

REDUCING ROAD TRAUMA IN SOUTH AUSTRALIA



Possible Initiatives 2004–2010

Issued by The Road Safety Advisory Council

The Road Safety Advisory Council

On 14 October 2002, Cabinet approved the establishment of a Road Safety Advisory Council (RSAC).

I chair the Council and membership includes representatives of the RAA, the Centre for Automotive Safety Research (which incorporates the Road Accident Research Unit), the Transport Workers Union, and local government, together with representatives from the South Australia Police, the Motor Accident Commission, and the portfolios of Transport, Education and Human Services.

The RSAC recommends road safety initiatives to the Road Safety Ministerial Council which is chaired by The Minister for Transport and which includes the Ministers for Health and Education, along with the Treasurer (and Minister for Police) and the Attorney General.

Later this year the Road Safety Advisory Council will be recommending a range of measures to the Road Safety Ministerial Council aimed at reducing injuries and deaths on our roads.

A wide range of factors contribute to the incidence of crashes and casualties, requiring a broad strategic approach. The Road Safety Strategy outlines this broad approach through initiatives relating to road users, the road environment and the vehicles we drive.

The purpose of this document is to seek feedback on a number of ideas in relation to a range of road safety issues. At this stage, the initiatives outlined in this paper are simply ideas – they are not Government policy. You are invited to comment on the initiatives outlined or to suggest any other ideas that you think would reduce road trauma. The final package will be prepared by the Road Safety Advisory Council and will take into account your feedback, research and analysis, investigations by the various Task Forces established under the Council, and other input.

I encourage you to provide your comments using the feedback forms and ask that this feedback be provided by Friday 14 November 2003 to the address below.

The Road Safety Advisory Council appreciates your participation and looks forward to working with all South Australians to improve road safety in our State.

*Sir Eric Neal AC CVO
Chair, Road Safety Advisory Council*

How to provide feedback

This document highlights a number of road safety issues ranging from drink driving to school road safety education and motorcycling. Under each issue there are a number of "possible initiatives". You are able to provide feedback by simply providing a written response to any initiative you wish to. Alternatively you could use the feedback form to provide feedback on specific initiatives on which you feel able to have input in terms of their impact on reducing the road toll.

Each initiative has a corresponding letter/number code (eg, DD01): please use this code on the form to identify the issue you are commenting about. If you wish to comment on a number of issues, please use additional forms.

Your response can be By email to david.forster@transport.sa.gov.au

OR by post to David Forster
Project Officer, Transport Planning Agency
PO Box 1
Walkerville SA 5081

Or by fax to David Forster on (08) 8343 2880

If you have questions about any of these initiatives or would like additional information, please use the contact details above.

The Issues

Possible Initiatives 2004-2010 highlights a number of road safety issues and provides a brief summary of the background and facts.

These issues are discussed in more detail in the **South Australian Road Safety Strategy 2003 – 2010** booklet. Supporting statistical information is provided in the accompanying brochure **Road Trauma: Facts & Figures**.

The issues have been grouped under the following categories:

Addressing Specific Problems

- Drink Driving
- Speeding
- Fatigue
- Use of Restraints
- Drug Usage
- Unlicensed Driving
- Heavy Vehicles

Road Users with Special Needs

- Children and School Education
- Cyclists
- Older Road Users
- Motor Cyclists
- Pedestrians
- Young Drivers
- Aboriginal Road Users

Engineering Solutions

- Road Standards
- Vehicle Standards

Education and Attitudes

- Community Attitudes & Behaviour
- Licensing and Driver Training

Drink Driving – DD

Over the past five years (1998-2002), the percentage of drivers and riders killed with a Blood Alcohol Concentration (BAC) above the legal limit of 0.05 has risen from 22% to 32%. In the metropolitan area, the figure reached 40% in 2002 (doubling from 2001), while in rural areas, this figure increased from 22% in 1998 to 34% in 2001, before there was slight decline to 29% in 2002.

In 2002, 85% of drivers and riders killed and seriously injured with a BAC above 0.05 were male. The group most at risk in regard to fatalities and serious injuries are males aged 16-30 years.

For every increase of 0.05 BAC above zero, the chance of crashing doubles. The increased crash risk at higher BACs is due to increases in risk-taking and reduced skills, such as errors in judgement and impaired reaction times. Pedestrians affected by alcohol are also at risk of death or serious injury.

South Australia pioneered alcohol ignition interlocks (devices which prevent drink drivers starting their car) in 2000. Fitting the interlock is a voluntary decision of the convicted drink driver. The incentive is to halve the time of the licence suspension. The take up rate in South Australia has been very low. In Victoria an interlock is mandatory. In New South Wales it is voluntary but the incentive is stronger because the installation of an interlock reduces the licence suspension time to only one month (rather than a minimum of six months in SA). The cost in Victoria and NSW is less than in SA because they have no monthly administrative fee.

