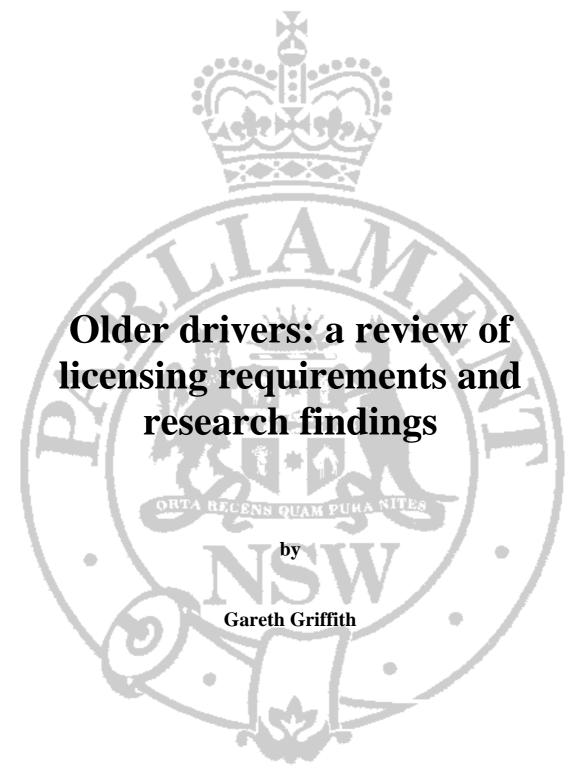
NSW PARLIAMENTARY LIBRARY RESEARCH SERVICE



Briefing Paper No 11/07

RELATED PUBLICATIONS

- Preparing for the Impact of Dementia by Talina Drabsch, NSW Parliamentary Library Briefing Paper No 4/06
- Ageing in Australia by Talina Drabsch, NSW Parliamentary Library Briefing Paper No 12/04

ISSN 1325-5142 ISBN 978 0 7313 18278

October 2007

© 2007

Except to the extent of the uses permitted under the *Copyright Act 1968*, no part of this document may be reproduced or transmitted in any form or by any means including information storage and retrieval systems, without the prior written consent from the Librarian, New South Wales Parliamentary Library, other than by Members of the New South Wales Parliament in the course of their official duties.

Older drivers: a review of licensing requirements and research findings

by

Gareth Griffith

NSW PARLIAMENTARY LIBRARY RESEARCH SERVICE

David Clune (MA, PhD, Dip Lib), Manager(02) 9230 2484
Gareth Griffith (BSc (Econ) (Hons), LLB (Hons), PhD), Senior Research Officer, Politics and Government / Law(02) 9230 2356
Stephanie Baldwin (BSc (Hons), PhD), Research Officer, Environment (02) 9230 2798
Lenny Roth (BCom, LLB), Research Officer, Law(02) 9230 3085
John Wilkinson (MA, PhD), Research Officer, Economics(02) 9230 2006

Should Members or their staff require further information about this publication please contact the author.

Information about Research Publications can be found on the Internet at: www.parliament.nsw.gov.au/WEB_FEED/PHWebContent.nsf/PHPages/LibraryPublications

Advice on legislation or legal policy issues contained in this paper is provided for use in parliamentary debate and for related parliamentary purposes. This paper is not professional legal opinion.

CONTENTS

EXECUTIVE SUMMARY

1.	INTRODUCTION	1
2. 2.1	ISSUES IN THE DEBATE IN SUMMARYSpecific incidents	
2.2	The ageing population and driver safety	
2.3	The mobility needs of older people	
2.4	Implications for an ageing society	
	ı v	
3.	THE CURRENT SYSTEM IN NSW	
3.1	Licensing requirements	
3.2	Licensing restrictions for older drivers	
3.3	Canceling an older person's driving licence	6
4.	THE RTA PROPOSAL FOR REFORM	8
5.	STAKEHOLDER RESPONSES	10
5.1	Media reports	10
5.2	Duncan Gay, Shadow Minister for Roads	11
5.3	Older Drivers of NSW Organisation	11
5.4	Council on the Ageing (NSW)	
5.5	Combined Pensioners and Superannuants Association of NSW (CPSA)	
5.6	The NRMA	
5.7	Eric Roozendaal, the Minister for Roads	
5.8	Malcolm Kerr, Member for Cronulla	16
6.	LICENSING REQUIREMENTS IN OTHER JURISDICTIONS	17
6.1	Australia	
6.2	USA	
6.3	Canada	18
6.4	New Zealand	20
6.5	Europe	22
6.6	Comment	23
7.	STATISTICAL FINDINGS FOR NSW	
7.1	Older car drivers killed on NSW roads	
7.2	Older pedestrians killed on NSW roads	
7.3	Older car drivers injured on NSW roads	26
8.	SUMMARY OF RESEARCH FINDINGS	27
8.1	The problem identified	
8.2	History of research on the safety of older drivers	
8.3	Older drivers' crash trends	
8.4	Older drivers and crash risk	
8.5	The cohort effect	29
8.6	The frailty bias	29
87	The law mileage higs	31

8.8	Common crash types among older drivers	33
8.9	Self-regulation of older drivers	
8.10	Assessing responsibility for older drivers' crashes	
8.11	Dementia and older drivers	
9.	LICENSING ISSUES – COMMENTS AND PROPOSALS	42
9.1	Mandatory age based assessments and the alternatives	42
9.2	Recommendations of the Victorian Parliament's Road Safety Com	
9.3	Local licences and graduated de-licensing	
9.4	Model licensing procedures for older drivers	
10.	CONCLUSION	46

ATTACHMENT

RTA, Licensing of older driver Discussion paper, July 2007

EXECUTIVE SUMMARY

In July 2007 the Roads and Traffic Authority (RTA) released its discussion paper, *Licensing of older drivers*, in relation to which submissions were invited from the community over the next three months. The main purpose of this paper is to assist the current debate by presenting an overview of the relevant research and to offer a more detailed jurisdictional comparison than is presented in the RTA publication. The publicly articulated views of certain stakeholders are also discussed. The paper does not seek to lead the debate in one direction or another.

Specific incidents: In a NSW context the debate concerning older drivers has both a general and more specific focus. As to the latter, a particular focus is on the two serious accidents involving young Sophie Delezio, the first in December 2003, the second in May 2006, both of which involved elderly drivers. [2.1]

The ageing population: Such incidents feed into the more general debate about the licensing of older drivers. Its key concerns are that older drivers are a greater safety risk to themselves and/or others, and that this problem will intensify as the population ages in absolute as well as relative terms. The OECD reports that in Australia the percentage of the population aged 65 or more is projected to rise from 12.6% in 2000, to 22.1% in 2030 and 25.2% in 2050. People aged 85 years and over as a proportion of the population is projected to rise from 1.2% in 1997 to between 4.4% and 4.8% in 2051. The RTA reports that the number of older Australians holding a driving license is projected to rise from 12.6% of those over 65 in 2000 to 22.1% in 2030. [2.2]

Policy issues: Policy makers in this area are faced with tough choices. On one side, there are the 'safety' issues associated with the ageing population. On the other, ceasing to drive can have enormous implications for the independence and mobility of many older people. These problems are exacerbated in Australia by population trends which have seen more and more people living more or less car dependent lives in suburban and regional areas. The prospect facing policy makers is that the ageing population of 'baby boomers' is likely, for a variety of reasons, to *want* to continue driving for as long and, probably, as far as possible. Many may *need* to drive a private car if they are to access shopping, health, entertainment and other facilities. [2.3]

In terms of the legislative and policy solutions, it is obvious that a whole of government approach is needed to: plan explicitly for the mobility needs of the elderly; support alternative transport options; build safer vehicles; and improve the roads infrastructure to help older people to drive as safely as possible for as long as possible. [2.4]

The RTA reform proposal: In NSW at present older drivers must undergo a medical test at 80 years and an on-road test at 85 years. [3.1] The proposed scheme under the RTA Discussion Paper would alter this system by requiring instead an annual medical test from 75 on, plus the issuing of a 'local licence' at 85 with a 10 km radius restriction. An on-road test might be undertaken on a voluntary basis for those 85 years and over seeking to drive outside their local area. [4]

Stakeholder responses: Responses to the RTA proposal have been varied. Most

controversial is the 'local licence' proposal, opposed by the Combined Pensioners and Superannuants of NSW on the grounds that 'medical tests and education work much better'. The NRMA is also opposed to this aspect of the proposal, as is the Council on the Ageing (NSW). [5.1-5.8]

Comparative licensing requirements: In Australia at present age-based driving tests are only mandated in three jurisdictions, NSW, Tasmania and Western Australia. [6.1] In the US two States require older drivers to undertake an on-road test at a given age, regardless of a person's driving record. This occurs in Illinois and New Hampshire, at 75 years of age in both cases (same requirements apply in the District of Columbia) In two other States, Delaware and Hawaii, an on-road test is mandated, but only for cause, for example after a specific number of accidents or other points and infractions have occurred, or for specific physical conditions. [6.2] Mandatory on-road tests are not a feature of licensing requirements for older drivers in Canada. Instead, in a number of jurisdictions the emphasis is on medical testing and education. The strictest testing standards and the most comprehensive evaluation program is found in Ontario where driving licenses must be renewed at 80 years of age and every two years thereafter. [6.3] In New Zealand a new system for licensing older drivers was introduced on 4 December 2006. This new system removed the mandatory on-road driving test that was previously needed to re-license at age 80 and two yearly afterwards. What remains in place is a medical certificate of fitness to drive, with referral and support systems for GPs and health practitioners. Education and information for GPs, health practitioners and older drivers are also be emphasized under the new scheme. [6.4] Licensing procedures in Europe confirm that very few jurisdictions use driving tests for older drivers. [6.5]

Statistical findings for NSW: When account is taken of the proportion of older persons in the total NSW population, those who are 70 years or more are consistently overrepresented in the figures for car driver fatalities. This over-representation is more marked still when account is taken of the proportion of older people who are licensed to drive in this State. Note, too, that not all drivers with a licence will actually drive and the number in this category is likely to increase with age. These figures confirm findings from other jurisdictions suggesting that older drivers are over-represented among those drivers who are killed or seriously injured. [7.1]

Research findings on crash involvement: It has been predicted that, unless effective countermeasures are put in place, older driver casualty crashes may comprise around 25-30% of all casualty crashes by 2025. [8.1]

Researchers in the 1990s and later have argued that, at least as far as reduced driving skills are concerned, the older driver crash involvement problem is mainly restricted to certain subgroups of older people (those suffering from dementia, epilepsy or insulin-treated diabetes), rather than encompassing all older drivers. [8.2]

In 2004 Liisa Hakamies-Blomqvist of the University of Helsinki, Finland stated:

- older drivers clearly have a higher risk of serious injury and fatality;
- the question of whether they are also at a higher risk of crashes remains unresolved;
- the greater physical vulnerability of older persons leads to an overrepresentation-called the 'frailty bias' of their crashes in databases based on injury outcome;

- similarly, their risk estimates based on mileage driven are overestimated 'low mileage bias' when compared with those of younger drivers with a higher yearly mileage;
- most crashes involving older drivers occur at intersections; and
- the crashes in which older drivers are involved rarely involve speeding or risky overtaking. [8.3]

Older drivers are more likely than younger drivers to be found responsible for the crashes in which they are involved, although this finding has been questioned. [8.10]

Self-regulation: Research shows that many older drivers self-regulate their driving habits, with the result that older driver crashes rarely occur at night, on weekends, in peak hour traffic, or in inclement weather. However, the 2003 report of the Victorian Parliament's Road Safety Committee concluded 'That while self-regulation may be valid for most older drivers, it is not a satisfactory fail-safe strategy and cannot alone be relied upon to keep incapable older drivers from being a safety hazard. Intervention by licensing agencies will be necessary to ensure safety for all road users'. [8.9]

Dementia and older drivers: Snellgrove (2005) estimated that there may be approximately 162,500 older drivers with cognitive impairment associated with dementia on Australian roads. She also estimated that potentially 107,250 accidents may be attributable to these drivers every year. [8.11]

Mandatory age based assessments: With its emphasis on at risk sub-groups of older drivers, contemporary research in this field tends to question the safety benefits of age-based mandatory assessments for population wide groups of older drivers. Published in 2004 was research conducted by Langford and others into the effectiveness of mandatory licensing testing for older drivers. The study compared the casualty crash involvement rates of drivers aged 80 years and older in Melbourne (where there is no regular assessment) and Sydney. Results showed that while there was no difference in crash risk for older drivers based on population, Sydney drivers had statistically higher casualty crash involvement than their Melbourne counterparts on a per licence issued basis and time spent driving basis. These Australian findings were said to be consistent with overseas research, where it is argued that mandatory testing has negative unintended consequences. [9.1]

Local licences: The acceptability to older drivers of different types of licensing restriction was considered in a recent Canadian study. 'Local licences' were not popular among older drivers. The authors concluded, 'Our subjects' preferences appeared to be inversely related to the impact on autonomy and the ability to access the community'. [9.3]

1. INTRODUCTION

In July 2007 the Roads and Traffic Authority (RTA) released its discussion paper, *Licensing of older drivers*, in relation to which submissions were invited from the community over the next three months. The RTA also stated it would consult directly with key stakeholders, including the NRMA, the Staysafe Committee and the Department of Ageing, Disability and Home Care.

The main purpose of this paper is to assist the current debate by presenting an overview of the relevant research and to offer a more detailed jurisdictional comparison than is presented in the RTA publication. The publicly articulated views of certain stakeholders are also discussed. The paper does not seek to lead the debate in one direction or another. The full text of the RTA Discussion Paper is attached.

2. ISSUES IN THE DEBATE IN SUMMARY

2.1 Specific incidents

In a NSW context the debate concerning older drivers has both a general and more specific focus. As to the latter, a particular focus is on the two serious accidents involving young Sophie Delezio, the first in December 2003, the second in May 2006, both of which involved elderly drivers. On the first occasion a 68 year-old man who suffered a seizure drove a car into the Roundhouse Childcare Centre at Fairlight, injuring seven children, two of whom were pinned under the car, which caught on fire.² In the second incident an 80 year-old man ran over Sophie Delezio at a pedestrian crossing on Frenchs Forest Road, Seaforth. Witnesses said the driver slowed from 60km/h to 40km/h as he approached the crossing 'but was trying to pass a car stopped at the crossing on the outside lane when he collided with Sophie'. The court was told that the 'sun was glaring, not blinding but certainly a distraction'.³ The man had been driving for 62 years with one blemish on his record when, in 2004, he exceeded the speed limit by less than 15km/h.⁴

This last crash led to changes to the particular crossing involved, with the installation of traffic signals being fast-tracked.⁵ It also prompted the State Government to introduce a \$17m program to upgrade certain pedestrian crossings. A further reported development was that an RTA taskforce was established to examine whether drivers should have annual checks at age 75, rather than 80. This came after Sophie Delezio's father had called 'for more stringent testing of elderly drivers'. The same report discussed the response of the

The closing date for written comment is 19 October 2007.

D Teutsch, 'Child-care crash man talks of sorrow', *The Sun Herald*, 21 December 2003, p 7; N Casella. 'I am deeply sorry', *The Daily Telegraph*, 13 May 2005, p 9.

T Ong, 'Drover pleads guilty over Sophie', *The Australian*, 31 August 2006, p 3.

⁴ A Kamper, 'Devastated by guilt', *The Daily Telegraph*, 31 August 2006, p 7.

⁵ R Pollard and J Baker, 'Sophie's new battle forces safety review', SMH, 8 May 2006, p 5.

