Transport for NSW | Centre for Road Safety

# Evaluation of changes to the older driver licensing system in 2008: Summary report

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# **Key findings**

This evaluation assessed the impact of a set of licensing changes for older drivers that were implemented in NSW in 2008. These changes were designed to balance the safety of road users and the general community with the continuing independence and mobility of older drivers. The changes were:

- Reducing the commencement age for annual medical assessment to age 75 years, and reducing the frequency of on-road driving tests from age 85 years.
- Introducing the option of a modified licence as an alternative to the on-road driving test, which restricts modified licence holders to a limited driving distance.
- Changing the on-road driving test from a 'full' driving test to an assessment of safe driving ability, and providing the option for the test to be taken with an accredited driving instructor as an alternative to Roads and Maritime Services.

The evaluation showed that, overall, the current NSW licensing approach continues to balance the quality of life for older drivers with road safety for the community. It found:

- While there was no change in crash rate for older drivers that could be linked to the 2008 licensing changes, there was a gradual decline in crash rate per licensed older driver between 2005 and 2014.
- The crash rate for drivers 85 years or over with a modified licence was 18% lower than the rate for drivers in this age group with a full licence. After the 2008 changes, uptake of modified licences increased to 11% of drivers in this age group (compared to 2% prereforms).
- While many different views were expressed, the licensing changes were generally well supported by older drivers and their family members and carers.
  - 81% of older drivers and 73% of family members/carers surveyed agreed that the medical assessment from age 75 was fair, and likely to result in safety benefits (75% of drivers and 67% of family members/carers).
  - 90% of older drivers and 88% of family members/carers surveyed agreed the on-road driving test from 85 years was fair, while 80% of drivers and 83% of family members/carers thought it was likely to result in safety benefits.
- Driving was seen by older people as important to maintaining quality of life because it helps maintain mobility, independence and social connectedness. Opportunities to enhance the current system were identified, which included improved information and education about alternative transport options for older people to support continued quality of life when reducing their driving.
- There are challenges associated with medical review for drivers experiencing significant cognitive decline. Time and specialist expertise is required to make recommendations on an individual's ability to continue driving.

#### About the evaluation 2

In November 2011, the Minister for Roads and Ports approved the establishment of an Older Driver Taskforce (the Taskforce) to review the current NSW licensing arrangements for older drivers.

The Taskforce made specific recommendations relating to the evaluation of changes to the older driver licensing system introduced in 2008. The scope of this evaluation addressed the Taskforce recommendations. The Centre for Road Safety (CRS) commissioned The George Institute for Global Health to conduct the evaluation.

The evaluation considered the impacts of the 2008 changes on road safety and quality of life for older drivers, as well as how these changes have affected the family and carers of older people and key stakeholders in the licensing system.

This summary report presents the key findings of this evaluation.

#### 2.1 2008 older driver licensing changes

In 2008, a suite of changes were made to the licensing system in NSW for drivers aged 75 years and over. These modifications were designed to balance the safety of road users and the general community with the continuing independence and mobility of older drivers.

The changes to the older driver licensing system were tailored to the older population by introducing flexible and evidence-based policies.

The changes introduced in 2008 were:

- The commencement age for annual medical assessment for driving was reduced from age 80 to age 75 years.
- A modified licence option with distance-based restrictions was introduced for drivers from age 85 years, without the need for an on-road driving assessment.
- The frequency of the on-road driving assessment for drivers 85 years and over was reduced from annually to biennially (two-yearly).
- The design of the on-road driving assessment for drivers aged 85 years and over was changed, from a 'full' driving test to an assessment of safe driving ability.
- The option was introduced to undertake the on-road driving assessment with an accredited driving instructor.

An important change to licensing policy in 2008 was the introduction of the modified licence. This licence is available to drivers aged 85 years and older as an alternative to undertaking the two-yearly on-road driving assessment. The modified licence is based on a distance restriction of usually a five to ten kilometre radius from a person's home, although the radius is adjusted for each individual's personal situation.

#### 2.2 About the current older driver licensing system

Older drivers are required to have an annual medical assessment from age 75. From age 85, drivers must undertake an on-road driving assessment every two years to maintain a full (unrestricted) licence, or opt for a modified licence if they do not want to take the on-road driving assessment.

The annual medical assessment is undertaken in accordance with the Austroads (2016) Fitness to Drive Guidelines to ensure that older drivers are medically fit to drive safely.

