



ACT
Government

ACT ROAD SAFETY EDUCATION STRATEGY

2018-2025

WHITING MOYNE

Strategic Road Safety Advisory
Services

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INTRODUCTION

The ACT Road Safety Education Strategy aims to improve the knowledge and the behaviours of all road users.

Lifelong learning is broadly defined as learning that is pursued throughout life and that is diverse, flexible and available at different times and places. It is learning that occurs in formal, informal and social settings. A lifelong learning approach to road safety education means that all road users, from birth to old age need to be provided with opportunities to learn to be a safer road user and this learning is delivered in a wide range of ways.

This strategy supports the overall goal of contributing to reducing road trauma nationally by 30% by 2020 as outlined in the ACT Road Safety Strategy.

The ACT has adopted a Safe System approach to road safety in order to achieve its trauma reduction target. The Safe System views the entire road transport system holistically and recognises that achieving an entirely safe road system, free of death and serious injury, will require a system wide approach.

A “Safe System” recognizes four key principles.

1. People make mistakes

People make mistakes and some will take risks on the road. The aim of the Road Safety Education (RSE) Strategy is to educate, inform and influence all road users so that they will be less likely to take risks or make mistakes.

2. People are vulnerable

Human bodies have a very limited ability to withstand the forces of a crash. A ‘Safe System’ is one that is adapted to the physical tolerance of road users. The RSE Strategy aims to help road users minimize their vulnerability and to understand what human vulnerability means in terms of having a road environment with travel speeds that do not harm vulnerable road users.

3. We need to address all parts of the system

All parts of the system need to be improved - roads, speeds, vehicles and road users - so that if one part fails, the other parts will protect the people involved. Applying the “Safe System” framework helps road users to understand why crashes occur and to identify what measures are needed to prevent road users from being killed or seriously injured.

4. We are all responsible

Everyone in the community has a responsibility in the creation and maintenance of the Safe System and everyone has an important role to play. Road authorities, stakeholders, government departments, schools, employers and each and every road user share the responsibility for creating and maintaining a safe and forgiving road system and reducing the incidence of road trauma. The RSE Strategy aims to build a shared responsibility for road safety within the ACT community.



GUIDING PRINCIPLES OF THE ROAD SAFETY EDUCATION STRATEGY

The ACT Government is committed to delivering programs and initiatives that have a sound theoretical or evidence base. While drawing a direct correlation between road safety education and road trauma outcomes is difficult, there is good evidence to guide the development of effective programs across the lifespan.

The guiding principles of the ACT RSE Strategy are:

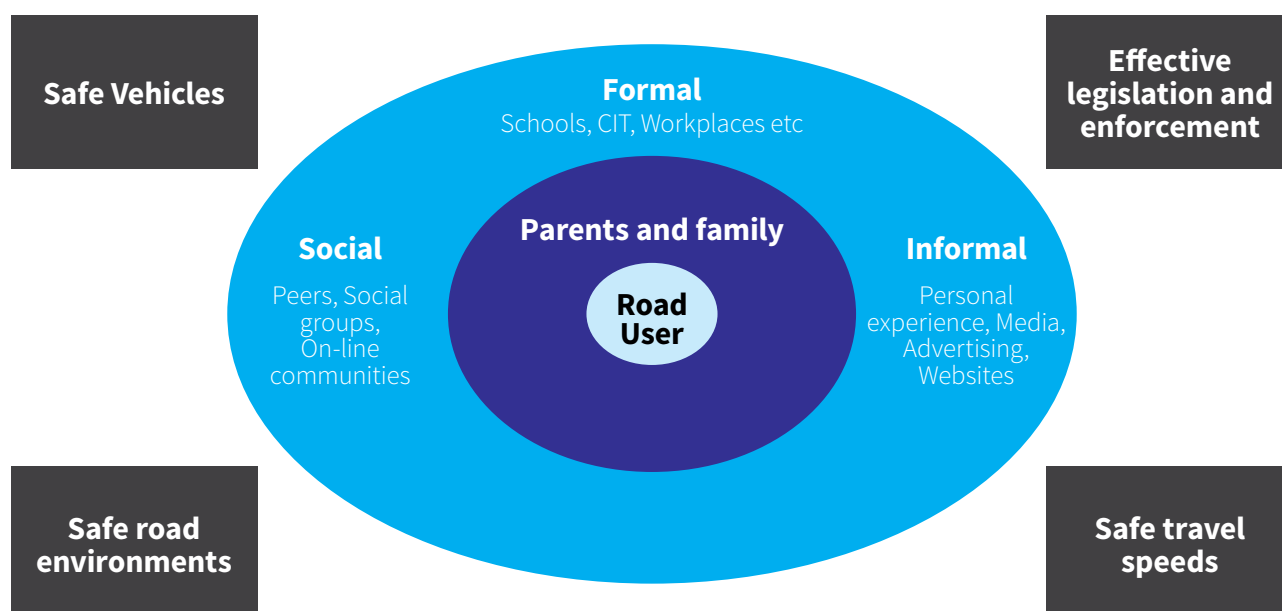
- > Road trauma does not discriminate by age and subsequently it is critical for people to learn and engage in safe behaviours on roads throughout their lives.
- > Parents are the primary teachers of road safety to their children and they need to be supported and encouraged to provide effective role modelling, parental monitoring and real world learning opportunities for their children.
- > Preventing road trauma is the shared responsibility of individuals, families, schools, workplaces, industry groups, communities and governments and all need to be proactive in doing this.
- > The creation of a safe road environment in the ACT will be encouraged by ensuring that road users understand what speed limits are needed to protect vulnerable road users and understand the importance of choosing safe vehicles.
- > Active forms of transport such as walking and riding are encouraged, but road users need to be informed about the crash risks associated with mixed road use and encouraged to adopt safe behaviours in sharing the road particularly in mixed mode environments. Safe infrastructure and speed limit measures need to be implemented over time to provide environments that are forgiving of human error.
- > Programs and policy will be evidence based and new programs will be evaluated to ensuring that practices continuously improve.
- > New road safety measures implemented nationally and internationally will be reviewed on an ongoing basis and those that are shown to be effective in reducing trauma will be considered for their application in the ACT.

STRATEGIC APPROACH

The ACT RSE Strategy has been designed to incorporate the key elements of a lifetime learning approach and the Safe System road safety philosophy.

