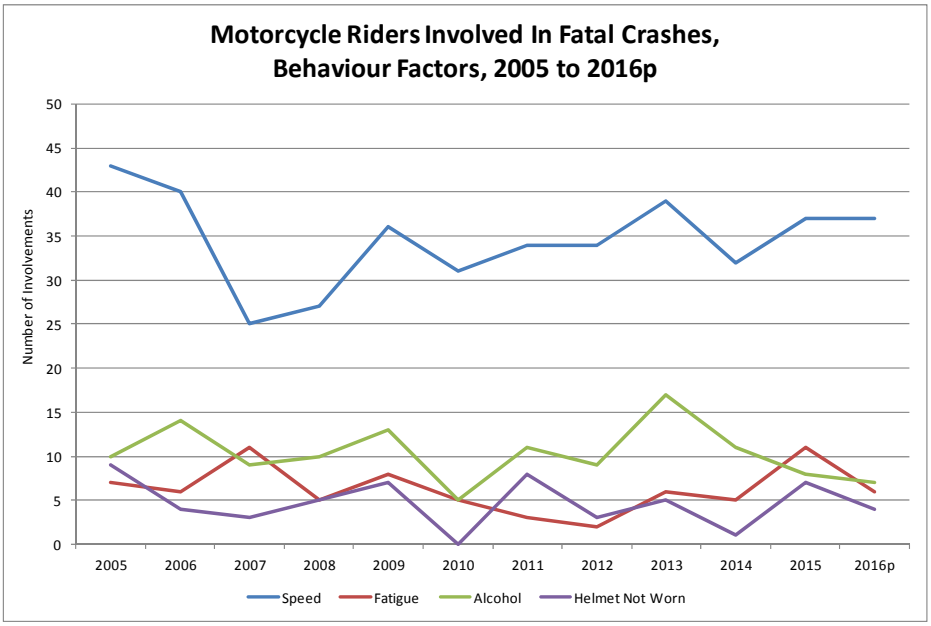


Figure 48

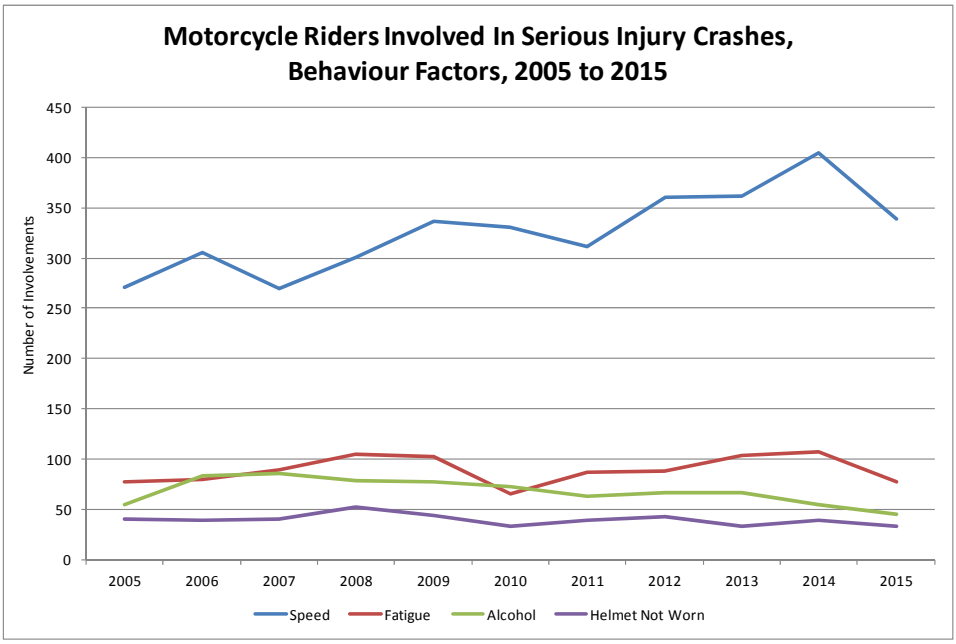


Figure 49

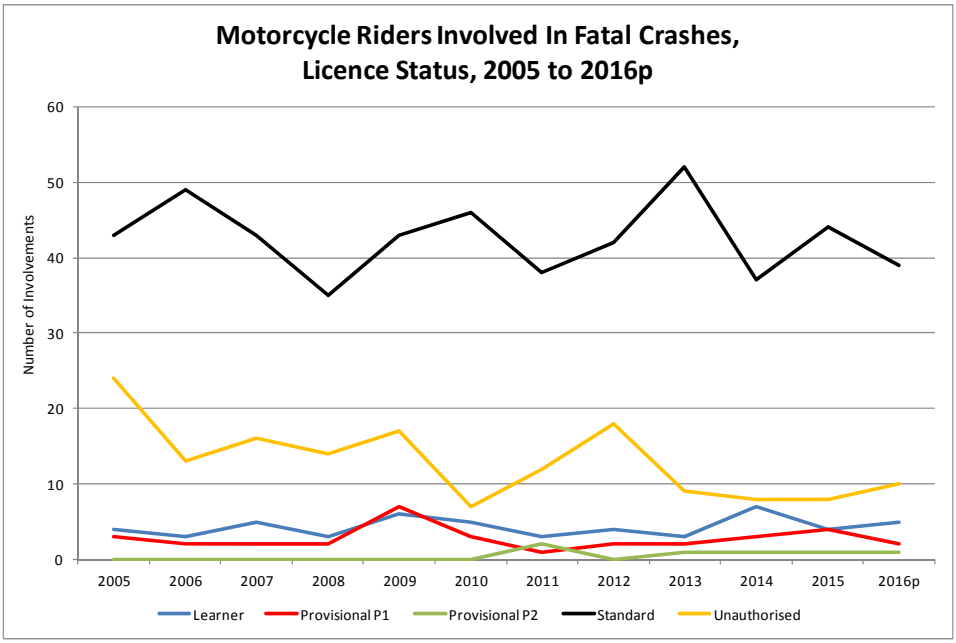
