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In accordance with section 38E of the *Public Finance and Audit Act 1983*, I present a report titled **Improving road safety: Young drivers – Roads and Traffic Authority of NSW**.

Pote Auterstrant

Peter Achterstraat Auditor-General October 2011

# The role of the Auditor-General

The roles and responsibilities of the Auditor-General, and hence the Audit Office, are set out in the *Public Finance and Audit Act 1983*.

Our major responsibility is to conduct financial or 'attest' audits of State public sector agencies' financial statements. We also audit the Total State Sector Accounts, a consolidation of all agencies' accounts.

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We also conduct performance audits. These examine whether an agency is carrying out its activities effectively and doing so economically and efficiently and in compliance with relevant laws. Audits may cover all or parts of an agency's operations, or consider particular issues across a number of agencies.

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# Contents

<b>Executive summary</b>	2
Background	2
Conclusion	2
Supporting findings	2
Recommendations	3
Key findings	10
1. The Graduated Licensing System and Road Safety	10
2. The Learner Licence Period	13
3. The Provisional Licence Period	18
Appendices	24
Appendix 1: Fatal crashes	24
Appendix 2: Licence test pass rates 2005-2010	25
Appendix 3: About the Audit	29
Performance auditing	31
Performance audit reports	32

NSW Auditor-General's Report
Improving road safety:
Young drivers
CONTENTS

# **Executive summary**

NSW Auditor-General's Report Improving road safety: Young drivers

**EXECUTIVE SUMMARY** 

# Background

The Roads and Traffic Authority (RTA) introduced a revised Graduated Licensing System (GLS) in July 2000, and since then has introduced further refinements to the licence testing and regulation of novice drivers.

A novice driver must progress through three phases and four tests before obtaining a full driver's licence. The first phase is the learner licence period which requires 120 hours supervised on-road driving experience over a period of at least 12 months. The second phase is the provisional P1 licence period (at least 12 months), which allows unsupervised driving but with certain restrictions such as 90km/h speed limit and a zero blood alcohol limit. The third phase is the provisional P2 licence period (at least 24 months), where some of the restrictions are relaxed such as a higher speed limit of 100km/h.

The objective of this audit was to assess the effectiveness of the RTA's driver licence testing and regulation in ensuring young people (that is drivers under 26 years of age) drive safely. The goal of the licensing process should be to create drivers who are safe, and not just technically competent.

# Conclusion

The audit concluded that the RTA's licence testing and regulation has been generally effective in ensuring the safety of young drivers. There has been a significant reduction in crash and fatality rates involving young drivers over the last decade, more so than for drivers 26 years and older. This has coincided with the introduction by the RTA of an enhanced GLS. International and national research has demonstrated graduated licensing systems to be effective in reducing crashes and saving lives. However:

- crash and fatality rates involving young drivers remain disproportionately high, and most of the reduction in fatalities over the last decade has occurred in metropolitan areas
- the extent to which any GLS is effective depends on its component parts, and the RTA's GLS could be further refined based on evidence of what has and has not worked elsewhere
- a GLS will not change the behaviour of the minority of young people who drive recklessly unless they perceive a real risk of being caught and penalised.

# Supporting findings

The numbers of fatal and injury crashes involving drivers less than 26 years of age have fallen in NSW since 1999-2000, and have fallen at a greater rate than for older drivers. Overall, the rate of fatal crashes involving young drivers declined by 51 per cent between 1999-2000 and 2009-10, compared with a reduction of 35 per cent for drivers aged 26 years and over. This reduction in crash rates coincided with the introduction of the RTA's revised GLS in 2000.

Research evidence both nationally and internationally supports the graduated licensing approach implemented by the RTA, with restrictions and sanctions that are progressively reduced as experience is gained.

A number of the RTA's GLS components have a strong evidence base including the increased minimum duration for the learner licence, mandating minimum supervised driving hours, zero blood alcohol concentration limits and increasing the minimum duration for a provisional licence. Some other GLS components are not well supported by evidence including the current speed restriction on learner drivers. And there are some other initiatives well supported by evidence that the RTA has not adopted such as a night time 'curfew' for provisional licence drivers in their first year of driving.

Whilst there has been a significant reduction in fatalities and injuries involving young drivers in NSW, this has mostly occurred in metropolitan areas. For example, the fatal crash involvement rate (per licence) for young drivers declined by 68 per cent between 1999-2000 and 2009-10 in metropolitan areas whereas it has declined by 25 per cent in country areas over the same period. In recent years young drivers in the country have been around three times more likely to be involved in a fatal crash than young drivers in metropolitan areas.

**EXECUTIVE SUMMARY** 

Despite improvements in the last decade, young drivers are still more likely to be involved in crashes that lead to injury or death than the rest of the driving population. They are involved in around 25 per cent of road fatalities despite making up only 16 per cent of drivers.

Compared with drivers aged 26 years or more, young drivers have a significantly higher incidence of speed and illegal alcohol involvement in fatal crashes. For example, based on crash data for 2007-08 to 2009-10, 43 per cent of young drivers involved in fatal crashes were judged to be speeding, compared with only 23 per cent for older drivers involved in fatal crashes.

Some young drivers rapidly accumulate demerit points and those who commit traffic offences, especially speeding fines, have a significantly increased risk of subsequent crash involvement.

# Recommendations

In order to further improve the regulation and testing of young drivers the RTA should:

#### For learner drivers:

- 1. by 30 June 2012, determine if the current requirement for a minimum of 120 hours of supervised practical experience for learner drivers remains appropriate (page 14)
- 2. by December 2011, increase attendance at educational workshops for learner driver supervisors through an expanded program, and improved communication and advertising initiatives (page 15)
- 3. by 30 June 2013, provide additional support to learner drivers in low socio-economic status communities and remote areas including subsidised professional instruction, and access to volunteer mentors and suitable vehicles (page 15)
- 4. by 30 June 2012, review the current speed restriction for learner drivers, with a view to increasing it to 90km/h after six months of the learner licence period to ease the transition to unsupervised driving (page 16)
- 5. by December 2012, investigate variations in licence test pass rates between testing centres and, by 30 June 2013, address contributing factors within its control (page 17).

# For provisional licence drivers:

- 6. by 30 June 2012, consider introducing a night-time 'curfew' driving restriction for P1 drivers between 11pm and 5am on Friday and Saturday evenings, and investigating the benefits of a similar curfew at other times (page 19)
- 7. by 30 June 2012, consider extending the current passenger restriction for P1 drivers so that they can carry no more than one peer passenger at any time (page 19)
- 8. commencing immediately, to enable young drivers improved access to safer second-hand vehicles, the RTA should strongly advocate for all NSW Government agencies to only purchase light passenger vehicles with a five star ANCAP rating and light commercial vehicles with the best available ANCAP rating and specified safety features, including Electronic Stability Control and head protecting airbags (page 20)
- 9. by 30 June 2012, consider adding further safe driving elements to the Driver Knowledge, Hazard Perception and Driver Qualification Tests to better safeguard against unsafe driving (page 21).

# To further reduce risk-taking among young drivers:

- 10. by 30 June 2012, investigate options to further strengthen sanctions for serious and repeat offenders (page 23)
- 11. by 31 December 2012, research the feasibility of using psychological testing for novice drivers, particularly in respect of serious and repeat offenders (page 23)
- 12. look at ways of encouraging safer driving behaviour in country areas through:
  - by 30 June 2012, directing increased resources to speed and alcohol enforcement in regional and remote areas at times of high risk for young drivers
  - by 31 March 2012, enhancing and extending speed enforcement activity in regional areas on light passenger and light commercial vehicles through use of point to point camera technology and mobile units
  - by 30 June 2012, address the dangers of alcohol, speeding, fatigue and not wearing a seatbelt through increased education/advertising campaigns in country areas (page 23).

#### **EXECUTIVE SUMMARY**

# Response from Roads and Traffic Authority



CE11/282

Mr Peter Achterstraat Auditor General GPO Box 12 SYDNEY NSW 2001

Dear Mr Achterstraat

# RTA response to the Performance Audit Report – Improving Road Safety: Young Drivers.

I refer to the Performance Audit Report prepared on Improving Road Safety: Young Drivers. The Roads and Traffic Authority (RTA) welcomes the analysis of its Graduated Licensing Scheme and associated programs and regulations introduced to improve road safety for novice drivers.

The RTA notes this investigation found that in the past 10 years following the introduction of the New South Wales (NSW) Government's Graduated Licensing Scheme, there has been a significant reduction in fatality rates involving young drivers.

Comparing the years 2000 and 2010, the number of drivers aged 25 years or younger involved in fatal crashes decreased by 47 per cent, from 203 to 107. In the same period the number of drivers aged 26 years or older involved in fatal crashes decreased by 31 per cent.

While the reduction in young driver related fatalities was greater than for drivers 26 years and older, the RTA acknowledges young drivers continue to be over represented in crash statistics. This is not unique to NSW. It is common across Australia and around the world.

The Audit Report acknowledges there are many contributing factors to road crashes and fatalities involving young drivers. These include risk-taking behaviour, overconfidence, the carrying of passengers, alcohol and poor hazard perception.

While the Audit reinforces the gains made since the introduction of graduated licensing and associated programs, the RTA welcomes the identification of additional measures which could be introduced to further reduce the over-representation of young people in fatalities and injuries in NSW. The following comments are provided on the recommendations in the Report:

#### Roads and Traffic Authority of NSW

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 By 30 June 2012 the RTA should determine if the current requirement for a minimum of 120 hours of supervised practical experience for learner drivers remains appropriate.

NSW Auditor-General's Report
Improving road safety:
Young drivers
EXECUTIVE SUMMARY

The Government is currently reviewing the licence arrangements for learner drivers and is considering the development of a Safer Driver Course for learner drivers.

2. By December 2011, the RTA should increase attendance at education workshops for learner driver supervisors through an expanded program, improved communication and advertising initiatives.

Helping Learner Drivers become Safer Drivers Workshops are currently available to help supervisors of learner drivers. The free two-hour workshops are delivered to communities in partnership with local councils. Most participants are parents of young learner drivers under 25.

