



A New South Wales
Government initiative



Road Safety 2010



A FRAMEWORK FOR SAVING 2,000 LIVES
BY THE YEAR 2010 IN



New South Wales



Roads and Traffic
Authority

Making our roads the world's safest

The New South Wales Government is committed to making our roads the safest in the world.

We have made great progress in reducing the road toll over the past two decades. In 1998 NSW had the lowest number of people killed on our State's roads in a single year since 1949.

While we have had success we need to do more. In 1998, 556 people died and more than 26,000 were injured on New South Wales roads, a great loss to our community.

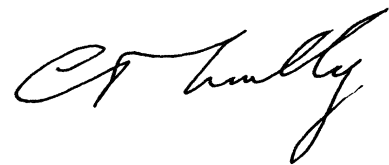
This represents enormous emotional trauma and personal loss, and has a financial cost of more than \$2 billion each year for loss of earnings, emergency medical care, repair costs, insurance, and rehabilitation.

To meet our goal of having the safest roads in the world, the State Government has developed Road Safety 2010.

This framework sets out how we can halve the road toll, saving 2,000 lives by the year 2010. It also promotes community understanding and involvement in road safety initiatives and strategies.

We are all road users at some time, whether as drivers, cyclists, pedestrians or passengers. Road safety is an issue that affects us all.

I urge you to become involved in determining how we can make New South Wales roads safer for all of us.



Carl Scully MP
Minister for Roads
Minister for Transport

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Saving lives, avoiding injury

By the year	Lives that will be saved	Injuries that will be avoided
2005	820	15,500
2010	2,000	38,000

The challenge in NSW

Every week, 11 of our friends, neighbours, family members or workmates start a journey that they never complete.

Every week, more than 500 people suffer injury on the way to or from work, home, visiting friends, going shopping, doing what they expect to be able to do safely.

Consider Sarah, a 28 year old mother of two children, who worked as a teacher. Sarah was killed in an accident involving a speeding motorist. Sarah's children lost a mother, her husband his wife, her parents their daughter, and our community has lost someone who was making a valuable contribution.

Road safety progress

We have done well so far in reducing fatalities. In metropolitan areas, fatalities totalled 199 in 1998, a reduction of 55 compared with 1997. On local roads, the *50km/h Urban Speed Limit Program* has reduced the number of crashes. However, while there have been major long term reductions in the number of fatalities in some areas, there have been some increases in country road fatalities in recent years. In 1998 there were 357 people killed on country roads, an increase of 35 over the previous year.

Speeding and driver fatigue, particularly amongst young drivers, and failure to wear seatbelts continue to be road safety problems and are the major contributors to the annual road toll. As such, future safety strategies and initiatives will primarily focus on these issues.

The future focus

To achieve our goal of having the safest roads in the world, the State Government will pursue a range of initiatives in three key areas:

- Safer people
- Safer roads
- Safer vehicles.

Better community understanding of road safety issues and solutions is important in achieving our goal. As a community we now have greater awareness and understanding of the factors contributing to road deaths and injuries, and these have changed some of our attitudes. For example, drink driving is now

largely regarded as socially unacceptable behaviour. We need to change people's attitude to speeding, driving while fatigued and not wearing seatbelts to achieve a similar change of culture to reduce the road toll.

The over-representation of novice drivers in accident statistics requires a new approach to be taken. A Graduated Licensing Scheme will ensure that novice drivers do not progress to an unrestricted licence until they demonstrate greater knowledge about road conditions and have had more experience behind the wheel.

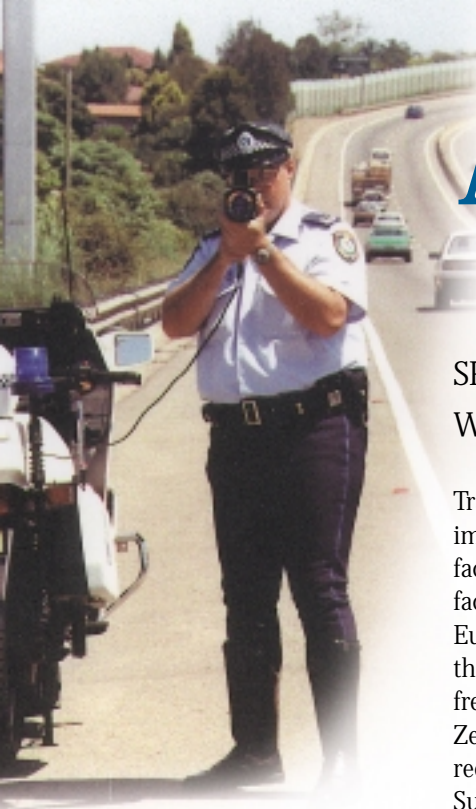
The RTA will also work with the police and courts to develop initiatives that have greater impact on repeat offenders. Such initiatives could require repeat offenders to be ordered by the court to undertake road safety education courses, or have specific devices such as alcohol interlocks fitted to their vehicles.

Improvements to date have been achieved through a whole of government approach between State, regional and local stakeholders working in partnership in the planning and delivery of road safety programs to the community. In recognition of the important ongoing role of Local Government, the State Government will continue its strong support for road safety initiatives such as the 50km/h speed limit program for council controlled roads.

2,000 lives can be saved

Road safety initiatives	by 2005	by 2010
Safer people		
Enhanced speed education and enforcement	185	330
Other initiatives	115	350
Subtotal	300	680
Safer roads		
Lower urban speed limits (50km/h)	135	230
Other initiatives	100	365
Subtotal	235	595
Safer vehicles		
Speed limiters	45	160
Other initiatives	240	565
Subtotal	285	725
Total reductions	820	2,000

A new approach



SPEEDING IS THE GREATEST contributor to road fatalities in New South Wales, and young drivers are amongst those who suffer most in road accidents.

Traditionally, safety has been seen as only one important factor in the provision of road facilities, which has been balanced with other factors such as cost, access and mobility. Some European countries such as Britain, Sweden, the Netherlands and Norway are taking a fresh approach to road safety. Sweden's Vision Zero strategy turns attention away from crash reduction to injury reduction. The Dutch Sustainable Safety strategy also aims to progressively remove injury risks from the road system.

Just like these European countries, NSW aims to further improve road safety through a systematic change in the planning, design and management of the road networks and road safety strategies.