As such, it acknowledges the key role that parents and family play in influencing and teaching children and young adults about road safety. It also recognises that learning occurs in a range of situations. This can involve formal learning environments, such as schools and pre-schools. It can involve informal learning that can involve experiential learning in real traffic environments as well as in ad hoc ways through advertising, media, printed materials or electronically. Learning can also occur in social settings through social organisations such as bicycle groups, older person's groups, through friendship groups and on-line communities. Another influence on learning is the licensing system, and the requirements of the licensing system will determine to some extent the nature of the preparation individuals take to become licensed.

The strategic approach also incorporates the pillars of the safe system that can impact on the safety of the road user, the safety of vehicles, the road environment, travel speeds, and legislation and enforcement. This is reflected in the model below.



Overall the strategy aims to improve the safety of road users with the provision of learning opportunities delivered throughout the lifetime in a range of settings, which focus on the key road safety measures that are going to reduce road trauma for the relevant age groups. The strategy also incorporates the need for all road users to consider, promote and use safe vehicles, safe road environments and safe travel speeds and to comply with existing laws.

ROAD SAFETY ACROSS THE LIFESPAN

PRE-SCHOOL AGE CHILDREN (BIRTH TO 4 YEARS)

ROAD SAFETY RISKS

Newborn children usually commence a lifetime of road use when they are driven home from hospital. For children aged 0 to 4 years, the main interaction with the road transport system is as vehicle occupants. The use of appropriate child restraints is critical to the safety of children while travelling in cars.

Children are also vulnerable as pedestrians in the early years due to a range of factors. They don't have well developed perceptual skills, judgement and ability to understand or assess risk. Young children are at risk because:

- > their size makes them difficult to see (especially in driveways);
- > they are extremely vulnerable if they are not travelling in a correct child restraint; and
- > they have no understanding of the danger of the traffic environment.

The ACT casualty crash data from 2010-2014 shows that:

- > a total of 47 children aged 0 to 4 years were injured in road crashes;
- > most of these injuries occurred when the children were passengers (89%); and
- > some pre-school aged children were injured as pedestrians (11%).

TARGET AUDIENCES

The primary target audience for all road safety messages for pre-school children is their parents. They are responsible for protecting their children, role modelling safe road use practices and they also teach their children important road safety behaviours.

Early childhood education settings, such as child care centres, family day care and pre-schools are also important, especially if they transport children or supervise them in traffic. Early childhood educators can provide learning activities about road safety with pre-school children and are an important conduit for communicating key road safety information to parents.

KEY ROAD SAFETY MEASURES

Ensuring children always travel in an appropriate restraint that is correctly installed is a key way of protecting children as vehicle occupants. Ensuring parents have received appropriate information and advice about child restraints is imperative for the safety of pre-school aged children.

Close supervision when children are near traffic and safe practices when crossing roads, specifically always holding hands with an adult, are the key ways of protecting young children as pedestrians (Muir et al, 2010). Ensuring young children always wear a helmet when riding tricycles, bicycles and scooters has been found to reduce their risks of head injuries (Thompson et al, 2000) and also establishes safe behaviours from a young age. Key road safety messages for parents of young children are to always:

- > use the correct child restraint for their child's age/size;
- > supervise children when near traffic and hold their hand when crossing roads;
- > ensure helmets are worn when on wheeled toys, bicycles or tricycles; and
- > be a good road safety role model.

PRIMARY SCHOOL AGE CHILDREN (5-12 YEARS)

ROAD SAFETY RISKS

Primary school aged children can be at risk of road trauma as vehicle occupants, pedestrians or while cycling. They are at risk because:

- > their peripheral vision, directional hearing and ability to judge speed is still developing;
- > they are still likely to be easily distracted and impulsive;
- > their size makes them difficult to see; and
- > they may be starting to travel independently – walking, cycling or scootering.

The ACT casualty crash data from 2010-2014 shows that:

- > a total of 101 children aged 5 to 12 years were injured in road crashes;
- > most of these injuries occurred when the children were passengers (73%);
- > some children aged 5 to 12 years were injured as a pedestrian (13%), or while riding a bike (13%); and
- > 1 was injured on a motorcycle.

TARGET AUDIENCES

The safety of primary school aged children will be influenced by their parents' road use behaviours and by the choices their parents make about how they monitor and direct their children's road use behaviours. Primary schools can influence the safety of their students by the policies they implement and through the provision of engaging and developmentally appropriate road safety lessons or programs. Primary schools are also key channels for communication of road safety information to parents.

KEY ROAD SAFETY MEASURES

Children travelling in cars represent the largest trauma group in the 5-12 year age category. The correct use of seat belts and restraints is critical. Children should travel in approved booster seats until the age of 8 to 10 years (NeuRA, 2013). Ensuring that parents are aware of this is very important for children aged 5 to 12 years.

Child pedestrians are vulnerable in traffic, and their parents need to be encouraged to:

- > teach them safe road crossing behaviours and provide supervised opportunities for them to apply these skills in real traffic environments;
- > determine when children are safe to walk unsupervised; and
- > help children determine safe routes to school and other destinations.

Parents are usually responsible for teaching their children how to ride a bike, for purchasing their bike and helmet and for determining when, where and how often their children ride and when they are allowed to ride without parental supervision. Therefore parents need to be informed about good riding skills (such as being confident and predictable) as well as safe bicycle use and helmet wearing.

Learn to Ride centres at Lake Tuggeranong and Lake Ginninderra provide young cyclists with a safe place to practice riding skills in an environment that has some similar characteristics to a real road environment. The centres include footpaths, roundabouts, pedestrian crossings, line markings and road signs, as well as signs which provide training and road safety tips and reminders.

School based education and learn to ride centres can be helpful in increasing students' knowledge and basic skills, although the best learning occurs when children learn in "real traffic environments" (Percer, 2009). Providing on road supervised practice for novice riders after completing off road training enables young riders (from teenage years) to translate and apply their knowledge and skills in a real world environment and helps them understand and manage the very substantial crash risk posed by other road users.

The key road safety measures for children aged 5 to 12 years are:

- > the correct use of child restraints for age/size up to 10 years;
- > the correct use of seatbelts and not permitting children to sit in the front seat until 10 to 12 years;
- > using a car with a good safety rating;
- > always supervising children near traffic and knowing when to permit children to travel independently;
- > actively teaching children about safe road crossing; and
- > always using helmets on scooters and bikes.