The RTA agrees parental involvement in the licensing process is an opportunity for parents to emphasise and reinforce positive attitudes to safety, laws and licence restrictions. It also increases parental awareness of youth risk and provides a supportive framework for the provisional licence phase.

By December 2011, the RTA will increase participation of parents by expanding the current program delivery through the engagement of school communities. The RTA will also develop a new communication and promotional strategy by March 2012.

3. By 30 June 2013, the RTA should provide additional support to learner drivers in low socio-economic communities and remote areas including subsidised professional instruction, and access to volunteer mentors and suitable vehicles.

The RTA currently funds Youthsafe, a not-for-profit organisation, to develop injury prevention programs. Since 2009, Youthsafe has assisted community-based organisations deliver learner driver mentor programs. This year, Youthsafe will publish an operational manual for community-based learner driver mentoring programs. Next year, Youthsafe will provide road safety and program training for up to 10 community-based mentoring programs which provide on-road driving experience to disadvantaged youth.

The RTA has an Aboriginal Action Plan which aims to improve driver licensing and vehicle outcomes for Aboriginal people throughout NSW. It includes Aboriginal driver licensing communication resources, a community based driver knowledge test program, driver education and a driving instructor program.

To supplement the existing initiatives, in 2012, the RTA will pilot and evaluate a licensing program to support Aboriginal people in remote areas. A key action identified for the first three years of the National Road Safety Strategy 2011-2020 is to implement programs addressing the road safety needs of Indigenous communities and disadvantaged groups. This includes developing programs to increase opportunities for driving practice.

The existing programs will provide additional support to learner drivers in low socioeconomic communities. In 2012, the RTA will investigate program support options for disadvantaged young people to help gain practical on-road driving experience. NSW Auditor-General's Report Improving road safety: Young drivers EXECUTIVE SUMMARY 4. By 30 June 2012, the RTA should review the current speed restriction for learner drivers, with a view to increasing it to 90km/h after six months of the learner licence period to ease the transition to unsupervised driving.

The restriction of 80km/h speed limit for learner drivers is part of the progression of the NSW Graduated Licensing Scheme. As the learner driver proceeds through the three licensing phases, the restrictions are progressively reduced.

In NSW, speeding is the key contributing behavioural factor to all road crashes. It is a contributing factor in 51 per cent of the fatal crashes involving young drivers. The 80km/h speed restriction provides the learner driver with greater control of the vehicle and a shorter stopping distance if suddenly required to stop. It also provides increased safety for the learner driver and their passengers and emphasises speed is the major road safety issue.

The RTA will review the learner driver 80km/h speed restriction with consideration of whether this change will adversely affect the safety of the learner driver and their supervisor. The review will examine road safety crash patterns of learner drivers on high speed roads and effectiveness regarding compliance and enforcement.

5. By December 2012, the RTA should investigate variations in licence test pass rates between testing centres and, by 30 June 2013, address contributing factors within its control.

The RTA provides driver testing services state-wide at motor registries and other service locations such as Government Access Centres and council agencies. Features at each location are maximised to ensure the test is as robust as possible. The use of dirt and high speed roads for rural test courses are examples of this.

While considerable effort is made to achieve test uniformity, some variation in delivery and outcomes will always exist. For example, two metropolitan test locations within kilometres of each other may have very different traffic conditions or customer bases. Some motor registries may be located in busy shopping centres, while others may be in quiet suburban locations. Additionally, some test locations assess a high number of applicants from non-English speaking backgrounds or low socio-economic backgrounds, which may affect test pass rates.

Notwithstanding the above issues, the RTA will review licence test pass rates, with a view to ensuring the test is delivered as consistently as possible.

6. By 30 June 2012, the RTA should consider introducing a night-time 'curfew' driving restriction for P1 drivers between 11pm and 5am on Friday and Saturday evenings, and investigating the benefits of a similar curfew at other times.

The high level of crashes of young people at night could be a combination of factors including lack of adult supervision, lower visibility, fatigue, increased independence and risk taking.

The RTA will investigate the road safety benefits of introducing a night-time 'curfew' driving restriction and will consider the social, economic, transport and road safety impacts of the proposed changes.

Consideration will also be given to community acceptance, social equity issues of mobility and access and compliance and effectiveness.

NSW Auditor-General's Report
Improving road safety:
Young drivers
EXECUTIVE SUMMARY

# 7. By 30 June 2012, the RTA should consider extending the current passenger restriction for P1 drivers so they can carry no more than one peer passenger at any time.

In July 2007, the RTA introduced a night-time peer-passenger restriction for P1 drivers under the age of 25. The restriction permits only one passenger under the age of 21 between the hours of 11pm and 5am. This restriction was introduced as part of a range of young driver reforms that have proven to have road safety benefits.

The RTA will investigate the road safety benefits of extending the current passenger restrictions and will consider the social, economic, transport and road safety impacts of the proposed changes. Consideration will also be given to community acceptance, social equity issues of mobility and access and compliance and effectiveness.

8. Commencing immediately, enable young drivers improved access to safer second-hand vehicles, the RTA should strongly advocate for all NSW Government agencies to only purchase light passenger vehicles with a five star ANCAP rating and light commercial vehicles with the best available ANCAP rating and specified safety features, including Electronic Stability Control and head protecting airbags.

The RTA welcomes this recommendation about safer vehicles in government fleets. Safer vehicles provide long-term road safety benefits. As recognised by the Audit Report, fleet vehicles are on-sold to the public, commonly becoming the vehicle used by a family and often used by a novice driver. The added safety features can help avoid or reduce the severity of a crash and improve the protection of the vehicle's occupants.

The RTA fleet purchasing policy already requires light passenger vehicles to meet 5 Star ANCAP safety requirements and for light commercial vehicles, a 4 Star ANCAP safety rating is required, with the additional safety features of electronic stability control and/or head protecting side airbags wherever available for the particular vehicle type.

The NSW Centre for Road Safety is currently working with StateFleet Services to encourage the introduction of these minimum safety standards as mandatory for all government vehicles. This policy is also being promoted to industry through a range of channels, including via the Australasian Fleet Manager's Association and various industry presentations.

 By 30 June 2012, the RTA should consider adding further safe driving elements to the Driver Knowledge, Hazard Perception and Driver Qualification tests to better safeguard against unsafe driving.

The Hazard Perception Test is a computer touch-screen test using video footage taken from a driver's perspective of situations which commonly involve provisional drivers in crashes.

NSW Auditor-General's Report Improving road safety: Young drivers EXECUTIVE SUMMARY The purpose is to ensure P1 drivers have the necessary hazard perception skills to progress to the next class of licence. The test was extensively researched by road safety experts before development.

The RTA is currently developing a long term plan to review the video footage for the Hazard Perception Test and the Driver Qualification Test.

Both the RTA Driver Knowledge Test and the Driver Qualification Test contain question and answer sections focusing on safe driving strategies and practice. The RTA will review the questions in both tests and consider the addition of further questions about safe driving.

10. By 30 June 2012, the RTA should investigate options to further strengthen sanctions for serious and repeat offenders.

As part of the Road Toll Response Package, a repeat offender strategy is being developed via an evidence based approach. Research is being carried out to profile repeat offenders and to identify successful international and interstate programs.

11. By 31 December 2012, the RTA should research the feasibility of using psychological testing for novice drivers, particularly in respect of serious and repeat offenders.

While there is currently no known suitable psychological test to be used in the driver licensing context, the RTA will carry out further research in this area, particularly in relation to serious and repeat offenders.

- 12. The RTA should look at ways of encouraging safer driving behaviour in country areas through:
  - By 30 June 2012, directing increased resources to speed and alcohol enforcement in regional and remote areas at times of high risk for young drivers.
  - By 31 March 2012, enhancing and extending speed enforcement activity in regional areas on light passenger and commercial vehicles through use of point to point camera technology and mobile units.
  - By 30 June 2012, address the dangers of alcohol, speeding, fatigue and not wearing a seatbelt through increased education/advertising campaigns in country areas.

The RTA strongly agrees the key risk behaviours contributing to road crashes for all motorists, including young drivers under 25, are speeding, drink driving, the non-use of seatbelts and driver fatigue.

Education and public education campaigns to address the key risk behaviours and attitudes of drivers are critical to safe driving and reducing road trauma. The RTA has an ongoing commitment to deliver public education and campaigns on critical issues throughout New South Wales and will continue to do so.

NSW Auditor-General's Report

Improving road safety:
Young drivers

EXECUTIVE SUMMARY

In January 2011, the RTA launched a new seatbelt public awareness campaign across all media. The campaign primarily targeted rural male drivers but also addressed all drivers and passengers in country non-urban and regional towns. The campaign's tagline "Clip Every Trip" provides a friendly reminder about seatbelt use but also emphasises a seatbelt doubles the chance of survival in a serious crash and reduces the death and injury related to road trauma.

This campaign will continue into the 2011-2012 financial year and the RTA will provide support resources to encourage the delivery of campaign messages through local councils. The RTA will explore options to target young audiences through a cinema strategy in regional locations.

The RTA is currently developing a new state-wide drink driving campaign targeting males. The primary target group will be young licence holders (17-25 years). While country locations are over-represented in drink-driving crashes, metropolitan crashes still represent a significant number of drink driving crashes.

The current fatigue campaign entitled *Wake Up to the Signs* on television and radio will be aired in country NSW at peak holiday periods of Christmas and Easter. The campaign will be expanded to youth communication mediums.

An initiative of the Youthsafe injury prevention project funded by the RTA has been the development of a new education resource *Plan 2* for educators and professionals working with young people. The DVD and on-line resource helps young people explore options and develop strategies for travelling as drivers, passenger, pedestrians and cyclists. The RTA will fund Youthsafe to conduct professional forums for rural professionals working with rural youth.