New Graduated Licensing Scheme

NSW will introduce a comprehensive revamp of the licensing arrangements for novice drivers. The new Graduated Licensing Scheme, or 'GLS' as it will be known, will introduce sophisticated new methods suitable to prepare novice drivers for safe and efficient driving in the new millennium.

It is over thirty years since NSW pioneered graduated licensing by introducing a provisional licence; it is only in recent years

that graduated licensing has gained wide acceptance elsewhere, such as in North America. While NSW has progressively upgraded its novice licensing arrangements, the GLS will represent a quantum leap in driver licensing practice.

Young drivers continue to be over-represented in accident statistics year after year. The GLS will use the latest technology to assess the competence of novices. Extensive experience under varied conditions will be made compulsory and the novice driver period will be

extended to more than twice the current minimum duration. This will ensure greater opportunity for training and experience under controlled conditions. Drivers will be at least 20 years of age by the time they graduate from learner licence through two provisional licence stages, to unrestricted licence level.

Speed, crashes and injuries

A major road safety issue is speeding.

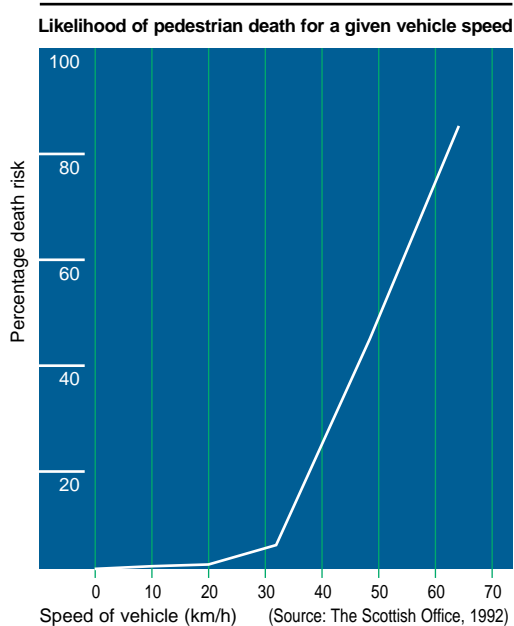
Speeding is a factor in at least 40% of fatal crashes in NSW. No other single factor has a greater contribution to road trauma in our state. There have been many studies which demonstrate that speeding increases both the likelihood of a crash occurring and the severity of injury caused by road crashes. A priority of road safety authorities is to reduce the problem of speeding. If we can prevent motorists from speeding, we will dramatically reduce the road toll.

Safe speeding campaigns

A Federal Office of Road Safety study of speed related crashes in 60km/h zones found that:

- the risk of being involved in a crash causing death or injury doubles with each 5km/h increase in speed above 60km/h
- the risk of a crash associated with speeding is directly comparable to that associated with drink driving; for example, travelling at 68km/h in a 60km/h zone is as risky as driving with a blood alcohol level of 0.08
- if the vehicles in the study had been travelling below 60km/h, nearly half of the casualty crashes may have been avoided
- speeding up to 72km/h in a 60km/h zone causes as many casualty crashes as more extreme speeding (greater than 72km/h).

Despite this there are still drivers who persist in driving over the speed limit and who drive too fast for prevailing conditions. The State Government's *Safe Speeding: There's No Such Thing* campaign aims to alert the community to the crash risks associated with exceeding the speed limit by even a small margin.



Speeding has a much more severe effect on some road users than on others. For example, an unprotected road user such as a pedestrian or cyclist is injured at much lower speeds than are people travelling within a motor vehicle.

Driving at lower speeds will allow a better chance of either stopping in time to avoid a collision with an object or a person, or will reduce the severity of impact and injury.

When a car hits a pedestrian at 64km/h there is an 85% chance the pedestrian will die. As the graph on page 2 indicates, at around 50km/h the chance of death drops to 45%.

In areas where there is high pedestrian and cyclist activity, the Government is responding to community calls for safer speed environments. Examples are:

- 40km/h school zones and school bus zones
- 50km/h speed limits for local streets
- 10km/h shared vehicle and pedestrian zones.

The implementation of these zones is accompanied by public education campaigns to ensure that drivers are aware of the need to slow down. Where appropriate, there are special engineering treatments to ensure that drivers slow down.

Lower urban speed limits

In many European countries the 50km/h limit is widespread, and even lower limits, most frequently 30km/h, are applied in zones where vehicles, pedestrians and cyclists mix. The Dutch aim to have 50% of their local roads zoned at 30km/h by the year 2000. Britain's key pedestrian policy is for local safety schemes, with traffic calming and 20miles/h (32km/h) zones in residential areas.

The 1997 trial of the 50km/h urban speed limit in NSW demonstrated a significant reduction in casualties throughout the trial areas. More than half of NSW councils have implemented this limit on local streets, which has contributed to a reduction in the number of vehicle accidents.

Fatalities on local urban streets have decreased from 124 in 1997 to 102 in 1998.

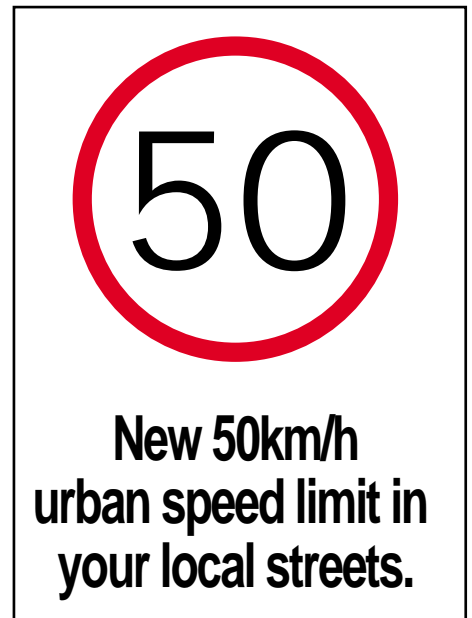
Speed management

An important aspect of the management of speed is enforcement. RTA research in NSW demonstrates that more than 60% of motorists report that they drive at or above the posted speed limit. A number of research studies, including the RTA pilot study in NSW on the double demerits initiative, have found strong

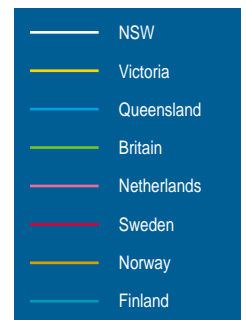
links between speed enforcement, appropriate penalties and reductions in serious casualties.