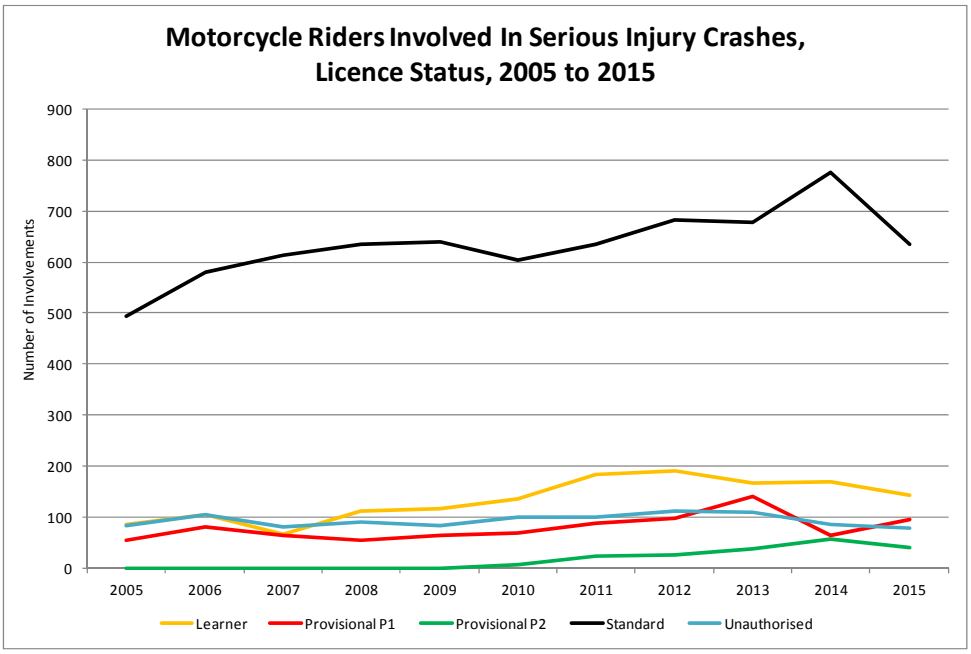


Figure 50



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