The issues of speed and fatigue are currently addressed through the RTA's *Don't Rush* television, radio and outdoor public education campaign. This campaign reinforces the crash consequences of speeding and fatigued driving by highlighting the human and emotional costs associated with unsafe driving behaviours. In 2011, this campaign will continue to be delivered state-wide with elements directly targeting young people using a range of communicational approaches. These include online advertising links and updates to Facebook and the SpeedBlitz Blues' Slow Down Pledge. The RTA will continue to deliver key messages to young people through the SpeedBlitz Blues presentations in schools and the RTA's Slow Down Road Show visual displays at major events and shopping centres.

Thank you for the opportunity to comment on this report.

Yours sincerely

Michael Bushby Chief Executive

29 SEP 2011

# Key findings

10

NSW Auditor-General's Report Improving road safety: Young drivers

KEY FINDINGS

# The Graduated Licensing System and Road Safety

Graduated licensing systems allow beginners to get their initial experience under conditions that involve lower risk and introduce them in stages to more complex driving situations. The RTA introduced a revised graduated driver licensing system in New South Wales in 2000, with significant additions between 2004 and 2008.

These refinements included:

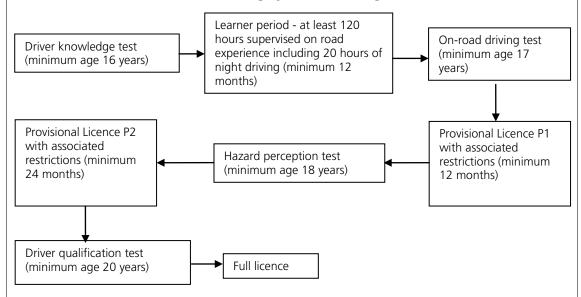
May 2004 – zero blood alcohol limit for learner and provisional licence holders

July 2005 – vehicle restrictions for provisional drivers (P1 and P2).

# July 2007 -

- zero tolerance for speeding for provisional P1 drivers and riders
- ban on hands-free or handheld mobile phones for learner and provisional P1 drivers
- peer passenger restriction of one passenger for P1 drivers between the hours of 11pm and
   5am
- requirement of a minimum of 120 mandatory hours of supervised on-road driving experience recorded in a RTA learner driver log book
- new more extensive on road driving test.

# **Exhibit 1: The NSW Graduated Licensing System for Young Drivers**



Source: NSW Audit Office 2011 from information provided by the RTA

The system also includes:

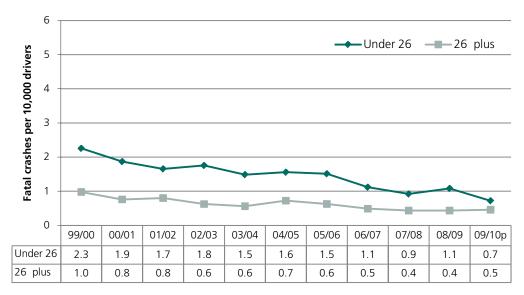
- a log book arrangement requiring documentation of completion of the required minimum hours of supervised driving for learner drivers
- speed limits for novice driver licences classes: learner licence (80 km/h), provisional P1 licence (90 km/h), and provisional P2 licence (100km/h)
- licence suspension of three months for any speeding offence by a P1 provisional driver.

The introduction of the RTA's revised GLS coincided with a significant reduction in crash and fatality rates involving young drivers over the last decade, more so than for drivers 26 years of age and older. Fatal crash involvement rates for young drivers declined by 51 per cent from 1999-2000 to 2009-10, compared with a reduction of 35 per cent for drivers aged 26 years and over. However, young drivers are still 65 per cent more likely to be involved in a fatal crash than drivers aged 26 years and over.

Fatal crash involvement rates for young drivers have declined by 51 per cent

Fatal crash involvement rate reductions since 1999-2000 have been greatest in metropolitan areas, with more modest improvements in country areas. The reduction in metropolitan areas was 68 per cent for young drivers compared with 53 per cent for drivers aged 26 years and over. The reduction in country areas was 25 per cent for young drivers compared with ten per cent for older drivers.

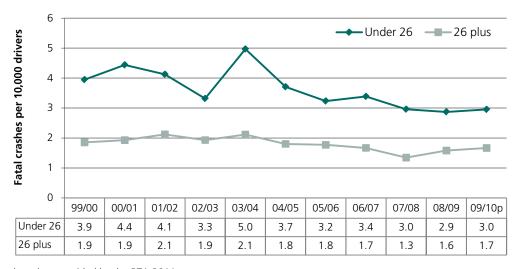
Exhibit 2: Fatal crash involvement rates in metropolitan areas by age of driver



Based on data provided by the RTA 2011 Notes: 2009-10 data is provisional

The metropolitan area is defined as the Sydney, Newcastle and Wollongong greater conurbation areas – this includes the Sydney, Newcastle and Wollongong metropolitan areas as well as the Wyong, Gosford, Hawkesbury, Blue Mountains and Wollondilly local government areas. The country area is defined as the rest of the State.

Exhibit 3: Fatal crash involvement rates in country areas by age of driver



Based on data provided by the RTA 2011

Note: 2009-10 data is provisional

The above exhibits also show that in recent years young drivers in the country have been around three times more likely to be involved in a fatal crash than young drivers in metropolitan areas.

Young country drivers are around three times more likely to be involved in a fatal crash than young metropolitan drivers

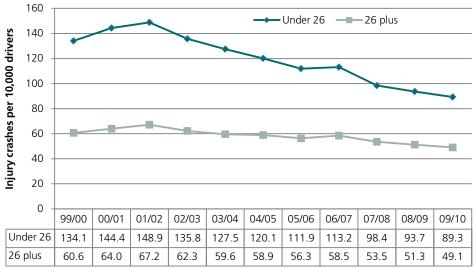
KEY FINDINGS

The rate of injury crashes for young drivers has fallen by 30 per cent

Injury crash involvement rates have also declined since 1999-2000. The rates have declined by 30 per cent for young drivers and 18 per cent for drivers aged 26 years and older.

The decline has been greatest in metropolitan areas with a 33 per cent reduction in the injury crash involvement rate for young drivers compared with a 19 per cent reduction for drivers aged 26 years and older. The decline in country areas has been 21 per cent for young drivers and 14 per cent for drivers aged 26 years and older.

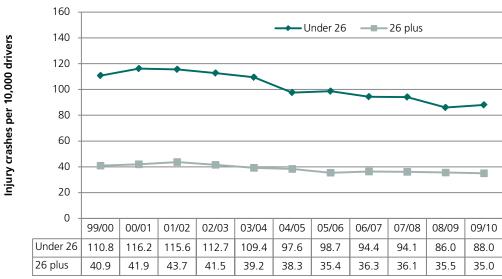
Exhibit 4: Injury crash involvement rates in metropolitan areas by age of driver



Based on data provided by the RTA 2011

It should be noted that young country drivers are still around two and a half times more likely to be involved in a crash involving injury than country drivers 26 and over.

Exhibit 5: Injury crash involvement rates in country areas by age of driver



Based on data provided by the RTA 2011

The numbers of fatal and injury crashes involving drivers under 26 years of age are contained in Appendix 1.

NSW Auditor-General's Report

Young drivers KEY FINDINGS

Improving road safety:

Graduated licensing systems reduce crashes and save lives

The higher crash risk of young, newly licensed drivers appears to result from a combination of age factors and a lack of driving experience. Young drivers are more likely to engage in a range of risky behaviours such as speeding and driving at times that are more dangerous such as late at night and with young passengers in their vehicle.

International and national research has demonstrated graduated licensing systems to be effective in reducing crashes and saving lives. Graduated licensing was introduced to North America in the late 1970s. Early evaluations demonstrated that the systems are associated with significant crash reductions, with at least some of the reduction due to a reduced level of driving. GLS evaluations carried out in the US, Canada, New Zealand and Australia, showed crash reductions among young first-year drivers ranging from 26 to 41 per cent.

Graduated licensing systems introduced overseas generally have the following features:

- extended supervised learning periods and practice
- late night driving restrictions, with exemptions
- passenger restrictions, with exemptions
- early intervention for traffic offending through a lower demerit point threshold
- progression through licensing stages contingent on good driving records
- zero blood alcohol concentration (BAC) limits and compulsory seat belt wearing.

The extent to which any GLS is effective depends on its component parts. A number of the RTA's GLS components have a strong evidence base including the increased minimum duration for the learner period, mandated minimum supervised driving hours, zero BAC limits and an increased minimum period for a provisional licence. The RTA's GLS could, however, be further refined based on evidence of what has and has not worked elsewhere.

There is also a small minority of young people who will drive recklessly, unless they perceive a real risk of being caught and penalised. Therefore, additional programs and sanctions should be considered for these drivers.

Components of the GLS, and enforcement and sanctions are discussed in the following chapters.

#### 2. The Learner Licence Period

Young people who want to drive must first obtain a learner licence which is valid for five years. To obtain this licence a young person must be 16 years of age or older and sit a theory test known as the Driver Knowledge Test (DKT).

The DKT is a computer-based road rules knowledge test. Participants must answer 45 guestions which the computer selects at random from a question bank of more than 600. The test is based on information contained in the Road User Handbook, which includes practical information on NSW road rules and safe driving practice. The test includes guestions on general road rules, traffic signs and safe driving and makes extensive use of photographs and graphic images of traffic situations. Victoria, South Australia and Tasmania use a similar test.

The GLS currently requires a learner driver under 25 years of age to undertake 120 hours of supervised driving experience which includes 20 hours of night time driving. One hour of professional driving instruction can be recorded as three hours in the log book up to a maximum of 30 hours (i.e. ten hours professional instruction).

A large number of hours of driving experience in a range of conditions make a significant difference to the safety of young drivers. Swedish research showed that learners who received about 118 hours of supervised experience had up to 35 per cent fewer crashes than those who received 41 to 47 hours.

There has been considerable debate amongst key stakeholders and researchers regarding the exact amount of practical experience required during the learner driver phase. NSW has the toughest supervised driving requirement of any Australian State. Victoria also has 120 hours but this only applies to learner drivers under 21 years of age. Queensland has 100 hours and its night driving requirement is ten hours.