The RTA is working closely with the Police Service to ensure that enforcement programs are effective for both heavy and light vehicles. Programs such as the *3 Strikes You're Out* are having a dramatic effect in increasing compliance in the heavy vehicle industry. Under this program, a vehicle can be suspended from operating on the road on the third offence if caught flouting road transport laws.

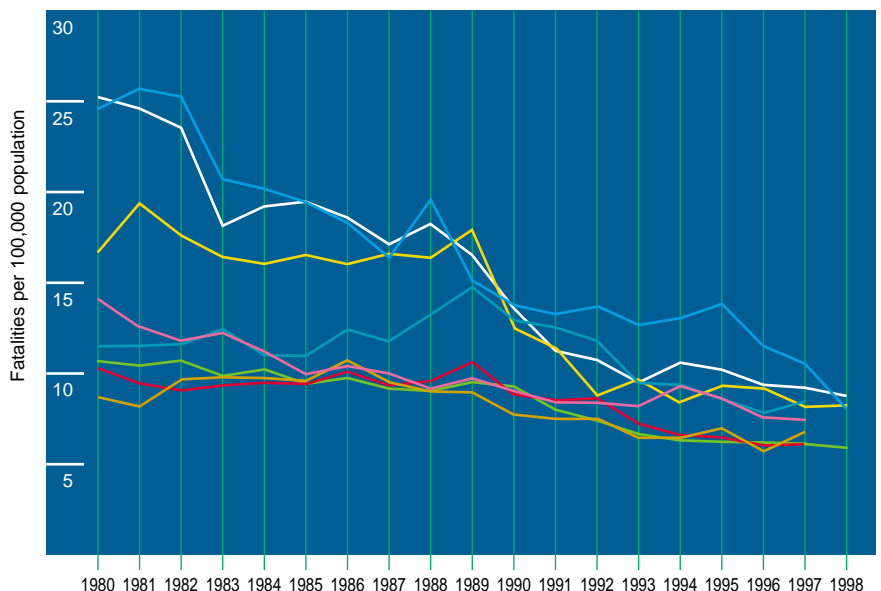
Overseas technological advancements are also being examined for ways to improve compliance with speed limits. A recent Norwegian study found that automatic speed camera enforcement can reduce the number of injury accidents by 20%. NSW is also looking towards using this type of technology in the future, and has introduced two fixed speed cameras on the Pacific Highway at Burringbar Range on the New South Wales far north coast, a well known blackspot. This initiative has already seen an immediate reduction in speed, and as a result a reduction in serious injury accidents.



The State Government has invited local councils to implement a 50km/h speed limit in local streets.



Trends in fatalities per 100,000 population since 1980 – NSW, Victoria, Queensland and current best performing countries





Safer people

THE STATE GOVERNMENT WILL encourage safe behaviour by doing all it can to ensure that drivers keep to speed limits, that they do not drive if impaired by alcohol or fatigue, that all vehicle occupants are using seatbelts, and that novice drivers acquire adequate knowledge and experience before progressing to the next licence stage.

Improvements in road user behaviour can save around 680 lives by the year 2010.

Speed limits and enforcement

Speed is the major behavioural road safety problem in NSW and to achieve our goal of halving the road toll in the next decade, compliance with speed limits must be increased as a matter of priority.

While 42% of all road fatalities involve speeding, this increases to more than 47% of the deaths on country roads. In 1998, of the 357 deaths on country roads, 167 were speeding related, with most of these fatalities being country people. The risk of a casualty crash associated with speeding is directly comparable to that associated with drink driving.

Excessive speeding is particularly dangerous and the Government has recently doubled the penalties for exceeding the speed limit by 30km/h or more.

Initiatives that target speeding, such as double demerit points for speeding over holiday periods, have been very effective. In 1998 the double demerit points initiative resulted in the lowest ever recorded Easter road toll. These types of initiatives have strong community support.

Educating the community about the risks and consequences of speeding will continue to form a major part of the NSW speed management program. These activities are coordinated with highly visible Police enforcement.

Speed limits will be even more vigorously enforced. New technology will offer opportunities to improve detection and enforcement. New equipment enables accurate detection of motorists exceeding the speed limits by only a few kilometres per hour and from a greater distance. The use of automated speed camera technology in Europe has played a pivotal role in achieving some of the safest roads in the world. Highly visible, highly publicised automated speed cameras will be trialed at key blackspot locations and, if there are substantial road safety gains, will be used more widely to encourage speed compliance.

In addition, the Government will examine how existing technology such as Safe-T-Cam and SCATS could be adapted as speed monitoring and enforcement tools. Safe-T-Cam enables the RTA to monitor heavy vehicles travelling at excessive average speeds and drivers exceeding prescribed driving hours, and SCATS is the computerised system which controls traffic signals in major urban centres in NSW.

Tougher action on drink driving

Of all drivers and motorcycle riders killed or injured in 1998 with an illegal blood alcohol content, 55% were in the high range of 0.15 or more.

Police already have the power to confiscate the vehicle keys of drink drivers. Drink driving fines, penalties and periods of imprisonment were recently doubled for many drink drive offences. To ensure that the community is safe from those who persist in drinking and driving, the RTA is conducting trials of alcohol ignition interlocks to stop drivers impaired by alcohol using their vehicles. If trials are successful, the Government will consider giving Courts the power to order repeat offenders to fit alcohol interlocks to their vehicles, at their own cost, or to have vehicles impounded.

The introduction of Random Breath Testing (RBT) has had a significant impact on the level of drink driving. It is now generally considered to

Recent initiatives

- Penalties increased for drink driving and excessive speeding.
- Police have power to confiscate car keys of drink drivers to prevent danger to themselves and others.
- Introduction of road safety education campaigns, coordinated with police enforcement; increased penalties (such as double demerit points) and community activities over peak travel times, e.g. Easter holiday periods.
- Introduction of Enhanced Enforcement Program, delivering increased police enforcement and public awareness.
- New tough penalties for 'road rage' offences including aggressive and predatory driving.
- Increased public awareness of safe road practices through advertising and education.

be socially unacceptable to drink and drive. However, as alcohol is still a factor in approximately one in six fatal crashes, the Government will continue to implement RBT programs targeted to problem areas, supported by high profile public education programs.