Combined Pensioners and Superannuants Association, with a spokesperson for the organisation stating:

For the minister [for Roads] to take the age of the driver involved as a prompt to lower the age at which people must have their ability to drive tested seems to be evidence of a prejudice against older people.⁶

2.2 The ageing population and driver safety

This last incident in particular feeds into the more general debate about the licensing of older drivers. Its key concerns are that older drivers are a greater safety risk to themselves and/or others, and that this problem will intensify as the population ages in absolute as well as relative terms. The fact is that over the next three decades, the maturation of the 'baby boom' generation (those born between 1946 and 1964), combined with increased longevity and declining birth rates, will transform the developed world's demographics. The OECD reports that in Australia the percentage of the population aged 65 or more is projected to rise from 12.6% in 2000, to 22.1% in 2030 and 25.2% in 2050. Likewise, the percentage of the Australian population aged 80 or more is projected to rise from 3.1% in 2000, to 6.6% in 2030 and 9.7% in 2050.

The Australian Bureau of Statistics confirms this trend, projecting that the number of people aged 85 years or more will rise from 216,100 in 1997 to between 440,500 and 442,500 in 2021, and reaching between 1.1 and 1.2 million in 2051. People aged 85 years and over as a proportion of the population are projected to rise from 1.2% in 1997 to between 4.4% and 4.8% in 2051.

Again, the RTA reports that the number of older Australians holding a driving license is projected to rise from 12.6% of those over 65 in 2000 to 22.1% in 2030. 10 A disproportionate increase in women licence holders is forecast. The OECD report referred to a survey conducted in Melbourne which found that, among those aged over 65, 75% of men and 40% of women were licensed to drive, while for those aged 45 to 54, nearly 100% of men and 90% of women held licenses.

Behind these figures lies the concern that 'normal ageing' generally results in some level of decline in sensory, perceptual, cognitive, psychomotor and physical functioning and, therefore, also in driving skills.¹¹ While the RTA discussion paper acknowledged that the

J Langford, M Fitzharris. S Koppel and S Newstead, 'Effectiveness of mandatory license

G Jones, 'RTA finally acts at Sophie crash site', *The Daily Telegraph*, 9 May 2006, p 9.

OECD, Ageing and Transport: Mobility Needs and Safety Issues, 2001, p 18 - http://www.cemt.org/pub/pubpdf/JTRC/01Ageing.pdf The OECD average for 2050 is projected to be 25%.

⁸ OECD, n 7, p 19. The OECD average for 2050 is projected to be 9.1%.

⁹ ABS, Population Projections, 1997-2051, p 12.

¹⁰ OECD, n 7, p 29.

'new generation of older drivers is healthier, more active and more mobile than previous generations', it also commented on the health issues facing older drivers, stating that 'Dementia and vision conditions will probably be the most significant health issues for older drivers'.¹²

Summarising the concerns in the debate in 2005, Jim Langford of the Monash University Accident Research Centre wrote:

Older drivers are perceived to have a heightened crash risk. This, together with a projected growth in the number of older drivers over the next thirty or so years, has produced a call for improved road safety countermeasures, including more accurate assessment procedures and more targeted licensing conditions to better identify older drivers with unacceptably diminished driving skills.¹³

It is argued in this context:

One of the biggest challenges over the next 30 or so years towards reducing road trauma will come from the ageing of the population and the particular safety problems associated with older road users. There is an expected 3-fold increase in older driver trauma over the next 20-30 years, especially among those aged 80 years and above. ¹⁴

2.3 The mobility needs of older people

Research findings on crash statistics, the driving habits of older persons and other related matters are discussed later in this paper. For the moment it is enough to note that the question of licensing older drivers is a key component of a broader debate about the mobility needs of older Australians. The fact is that policy makers in this area are faced with tough choices. On one side, there are the 'safety' issues associated with the ageing population. On the other, ceasing to drive can have enormous implications for the independence and mobility of many older people. These problems are exacerbated in Australia by population trends which have seen more and more people living mainly car dependent lives in suburban and regional areas. The RTA Discussion Paper noted in this respect that 'Many of the areas where "baby boomers" live are vehicle dependent – outer suburban and rural locations where public transport and pedestrian facilities are limited'. Expanding on this theme, it stated:

testing for older drivers in reducing crash risk among urban older Austalian drivers' (2004) 5(4) *Traffic Injury Prevention* 326 at 327.

- RTA, Licensing of older driver discussion paper, July 2007, p 2 and p 6.
- J Langford, 'Licensing options for managing older driver safety' (June 2005 update of paper in *Austroads Road Safety Handbook Volume 1*). Note that this summary does not necessarily reflect Langford's own views.
- B Fildes, Achieving the national strategy target a role for vision zero? http://www.monash.edu.au/cmo/roadsafety/abstracts and papers/015/Vision zero.pdf

The greatest growth in the over-85 population outside Sydney will be in the coastal areas of Port Stephens, Shellharbour, Tweed and the Great lakes. In Sydney, the greatest growth in population over the age of 85 will be in Baulkham Hills, Blacktown, Liverpool, Penrith, Fairfield and Sutherland.¹⁵

Similar trends are at work in the United States. According to a July 2003 report, *The Mobility Needs of Older Americans*, issued by the Brookings Institution, increasing numbers of elderly people are concentrated in suburban areas and have no transportation options but to drive. It is also reported that the number of miles driven by seniors increased from 12.7 miles a day in 1995 to 15.3 miles in 2001. These research findings on the 'greying of the suburbs' suggest that the demographic shift towards suburban and outer suburban areas has required older persons to travel greater distances to and from their local amenities. While making more trips or travelling greater distances by car can be seen as a positive social indicator of improved mobility, it can also be viewed more negatively as an indicator of poor access to services.

The prospect facing policy makers is that the ageing population of 'baby boomers' is likely, for a variety of reasons, to *want* to continue driving for as long and, probably, as far as possible. Many may *need* to drive a private car if they are to access shopping, health, entertainment and other facilities. Moreover, they will have grown up with the car and will value the independence it provides. Alongside this is the perception of the reduced fitness to drive, at least among a sub-group of elderly people, and the need to manage older driver safety as appropriately as possible by the use of licensing, testing, educational and other means.

2.4 Implications for an ageing society

The dilemma, if it can be called that, posed by the projected increase in older drivers for policy makers is clearly something that can and should not be looked at in isolation. Road safety is something that affects us all. More than that, a greater reliance on the private car by more and more older people will have broad social implications for environmental pollution, energy consumption and road congestion. Health care and other issues are sure to arise if we fail to provide adequate alternatives for those elderly people who, because they do not or cannot drive, become isolated from the rest of the community. A further question relates to the use of a driver's license for ID purposes. Without some easily accessible alternative, the loss of a driver's licence can have significant implications for older people. In terms of the legislative and policy solutions, it is obvious that a whole of government approach is needed to: plan explicitly for the mobility needs of the elderly; support alternative transport options; build safer vehicles; and improve the roads infrastructure to help older people to drive as safely as possible for as long as possible.

¹⁵ RTA, n 12, p 2 and p 3.

S Rosenbloom, *The Mobility Needs of Older Americans*, The Brookings Institution, July 2003.

Insurance Information Institute (US), *Older drivers*, July 2007 - http://www.iii.org/media/hottopics/insurance/olderdrivers/

3. THE CURRENT SYSTEM IN NSW

3.1 Licensing requirements

Licence classes and testing requirements

Licence Class	Annual driving test from	Annual medical test from
C (car)		
Any vehicle with a Gross Vehicle Mass of		
up to 4.5 tonnes	05	00
• Tractors	85 years	80 years
• Implements		
LR • Any rigid vehicle with a Gross Vehicle		
 Any rigid vehicle with a Gross Vehicle Mass up to eight tonnes 		
 Vehicles equipped to seat between 13 and 	80 years	80 years
30 adults including the driver	5	2
MR		
Any rigid truck with two axles and with a		
Gross Vehicle Mass of more than eight		
tonnes (no upper Gross Vehicle Mass limit)	80 years	80 years
HR		
Any rigid vehicles with three or more axles		
and a Gross Vehicle Mass of more than	90 via ama	90 ***
eight tonnes HC	80 years	80 years
• prime mover to which is attached a single		
semi-trailer plus any unladen converter		
dolly, or	80 years	80 years
a rigid motor vehicle to which is attached a	, , , , , , , , , , , , , , , , , , ,	J - 1 J - 1 - 1
trailer that has a GVM greater than nine		
tonnes plus any unladen converter dolly		
MC		
all vehicles including		
B-Doubles		
Road Trains	70 years	70 years
Vehicles in HC except motor bikes or		
motor trikes	90	90
Rider (R)	80 years	80 years

In NSW, individuals are required to undertake a medical examination every year from the age of 80 should they wish to retain their licence. The annual medical test is based on the Austroads standard 'Assessing firness to drive', which the RTA Discussion Paper says is 'used by all Australian jurisdictions with medical assessments in their licensing systems'. For class 'C' (car) licences, driving tests are required every year from the age of 85. The same Discussion Paper explains that the test used is 'basically the same as that used for licensing new drivers (with modifications including a removal of the parking manoeuvres

and an increase in time allowed)'. 18 The age specific licensing requirements for all licence classes are set out in the above table. 19

3.2 **Licensing restrictions for older drivers**

The RTA website provides the following advice on licensing options for older drivers:

If an older person has competent driving skills but is no longer up to driving in more challenging situations (eg over long distances, in heavy traffic or at night) the RTA can place a restriction on the licence which still allows them to continue driving under some circumstances. For example, restrictions can allow the licence holder to drive within a certain distance from their home or only at certain times of the day. They should discuss these options with their doctor. Doctors are in the best position to help by advising older drivers of the implications for safe driving from declining capabilities or other medical conditions.²⁰

The RTA Discussion Paper explains that such restrictions may be placed on a driver's licence following a medical or driving test. It states:

The most common restrictions are limiting the licence holder to driving only between sunrise and sunset and restricting the radius of travel from the driver's home.²¹

3.3 Canceling an older person's driving licence

The holder of a drivers licence is required to notify the RTA of any long term injury or illness that may affect his or her ability to drive safely. 22 The RTA website comments in this respect:

If an older person no longer wants to drive, they can return their licence to a motor registry in person or by mail. If they send their licence by mail they will need to prepare a short note advising the RTA of their decision.

In its advice on 'driving and dementia' the RTA suggests licence holders seek advice from their doctor and reconsider their driving ability, should they experience difficulty with any of the following:²³

```
RTA, n 12, p 2.
19
                                  Guide
                                                 for
                                                              Older
                                                                             Drivers
       http://www.rta.nsw.gov.au/licensing/downloads/2005_03_gfod.pdf
```

18

²⁰ http://www.rta.nsw.gov.au/licensing/renewingalicence/olderdrivers/older driver options.html

²¹ RTA, n 12, p 2.

²² RTA, A guide for older drivers, p 53.

²³ RTA, A guide for older drivers, p 64.

- Seeing things coming straight at you or from either side.
- Hearing the sound of approaching cars, car horns or sirens.
- Stopping, turning or speeding up quickly.
- Feeling confused or upset when more than one thing happens at a time.
- Becoming confused on familiar routes.
- Your mood changing when you are driving.

Other individuals can also initiate the cancelling of an older person's licence. The Discussion Paper comments:

Members of the public, such as close family and friends, Police and medical practitioners, can inform the RTA if they are concerned about the competence of a driver. The concerned person completes an 'Unsafe Driving Report' that is processes by the RTA Medical Unit. After an initial assessment the unit may require the driver to undertake a medical assessment or on-road test.

4. THE RTA PROPOSAL FOR REFORM

The core recommendations of RTA discussion paper, *Licensing of older drivers*, were to 'Replace the current older driver licensing system with a graduated licensing system in which restrictions are progressively placed on the older driver'. Under this proposal:

- Annual medical testing will commence from age 75 rather than at age 80; and
- At age 85, a 10km radius will be placed on the driver's licence in lieu of the current mandatory driving test. A 'home to town' restriction would be available for rural drivers. Older drivers would only be required to pass a driving test if they needed to remove or modify their radius restriction.

In a document clarifying the proposal, released on 27 August 2007, an RTA spokesman said

The proposal is designed to help more older drivers maintain their mobility for longer than they would under existing arrangements, without compromising road safety. It would provide more choice and less testing than the current system. Rather than the existing compulsory driving test at 85, people would have a choice; be issued a local license and sit no test, or sit a test to maintain a full and unrestricted licence.

The 'clarification' went on to explain the RTA proposal for reform as follows:

1. Medical testing for all drivers aged over 75.

This would bring NSW into line with the standard applied in other Australian states and in New Zealand and Europe.

It supports the early diagnosis of a range of medical conditions, in particular dementia and Alzheimer's, and it means people get earlier referral to eye specialists if problems are identified earlier.

2. New licence options for people aged over 85

Currently, drivers do not have a choice when they reach 85 – they must sit a special RTA driving test every year if they wish to remain on our roads.

The discussion paper puts forward a second option known as the 'local licence' restricting drivers to driving within a certain, practical radius of their home. This option would give drivers a choice when they reach 85; be issued with a local licence and remain mobile, or sit a test to drive more widely and unrestricted. For many older drivers, being able to get to the local shops, doctor and place of worship is critical and the local licence would give them a hassle-free option to stay mobile which does not require an annual test. For those who still drive long distances, nothing would change from the current situation and they would still sit an annual test.

Other features of the RTA proposal include enhancing the system for reporting unsafe driving behaviours, specifically by the improved use of *Unsafe Driving reports* and follow-up action.

The proposed licensing scheme would also be accompanied by a comprehensive education strategy, to provide information for older drivers on: the new licensing scheme; maintaining safe driving practices; identifying when to give up driving; and alternative transport options. In a letter distributed on 25 September 2007 the RTA explained that the requirement to test all drivers at 75 would support

the early diagnosis of a range of medical conditions, in particular dementia and Alzheimer's, and it means people get earlier referral to eye specialists if problems are identified sooner.

For heavy vehicle driving licence holders it is proposed that the current system of annual driving tests starting at 80 years of age be retained, while medical and vision tests would be aligned with the new requirements for Class C and R licences (at 75 years of age).

5. STAKEHOLDER RESPONSES

5.1 Media reports

The 'clarification' issued by the RTA on 27 August 2007 was in response to 'some confusion about the existing licensing arrangements as well as the proposals put forward'. The proposals certainly generated considerable debate, some but not all of it critical in nature. An article in the *Sydney Morning Herald* on 14 September 2007 started, 'Elderly drivers are angry about proposed changes that affect their licenses, fearing their independence is threatened'. The same article continued:

The South Coast MP, Shelley Hancock, a Liberal, held a form on the issue in Nowra at the end of August. She had more than 300 residents turn up. The Roads and Traffic Authority has invited public submissions on the proposals and it has been flooded with more than 700 letters.²⁴

Offering a flavour of the public response, the ABC reported that following the release of the Discussion Paper:

A tidal wave of calls hit the switchboard during the Morning Show with listeners, expressing a wide range of opinions. Some people were clearly offended by the proposal, saying older people were being unfairly targeted. While a number of our listeners said experience and a solid driving record should be taken into consideration, many highlighted the need for more thought being given to teaching young drivers better habits.

The report continued:

There was clear concern for the independence that a drivers' license assures with many saying their activities would be severely curtailed if driving was to be denied, or even restricted to within a 10 kilometre radius of their home. One 87 year-old woman who said she had studied up for and passed her driving test in the last two years and still felt confident and capable behind the wheel, has recently driven to the mid-north coast to visit family. There were others who said they had to drive 20 kilometres or more just for medical appointments.

