Mobility scooter usage and safety survey report

A collaborative project involving the Australian Competition and Consumer Commission, NRMA Motoring & Services, CHOICE, EnableNSW and Flinders University

September 2012
Executive summary

From February to June 2012, the Australian Competition and Consumer Commission (ACCC), NRMA Motoring & Services (NRMA), CHOICE, EnableNSW, Flinders University and a number of other stakeholders worked together on Australia’s first national survey of mobility scooter users. The survey was designed to provide a better understanding of the demographics of mobility scooter users, and patterns of use, amongst the Australian population. It was designed to build on existing work in the area of mobility scooter safety, including an ACCC-commissioned report into mobility scooter injury data which is available on the ACCC’s Product Safety Australia website (www.productsafety.gov.au/mobilityscooters).

The reference group, comprising of the above stakeholders, will use the results of the survey to develop recommendations on awareness raising and education programs to increase the safety of scooter users. Discussion and analysis on licensing policy and safety standards was not in the scope of this research or reference group.

The survey included a randomly selected sample of 2,406 people aged 18+ weighted by age, gender, location and highest level of schooling completed to represent the Australian adult population (short version of survey); and 515 current users of mobility scooters who volunteered to complete an extended survey. Responses indicated the following:

- Scooter users cannot be characterised just as elderly road users, with over 50 per cent of scooter users aged less than 60 years.
- Scooter users know themselves to be (and behave as) pedestrians—this is consistent with the Australian Road Rules. Scooter users highly value the independence their scooter gives them and do not generally replace a car with a scooter. Rather, they use a scooter to ‘replace’ their legs when they are no longer able to walk long distances.
- A surprisingly large portion of scooter users live in rural areas, which has ramifications regarding training, safety and servicing.
- The majority of users use additional safety features and generally feel safe on their scooter. Scooter users blame factors out of their control (e.g. environmental factors) for any lack of safety.
- Scooter users believe increased awareness from road users would increase safety and reduce injuries.
- About 95 per cent of trips on a mobility scooter involve no injury or damage of any kind.
- Mobility scooters are a lifeline to independence and emotional well-being, making it imperative to find a way to ensure it is safer and easier for road users to incorporate scooters into the transport mix.

Following on from this survey, the ACCC, NRMA, CHOICE, EnableNSW, Flinders University and other stakeholders will continue to work together to:

- raise the awareness of all road users (motorists, pedestrians, cyclists and scooter users) of the changing nature of mobility in Australia and how to safely integrate scooters into Australia’s transport mix
- communicate the importance to scooter users of safety items such as flags and reflectors to increase their visibility and safety on the road
- investigate training that is currently available to users, whether it is readily accessible and what type of training is most effective in delivering increased safety for all road users.

The independence and emotional well-being that scooter users experience will play a salient role in shaping future programs for users and their communities to ensure Australians can continue to use scooters safely and enjoy the expanded mobility they enable.
Research objectives

Broadly, the objectives of this Mobility Scooter Usage and Safety survey were to:

1. determine the incidence of motorised mobility scooter usage in Australia today, and to understand the demographics of this user group
2. identify the purchase and usage behaviours of users
3. quantify motorised mobility scooter safety incidents, and the factors contributing to these
4. highlight key safety issues and provide direction for the development of strategies to improve the safe use of motorised mobility scooters.

Research methodology

This survey was conducted in two parts:

1. OMNIBUS
   - Australia-wide telephone survey involving 2,406 people aged 18+ years, weighted by age, gender, location and highest level of schooling completed to represent the Australian adult population.
   - Fieldwork was conducted from 23 February – 4 March 2012 by Newspoll.

2. EXTENDED SURVEY
   - Australia-wide online and paper-based survey involving 515 self-selected motorised mobility scooter users.
   - Fieldwork was conducted from 9 February – 5 April 2012 by NRMA Motoring & Services.

Scooter user – demographics

Inconsistent with the stereotype of mobility scooter users being older Australians aged 60+, the survey found that over 51 per cent of mobility scooter users are aged less than 60 years.

The incidence of scooter use for Australians aged 18 years and over is 13 users per 1,000 adults, equating to around 231,000 mobility users Australia wide.

The incidence of mobility scooter use is higher in regional/rural/remote areas than in capital cities. This means that the user population appears to be much more dispersed than the general adult population, with 50 per cent of scooter users living outside of capital cities.

Overall, users have a lower socio-economic profile than the general adult population, with:

- 43 per cent living in a household with income less than $50,000 per annum
- 70 per cent classified as “blue collar”
- 61 per cent not working.
Becoming a scooter user

Entry to the motorised mobility scooter market

For nine in ten users, reduced walking/physical mobility is the key trigger for taking up use of a motorised mobility scooter. This may be either a gradual loss of walking mobility, due to ageing or chronic illness, or an acute loss, due to injury or surgery/recovery.