Drink driving is detected by Random Breath Testing (RBT) and other means. During 2002, Police breath-tested 623 000 motorists and found 1191 above 0.05, 2253 above 0.08, and 1243 above 0.15. RBT is at fixed stations on the side of the road. Mobile RBT (where Police can pull over a moving car) has been in place in the other States for many years (20 years in NSW) but will only be introduced into South Australia from 2003 for selected holidays and weekends.

Since the inception of RBT in Australia, media campaigns (mainly television) have aimed to scare drink drivers into thinking that they face a higher probability of being caught. South Australia continues to spend approximately \$500 000 per year on drink driving advertising campaigns. But it now seems that these campaigns have lost their impact. It may be time to place more emphasis on actually catching as many offenders as possible.

Many drink drivers are repeat offenders, and some have alcohol dependency problems. Special rehabilitative programs may be of benefit to those with alcohol dependency problems.

Rural areas pose a special problem because of the difficulties in applying effective RBT programs and the lack of transport options (public transport, taxis) for drivers who drink too much.

Hotels and clubs should continue to promote responsible serving policies including:

- the promotion of no or low alcohol drinks
- server intervention programs
- distribution of information on standard drinks

About 35% of people who drink and drive do their drinking at the house of a friend or relative. Hosts have a duty of care which may be easier to fulfill if hand-held breath alcohol testers were more readily available.

Possible Initiatives

Legislation and Penalties

DD01	Apply double demerit points for BAC offences during periods of high crash history or increased traffic volumes (eg, Easter, Christmas/New Year)
DD02	Legislate for immediate suspension of licence for a BAC greater than 0.15
DD03	Make alcohol interlocks mandatory for repeat offenders with a BAC above 0.08 (and support with education program)
DD04	Reduce costs for an alcohol interlock by subsidy or fee reduction
DD05	Reduce the licence suspension time before being able to fit an interlock to 1 month

Detection and Enforcement

DD06	Increase RBT levels so that every driver in the metropolitan area is likely to be tested at least once a year and RBT in rural areas is also increased
DD07	Operate mobile RBT at any time during the year

Education and Information

DD08	Examine integrated public education programs (advertising and promotion)targeting drink driving to ensure adequate attention given to the issue
DD09	Re-investigate the feasibility of installing or making available low cost, reliable alcohol breath testers in all licensed premises – hotels, clubs and restaurants
DD10	Ensure that all those who operate and work in the alcohol service industry are fully trained in responsible serving practice and server intervention
DD11	Promote a program of “No-blame Parent Contracts” for the transport of intoxicated son/daughter drivers
DD12	Increase promotion of the Designated Driver program
DD13	Make hand-held alcohol breath testers available for loan or hire to the organisers of social events, stressing no liability will be assumed(ranging from private dinner parties to catered events such as weddings, etc)

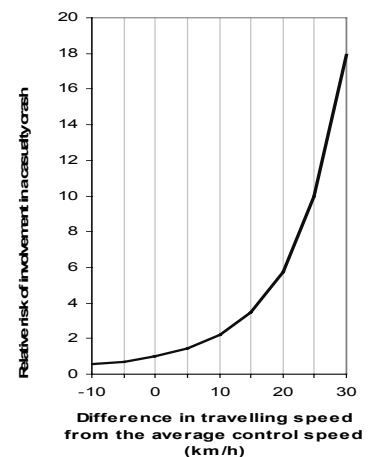
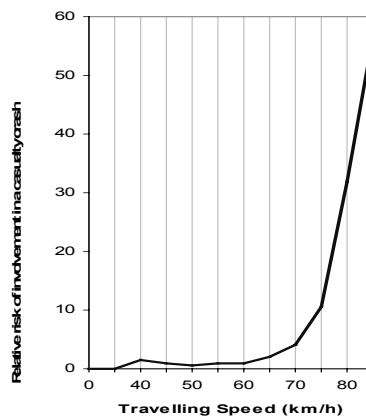
Speeding – SP

Excessive speed has been identified as a major factor in approximately 20% of fatal crashes. However, the links between speed and road safety are complex and speed that is excessive, either above the speed limit or too fast for the conditions (although below the speed limit), could be a factor in 50% or more of crashes, making it the single most important issue in road safety.

The speed at which a driver or rider chooses to travel affects both the risk of a crash occurring and the severity of any resulting injuries. Higher travelling speed increases the risk of crashes and injuries by increasing reaction distance, braking distance, impact speed, crash energy, and loss of control. In addition, other road users are more likely to underestimate the approach speed of a vehicle that is travelling much faster than other traffic and endanger themselves by moving into or across the path of the speeding vehicle.

Research by the Road Accident Research Unit (RARU) has shown that crash risk increases rapidly with increasing speed on both urban and rural roads.

On urban roads the risk of a casualty crash doubles for each 5 km/h above 60 km/h; on rural roads the risk doubles for each 10 km/h above the average traffic speed.



The lowering of inappropriately high speed limits and continued provision of traffic calming treatments in local areas will help achieve significant reductions in road trauma. In 2003 a 50 km/h speed limit in built up areas was introduced and the speed limit reduced from 110km/h to the default limit of 100 km/h on around 1100km of rural roads.

