



Institute of
Public Works
Engineering
Australia
(NSW Division)

IPWEA (NSW) ROADS & TRANSPORT DIRECTORATE

Staysafe (Joint Standing Committee on Road Safety)
Parliament House
Macquarie St
Sydney NSW 2000

30 April 2013

Email: staysafe@parliament.nsw.gov.au

Dear Sir / Madam,

Non-registered Motorised Vehicles Submission

Introduction

The Institute of Public Works Engineering Australia (IPWEA) is a not for profit, membership based, professional organisation representing engineers and others involved in the provision of public works and services predominantly in the local government sphere.

The Roads & Transport Directorate has been set up by IPWEA (NSW) in conjunction with Local Government NSW to provide support to its members working in local government across the state. It is supported financially by membership contributions from Local Councils in NSW.

Background

The Roads & Transport Directorate has been set up to meet the demand from members of IPWEA (NSW) to act as a focus for research activities and to provide technical advice.

Its main purpose is to assist Local Government in NSW in the area of road infrastructure and transport related activities by:

- Assisting members in discharging their road management roles in the most effective manner consistent with current legal obligations and the most recent technical practices in the critical area of consistent and cost effective asset management and road safety;
- Assisting the IPWEA (NSW), Local Government NSW, individual Councils and members in lobbying for a higher priority to be placed on road infrastructure provision and maintenance and for a more equitable share of resources and funding; and

- Providing for IPWEA members and Local Government a powerful technical and research resource on transport issues at regional, state and national level. The activities would be, as circumstances dictate, either proactive or reactive to achieve the optimum benefit for the region or state.

The Directorate commenced operation in October 2004 and has been involved in determining the needs of members and developing solutions to meet those needs. Over that period the Directorate has made submissions on a range of issues. Copies of some of these submissions¹ are available on the website at: www.roadsdirectorate.org.au.

Terms of Reference

The Staysafe Committee is currently undertaking an inquiry into non-registered motorized vehicles. The Terms of Reference for the Inquiry are:

That the Committee inquires into and reports on the increasing use of non-registered motorised vehicles, including mobility scooters, electric bicycles, Segways and quad bikes on public roads, footpaths and public land and their impact on road safety, with particular reference to:

- a) The current status of non-registered motorised vehicles in road rules definitions and the extent of road safety problems related to their use;*
- b) The adequacy of data collection for injury and fatality rates arising from the use of nonregistered motorised vehicles;*
- c) Vehicle standards requirements for nonregistered motorised vehicles, including vehicle design, engine capacity, mass and speed controls;*
- d) The extent and effectiveness of education and the necessity for skills and competency training for users of nonregistered motorised vehicles, particularly in relation to safe use;*
- e) Insurance implications of injuries and fatalities sustained and caused by nonregistered motorised vehicles;*
- f) Initiatives taken by local Councils and other jurisdictions to certify, register and regulate the use of currently nonregistered motorised vehicles; and*
- g) Any other related matters.*

Vehicle Descriptions

The terms of reference describe the vehicles under consideration as *non-registered motorised vehicles, including mobility scooters, electric bicycles, Segways and quad bikes on public roads, footpaths and public land and their impact on road safety*. This description might infer that the included vehicles constitute a single class of vehicle that have similar impacts, are used by homogenous groups within the community and have common road safety issues. Our members, working in Local Government see each of these vehicle types being used by different user groups and currently having different impacts on road safety. These different applications are summarised as follows:

a) Mobility Scooters

Mobility scooters (including motorised wheelchairs) are being used increasingly in both metropolitan and regional council areas. In general, users tend to be elderly or infirm and do

¹ Copies of submissions are available at: <http://www.ipwea.org.au/RoadsTransportDirecnecessaryandrecreationaltorate/AboutRD/Submissions/>

not currently hold a motor vehicle license although they may have done so in the past. Their journeys tend to be short, from home to a range of necessary and recreational activities. There is a wide range of vehicles available from basic three or four wheel designs to more elaborate vehicles with canopies and other enhancements.