The decision to start using a motorised mobility scooter does not typically result from recommendation by a medical professional: only one in four users reported taking up usage following such a recommendation.

Other forms of physical impairment, such as difficulty carrying weight (37%) or vision impairment (4%) are much less likely to be the trigger for take up.

Loss of drivers’ license is also a trigger of low incidence, with only 13 per cent indicating this event prompted them to take up use of a scooter. Verbatim survey comments indicate a number of reasons for this:

- There can be a time lapse between these two events.
- Some users make concurrent use of both transport modes (private vehicle + motorised mobility scooter).
- Potentially, large numbers of users have never been licensed.

The majority (95%) of respondents in the extended survey expect to be using their scooter for the long term. Only two per cent expect to be using their scooter temporarily, typically while recovering from injury or surgery. As a consequence, most (66%) are experienced scooter users, having used a scooter for at least two years. One in three users have used scooters for more than five years.

The omnibus data shows that 88 per cent of users use a four-wheeled scooters with the remaining 12 per cent use a three-wheeled one.
Benefits of scooter use

Given that physical impairment is one of the key triggers in becoming a scooter user, it is not surprising that a key benefit of use is the ability to maintain independence for shopping, social activities, services and/or work. Indeed, it is not uncommon for scooter users to see their scooter as a lifeline for independent living.

User comments

- My scooter changed my life. I wouldn’t be without it now.
- Before we bought my first scooter, I was restricted to my home. Now, I get out and about by myself a lot more. I couldn’t imagine being without one ever again.
- I think they are a good form of transport and give me independence and the ability to go where I like, when I like.
- I find it invaluable. I appreciate being able to go shopping with my wife once a week and also to go to my dentist without having to take somebody with me.
- I spend on average about eight hours a day on my scooter. Mostly around my house and garden but frequently outside the home.

Table: Main benefits of motorised mobility scooter use

<table>
<thead>
<tr>
<th>Benefit</th>
<th>TOTAL</th>
<th>Under 60 years</th>
<th>60+ years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Better able to maintain independence</td>
<td>93</td>
<td>97</td>
<td>90</td>
</tr>
<tr>
<td>To do the shopping independently</td>
<td>67</td>
<td>68</td>
<td>66</td>
</tr>
<tr>
<td>Reduced pain/fatigue</td>
<td>65</td>
<td>65</td>
<td>64</td>
</tr>
<tr>
<td>Better access to services</td>
<td>53</td>
<td>55</td>
<td>50</td>
</tr>
<tr>
<td>Better access to social activities</td>
<td>53</td>
<td>56</td>
<td>49</td>
</tr>
<tr>
<td>To see friends and family</td>
<td>51</td>
<td>61</td>
<td>41</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>16</td>
<td>16</td>
<td>16</td>
</tr>
</tbody>
</table>

Base: Total, n = 515. Weight: Motorised Mobility Scooters Users aged 18+ years
Buying a scooter & undertaking safety training

According to results from responses in the extended survey:

- just over half (51%) of scooter users sought advice or assessment from mobility specialists when buying a scooter
- only 25 per cent have had safety training or tuition on their current scooter
- two key providers of safety training/tuition were Occupational Therapists or other health professionals, along with retailers (including a sales person and suppliers).

<table>
<thead>
<tr>
<th>Provider of safety training /tuition</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>OT or other health professional</td>
<td>41</td>
</tr>
<tr>
<td>Retailer/sales person/ supplier</td>
<td>40</td>
</tr>
<tr>
<td>Council or government</td>
<td>9</td>
</tr>
<tr>
<td>Family member</td>
<td>6</td>
</tr>
<tr>
<td>Internet</td>
<td>3</td>
</tr>
<tr>
<td>Other scooter user</td>
<td>1</td>
</tr>
<tr>
<td>Other (not specified)</td>
<td>9</td>
</tr>
</tbody>
</table>

There is considerable variation in quality and depth of safety of training amongst retailers/suppliers, as shown by the examples below.

User comments

**Example 1**

He just showed me the controls and watched me ride it, but it was very easy.
Operation of controls on scooter. Supplied RTA leaflet on scooter use.

**Example 2**

Took me on 3km drive. Taught me when to use footpath and when to use the road. Road rules.
Use of scooter, safety aspects, assessment, written quiz, assembling and dismantling scooter, practical outdoor course which included driving scooter along street path, up/down sloped gutters to cross road and ramp to lower carpark, in/out of different doorways, backing in small space etc. All in public place.
He brought the scooter to my home and gave me a lesson around the roads in the retirement village where I live. He talked about safe reversing, the way to approach slopes, speeds and where to ride on any public road. He supervised my ride and went through safety issues. He also talked about battery charging and service.
Using safety features

The extended survey results indicated that:

- 88 per cent of scooter users feel safe when using their scooter
- most users (72%) employ at least one safety feature from a short-list of commonly used features, with visibility flags being the most common safety feature used.