Possible Initiatives

Traffic Management

SP01	Extend the Adelaide Hills 80 km/h limit into adjacent areas with similar topography
SP02	Reduce the speed limit on relatively concentrated sections of urban arterial roads from 60 km/h to 50km/h where there is high pedestrian or cycling activity
SP03	Introduce variable speed limits where appropriate on urban routes
SP04	Encourage councils to review current speed limits on local roads, including 40km/hr limits
SP05	Erect electronic variable speed limit signs for adverse environmental or traffic conditions on very high volume critical routes (eg, Southern Expressway, Glen Osmond – Crafers Highway)
SP06	At appropriate locations install perceptual speed management treatments (eg, transverse bar markings) that are shown to be effective

Enforcement

SP07	Give greater priority to the deployment of Police speed detection resources into country areas
SP08	Increase the average number of hours that laser guns are operated by the Police
SP09	Reduce the enforcement tolerance on speed violations
SP10	Install additional combined speed and red light cameras
SP11	Install fixed speed cameras at black spots on high volume routes
SP12	Install fixed point-to-point speed cameras (these measure a cars average speed between two points) on black routes
SP13	Install a network of <i>Check Your Speed Now</i> signs in rural areas in association with fixed speed cameras

Penalties

SP14	Apply double demerit points for speeding offences during periods of high crash history or increased traffic volumes (eg, Easter, Christmas/New Year)
SP15	Legislate for the immediate loss of licence for exceeding any speed limit by more than a designated amount

Education

SP16	Deploy trailer-mounted electronic speed feedback signs throughout the State to provide information to drivers about their driving speed and the accuracy of their speedometer
SP17	Install several fixed speed feedback signs on bridges over high volume roads to provide information to drivers about their driving speed and the accuracy of their speedometer
SP18	Erect electronic vehicle-activated signs to warn drivers who are speeding on hazardous road sections or approaching sharp curves, etc, too fast
SP19	Expand integrated public education programs targeting speeding and promoting the fact that small reductions in speed produce a much larger reduction in crash risk

Fatigue – FT

While estimates of the proportion of casualty crashes involving driver fatigue vary, research indicates it could be as high as 20%. Fatigue is a possible explanation of why two-thirds of fatalities in rural areas occur on straight stretches of road.

Road engineering treatments such as audio-tactile edge lines, shoulder sealing and the removal or guarding of roadside hazards can reduce the incidence or seriousness of fatigue-related crashes.

Three major factors that contribute to fatigue are prolonged or repeated sleep loss, being awake when you would normally be asleep, and having engaged in stressful or repetitive tasks.

Laboratory research suggests that the effect of being awake for about 19 hours before driving corresponds to driving with a blood alcohol concentration of 0.05. Drivers need to be encouraged to break their journeys, especially if they are beginning to experience signs of drowsiness. In this case they need to rest for at least 15 minutes. Roadside rest areas of a high standard and strategically located on rural arterial roads and National Highways will encourage these breaks. Most rest areas will cater for cars and heavy vehicles; however, in some cases it may be necessary to provide separate truck parking bays within a reasonable distance if rest areas are not suitable for use by heavy vehicles.

Travel maps indicating rest areas and approximate journey times could be promoted. These publications could be produced in conjunction with local tourism groups to encourage motorists to visit the area rather than just travel through it.

The “Drowsy Drivers Die” program started with advisory literature and was expanded to include roadside signage. The program aims to increase awareness of fatigue and encourage drivers to plan their trips and make use of roadside rest areas. The program will continue to be implemented across the State in conjunction with local community road safety groups. Community groups also operate Driver-Reviver sites.

WorkCover Corporation and the transport industry should promote the integration of measures countering driver fatigue into occupational safety programs.

Possible Initiatives

Engineering Treatments

FT01	Extend fatigue-related road improvements such as shoulder sealing, installation of audio-tactile edge lines, and pavement marking including raised reflective markers
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Roadside Rest Areas

FT02	Accelerate the installation or upgrade of high standard rest areas at strategic locations on the rural arterial and National Highway system, taking into account the routes used by and the needs of heavy vehicle drivers
FT03	Seek agreements with service stations on key routes in regard to the provision of “rest” services for drivers
FT04	Develop an information kit for each National Highway and other major routes giving driving times, outlining attractions, providing activities, and indicating rest areas, services and points of interest where travellers can take regular breaks

Education and Information

FT05	Integrate information on fatigue and its countermeasures into all occupational health and safety programs in relation to driving to, from and during work
FT06	Develop educational campaigns that target high risk groups, including shiftworkers, parents/carers of young children, long distance travellers, and those with sleep disorders, as well as the spouses and families of commercial and private drivers
FT07	Monitor research into devices which monitor fatigue as well as record driving activity, especially among heavy vehicle drivers
FT08	Distribute a State-wide map showing rest areas and major service locations
FT09	Extend the existing fatigue messages on major route signing to other major routes in rural areas
FT10	Improve the promotion of the rest options for motorists during major holiday periods

Use of Restraints – UR

On-road surveys show that only about 5% of car occupants are unrestrained. However, about 33% of all vehicle occupants killed and 12% of those seriously injured are not restrained. This clearly shows that seatbelts and child restraints are very effective in preventing deaths and reducing the severity of injuries.