The on-road assessment for older drivers differs to the assessment undertaken by learner drivers, as it focuses on driving safely and following the road rules rather than being a comprehensive assessment of vehicle control skills. Drivers can choose to undertake the assessment at a Roads and Maritime Services registry free of charge, or through a driving instructor accredited by Roads and Maritime on a 'fee for service' basis.

The modified licence option allows drivers to drive locally without the requirement of an on-road driving assessment. The conditions of the modified licence, such as radius or distance restrictions, are negotiated with the local Roads and Maritime registry or Service NSW manager based on the individual's driving needs. The conditions of a modified licence are printed on the licence card and penalties apply if the conditions are breached.

If a person's driving needs change, they can convert back to a full licence at any time after they pass the on-road driving assessment.

While licensing and road safety policy in NSW is the responsibility of Transport for NSW, the day-to-day administration of the older driver licensing system is the responsibility of Roads and Maritime. This includes making licensing decisions, managing the medical review and on-road assessment processes and issuing modified licences to older drivers.

## 2.3 Evaluation questions

The evaluation questions were:

- 1. To what extent have the key changes to the older driver licensing system improved the road safety of older drivers or the wider community?
- 2. To what extent have the key changes to the older driver licensing system affected the quality of life of older road users?
- 3. How can the current NSW older driver licensing system be improved to maintain quality of life without adversely impacting on the road safety of either these drivers or the wider community?
- 4. How effectively are transport authorities supporting older people to reduce their reliance on driving as they transition to retirement from driving, and how could the system be improved to support this transition?
- 5. How effectively does the older driver licensing system deal with older people experiencing significant cognitive decline, and how could the system be improved to deal with them better?
- 6. Were there any unintended or unexpected outcomes of the key changes to the older driver licensing system?

#### 2.4 Evaluation methods

The evaluation components including the following:

- Crash rates per licensed driver were estimated by linking NSW crash data to NSW licensing data for all drivers aged 65 years and older between 2005 and 2014. Crash rates were calculated separately for particular age groups relating to changes in the licensing system: those aged 75–79 years were considered for changes to medical testing, and those 85 years and older were considered for modified licences and changes in the on-road driving assessment. Analyses were conducted to investigate patterns in crash rates for gender, residential location, year, licence type (car or car + motorcycle), modified licence, and time period (pre or post 2008 licensing reforms).
- Licensing data were extracted for a cohort of older drivers aged 65 years and older between 2005 and 2014. The licence status of each driver was categorised as full licence, modified licence, or other. Licensing status was compared before and after licensing reforms in 2008.
- Focus groups were held in Sydney and regional NSW with members of the community who
  were either current older drivers or who had recently given up driving, and separately with
  family members or carers of an older driver. Members of these focus groups were aged
  65 years and older, or in the case of family members and carers, aged over 45 years.
  Facilitators guided the discussion.
- Semi-structured interviews were conducted with stakeholders who had professional
  experience working with older drivers directly or were involved in research or policy-making
  affecting older drivers. Stakeholders including clinicians, policy-makers, and driver trainers
  and assessors.
- Two state-wide telephone surveys were conducted: one of 608 older drivers and recently retired drivers in NSW, and the other of 602 family members or carers of older drivers. Both surveys had equal numbers of drivers aged 65–74 years, 75–84 years, and 85 years and older. Respondents included men and women, and those who lived in urban, regional and remote locations (quotas for location were set for both surveys).

This research was approved by the University of Sydney Human Research Ethics Committee (HREC2016/535) on 11 July 2016.

#### Impact on road safety 3

No decreases in crash involvement or crash severity for older drivers could be linked to the introduction of the 2008 changes to the licensing system. Instead there was a general trend for decreased crash involvement over the 10-year period 2005 to 2014. The average annual reduction in crash rate varied between age groups, with a 2.1% decline for 65–69 year-olds, 2.9% for 70-74 year-olds, 2.1% for 75-79 year-olds, 3.3% for 80-84 year-olds, and 1.4% for drivers aged 85 years and older.

Crashes were categorised as those where there were no injuries, those with minor or moderate injuries, or those with serious injuries or a fatality. The greatest reductions were found in noninjury crash rates, with average annual reductions of 2.7% to 5% across all age groups 65 years and over, followed by moderate injury crash rates with average annual reductions of 1.4% to 3.1%. Rates of fatal and serious injury crashes showed little change in all age groups.

With the introduction of the modified licence as an alternative to completing the on-road test for older drivers, there were more drivers aged 85 years and older with modified licences after the 2008 reforms. The uptake was 2% prior to the 2008 reforms and 11% after 2008 reforms for licence holders during the first year after turning 85 years old.