Conversely, other listeners said that they had experienced first hand the problems that slowing reaction times, and deteriorating mental and physical abilities can bring. And while they were hesitant to have 'that' discussion with ageing family members, welcomed the opportunity that a license review system might bring. Finally, some people suggested that perhaps it wouldn't be such a bad idea for drivers of any age to undergo some type of regular assessment.²⁵

²⁴ L Besser, 'Hot seat for old hands at the wheel', *SMH*, 14 September 2007, p 10 - http://www.smh.com.au/text/articles/2007/09/13/1189276899647.html

ABC, 'Proposed licensing changes for older drivers', 23 July 2007 - http://www.abc.net.au/centralwest/stories/s1985812.htm

5.2 Duncan Gay, Shadow Minister for Roads

On 24 July 2007 the Shadow Minister for Roads, Duncan Gay, issued a media released titled 'Proposed changes to licensing older drivers – finally some common sense'. As the title suggests, the Shadow Minister welcomed the proposed changes, stating that the 10 kilometre restriction for drivers over 85 would

eliminate the need for annual licensing tests, which is causing elderly drivers a lot of distress. This is a sensible approach and one put forward by the NSW Liberal/Nationals Coalition. The current 'one-size fits all' testing system assumes elderly drivers regularly travel into Sydney's CBD, or take long driving trips. In reality, many elderly drivers we speak to just want to be able to drive the few kilometres to the shops, the bowling club, or church.

The media release went on to say:

The proposed changes are also good news for elderly drivers in the country, where access to public transport is limited, because it allows them to drive around the safety of their own town. Older citizens groups are supporting these policies. They've been telling us the current system is draconian with many drivers daunted by regular testing and the possibility of losing their licence and independence - for good.

A month later the NSW National Party leader, Andrew Stoner, was quoted as saying 'People are living longer and they are fitter so why should this compulsory regime of driver testing apply to 85 and over?' He said a lot of older drivers 'feel that the current policy is discriminatory'. He added 'I think what is proposed can work. But they're going to have to take into account some of the differences between city and country'.²⁶

5.3 Older Drivers of NSW Organisation

The RTA proposal gained qualified support from the Older Drivers of NSW Organisation, which called for flexibility in the issuing of restricted licenses. In its submission to the RTA, the Organisation stated:

While our stated aim is complete abolition of the road test for over 85's, the introduction of a restricted licence without the requirement of a road test is seen as being a welcome change. Provided there is some flexibility in the radius allowed for the restricted licence, this proposal may well satisfy the driving needs of most in this age group. It is important to note that drivers who still require a full licence can continue to opt to take the road test, presumably without prejudicing their right to the restricted licence that would be available without the test.²⁷

²⁶ 'Stoner calls for RTA older-drivers test rethink', *ABC News*, 24 August 2007.

The full text of the submission can be accessed at - http://www.olderdriversnsw.org/index.html

Calling for restricted licences to the individually negotiated with the RTA, the submission continued:

Our organisation believes that the 10 km radius suggested could be a basic indication but that the actual radius should be negotiated individually with the RTA, taking into account the above factors. As an example, on the northern beaches the main centre for medical and other health-related practitioners is Dee Why. For residents of Manly, a 10 km distance would easily cover the trip but for those further north such as in Avalon, the distance is nearer to 15 km. A major aim of the proposal is to keep drivers to familiar territory and this should be the overriding factor in deciding the proscribed radius rather than the arbitrary and obviously rounded number of 10 km.

The submission welcomed the educational component of the RTA proposal, particularly making older drivers aware of their potential problems at intersections, especially when making right hand turns. It concluded by drawing attention to some aspects that would need to be considered if this proposal were to be endorsed into law:

- What would happen to a driver who decided to take the road test and failed could he/she still opt for a restricted licence?
- What would be the situation for those drivers who in recent times failed their road test would they be eligible to receive a restricted licence?
- Would drivers who have more than one address such as a holiday home as well as a town base be eligible for licences to cover a radius for both of their establishments?

The submission concluded:

For those drivers who opt to continue to sit for the annual road test, this would seem an ideal time to ease their plight somewhat by removing the highly discriminatory limit on taking the test a maximum of three times.

5.4 Council on the Ageing (NSW)

Outlined on the Aged Care Australia website is the response of the Council of the Ageing (NSW) to the RTA Discussion Paper. It is more critical in nature, with Council on the Ageing (NSW) Policy Manager, Lisa Langley, reportedly stating

We just do not think the RTA has proven its case; that increasing numbers of older drivers on our roads warrants these tough new restrictions...COTA (NSW) recognises that as a person ages they are more susceptible to chronic disease and other conditions that can affect their driving ability. However, 'older drivers' are not a homogenous group. COTA (NSW) would like to see a combination of medical testing and driver assessment and re-education as the focus of older drivers' licensing policy, rather than the proposed policy of annual testing after the age of 85 and radius driving restrictions. Testing should be based on driving ability

– not someone's age.²⁸

5.5 Combined Pensioners and Superannuants Association of NSW (CPSA)

Basically, the CPSA views the RTA proposal as an improvement on the current system but hardly the ideal policy solution to the issue. Its position was set in an editorial article in the organisation's magazine, *The Voice*. It started by correcting the view propagated in the media that the RTA proposal involved tougher licensing restrictions for elderly drivers, saying 'That's not actually true'. The editorial commented:

The two main changes the RTA proposes is (1) to lower the age for an annual medical from 80 to 75 and (2) to give any driver turning 85 a licence for a 10 kilometre range from where they live. Anyone not happy with 10 kilometres still has to sit an annual driving test. It's a bit tougher but it's a bit better at the same time. But not good enough, of course.²⁹

Explaining its position, the editorial goes on to say:

CPSA was contacted by the office of the Minister for Roads, which claimed that it had been bombarded with letters from people begging for a restricted-range licence. Unfortunately the RTA now thinks that giving everyone a restricted-range licence is the answer. The RTA is quite dismayed at the strong protest lodged by CPSA. The RTA, being the RTA, doesn't get a lot of things. This is one of them: people beg for range-restricted licences because it's the lesser of two evils. Most people drive short distances, but face total isolation if their car is taken away from them. So rather than sit a nerve-wracking annual driving test that causes them almost continuous anxiety throughout the year in the lead-up to the next test, they would rather the humiliation of a range-restricted licence. But what people really want is the abolition of annual driving tests for people over 85.

By reference to the approach taken in Victoria, the CPSA editorial argues that very few jurisdictions use driving tests for older drivers, for the simple reason that 'medical tests and education work much better'. The editorial concludes: 'That's why CPSA calls for medical testing of older drivers to replace the lunacy of annual driving tests for the over-85s'.

In summary, the position of the CPSA is that, in the absence of any evidence that older driver testing has led or will lead to improvements in road safety, any decision to medically test, road test or to restrict people's licence is based purely on their age. This is described by Paul Versteege, Policy Coordinator for the CPSA, as 'age discrimination pure and simple'. He adds, 'The RTA's proposal, if implemented, would soften the current arrangements, but it is defective for the same reason'. 30

²⁸ 'Older drivers not a threat to public safety' http://www.agedcareguide.com.au/news.asp?newsid=1417

Editorial, "Older driver testing demented says CPSA", *The Voice of Pensioners and Superannuants*, 27 July 2007.

Communication to the author, 26 September 2007.

5.6 The NRMA

In response to the RTA's discussion paper on licensing of older drivers, the NRMA has said it will oppose: enforcing a 10km radius on older drivers; and dropping the age of compulsory medical testing to 75. NRMA Motoring & Services director, Graham Blight, said the NRMA would oppose the proposals being suggested by the RTA because they were 'unnecessary and counterproductive', stating

It does not make sense to be legislating against older drivers when the RTA's own data shows that they are the least likely group to cause a crash...There is no evidence in Australia or abroad to suggest that these restrictions will make any difference to road safety standards, particularly since they are not the age group causing the majority of problems on our roads.³¹

According to Mr Blight:

Restricting older drivers to a 10 km radius of their homes will mean they can not access critical services like hospitals, community centres, visiting families, shopping and banks...Many older drivers live in areas where there is little public transport or the public transport options available to them are unsafe. If we force them out of their cars they will have no means to travel. This situation gets a lot worse for older drivers in regional NSW.

Mr Blight argued that the medical test currently being conducted by general practitioners could be improved.

Drivers aged 75 and over are among the most safety-aware groups on our roads, they carefully monitor their own driving capacity and limit their driving to areas where they are comfortable...Rather than dropping the age for compulsory medical testing to 75, we should be giving doctors more information on how to make the tests more thorough and relevant to assessing if an older driver is safe to keep driving. We want the RTA to provide drivers approaching 75 with more information on what they can do to improve their driving skills and more direction on the changes to their health and physical condition which might affect their driving ability. This has proven to make a difference in countries where it has been introduced.

The NRMA called on the RTA to scrap its current policy of forcing drivers aged 85 and over to undertake a compulsory annual in car driving test, arguing instead for a more targeted approach:

NSW is one of three states in Australia that forces all drivers aged over 85 to

NRMA, 'Restricting older drivers won't work', 20 August 2007 - http://www.mynrma.com.au/cps/rde/xchg/mynrma/hs.xsl/5790.htm?cpssessionid=SID-3F5768EC-62B2554B

undertake an annual driving test, yet our crash statistics are no better than those states that don't enforce the test...We don't oppose the tests outright, but believe they should be limited to those drivers who have been identified by family, friends, doctors or the Police as being a risk on the road...A better use of the state's resources would be to provide more information to the family and friends of older drivers so that they are better equipped to identify and address changes to the health and physical condition of loved ones which might affect their ability to drive.

Mr Blight said the RTA proposals had caused great concern among NRMA Members, with NRMA directors receiving countless calls and letters from concerned older drivers and their families.

On 14 September 2007 Mr Blight was further reported to have said that this was the 'hottest issue we have had in a long time', one driven by emotion, 'and the emotion comes from Sophie Delezio and her accidents, and there has been an overreaction'. Again, he questioned the usefulness of driving tests, stating: 'The testing regimes don't apply in Victoria or Queensland, and their crash statistics are just the same as ours'. Consistent with his earlier views, Mr Blight was reported to advocate an education program to help people recognise when their relatives or friends should forgo their driving privileges. He also condemned the local licensing concept as inappropriate for rural areas and Sydney's urban sprawl, saying: 'The way suburbs are being built and services being congregated in big centres, there is a lot of instances where 10 kilometres is not enough'. Less consistent with his earlier views was the reported claim that the NRMA 'support bringing the medical test forward to age 75'. 32

5.7 Eric Roozendaal, the Minister for Roads

In the same article the Minister for Roads was reported to say he was keenly aware of the angst that people feel when they are asked to sit a driving test after so many years. He said:

As it is now, when you turn 85 you are required to sit compulsory test, no ifs, no buts. This gives them a choice. If they want to drive to Melbourne, they sit a test.

The article commented further:

Mr Roozendaal acknowledges the local licence concept is one that may require 'some tweaking'. There are particular challenges for those living in regional areas who may need to travel hundreds of kilometres to get access to health services, for instance. If allowances be made for these dilemmas, and a two-tier system emerges, then questions about equity arise. 'My mind is open. [But] the suggestion of no testing of older drivers is one I would not be comfortable with and one I don't think the community would be happy with'. ³³

L Besser, 'Hot seat for old hands at the wheel', *SMH*, 14 September 2007, p 10 - http://www.smh.com.au/text/articles/2007/09/13/1189276899647.html

L Besser, 'Hot seat for old hands at the wheel', *SMH*, 14 September 2007, p 10 - http://www.smh.com.au/text/articles/2007/09/13/1189276899647.html

5.8 Malcolm Kerr, Member for Cronulla

The RTA proposal has generated widespread community concern, with many people contacting their local MPs on this issue. An indication of this concern is gained from the views expressed by Mr Kerr who, speaking in the Legislative Assembly on 26 September 2007, said:

Older drivers in the Cronulla electorate have overwhelmingly rejected the 10 kilometres radius restriction from home for drivers over the age of 85 proposed by the Roads and Traffic Authority [RTA] and outlined in the Licensing of Older Drivers discussion paper. I conducted a survey of 4,000 residents over the age of 75 in the Cronulla electorate. More than 1,500 older drivers responded to the survey.³⁴

Mr Kerr went on to explain:

While supporting the need for thorough medical examinations after the age of 75, particularly for eyesight, respondents rejected the proposed 10 kilometres radius restriction. A 10 kilometres radius restriction would place a severe limitation on older drivers visiting family and friends and attending medical appointments, church and the many activities engaged in by senior citizens. Such limitations would severely curtail the quality of life of senior citizens by reducing their mobility and independence and making them prisoners in their own homes.

He continued:

No evidence has been produced that older drivers cause more road accidents than any other group of drivers. The NRMA has stated that there is no evidence in Australia or abroad to suggest that these restrictions will make any difference to road safety standards, particularly since older drivers are not the age group causing the majority of problems on our roads.

NSW Legislative Assembly (Hansard Proof), 26 September 2007, pp 70-71.

6. LICENSING REQUIREMENTS IN OTHER JURISDICTIONS

6.1 Australia

The RTA Discussion Paper provides the following table setting out the licensing requirements for older drivers in other Australian jurisdictions.

Commencement age	Medical test	Driving test
No mandatory requirement	Victoria and Northern	Victoria, Queensland,
	Territory	ACT, South Australia and
		Northern Territory
Age 70	South Australia	1
Age 75	ACT, Queensland, Western	-
	Australia and Tasmania	
Age 80	New South Wales	1
Age 85	-	New South Wales,
		Tasmania and Western
		Australia

At present, therefore, age-based driving tests are only mandated in three jurisdictions, NSW, Tasmania and Western Australia.

6.2 USA

The following account of the situation in the US is sourced from the American Insurance Information Institute website – http://www.iii.org/media/hottopics/insurance/olderdrivers/ According to this source two States require older drivers to undertake an on-road test at a given age, regardless of a person's driving record. This occurs in Illinois and New Hampshire, at 75 years of age in both cases (same requirements apply in the District of Columbia) In two other States, Delaware and Hawaii, an on-road test is mandated, but only for cause, for example after a specific number of accidents or other points and infractions have occurred, or for specific physical conditions.

A total of 25 States have no retesting or other age-based licensing requirements, whereas other States have some form of requirement or potential basis for restriction. The most common are vision tests at specified ages, together with knowledge and medical tests. Several States also require doctors to report medical conditions, although age may not be a factor in this case. In California there is an express requirement for doctors to report a diagnosis of dementia. Further, some States place an age limit on the renewal of a licence by mail, most recently in the case of Texas which introduced this condition on 1 September 2007.

Listing only those States (and 'DC', the District of Columbia) which have one or more of these licensing requirements or limits, the position in the US can be expressed in the form of the following table.

Licensing requirements for older drivers in the US

G			TZ 1 1			A 1' '
State	Vision	Road	Knowledge	Medical	Require	Age limit
	Test	Test	Test	Test	doctors to	on mail
					report	renewal
					medical	
					conditions	
Alaska						69
Arizona					_	70
California					✓ (dementia)	70
Colorado						61
Connecticut						65
Delaware	i	i	i	i	~	
DC	70	75	75	70		
Florida	80					ii
Georgia					~	64
Hawaii		i	i	i		
Illinois		75				
Indiana				i		
Louisiana	70(40,62)					70
Maine	iii					
Maryland	40			i		
Montana						iv
Nevada	65			70(renewing	~	v
				by mail)		
New		75				
Hampshire						
New Jersey					~	
Oregon	50				~	
Pennsylvania	vi			45		
South	65					
Carolina						
Texas						79
Utah	65				~	
Virginia	80					
West					~	
Virginia						

- i. Retesting only for cause.
- ii. Only two successive renewals may be made electronically or by mail, regardless of age.
- iii. Vision tests are required at first renewal at age 40, at every second renewal after age 40, and at every renewal after age 62.
- iv. Only two successive renewals may be made electronically or by mail, regardless of age.
- v. All drivers must renew in person every 8 years.
- vi. Random re-examination at specified age.