The groups especially at risk are:

- Young male drivers in rural areas
- Aboriginal vehicle occupants
- Rear seat passengers in general
- Young children

Restraints have been compulsory since the early 1970s. However, some very old cars and buses may not be fitted with restraints and are not required to have them.

Australian Road Rule 266 currently allows passengers to travel unrestrained if there are more passengers than there are restraints available.

Possible Initiatives

Fitting Restraints to More Vehicles

UR01	Establish a state-wide advisory and fitting service in the metropolitan area and major country centres for all restraints in vehicles, especially baby capsules and child restraints
UR02	Install seat belts in all new DECS school buses at the time of purchase and on contracted buses after a specified time
UR03	Promote the fitting and use of audible seatbelt reminder systems in vehicles

Legislation and Enforcement

UR04	Increase penalties for not using restraints (currently \$160)
UR05	Legislate to make it illegal for any person to ever travel un-restrained in a vehicle (with minimal exemptions for people who need to continuously get in and out of vehicles eg, those making door-to-door deliveries and for other vehicles such as metropolitan buses)
UR06	Apply double demerit points for restraint use offences during periods of high crash history or high traffic volumes
UR07	Mandate use of child restraints for children over 12 months
UR08	Promote improved vehicle standards in relation to use of child restraints

Education and Information

UR09	Conduct seatbelt enforcement campaigns targeting: <ul style="list-style-type: none">• Young male drivers in rural areas• Aboriginal vehicle occupants• Rear seat passengers, especially children• Young children
UR10	Promote seatbelt wearing, especially by young males, children, rural residents, those in the rear seats of vehicle, and heavy vehicle drivers
UR11	Improve restraint usage data in fatal and serious crashes

Drug Usage – DU

The use of drugs can reduce a driver's performance or increase the likelihood that the driver will engage in risky behaviour. Drugs, especially in combination with alcohol, adversely affect driving while the increasing use of stimulants (such as methamphetamine) is of particular concern.

The most prevalent "recreational" drug (apart from alcohol) is cannabis but there is some debate about its role in causing crashes. Use of 'harder' recreational drugs can adversely affect driving. Police would benefit from technology to reliably screen for the presence of these drugs.

The legitimate use of some prescription drugs can cause drowsiness or a lack of concentration. Educational campaigns conducted with the help of health professionals should be beneficial.

The long-term use of stimulants by transport industry drivers can have adverse effects on health and driving ability. Such problems are best approached through work-place safety reforms.

Possible Initiatives

Education and Information

DU01	Conduct public information campaigns to alert drivers to the effects of drugs and medications
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Occupational Health & Safety Policies

DU02	Promote occupational health and safety programs, especially in the transport industry
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Legislation and Enforcement

DU03	Introduce a program of Random Drug Testing (RDT)
DU04	Train Police to conduct roadside behavioural testing for drugs on reasonable suspicion that someone is driving while affected by a drug or drugs
DU05	Introduce roadside chemical screening for drugs where there is reasonable suspicion that someone is driving while affected by a drug or drugs
DU06	Introduce mandatory blood testing for drugs for all road crash fatalities and any driver admitted to hospital as the result of a crash
DU07	Continue to monitor research into means of establishing impairment levels for various drugs
DU08	Encourage pharmacists to leave warning labels on medicines clear and not covered with other labels

Unlicensed Driving – UD

In fatal crashes, over 5% of drivers and 15% of motorcycle riders were unlicensed. Of particular concern is the proportion of these drivers and riders who have been disqualified from holding a licence or have never held a licence (for the vehicle being driven at the time of the crash or for any class).

Compared to those who are licensed, these people are more likely to have an illegal blood alcohol concentration, be speeding, be driving/riding an unregistered and uninsured vehicle, or not be wearing a seat belt or helmet (in the case of riders).

Unlicensed driving and riding is of particular concern because it reduces the deterrent effect of licence suspension and enables some people to use the road without fulfilling licensing requirements.

Those most likely to be driving or riding without a licence are disadvantaged groups and people living in remote areas.

Possible Initiatives

Education and Enforcement

UD01	Increase the expiation fee for driving while unlicensed or driving a vehicle without the appropriate licence class
UD02	Carry out highly publicised licence checks periodically each year as part of a coordinated strategic approach to road safety enforcement
UD03	Investigate the option of vehicle confiscation for unlicensed driving

Heavy Vehicles – HV

For people who are required to drive vehicles as part of their work, employers need to ensure that driving hours are not excessive and that employees are trained in safe driving practices and key road safety issues such as fatigue, drink-driving, excessive speed and the use of seat belts.

Of particular concern is the fact that heavy vehicles are involved in 20% of fatal crashes.