EARLY TEENAGE YEARS (13-15 YEARS)

ROAD SAFETY RISKS

When children are aged 12 or 13 they usually make the transition to secondary school and are often travelling far more independently than before.

While many teenagers between the ages of 13 and 15 years are proficient pedestrians and cyclists, this is also a stage when they will be more likely to be influenced by peers, to explore and enjoy some level of risk taking and as a result, may reject safety practices such as wearing a bicycle helmet (Ellis 2013). This, coupled with the fact that they are travelling independently means that their risk of injury is increased. The teenage years are also a time when some young people may be exposed to alcohol and other drugs. Overall, teenagers are at risk as road users because they:

- > are more likely to be travelling independently;
- > are influenced by their peers and may not wear helmets when riding; and
- > may be exposed to risks when travelling in cars with inexperienced drivers.

The ACT casualty crash data from 2010-2014 shows that:

- > a total of 56 teenagers aged 13 to 15 years were injured in road crashes;
- > most of these injuries occurred when the teenagers were passengers in the vehicle (52%); and
- > young people in this age group were also injured while walking (20%), while riding a bike (23%) and on a motorcycle (2%).

TARGET AUDIENCES

While teenagers are becoming more independent, parents continue to have a vital role to play in ensuring that their children are developing appropriate social competencies to manage their safety as a road user and to recognise risky situations and to have strategies to minimise the risks. Schools also help to educate teenagers about risks and encourage the development of resilience and social competence.

KEY ROAD SAFETY MEASURES

Research evidence suggests that simply providing information about the risks of certain behaviours to adolescents is generally ineffective (Gottfredson & Wilson, 2003). More effective approaches tend to be programs that build and increase the competency of students to act in safe ways when presented with opportunities to engage in risky behaviour. This includes resistance-skills training to teach students about social influences and specific skills for effectively resisting these pressures alone or in combination with broader-based life-skills. Programs that focus on decision making skills, coping skills, practising life skills, challenging social norms and resistance skills have been found to be more effective than programs that aim to build content or knowledge (Cuijpers, 2002).

The key road safety measures for children in their early teenage years are:

- > encouraging safe riding skills and the use of helmets every time they ride;
- > strategies to help them resist negative peer influences; and
- > reducing exposure to risky travel situations especially when out at night.

OLDER TEENAGERS (AGED 16-18 YEARS)

ROAD SAFETY RISKS

Young people aged between 16 and 18 years are usually travelling independently and many will begin to learn to drive and become licensed drivers.

While learner drivers who are being supervised are known to be a low risk group, newly licensed drivers have the highest level of road trauma involvement of any age group. The risk of crash involvement among young novice drivers is due to factors that may include inexperience especially in complex driving situations, motivational factors, the effect of peers, and broader lifestyle factors (Palamara et al, 2012). Overall, older teenagers face many risks as road users including:

- > being inexperienced when driving or motorcycling solo, especially in challenging situations ;
- > travelling in cars with inexperienced or impaired drivers;
- > being exposed to or using alcohol or other drugs; and
- > being negatively influenced by peers.

The ACT casualty crash data from 2010-2014 shows that:

- > a total of 299 young people aged 16 to 18 years were injured in road crashes;
- > most of these injuries involved the teenagers as drivers (51%) or passengers (27%); and
- > some were injured while motorcycling (8%), while cycling (7%) or as a pedestrian (7%).

TARGET AUDIENCES

Teenagers and their parents are the target audiences for messages about novice driver safety. Providers of the ACT's pre-learner Road Ready Program (including schools) play an important role in preparing this group of drivers, as do driving instructors and providers of other education programs.

KEY ROAD SAFETY MEASURES

One of the most effective road trauma reduction measures for novice drivers and motorcycle riders is a comprehensive Graduated Licensing System (GLS).

Learning to drive in a staged manner and accruing extensive supervised driving experience in a range of driving situations and conditions is the most effective way of reducing the risks during the Learner and Provisional driver licence periods. Parents are most often the supervising driver and their role in managing the learning to drive process is imperative to the safety of their child as a learner driver and extends into the 'P' driver phase.

Comprehensive GLS models have been found to be very effective in reducing road trauma among novice drivers, largely because they require extensive pre-licence driving experience and include measures to reduce exposure to high risk situations such as late night driving and driving with multiple passengers in the early stages of solo driving. How people learn to ride a motorcycle and become licensed to ride similarly presents an opportunity for the promotion of sound road safety behaviours and practices.

Road safety measures that support and encourage compliance with the GLS among novice drivers and riders, their parents and the broader community are likely to be beneficial (Williams, 2012). Encouraging parents to monitor and apply some restrictions or limits on their 'P driver or rider' children in relation to their driving at high risk times is also likely to be effective (Simons-Morton, 2011).

The key road safety measures for older teenagers are:

- > encouraging learners and their parents to maximize the safety benefits of learning to drive by getting extensive supervised experience, driving as a learner in a range of conditions;
- > reinforcing the importance of complying with GLS regulations; and
- > helping young people develop strategies to resist negative peer influences.

YOUNG ADULTS (19-25 YEARS)

ROAD SAFETY RISKS

Young adults are over-represented in crashes during the first few years of driving solo. This is due to the fact that they have less driving experience, they may under-estimate risks in certain situations or they may engage in deliberately risky behaviours due to a range of motivations. Young drivers also tend to drive cheaper cars with poor safety ratings. The key risks they face are:

- > driving solo - especially driving at night;
- > the influence of peers travelling in their vehicle;
- > exposure to alcohol and other drugs and arrangements to avoid driving after drinking (alternate transport);
- > over-confidence while driving or taking overt risks such as speeding; and
- > driving a car with a low crash protection rating.

The ACT casualty crash data from 2010-2014 shows that:

- > a total of 883 young people aged 19 to 25 years were injured in road crashes;
- > most of these injuries involved young drivers (56%), motorcyclists (17%) or passengers (15%); and
- > some were injured while cycling (8%) or as a pedestrian (5%).

The crash data shows that the numbers of pedestrian, motorcycle, driver and passenger casualties are highest for the 16-25 year age group, compared to all other age groups.