Drivers with a modified licence aged 85 years and older had an 18% lower rate of crash involvement than drivers aged 85 years and older with full licences. One possible explanation for this finding is that drivers with modified licences may drive less overall than full licence holders. However, it was not possible to measure total driving for the evaluation.

It should be noted that the impact of modified licences on community road safety depends on the percentage of drivers choosing this option, and the majority of drivers (62%) aged 85 years and older during the period of this evaluation maintained a full licence.

# Impact on quality of life for older road users

For this evaluation, quality of life was defined by mobility, independence and social connectedness.

The focus group discussions and stakeholder interviews confirmed that driving was closely associated with maintaining quality of life for older members of the community. A driver's licence for older people meant independent mobility for essential and non-essential trips such as attending social outings and family events and remaining in contact with the community, as well as maintaining feelings of identity.

Overall, the various components of the licensing system were generally well-supported by older drivers and their family members and carers.

#### 4.1 Reform to age of medical assessment

The reduction in age of medical testing from 80 years to 75 years was generally well supported. Most older drivers from the telephone survey agreed that it was a fair process (81%) and had safety benefits (75%). Similarly, the telephone survey of family members and carers revealed a high level of support: 73% agreed that it is a fair way to determine licensing for older drivers and 67% thought it would improve safety.

Among the older drivers surveyed who were aged 65-74 years, there was high awareness about this requirement (72%) and many intended to complete the medical assessment to maintain a driver's licence (94%). While these findings do not directly measure the perception of this reform, it indicates a level of support through intended participation and confirms knowledge and familiarity with the process.

A significant majority (88%) of older drivers surveyed reported being 'not at all' anxious about the medical testing. Data from community surveys, focus groups and stakeholder interviews all consistently suggested the reduced age of medical testing did not negatively impact the quality of life for older road users.

Among the older drivers surveyed who were aged 75-84 years, the majority reported they would take the on-road test to maintain a full licence from age 85 (61%), and 16% indicated they would opt for a modified licence. The remainder were either undecided (15%) or planned to retire from driving by the time they were 85 years old (8%). These findings suggest most drivers aged 75-84 years wish to have a full licence when thinking about their needs up to 10 years in the future. It is possible that full licences are preferred as they provide the greatest level of independent mobility.

### 4.2 Modified licence option

The modified licence option was considered a 'good in-between step' between a full licence and retiring from driving by most survey respondents: 72% of older drivers and 85% of family members and carers surveyed. The survey found that the modified licence still allowed access to essential destinations such as family visits (95%), medical appointments and shopping (100%). Overall, findings from the community survey and focus groups suggested the introduction of a modified licence option had a neutral to positive effect on the quality of life of older road users.

Planned uptake of modified licences was highest in remote areas (34%), though there were concerns about restrictions on the distance of travel in rural areas, where greater distances are required to access essential services. Customising the restricted area of travel for modified licence holders is important to minimising its impact on older drivers' mobility, social participation and ultimately quality of life. It is important to ensure drivers are aware that there is flexibility in the restrictions available, depending on individual needs.

#### 4.3 Reform to frequency of on-road assessment

The majority of older drivers from the telephone survey (70%) felt that the frequency of on-road assessment every two years was 'about right'. When there was an opposing view, it tended to support more frequent assessment. Among older drivers, 6% stated that assessment frequency was 'too often' while 19% stated it was 'not often enough'. Similarly, 4% of family members stated the on-road assessments were 'too often' while 30% believed they were 'not often enough'.

Overall, findings suggest that the reduced frequency in on-road driving assessment had a neutral to positive effect on quality of life of older road users.

Most older drivers (90%) and family members/carers (88%) surveyed also felt that the practical driving test was a fair way to determine licensing for drivers 85 years and older; and agreed that it was likely to result in safety benefits (80% of older drivers and 83% of family members/carers).

#### 4.4 Reform to on-road driving assessment

As a part of the 2008 reforms, the on-road test was changed to be a test of safe driving ability, rather than the 'full' driving test undertaken by learner drivers.

Among the community telephone survey respondents who had completed the safe driving ability assessment, 95% felt it was a fair assessment of their ability to drive. The respondents to this survey were not likely to have had experience with the previous test prior to 2008.

The stakeholders interviewed felt that the change was positive and that the safe driving assessment would not fail an individual who can drive safely.

#### 4.5 Option for external assessors for on-road assessment

Older drivers from the telephone survey reported considerable uptake of external assessors (24% of drivers aged 84+). Licensing data showed a similar rate of uptake: 25% of licence holders in NSW aged 85 years and older had used an external assessor.