Fatigue issues are dealt with in Section FT: Fatigue.

Excessive hours and use of stimulants by transport industry drivers can have adverse effects on health and driving ability. The Third Heavy Vehicle Reform Package, developed by the National Road Transport Commission's (NRTC), includes a strong fatigue management component.

Designated roads for B Doubles must provide sufficient room for vehicles to pass safely.

The State will encourage the Commonwealth Department of Transport and Regional Services (DOTRS) to take an active role in bringing in side, front and rear impact protection on all vehicles over 4.5 tonnes. This would be similar to legislation which now exists in Europe, New Zealand and Japan.

Possible Initiatives

Policy and Education

HV01	Contribute to the implementation of a National Heavy Vehicle Road Safety Strategy
HV02	Support national legislation for side, front and rear impact protection on all new vehicles over 4.5 tonnes
HV03	Work with the heavy vehicle transport industry to ensure that employers and drivers have programs that target the use of drugs when driving
HV04	Improve targeting of at-risk drivers using drugs or driving for excessive hours
HV05	Ensure adequate enforcement of load restraint and dangerous goods codes
HV06	Reinvigorate a random roadside brake and safety inspection program to measure the level of compliance

Infrastructure

HV07	Review the width of roads used by B Doubles for compliance with national standards and upgrade, where necessary, to ensure an adequate safety margin for all road users
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Children and School Education – CE

Various age groups have different roles and needs.

Age Group	Road User Activities
Preschool to junior primary	First possibility of unsupervised movements outside the home; passenger travel
Primary school	Walking to school; passenger travel First steps as a road user – learning to ride a bike leading to independent mobility Other on-road activities such as skate boarding
Secondary school	Cycling for school, employment, recreation; passenger travel Learning to drive/ride

Young children do not have a sufficient range of emotional, cognitive and physical skills to safely interact with traffic without adult supervision. An important part of their development is being taught how to use the roads (which includes the footpaths) safely.

The safety of school children is a particular concern as they begin to move about the community without adult supervision.

As part of the Safe Routes to School program, Transport SA, in conjunction with school communities and local government, are modifying the road environment in the vicinity of schools to provide safe access and road crossings.

Possible Initiatives

Road Safety Education

CE01	Develop programs to assist parents in teaching road safety skills to their young children
CE02	Establish a grant scheme to assist young people developing their own specific road safety projects eg, drama/film production, forum, survey, CD, etc

School Road Safety

CE03	Extend the provision of road-based treatments such as lower speed limits and traffic management schemes
CE04	Complete the introduction of the Safe Routes to Schools program (or similar) to all schools in South Australia
CE05	Promote through schools and community road safety groups the signing of Safety Contracts between young people and their parents or carers
CE06	Collaborate with major metropolitan and regional newspapers to print regular articles on road safety statistics and issues
CE07	Develop, promote and monitor more coherent and integrated road safety education at all Kindergarten to Year 12 school levels and in all school systems

Cyclists – CC

National and state cycling strategies aim to increase the level of cycling for environmental and health reasons. However, cyclists are vulnerable to serious injury, especially when sharing the road with motorised traffic. Per distance travelled, the risk of serious injury to cyclists is about five times as great as for car occupants. Road design and management must take into account the needs of all road users, especially those at greater risk of injury such as pedestrians and cyclists. Where possible, these road users will be separated from other traffic.

Compulsory helmet wearing was introduced in South Australia in 1991 and has substantially reduced the level of head injury for cyclists.

Adults are currently banned from riding on footpaths. However, it might be advisable to permit parents to ride with their children on footpaths when teaching them habits of safe cycling.

Possible Initiatives

Legislation and Enforcement

CC01	Increase the level of education (with groups such as the courier industry) and enforcement aimed at the use of helmets and lights and adherence to the road rules
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Education and Information

CC02	Encourage and promote the use of protective gear and the wearing of highly visible clothing or vests by cyclists
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Cycling infrastructure

CC03	Continue to develop off-road and local road cycle path networks in the metropolitan area and country towns
CC04	Implement signage and markings (including on-road) to enhance awareness of cyclists
CC05	Create "super footpaths" which are wider for use by cycling and pedestrians – this requires an exemption from the Road Rules

Older Road Users – OR

People aged 60 and above are involved in 24% of all road fatalities and 11% of serious injuries. With increasing age, older drivers, riders and pedestrians are more likely to be involved in crashes. Their high casualty rate is also affected by increasing frailty and a reduced capacity to recover from injury.

As the proportion of older people in the State rises, the number of older people involved in crashes is expected to increase. The safety implications of an aging population needs to be addressed by ensuring the needs of older road users are explicitly taken into account in road design, maintenance and traffic management practices. Elderly drivers can become mentally overloaded in complex driving environments. Determining when an elderly person is no longer fit to drive is a difficult task requiring the further development of appropriate diagnostic tests and administrative procedures.