TARGET AUDIENCES

The primary target audience for road safety messages to young adults is the young people themselves. Their parents also remain an important audience as they are often in the position to monitor the nature of their children's driving, encourage the use of safe cars, and monitor and support compliance with the GLS and other laws.

KEY ROAD SAFETY MEASURES

Australian research estimates that if all young drivers killed or seriously injured in crashes had been driving the safest vehicle of the same age as the one they were driving when they crashed, there would be a reduction of death and serious injuries of more than 60 per cent (Whelan et al, 2009). However, in many cases, young people and their families do not consider the safety of the vehicle when purchasing a first car. Informing young adults and their parents about vehicle safety and encouraging the use of a safe vehicle is particularly important for the safety of young drivers.

Engaging in speeding behaviour or driving at unsafe speeds contributes to a large number of young driver crashes. Drink driving is also a significant contributor to young driver crashes, especially after they have graduated from their provisional licence and no longer need to comply with a zero blood alcohol concentration requirement.

While it can be difficult to influence young drivers to avoid or change these high risk behaviours, enforcement practices have been proven to be effective measures. For young people, being aware of the relevant road safety laws, of the level of enforcement, and of the legal consequences of non-compliance are important in creating the basis for effective deterrence. Providing this information to young people, especially in supporting effective licensing systems, such as the GLS, is likely to be worthwhile.

Key road safety measures for young adults include:

- > promoting the importance of driving a safe car;
- > limiting late night driving and carrying multiple peer-aged passengers until experienced;
- > strategies to help young adults separate drinking and driving; and
- > promoting awareness of enforcement and the consequences of being caught speeding or drink driving.

ADULTS (26-69 YEARS)

ROAD SAFETY RISKS

Risks adult road users face arise from overt and deliberate risk taking, such as drink or drug driving or high level speeding, as well as lower level risk taking or making mistakes, often as a result of being fatigued, distracted, or driving at inappropriate speeds for the conditions.

Key safety risks are:

- > travelling at unsafe speeds;
- > exposure to alcohol and other drugs;
- > driving/riding while fatigued or distracted;
- > driving a car with a low crash protection rating; and
- > Riding a motorcycle that doesn't have good safety features such as ABS.

The ACT casualty crash data from 2010-2014 shows that of adult casualties aged between 26 to 65 years:

- > a total of 1,299 were drivers, 45% were male and 55% were female;
- > a total of 403 were motorcyclists, with 88% being male;
- > 219 were passengers, of which 73% were female;
- > a total of 309 cyclists were injured, with most (72%) involving male cyclists;
- > 71 pedestrians were injured, of which 51% were male and 49% were female; and
- > crash involvement was higher among younger age groups and declined with age for all road user groups.

Adults are vulnerable when riding a bicycle or walking due to the lack of protection that these forms of transport have from larger and heavier vehicles. Adults who walk and cycle are at risk if they are not using areas that are separated from other traffic. If a cyclist or pedestrian is hit by a vehicle travelling at 30km/h or more, it is likely that they will be seriously injured. Pedestrians who are intoxicated are also at greater risk of crash involvement due to their impaired judgment.

TARGET AUDIENCES

While all adult road users are the key targets for road safety measures, a specific focus needs to be on those who are at most risk, including through failing to comply with road safety laws. Those who are responsible for car choice, especially organisations that purchase new cars are also a target audience for some measures. Organisations who promote and support motorcycling, cycling and walking are also key audiences.

KEY ROAD SAFETY MESSAGES

For adults who drive and ride motorcycles

A key way in which risky road behaviours are mitigated is through legislation and enforcement. For laws to be effective, especially at a deterrent level, the relevant population groups need to be aware of the laws and they also need to understand and accept that there is a reasonable chance of detection if they breach these laws and that penalties for breaking the laws will be applied (Hommel, 1986).

Promotion of laws and understanding the consequences of unsafe behaviours such as drink driving, drug driving, high level speeding and mobile phone use, as well as some practical strategies to help people avoid being in situations where they are more likely to engage in unsafe behaviours will assist adult road users. This includes promoting the separation of alcohol and driving and also discouraging the use of phone diversion apps or devices.

In addition to behavioural controls, safer vehicles can play a major role in reducing road fatalities. If licensed drivers could be influenced to purchase the safest car in the class of car they use now when they are considering purchasing (eg. small to small, Sport Utility Vehicle (SUV) to SUV), their fatal crash risk would drop by about a third (Newstead et al, 2004). As a large percentage of all cars are purchased by organisations, this research highlights the huge safety potential of encouraging fleet replacement with the vehicles that have a high safety rating.

The use of motorcycle protective clothing is another area in which the impact of injury can be reduced, particularly when fitted with body armour. Encouraging the use of high quality protective clothing among ACT riders is a high priority (deRome et al, 2011).

While all motorcycles sold in Australia need to meet the Australian Design Rules, encouraging riders to purchase motorcycles that have Anti-lock Braking System (ABS) braking is a relatively simple measure that is worth pursuing. A recent Monash University report found that the presence of ABS on motorcycles resulted in a 33% reduction in all injuries (Fildes et al, 2015).

Adults also need to be educated about the importance of driving responsibly around vulnerable road users – recognising the potential harm they could cause to a person who is walking or riding a bicycle or motorcycle. Infrastructure and speed limit treatments need to be introduced over time to provide forgiving conditions for these environments in order to avoid serious casualty crash outcomes.

For adults who cycle and walk

Regular bicycle riding is a healthy and environmentally friendly way of travelling and is a popular form of transport in the ACT. The most critical safety aspect for bicycle riders, in addition to helmet wearing, is understanding the conditions of the road environment where they are riding. Having dedicated cycle lanes that are separated from other traffic and parked cars is paramount. In areas where this cannot occur, speed limits need to reflect the need to protect cyclists. Specifically, the research indicates that if the impact speed of a car hitting a bicycle at 30km/h or higher, it is likely that the cyclist will be seriously injured or killed (Austroads, 2005).

Informing cyclists of the risks they face on certain types of roads and encouraging other road users to share the road is a key measure that can assist cyclists.

Research has shown that many cyclists are injured in the ACT while using shared paths, and there can also be collisions between cyclists and pedestrians on these paths. Explaining the safety rationale behind some of the key road rules for cyclists and pedestrians is important and will hopefully ensure a greater level of compliance and subsequently reduce risk.