Older drivers who participated in the focus group discussions felt that the option to undertake the on-road driving assessment with an accredited instructor was a positive change. They welcomed the opportunity to undergo driver re-training, and to have a practice session prior to the assessment. However, it was noted that the fee could be a barrier to accessing this alternative.

#### **Opportunities for improvement** 5

The evaluation considered how the current NSW older driver licensing system might be improved to maintain quality of life for older drivers, without adversely impacting on road safety for these drivers and the wider community.

Overall the community telephone survey showed a relatively high level of support for current licensing policy among older drivers and their family and carers.

Greater uptake of modified licences may improve safety, since crash involvement was 18% lower for drivers aged 85 years and older with modified licences than for drivers in the same age group with full licences. Suggested strategies to increase uptake included: flyers in medical centres and doctors' surgeries; information with registration papers; emailed information; and use of social media. It was stressed that information should be made available early so older drivers could plan ahead.

There was low awareness of the flexibility in the distance restrictions for modified licences. Therefore, communication about modified licences should include that the boundary of travel restriction is flexible and can be negotiated to account for local context and distance of essential services from home.

Medical professionals believed that better in-office assessments would be desirable for Fitness to Drive Medical Assessments for older drivers, but it was acknowledged that such tests are not available at the time of this evaluation. Several assessment tools are currently available to test driver-related function, however these are imperfect and do not accurately predict safety on the road. More work in this area is needed to determine if more accurate assessment tools will help improve assessment of older driver competency.

On-road assessment was viewed as the gold standard in assessing an individual's driving skill and competence by stakeholders interviewed in this consultation.

#### Support for transition to retirement from driving 6

There was consensus amongst stakeholder and focus group participants that more could be done to support older people to reduce their reliance on driving.

Focus group discussions highlighted substantial gaps in knowledge regarding alternative transport options and uncertainty about skills and ability to use community and public transport. Lack of knowledge could be addressed through provision of information about available services and eligibility for these services.

The telephone survey included only 50 retired drivers, but 30% of them were dissatisfied with the support or information received. About half of these were specifically interested in lists of community and public transport, brochures, and letters with information.

While family members and carers will support older people with transport, there is the opportunity to provide further services, particularly for those without family members and carers. There was consensus that better alternative transport could reduce the negative impact of transitioning from driving. From the survey, only 16% of drivers aged 65 years and over regularly used alternative transport (once a week or more), reflecting high reliance on driving as a primary means of transport for older drivers.

Alternative transport options currently available were discussed. However, there were perceived barriers to using each option, such as:

- Taxis: expense, particularly in rural areas, and lack of awareness of taxi subsidies
- New forms of flexible transport such as Uber: unfamiliarity with technology
- Community transport: perception that community transport is reserved for people with a disability, lack of awareness about its availability
- Public transport: Bus stops/train stations not close enough to home, unfamiliarity with using public transport, fear for physical safety such as falls, and lack of awareness of pension discounts.

Existing schemes such as pensioner discounts on public transport were highly valued. Infrastructure upgrades to improve accessibility of public transport services were also appreciated by older people. Transport training services are another possibility to teach older drivers to learn how to make greater use of public transport.

Suggestions were made to provide information about available alternative transport, including written information with clear descriptions of eligibility for different schemes. Caution was expressed by stakeholders and older drivers alike about relying on the internet or smartphones to communicate information. As the technological literacy of older drivers increases over time, technology-based alternative transport options such as Uber are likely to become more accessible and acceptable to older road users.

Door to door transport options such as community transport, ride share or other innovative solutions were favoured. Continued investment in and marketing of these services to older people as they transition from driving would be of benefit. Solutions should account for the decreased physical mobility of older people, as well as the need for greater support in rural and remote locations.

# 7 Older people with cognitive decline and the licensing system

The evaluation explored how effectively the older driver licensing system deals with older people experiencing significant cognitive decline, and how the system could be improved to deal with them better.

Most of the discussion about older drivers who experience significant cognitive decline was with stakeholders who deal with assessing older driver safety. They included general practitioners who complete Fitness to Drive Medical Assessments and geriatricians who are expert in this field.

Though there was a high level of support for the older driver licensing system, stakeholders generally felt the system was inadequate in dealing with older drivers who are experiencing significant cognitive decline. Specifically, the current annual medical review by general practitioners was felt to be insufficient to appropriately deal with older drivers who are experiencing significant cognitive decline. It is limited by the time available and expertise required for a comprehensive assessment.