b) Electric Bicycles

Member councils have not reported an increasing safety problem from the use of electric bicycles at the present time. It appears that these vehicles are using the bicycle path networks and that their speed characteristics and user group are compatible with the general cycle population. The management of these vehicles at interfaces with the road network and pedestrians appears to be similar to the problems being experienced with managing the general bicycle population.

c) Segways

Member councils have not reported any specific road safety problems associated with the use of these vehicles. These vehicles require a good sense of balance and are generally used as recreational vehicles off road at the present time. Users tend to be younger people who use them as recreational vehicles. These vehicles are currently not approved for on road use. However, it is noted that approval has now been granted in Queensland for increased use of Segways and that New South Wales has them under consideration.

In relation to Queensland, *The Sydney Morning Herald*² reported:

Queensland will become the first state to allow Segways to be used in public places. The two-wheeled, self-balancing vehicles are seen as a potential boon for tourism, but people are restricted to using them on private property. The state's Transport Minister Scott Emerson glided into a media conference to make the announcement on Tuesday, saying that Segway drivers must wear helmets and restrict themselves to travelling at 12 km/h.

The outcome of this approval should be monitored closely by New South Wales as part of any consideration to grant a similar approval.

d) Quad Bikes

As with electric bicycles and Segways, member councils have not reported a significant problem with the use of quad bikes on public roads. Anecdotal evidence suggests that these vehicles are used largely as work vehicles on farms or as recreational vehicles in off-road environments.

Quad bikes are also used extensively by councils and other public authorities for beach and park management. In this environment the vehicles are used by accredited employees under detailed Safe Work Method Statements (SWMS). Training and assessment of users is mandatory in these circumstances. There is no evidence of significant accidents having been reported from this group of users.

A report titled *Quad Bike Related Deaths and Injuries Australia 2012*³ prepared by Emily Herde and Tony Lower from Media Monitors for the Australian Centre for Agricultural

² SMH Wednesday 24th April 2013, p13

³ *Bike Related Deaths and Injuries Australia 2012*
<http://www.farmsafe.org.au/document.php?id=206>

Health and Safety was released in January 2013. This report summarized the deaths and injury from the use of quad bikes Australia wide as follows:

Deaths

There were approximately 3,708 print media articles received by the NFIDC from Media Monitors Australia in 2012. A total of 18 quad bike related deaths were reported for this period. Table 1 provides a summary of the quad bike related fatal injury events:

Of the 18 reported deaths there was one case where location could not be determined from the available information.

- *Ten (55%) of these deaths occurred on farm.*
- *Of the 18 reported quad bike fatalities, four cases could not be classified as either a rollover or non-rollover incident. Of the remaining 14 cases, 9 (64%) were rollovers.*
- *Rollovers accounted for 60% of on-farm deaths.*

Non-fatal Injury

There were an additional 78 non-fatal quad bike related injury events reported in the Australian print media in 2012. Table 2 provides a summary of the quad bike related non-fatal injury events:

- *There were 10 children under the age of 16 years in quad bike related injury events, all of these children required hospitalisation for their injuries.*
- *Of the 78 reported injury events, location was unable to be determined for 11 cases. Of the remaining 67 cases, 38 (57%) occurred on-farm and 29 (43%) in a non-farming setting.*
- *Information was available in only 63 of the 78 injury cases in relation to the event being a rollover or non-rollover. Of the 63 cases, rollovers accounted for 35 (56%) of the reported non-fatal injury cases, whereas non-rollovers accounted for 28 (44%) of the cases.*

There is clearly a safety problem associated with the use of quad bikes, particularly in relation to roll over accidents which needs to be addressed.