The key road safety measures for adult road users are:

- > promote the risks of detection and the sanctions for illegal behaviours;
- > encourage the separation of drinking from driving;
- > encourage the development of best practice vehicle safety purchasing policies for individual purchasers and in organisations;
- > encourage the use of protective clothing by motorcyclists;
- > promote the purchase of motorcycles with ABS;
- > inform cyclists and pedestrians about safe routes to use;
- > promote the link between travel speeds and risks to vulnerable road users and examine general speed limits for all traffic in higher risk locations for cyclists;
- > promote and encourage a 'share the road' culture, supported by good road rules and compliance, and provision of forgiving, safe infrastructure and speed limits;
- > inform pedestrians and cyclists about their responsibilities when using shared paths; and
- > explain and promote key road rules for pedestrians and cyclists.

OLDER ROAD USERS (70 YEARS +)

ROAD SAFETY RISKS

Older people are more likely to be involved in crashes at intersections and with other vehicles rather than single vehicle or high speed crashes and are less likely than younger drivers to engage in risky behaviours such as drink driving and speeding (King et al, 2011, Koppel et al, 2011).

Older people are more susceptible to injury if they are involved in a crash due to their increased fragility and as their ability to recover from injury is far less than for younger people (Kent et al, 2009). The key risks older road users face are that they:

- > may be travelling in older less safe cars;
- > may be managing health conditions that could affect their driving;
- > may be unwilling to stop driving if they need to; and
- > are not aware of the risks they face as pedestrians.

The ACT casualty crash data from 2010-2014 shows that:

- > a total of 355 people aged 66 years or older were injured in road crashes during the past five years;
- > most of these injuries involved older people as drivers (68%) or passengers (20%); and
- > a few were injured while as a pedestrian (6%), a motorcyclist (5%) or while cycling (2%).

TARGET AUDIENCES

The target audiences for measures for this group are older road users and their families. Health professionals and health support organisations also have a large role in discussing and monitoring fitness to drive with patients.

KEY ROAD SAFETY MEASURES

Creating safe older road users requires ways to ensure that older people, their families and their health professionals can identify when a person is at higher risk and can employ a range of measures to try to reduce that risk.

Travelling in a safe vehicle is one of the most effective measures an older person can take to ensure their safety. As people age their fragility increases, meaning that they are far more likely to sustain serious or fatal injuries in crashes than younger vehicle occupants. The current focus needs to be on ensuring that older people choose the safest vehicle they can afford and that they are aware that “older” cars do not have advanced safety features and are less safe.

Older drivers are usually very interested and motivated to maintain their ability to drive safely for as long as possible. While this is acknowledged, they also need to be aware of the alternative transport that is available, such as ACTION buses, community transport and other ride sharing options as well as informal transport provided by family and friends. This can help ensure they are prepared for a time when they may no longer be able to drive.

Research shows that the most effective communications with older people are: delivered in a positive rather than negative way; depict older people as younger and healthier rather than very old; provide specific and practical information; and, are from credible sources (Moschis et al, 1997, Ward 2013; Shamaskin et al, 2010).

The key measures for older road users are to:

- > inform older people of the importance of buying a safe car and replacing very old cars with safer ones;
- > raise awareness of good safe self-regulation of driving practices;
- > encourage older people to undertake mobility planning for a time when they might not be able to drive; and
- > inform older people about how to use other forms of transport if they need to stop driving.

STRATEGIC GOALS

In order to address the road safety needs of all age groups, a number of strategic goals have been developed and each of these goals is accompanied by a number of actions to meet the goals.

Goal 1: Engage with parents about how to protect and educate their children about road safety from birth to adulthood

> This goal addresses the learning and influence parents have on their children as road users.

Goal 2: Build a positive road safety culture in schools and early childhood centres and encourage the delivery of quality road safety education

> This goal addresses the important role that formal education settings have in road safety.

Goal 3: Inform and support novice drivers and riders through the licensing system

> This goal reflects the influence that licensing systems have on learning to drive and or ride safely.

Goal 4: Encourage the adoption of safer behaviours among high risk groups

> This goal reflects the influence that licensing systems have on learning to drive and or ride safely.

Goal 5: Encourage safe behaviours and understanding of the safe system

> This goal supports the key principles of the safe system and is learning delivered in social and informal settings.

Goal 6: Strengthen leadership and collaboration across government and community organisations to improve road safety in the ACT.

> This is an enabling goal to support the overall implementation and monitoring of this strategy.

1. ENGAGE WITH PARENTS ABOUT HOW TO PROTECT AND EDUCATE THEIR CHILDREN ABOUT ROAD SAFETY FROM BIRTH TO ADULTHOOD

Parents have three key roles:

- > to inform and educate their children about road safety;
- > to monitor and supervise their children so that they are not at risk of injury as road users; and
- > to be effective role models for how to use the roads safely and manage risks such as exposure to alcohol or drugs.

While parents play a significant role, engaging with them can be difficult. There are key opportunities when parents are particularly engaged in road safety and these opportunities need to be leveraged. These times are when:

- > parents are about to have their first child and need to learn about child restraint safety;
- > when children are starting kindergarten or primary school;
- > when children are learning to ride a bike;
- > when children are transitioning to secondary school and will be travelling independently; and
- > when children are learning to drive and buying their first car.

There are ongoing opportunities to communicate with parents to reinforce key messages about safety. Early childhood services, schools, driving instructors, local community and membership groups like the NRMA or Pedal Power can all be key conduits for this information. In addition, government initiatives such as the Ride or Walk to School (RWTS) initiative aims to increase walking, cycling and use of public transport among school students in the ACT. Participating schools receive bikes, helmets, maintenance support, personal safety sessions, road safety education, BMX skills development workshops and a range of other activities as part of the initiative.

The Active Streets pilot program builds on the RWTS initiative and is designed to create a supportive environment around schools that makes walking and cycling to school safer and more fun for children. The Active Streets pilot was launched at Macquarie, Macgregor, Latham and Mount Rogers primary schools and is currently the subject of an evaluation.

The Safe Cycle initiative is another valuable program that is delivered through a school based curriculum, developed by Melba Copland Secondary School with the support of the former NRMA-ACT Road Safety Trust. Safe Cycle aims to promote a culture of risk awareness and protective behaviour, equip school students with skills to safely use paths, cycle ways and roads, and improve bike handling skills for identified high risk areas.