6.3 Canada

The following table showing licensing requirements for older drivers in the Canadian Provinces and Territories is based on a 2003 US Department of Transportation report titled

Model Driver Screening and Evaluation Program. 35

Licensing requirements for older drivers in Canada

Province/Territory Driving Medical or other test				
Trovince, refittory	test	Wiedean of other test		
Newfoundland	-	Drivers age 75 must present a medical exam form from their physician to renew their licenses. Drivers age 80 must provide a medical report every 2 years.		
Prince Edward Island	-	On recommendation from the police, physician, or family member, mature drivers can be requested to complete medical, vision, or oral test.		
Nova Scotia	-	Drivers over 65 involved in a collision must take a written and on-road test.		
New Brunswick	-	No special requirements for older drivers		
Quebec	-	At ages 75, 80, and every 2 years thereafter, drivers must present a medical examination and optometric report (with acceptable exam results) when renewing. No tests required for renewal, but a declaration of illness or impairment that has not been previously reported must be reported upon renewal.		
Ontario	-	Driver evaluation required at 80;* also required for individuals 70 years of age and over who are involved in a motor vehicle accident and are at fault.		
Manitoba	-	On recommendation from a physician older drivers can be requested to complete medical, vision, or oral test.		
Saskatchewan	-	On recommendation from the police, physician or family member, older drivers can be requested to complete medical, vision, or oral test.		
Alberta	-	Medical review and vision test at age 75, 80, and every 2 years thereafter.		
British Columbia	-	Medical review at age 80 and every 2 years thereafter.		
Northwest Territories	-	Medical review at age 75, 80 and every 2 years thereafter		
Yukon	-	Medical review and vision test at age 70, every 2 years to age 80, annually thereafter.		
* The Ontario system is discussed in more detail below.				

Note that the information is dated 2001. For the text of the report see http://www.nhtsa.dot.gov/People/injury/olddrive/modeldriver/3 app b.htm

From this it would seem that mandatory on-road tests are not a feature of licensing requirements for older drivers in Canada.³⁶ Instead, in a number of jurisdictions the emphasis is on medical testing and education. The strictest testing standards and the most comprehensive evaluation program is found in Ontario where driving licenses must be renewed at 80 years of age and every two years thereafter. Based on the 2003 US Department of Transportation report, the Ontario evaluation program requires:

- mandatory written knowledge and vision test;
- participation in a 90-minute group education session on safe driving at age 80 and every two years thereafter;

The Ontario evaluation program also involves a review of a person's driving record. Senior drivers may be required to pass a road test before being re-licensed if they have an excessive number of demerit points showing on their record. Some drivers may be required to pass a road test before being re-licensed if, in the opinion of the instructor, they may represent a safety risk. It is also the case that drivers 70 years of age and over who are involved in a motor vehicle accident and are at fault must take mandatory vision, knowledge, and road tests.

Also, by s 203 of the Ontario *Highway Traffic Act* physicians are required to report any patient aged 16 and over with a medical condition that may make driving dangerous. Medical report may be required on a cyclical basis if there is evidence of a medical condition that may eventually interfere with the safe operation of motor vehicle. Section 31 of the same legislation states that the purpose of the Act is to protect the public by ensuring that 'the privilege of driving on a highway is granted to, and retained by, only those persons who demonstrate that they are likely to drive safely'.

6.4 New Zealand

In New Zealand a new system for licensing older drivers was introduced on 4 December 2006. This new system removed the mandatory on-road driving test that was previously needed to re-license at age 80 and two yearly afterwards. What remains in place is a medical certificate of fitness to drive, with referral and support systems for GPs and health practitioners. Education and information for GPs, health practitioners and older drivers are also emphasized under the new scheme.

As set out by the New Zealand Ministry of Transport, the main features of the scheme are as follows:³⁷

- no mandatory age-based on-road test for drivers aged 80 and over;
- a Medical Certificate for Driver Licence indicating fitness to drive required to

It seems up until 1996 road tests were required in Ontario annually for drivers aged 80 years and over – J Saunders, 'Inquest points no fingers', *The Toronto Globe and Mail*, 16 March 2002.

NZ Ministry of Transport, Questions and Answers – Land Transport (Driver Licensing) Amendment Rule (No 2) 2006 - http://www.transport.govt.nz/older-license-qa-june-2006/

relicense at 75, 80 and two-yearly thereafter (same as under the previous system);

- a revised Medical Certificate for Driver Licence form;
- the existing Land Transport New Zealand medical referral process and existing options for specialist assessment will be retained;
- GPs and other health practitioners to be better informed about, and when appropriate, recommend licence conditions or restrictions (for example, no night driving or a distance restriction);
- GPs will have a new option to refer an older driver (age 75+) for an optional onroad safety test in certain circumstances. This will be available for patients 75 over who are medically fit to drive but their GP is uncertain about their ability to drive safely;
- \$550,000 in new funding per annum for a nationwide expansion of the *Safe with Age* road safety classroom course;
- a subsidy for a private on-road driving lesson with an approved driving instructor for *Safe with Age* course participants from early 2007;
- an education and information package to be targeted at older people, their families and communities:
- education and information to be targeted at GPs, including a series of regional seminars:
- monitoring of New Zealand and overseas research in developing assessment tools for fitness to drive.

Explaining the reason for abandoning mandatory testing for drivers aged 80 and over, the Ministry of Transport commented that, prior to the change, New Zealand was

one of the very few countries that requires drivers 80 and over to undertake a mandatory on-road driving test. The UK, Western European countries, and most Australian and US states have no age-based on-road testing of older drivers. Overall their crash statistics for older drivers are no better or worse than ours.

The Ministry of Transport went on to observe:

New Zealand older drivers are generally a safe group. Most older people drive conservatively and adequately self-regulate their driving. Older drivers are responsible for only about 2 percent of road casualties. This is consistent with the percentage of older drivers in the driving population.

It as further noted that many older drivers say they find taking the over 80s driving test highly stressful, while organisations like Grey Power view the test as discriminatory. Other reasons for removing the test were outlined as follows:

- there is little evidence of road safety benefits from the test;
- a very high percentage of older drivers who take the current on-road test pass it (some require more than one attempt);
- the mandatory test places an unfair financial burden on older people (under the old system \$59.30 every two years for people 80 and over who wished to re-license. Under the new system this dropped to \$18.30, for those drivers who are not

required to pass an on-road safety test);

 maintaining mobility and access to the community are important values for older people. While this must be balanced against keeping our roads safe, there is no evidence that abolishing the driving test will compromise road safety.

6.5 Europe

This following table, showing licensing requirements in selected European jurisdictions, is based on an OECD report on *Ageing and Transport: Mobility Needs and Safety Issues*, published in 2001, and as adopted and revised in 2006 by the European Road Safety Observatory.³⁸ To the extent that it continues to provide an accurate picture the table seems to confirm the point made by the Combined Pensioners and Superannuants Association of NSW that 'Very few jurisdictions in the world use driving tests for older drivers'.

Licensing procedures in selected European countries

Country Renewal		Renewal Interval	Medical Requirements for	
Country	Renewar	Kenewar Intervar	Renewal	
	Procedure?		Reflewar	
Belgium	No	No renewal required	No	
Denmark	Yes	At age 70, licenses issued for 4	Doctor's certificate required	
		years		
		At age 71, issued for 3 years		
		At ages 72-79, issued for 2 years		
		At ages 80+, issued for 1 year		
		If illness, shorter terms possible		
United	Yes	At age 70, mandatory renewal and	Self-declaration of ability to meet	
Kingdom		every 3 years thereafter	vision standard required. Any	
			medical condition that could affect	
			driving must be reported to the	
			Licensing Authority.	
Finland	Yes	At age 45, renewal every 5 years	After age 45, medical review every	
		At age 70 license expires	five years, covering general health	
		Renewal period depends on the	status and vision.	
		physician	Renewal requires medical exam	
			and verification of ability by two	
			people	
France	No	No renewal required	No	
Germany	No	Renewal not determined by age	No	
Ireland	Yes	Annual renewal regardless of age	At 70, a certificate of medical	
			fitness is required	
Italy	Yes	10 year renewal up to age 50, 5 Medical test required with renew		
		year renewal after age 50 and 3		
		year renewal at age 70		
		_		

European Road Safety Observatory (2006), Older Drivers - http://www.erso.eu/knowledge/Fixed/06 drivers/20 old/olderdrivers.pdf

Netherlands	Yes	At age 70, medical review required Depending on physical			
		every five years conditions, medical review			
		be more frequent, vision to			
		required			
Portugal	Yes	At age 70, license renewed every 2	At age 70, a medical exam is		
		years	required every 2 years		
Sweden	No	No renewal required	No		

6.6 Comment

By proposing to scrap mandatory on-road testing of older drivers at 85 the RTA Discussion Paper is certainly moving towards most other jurisdictions in the world. Of those surveyed above, such tests are only used in three US jurisdictions, the States of Illinois and New Hampshire (at 75 years of age in both cases), and at the same age in the District of Columbia. New Zealand dispensed with the requirement in recent years, as did the Canadian Province of Ontario in 1996. The RTA's emphasis on the education of older drivers about maintaining safe driving practices, identifying when to give up driving, and alternative transport options is consistent with the best practice in comparable jurisdictions.

On the other hand, the 'local licence' proposal to restrict the over 85s to a 10 k/m radius is more novel. The proposed new scheme includes the option to modify or lift this restriction, but that would require an on-road test. It is this facet of the RTA's proposal that has generated most comment among stakeholders.

7. STATISTICAL FINDINGS FOR NSW

7.1 Older car drivers killed on NSW roads

The first two tables below show the numbers of *elderly car drivers* and *elderly pedestrians* killed and injured on NSW roads between 1998 and 2005. Road fatalities among older drivers can be attributed consistently to these two categories. In 2005, for example, when a total of 83 older people died on the roads, 24 were killed while driving a car and 36 as pedestrians. The other 23 fatalities comprised 19 vehicle passengers, one motorcycle rider and three pedal cycle riders/passengers. This distribution can be compared with other age groups where car drivers similarly account for the largest class of fatalities (for example, 50 for the 17-25 age groups, and 60 for the 30-49 age groups), but where pedestrian fatalities are comparatively lower (for example, 8 for the 17-25 age groups, and 27 for the 30-49 age groups).

Unless otherwise stated the figures presented below are from the RTA's statistics on *Road Traffic Crashes in NSW*, 1998-2005 — which can be accessed at http://www.rta.nsw.gov.au/roadsafety/downloads/accident statistics dl4.html

Older car	driver	fatalities	in]	NSW.	1998-2005

Year	Car drivers killed 70 years	Total car drivers killed	70 years and over car drivers killed %	70 years and over persons with car driver licences %*	70 years and over persons in NSW population %**
2005	and over	191	12.6%	8.2%	9.8%
2003	31	180	17.2%	8.2%	9.7%
-					
2003	34	195	17.4%	8.1%	9.6%
2002	44	219	20.1%	8%	9.5%
2001	26	179	14.5%	7.9%	9.4%
2000	34	220	15.5%	7.6%	9.3%
1999	27	223	12.1%	7.5%	9.1%
1998	29	191	15.2%	7.3%	9%

^{*} Source: RTA, Registration and Licensing Statistics, 1998-2005 - http://www.rta.nsw.gov.au/publicationsstatisticsforms/downloads/statiregis_dl6.html?plid=licencest ats

As expected, when account is taken of the proportion of older persons in the total NSW population, those who are 70 years or more are consistently overrepresented in the figures for car driver fatalities. This over-representation is more marked still when account is taken of the proportion of older people who are licensed to drive in this State. Note, too, that not all drivers with a licence will actually drive and the number in this category is likely to

^{**} Source: ABS, *Australian Historical Population Statistics*, 2006 http://www.ausstats.abs.gov.au/ausstats/abs@archive.nsf/0/A29090D88BDB750FCA257176002272BD/\$File/3105065001 table22.xls

Nationally, in 2006 92 drivers 70 years and over were killed on Australia's roads, from a total of 762 drivers (12.1%); in 2005 the figures were 77 older drivers from a total of 775 (9.9%) – see Australian Transport Safety Bureau, Road Deaths Australia, 2006 Statistical Summary - http://www.atsb.gov.au/publications/2007/pdf/mrf 2006.pdf

increase with age. These figures confirm findings from other jurisdictions suggesting that older drivers are over-represented among those drivers who are killed or seriously injured. The effect of what is called the 'frailty bias' in relation to the over-representation of older drivers among those killed or seriously injured is discussed in the next section of this paper – 'Summary of research findings'.

The fact that older drivers are more likely to be seriously injured or killed in a crash was commented upon in the RTA Discussion Paper. Statistics were produced showing the proportion of older people who die as a result of road crashes. This was represented in the in the form of the U curve, where fatalities dip as a proportion of casualties from between the teenage years to middle age, but then rise again in later life. The RTA calculates that, of all casualties killed on NSW roads between 2002 and 2004, 4.1% were in the 70-74 age group, with this figure rising steeply to 6.1% for the 75-79 age group, to 7.7% for the 80-84 age group and to 9.3% for those age 85 years and over. This compares with 1.7% for those in the 20-24 age group and 2% for those in the 45-49 age group. However, the RTA also commented that 'the total number of fatalities amongst the older population is actually low compared to other age groups'.

7.2 Older pedestrians killed on NSW roads

Pedestrian fatalities are another story. Here the overrepresentation of the over 70 age group in very marked. As shown by the table below, between 1998 and 2005 this age group accounted on average for around a quarter or a third of all pedestrian fatalities, whereas its proportion of the total NSW population averaged around 9.5%. Of course the licensing of older people is not relevant in this context. The figures do however raise important questions, among other things about alternative transport facilities available to the elderly and about the road infrastructure generally.

Older pedestrian fatalities in NSW: 1998-2005

Year	Pedestrians killed 70 years and	Total pedestrians killed	70 years and over persons over pedestrians killed 70 years and over persons NSW population %*	
	over		%	
2005	36	96	37.5%	9.8%
2004	29	85	34.1%	9.7%
2003	37	94	39.4%	9.6%
2002	24	94	25.5%	9.5%
2001	21	88	23.9%	9.4%
2000	30	110	27.3%	9.3%
1999	27	108	25%	9.1%
1998	33	102	32.3%	9%

^{*} Source: ABS, *Australian Historical Population Statistics*, 2006 http://www.ausstats.abs.gov.au/ausstats/abs@archive.nsf/0/A29090D88BDB750FCA25717600227 2BD/\$File/3105065001 table22.xls

7.3 Older car drivers injured on NSW roads

If older persons are overrepresented in proportionate terms when it comes to road fatalities, the table below suggests they are somewhat underrepresented when it comes to road injuries suffered by car drivers. This under representation of older drivers can be compared to the figure of 14.7% for road injuries suffered by those in the 17-20 age group in 2005 (1,821 of 12,380). In that year, the 16-19 age group comprised 6.5% of licensed car drivers in the State.