<table>
<thead>
<tr>
<th>SAFETY FEATURES USED</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>NONE</td>
<td>28</td>
</tr>
<tr>
<td>ANY SAFETY FEATURE</td>
<td>72</td>
</tr>
<tr>
<td>Flag</td>
<td>52</td>
</tr>
<tr>
<td>Reflectors</td>
<td>34</td>
</tr>
<tr>
<td>Lights</td>
<td>25</td>
</tr>
<tr>
<td>High visibility vest</td>
<td>15</td>
</tr>
<tr>
<td>Safety helmet or protective...</td>
<td>3</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
</tr>
</tbody>
</table>

Verbatim comments indicate that scooter users employ a range of additional/alternative techniques which, in their opinion, minimise risks to their safety. This includes:

- increased visibility to others – flag, horn, canopy, bright clothing/scooter colours
- avoidance behaviours or techniques – mirrors, defensive driving, reduced speed
- increased stability of scooter – redistribution of weight, careful selection of route/path, seatbelts.

Using a scooter

There appears to be two main groups of scooter users, separated according to the role and importance of their scooter for their out-of-home mobility (note that the size of these user groups was not quantified in this study—evidence for the groups is derived from verbatim responses only).

It is clear that for some users their scooter is their primary means of mobility outside the home. Their scooter is vital for the maintenance of their independence — their ‘lifeline’ — and is used in a broad variety of situations. Such users might be using their scooter more frequently and travelling greater distances.

User comment

*I have no use in my legs and until I got my scooter I felt imprisoned as my electric wheelchair is for inside use only. Now I have freedom and can walk my dogs and go for walks with my husband.*
For the other user group, their scooter is positioned more as a secondary means of transport and serves as an adjunct to other modes including walking. For this group, their scooter may be more frequently transported (e.g. via car or public transport) to a location where it will be used. Examples of this provided by survey respondents include where a scooter might be transported by private vehicle to be used in a shopping centre or on a golf course (as depicted by the following comments and the percentages in the graph depicting ‘types of surfaces used’).

User comments

*My husband transports the scooter to my destination, church, shopping centre etc and I travel from there.*

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*At this stage the scooter is a supplement to driving but when this is not possible a scooter will be very important to retain some level of independence.*

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*I live in a retirement village and my unit is some distance from my garage. I find the scooter very useful for transporting the shopping from the garage.*

**TYPES OF SURFACES USED**

- On sealed footpath or bike path: 83%
- On sealed road: 40%
- Shopping centre: 4%
- On unsealed footpath or track: 9%
- On unsealed road: 3%
Safety incidents

Based on responses to the extended survey, the scooter users take an average of 5.8 trips per week outside the perimeter/fence of their home. Based on these responses, the occurrence of incidents and injury arising from these trips was five per cent: 95 per cent of trips did not involve an injury or damage of any kind.

This is likely to at least partly explain why 12 per cent of respondents reported feeling unsafe on their scooters. Responses to the extended survey provided an insight into the nature of incidents experienced by scooter users. About five per cent of respondents in the extended survey reported experiencing an incident which included one or more of the following:

- scooter topping over
- collision with a stationary object
- trip or fall from scooter
- collision with a moving object.

Responses to the extended survey also provided some insights into factors that scooter users felt contributed to their incidents:

- cars backing out of driveways – unaware of the scooter user behind them
- scooters not being noticed on roads or parking lots
- damaged roads and footpaths
- confusion at intersections amongst pedestrians, scooter users and other road users.

Although largely anecdotal, information on the nature of injuries and incidents provided in responses to the extended survey will provide useful guidance to the working party in developing and implementing recommendations related to the education and training of scooter users and the community more broadly.
Conclusion

This survey has uncovered a variety of information relating to mobility scooter use in Australia. The survey demystified current community assumptions that the majority of mobility scooter users are elderly. It also highlighted the value that the scooter represents for our Australian users. It is not a replacement vehicle but a ‘replacement’ of legs: without their scooters, many would be house-bound and dependent upon family, friends and carers.

The survey findings have also highlighted an opportunity to further ensure the safety of scooter users in Australia. Following on from this survey, the ACCC, NRMA, CHOICE, EnableNSW, Flinders University and other stakeholders will continue to work together to scope and plan opportunities to highlight general community awareness about the changing nature of mobility in Australia, investigate current availability of training and reach scooter users with key safety information if or when they transition to mobility scooter use.