The RWTS and Active Streets programs provide opportunities for key groups to collaborate, develop and expand programs to further improve road safety education for school children.

Making road safety information easy to understand, readily accessible and ensuring that it includes clear behavioural guidelines and strategies that parents can employ to ensure the safety of their children will be important. The most effective communication mechanisms will need to be determined but may involve online information, videos or interactive toolkits.

PROPOSED ACTIONS

- 1.1 Work with Kidsafe and the ACT Education Directorate to distribute key road safety information to parents of pre-school age children.
- 1.2 Develop materials outlining key messages for parents of primary school aged children about pedestrian safety and role modelling. The Active Streets Program could be utilised to do this initially.
- 1.3 Develop specific materials for parents about safe cycling and distribute via schools and cycling organisations.
- 1.4 Develop safe travel to secondary school resources for parents and children commencing the transition to secondary schools.
- 1.5 Develop extensive materials to support the greater involvement of parents in supervising their children when learning to drive. Consider including a parent module with the Road Ready Program.

2. BUILD A POSITIVE ROAD SAFETY CULTURE IN SCHOOLS AND EARLY CHILDHOOD SERVICES AND ENCOURAGE THE DELIVERY OF QUALITY ROAD SAFETY EDUCATION

Developing core road safety education programs and approaches that can be used by all schools will help to ensure this goal is met. Road safety education in schools should:

- > be comprehensive and delivered at different intervals with age relevant content;
- > build capacity to ensure that road safety is reflected in school policies and practices; and
- > encourage a low speed, safe environment around schools.

Foundation or core resources need to be created for early childhood, primary and secondary schools and will target the key road safety messages and behaviours pertinent from birth to 18 years.

The resources will be evidence based, will be developmentally appropriate and will reflect the best practice guidelines for early childhood education and for road safety education. The new core road safety programs will be enhanced by existing programs such as the ACT Police Constable Kenny Program, Cycle Safety, the Ride or Walk to School Program, ACTION buses road safety program and NRMA road safety programs.

As there is now a national curriculum for all primary and secondary schools as well as the early childhood sector, it is possible that the ACT could utilise some of the extensive road safety education resources developed in other jurisdictions. An example is the NSW Government's Safety Town website which provides resources for school teachers, parents and students. A review of the most appropriate resources as well as some refinement of the materials may be the most efficient way of developing core road safety education programs for ACT schools and early childhood services.

It is important that the resources that are developed include model policies for schools and early childhood services to ensure that a school-wide approach to road safety is implemented. Some examples of good practice in schools or early childhood centres may also be valuable. Embedding key road safety content and key messages in active transport programs and resources that already exist will also improve the level of road safety content covered in schools.

Increasing the awareness of schools and early childhood services about road safety education programs and resources and encouraging their use will be critical. Ensuring that the resources are easy to find and accessible will help facilitate greater usage. A dedicated road safety education website for schools/educators which houses all of the core program resources as well as a description and link to supporting programs will be developed.

Promotion of the resources directly to schools is also crucial to success as are opportunities for professional development for new and experienced teachers. Measures to promote the programs and to educate teachers will help the delivery of effective road safety education in schools.

A collaborative approach to school and early childhood road safety education is needed and a working group including representatives from relevant government and non-government agencies will be formed to assist in the delivery of the actions related to this strategic goal.

PROPOSED ACTIONS

- 2.1 Establish a working group to assist in the development of core road safety resources for schools and early childhood services.
- 2.2 Review available road safety education resources for schools and early childhood services from other jurisdictions and negotiate for the use of these resources in the ACT.
- 2.3 Identify resources to meet the needs of ACT schools and early childhood services and encourage the uptake of these materials by schools and centres.
- 2.4 Develop an ACT road safety education website or webpages for new programs and link with existing programs available.
- 2.5 Launch new resources and undertake ongoing promotion of the resources.
- 2.6 Establish a monitoring system to determine take up of resources and the effectiveness of programs delivered.
- 2.7 Review existing active transport resources and approaches to ensure that they include key road safety messages.

3. INFORM AND SUPPORT NOVICE DRIVERS AND RIDERS THROUGH THE LICENSING SYSTEM

Ensuring that the novice driver and rider licensing systems are as comprehensive and effective as possible has the potential to be a significant road safety advancement in reducing road trauma in the ACT.

Engaging and communicating with young people and their parents, as well as key stakeholders such as driving schools to encourage the adoption of safe young driver practices will be critical. These practices include:

- > ensuring the learner driver has extensive supervised driving in a range of conditions prior to sitting for a provisional licence assessment;
- > being aware of the extremely high levels of crash involvement of newly licensed drivers, especially when driving at night and with peer passengers, and having some strategies to reduce these risks;
- > the importance of separating drinking and driving, and adhering to the zero blood alcohol requirement; and
- > understanding the safety benefits of buying a car or motorcycle with good safety features, and encouraging the purchase and/or use of such vehicles.

Given that all learners in the ACT need to complete the Road Ready Program, this provides the best mechanism for communicating the benefits of good safety practices as a learner and provisional driver or rider. In many cases, especially when delivered in schools, there may be an opportunity to include a session for the parents of young people to help prepare them for their role as supervising drivers. There is also an opportunity to include in Road Ready some tips on active travel and environmentally friendly driving, which in many instances mirrors low risk driving.

Some young disadvantaged people may not have ready access to a car or a supervising driver to obtain extensive supervised driving as a learner. A number of programs operate in other jurisdictions to support disadvantaged young people and this may need to form part of this strategy.

Given the extremely high involvement of young people in casualty crashes in the ACT, it is important that there is a focus on programs or measures that have been shown to work and any programs that do not have a sound evidence base are discontinued.

PROPOSED ACTIONS

- 3.1 Revise the content of the Road Ready Program to ensure it describes and supports contemporary good learner and provisional driver practices for young people and their parents and include some content on “green driving” and enhanced content on driving safely around vulnerable road users.
- 3.2 Prepare communications to explain the risks associated with late night driving and driving with peers among newly licensed provisional drivers.
- 3.3 Communicate with young people and their parents about the benefits of buying or using a safe car and consider publishing a “Safe First Car List” of affordable four or five star new and used cars.
- 3.4 Review what programs or measures can be implemented to support disadvantaged young people who may have difficulty achieving extensive supervised driving.
- 3.5 Undertake targeted community education to explain the road safety benefits to novice drivers and riders of any changes to the licensing system.