The Government will continue to take the lead in the development of alternative transport schemes with the RTA and the police working in partnership with Local Government, health authorities, the liquor industry, transport providers and community agencies, in urban and rural areas. Designated driver schemes and complementary buses and taxis sponsored by some clubs and hotels are good examples of how community organisations can help in reducing drink driving incidence.

Dangers of driver fatigue

Driver fatigue is a factor in at least 20% of fatal crashes in NSW. Public education and advertising campaigns will continue to be used to ensure that drivers are aware of the dangers of driver fatigue over long and short distances, and what is needed to prevent it.

The Government will continue to work with the community and sponsors to improve the provision and operation of Driver Reviver sites throughout NSW, to encourage motorists to stop and take a break.

To help reduce long distance driver fatigue for both heavy and light vehicles the Government will extend its program of building and upgrading rest areas across NSW, and investing in public education and information such as travel maps showing rest areas. Rest areas will be strategically located along key travel routes to provide drivers with opportunities and encouragement to break their journey at least every two hours. The Government will work with the trucking industry, drivers and the Transport Workers' Union to ensure that drivers have safe working conditions and are not required to drive for excessive hours.

The Government is also working closely with the heavy vehicle industry to promote lifestyle improvements. Programs such as *Healthy Eating on the Road* promote a healthy lifestyle as one step in reducing driver fatigue incidence. Other initiatives include the *Transitional Fatigue Management Program* and other compliance programs, that give heavy vehicle operators more flexibility to better manage their drivers and operations. Existing technology such as the Safe-T-Cam system has recently been expanded to monitor and enforce driving hour legislation.

Advances in technology are being explored overseas to detect driver fatigue by monitoring driver behaviour through vehicle 'wobble'. The RTA is also working closely with the National Road Transport Commission to develop a driver

specific monitoring device to better record the behaviour of heavy vehicle drivers. Investigations and trials will be run to test the feasibility of introducing these technologies into NSW.

The need for seatbelt wearing

Although 95% of motor vehicle occupants in NSW wear seatbelts, in 1998 106 vehicle occupants who died on our roads were not wearing seatbelts. The non-wearing of seatbelts in rural areas is much higher than in urban areas. Seatbelts save lives and public education campaigns target rural drivers and passengers to promote seatbelt wearing as an important road safety issue for the rural community. These initiatives will be coordinated with enforcement programs. The Government will consider giving Courts the power to order repeat offenders to fit seatbelt interlocks that prevent operation of the vehicle unless seatbelts are fastened. The State Government will lobby for changes to the Federal Government's Australian Design Rules (ADRs) to ensure that interlocks are fitted to all new vehicles.

Road safety education programs

The extensive road safety education program in schools and children's services will continue to be a key initiative aimed at increasing students' knowledge and skills in road safety. This curriculum-based program is delivered in schools to students from Kindergarten to Year 12 and is integrated with the school syllabus. The RTA has formal agreements with the Department of Education and Training, the Catholic Education Commission, the Association of Independent Schools and the Institute of Early Childhood at Macquarie University to support schools and children's services in road safety education. The program is supported by marketing and public education campaigns such as *Hold me close* and *Take me to the right side of the road*.

Education will not be restricted to the school environment. Road safety courses will also be developed to enable offenders to change their behaviour and develop safer driving habits.

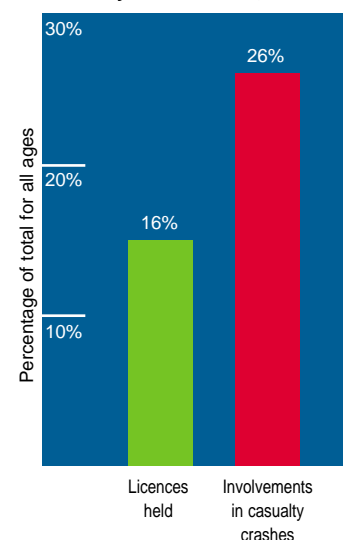
Driver licensing

Year after year, accident statistics demonstrate that young drivers are at risk of death or injury on our roads. While 17 to 25 year old drivers hold 16% of licences, they account for 26% of all drivers involved in fatal or injury crashes. We must provide ways to improve the knowledge and ability of younger people behind the wheel. A radically revised graduated licensing scheme is proposed to ensure that novice drivers demonstrate improved skills and maturity in driving before graduating through the stages of driver training and licensing. This will require a progressive improvement in skills to graduate



Safety education programs emphasise the need for children to hold an adult's hand at all times in the traffic environment.

Over involvement of 17 to 25 year old drivers, 1998



from learner licence, through provisional driver licence to unrestricted licence level. Importantly, the novice driver period will be extended to a minimum of 3 years and 6 months duration to ensure greater opportunity for training under controlled conditions.

The new GLS, which will apply to all provisional licence applicants after 1 July 2000, will be the most significant overhaul of the NSW novice licensing arrangements ever undertaken. It will restore NSW to the forefront of world novice licensing practice.

Under the GLS, entrants will be required to step through three novice stages before progressing to an unrestricted licence. Graduation to the next stage will depend on passing a test. There will be a total of four tests. The two existing tests, the computer-based Driver Knowledge Test and the Driving Ability Road Test, are advanced by world standards; they will continue to be fine-tuned. The two new tests, the Hazard Perception Test and the Driver Qualification Test, will be highly innovative approaches to ensuring that drivers have the necessary knowledge, attitudes and skills for safe