Possible Initiatives

Assess fitness to drive

OR01	Support both older drivers' continuing driving, and their transition to non-driver, through promotion of driver assessment and feedback services
OR02	Run special driver courses for older drivers in collaboration with COTA
OR03	Offer regular information sessions for health professionals involved with older (and other) drivers where a medical assessment is required to ensure they are aware of licensing requirements
OR04	Examine the feasibility of limited graduated licences for elderly older drivers (and other drivers with impairments to full driving)

Design and Planning

OR05	Ensure the needs of older road users are explicitly taken into account in road design and maintenance and traffic management practices
OR06	Encourage older people to contribute to transport/mobility plans and options for older residents in their local area

Alternative forms of mobility

OR07	Promote the availability of alternative forms of transport for older drivers to support the transition to non-driver
OR08	Develop a strategy for the safe use of gophers on roads and footpaths
OR09	Continue to deliver the "Walk With Care" program to communities on request

Motor Cyclists – MC

Motor-cycling is a pleasurable but high risk activity with special needs to reduce injury crashes. Learner drivers training can be improved with more at road speed riding instruction. Maximum power to weight ratio for novice motorcyclists to replace the current 250 cc capacity limit is suggested to reduce early injury crashes.

Riders aged 40 and above are returning to motor cycling or taking it up for the first time and are involved in more crashes suggesting the need for retraining.

Motor Cycle Standards

The small profile and high manoeuvrability of motorcycles makes them harder to see; riding with headlights on and wearing highly visible clothing would help make riders more visible to other road users.

Road Standards

Roads are not always designed or made to meet motorcyclists' needs as they require non-slippery pavements with consistent grip to prevent the motorcycle from sliding into other vehicles.

Possible Initiatives

Legislation and Enforcement

MC01	Introduce a maximum power to weight ratio for novice motorcyclists to replace the current 250 cc capacity limit
MC02	Increase levels of enforcement, and the severity of penalties if necessary, for riding without a licence
MC03	Introduce legislation making it compulsory for motorcyclists to ride with headlights switched on
MC04	Maintain and enforce the current car side-window visible light transmission tint standard of 70% so that motorcyclists and vehicle drivers can see one another, helping to avoid crashes

Education and Information

MC05	Conduct a media campaign stressing the high risk of motorcycling to discourage irresponsible motorcycling and to ensure all vehicle drivers share the road safely with other road users
MC06	Upgrade Ridersafe learner training to include training at urban road speeds
MC07	Introduce a training scheme for those returning to motorcycling after an absence of several years
MC08	Require an advance course motorcycle accreditation for those wishing to upgrade the capacity of their motorcycle to one with a higher power to weight ratio

Motorcycling Infrastructure

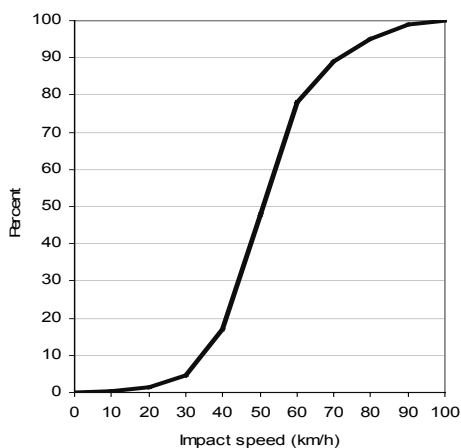
MC09	Give explicit recognition to motorcycling safety issues in road safety audit procedures
MC10	Introduce a motorcycle audit program on at-risk roads with a Black Spot correction program for high risk roads
MC11	Establish a Transport SA hotline for motorcyclists to report motorcycle-related road and traffic hazards
MC12	Ensure that the relevant Austroads motorcycle road design guidelines are used when planning new and remedial roadworks
MC13	Review crack sealing techniques used to repair and maintain roads

Pedestrians – PD

Pedestrians are vulnerable road users and represent about 15% of the road toll. The three highest risk groups are children, the elderly and those affected by alcohol.

Increased walking is encouraged for its health and fitness benefits, and as a traffic reduction measure.

RARU research has shown that the risk of severe injury or death for pedestrians increases rapidly between collision speeds of 40 to 60 km/h. Even small reductions in urban speeds can have a large effect on the risk of a pedestrian fatality.



Reducing traffic volumes and speeds, particularly where there is significant pedestrian activity would provide substantial improvements in amenity and safety. Research has shown that lowering speed limits on urban arterial roads would result in a greater reduction in pedestrian casualties than the same lowering of limits on residential streets.

Possible Initiatives

Infrastructure

PE01	Provide more pedestrian crossing facilities on urban arterial roads such as medians, refuges, walk-throughs (underpasses), and pedestrian-activated crossings at locations with numbers of pedestrians above agreed number in line with national standards
PE02	Install pedestrian-activated crossings on urban arterial roads that automatically detect the presence of pedestrians and adjust crossing times according to the speed at which pedestrians cross
PE03	Implement a "Sharing the Main Street" program with the aim of improving safety for pedestrians in commercial and retail areas
PE04	Review and simplify the different types of speed zones and crossings at schools
PE05	Install additional fencing along roads of high pedestrian activity to encourage use of pedestrian facilities
PE06	Investigate infrastructure improvements including pedestrian crossing facilities at all bus stops.