4. ENCOURAGE THE ADOPTION OF SAFER BEHAVIOURS AMONG HIGH RISK GROUPS

At-risk groups of road users in the ACT include older road users, motorcyclists, cyclists and pedestrians. Older road users are more vulnerable and likely to be killed or injured due to their physical frailty and motorcyclists and cyclists are at risk as they are less protected as road users.

Older road users are likely to require specific information related to their safety both preventatively, when they are healthy and active, and also at a more acute stage, when they may be experiencing the impact of health problems or conditions.

Older road users will continue to benefit from the general information provided in the Older Drivers' Handbook and via information programs delivered by the Council of the Ageing (COTA) and the NRMA.

However, a greater focus on the importance of buying or using a car with good protection features needs to be highlighted to older people as this is likely to provide considerable road trauma benefits. Key information needs to be disseminated widely through a range of groups who communicate regularly with older road users.

In addition, an emphasis should be placed on the role of health professionals and health support agencies to ensure that they have appropriate information and knowledge to communicate with older people about their fitness to drive.

Encouraging older people to consider mobility planning when they are undertaking financial and other life planning would also be helpful in enabling a good transition to being a non-driver if an older person needs to stop driving. Working closely with the Office of Ageing, Community Services Directorate to ensure that mobility and social inclusion can be maximised is also likely to benefit older road users.

The safety of motorcyclists in the ACT could be enhanced by encouraging:

- > purchase of a motorcycle with ABS; and
- > motorcyclists to wear protective and more highly visible clothing.

These are two key measures that can help reduce the incidence of crash involvement and reduce the extent of injury if a crash does occur. Working closely with the Motorcycle Riders Association (MRA) to ensure that key messages are appropriate and likely to be accepted by motorcyclists will be important.

Informing cyclists, and to some extent pedestrians, of the risks they face on certain types of roads and encouraging the use of safer routes will help to reduce crashes.

Compliance with road rules could be enhanced if the safety rationale behind some of the key road rules for cyclists and pedestrians were better understood. Understanding the rules and protocols with using shared bike/pedestrian paths will also be important to help reduce crashes and injuries on these paths.

PROPOSED ACTIONS

- 4.1 Develop communication materials for older road users about the importance of buying or using a safe car and of replacing older cars and disseminate broadly.
- 4.2 Review whether health professionals and health support groups in the ACT need any further information or resources to help them communicate with road users about fitness to drive.
- 4.3 Work with the Office of Ageing, Community Services Directorate to encourage greater mobility planning among older road users to facilitate a good transition to non-driving if they need to stop.
- 4.4 Work with MRA and other relevant motorcycle groups to encourage the purchase of motorcycles with ABS, and the greater use of protective and high visibility clothing.
- 4.5 Implement an awareness program for cyclists and pedestrians about their responsibilities when using shared paths.

5. ENCOURAGE SAFE BEHAVIOURS AND UNDERSTANDING OF THE SAFE SYSTEM

Community understanding and engagement with road safety problems and solutions is a critical part of implementing a safe system. Ongoing community awareness campaigns need to focus on the key elements of the safety system philosophy. This will involve:

- > *Supporting police enforcement activity and increasing the perception of detection:* Public education can support police enforcement operations and can magnify the driver's perception of being detected and so helps to modify risky behaviours. Communications should focus on the high levels of enforcement and the unpredictable nature of enforcement to increase the deterrent effect.
- > *Encouraging the purchase of safer cars:* Public education can increase awareness of the value of safer vehicles and direct people to relevant information. Highlighting the benefits of emerging vehicle technology such as Automatic Emergency Braking (AEB) is important and should target both private vehicle buyers as well as organisations buying fleet cars. Vehicle safety messages in the community should be targeted at newly licensed drivers and older drivers, as these will benefit most from safe vehicles.
- > *Building an understanding of the role of traffic environments and travel speeds on crashes:* Within the Safe System, a key goal is to manage travel speeds so that if a driver makes a mistake or error of judgement, a crash will either be avoided or, should it occur, the crash forces will be such that no-one is killed or seriously injured. Helping the community to understand the relationship between speed and trauma can be an important means of building compliance with speed limits in the longer term. An important complementary message is that decreases in travel speeds translate into only very small changes in travel times.

In addition to these ongoing community awareness messages, some targeted community education may be relevant in supporting the goals of this strategy. For instance, community education campaigns about the importance of parents being effective road safety role models, about the rationale underpinning enhanced GLS, as well as specific messages about some high risk behaviours would be beneficial.

Communicating with the public about any changes to road laws or the road environment is also important in ensuring that the public know what these changes are. Ideally the key communications around these changes should provide information about what the changes are, a brief rationale for the changes and how the road user needs to respond to the changes.

Developing public education messages and campaigns requires careful consideration due to the high costs that can be involved. It will be important that campaigns are developed with consideration to:

- > effectively utilising traditional approaches such as television commercials, as well as radio which can provide messages to drivers who are on-road, as well as print which can be very effective in communicating detailed, information based messages;
- > incorporating newer forms of media when communicating with certain demographics, such as interactive websites, apps and e-learning modules;
- > supporting public relations activity with third party endorsements by respected local people or organisations costs little but can strengthen and sustain communication campaigns; and
- > reviewing the available communications that are produced by other jurisdictions that could be adapted and used in the ACT, or building a communications program around the NSW communication plan given that NSW media, especially television, is regularly seen by ACT residents. Ensuring the key messages in the ACT are delivered to coincide with key NSW television campaigns may be an effective way of strengthening the road safety message.

PROPOSED ACTIONS

- 5.1 Continue campaigns to support and promote police enforcement, especially related to drink and drug driving and speeding to increase the level of deterrence
- 5.2 Implement campaigns targeting the general public and also specifically targeting organisations with fleets, about vehicle safety.
- 5.3 Develop public engagement programs and information about the impact that travel speeds have on crash outcomes, especially for vulnerable road users.
- 5.4 Develop public education campaigns to help protect vulnerable road users specifically targeting the role that parents play in relation to children.
- 5.5 Develop education and information materials for key stakeholders and government departments about the safe system and what it means.
- 5.6 Encourage all employers to develop workplace related road safety policies covering safe road use and safe vehicles for staff travelling during work hours or when travelling to and from the workplace. This should include a specialised version/s for the freight industry.