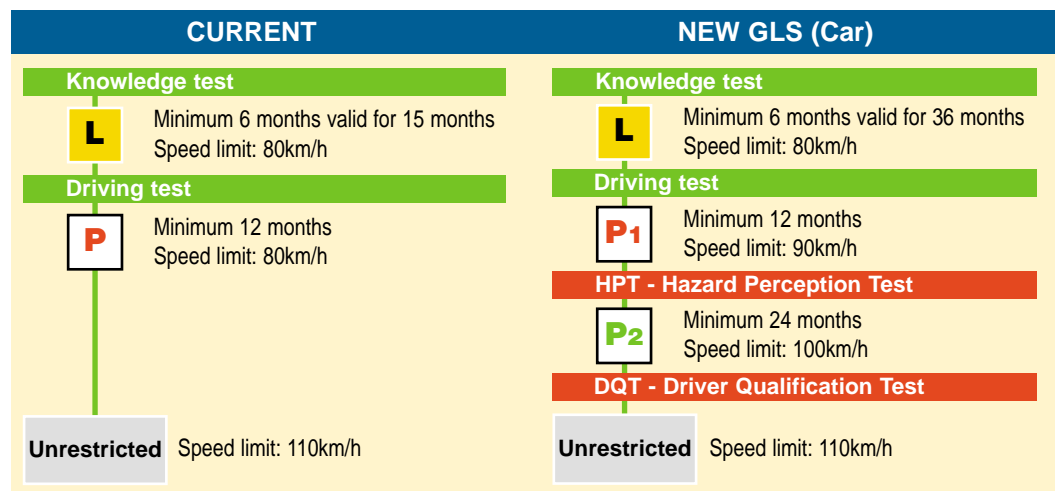
driving. They will make use of the latest computer multimedia technologies. Following trials, a Hazard Perception Test will be implemented in all motor registries. It will become a prerequisite to advancing to the second provisional licence stage.

In addition to passing the Driver Knowledge Test to graduate from a learner licence to a provisional licence, a driver will have to gain extensive experience under various specified conditions. These will have to be recorded in a log book and signed off by the learner's supervisor, who must hold an unrestricted licence.

The minimum time to move from first obtaining a learner licence to an unrestricted licence will be extended by two years. Drivers will be at least 20 years of age before they can obtain an unrestricted licence.

Restrictions imposed on novice drivers will be progressively relaxed as they graduate through the stages. This will shield drivers from hazards in the early stages and allow exposure to more challenging driving conditions only when they have demonstrated that they are ready.

Graduated Licensing Scheme for novice drivers to improve driving skills and standards



Making it happen

Safer people

1. Introduction of a new Graduated Licensing Scheme for novice drivers.
2. Rigorous enforcement of speed limits, with the introduction of automated speed camera technology.
3. Alcohol interlock trial commenced for repeat drink drivers.
4. Courts may be given the power to have vehicles of repeat drink drivers impounded.
5. Seatbelt interlocks may be ordered for repeat offenders of non-wearing of seatbelts.
6. Repeat offenders may be ordered by the court to undertake road safety education courses.
7. Implementation of alternative transport schemes for drinkers, in conjunction with liquor industry, transport providers, Local Government, health and community agencies.
8. Provision of information to drivers regarding locations of rest areas, and continuing to work with the community to provide Driver Reviver sites to combat fatigue related accidents.
9. Public education campaigns to ensure road users understand the dangers of speeding, drink driving, fatigue and not wearing seatbelts.
10. School education road safety programs for protection of children and development of long-term safe behaviours.

Safer roads

THE STATE GOVERNMENT IS committed to building and maintaining better and safer roads. Future improvements will ensure that all new roads are built to the most stringent safety standards.

Speed management

Safety will be improved by a shift to lower speed environments, especially in areas with high pedestrian activity and vulnerable users. The Government strongly supports the Local Government 50km/h urban speed limit program. By the end of 1999, 100 Local Councils in NSW will have implemented this initiative.

A number of councils have implemented the *Sharing the Main Street Program* for improved safety and pedestrian amenity in shopping precincts. Lower speed limits to suit specific conditions may also be introduced in areas where the community demands improved safety.

The RTA has initiated a review of speed limits on all NSW roads to ensure that posted speed limits are appropriate to the function and construction of the road and to enhance the safety of all road users.

The road environment will be designed to manage vehicle speeds: for example, innovative use of line marking and other techniques can influence motorists' perceptions of the safe speed to travel. Electronic variable message signs will be used to vary speed limits to enhance safety in all traffic and weather conditions.

Protection of our children requires special care. That is why the Government has introduced school zones with 40km/h limits (60km/h in some rural areas), advised by

Upgrading the Pacific Highway. The new freeway north of Bulahdelah replaces a number of notorious accident blackspots, vastly improving road user safety along the North Coast.



signposting and roadmarkings, during school start and finish times. A 40km/h passing speed limit around school buses started in January 1999.

Designing safer roads

Road design in the future will increasingly focus on the safety of all users. Special consideration is given to road users who are more at risk of serious injury such as pedestrians and cyclists. They will be separated from other traffic where possible, or vehicle speeds will be reduced in appropriate areas.

Upgrading existing roads and higher safety standards in new road construction, coupled with greater driver awareness of factors which can cause accidents, will lead to significant savings in road trauma and crash costs.

Road maintenance such as resurfacing to improve skid resistance will continue to be a priority.

Road safety audits

Innovative techniques in road safety diagnosis and treatment will be applied during the building of new roads and improvements to existing roads. The criteria for new construction will be the highest safety standards. Potential safety hazards will be identified and eliminated even before construction commences through road safety audits.

Recent initiatives

- Upgrading of roads, particularly those with poor crash records such as the Pacific Highway, and the widening of the M4 Motorway between Penrith and Parramatta.
- Construction of cycleways to separate cyclists from other traffic.
- Removal of blackspots through improvements such as the Homebush Bay Drive grade separation in Sydney.
- 50km/h speed limits introduced in urban streets and 40km/h speed limits in school zones to reduce the risk to vulnerable road users.
- Improved linemarking with longer life, higher visibility and more skid resistance and 'rumble' strips marking lane edges to prevent run-off accidents.
- Road safety audits to assess risk on existing roads and to build safer roads in the future.



Improvements in the road environment can save around 600 lives by the year 2010.

Blackspot programs

Blackspot programs that target locations with high accident histories have reduced injuries and fatalities. Many of the State's worst blackspots have now been completely reconstructed to remove hazards and relieve congestion. The blackspot program includes treatment of blackspots around bus stops, particularly near schools, and on hazardous intersections and sections of road.

Increased use of public transport

Despite extensive public transport in our cities, NSW is still highly dependent on road transport. We have one of the highest levels of car ownership in the world. One of the challenges for this Government is to encourage more use of public transport.