Older car drivers injured in NSW, 1998-2005

Year	Car drivers	Total	70 years and over	70 years and over
	injured	Car drivers injured	car drivers injured	persons with car
	70 years and over		%	driver licences %*
2005	770	12,380	6.2%	8.2%
2004	743	13,210	5.6%	8.2%
2003	745	13,665	5.4%	8.1%
2002	726	13,927	5.2%	8%
2001	759	14,554	5.2%	7.9%
2000	714	13,645	5.2%	7.6%
1999	693	12,091	5.7%	7.5%
1998	660	11,505	5.7%	7.3%

* Source: RTA, Registration and Licensing Statistics, 1998-2005 - http://www.rta.nsw.gov.au/publicationsstatisticsforms/downloads/statiregis_dl6.html?plid=licencest ats

Of course care needs to be taken when interpreting these figures. Note that for the purposes of the above table 'injured' is defined to mean 'A person who is injured as a result of a crash, and who does not die as a result of those injuries within 30 days of the crash'. The term is not therefore reserved for serious injuries. For 1997 the figures were calculated on a different basis and for that year they do refer specifically to those 'seriously injured', a term that is defined to mean 'A person who is injured *and admitted to hospital* as a result of an accident and who does not die as a result of those injuries within 30 days of the accident'. In that year 217 drivers aged 70 years and over were 'seriously injured' from at total of 2,530 (8.6%). More broadly, the road crash profile for older drivers and the injury and fatality rates suffered must be looked at in a wider context, which includes the driving patterns and habits of the elderly. The raw data can only tell us so much.

With its emphasis on the fatality rate of older drivers, the RTA Discussion Paper does not deal in any concerted way with injury rates suffered by the 70 and over age group.

8. SUMMARY OF RESEARCH FINDINGS

8.1 The problem identified

From the earlier comments about the ageing population it can be assumed that the problems associated with older drivers are likely to increase over the coming years. A 2001 Australian study predicted that by 2025, driver fatalities for the age group over 65 years and above will increase from 121 in 1995 to 341 in 2025, an increase of 281%. A similar increase in serious injuries would also be expected. ⁴⁰ Langford notes in this respect

It has been predicted that older driver casualty crashes may comprise around 25-30% of all casualty crashes by 2025 as a result of this increased exposure, unless effective countermeasures are put in place.⁴¹

8.2 History of research on the safety of older drivers

A common view is that the changes associated with the 'normal ageing' process, or arising from specific medical conditions that affect functioning, result in deterioration in driving skills and, by extension, lead to an increase in crash involvement for older drivers. The 2001 OECD report, *Ageing and Transport: Mobility Needs and Safety Issues*, challenged this position, noting that contemporary research tends to focus, not on all older drivers, but rather on a subgroup of high-risk older drivers:

- in the late 1960s and early 1970s, research focused on the functional deficiencies typical of older drivers, frequently recommending screening tests to remove highrisk cases from the road;
- in the 1980s and 1990s researchers used accident epidemiology to establish that
 crash over-representation arose, at least partly, from older people's physical frailty
 and vulnerability to injury. The societal implications of the older driver problem
 were also re-considered, with the focus beginning to shift from safety to mobility;
 and
- researchers in the 1990s and later have argued that, at least as far as reduced driving skills are concerned, the older driver crash involvement problem is mainly restricted to certain subgroups of older people (those suffering from dementia, epilepsy or insulin-treated diabetes), rather than encompassing all older drivers.⁴²

8.3 Older drivers' crash trends

In a 2004 paper delivered at the Transportation Research Board Conference in the United States Liisa Hakamies-Blomqvist of the University of Helsinki, Finland made the following

Cited in Assessing Responsibility for older drivers' crashes, Austroads, 2005, p v and pp 57-58.

Langford, n 13.

OECD, Ageing and Transport: Mobility Needs and Safety Issues, 2001, pp 39-40; summarized in J Langford, M Fitzharris. S Koppel and S Newstead, n 11, p 327.

points:

- older drivers clearly have a higher risk of serious injury and fatality;
- the question of whether they are also at a higher risk of crashes remains unresolved;
- the greater physical vulnerability of older persons leads to an overrepresentation-called the 'frailty bias' of their crashes in databases based on injury outcome;
- similarly, their risk estimates based on mileage driven are overestimated 'low mileage bias' when compared with those of younger drivers with a higher yearly mileage;
- most crashes involving older drivers occur at intersections; and
- the crashes in which older drivers are involved rarely involve speeding or risky overtaking. 43

8.4 Older drivers and crash risk

Whether older drivers, as a group, represent an unacceptably high crash risk, remains a contentious issue. The question has been studied by considering older driver crash rates in terms of different measures of exposure. –

- killed and injured older drivers as a proportion of the total population;
- killed and injured older drivers as a proportion of licensed drivers; and
- killed and injured older drivers per distance travelled.

A 2005 research report, *Assessing Responsibility for Older Drivers' Crashes*, published by Austroads noted that studies in most Western societies had found:

- older drivers compare well in terms of crash outcomes on a per capita basis (as a proportion of the total population), having a relatively low number of casualty outcomes;
- however, a U-shaped distribution is obtained when using the number of licensed drivers as the exposure measures. This is where fatalities dip as a proportion of casualties from between the teenage years to middle age, but then rise again in later life. Older driver outcomes are the highest of all age groups except for the youngest drivers; and
- once the casualty rate per distance travelled is calculated, the crash risk of older drivers is dramatically elevated and for drivers aged 80 years or more, exceeds even that of young drivers.

The overall finding therefore is that crash rates show that older drivers have relatively few crashes in absolute terms and per head of population but show increased rates per licensed driver and, especially, per unit of driving exposure. This seems to suggest that the driving ability of older drivers in deficient compared with that of other age groups. The Austraods report says in this respect that the U-shaped function based on casualty crash rates per

L Hakamies-Blomqvist, 'Safety of older persons in traffic' in *Transportation in an Aging Society: A Decade of Experience*, Transportation Research Board, pp 22-35

distance travelled 'has been used by many to argue that older drivers represent an unacceptably high crash risk'. 44 However, a number of authors, including Hakamies-Blonqvist and Langford, have argued that a large component of the increased crash risk of older drivers per kilometre driven is due to factors not linked to age-related declines in driving ability. These factors include cohort effects, frailty effects and low mileage effects. Each of these is discussed separately.

8.5 The cohort effect

One explanation for the increased crash risk among older drivers is that it represents a cohort effect, such that older cohorts may have had an increased risk of crashing even at a younger age. As summarised by Dr Matthew Baldock, this explanation is based on longitudinal studies showing that earlier cohorts of older drivers had higher rates of crash involvement than more recent cohorts. This is explained by reference to differences in driving experience, with more recent cohorts learning to drive at a younger age compared to older drivers and under different conditions, in an era of dense traffic and multi-lane highways.

However, Baldock concludes by saying that, while the cohort effects do exist, other research has found that these effects were 'small' compared to time-related effects. Citing the 1995 work of Stamatiadis and Deacon, Baldock writes:

They conclude that even if older drivers' crash risk per unit of driving exposure continues to decline in the future, they would remain a 'high-risk component of the driving population'. ⁴⁵

8.6 The frailty bias

The frailty bias maintains that, once involved in a crash, older drivers are more likely to experience adverse outcomes because of their greater vulnerability to injury. The RTA Discussion Paper appeared to place considerable weight on the effect of this frailty bias, commenting:

Although older people are more likely to be seriously injured or killed in a crash *due to their increased frailty*, the total number of fatalities amongst the older population is actually low compared to other age groups. (emphasis added)⁴⁶

Austroads Research Report, Assessing Responsibility for Older Drivers' Crashes, 2005, pp 5-6. The report was prepared by Jim Langford, Dale Andrea, Brian Fildes, Tricia Williams and Michael Hull.

M Baldock, Self-regulation of the driving behaviour of older drivers, PhD, University of Adelaide, 2004, p 14.

⁴⁶ RTA, n 12, p 4.

Discussing the issue in greater detail, the Austroads report from 2005 observed:

The frailty of older drivers and passengers can be illustrated by a fragility index, measuring the likelihood that an injury from a crash will result in a fatality. Defining the risk as 1.0 for the age group 20-50 years. At 60 years fragility increases to 1.8, to 2.6 at age 70, and to over 5 for vehicle occupants aged 80 and above.

The report adds that the frailty bias 'fails to fully explain older driver involvement in serious injury crashes'. It continues:

Li et al (2003) concluded that 60-95% of the increase in death rate per distance travelled for those aged 60 and over could be accounted for by increases in fragility. However, they also claimed that after allowing for fragility, excess crash involvement rates of around 30-45% could be observed for drivers aged 75 years and above. A European report by Maycock (1997) estimated that just under one-half of the excess fatality risk of drivers aged 75+ years, could be attributed to factors other than fragility.⁴⁷

The point to make is that, while the frailty bias exists, calculating its precise effect is very difficult. Baldock ended his summary of the issue by stating:

Dellinger, Langlois and Li (2002) analysed fatal crash involvement rates among older drivers to determine the extent to which they were determined by the increased risk of fatality in the event of a crash, increased crash risk, or driving exposure. Comparing these factors for drivers aged 65 to 74, 75 to 84, and over 84 to those aged 55 to 64, it was found that the strongest determinants of changes with age in fatal crash risk were of crashing and driving exposure. Increased risk of a fatality given a crash made the smallest contribution. 48

Reporting in 2003, the Victorian Parliament's Road Safety Committee commented:

People aged 60 years and over make up about 17% of Victoria's population, and approximately 20% of fatalities. Transport Accident Commission data shows 16% of hospitalisation claims and 9% of minor injury claims are for people over 65 years. Only some of this over-representation in the more serious road trauma is due to their frailty.⁴⁹

Austroads Research Report, n 44, p 7.

⁴⁸ M Baldock, n 45, pp 16-17.

Parliament of Victoria, Road Safety Committee, *Inquiry into Road Safety for Older Road Users*, September 2003, p 37.

8.7 The low mileage bias

The 'low mileage bias' was discussed in 2005 by Jim Langford of the Monash University Accident Research Centre. His argument is that older drivers are likely to experience some decline in driving skills as a result of the normal ageing process. Nonetheless, there is 'strengthening evidence' that older drivers are not an additional crash risk relative to other drivers. The main evidence for this claim rests on the 'low mileage bias'. Langford goes on to explain:

It has been long recognised that the relationship between travel distances and crash rates is not linear: independent of age, drivers travelling more kilometres will typically have lower crash rates per kilometre, compared to those driving fewer kilometres. Because older drivers typically drive less distance per trip and have lower accumulated driving distances per year, they have greater crash involvement per unit of distance compared to drivers with greater accumulated driving distances.

Langford continued:

This hypothesis had been empirically tested by using Finnish survey data to compare older and young middle-aged drivers' crash rates, controlling for annual distances driven...When older drivers were compared with younger drivers who had equivalent driving exposure, there was no age-related increase in crashes per distance driven. Thus the apparent age-related risk is more likely attributable to yearly driving distances and not to age per se, a phenomenon that is now called the low mileage bias. ⁵⁰

In a paper published in 2006, Jim Langford, Rob Methorst and Liisa Hakamies-Blomqvist used Dutch travel survey data from a large sample of respondents to confirm previous research findings concerning the association between annual mileage driven and crash involvement. They argued:

When crash rates of drivers of different ages were compared after being matched for yearly driving distance, most drivers aged 75 years and above were indicatively safer than all other drivers. Only older drivers travelling less than 3,000 km per year (just over 10% of older drivers in the survey) gave any indication of elevated crash rates.⁵¹

In his summary of the research, Langford explained that the causes for the association between mileage and crash rates are yet to be fully identified. On one side he referred to a study, conducted by himself and others, based on a sample of New Zealand older drivers,

J Langford, 'Licensing options for managing older driver safety' (June 2005 update of paper in *Austroads Road Safety Handbook Volume 1*).

J Langford, R Methorst and L Hakamies-Blomqvist, 'Older drivers do not have a high crash risk – a replication of low mileage bias', (2006) 38 Accident Analysis and Prevention 574-578. See also - L Hakamies-Blomqvist, Ageing Europe: The Challenge and Opportunities for Transport Safety, European Transport Safety Council, 2003.

showing that low mileage drivers were 'characterised by both perceived and actual reduced fitness to drive'. ⁵² On the other side he also discussed other possible causal factors, stating:

High mileage drivers are more likely to use freeways and multi-lane divided roadways with limited access and low mileage drivers more likely to drive on local roads with more potential conflict points.⁵³

Cited by Langford was research⁵⁴ showing that there were 2.75 times more crashes per mile driven on non-freeways than freeways, and further research showing 'that for all ages, the riskiest roads are major and minor urban roads – with motorways being the safest'.⁵⁵

The same point was made by the European Road Safety Observatory in its 2006 paper on older drivers. These were identified as those aged 75 and above, about whom it was said that they are 'very diverse, in driving skills as well as in physical and mental abilities'. The paper went on to say:

One thing that they do have in common is their low mileage. This may have an influence on their crash rates, since drivers travelling fewer kilometres have increase crash rates per kilometre compared to those driving more kilometres. In addition, they generally drive less on motorways (with interchanges), the safest types of roads, and tend to drive on streets with intersections, which are, by their nature, less safe. This is reflected in the crash types that are common among older drivers. Older drivers are over-represented in crashes at intersections, where typically the older driver turns against oncoming traffic with right of way on the main road.⁵⁶

It was concluded that 'older drivers' risk estimates based on injuries or fatalities per mile driven will be overestimated when compared to those of younger drivers with higher yearly mileage on safer roads.

J Langford, S Koppel, S Charlton, B Fildes and S Newstead, 'A re-assessment of older drivers as a road safety risk' (2006) 30(1) *IATSS Research* 1-11.

J Langford, 'Licensing options for managing older driver safety' (June 2005 update of paper in *Austroads Road Safety Handbook Volume 1*).

M Janke, 'Accidents, mileage and the exaggeration of risk' (1991) 23(2-3) *Accident Analysis and Prevention* 183-188.

M Keall and W Frith, 'Older driver crash types in relation to type and quantity of travel' (2004) 5 *Traffic Injury Prevention* 26-36.

European Road Safety Observatory (2006), *Older Drivers* - http://www.erso.eu/knowledge/Fixed/06_drivers/20_old/olderdrivers.pdf

It is probably fair to say that, at this stage, there do not appear to be any definitive answers to the question of the causes that underlie the low mileage bias. It may be that a combination of factors is at work: older people whose fitness to drive is reduced by certain medical conditions may elect to drive shorter distances; this same group may also tend to drive on the kind of roads where more accidents occur, most typically at intersections. Current thinking on the matter was summed up at a 2007 Transportation Research Board workshop, where a communiqué from a panel of leading researchers stated:

While older drivers as a group cannot be assumed to be at increased risk because of reduced fitness to drive, it was accepted that older drivers had a relatively high casualty crash involvement per distance driven. However when different annual driving distances were controlled for (based on drivers' estimates of their driving distances), early research has shown that the only older drivers showing heightened per-distance risk relative to younger drivers were very low distance drivers – with the traditional age-related U-shaped risk curve disappearing in regard to middle distance and high distance older drivers. There was also limited evidence to suggest that for at least some of these low-mileage drivers, reduced fitness to drive stemmed from medical conditions, functional decrements and consequently poor driving performance. The association between driving distances and crash risk urgently requires further research.⁵⁷

The RTA Discussion Paper commented in this respect:

Older driver crash risk is difficult to determine as they have very different driving patterns to drivers in other age groups. When factors such as distance travelled, frailty and licences per population are taken into account, older drivers may have a marginally lower crash risk per kilometre than other drivers.⁵⁸

8.8 Common crash types among older drivers

Various crash studies have shown that older drivers are over-represented in crashes at intersections, where typically the older driver turns against oncoming traffic with right of way on the main road. Commenting on this, the European Road Safety Observatory in its 2006 paper on older drivers stated:

In general, intersections are complicated traffic situations which involve time pressure and the necessity of dividing attention between various subtasks. Negotiating an intersection represents a 'testing of the limits' type task, since it combines a host of age-sensitive functions while simultaneously limiting the usefulness of normal safe driving strategies.