6. STRENGTHEN LEADERSHIP AND COLLABORATION ACROSS GOVERNMENT AND COMMUNITY ORGANISATIONS TO IMPROVE ROAD SAFETY IN THE ACT

This strategy is a ten year plan for the delivery of road safety education across the lifetime in the ACT.

A large number of ACT Government Directorates and stakeholder groups have a considerable role in the delivery of this road safety education strategy. Ensuring that there is a shared vision for what this strategy can achieve and high level support from within all partner and stakeholder organisations will be imperative to its success.

The responsibility for implementing this strategy will be shared by:

- > The Justice and Community Safety (JACS) Directorate will be responsible for planning, implementing and evaluating the actions in collaboration with other Government partners and key stakeholders.
- > The Active Travel office will be responsible for assisting and advising on the delivery of the actions related to new infrastructure and improvements to walking and cycling networks.
- > ACT Health and the Active Travel Office will assist with the development and delivery of the actions related to active transport policies and programs, older road users and early childhood practice.
- > The Education Directorate will assist with the development and delivery of the actions related to primary and secondary schools.
- > ACT Policing will assist with the development and delivery of the actions related to enforcement.
- > Road user representative groups will provide input on the implementation of the strategy and assistance with the delivery of those action items.

Progress on the delivery of the strategy will need to be monitored and reported regularly and the actions and outcomes of the strategy be reviewed at appropriate intervals.

PROPOSED ACTIONS

6.1 Public launch of the strategy.

6.2 Establishment of a reference group (or use existing structure) to oversee the detailed workplans to achieve the key milestones and the strategic goals, reporting to the ACT Road Safety Advisory Board

6.3 Annual reporting on progress in the Road Safety Report Card including development of performance indicators to measure the success of this strategy.

REFERENCES

- Austrroads (2005) *Balance between Harm Reduction and Mobility in Setting Speed Limits: A Feasibility Study*, Austrroads report AP-R272-05
- Cuijpers, P. (2002) Peer-led and adult-led school drug prevention, *Journal of Drug Education*, vol. 7, pp. 107-119.
- de Rome, L., Ivers, R., Fitzharris, M., Du, W., Haworth, N., Heritier, S. & Richardson, D. (2011) *Motorcycle Protective Clothing: Protection From Injury Or Just The Weather?*, The George Institute Report.
- Ellis, J. (2014) *Bicycle safety education for children from a developmental and learning perspective* (Report No. DOT HS 811 880). Washington, DC: National Highway Traffic Safety Administration.
- Fildes, B., Newstead, S., Rizzi, M., Fitzharris, M. & Budd, L. (2015) *Evaluation of the effectiveness of anti-lock braking systems on motorcycle safety in Australia*, MUARC Report No. 327.
- Gottfredson, D. & Wilson, D. (2003) Characteristics of effective school-based substance abuse prevention, *Prevention Science*, vol. 4, pp. 27-38.
- Hommel R. (1986) *Policing the drinking driver: random breath testing and the process of deterrence*. Canberra: Federal Office of Road Safety.
- Kent, R., Trowbridge, M., Lopez-Valdes, F., Ordoyo, R. & Segui-Gomez, M. (2009) How many people are injured and killed as a result of ageing? Frailty, fragility, and the elderly risk-exposure trade-off assessed via a risk saturation model, *Annals of Advances in Automotive Medicine*, vol. 53, pp. 41-50.
- King, M., Soole, D., Watson, A. & Schramm, A. (2011) *Older Driver Safety Advisory Committee – Supporting Research and Consultation*, Report to Department of Transport and Main Roads. December 2011.
- Koppel, S., Bohensky, M., Langford, J. & Taranto, D. (2011) Older drivers, crashes and injuries, *Traffic Injury Prevention*, vol. 12, pp. 459-467.
- Moschis, G. (2003) Marketing to older adults: an updated overview of present knowledge and practice, *Journal of Consumer Marketing*, vol. 20, pp.516 – 525.
- Muir, C., Devlin, A., Oxley, J., Kopinathan, C., Charlton, J. & Koppel, S. (2010) *Parents as role models in road safety*, MUARC Report No. 302.
- NeuRa (2013) *Best Practice Guidelines for the Safe Restraint of Children Travelling in Motor Vehicles*, Technical Report, Sydney: 2013.
- Newstead, S., Watson, L. & Cameron, M. (2004) *A Model for considering the ‘total safety’ of the light passenger vehicle fleet*, MUARC Report No. 228, Monash University Accident Research Centre, Clayton, Victoria.
- Palamara, P., Molnar, L., Eby, D., Kopinathan, C., Langford, J., Gorman, J. & Broughton, M. (2012) *Review of young driver risk taking and its association with other risk taking behaviours*, Report by Curtin Monash Accident Research Centre, RR 1.
- Percer, J. (2009). *Child pedestrian safety education: Applying learning and developmental theories to develop safe street-crossing behaviours*. (Publication No. DOT HS 811 190). Washington, DC: National Highway Traffic Safety Administration.
- Shamaskin, A., Mikels, J. & Reed, A. (2010) Getting the Message Across: Age Differences in the Positive and Negative Framing of Health Care Messages, *Psychology and Ageing*, vol. 25, pp. 746-751.
- Simons-Morton, B. (2011) Adolescent Driving Behaviour: A Developmental Challenge, *Encyclopedia of Adolescence*, vol. 1, pp 38-47.
- Thompson, D., Rivara, F. P., & Thompson, R. S. (2000) *Helmets for preventing head and facial injuries in cyclists*, Cochrane Database System Review, 2, CD0001855.
- Ward, R. (2010) How old am I? Perceived age in middle and later life, *International Journal of Ageing and Human Development*, vol. 71, pp. 167-184.
- Whelan, M., Scully, J. & Newstead, S. (2009) *Vehicle safety and young drivers Stages 2 and 3: Analysis of young driver crash types and vehicle choice optimisation*, Monash University Accident Research Centre - Report No. 292.
- Williams, A., Tefft, B. & Grabowski, J. (2012) Graduated Driver Licensing Research, 2010-Present, *Journal of Safety Research*, vol. 43, pp. 195-203