The State Government's plan, *Action for Transport 2010*, aims to increase the use of public transport by making it more convenient, safe and reliable.

There are also significant road safety benefits associated with increasing the use of public transport and reducing the use of private cars, especially for journeys to work. Studies have demonstrated that passengers on buses have lower exposure to the risk of road death and injury than occupants of other types of vehicles.

The worst blackspot in Sydney was fixed in 1998. During the two year period 1994–95, there were 52 accidents at the Homebush Bay Drive and Australia Avenue intersection. This was Sydney's worst intersection accident blackspot until a new six-lane flyover was opened to take traffic over Australia Avenue.



Attractive roadside rest areas encourage drivers to break their journey.

Promoting roadside rest areas

To help reduce driver fatigue, roadside rest areas will be more attractive and will be built at strategic locations to encourage drivers to break their journey at least every two hours. The Government will provide information to drivers regarding locations of rest areas via maps and consistent signage of rest areas. Particular attention will be paid to the needs of truck drivers and other professional drivers.

Major rest areas, such as those recently completed on the Mitchell and Barrier highways, have facilities such as toilets, picnic tables, rubbish bins and playground equipment.

Cyclist safety

The Government is committed to promoting cycling as a viable transport alternative and to improving safety for cyclists. On and off-road cycle networks and cycleways such as the Meadowbank Bridge cycleway and the Warners Bay to Speers Point cycleway in urban and rural areas help produce a safer environment for commuting and recreational cyclists. Maps of these networks inform and encourage potential riders.

Cyclist safety education is provided through school curriculums, Community and Road Education Scheme (CARES) centres and bicycle education parks where children can learn safe riding practice in a controlled environment. Education campaigns also address helmet wearing and sharing the road with other users.

The RTA will continue to work with Police to educate bicycle couriers on adhering to traffic laws.

Safe cycling is promoted to the community during Bike Week and through sponsored bicycle events including the RTA Cycle Sydney and the RTA Big Ride.

Pedestrian safety

More than 100 pedestrians were killed in road accidents in NSW in 1998. People over 60 and young children account for the greatest number of pedestrian injuries and fatalities. At present 40% of pedestrians killed are aged 60 or over, although only about 17% of the population are in this age group.

It is estimated that by the year 2010 the number of people aged 60 years and over will be around one-third higher than current levels. This ageing of the population will increase the proportion of pedestrians at risk. The Government will therefore conduct public education and advertising campaigns targeting this more vulnerable group.

The safety of pedestrians will be improved through the provision of adequate road crossing facilities, audio-tactile signals and ramps for wheelchairs, prams and shopping trolleys. Technology can already vary pedestrian signal crossing times for the needs of particular user groups. In the next decade more sophisticated devices will be able to measure the speed at which users cross and lengthen the 'walk' time if a user is at risk. Information programs about the use of such facilities, especially for seniors and children, will be developed by the RTA.

The Government is also committed to an ongoing program to build pedestrian overbridges, particularly in the vicinity of schools and in other locations of high pedestrian activity, to separate pedestrian traffic.

Lower speed limits represent one of the most effective safety improvements. Innovative approaches for separating pedestrians from road traffic will be developed.

The State Government will work with Local Government to implement Pedestrian Access Mobility and Safety Plans (PAMPs). These plans examine the local movement of pedestrians, particularly the elderly, and develop coordinated strategies to improve safety and amenity.

Intelligent transport systems

Road users already have access to information about hazards, congestion and other traffic and safety issues through radio and variable message signs, before and during their trip. Wet weather alerts and other information assist with safer travel choices and safer driving en route. The Government will continue to ensure that this information is accessible to the general public. To assist enforcement agencies, traffic signal systems and Safe-T-Cam can be enhanced to provide

efficient automated enforcement of some traffic violations.

The new Transport Management Centre plays a key role in improving road safety. It will provide information through variable message signs and support safer and more efficient traffic movement. As well as the safety benefits, vehicle users will enjoy improved travel times, fewer congestion-causing incidents and less frustration.

In future, technology may be available to allow the Transport Management Centre to communicate with vehicles directly, for example, automatically regulating vehicle speeds in hazardous conditions. In an emergency, it may be possible to warn and notify motorists over their car radios and to give priority at traffic signals for emergency vehicles.

On key traffic corridors such as the F3 between Sydney and Newcastle, the RTA, police and emergency services have developed a protocol to ensure that traffic around accident sites is cleared as quickly and safely as possible.



New M4 variable message signs give motorists up-to-the-minute information.



Making it happen

Safer roads

1. 50km/h urban speed limit in local streets, and even lower limits in areas of high pedestrian activity, e.g. shopping areas and central business districts.
2. Mandatory road safety audits of all new road developments.
3. Expansion of the blackspot program, including treatment of those around bus stops.
4. Development of driver information and speed management systems.
5. Traffic priority systems to ensure quicker responses by emergency services.
6. Improved highway treatments to alert drivers to the onset of fatigue, and provision of quality rest areas.



Safer vehicles

THE NEXT DECADE WILL SEE the emergence of even more improvements in vehicle safety.

Speed and smarter vehicles

Many technologies which already exist can be developed or adapted in future for road safety purposes. For example, the engine management systems in new cars here and overseas could be modified to restrict vehicle top speeds. Over the next 10 years it may also become feasible to communicate local speed limits to vehicle computers, and hence restrict the speed of the vehicle to these limits.

Smart card technology which is being developed in other industries could be adapted to motor vehicles. These could impose different speed limits for different drivers, for example provisional licence holders or repeat offenders, even in the same vehicle.

As vehicle control systems become more computerised, greater numbers of cars will be fitted with increased safety features such as collision avoidance and intelligent cruise control equipment. Over the next decade vehicles may eventually be able to detect hazards through radar sensors to help drivers avoid collisions. On board computers are already able to locate a vehicle's position and help the driver navigate, reducing potentially dangerous distractions. These types of technologies are being used by the road transport industry, the bus and coach industry and the taxi industry to improve safety not only for their drivers but for the community at large.

Making safety a selling point

Compared to 20 or 30 years ago, today's vehicles offer far more protection. Better structural design, improved seats, more advanced seatbelts and airbags have all

dramatically reduced the chance of occupants receiving serious or fatal injuries in a crash. The next decade will see the emergence of even more improvements in vehicle safety with great potential to save more lives. The European Transport Safety Council estimates that 50% of all fatal and disabling injuries to occupants could be avoided if all cars being used had all of the best safety features already available.