Diagnostic tools could be used to assist in screening for cognitive decline. However, medical professionals acknowledged that the current tools available are not sufficient to provide a definitive determination of safety on the road.

Stakeholders believed that, when a driver has cognitive decline, specialists (such as geriatricians, psychiatrists and occupational therapists) are required to adequately diagnose and manage the condition as well as make recommendations on an individual's ability to continue driving. However, cost and limited availability are barriers to accessing these specialists.

Stakeholders were concerned that once a modified licence is issued, there is no longer a requirement for on-road assessment. This was seen as a weakness of the current system, particularly for older drivers with cognitive decline. Stakeholders also felt the system could better detect unsafe driving related to cognitive decline if there was annual, rather than two-yearly, on-road testing for drivers aged 85 years and older.

Finally, as well as the difficulty of identifying drivers with significant cognitive decline, it was noted that there can be problems with drivers not adhering to legal requirements. People with cognitive decline may have difficulty judging whether they are able to drive safely, and some continue to drive when no longer licensed. Family members and carers have an important role in this special circumstance, by helping the older driver to access support and reinforcing decisions made by specialists and driver assessors. However, this role can be very challenging for family members and carers.

#### 8 Unintended or unexpected outcomes

The 2008 changes to the older driver licensing system were introduced to provide older drivers with more flexible and practical options to suit their mobility needs. However, a negative perception about age-based licensing requirements remains for a minority in the community. These requirements added to the other perceived negative consequences of ageing. Further, age-related decline is a sensitive and personal topic. Therefore, careful attention to the delivery of messages about licensing requirements is critical, along with ongoing support.

In contrast, some focus group and survey participants supported increasing the rigour of the current licensing system. Some participants felt the on-road assessment should be more frequent than two-yearly. Others highlighted the perceived 'loophole' of not having an on-road test once a modified licence is issued.

The inclusion of family members and carers in this evaluation revealed their significant contribution to providing transport for older drivers and retired drivers. Overall, 63% of family members and carers surveyed agreed that providing transport for the older driver they care for was rewarding, and 25% felt it was their responsibility. However, some said it was stressful (14%), a conflict with work (14%), or something that takes time away from family and social life (14%).

The focus groups and stakeholder interviews indicated that older people are reluctant to rely entirely on family and carers, and some do not have family or friends who can assist. In the context of an ageing population, older drivers are often carers themselves, and this may affect their willingness and ability to retire from driving.

#### Limitations of the evaluation 9

The limitations of this evaluation are related to two main issues.

First, it was difficult to isolate the impact of licensing reforms from other factors such as broader road safety programs and the overall increase in numbers of licensed drivers aged 65 years and older.

Second, data may have been affected by changes to data collection and classification over the analysis period. These include changes to the classification of deceased drivers in the licensing data, resulting from changes in the way that data was transmitted from Births, Deaths and Marriages.

#### 10 Conclusions

The purpose of this evaluation was to assess the impact of the 2008 licensing changes for older drivers in NSW. The changes were designed to balance road safety with the quality of life of older drivers.

Findings from the evaluation showed that, while there was no evidence of changes in older driver crash rates associated with the 2008 licensing reforms, a general reduction in the crash rate for older drivers was observed over the 10-year period from 2005 to 2014.

The evaluation clearly demonstrated a measurable impact of the 2008 licensing reforms on licence status for older drivers. This was most apparent in the increased uptake of modified licences from 2.1% before 2008 to 11% after 2008 for drivers aged 85 years and older. Drivers in this age group with a modified licence were found to have an 18% lower rate of crash involvement than their counterparts with full licences.

The evaluation showed there was generally a high level of support for the various components of the current older driver licensing system among older drivers and their family members and carers, despite there being many differing viewpoints about the system. The diversity of views identified in this evaluation highlights the complexity of finding a balance between maintaining quality of life and promoting road safety for this group.

The evaluation identified the need for better support for the transition to retirement from driving among older road users. Driving was seen by older people as important to help maintain mobility, independence and social connectedness. There are opportunities to improve information and education about alternative transport options for older people to support continued quality of life when reducing their driving.

The stakeholder interviews provided further insights, particularly with regards to challenging situations like cognitive decline. Additional time and specialist expertise is required for a comprehensive assessment of driving ability in this situation. More work needs to be done to better understand recommendations for driving when older people are experiencing significant cognitive decline.

# 11 References

Austroads, 2016. Assessing Fitness to Drive for commercial and private vehicle drivers: Medical standards for licensing and clinical management guidelines. Austroads, Sydney.

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