TRB Workshop 2007, Licensing Authorities' Options for Managing Older Driver Safety – Practical Advice from the Researchers, Communique from the Panel – copy held by NSW Parliamentary Library.

⁵⁸ RTA, n 13, p 4.

In contrast, the same paper observed:

Older drivers are 'under-represented' in crashes involving loss of control or collisions due to speeding, risky overtaking or driving under the influence of alcohol. This suggests that they are more aware of the risks that are associated with speeding and driving under the influence of alcohol, and are more willing to avoid these kinds of risk-taking behaviour.⁵⁹

In its 2003 report the Victorian Parliament's Road Safety Committee agreed that older drivers are involved in a higher proportion of intersection crashes, 'usually because they fail to give way'. It was found that 64% of all casualty crashes occurred at intersections, compared with 54% for drivers aged less than 65 years'. The report went on to observe that older drivers 'are, however, less likely to be involved in risk-taking behaviour such as speeding, unsafe overtaking and drink-driving'.⁶⁰

These findings were confirmed in the 2005 Austroads Research Report, Assessing Responsibility for Older Drivers' Crashes, which made the following points:

- The crashes involving older drivers that do occur, have a distinct pattern common to most Western societies.
- Relative to younger age groups, older drivers are more than twice as likely to be in multiple-vehicle crashes, especially at intersections and especially where the older driver is attempting to turn across adjacent or oncoming traffic.
- Given this predominant crash scenario, older drivers are more likely to be involved in side impacts, a feature which contributes to their high injury rates once involved in a crash.
- Older drivers are relatively unlikely to be in single-vehicle crashes, especially those
 involving loss of control, speeding or other risky behaviours a finding that can
 be taken as indicative of their cautious and conservative driving style.⁶¹

The RTA Discussion Paper comments in this respect that

The fatal crash patterns for older drivers are significantly different to those of other age groups. For drivers age 80 and over the highest percentage of fatalities occurs from: intersection crashes, particularly where the older driver is turning right causing crashes with on-coming traffic; crashes where the older driver drives off path on a straight or curved section of road.

8.9 Self-regulation of older drivers

European Road Safety Observatory (2006), Older Drivers - http://www.erso.eu/knowledge/Fixed/06 drivers/20 old/olderdrivers.pdf

Parliament of Victoria, Road Safety Committee, n 49, p 21 and p 37.

Austroads Research Report, n 44, p 20. Discussed at page 12 are findings based on research conducted in Victoria (1994) and Western Australia (1998).

Research shows that many older drivers self-regulate their driving habits, with the result that older driver crashes rarely occur at night, on weekends, in peak hour traffic, or in inclement weather. ⁶² A US 2007 study by Loughran, Seabiry and Zakaras, published as an occasional paper by the Rand Institute for Civil Justice, found that older drivers are 'only slightly likelier' than other drivers to cause an accident but are 'considerably likelier to be killed in one'. They continued:

These findings do not mean that driving skills do not, in fact, deteriorate with age as a result of worsening mental and physical impairments. Instead, our evidence suggests that older drivers adjust their behavior in light of these worsening impairments. Many older drivers cease to drive altogether; many others reduce the miles they drive and avoid the most dangerous driving conditions. Because they are aware of their own limitations and adjust their driving patterns in response, older drivers pose only a slightly increased risk to other drivers. The main danger they pose on the road is not to others but to themselves. ⁶³

With some important qualifications, this was confirmed by Baldock in a 2004 South Australian study, based on examining the driving behaviour and attitudes of 104 drivers aged 60 years or older, along with an analysis of South Australian crash statistics over a 5 year period. Baldock found that older drivers do engage in a degree of self-regulation of driving behaviour and that this does have a relationship with driving ability – the more they perceive their ability to be declining, the more self-regulation they employ. However, he also found that there are still some driving tasks which older drivers show little self-regulation for, notably performing right-hand turns across oncoming traffic, of particular significance in light of the fact that older drivers are over-represented in crashes at intersections. In his 'final conclusion' Baldock wrote

the relationship between self-regulation and driving ability was not strong, suggesting that many older adults with deficits in their driving ability do not avoid difficult driving situations.⁶⁴

Qualified again was the 2003 Austroads report which reviewed the self-regulation of older drivers. It stated that it is 'likely that many older drivers adjust their driving behaviour adequately to accommodate' changes in sensory, cognitive and motor skills. However, the report went on to observe:

It is also possible that there is a sub-set of older drivers who fail to self-regulate their driving adequately and are therefore at higher risk of crash involvement.⁶⁵

⁶² OECD, n 7.

DS Loughran, SA Seabury and L Zakaras, *Regulating Older Drivers: Are New Policies Needed?* Rand Institute for Civil Justice, Occasional Paper, 2007, p 14 - http://www.rand.org/pubs/occasional_papers/2007/RAND_OP189.pdf

⁶⁴ Baldock, n 45, p 330.

⁶⁵ Austraods, Self-regulation of older drivers: a review, 2003 – Executive Summary.

The 2003 report of the Victorian Parliament's Road Safety Committee concluded in a similar vein, stating:

That while self-regulation may be valid for most older drivers, it is not a satisfactory fail-safe strategy and cannot alone be relied upon to keep incapable older drivers from being a safety hazard. Intervention by licensing agencies will be necessary to ensure safety for all road users.⁶⁶

8.10 Assessing responsibility for older drivers' crashes

Older drivers are more likely than younger drivers to be found responsible for the crashes in which they are involved, although this finding has been questioned.

- One argument is that the judgments about responsibility made by police officers or insurance assessors may be biased against older drivers, such that older drivers are more likely to be found responsible for their crashes. However, research has also shown that, while a bias may exist, its effects are likely to be small.
- A second argument, associated with Hakamies-Blomqvist, is that findings of an increased likelihood of responsibility for crashes among older drivers may represent a decreased involvement of older drivers in crashes when they are not at fault. According to this argument, older drivers, because of their conservative driving styles, are less likely to strike the vehicle of another driver. To put it another way, older drivers are only over-represented as the responsible party in road crashes because they are less likely to be the innocent party in crashes.⁶⁷

The issue was discussed in the 2003 report of the Victorian Parliament's Road Safety Committee. It found that:

In 85% of fatal crashes involving a driver 80 years or older, the driver was considered to be responsible. Australian data shows that, beyond middle age, driver responsibility increases with age.⁶⁸

This finding was based on a 1995 Federal Office of Road Safety (FORS) report conducted by Elliott and others. ⁶⁹ The same report was also cited by Snellgrove who commented:

Parliament of Victoria, Road Safety Committee, n 49, p 121.

For a summary of this and other arguments see – Baldock, n 45, pp 22-27.

Parliament of Victoria, Road Safety Committee, n 49, p 37. The Committee also reported that, in Sydney, it heard from the RTA 'who suggest that approximately 80% of the passenger fatalities were in the vehicle driven by the older driver' (pp 26-27).

D Elliott, B Elliott and A Lysaght, *Older driver risks and countermeasures: source book*, FORS Report No: CR 163, 1995, p viii and p 40. The findings were based on the FORS Fatality File which 'records whether each driver involved in a fatal crash was "responsible" (at fault), "partly responsible" or 'not responsible" for the crash'.

Older drivers in Australia are also more at risk of being responsible for causing a crash. The odds are more than five to one (5.7 to 1) that an older driver (aged 80-84 years) involved in a fatal crash will be responsible for that crash. This figure is high compared to middle aged drivers (0.75 to 1) and young adolescent drivers (2.2 to 1).

The findings of the FORS 1995 report were discussed in the 2005 Austroads Research Report, Assessing Responsibility for Older Drivers' Crashes, where it was said:

Elliott et al (1995) compared odds ratios of crash responsibility for different age groups to construct a 'relative risk' curve for both genders across all ages, which showed that male and female drivers aged 80-84 years had a combined 'relative risk' of 7.6 compared to drivers aged 45-49 years. It is likely however that in this instance, the statistical technique used (specifically, the practice of equating odds ratios to relative risks) has led to a substantial exaggeration of older drivers' extent of crash responsibility.⁷¹

For its part, the 2005 Austroads Research Report confirmed that older drivers are more likely to be judged as responsible for crashes than other age groups. The report stated:

The analysis of Australian fatality data suggested that relative to middle-aged drivers, drivers aged 75 years and older were 1.4 times more likely to be judged totally responsible for their crashes. Linked police and insurance data covering Tasmanian crashes of all severity, suggested that relative to middle-aged drivers, drivers aged 65 years and older were 1.5 times more likely to be judged as responsible for their crashes.

It was added that older drivers' additional crash responsibility made 'only a small contribution to the overall road toll', with the report concluding:

It was estimated that had older drivers' crash responsibility been the same as middle-aged drivers', there would have been only a 1.5% reduction in fatal crashes and fatalities – and (using different age parameters) around a 4% reduction in all casualties. ⁷²

These conclusions are similar to those arrived by Loughran, Seabiry and Zakaras, published as an occasional paper by the Rand Institute for Civil Justice. They wrote:

Our most important finding is that older drivers are not much riskier than adult

Snellgrove C, Cognitive screening for the safe driving competence of older people with mild cognitive impairment or early dementia, January 2005, p 1. A copy of the study is available from the Australian Transport Safety Bureau www.atsb.gov.au.

Austroads Research Report, n 44, p 16.

Austroads Research Report, n 44, p v.

drivers and far less risky than young adult drivers. Older drivers are 16 percent likelier to cause a crash than adult drivers are. While that difference is significant, it is perhaps far smaller than the conventional wisdom, fueled by anecdote, would imply that it would be. And it is nowehere near the risk that younger drivers pose to the public.

According to the study, 'the youngest drivers are 188 percent likelier than adult drivers to cause a crash'. It was reported that younger drivers drive more than either adult drivers or older drivers, which led Loughran et al to state:

Together, these findings suggest that younger drivers pose a much greater risk to traffic safety than do older drivers, both because they are likelier to cause a crash and because they drive many more miles. By our estimates, older drivers, who represent 15 percent of all licensed drivers, cause 7 percent of all two-car accidents (both fatal and non-fatal). Younger drivers, on the other hand, who represent 13 percent of all licensed drivers, cause 43 percent of all two-car accidents.⁷³

8.11 Dementia and older drivers

As noted, the trend in contemporary research is to argue that the older driver crash involvement problem is mainly restricted to certain subgroups of older people, rather than encompassing all older drivers. In particular, emphasis is placed on the problems posed in this respect by those suffering from dementia. The communiqué from the 2007 Transportation Research Board workshop observed that this sub-group of older drivers was the least likely to adopt appropriate self-regulatory practices. According to the communiqué

there was only limited evidence to suggest that those most in need of self-regulation – especially, those with substantial cognitive decline – were self-regulating to an acceptable extent. The general feeling was that existing mechanisms and practices need to be augmented at least for the minority of older drivers at unacceptable risk due to cognitive decline.⁷⁴

The issue was discussed in some detail in the 2003 report of the Victorian Parliament's Road Safety Committee. It found that 'A number of studies have shown that people with dementia, who continue to drive, have more road crashes than other drivers'. It also quoted the Alzheimer's Association as saying that studied had shown that 'self-initiated driving cessation cannot be assured in people with dementia'. The Association further advised the Committee that 'resistance to the removal of driver status is sometimes exhibited by families and carers, as well as by the person with dementia'. In its submission to the Committee, the Royal Automobile Association of Victoria quoted research undertaken by Fildes and other in 2000 stating that:

DS Loughran, SA Seabury and L Zakaras, n 63, p 11.

⁷⁴ TRB Workshop 2007, n 57.

Some recent research has indicated that screening drivers for cognitive impairment may be the most effective form of detecting drivers who may be a road safety risk. ⁷⁵

In 2005 Carol Snellgrove published a study funded by the Australian Transport Safety Bureau on the impact of early dementia or mild cognitive impairment on the driving competence of older people.⁷⁶ The study had two aims:

- 1. Describe the on-road driving performance of a group of older people with mild cognitive impairment or early dementia.
- 2. Validate a new cognitive screening instrument (the Maze Task) developed to indicate the likely competence of older people with mild cognitive impairment or early dementia.

Snellgrove started by trying to define the size of the problem at issue. She estimated that there may be approximately 162,500 older drivers with cognitive impairment associated with dementia on Australian roads. She also estimated that potentially 107,250 accidents may be attributable to these drivers every year. This is of course an estimate, arrived in the following way:

There are around 1.3 million private vehicles registered to people aged 65 years and above in Australia. If it is assumed that each of these vehicles is driven by just one older person, and that all individuals with MCI [Mild Cognitive Impairment] or early dementia are still driving, then according to the epidemiological data, approximately 5% (65,000) of these drivers will suffer early dementia, and another 5% (65,000) of drivers will suffer MCI. There may be up to 130,000 licensed drivers with MCI or early dementia on Australian roads. Moreover, at least 50% of individuals may continue to drive for up to three years following the onset of dementia, well into the moderate stage of the dementing illness...Thus, there may be an additional 32,500 (2.5%) licensed drivers with moderate dementia on Australian roads. In total, there may be approximately 162,500 older drivers with cognitive impairment associated with dementia on Australian roads.

This is the first stage of the Snellgrove's analysis. She then proceeds to estimate the total number of potential crashes this sub-group of older drivers may be responsible for, as follows:

It has been estimated that up to 50% of people driving with a dementing disorder have a 'crash' (any contact between the vehicle and another object that may or may not result in property damage or personal injury) within a few years of diagnosis, 80% of those who have a 'crash' continue to drive, 40% of those have at least one

Snellgrove, n 70, p 4.

Parliament of Victoria, Road Safety Committee, n 49, pp 58-59.

⁷⁶ Snellgrove, n 70.

more crash, and as many as 27% of those asked to stop continue to drive.

By applying these proportions to the estimated total population of Australian drivers with cognitive impairment associated with the dementing process (162,500), Snellgrove arrives at the estimate that potentially 107,250 accidents may be attributable to these drivers every year. The accuracy of this estimate may be debated at some length. For present purposes it is enough to note Snellgrove's figures may be at the higher end of the range, if only because it is assumed that all individuals with MCI [Mild Cognitive Impairment] or early dementia are still driving. It is also the case that the figures relate to all crashes, however minor.⁷⁸

The Snellgrove study was based on 115 older drivers with mild cognitive impairment or early dementia who lived in the community and who participated on a voluntary basis. They were required to complete the Maze Task followed immediately by an on-road driving test. 70% of study participants failed the on-road test, most broke an important road law, and physical intervention was required in nearly half of the cases in order to prevent an accident. When the failure rate was further broken down, it was revealed that approximately half of those with mild cognitive impairment failed the driving test, as did three-quarters of those with early dementia.

The study determined that the difficulties in completing the on-road driving test were related to poor planning; poor observation skills regarding other vehicles, signs and signals; an inability to monitor and control the speed of the car; poor positioning of the car; confusion regarding the pedals and gears; and a lack of anticipatory or defensive driving. Most participants were not aware of their driving faults.