RTA's GIS could be further refined

A large amount of practical drivina experience is needed

14

NSW Auditor-General's Report Improving road safety: Young drivers

KEY FINDINGS

Advanced driver training can increase the risk of crashing for novice drivers

#### Recommendation

The RTA should determine if the current requirement for a minimum of 120 hours of supervised practical experience for learners remains appropriate.

The provision of effective training is essential to developing safe young drivers. There is no compelling evidence to suggest, however, that novice drivers who receive instruction from a professional driving instructor are any safer as a solo driver than those drivers who have been supervised by their parents. Parents may be better able to influence the behaviour and attitudes of young drivers while they are learning, reducing the likelihood they will engage deliberately in unsafe behaviours when they begin solo driving.

There is considerable evidence that driver training that attempts to impart advanced skills to young, recently licensed drivers actually increases crash risk. Research in both Scandinavia and the U.S has indicated that young people who take such courses, particularly young men, have more crashes subsequently than comparable people without training. The higher crash rates are thought to be largely the result of over confidence and showing off.

Research has also shown that registered racing drivers tend to be involved in more on-road crashes and traffic violations than other drivers of the same age and gender. Again, this suggests driver safety may be less about mechanical skills in manoeuvring a vehicle than attitude, behaviour and risk-taking propensity.

The majority of fatal crashes involving young drivers in NSW involve risk-taking including speeding, illegal blood alcohol concentration or not wearing a seat belt, further illustrating that the right attitude and behaviour are fundamentally important. Since 2005-06, sixty five per cent of learner driver fatalities and 55 per cent of provisional P1 driver fatalities involved risk-taking behaviour.

Parent/friend supervisors need more guidance Driving experience is important to protect young drivers. Parent/friend driving supervisors can significantly influence the quality of the training and may also influence the attitude of young drivers. There is ample evidence attesting to the benefits of parental involvement in young driver safety. However, parental behaviour with regard to the licensing and early driving of a young person is affected by the amount of time parents have available, their motivation to be involved, parenting styles, and knowledge about relevant road safety issues. Parents play a critical role in ensuring their children undertake the necessary driving practice hours to become safer drivers.

Education for parent/friend supervisors of learner drivers is an important GLS consideration. Research suggests that parents do not always understand novice driving risks well, being aware of their increased risk in general, but not in relation to specific situations such as driving at night and with peer passengers. Therefore, education for parents as well as novice drivers is considered beneficial in order to maximise the effectiveness of the GLS. A recent study in the U.S. recommended that parents/guardians be required to attend a novice driver orientation program with the young person they are going to supervise.

The RTA has acknowledged the importance of parent/friend supervisors in the development of safe novice drivers. The RTA provides guidance for lay supervisors in its Learner Driver's Logbook supplemented by Helping Learner Drivers Become Safer Drivers workshops. The two-hour workshops, delivered by local government road safety officers (and funded by the RTA) offer parents and supervisors practical advice including:

- how to use the learner driver logbook
- how to plan supervised on-road driving experience and professional driving instruction
- how to deal with difficulties that may arise during driving practice
- the importance of giving the learner driver constructive feedback.

The RTA advised that participant feedback has been positive and that participants feel they gain increased confidence in being a supervisor, as well as increased understanding and awareness of the learner log book requirements and strategies to share with their learner.

However, attendance at the workshops is voluntary and there seems to be a low attendance rate. For example, one Council highlighted this lack of participation by indicating that the workshops were attended by approximately 60 parents in 2008 yet there were 4,933 learner drivers in the area.

#### **Recommendation**

The RTA should increase attendance at educational workshops for learner driver supervisors through an expanded program, and improved communication and advertising initiatives.

Young novice drivers in rural areas do not have the same level of access to driver training and education as their metropolitan counterparts. In addition, the cost of professional driving tuition operates as a barrier to learner drivers from lower socio-economic and indigenous backgrounds in all areas of NSW. The issue of additional support is particularly critical for those young drivers with only limited access to extended practice during the learning period.

### Recommendation

The RTA should provide additional support to learner drivers in low socio-economic status communities and remote areas including subsidised professional instruction, and access to volunteer mentors and suitable vehicles.

The minimum term for a learner licence in NSW is 12 months if the learner is under 25 years of age. This is similar to Queensland and Victoria (for drivers under the age of 21 years) and designed to be sufficient to allow the required hours of supervised driving experience.

There are a range of restrictions on learner drivers including:

- zero blood alcohol concentration (BAC)
- demerit points four or more demerit point results in a three month suspension
- speed restriction of 80km/h
- supervision must be seated next to a person who has an appropriate Australian full licence
- mobile phones not use any functions of a mobile phone including hands-free devices.

A learner driver can be suspended by the RTA for offences such as:

- driving without a supervising driver.
- the learner driver or passengers are not restrained by seatbelts or child restraints.
- driving with a passenger(s) in the boot or on the vehicle.

There is a significant body of research supporting the restrictions on alcohol consumption and mobile phone use for young drivers. Most other Australian States have the similar restrictions in place. There is also evidence of the benefits of tougher demerit point systems for young drivers.

As previously stated, learner drivers are currently restricted to a speed limit of 80km/h, ten less than P1 licensed drivers. However learner drivers are 20 to 30 times less likely to be involved in a serious crash than P1 licensed drivers. The graph below illustrates the increased risk associated with moving from a supervised driving environment to independent driving.

Country and low socioeconomic learners need more support

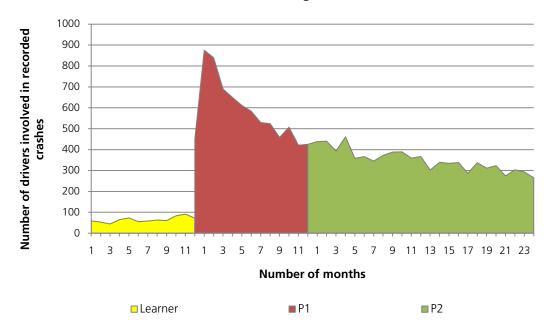
16

NSW Auditor-General's Report Improving road safety: Young drivers

KEY FINDINGS

P1 drivers have the highest crash rates

Exhibit 6: Learners, P1 and P2 Driver Involvements in Recorded Crashes in NSW, 2006 to 2010, Number of Months Since Obtaining Licence Level



Source: The RTA 2011

Notes: The minimum period for learner licence is 12 months; the minimum for provisional P1 licence is 12 months; and the minimum for provisional P2 licence is 24 months.

The current speed restriction on learner drivers prevents them from obtaining the benefit of supervised practice at 90km/h. Yet once they pass their driving test they can travel at this speed when the risk factors can be much greater (for example, unsupervised and with peer passengers). Stakeholders have also indicated that learner drivers on high speed roads can present as a moving road block to other drivers who may not be sympathetic and may vent their frustrations through risk-taking behaviour. According to some researchers, the benefit of imposing such a speed restriction is, at best, lacking empirical support. NSW is the only mainland Australian State with a learner speed limit less than 100km/h.

#### Recommendation

The RTA should review the current speed restriction for learner drivers, with a view to increasing it to 90km/h after six months of the learner licence period to ease the transition to unsupervised driving.

Once young drivers have completed the required driving experience they must pass an on-road driving test to obtain their P1 licence.

A new driving test was introduced in 2007. The RTA appears to have gone through a robust process to develop, trial and implement the new test. The RTA indicated that the test focuses on assessing hazard perception skills and has been designed for learners with extensive driving experience.

The test consists of set performance checks on a set test course. Testing officers mark whether the applicant did or did not meet the scoring criteria. This reduces the need for subjective judgments by the testing officer. During the test a testing officer in the car directs the learner driver on where to drive and assesses the driver against five key performance areas: speed management; road positioning; decision making; responding to hazards and vehicle control.

There is significant variation in driving test pass rates between some testing centres and pass rates are generally higher in the country than the metropolitan areas. The average pass rates ranged from 91 per cent at the Narooma registry to 43 per cent at the Maroubra registry in for the period 2005 to 2010.

Significant variation in driving test pass rates between registries

Exhibit 7: Average pass rates for top and bottom five metropolitan and country licence testing centres - 2005 to 2010

Regional					
Testing centre	Rate		Rate		
NAROOMA MOTOR REGISTRY	91%	LAKE CARGELLIGO COUNCIL AGENCY	51%		
BEGA MOTOR REGISTRY	90%	WELLINGTON MOTOR REGISTRY	55%		
CROOKWELL COUNCIL AGENCY	86%	MERRIWA COUNCIL AGENCY	55%		
BATEMANS BAY MOTOR REGISTRY	84%	WAGGA WAGGA MOTOR REGISTR	56%		
BOMBALA COUNCIL AGENCY	84%	RAYMOND TERRACE MOTOR REGISTRY	56%		

#### Metropolitan

Testing centre	Rate		Rate
SHELLHARBOUR MOTOR REGISTRY	76%	MAROUBRA JUNCT MOTOR REGISTRY	43%
CORRIMAL MOTOR REGISTRY	73%	WETHERILL PARK MOTOR REGISTRY	46%
UNANDERRA MOTOR REGISTRY	72%	GOSFORD MOTOR REGISTRY	46%
ENGADINE MOTOR REGISTRY	71%	LIDCOMBE MOTOR REGISTRY	48%
THE ENTRANCE MOTOR REGISTRY	70%	SILVERWATER MOTOR REGISTRY	49%

Source: The RTA 2011

Appendix 2 contains a list of testing centres with the corresponding average pass rate for each centre for the period 2005 to 2010.

In order to meet community expectations and customer service obligations, the RTA delivers driver testing in approximately 200 locations across NSW including registries and council centres.

The RTA advises that registry pass rates are likely to be influenced by socio-economic and demographic factors such as non-English speaking background and educational attainment. In country areas, some young people may have had extensive driving experience on farms before they began driving on roads. And some registries are located in busy areas with complex traffic environments whereas others are not.

The RTA indicated that pass rates can also be influenced by factors within its control. These include the driving test procedure, the judgement of testing officers and the testing routes used.