Young Drivers – YD

Young adults aged 17-24 account for 11% of the total population but 18% of fatalities and 28% of serious injuries come from this age group. This over-representation is mainly attributable to inexperience or lack of skill during the initial period of unsupervised driving and then an increasing propensity for risk taking. Young drivers, their passengers, and other road users are all at risk.

The State's Graduated Driver Licensing scheme for novice drivers is being examined in terms of both its structure and conditions including such features such as staged provisional licensing, hazard perception tests with a greater amount and variety of supervised driving experience.

Much of the 'speed problem' and a substantial amount of the 'drink drive problem' are also 'young driver problems'. Improved enforcement of these offences would have a particularly beneficial effect on young drivers.

Possible Initiatives

YD01	Extend the zero BAC restriction to a higher age
YD02	Consider passenger restrictions to those on a probationary licence
YD03	Examine restrictions on full licence holders in the first few years after they obtain a full licence
YD04	Introduce ways of encouraging and rewarding offence-free driving periods by novice and full licence drivers
YD05	Review the effectiveness of provisions for disqualified novice drivers, including the Driver Intervention Program
YD06	Review the information provided to Learner drivers
YD07	Add questions relating to railway crossing safety to the Learners Permit knowledge test
YD08	Investigate options for mandatory or optional driver training courses for novice and other drivers

Aboriginal Road Users – AR

Road crashes are the cause of 8% of the total number of deaths among Aboriginal people each year compared to 1.2% for the non-Aboriginal population. The majority of Aboriginal casualties are passengers and occur in rural or remote areas.

The greater risk factors for Aboriginal road users include

- More passengers per vehicle
- Greater likelihood of not having or not using restraints
- Passengers travelling in the goods areas of trucks or utilities

Possible Initiatives

AR01	Involve Aboriginal communities in identifying their own local road safety issues and considering culturally appropriate solutions
AR02	Encourage more Aboriginal people to become licensed driving instructors, to provide culturally appropriate forms of driver training in their surrounding communities
AR03	Extend into the far north west Anangu Pitjantjatjara lands, the program of training health workers and other key personnel to provide hands-on demonstrations of the correct fitting of child restraints into vehicles and how to use them
AR04	Work with TAFE to ensure that there are appropriate repair and maintenance skills and resources available in remote communities

Road Standards – RH

Inadequate clear zones, poor shoulder condition, substandard road alignment and poor delineation contribute to many crashes on the road. In particular:

- road-side hazards such as poles and trees are a major factor in 40% of car occupant fatalities
- 60% of crashes on open rural roads are single vehicle crashes such as rollovers or running off the road
- 33% of fatalities occur when vehicles run off the road and hit fixed objects
- more than two-thirds of country fatalities occur on straight sections of road
- 60% of all fatalities and 46% of serious injuries occur on rural roads

Improvements to existing roads produce major reductions in the road toll. Such reductions can be achieved through Black Spot and Mass programs and from general road improvements.

Fatalities in rural areas are declining at a slower rate than in urban areas. While urban fatalities have reduced by 59% between 1982 and 2002, rural fatalities have only declined by 27% over the same period.



Smart Roads Safety Program

Smart ITS (Intelligent Transport Systems) technology is available for the road system. It includes variable electronic message signs able to provide timely warnings about road safety hazards or apply flexible speed limits in response to changing conditions.

Possible Initiatives

Infrastructure

RH01	Extend the programs of constructing overtaking lanes
RH02	Implement a notification program to encourage the public to identify and report hazardous vegetation and objects
RH03	Expand the program of replacing poles near arterial roads with underground services and frangible lighting poles
RH04	Identify and treat critical locations (eg, intersections, areas with drainage issues) with poor skid resistance
RH05	Consider the relocation of stobie poles and light poles where this is a factor in crashes
RH06	Investigate ways of improving line marking on roads for improved visibility

Safety Management

RH07	Conduct road safety audits as an integral part of land use planning
RH08	Work with Local Government to develop road safety strategies aimed at safer roads and roadsides
RH09	Review the operation of the Adelaide Coordinated Traffic Signal system to ensure there is an appropriate balance between efficiency, access and safety

Traffic Management

RH10	Implement a program of indenting bus stops on all key arterial roads
RH11	Review the application of double lines on overtaking lanes
RH12	Relocate bus stops that are in dangerous locations

Research

RH13	Install automatically-activated video cameras at high-risk intersections to record crash dynamics, enabling better analysis of crash factors and intersection design
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Vehicle Standards – VS

With an average age of 11.9 years compared to the national average of 10.5 years, South Australia has the oldest car fleet in Australia, except for Tasmania. This means that new cars with their better safety standards and features are being incorporated in to the South Australian vehicle fleet at a slower rate.

Most improvements in occupant protection will be a natural consequence of gradual improvements in the standards of new cars. Modifications such as bull bars and other after-market attachments also need to comply with safety standards.