According to Snellgrove, the results highlight the need for cognitive screening of driving ability, as there are a number of concerns about the ability of older drivers with either mild cognitive development or early dementia to drive safely. She believes that:

Current Australian drivers licence renewal practices of physical and visual screening do not tap into those cognitive skills deemed necessary for safe driving; cognitive skills that are likely to be impaired in the expanding population of older people.⁷⁹

She promotes the use of the Maze Task, as it correctly identified those drivers who would pass and fail the on-road test in 79% of cases. Therefore, the most dangerous drivers, as well as the most competent, could be determined without the need for an on road test.

Snellgrove accepts that it is difficult to determine the point at which driving becomes unsafe. She also notes that the use of a car links many older people to goods and services,

Further, as noted above, when assessing older driver responsibility for crashes Snellgrove relies on figures presented in the 1995 FORS report, the reliability of which was questioned in the 2005 Austroads Research Report, Assessing Responsibility for Older Drivers' Crashes.

⁷⁹ Snellgrove, n 70, p 32.

and activities, including social ones. However, she describes the results of the study as 'hazardous or potentially catastrophic' and argues:

For reasons of individual and public road safety, a recommendation to preclude all older individuals with dementia, even in its early stage, from driving motor vehicles may well be appropriate.

As Drabsch commented in 2006:⁸⁰

Not all agree with the concept of a blanket prohibition. The position adopted by Alzheimer's Australia, as indicated by its Driving Policy Statement, is that whilst all people with dementia will reach a stage where it is not safe for them to drive, a person diagnosed with dementia should not be automatically precluded from driving. ⁸¹ It notes that the automatic cancellation of a licence could discourage people from presenting for early diagnosis and treatment. Clearly, a number of factors need to be considered when determining the appropriate policy for older drivers with dementia.

The 2001 OECD report tended to confirm this approach, stating:

Some studies have shown that dementia of the Alzheimer's type significantly increases a driver's risk of accident. Other studies have also indicated some increased risk due to dementia. However, it has also been shown that the risk does not necessarily increase at the outset of the illness and that many patients have intact driving ability. One study compared crash rates of those with dementia to young drivers and found that the former had fewer crashes than the latter. Consequently, it has been recommended that early or mild dementia should not lead to an automatic loss of driving licence. 82

T Drabsch, Preparing for the impact of dementia, NSW Parliamentray Library Briefing Paper No 4/06, pp 55-57.

Alzheimer's Australia, *Driving Policy Statement*, March 2004.

⁸² OECD, n 7, p 49.

9. LICENSING ISSUES – COMMENTS AND PROPOSALS

9.1 Mandatory age based assessments and the alternatives

In NSW at present older drivers must undergo a medical test at 80 years and an on-road test at 85 years. The proposed scheme under the RTA Discussion Paper would alter this system by requiring instead an annual medical test from 75 on, plus the issuing of a 'local licence' at 85. An on-road test might be undertaken on a voluntary basis for those 85 years and over seeking to drive outside their local area.

With its emphasis on at risk sub-groups of older drivers, contemporary research in this field tends to question the safety benefits of age-based mandatory assessments for population wide groups of older drivers. Published in 2004 was research conducted by Langford and others into the effectiveness of mandatory licensing testing for older drivers. The study compared the casualty crash involvement rates of drivers aged 80 years and older in Melbourne (where there is no regular assessment) and Sydney, using as exposure measures: population; number of licences held; total distance driven; and time spent driving. Results showed that while there was no difference in crash risk for older drivers based on population, Sydney drivers had statistically higher casualty crash involvement than their Melbourne counterparts on a per licence issued basis and time spent driving basis. There was a similar trend based on distance travelled but it was of borderline statistical significance only. 83

These Australian findings were said to be consistent with overseas research, where it is argued that mandatory testing has negative unintended consequences. Notably, it is argued that some drivers allow their licences to lapse rather than undergo mandatory assessment. As noted by the 2003 Victorian Parliamentary Road Safety Committee report, this can have 'adverse consequences for their mobility and possible implications for spouses and other family members'. With the high casualty rate among older pedestrians, it may also increase the overall accident risk. The 2006 research of Langford, Methorst and Hakamies-Blomqvist commented:

There are no rational grounds for implementing mandatory age-based testing of driving fitness for a group, the large majority of whose members are demonstrably safe or safer than drivers of other ages. Attempts to identify high-risk drivers should focus upon those drivers giving some preliminary evidence of being at risk, without involving all older drivers in a formal assessment process.⁸⁵

In a similar vein, the communiqué from the 2007 Transportation Research Board workshop observed:

The evidence presented at the Workshop strongly indicated that population-wide

J Langford, M Fitzharris. S Koppel and S Newstead, n 11.

Parliament of Victoria, Road Safety Committee, n 49, p 112.

J Langford, R Methorst and L Hakamies-Blomqvist, n 51, p 577.

age-based assessment and screening for licensing purposes had no demonstrable safety benefits, while probably contributing to premature cessation of driving for some older drivers. However, while evaluation studies from jurisdictions around the world failed to show that these programs resulted in reduced older driver crashes, there was limited evidence to suggest that minimal requirements such as in-person attendance for licence renewal were associated with some crash reduction.

The communiqué went on to say:

A number of older driver licensing strategies either rely upon or propose to use off-road tests of functional performance. The available evidence shows that even for the best-performed tests, application to population-wide groups of older drivers using a simple pass/fail threshold score has insufficient validity to warrant their use as a determinant of licence status. However there was some optimism that these tests might have a more useful role if they were used: (a) only for drivers already giving some indication of being at risk; and (b) to produce a multiple outcome (for example, 'pass'/'doubtful'/'fail' — with 'doubtfuls' being referred for further assessment). It was recognised that while the latter strategy has likely operational benefits for a licensing agency, safety benefits have not been demonstrated.⁸⁶

The communiqué suggested that 'medical review boards consisting of practitioners and/or medical specialists with particular training were seen as having a valuable role in this context'. Whether policy makers are attracted to proposals of this sort remains to be seen. They may be deemed too costly and cumbersome.

9.2 Recommendations of the Victorian Parliament's Road Safety Committee

The 2003 Victorian Road Safety Committee report recommended against introducing either mandatory age based on-road driver testing or road knowledge testing. In its April 2004 response the Victorian Government agreed on both counts. More positively, the Committee's recommendations included:

- shorter duration of licences for older drivers, for five year periods at 65 years and for two years from 80 years of age (not supported by the Government);
- use of self-reported health questionnaires at the time of licence renewal (not supported by the Government);
- use of crash and infringement data to assist in any decision to renew a licence (not supported by the Government, on the basis that crash records do not contain at-fault data);
- the development of conditional licences, possibly using a wider range of conditions, within a de-graduated licensing framework (supported by the Government, stating that 'VicRoads will investigate the suitability if these for use in Victoria');
- the possible introduction of attendance at appropriate education courses as a

⁸⁶ TRB Workshop 2007, n 57.

condition for licence renewal (supported by the Government);87

- that eyesight assessments be required prior to renewing a licence (not supported by the Government, in part on the basis that there is insufficient evidence of road safety benefits from age based mandatory eyesight assessment);
- the development and implemention of a standard medical assessment to determine fitness to drive for those aged 80 years and over who wish to renew their licence (supported by the Government in principle); and
- the development of cognitive screening and assessment tools for driver licensing purposes (supported by the Government).

9.3 Local licences and graduated de-licensing

As noted above, the Victorian Parliamentary Committee recommended the development of conditional licences within a de-graduated licensing framework. The classes of restriction on older drivers considered by the Committee were:

- local areas, routes and types of road;
- accompanying persons, where an older person is required to be accompanied by a companion;
- blood alcohol level; and
- type of vehicle.

In relation to 'local licences' the Committee commented that these were 'supported in many submissions'. It continued:

However, the Committee could find no evidence for restrictions made to the number of kilometres allowed to travel from the registered address of the driver, or particular routes, or categories of road...In any case older driver crashes predominantly occur close to home.

This last observation can be contrasted with the comment made in the RTA Discussion Paper to the effect that:

In NSW between 2002 and 2004, 30 per cent of crashes for drivers aged 85-89, occurred outside the driver's own local government area...this is significant given that 18.1 per cent of drivers in this age group have a radius restriction on their licence.⁸⁸

The acceptability to older drivers of different types of licensing restriction was considered in a recent Canadian study. This was conducted in the community of Ottawa in Ontario and involved a total of 86 subjects, 56 men and 30 women who were recruited by means of posters and advertisements in regional and local newspapers and who were required to complete a one-hour interview. The study found general acceptance of regular assessment

Parliament of Victoria, Road Safety Committee, n 49, p 147.

⁸⁸ RTA, n 12, p 5.

by the Ministry of Transportation, and similarly high endorsement for such restrictions as driving with vehicle adaptations and daytime driving only. Less acceptable restrictions included:

- avoidance of roads with a speed limit greater than 60km/h;
- limitation of destinations;
- driving only within a 10 km radius of home; and
- requirement of another licensed driver in the vehicle.

The authors concluded, 'Our subjects' preferences appeared to be inversely related to the impact on autonomy and the ability to access the community'. 89

9.4 Model licensing procedures for older drivers

Discussed in the 2001 OECD report were three proposed model licensing procedures for older drivers – the Californian model, the Maryland model, and the Australasian model, as developed by Austroads. The Australasian model's features include:

- the establishment of a network of community notification sources, whereby only drivers suspected to have a high crash risk are identified and referred to the licensing authority for formal assessment. It is proposed that notification sources include general practitioners, police, family and friends as well as older drivers themselves
- the use of multi-tiered assessment, involving general practitioners, occupational therapists and other health specialists at more elaborate levels of assessment
- the use of assessment instruments of known validity for testing safe driving. 90

In its 2003 report the Victorian Parliament's Road Safety Committee recommended that 'VicRoads trial the Austroads model licensing procedure in Victoria and, if successful, adopt the model'. In its response the Victorian Government said is supported the recommendation's 'underlying objectives'. However, it was also pointed out that 'in making this recommendation the Committee expressed concerns about the effectiveness and potential costs of the model'. More specifically, the Committee stated:

A feature of the model is the introduction of case managers. The Committee is concerned whether VicRoads could ensure such services were available throughout the state. The RTA in New South Wales expressed concern about the potential cost and the difficulties of servicing remote locations.⁹¹

SC Marshall et al, 'The acceptability to older drivers of different types of licensing restriction' (2007) 39 Accident Analysis and Prevention 776-793.

This summary is based on J Langford, 'Licensing options for managing older driver safety' (June 2005 update of paper in *Austroads Road Safety Handbook Volume 1*).

Parliament of Victoria, Road Safety Committee, n 49, p 80.

10. CONCLUSION

It was said at the outset that this paper does not seek to lead the debate about licensing older drivers in one direction or another. Obviously the RTA Discussion Paper has excited considerable controversy, in particular the proposal to introduce 'local licences' for drivers 85 years and over. A key issue relates to the practicality of such licences in a contemporary Australian setting, not only in regional NSW but also in the ever-expanding Sydney metropolitan area. As noted, the Minister for Roads, Mr Roozendaal, acknowledges the local licence concept is one that may require 'some tweaking'. He is also reported to have said that 'My mind is open. [But] the suggestion of no testing of older drivers is one I would not be comfortable with and one I don't think the community would be happy with'. ⁹²

No clear consensus emerges from the research findings discussed in this paper. As the RTA Discussion Paper acknowledged, 'Older driver crash risk is difficult to determine as they have very different driving patterns to drivers in other age groups'. As a point of agreement, the research does emphasise that the older driver crash involvement problem is mainly restricted to certain subgroups. The specific problem posed by older drivers with dementia has been discussed. The RTA explained that the requirement to medically test all drivers at 75 would support 'the early diagnosis of a range of medical conditions, in particular dementia and Alzheimer's, and it means people get earlier referral to eye specialists if problems are identified sooner'. The RTA proposal also includes an educational component. For its part, the Victorian Parliament's Road Safety Committee was impressed by the system operating in Ontario which 'requires those 80 years and over, prior to licence renewal to attend a short group education session'. ⁹³

Clearly, this whole debate belongs to a broader discussion about the ageing population and the whole of government approach that is needed to respond to the mobility needs of the elderly. The 2003 report issued by the Brookings Institution in the US found that increasing numbers of elderly people are concentrated in suburban areas and have no transportation options but to drive and to drive longer distances to the amenities they need to access. ⁹⁴ A growing reliance on the private car has also been recorded among older Australians. ⁹⁵

L Besser, 'Hot seat for old hands at the wheel', *SMH*, 14 September 2007, p 10 - http://www.smh.com.au/text/articles/2007/09/13/1189276899647.html

Parliament of Victoria, Road Safety Committee, n 49, p 147. The Committee added, 'While there is insufficient evidence to support its introduction in Victoria, the concept is worth exploring further'.

⁹⁴ S Rosenbloom, n 16.

S Rosenbloom and J Morris, 'Travel patterns of older Australians in an international context' (1998) Transportation Research Record 1617, pp 189-193.

ATTACHMENT

RTA, LICENSING OF OLDER DRIVER DISCUSSION PAPER July 2007



Licensing of older driver Discussion paper

JULY 2007

Introduction

The number of older drivers is growing significantly due to the ageing of the 'baby boomer' generation and an increase in life expectancy. The new generation of older drivers is healthier, more active and more mobile than previous generations. Many of the areas where the 'baby boomers' live are vehicle dependent – outer suburban and rural locations where public transport and pedestrian facilities are limited.

The RTA's challenge is to address the road safety implications of this ageing population, while recognising that the next generation of older people will be very dependent on driving to access facilities and services.

Older people are over-represented in pedestrian fatalities and have a greater chance of being killed when they are involved in a motor vehicle crash. Dementia and vision problems are likely to be the most significant health issues affecting the future generation of older drivers.

This document examines some of the road safety implications of the ageing population, current licensing systems and emerging ideas being developed in Australia and overseas. The paper proposes an option for the licensing system that maintains the mobility of older drivers without impacting on road safety.

The current system

NSW has a comprehensive assessment system to ensure the ongoing competency of older licence holders. Most jurisdictions examining this issue are considering introducing licensing practices that NSW has in place, such as shorter licence renewal periods and annual medical assessments for older drivers.

In NSW all licence holders must have an annual medical test from age 80. Annual driving tests begin at age 85 for class 'C' (car) and class 'R' (rider) licence holders, and age 80 for heavy vehicle drivers. The annual medical test is based on the Austroads' standard 'Assessing fitness to drive', which is used by all Australian jurisdictions with medical assessments in their licensing systems. The practical driving test used for older drivers is basically the same as that used for licensing new drivers (with modifications including a removal of the parking manoeuvres and an increase in time allowed).

Following a medical or driving test a restriction may be placed on a driver's licence. The most common restrictions are limiting the licence holder to driving only between sunrise and sunset and restricting the radius of travel from the driver's home.

Members of the public, such as close family and friends, Police and medical practitioners, can inform the RTA if they are concerned about the competence of a driver. The concerned person completes an 'Unsafe Driving Report' that is processed by the RTA Medical Unit. After an initial assessment the unit may require the driver to undertake a medical assessment or on-road driving test.

Approaches in other jurisdictions

NSW is one of a few jurisdictions worldwide that has a mandatory driving test for older drivers. The following table summarises the approach to medical and driving tests in other Australian states.

Commencement	Medical test	Driving test	
age			
No mandatory requirement	Victoria and Northern Territory	Victoria, Queensland, ACT, South Australia and Northern Territory	
Age 70	South Australia	-	
Age 75	ACT, Queensland, Western Australia and Tasmania	-	
Age 80	New South Wales	-	
Age 85	-	New South Wales, Tasmania and Western Australia	

Internationally, most European countries commence medical testing at age 70, New Zealand conducts a medical at 75, then biennially from 80.