The RTA advises that it has a quality assurance system that which includes training, monitoring and review of testing officers, and random allocation of test courses and testing officers. It also advised that it proposes to restructure its driver testing operational support areas, introducing specialist training and audit units to focus on improved consistency of training, quality assurance and overall service delivery.

The RTA, however, needs to better understand the causes of the current significant differences in pass rates between registries so it can target its improvement efforts.

# Recommendation

The RTA should investigate variations in licence test pass rates between testing centres and address contributing factors within its control.

We do not think the variation in test results has been a significant factor in the higher rate of crashes and fatalities in rural areas we discussed earlier. The RTA provided data on crash rates by Local Government Area (LGA) and this showed no particular correlation to the pass rates of the registries in them. For example, of the 20 regional licence testing centres with the highest pass rates, half of their LGA's were above the regional average whilst half were below the regional average.

Also, a limited duration, on-road test has inherent limitations in predicting subsequent driving attitudes and behaviours despite these being key factors in crashes. In fact, the inherent limitations of any such test is a key reason for the introduction of a GLS.

KEY FINDINGS

### 3. The Provisional Licence Period

Most young drivers are not involved in serious crashes and do not indulge in reckless behaviour. Mobility is important to them, especially to young country drivers who lack public transport options and cover greater distances than young metropolitan drivers.

Research clearly shows that young drivers are most at risk of crashing in the first six to 12 months of obtaining their provisional licence. This reflects a number of factors, including:

- a tendency to be overconfident and a greater susceptibility to distraction
- a greater propensity to take risks and engage in attention seeking, especially among young males
- a lack of driving experience
- under-developed information processing and decision-making skills.

Young males are also generally less able to handle stress and more likely to become frustrated and act/react aggressively to a range of situations. Young male drivers are responsible for a greater number of crashes and up to three times the number of crash fatalities on the road.

Younger provisional P1 licence drivers are generally more likely to crash than drivers who get their provisional P1 licence later. For example, research provided by the RTA indicates that drivers who obtain their provisional P1 licence at 17 years of age are around 30 per cent more likely to be involved in a fatal crash during their P1 licence period than drivers who get their provisional P1 licence at 18 years of age.

To try to improve the safety of provisional P1 licence drivers, the RTA has a range of restrictions in place including:

- a zero blood alcohol concentration
- a maximum speed limit of 90 km/h
- if aged less than 25 years, may carry only one passenger under the age of 21 between 11pm and 5am
- not use any functions of a mobile phone including hands-free devices
- not drive certain prohibited vehicles.
- must not incur four or more demerit points during the term of the licence.

Most of the RTA restrictions on provisional P1 drivers are based on strong evidence. As previously indicated, alcohol and mobile phone restrictions on novice drivers are well supported by research. Young drivers are more susceptible to the effects of alcohol on their driving, have lower night driving skills and are more likely to speed excessively than older, more experienced drivers.

Late night driving substantially increases the risk of an inexperienced driver crashing. Young drivers (particularly male) have very much higher crash rates at night, particularly on the weekend. For Australian drivers aged 18 to 24 years old, crashes at night and single vehicle crashes were more serious in comparison with older drivers. Over a third of fatal crashes involving young drivers occur on Friday and Saturday evenings.

NSW research indicates that risks increase for young drivers with multiple passengers, particularly during late evening and early morning. A review of the 2001-02 to 2003-04 data found that young drivers with two or more occupants were over three times more likely to be involved in a fatal crash during these times.

The RTA acknowledged the risks for novice drivers of night-time driving and peer passengers by introducing a combined night driving and passenger restriction in 2007. RTA has also indicated that there was significant community opposition to the potential introduction of a night-time 'curfew' driving restriction. But there is strong evidence-based safety benefits associated with extending the current passenger restriction and introducing a night-time curfew for P1 licence drivers. Victoria introduced a passenger restriction in July 2008 permitting P1 licence drivers to carry no more than one passenger aged between 16 and 21.

Greater novice driver crash risk at night and with passengers

NSW Auditor-General's Report

Improving road safety:
Young drivers
KEY FINDINGS

#### Recommendations

The RTA should:

- Consider introducing a night-time 'curfew' driving restriction for P1 drivers between 11pm and 5am on Friday and Saturday evenings, and investigating the benefits of a similar curfew at other times
- Consider extending the current passenger restriction for P1 drivers so that they can carry no more than one peer passenger at any time.

The RTA has vehicle restrictions in place for young drivers. P1 and P2 drivers must not drive a vehicle with:

- eight or more cylinders (except diesel)
- a turbocharged or supercharged engine (diesel powered engines exempt)
- modifications that increase engine performance
- any other vehicle identified by the RTA as a high risk including some high performance six cylinder cars.

High performance vehicle (HPV) restrictions for provisional drivers are also in place in Victoria, Queensland and South Australia.

The RTA has indicated that there is strong community support for HPV restrictions. However there is limited evidence to support a vehicle restriction for novice drivers. Less powerful vehicles may accelerate less quickly but are still capable of exceeding the speed limit. Research has indicated that provisional drivers who drive high-performance vehicles were not found to present a greater crash risk.

Western Australia does not currently have vehicle restrictions on novice drivers. The Western Australian Office of Road Safety has recently commissioned a review by Curtin University to investigate the relationship between vehicle performance factors, age of driver and the risk of serious injury crash involvement. This review will assist in determining whether vehicle restrictions should be introduced in Western Australia and is scheduled for completion by March 2012.

Austroads' Licensing & Registration Task Force has a national working group investigating the creation of national criteria for high performance vehicle restrictions for provisional drivers. It largely follows the current NSW model, but proposes to base restrictions on a vehicle's power-to-weight ratio, and remove other factors, such as number of cylinders or turbocharging. This is necessary to keep abreast of technological advances whereby small, safe cars are fitted with turbochargers to improve their emission performance. This will allow a greater range of safer vehicles to be used by provisional drivers. The RTA has indicated that it will evaluate the results of the investigation with a view to adopting the new criteria.

Young drivers generally drive cheaper, older cars. The risk of death or serious injury in a crash is lower for later model vehicles. For example, the risk in a vehicle made in 2007 is about half that of a vehicle made in 1987. This problem is compounded in rural and regional areas where the average age of the motor vehicle is 12.1 years, compared to 9.6 years in metropolitan areas.

Because of the cars they are driving, young people have an average 11 per cent greater risk of death or serious injury if they have a crash. For young women, the risk is greatest, with the type of car they are driving increasing the risk of death or serious injury in a crash by more than 13 per cent (compared with 10 per cent for young men).

Clearly, Governments need to find ways of accelerating safety improvements in Australia's vehicle fleet, realising that new vehicle safety features currently take many years to reach the majority of Australian motorists.

Young people generally drive less safe cars

KEY FINDINGS

To assist Australians in making safer vehicle choices, the Australasian New Car Assessment Program (ANCAP) provides consumers with independent information on the comparative level of protection provided by new light vehicles (cars and light commercials) in the event of a serious crash based on controlled crash testing. The Used Car Safety Ratings also provide comparative safety data obtained from 'real world' crashes. The RTA also assists young people select safer cars. For example, the RTA's GEARED website provides general information on vehicle safety as well as links to new and used motor vehicle safety ratings.

Nevertheless, the National Road Safety Strategy 2011-2020 highlights the lack of awareness in the community of the importance vehicle safety ratings have on crash outcomes. The Strategy, released on 20 May 2011 by the Australian Transport Council, outlines broad directions for the future of Australian road safety.

The Strategy includes in its actions for the next three years the need to:

- develop nationally-agreed fleet purchasing policies with practical, evidence-based safety criteria that drive an increase in the safety features required for vehicle purchases.
- require all government fleets to implement nationally-agreed fleet purchasing policies and encourage adoption by other fleet operators.

A large proportion of new vehicles in Australia are purchased for government fleet use. As these vehicles are generally sold for private use within a few years, there is an opportunity to improve the uptake of safety features in Australian vehicles by encouraging fleet purchasers to demand them. This will ultimately enable young drivers improved access to safer second-hand vehicles.

#### Recommendation

To enable young drivers improved access to safer second-hand vehicles, the RTA should strongly advocate for all NSW Government agencies to only purchase light passenger vehicles with a five star ANCAP rating and light commercial vehicles with the best available ANCAP rating and specified safety features, including Electronic Stability Control and head protecting airbags.

Young drivers must pass a Hazard Perception Test (HPT) to progress from a P1 to a P2 licence. The HPT involves a touch-screen computer-based test that measures a young driver's ability to recognise potentially dangerous situations on the road and react appropriately. The test presents applicants with film footage of real traffic situations, shown from the driver's viewpoint.

Research shows that hazard perception skills are important for safe driving and that drivers with poor hazard perception skills usually have more crashes. Research also shows that screen-based hazard perception tests can detect drivers with a higher risk of crash involvement.

A 2010 analysis by a leading expert found that the RTA's HPT test is operating as intended and successfully discriminates between higher and lower crash risk drivers.

Once young drivers have successfully completed the P1 driving period and passed their hazard perception test they can progress to a P2 licence. To try to improve the safety of provisional P2 licence drivers, the RTA has a range of restrictions in place including:

- a zero blood alcohol concentration
- a maximum speed limit of 100 km/h
- not drive certain prohibited vehicles
- a licence suspension for a minimum of three months for two speeding offences
- must not incur seven or more demerit points during the term of the licence.

The gradual reduction in restrictions is consistent with research on the safety of young drivers and the features of effective graduated licensing systems.

Provisional drivers must retain their P2 licence for at least 24 months before progressing to a full licence. Victoria has a three year period with the requirement for a good driving record. Queensland and Tasmania have a two year P2 period if the driver is younger than 23 years of age.

KEY FINDINGS

NSW Auditor-General's Report Improving road safety: Young drivers

The Driver

Qualification

Test helps to

safe drivers

screen out less

Following completion of the provisional P2 licence period drivers must undertake a computer-based Driver Qualification Test (DQT) to progress to a full licence. The test assesses whether P2 drivers have sufficient safe driver knowledge and hazard perception skills to graduate to an unrestricted licence. It consists of two parts:

- questions on advanced safe driving knowledge
- a hazard perception test.