The Government will provide better information on the safety performance of new and used vehicles to encourage the purchase of new cars with higher levels of safety performance. Society is already changing, with consumers increasingly aware of the importance of safety in motor vehicles, and demanding higher safety standards and performance. Manufacturers are increasingly seeing that safety can be a real selling point.

Programs such as the *Australian New Car Assessment Program (NCAP)* will continue and will develop new types of tests. Information shared with international NCAP programs plays an important part in influencing manufacturers to build safer vehicles and consumers to buy safer vehicles.

Consumer demand for safer cars will be increased by up-to-date information on safety performance of vehicles, enabling consumers to pressure manufacturers for safer products through their buying power.

The Government will ensure that all vehicles purchased or leased by State Government bodies provide the highest practicable levels of protection for their occupants and other road users. This will not only ensure maximum safety for these fleets but will also provide a pool of safer vehicles for future used car buyers. The Government will also encourage purchasing policies amongst leading private sector fleet operators to further increase the usage of safer vehicles.

Age of the fleet limits improvements

Australian vehicles tend to be older than in many other countries, with an average vehicle age of over 10 years. It will take more than a

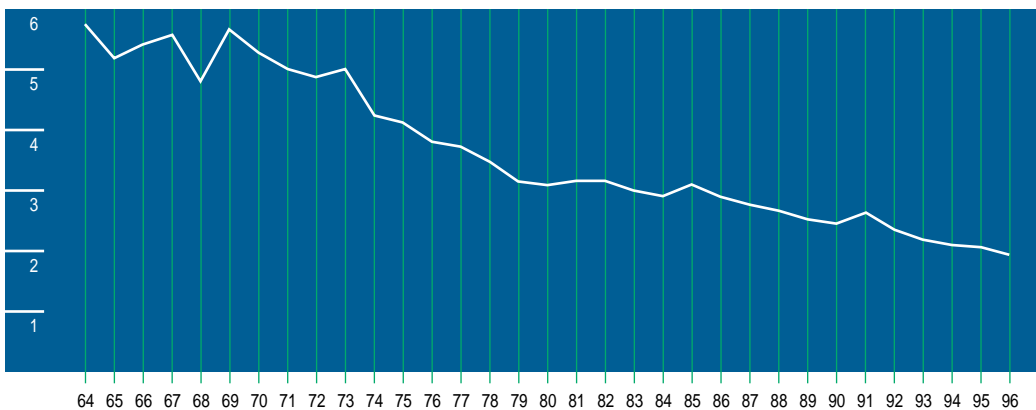
Improvements in the safety of vehicles can save around 725 lives by the year 2010.

Recent initiatives

- The *Australian New Car Assessment Program (NCAP)* has encouraged manufacturers to build safer cars.
- More and better information has been provided on vehicle safety for purchasers of new and used cars.
- The effectiveness and use of child restraints has been improved through testing and community information.

VEHICLE SAFETY PERFORMANCE BY YEAR OF MANUFACTURE

Serious injury rate per 100 drivers in crashes



(Source: *Newer Cars Benefit Everyone*, Australian Automobile Association)

decade at the current rate of vehicle turnover before a significant proportion of vehicles have the benefit of improvements such as airbags, antilock braking, enhanced resistance to side penetration and other safety features.

Older vehicles are significantly over-represented in crashes where deaths and serious injuries occur. In the 15 years leading to 1995, the vehicle safety performance of the Australian fleet improved by only 13% despite significant changes in new vehicle technology, a symptom of the age of the fleet delaying the environmental and safety benefits of new technology. The State Government will support initiatives by the Federal Government making it financially more attractive to all motorists to purchase newer vehicles.

The State Government will take the lead. Its annual purchase of around 15,000 light vehicles for the state fleet will set the highest safety and environmental standards.

Safety interlocks

It is estimated that alcohol contributes to at least 16% of fatal crashes. Alcohol ignition interlocks preventing operation of a vehicle when a driver is impaired by alcohol are already in use in the USA and Canada. They are currently being trialed for use with repeat drink drivers in NSW.

Not wearing available seatbelts is a factor in at least 23% of vehicle occupant fatalities. The Government will consider giving Courts the power to order repeat offenders to fit seatbelt interlocks. The Government will also request changes to Australian Design Rules to ensure these devices are fitted to new vehicles.

Faster medical attention

Advances in technology could enable a vehicle's location to be automatically transmitted for fast emergency response in

the event of a serious crash. Faster, more responsive medical attention will save lives and reduce the severity of injuries from road trauma. Innovations in this area will be closely monitored.

Protection of occupants and other road users

Occupant protection technologies that reduce crash injuries are vital. Frontal and side airbags minimise the forces that cause injury to occupants, as do seatbelts and improved seat designs.

Current developments in vehicle engineering will ensure that all systems within a vehicle will combine to provide optimum safety levels. There will also be an emphasis in vehicles of the future on minimising harm to other road users such as motorcyclists, cyclists and pedestrians. Continually increasing safety standards for all vehicles will play a key role in ensuring these safety improvements are achieved.

Newer cars are safer. In a pre-1970 vehicle the risk of injury is double that in a 1990 manufactured vehicle.

Crashlab vehicle testing.

Crashlab experience includes the design and conduct of tests of a broad range of vehicle configurations to ensure maximum safety.



Making it happen

Safer vehicles

1. Introduce interlocks and other controls to ensure the safe operation of vehicles.
2. Increase the use of the most advanced safety features available in vehicles.
3. Implement a Safe Fleet Policy for the Government's own fleet and promote this to other corporate fleet buyers.
4. Encourage consumer demand for safer vehicles and equipment through promotion of the *Australian New Car Assessment Program* results.
5. Work with manufacturers and other jurisdictions to ensure Australia's vehicles match world's best practice.

Community based action

THE STATE GOVERNMENT WILL encourage involvement in and support of road safety initiatives throughout the community, particularly at a local level.

New strategies in road safety

During the next decade the State Government will seek to lead changes in community perception of the importance of road safety by:

- raising the level of awareness of road safety issues
- improving community understanding of what we are doing in road safety and why
- increasing the ability of Local Government to implement initiatives and improve road safety at a local level
- promoting greater involvement and better coordination with all road safety stakeholders.