The ageing population

The issues associated with older drivers will become increasingly significant as the population ages and driving patterns change. The Australian Bureau of Statistics (ABS) estimates that over the next 30 years Australia's population aged over 60 will double. The ABS also forecasts the greatest population increases in the over 80-year-old group.

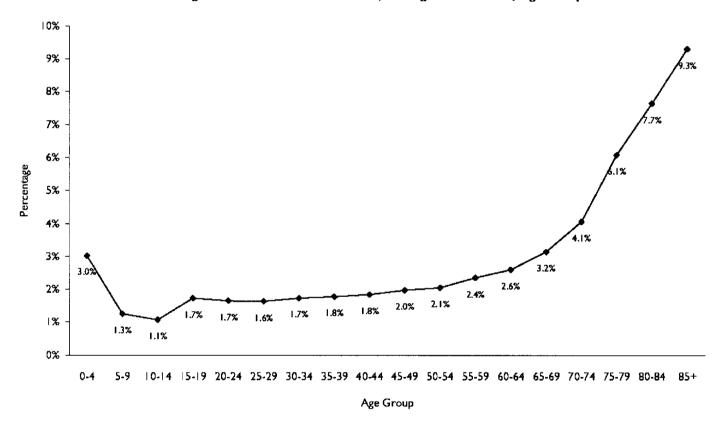
The greatest growth in the over-85 population outside Sydney will be in the coastal areas of Port Stephens, Shellharbour, Shoalhaven, Tweed and the Great Lakes. In Sydney, the greatest growth in population over the age of 85 will be in Baulkham Hills, Blacktown, Liverpool, Penrith, Fairfield and Sutherland.

The combination of growth in the aged population and the number of older drivers with licences will naturally lead to increased road safety issues for older people.

Older driver crashes

Although older people are more likely to be seriously injured or killed in a crash due to their increased frailty (see graph below), the total number of fatalities amongst the older population is actually low compared to other age groups (see graph next page). Older driver crash risk is difficult to determine as they have very different driving patterns to drivers in other age groups. When factors such as distance travelled, frailty and licences per population are taken into account, older drivers may have a marginally lower crash risk per kilometre than other drivers.

Percentage of Casualties Who Are Killed, Average 2002 to 2004, Age Groups



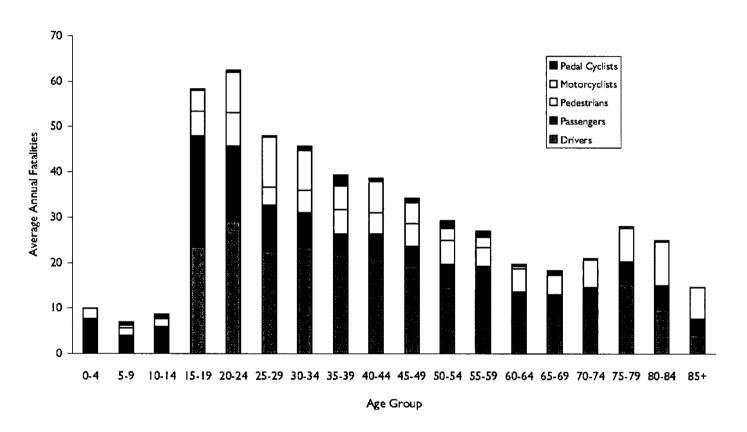
The fatal crash patterns for older drivers are significantly different to those of other age groups. For drivers age 80 and over the highest percentage of fatalities occurs from:

- Intersection crashes, particularly where the older driver is turning right causing crashes with on-coming traffic.
- Crashes where the older driver drives off path on a straight or curved section of road.

A major contributing factor to older driver crashes is poor gap selection. Most older drivers will experience a loss of sensory, cognitive and motor skills to some

degree and impairments such as declines in visual acuity, reduced perceptual performance and loss of memory capacity are likely to be a contributing factor to the types of crashes older drivers have. Older drivers may also be more susceptible to fatigue related crashes.

Average Annual Fatalities, NSW, 2002-2004, Age Group, Class of Road User



In NSW between 2002 and 2004, 30 per cent of crashes for drivers aged 85-89, occurred outside the driver's own local government area (LGA), this is significant given that 18.1 per cent of drivers in this age group have a radius restriction on their licence. From information gained by focus groups, research and other sources, it is understood that many older drivers are self restricting and limit their driving to local areas where they are familiar with the traffic conditions. Furthermore, many older drivers develop strategies to reduce driving risks around their local areas, eg using back streets to avoid complex or difficult traffic situations and self restricting their driving to daylight hours.

Health issues for older drivers

Dementia and vision conditions will probably be the most significant health issues for older drivers.

Australians over the age of 65 have a one in 15 chance of developing dementia. One in nine people between the ages of 80 and 84 have some form of dementia and the rate is one in four for people over the age of 85. All forms of dementia affect a person's ability to drive safely.

Eye diseases common to older people include cataracts, glaucoma and age-related macular degeneration (ARMD). ARMD affects 23 per cent of people over the age of 65 and 31 per cent of those over the age of 80. ARMD accounts for 70 per cent of serious vision impairment in people over the age of 70. While the RTA requires an annual eyesight test for drivers from the age of 80, the test is usually performed by a GP rather than an eye care professional. Although GPs are able to identify most common eye diseases, they are generally not equipped to detect eye disease in its early stages. The RTA will be investigating the feasibility of enhancing the requirements of GPs to make referrals to specialist eye doctors. It is critical for road safety that conditions that affect driver competency are identified early and appropriate precautions implemented.

The effect of ceasing driving

Ceasing driving can sometimes have extreme effects on the life of an elderly person. The loss of a driver's licence reduces a person's independence and mobility. For many, a licence represents freedom, treasured memories and a connection with the community and its loss is felt as a crushing blow to a person's self-esteem.

After the loss of their licence many older people become dependent on family or the community to provide access to food and medical services. An older person's social and community interaction can become extremely limited.

NSW Photo Card

When an older driver ceases driving, their licence may be exchanged at no fee for a NSW Photo Card. The Photo Card carries the same identity information as the licence and is accepted for transactions such as opening bank accounts, connecting the telephone and other services.

PROPOSED SYSTEM FOR LICENSING OLDER DRIVERS

Considering the issues mentioned in this paper, a system for improving licensing of older drivers is proposed.

The objectives of the improvements are to:

- Maintain current levels of road safety.
- Manage the increase in the aged driving population.
- Graduate the licensing process to better prepare older people for ceasing driving.
- Assist aged drivers in identifying when to stop driving.
- Provide assessment that is relevant and appropriate, to ensure the competency of aged drivers.
- Foster and support the continued mobility and independence of the older community.

The concept behind the proposal is the progressive introduction of interventions that reduce older drivers' exposure to risk while meeting their mobility needs. When the driver has greater mobility needs, these interventions can be delayed if the driver provides evidence of his or her driving fitness, competency and ability to manage these risks. In this way, drivers can examine their individual mobility needs and choose whether or not to undertake assessments. The proposal is also designed to identify medical conditions early enough for effective treatment, thus prolonging the competent mobility of the driver.

Proposal

- Replace the current older driver licensing system with a graduated licensing system in which restrictions are progressively placed on the older driver.
 - Annual medical testing will commence from age 75 rather than at age 80.
 - At age 85, a 10km radius restriction will be placed on the driver's licence in lieu of the current mandatory driving test. A 'home to town' restriction would be available for rural drivers. Older drivers would only be required to pass a driving test if they needed to remove or modify their radius restriction.
- Enhance the system for reporting unsafe driving behaviours.
 Currently people who are concerned about a driver's skill or ability can advise the RTA of the problem by completing an Unsafe driver report at a motor registry. For older drivers, these reports are generally from immediate family or dose friends and also from the Police and medical practitioners. When a report is received by the RTA, the matter is investigation and appropriate action taken. Depending on the outcome, a medical assessment or on-road driving test may be required.

Features of the proposal

Reducing the commencement age of annual medical tests from age 80 to age 75:

- More closely aligns NSW with the standard applied in international jurisdictions.
- Supports the early diagnosis of a range of medical conditions, in particular dementia.
- Places greater responsibility on medical practitioners to identify at risk drivers in the 75 to 80 age group.
- Improves road safety by identifying older drivers who are affected by the early stages of medical conditions such as Alzheimer's or Parkinson's disease.
- Supports the early referral to eye specialists.

Automatically imposed radius restrictions:

- Provides a 'graduate out' structure, progressively preparing older drivers for the cessation of driving.
- Reduces older drivers' exposure to known risk situations (driving in unfamiliar areas).
- Allows older people to make essential journeys within 10km of their home or to the closest town in the case of rural drivers.
- Allows the removal of restrictions for drivers who can prove their ability to manage complex driving situations.
- Improves road safety by reducing older drivers' exposure to 'at risk' driving situations.

Enhancing the system for reporting unsafe driving behaviours

Improved utilisation of Unsafe driving reports and follow-up action.

Proposed changes for heavy vehicle licence holders

Annual medicals and driving tests for heavy vehicle drivers currently begin at age 80. It is proposed that the current system of annual driving tests commencing at age 80 be retained, while medical and vision tests would be aligned with the new requirements for class C and R licences which is age 75.

Education strategy

The introduction of a new licensing scheme for older drivers would be accompanied by a comprehensive education strategy. The strategy would provide information for older drivers on:

- The new licensing scheme
- Maintaining safe driving practices
- Identifying when to give up driving
- Alternative transport options

Recent Research Service Publications



To anticipate and fulfil the information needs of Members of Parliament and the Parliamentary Institution.

[Library Mission Statement]

Note: For a complete listing of all Research Service Publications

contact the Research Service on 9230 2093. The complete list

is also on the Internet at:

http://www.parliament.nsw.gov.au/prod/web/PHWebContent.nsf/PHPages/LibraryPublist

BACKGROUND PAPERS

DAUNGROUND PAPERS	
Principles, Personalities, Politics: Parliamentary Privilege Cases in NSW	1 (0.1
by Gareth Griffith	1/04
Indigenous Issues in NSW by Talina Drabsch	2/04
Privatisation of Prisons by Lenny Roth	3/04
2004 NSW Redistribution: Analysis of Draft Boundaries by Antony Green	4/04
2004 NSW Redistribution: Analysis of Final Boundaries by Antony Green	1/05
Children's Rights in NSW by Lenny Roth	2/05
NSW By-elections, 1965-2005 by Antony Green	3/05
The Science of Climate Change by Stewart Smith	1/06
NSW State Electoral Districts Ranked by 2001 Census Characteristics	
by Talina Drabsch	2/06
NSW Electorate Profiles: 2004 Redistribution by Talina Drabsch	3/06
Parliamentary Privilege: Major Developments and Current Issues by Gareth Griffith	1/07
2007 NSW Election: Preliminary Analysis by Antony Green	2/07
Manufacturing and Services in NSW by John Wilkinson	3/07
BRIEFING PAPERS	
Infrastructure by Stewart Smith	1/04
Medical Negligence: an update by Talina Drabsch	
Firearms Restrictions: Recent Developments by Rowena Johns	
The Future of Water Supply by Stewart Smith	
Plastic Bags by Stewart Smith	5/04
Tourism in NSW: after September 11 by John Wilkinson	6/04
Drug Offences: An Update on Crime Trends, Diversionary Programs	
and Drug Prisons by Rowena Johns	7/04
Local Development Assessment in NSW by Stewart Smith	8/04
Indigenous Australians and Land In NSW by Talina Drabsch	9/04
Medical Cannabis Programs: a review of selected jurisdictions by Rowena Johns	10/04
NSW Fishing Industry: changes and challenges in the twenty-first century	
by John Wilkinson	11/04
Ageing in Australia by Talina Drabsch	12/04
Workplace Surveillance by Lenny Roth	13/04
Current Issues in Transport Policy by Stewart Smith	14/04
Drink Driving and Drug Driving by Rowena Johns	15/04
Tobacco Control in NSW by Talina Drabsch	
Energy Futures for NSW by Stewart Smith	
Small Business in NSW by John Wilkinson	
Trial by Jury: Recent Developments by Rowena Johns	
Land Tax: an Update by Stewart Smith	4/05 5/05
No Fault Compensation by Talina Drabsch	6/05
Waste Management and Extended Producer Responsibility by Stewart Smith	7/05
Rural Assistance Schemes and Programs by John Wilkinson	8/05
Abortion and the law in New South Wales by Talina Drabsch	9/05
Desalination, Waste Water, and the Sydney Metropolitan Water Plan	7103
by Stewart Smith	10/05
Industrial Relations Reforms: the proposed national system by Lenny Roth	11/05
Zimusi mi Zimuons Rejoinis, ine proposed national system by Denny Rom	11/03

Parliament and Accountability: the role of parliamentary oversight committees	
by Gareth Griffith	12/05
Election Finance Law: an update by Talina Drabsch	13/05
Affordable Housing in NSW: past to present by John Wilkinson	
Majority Jury Verdicts in Criminal Trials by Talina Drabsch	15/05
Sedition, Incitement and Vilification: issues in the current debate by Gareth Griffith	1/06
The New Federal Workplace Relations System by Lenny Roth	2/06
The Political Representation of Ethnic and Racial Minorities by Karina Anthony	3/06
Preparing for the Impact of Dementia by Talina Drabsch	4/06
A NSW Charter of Rights? The Continuing Debate by Gareth Griffith	5/06
Native Vegetation: an update by Stewart Smith	6/06
Parental Responsibility Laws by Lenny Roth	7/06
Tourism in NSW: Prospects for the Current Decade by John Wilkinson	8/06
Legal Recognition of Same Sex Relationships by Karina Anthony and Talina Drabsch	9/06
Uranium and Nuclear Power by Stewart Smith	10/06
DNA Evidence, Wrongful Convictions and Wrongful Acquittals by Gareth Griffith	
and Lenny Roth	11/06
Law and Order Legislation in the Australian States and	-
Territories: 2003-2006 by Lenny Roth	12/06
Biofuels by Stewart Smith	13/06
Sovereign States and National Power: Transition in Federal- State Finance	
by John Wilkinson	14/06
Reducing the Risk of Recidivism by Talina Drabsch	15/06
Recent Developments in Planning Legislation by Stewart Smith	
Commonwealth-State Responsibilities for Health	
- 'Big Bang' or Incremental Reform?' by Gareth Griffith	17/06
The Workplace Relations Case – Implications for the States	
by Lenny Roth and Gareth Griffith	18/06
Crystal Methamphetamine Use in NSW by Talina Drabsch	
Government Policy and Services to Support and Include People with Disabilities	
by Lenny Roth	
1/07	
Greenhouse Gas Emission Trading by Stewart Smith	2/07
Provocation and Self-defence in Intimate Partner and Homophobic Homicides	
by Lenny Roth	3/07
Living on the Edge: Sustainable Land Development in Sydney by Jackie Ohlin	4/07
Women, Parliament and the Media by Talina Drabsch	
Freedom of Information: Issues and Recent Developments in NSW by Gareth Griffith	5/07 a 6/07
Domestic Violence in NSW by Talina Drabsch	7/07
Election Finance Law: Recent Developments and Proposals for Reform	
by Gareth Griffith and Talina Drabsch	8/07
Multiculturalism by Lenny Roth	9/07
Protecting Children From Online Sexual Predators by Gareth Griffith and Lenny Rot	
Older Drivers: A Review of Licensing Requirements and Research Findings	/