A recent external review of the RTA's DQT concluded that the DQT is operating as an effective 'exit test' and contributing to risk reduction under the RTA's GLS. There is evidence to indicate that the DQT is a reasonable predictor of safe driving skills and attitude. Provisional P2 drivers who passed the DQT on their first attempt are generally the safest, with those who failed the first attempt being 16 per cent more likely to crash within one year.

The 2010 review also concluded that the questions on advanced safe driving knowledge were particularly effective in screening out unsafe drivers. The review indicated that the supporting material for the DQT contains information that may assist young drivers in reducing risks. This suggests that there may be scope to increase the emphasis on safe driving testing knowledge in the RTA's other theory tests.

### Recommendation

The RTA should consider adding further questions about safe driving to the Driver Knowledge, Hazard Perception and Driver Qualification Tests to better safeguard against unsafe driving.

Research indicates that many crashes involving young drivers result from inexperience and poor decision-making, rather than deliberate risk-taking on behalf of young drivers. Most novice drivers involved in fatal crashes do not have prior traffic violations or records and are not readily distinguishable from other drivers. The RTA is involved in a major research project to further reduce the road toll amongst young drivers. Such large scale research is costly and time consuming but the potential benefits are great.

#### **Exhibit 8: P Driver Project**

The RTA is currently involved in a large scale road safety research project, called the P Driver Project, to develop and implement a trial education program for novice drivers aged between 17 to 22 years.

The project aims to:

- reduce the number and severity of road crashes involving young novice drivers
- improve safe driving behaviour of young novice drivers
- increase awareness of the risk factors that contribute to high crash rates for young drivers.

The project is a joint initiative of the Federal, NSW and Victorian governments as well as the Transport Accident Commission of Victoria, Royal Automobile Club of Victoria, Insurance Australia Group and the Federal Chamber of Automotive Industries. The RTA advises the project is on schedule for commencement in October 2011, when the first of the 28,000 participants will be recruited to take part in the trial.

The high-risk behaviour of some young drivers contributes to the relatively high crash rate. The most common behavioural factor for young drivers is speeding and around 80 per cent of those killed are male. Provisional drivers constitute around seven per cent of licensees but are responsible for 18 per cent of speeding infringements greater than 30km/h and 22 per cent of speeding infringements in excess of 45km/h. Some young drivers rapidly accumulate demerit points and those who commit traffic offences, especially speeding fines, have a significantly higher risk of subsequent crash involvement.

Provisional drivers make up seven per cent of licensees but are responsible for 18 per cent of speeding infringements greater than 30km/h

22

NSW Auditor-General's Report Improving road safety: Young drivers

KEY FINDINGS

RTA has had some success with repeat drink driving offenders To provide a greater incentive for novice drivers to do the right thing, the RTA has introduced a range of penalties specific to P1 drivers. A provisional P1 licence will be suspended for at least three months for any speeding offence or if the threshold of four demerit points is reached or exceeded. An additional suspension applies for speeding offences in excess of 30km/h above the speed limit.

Excessive alcohol consumption can also be a problem for young drivers. The highest percentage of alcohol related fatal crashes in Australia are in the 21 to 29 years age group. In NSW, people under 26 years of age comprise 39 per cent of drink drivers involved in fatal crashes (2005-2009 data). Learner and provisional drivers are required to have a zero blood alcohol concentration.

There has been some success at reducing repeat offenders in drink drivers. An evaluation of the Sober Driver Program, a education program developed and then jointly funded by the RTA and the Motor Accident Authority, demonstrated that program graduates were half as likely to reoffend as other recidivist drink drivers who do not attend the program.

The program is currently funded by the RTA and delivered under the supervision of Corrective Services NSW. It is targeted at individuals who have been screened for their suitability to undertake the program and who have been convicted of at least two or more drink driving offences within a five year period. Offenders are directed to undertake the program either by court order, or by direction from their Probation and Parole Officer.

The RTA advises that it is currently developing a Repeat Offender Strategy, focusing on policies and strategies to target drivers before they become repeat high risk speeding and/or drink-driving offenders. The Strategy development is being undertaken in stages, initially identifying and analysing current issues and researching repeat offender programs in other jurisdictions. It will also include internal and external workshops and consultation with stakeholders and is scheduled to be completed by June 2012.

Compulsory in-vehicle monitoring for serious and repeat speeding offenders should be considered for both young and older drivers. Intelligent Speed Adaptation (ISA) systems are vehicle-based devices incorporating digital speed limit maps and satellite navigation technology. They have proven effective in improving driver compliance with posted speed limits by warning drivers when they are speeding or by even physically limiting the speed of the vehicle. Evaluation studies have found substantial crash reduction benefits for the speed limiting systems.

Research indicates that an offence free record is a good predictor of subsequent low crash involvement. Motivation to drive safely can be increased by making the removal of restrictions and imposition of sanctions both dependent on driving record. Introducing an offence free period for provisional P1 licence drivers to graduate to a P2 licence and an unrestricted licence could promote safer driving.

# Sanctions should be strengthened

Consideration should also be given to:

- heavier fines, suspensions and/or restrictions for provisional drivers caught speeding or drink driving with passengers in the car
- psychological testing for provisional drivers returning from disqualification/ suspension
- compulsory participation in a traffic offenders program and /or a sober driver program for suspended provisional drivers, including training courses and alcohol interlock programs
- doubling the length of the second suspension during the provisional licence phase
- penalising passengers (as well as provisional drivers) for breaches of passenger restrictions including overloading.

Some professions such as train drivers, airline pilots and police have to pass psychological tests. This suggests there may be some scope to require young drivers to undertake psychological testing to enter or progress through the driver licensing system. However, there are a number of issues which would need to be researched and considered. These include the availability of appropriate testing instruments, the possibility of manipulating test results, the validity of such testing on a large scale, and what happens to people who cannot pass the psychological test.

NSW Auditor-General's Report

Improving road safety:
Young drivers
KEY FINDINGS

#### Recommendation

The RTA should:

- investigate options to further strengthen sanctions for serious and repeat offenders
- research the feasibility of using psychological testing for novice drivers, particularly in respect of serious and repeat offenders.

As previously discussed, the overall number of crashes involving fatalities and injuries has declined over the last ten years and these reductions have been greater for young drivers compared with drivers aged 26 and older. However, the reductions have been much greater in metropolitan areas.

One possible reason for the limited crash reduction in country areas is the relatively low level of enforcement in some rural and remote areas, which lack speed cameras and may also have limited police numbers. Research shows that compliance will improve if there is a perceived risk of getting caught. The RTA currently commits around \$14 million per year to its Enhanced Enforcement Program. This program enables the NSW Police Force to conduct specific, targeted police enforcement operations. These are conducted at locations where certain offences (speeding, drink driving and seat-belt offences) are known to be more likely to occur.

The RTA advises it is in the process of expanding its mobile speed camera program, which will provide coverage in metropolitan and regional areas. It is also establishing point to point speed enforcement zones in regional areas to better regulate heavy vehicles. This technology could also be used to regulate the speed of passenger and light commercial vehicles.

Point to point speed camera technology allows continuous automated speed enforcement to be applied over an extended length of road. While fixed speed cameras are an effective mechanism for dealing with a specific location with known crash history, point-to-point cameras extend this over a much longer length of road and hence may have a greater influence on drivers. Instead of checking the spot speed of vehicles at a fixed point on the road, the cameras measure the average speed of vehicles over a substantial distance. In this way, point-to-point enforcement targets sustained speeding behaviour and can be more acceptable to the public than single-camera enforcement, and act to reduce speed-related young driver crashes.

#### Recommendation

The RTA should look at ways of encouraging safer driving behaviour in country areas by:

- directing increased resources to speed and alcohol enforcement in regional and remote areas at times of high risk for young drivers
- enhancing and extending speed enforcement activity in regional areas on light passenger and light commercial vehicles through use of point to point camera technology and mobile units
- increasing awareness of the dangers of alcohol, speeding, fatigue and not wearing a seatbelt through increased education/advertising campaigns in country areas.

In accordance with the recommendation in the NSW Auditor-General's report on speed cameras, the RTA has indicated that it will develop an overarching strategy for speed cameras incorporating all camera types, by 31 March 2012.

Stronger enforcement is needed in

country areas

# **Appendices**

24
NSW Auditor-General's Report
Improving road safety:
Young drivers
APPENDICES

# Appendix 1: Fatal crashes

# Drivers involved in fatal crashes by urbanisation and age of driver

	Age group	99-00	06-07	07-08	08-09	09-10	% change since 99-00	% change since 06-07
Metro	under 26	111	58	49	58	39	-65%	-33%
	26+	236	132	120	122	131	-44%	-1%
	Unknown	5	2	1	1	0		
	Total	352	192	170	181	170	-52%	-11%
Country	under 26	73	64	57	56	59	-19%	-8%
	26+	190	186	152	181	193	2%	4%
	Unknown	5	0	0	0	1		
	Total	268	250	209	237	253	-6%	1%
Totals	under 26	184	122	106	114	98	-47%	-20%
	26+	426	318	272	303	324	-24%	2%
	Unknown	10	2	1	1	1		
	Total	620	442	379	418	423	-32%	-4%

Source: The RTA 2011

### Drivers involved in injury crashes by urbanisation and age of driver

	Age group	99-00	06-07	07-08	08-09	09-10	% change since 99-00	% change since 06-07
Metro	Under 26	6596	5867	5239	5017	4823	-27%	-18%
	26+	14624	15793	14761	14423	14053	-4%	-11%
	Unknown	2126	1082	1017	1005	931		
	Total	23346	22742	21017	20445	19807	-15%	-13%
Country	Under 26	2048	1784	1813	1677	1759	-14%	-1%
	26+	4191	4050	4079	4070	4049	-3%	0%
	Unknown	448	249	232	243	224		
	Total	6687	6083	6124	5990	6032	-10%	-1%
Totals	Under 26	8644	7651	7052	6694	6582	-24%	-14%
	26+	18815	19843	18840	18493	18102	-4%	-9%
	Unknown	2577	1327	1253	1257	1158		
	Total	30033	28825	27141	26435	25839	-14%	-10%

Source: The RTA 2011

Notes: The RTA crash data includes only crashes where

- The crash was reported to the Police
- The crash occurred on a road open to the public
- The crashes resulted in at least one person killed or injured or at least one motor vehicle towed away.