The State Government has established a new facility incorporating RARU — the South Australian Centre for Automotive Safety Research (CASR). The Centre will add value to the State’s car industry by conducting collaborative world-leading automotive safety research.

At present only B Doubles, road trains and passenger transport vehicles (buses and taxis) have to be inspected regularly. Other vehicles including most trucks and semi-trailers are only inspected if their owners are seeking re-registration after a vehicle has been issued a defect notice. A broader vehicle inspection regime may improve the overall roadworthiness and safety performance of vehicles and possibly contribute to a reduction in the average vehicle age. However, the costs of increased testing relative to the benefits need to be considered.

Intelligent Transport Systems (ITS) technologies have an enormous potential to improve the safety of vehicle use. Many sophisticated devices and systems currently under development are unlikely to be fitted to new vehicles in high numbers until later this decade or next. However, a number of ITS systems have the potential to begin to make significant improvements in safety this decade:-

Drink driving	Alcohol ignition interlocks
Speeding	Speed alert devices and intelligent speed adaption
Non-use of restraints	Seatbelt warning devices and ignition interlocks

Possible Initiatives

Vehicle Standards

VS01	Collaborate with South Australian vehicle manufacturers to encourage the earliest introduction of safety-related innovations to new vehicles
VS02	Work with national authorities towards the accelerated introduction of safety devices into new vehicles manufactured and sold in Australia as well as imported vehicles
VS03	Examine the impact of daytime running lights

Vehicle Inspection

VS04	Introduce random vehicle inspections to detect highly visible defects (eg, excessively worn tyres, damaged lights); vehicles detected would require a comprehensive inspection to confirm all defects have been cleared
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Intelligent Transport Systems (ITS)

VS05	In association with South Australian vehicle manufacturers and CASR, run and publicise a trial of vehicles fitted with safety related and ITS devices - these vehicles would be displayed at the major shows held each year across the State
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Community Attitudes & Behaviour – CA

Individuals and community groups have the opportunity to influence attitudes and behaviours in their area, to participate in local and regional road safety projects, and to contribute towards wider road safety initiatives at State and national levels.

Local Government, as the provider of many community services and as the road authority for the local road network, has a vital role to play in implementing road safety initiatives. Local Government bodies could be encouraged to develop road safety strategic plans for their areas and to work closely with community bodies involved in road safety.

Community Road Safety Groups (CRSGs) provide an important avenue for community members, Local Government, Government agencies, business organisations, schools and service groups to work together on road safety issues. From 1999 to 2003 the number of community road safety groups has increased from 5 to 26, and the numbers will continue to increase, with appropriate resources.

Possible Initiatives

Alternative Forms of Transport

CA01	Continue to promote public transport especially its road safety and environmental benefits and the lower cost of travel compared to the ownership and operation of private cars
CA02	Work with the Passenger Transport Board to improve public transport in and to regional areas

Safe Behaviour

CA03	Implement a State-wide tailgating enforcement and advertising program
CA04	Impound vehicles for high-risk offences such as exceeding a speed limit by more than a designated amount, driving a vehicle without ever having had a licence, or driving while disqualified
CA05	Increase penalties for, and enforcement of, hands-on use of a mobile phone while driving
CA06	Monitor research into other driver concentration hazards within vehicles
CA07	Establish (taking into account civil liberty issues) a "dob in a driver" scheme where motorists can report other motorists for certain observed driving "offences"

Community Road Safety Activities

CA08	Expand community road safety groups (CRSGs) to cover the entire State and encourage greater involvement of Local Government
CA09	Expand the grants scheme providing assistance to community groups for undertaking road safety projects to organisations other than CRSGs
CA10	Enhance and further promote the Police annual Road Safety Calendar which is linked to major road safety communication campaigns (the calendar outlines Police enforcement focus over 12 months and provides key road safety messages)
CA11	Work pro-actively with the media and community groups in metropolitan and regional areas to maximise the promotion of road safety issues and enforcement
CA12	Promote community targets for maximising the number of consecutive fatality-free days within regions and across the State
CA13	Draw attention to road safety issues using road safety ambassadors
CA14	Expand the crash marker program to cover the whole State (including rural areas) and ensure consistent criteria
CA15	Develop promotional road safety materials for use by CRSGs and other groups
CA16	Create internet/web sites to provide access to information about road safety projects and links with interstate resources

Licensing and Training – LT

Previous sections cover young drivers and older drivers. The vast majority of drivers fit between these two special groups and, although the fatality and injury rate is low, 60% of fatalities and injuries among drivers and riders occur between the ages of 25 to 59.

Possible Initiatives

LT01	Develop intervention programs for those drivers with history of multiple crash offence and loss of licence history
LT02	Develop options for providing incentives for drivers who have lengthy periods of offence free and crash free driving
LT03	Provide educational material to those drivers who have reached 6 or more demerit points regarding safe driving, the road rules and the consequence of further demerit points

The Road Safety Advisory Council
www.dtup.sa.gov.au

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