Community involvement

Road safety is something that affects us all, and the direction for the future involves the entire community. This approach is being used in *Safer Routes to School*, through Road Safety Officers, and joint projects between the RTA and Local Area Health Services.

Increasingly, road safety will operate at two levels in NSW. Many programs will continue to be delivered at the statewide level. In parallel, programs will be initiated to meet the needs of local communities and address their specific road safety issues.

The role of Local Government and community organisations will become increasingly important in the delivery of community based road safety programs. Continued State Government support of Local Government Road Safety Officers will ensure the delivery of road safety outcomes at the local level.

Role of Local Government

Local Government has a major role in increasing community understanding of road safety and initiating road safety improvements at the local level.

The NSW Local Government road safety program includes the RTA, the Local Government and Shires Association (LGSA), the Institute of Municipal Engineering Australia (NSW Division) (IMEA) and Council Road Safety Officers (RSOs). This program has been very effective in enhancing road safety through:

- increasing the priority of road safety at the local level
- increasing the expertise of road safety practice in Local Government
- encouraging the development of Council road safety strategic plans and integrating these into Council management plans
- enhancing community ownership and participation in road safety through behavioural and educational programs
- increasing Councillor awareness and understanding of road safety.

Road Safety Officers provide a means of identifying local road safety problems and population groups who are particularly at risk or who cannot be reached readily by mass media.

Examples of locally-based initiatives are:

- breath testing equipment for patrons of hotels and clubs
- young driver campaigns developed in conjunction with youth forums



More than 100,000 families have enrolled in the *Safer Routes to School Program* which increases knowledge of child road safety issues and helps children get to and from school safely.

Recent initiatives

- A comprehensive *Local Government Road Safety Program* has been implemented which includes 53 Council Road Safety Officers developing and implementing community based road safety programs.
- A joint commitment to deliver road safety programs has been formalised through Memoranda of Understanding with the four School Education sectors, and is currently being formalised with Local Government (LGSA and IMEA) and the NSW Police Service.
- School child safety initiatives enlisting community participation, such as the *Safer Routes to School Program*, have strengthened the links between schools and communities to achieve safer school travel practices.

- workshops with older pedestrians to reduce the risk of involvement of seniors in accidents
- development of alternative transport schemes for patrons drinking at local venues
- implementation of school zone education and enforcement projects to address road safety issues in and around schools.

Safer Routes to School

The State Government and the community both have roles to play in ensuring that our children are as safe as possible when they travel to and from school each day. The *Safer Routes to School Program* aims to reduce the number and severity of injuries to primary school children on their journey. The program involves parents and carers, school communities, councils, the RTA and the police working together to identify road safety issues affecting children between home and school. The program increases parent and carer participation, and increases the level of awareness and knowledge in local communities of child road safety issues. To date over 100,000 families across the state are participating in the program.

Community-based consultative programs such as *Safer Routes to School* encourage all those involved to work together to provide solutions for local road safety issues.

Working with the private sector

To assist in reaching the community, groups representing industries such as road freight, hospitality, vehicle manufacturers, medical practitioners, taxis and insurance will continue to be involved. Agencies and industry organisations will be strongly encouraged to implement projects that enhance road safety. An example of industry involvement is *The Road is There to Share* campaign for trucks, where the heavy vehicle and freight industry played an active role.

Employers will be encouraged to participate in the advancement of road safety, and address road safety as a critical Occupational Health and Safety issue.

Companies with professional drivers, as well as those whose employees use the road frequently, will be strongly encouraged to adopt safe driving policies. Initiatives will also encourage corporate fleet buyers to purchase fleet vehicles with high safety standards. These policies and programs have the potential to reduce the costs of road trauma, as well as making a substantial contribution to road safety overall.

Whole of government approach to road safety

The aim of the whole of government approach is to engage every government agency in issues of concern with road safety. Thus a key strategy is to develop effective partnerships between the RTA, the Police Service, the NSW Workcover Authority, the Motor Accidents Authority, the Environment Protection Authority, the Health Department, Local Government and other organisations, to effectively raise and resolve community road safety concerns.



Making it happen

Community based action

1. Continued support of Local Government Road Safety Officers.
2. Providing road safety project grants to Councils to enhance locally based road safety initiatives.
3. Facilitate the delivery of road safety at the local level by better targeting community based organisations/agencies, e.g. NSW Health Department, Area Health Services.
4. Employers will be encouraged to implement active occupational road safety programs and policies that address work-related road crashes and injuries.
5. Hospitality industry promoting responsible service of alcohol.
6. Implement community programs of alternative transport options for drinkers.
7. Corporate fleet buyers will be encouraged to purchase vehicles with the highest safety standards.
8. Whole of government approach to resolving community road safety concerns.

Towards 2010

Making roads in New South Wales the safest in the world and saving 2,000 lives by the year 2010 is a challenge, but success will mean a substantial increase in the quality of life for us all.

The State Government is committed to ensuring that:

- people do all they can to ensure that they, and others, are not needlessly exposed to the risk of death and injury on our roads
- lives are not endangered because of excessive speed
- offenders who break road laws and endanger the lives of others will be appropriately penalised
- the safety of vehicles on NSW roads is equal to the best in the world.

Implementing *Road Safety 2010* will require close cooperation and consultation between the community and all agencies and organisations involved in road safety.

Road Safety 2010 sets out what the challenges are in road safety, what is being done in other leading countries, and many initiatives which will be taken in NSW between now and 2010.

It is intended that this plan will encourage informed debate enabling us all to have a much better understanding of future directions in road safety, and a stronger commitment to improving the progress of NSW towards having the safest roads in the world.

Need to know more?

For further information and copies of this document contact:

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A New South Wales
Government initiative

Road safety is one of the key actions in *Action for Transport 2010*.

Action for Transport 2010 – An Integrated Transport Plan for NSW and *Action for Transport 2010 – An Integrated Transport Plan for Sydney* are ten year fully funded construction programs.

To get your free copy of the *Action for Transport 2010*:

- Telephone: 131 500
- Facsimile: (02) 9218 6950
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- Internet: www.transport.nsw.gov.au