Drivers are defined as drivers of light passenger vehicles such as cars, four-wheel drives and light trucks. Heavy vehicle drivers, bus drivers and riders of motorcycles are specifically excluded.

The metropolitan area is defined as the Sydney, Newcastle and Wollongong greater conurbation areas – this includes the Sydney, Newcastle and Wollongong metropolitan areas as well as the Wyong, Gosford, Hawkesbury, Blue Mountains and Wollondilly local government areas. The country area is defined as the rest of the State.

Contrary to the belief among some residents of rural and remote areas that locals are not involved in serious traffic incidents, research indicates the majority of drivers involved in rural crashes are actually rural residents.

# Appendix 2: Licence test pass rates 2005-2010

Registry/ licence testing centre name	Pass rate (%)
rta narooma motor registry	91
rta bega motor registry	90
RTA CROOKWELL COUNCIL AGENCY	86
rta batemans bay motor registry	84
rta Bombala Council Agency	84
RTA MOULAMEIN COUNCIL AGENCY	83
RTA MACLEAN - ANNEXE OF GRAFTON MR	83
rta moruya motor registry	82
rta wilcannia council agency	81
rta moama council agency	81
rta eden motor registry	79
RTA WENTWORTH MOTOR REGISTRY	79
RTA LEETON MOTOR REGISTRY	79
RTA NAMBUCCA HEADS MOTOR REGISTRY	78
RTA FORSTER MOTOR REGISTRY	78
rta tweed heads motor registry	77
RTA TUMUT MOTOR REGISTRY	77
rta shellharbour motor registry	76
RTA GRAFTON MOTOR REGISTRY	76
rta kiama motor registry	75
RTA COBAR COUNCIL AGENCY	75
RTA HAY MOTOR REGISTRY	75
rta ulladulla motor registry	74
rta warialda council agency	74
WOODENBONG DRIVER TESTING	73
RTA TENTERFIELD MOTOR REGISTRY	73
rta Corrimal motor registry	73
rta nowra motor registry	73
RTA FINLEY MOTOR REGISTRY	73
rta cootamundra motor registry	73
RTA INVERELL MOTOR REGISTRY	72
RTA WALCHA COUNCIL AGENCY	72
RTA KATOOMBA MOTOR REGISTRY - CLOSED -	72
rta armidale motor registry	72
rta unanderra motor registry	72
rta cooma motor registry	72
RTA CESSNOCK MOTOR REGISTRY	71
RTA DUNGOG COUNCIL AGENCY	71
RTA COFFS HARBOUR MOTOR REGISTRY	71

#### APPENDICES

Registry/ licence testing centre name	Pass rate (%)
RTA COONABARABRAN MOTOR REGISTRY	71
RTA COWRA MOTOR REGISTRY	71
RTA BATHURST MOTOR REGISTRY	71
RTA ENGADINE MOTOR REGISTRY	71
RTA THE ENTRANCE MOTOR REGISTRY	70
RTA BALLINA MOTOR REGISTRY	69
RTA GLEN INNES MOTOR REGISTRY	69
RTA NYNGAN MOTOR REGISTRY	69
RTA WYONG MOTOR REGISTRY	69
RTA ST MARYS MOTOR REGISTRY	69
RTA MUDGEE MOTOR REGISTRY	68
RTA NELSON BAY MOTOR REGISTRY	68
RTA GLOUCESTER COUNCIL AGENCY	68
RTA PORT MACQUARIE MOTOR REGISTRY	68
RTA NARRANDERA MOTOR REGISTRY	68
RTA COROWA COUNCIL AGENCY	67
RTA KEMPSEY MOTOR REGISTRY	67
RTA YOUNG MOTOR REGISTRY	67
RTA FRENCHS FOREST MOTOR REGISTRY	67
RTA LIGHTNING RIDGE MOTOR REGISTRY	67
RTA INGLEBURN MOTOR REGISTRY	66
RTA WAUCHOPE MOTOR REGISTRY	66
RTA SPRINGWOOD MOTOR REGISTRY	66
RTA DENILIQUIN MOTOR REGISTRY	66
RTA MT DRUITT MOTOR REGISTRY	66
RTA PENRITH SOUTH MOTOR REGISTRY	65
RTA RICHMOND MOTOR REGISTRY	65
RTA TUMBARUMBA COUNCIL AGENCY	65
RTA LISMORE MOTOR REGISTRY	65
RTA WOY WOY MOTOR REGISTRY	65
RTA WARREN COUNCIL AGENCY	64
RTA JUNEE COUNCIL AGENCY	64
RTA GRIFFITH MOTOR REGISTRY	64
RTA MOREE MOTOR REGISTRY	64
RTA QUEANBEYAN MOTOR REGISTRY	64
RTA TOUKLEY MOTOR REGISTRY	64
RTA GILGANDRA COUNCIL AGENCY	63
RTA TEMORA COUNCIL AGENCY	63
RTA GOULBURN MOTOR REGISTRY	63
RTA MITTAGONG MOTOR REGISTRY	63

Registry/ licence testing centre name	Pass rate (%)
RTA ERINA MOTOR REGISTRY	63
RTA NARRABRI MOTOR REGISTRY	63
RTA CASTLE HILL MOTOR REGISTRY	62
RTA BROKEN HILL MOTOR REGISTRY	62
RTA TAREE MOTOR REGISTRY	62
RTA GUNNEDAH MOTOR REGISTRY	62
RTA MURWILLUMBAH MOTOR REGISTRY	62
RTA BLUE MOUNTAINS COUNCIL AGENCY	62
RTA ROCKDALE MOTOR REGISTRY	62
RTA NEWCASTLE MOTOR REGISTRY	62
RTA WALGETT MOTOR REGISTRY	62
RTA MAYFIELD MOTOR REGISTRY	61
RTA DUBBO MOTOR REGISTRY	61
RTA MAITLAND MOTOR REGISTRY	61
RTA ALBURY MOTOR REGISTRY	61
RTA NARELLAN MOTOR REGISTRY	61
RTA CASINO MOTOR REGISTRY	61
RTA WEST WYALONG MOTOR REGISTRY	61
RTA TORONTO MOTOR REGISTRY	61
RTA BOURKE COUNCIL AGENCY	60
RTA CAMPBELLTOWN MOTOR REGISTRY	60
RTA BELMONT MOTOR REGISTRY	60
RTA QUIRINDI COUNCIL AGENCY	60
RTA FORBES MOTOR REGISTRY	60
RTA BANKSTOWN MOTOR REGISTRY	60
RTA MIRANDA MOTOR REGISTRY	60
RTA MANLY MOTOR REGISTRY	60
RTA WOLLONGONG MOTOR REGISTRY	60
RTA CHATSWOOD MOTOR REGISTRY	59
RTA PARRAMATTA MOTOR REGISTRY	59
RTA SINGLETON MOTOR REGISTRY	59
RTA LITHGOW MOTOR REGISTRY	59
RTA RYDE MOTOR REGISTRY	59
RTA ORANGE MOTOR REGISTRY	58
OBERON DRIVER TESTING	58
RTA HORNSBY MOTOR REGISTRY	58
RTA TAMWORTH MOTOR REGISTRY	58
RTA PARKES MOTOR REGISTRY	58
RTA WALLSEND MOTOR REGISTRY	58
RTA CONDOBOLIN COUNCIL AGENCY	58

### APPENDICES

Registry/ licence testing centre name	Pass rate (%)
RTA COONAMBLE COUNCIL AGENCY	58
RTA FIVE DOCK MOTOR REGISTRY	58
RTA MUSWELLBROOK MOTOR REGISTRY	57
RTA WARRIEWOOD MOTOR REGISTRY	57
RTA YASS MOTOR REGISTRY	57
RTA BEVERLY HILLS MOTOR REGISTRY	57
RTA WARNERS BAY MOTOR REGISTRY	57
RTA BLACKTOWN - SHOP FRONT	57
RTA HURSTVILLE MOTOR REGISTRY	57
RTA RAYMOND TERRACE MOTOR REGISTRY	56
RTA WAGGA WAGGA MOTOR REGISTRY	56
RTA MERRIWA COUNCIL AGENCY	55
RTA CARDIFF MOTOR REGISTRY - CLOSED -	56
RTA BOTANY MOTOR REGISTRY	55
RTA WELLINGTON MOTOR REGISTRY	55
RTA LIVERPOOL MOTOR REGISTRY	54
RTA BONDI JUNCTION MOTOR REGISTRY	53
RTA PADSTOW MOTOR REGISTRY	53
RTA MARRICKVILLE MOTOR REGISTRY	52
RTA LAKE CARGELLIGO COUNCIL AGENCY	51
RTA MERRYLANDS MOTOR REGISTRY	50
RTA FAIRFIELD MOTOR REGISTRY	50
RTA CHARLESTOWN MOTOR REGISTRY - CLOSED -	49
RTA SILVERWATER MOTOR REGISTRY	49
RTA LIDCOMBE MOTOR REGISTRY	48
RTA GOSFORD MOTOR REGISTRY	46
RTA WETHERILL PARK MOTOR REGISTRY	46
RTA MAROUBRA JUNCT MOTOR REGISTRY	43
Average	67

Source: RTA 2011

#### APPENDICES

# Appendix 3: About the Audit

# Audit objective

This performance audit assessed the effectiveness of the RTA's driver licence testing and regulation (licensing practices) in ensuring young people drive safely.

### Audit scope

We expected that the RTA would have implemented appropriate licensing practices, including regulations and testing, during:

- the learner/driver phase (criterion 1)
- the provisional licensing phase (criterion 2)

In judging 'appropriate', we had regard to such things as:

- valid and reliable evaluations which show the RTA's licensing practices have been successful in reducing fatalities and injuries among young drivers (evaluations)
- valid and reliable data which demonstrate reduced fatalities and injuries among young drivers which can be linked to implementation of licensing practices (supporting data)
- reputable research and better practice guidance which indicate the RTA's licensing practices are likely to have contributed to safer young drivers (better practice)
- systematic identification and evaluation of improvement opportunities, and evidence that those that are worthwhile have been recommended to Government (continuous improvement)

# Licensing practices include:

- practical and theoretical tests (including but not limited to technical competence)
- restrictions on speed, night driving, vehicles, passengers, phone use etc
- minimum age, training and experience requirements
- requirements for regaining the right to drive after loss or suspension of licence

We were mindful of such things as the:

- benefits to young people of the increased mobility that comes from driving, particularly in areas not well served by alternative transportation
- impact of licensing practices on the rate of unlicensed driving.

#### Audit exclusions

We did not examine:

- school education programs
- motorcycle or truck driver licensing
- other road safety initiatives, except as they relate specifically to young driver safety.

#### Audit approach

We collected evidence by:

- interviewing head office staff from the RTA responsible for policies and processes regarding driver education, training and licence testing
- interviewing experts in driver safety issues in a number of research organisations
- interviewing relevant agencies and other organisations regarding driver education
- reviewing supporting documents provided by the RTA
- conducting a literature review
- analysing data on:
  - licence pass rates across motor registries and agencies
  - crash rates for city and country drivers, and for young people.

#### APPENDICES

We also examined approaches in other jurisdictions including Australian states and territories, New Zealand, the United States, the United Kingdom, and other countries.

#### Audit selection

We use a strategic approach to selecting performance audits which balances our performance audit program to reflect issues of interest to Parliament and the community. Details of our approach to selecting topics and our forward program are available on our website.

# Audit methodology

Our performance audit methodology is designed to satisfy Australian Audit Standards ASAE 3500 on performance auditing, and to reflect current thinking on performance auditing practices. We produce our audits under a quality management system certified to International Standard ISO 9001. Our processes have also been designed to comply with the auditing requirements specified in the *Public Finance and Audit Act 1983*.

#### Acknowledgements

We gratefully acknowledge the co-operation and assistance provided by the NSW Roads and Traffic Authority Centre for Road Safety whose staff participated in interviews and provided information relevant to the audit.

#### Audit team

Our team for the performance audit was Rod Longford and Neil Avery. Rob Mathie and Sean Crumlin provided direction and quality assurance. We were also assisted by Brett Chaiyawat. Our road safety experts, Mark Stevenson and Jennie Oxley from the Monash University Accident Research (MUARC), provided advice and assistance throughout the audit.

#### Audit cost

Including staff costs, printing costs and overheads, the estimated cost of the audit is \$191,900.

#### 31

NSW Auditor-General's Report Improving road safety: Young drivers

PERFORMANCE AUDITING

# What are performance audits?

Performance audits determine whether an agency is carrying out its activities effectively, and doing so economically and efficiently and in compliance with all relevant laws

The activities examined by a performance audit may include a government program, all or part of a government agency or consider particular issues which affect the whole public sector. They cannot question the merits of Government policy objectives.

The Auditor-General's mandate to undertake performance audits is set out in the *Public Finance* and *Audit Act 1983*.

#### Why do we conduct performance audits?

Performance audits provide independent assurance to Parliament and the public that government funds are being spent efficiently, economically or effectively and in accordance with the law.

Through their recommendations, performance audits seek to improve the efficiency and effectiveness of government agencies so that the community receives value for money from government services.

Performance audits also focus on assisting accountability processes by holding managers to account for agency performance.

Performance audits are selected at the discretion of the Auditor-General who seeks input from Parliamentarians, the public, agencies and Audit Office research.

# What happens during the phases of a performance audit?

Performance audits have three key phases: planning, fieldwork and report writing. They can take up to nine months to complete, depending on the audit's scope.

During the planning phase the audit team develops an understanding of agency activities and defines the objective and scope of the audit.

The planning phase also identifies the audit criteria. These are standards of performance against which the agency or program activities are assessed. Criteria may be based on best practice, government targets, benchmarks or published guidelines.

At the completion of fieldwork the audit team meets with agency management to discuss all significant matters arising out of the audit. Following this, a draft performance audit report is prepared.

The audit team then meets with agency management to check that facts presented in the draft report are accurate and that recommendations are practical and appropriate.

A final report is then provided to the CEO for comment. The relevant Minister and the Treasurer are also provided with a copy of the final report. The report tabled in Parliament includes a response from the CEO on the report's conclusion and recommendations. In multiple agency performance audits there may be responses from more than one agency or from a nominated coordinating agency.

# Do we check to see if recommendations have been implemented?

Following the tabling of the report in Parliament, agencies are requested to advise the Audit Office on action taken, or proposed, against each of the report's recommendations. It is usual for agency audit committees to monitor progress with the implementation of recommendations.

In addition, it is the practice of Parliament's Public Accounts Committee (PAC) to conduct reviews or hold inquiries into matters raised in performance audit reports. The reviews and inquiries are usually held 12 months after the report is tabled. These reports are available on the Parliamentary website.

#### Who audits the auditors?

Our performance audits are subject to internal and external quality reviews against relevant Australian and international standards.

Internal quality control review of each audit ensures compliance with Australian assurance standards. Periodic review by other Audit Offices tests our activities against best practice. We are also subject to independent audits of our quality management system to maintain certification under ISO 9001.

The PAC is also responsible for overseeing the performance of the Audit Office and conducts a review of our operations every three years. The review's report is tabled in Parliament and available on its website.

#### Who pays for performance audits?

No fee is charged for performance audits. Our performance audit services are funded by the NSW Parliament.

### Further information and copies of reports

For further information, including copies of performance audit reports and a list of audits currently in-progress, please see our website <a href="https://www.audit.nsw.gov.au">www.audit.nsw.gov.au</a> or contact us on 9275 7100.

# Performance audit reports

No	Agency or Issues Examined	Title of Performance Audit Report or Publication	Date Tabled in Parliament or Published
217	Roads and Traffic Authority	Improving Road Safety: Young Drivers	October 2011
216	Department of Premier and Cabinet Department of Finance and Services	Prequalification Service: Performance and Management Services	28 September 2011
215	Roads and Traffic Authority	Improving Road Safety: Speed Cameras	27 July 2011
214	Barangaroo Delivery Authority Department of Transport NSW Treasury	Government Expenditure and Transport Planning in relation to implementing Barangaroo	15 June 2011
213	Aboriginal Affairs NSW Department of Premier and Cabinet	Two Ways Together - NSW Aboriginal Affairs Plan	18 May 2011
212	Office of Environment & Heritage WorkCover NSW	Transport of Dangerous Goods	10 May 2011
211	NSW Police Force NSW Health	The Effectiveness of Cautioning for Minor Cannabis Offences	7 April 2011
210	NSW Health	Mental Health Workforce	16 December 2010
209	Department of Premier and Cabinet	Sick leave	8 December 2010
208	Department of Industry and Investment	Coal Mining Royalties	30 November 2010
207	Whole of Government electronic information security	Electronic Information Security	20 October 2010
206	NSW Health NSW Ambulance Service	Helicopter Emergency Medical Service Contract	22 September 2010
205	Department of Environment, Climate Change and Water	Protecting the Environment: Pollution Incidents	15 September 2010
204	Corrective Services NSW	Home Detention	8 September 2010
203	Australian Museum	Knowing the Collections	1 September 2010
202	Industry & Investment NSW Homebush Motor Racing Authority Events NSW	Government Investment in V8 Supercar Races at Sydney Olympic Park	23 June 2010
201	Department of Premier and Cabinet	Severance Payments to Special Temporary Employees	16 June 2010
200	Department of Human Services - Ageing, Disability and Home Care	Access to Overnight Centre-Based Disability Respite	5 May 2010
199	Department of Premier and Cabinet NSW Treasury WorkCover NSW	Injury Management in the NSW Public Sector	31 March 2010
198	NSW Transport and Infrastructure	Improving the Performance of Metropolitan Bus Services	10 March 2010
197	Roads and Traffic Authority of NSW	Improving Road Safety: School Zones	25 February 2010
196	NSW Commission for Children and Young People	Working with Children Check	24 February 2010

NSW Auditor-General's Report

Improving road safety:
Young drivers

PERFORMANCE AUDITING

No	Agency or Issues Examined	Title of Performance Audit Report or Publication	Date Tabled in Parliament or Published
195	NSW Police Force NSW Department of Health	Managing Forensic Analysis – Fingerprints and DNA	10 February 2010
194	Department of Premier and Cabinet Department of Services, Technology and Administration NSW Treasury	Government Advertising	10 December 2009
193	Roads and Traffic Authority of NSW	Handback of the M4 Tollway	27 October 2009
192	Department of Services, Technology and Administration	Government Licensing Project	7 October 2009
191	Land and Property Management Authority Maritime Authority of NSW	Administering Domestic Waterfront Tenancies	23 September 2009
190	Department of Environment, Climate Change and Water NSW Environmental Trust	Environmental Grants Administration	26 August 2009
189	NSW Attorney General's Department NSW Department of Health NSW Police Force	Helping Aboriginal Defendants through MERIT	5 August 2009
187	Roads and Traffic Authority of NSW	Improving Road Safety – Heavy Vehicles	13 May 2009
186	Grants	Grants Administration	6 May 2009
185	Forests NSW	Sustaining Native Forest Operations	29 April 2009
184	NSW Police Force	Managing Injured Police	10 December 2008
183	Department of Education and Training	Improving Literacy and Numeracy in NSW Public Schools	22 October 2008
182	Department of Health	Delivering Health Care out of Hospitals	24 September 2008
181	Department of Environment and Climate Change	Recycling and Reuse of Waste in the NSW Public Sector	11 June 2008
180	Follow-up of 2003 Performance Audit	Protecting Our Rivers	21 May 2008

# Performance audits on our website

A list of performance audits tabled or published since March 1997, as well as those currently in progress, can be found on our website www.audit.nsw.gov.au.