The details contained in this report confirm that very few accidents have occurred on public roads, and that accidents from the use of this class of vehicle is not currently impacting on road safety.

e) Other Devices

It is noted that the NSW Roads Minister made Ministerial Declaration (Personal Mobility Device Trial) Order 2013 in NSW Government Gazette Number 46⁴ dated 12th April 2013.

Under the terms of the Order Personal Mobility Device means:

a motor vehicle that does not comply with the Australian Design Rules and is limited to only the following vehicles:

- (a) A gyro-stabilised electric unicycle known as a 'Solowheel' that has a VIN/Chassis number of 1301001 or 1301002.*

⁴ Government Gazette No 46 at: www.nsw.gov.au/sites/default/files/Government-Gazette-19-April-2013_0.pdf

- (b) *A two-wheel motorised device known as an 'Egret One' that has a VIN/Chassis number of WEG0NE11A1A012123 or WEG0NE11A1A012118.*
- (c) *A gyro-stabilised electric three- wheeled cycle known as a 'Qugo' that has a VIN/Chassis number of XLA9AAG11XCA505647 or XL9AAG111CA505648*

Use of these devices is limited to the Macquarie University Campus at North Ryde. The Notice advises that this is the first stage of a trial being conducted by the City of Ryde and Macquarie University investigating the safe use of Personal Mobility Devices within the approved area.

There is obviously a demand for a range of other mobility devices to meet the needs of specific user groups.

Mobility Scooters – the Current Environment

The current rules governing the use of mobility scooters (including powered wheelchairs) can be summarised as:

- Registration is not required
- Maximum speed on level ground is limited to 10km/hr
- Must comply with Australian Road Rules as applied in NSW
- Maximum weight 110kg unladen
- Travel must be on footpath or nature strip unless this is impractical
- Use on road – on outside edge facing oncoming traffic
- Blood alcohol less than 0.05%
- No licence required
- No test required
- Third party insurance not required
- User must be unable to walk or have difficulty in walking

Member councils report that numbers of mobility scooters being used are increasing. This is reported in both metropolitan and regional councils.

Mobility Scooters – Their Importance

With a rapidly ageing population the need for mobility for aged and mobility impaired people is becoming more important. Their use provides a valuable means for users continuing to be part of their local community and maintaining their independence.

As individuals get older and are unable to meet the requirements to hold a motor vehicle license they face the prospect of being confined to their homes or being cut off from friends and regular activities. This problem is exacerbated by limited access to suitable public transport alternatives.

The availability of mobility scooters to an increasing proportion of the community is therefore an important issue. To restrict the use of these devices by requiring stringent licensing and registration requirements will greatly disadvantage this part of the community.

On the other hand the safety of mobility scooter users and other road and footpath users is also of high importance. The problem is to balance the needs of users against road safety – a difficult task.

Local Government Activities

As mentioned earlier, councils across the state are becoming increasingly aware of the use of mobility scooters and their potential impact on road safety. Several councils have pointed to the following activities currently being undertaken.

a) Holroyd City Council

Through its Senior Pedestrian Programme Holroyd City Council has identified a need to provide education for the users of motorized wheelchairs and scooters within their local government area. The Council has established a *Getting Around* Project aimed at collecting usage data with a view to improving road safety and access for all motorized wheelchair/scooter users. The current questionnaire is available on the Council website at:

<http://www.holroyd.nsw.gov.au/wp-content/uploads/downloads/2012/08/Getting-Around-Survey..pdf>

The initial *Getting Around* Project was carried out by Council over the 2010/11 and 2011/12 years. A *Getting Around* Project Report was prepared for Holroyd City Council. A copy of this report is available by contacting the Council Road Safety Officer. This report includes the results of a survey carried out as part of the project. The key findings reported are:

- *Holroyd motorised wheelchair/scooter users rode their scooter multiples time a day*
- *Trips measured between one and five kilometres*
- *Most popular destinations were local shops, larger malls eg. Stockland, health care*
- *provider and community groups*
- *Sixty per cent had a 'near miss' or an accident while using their motorized wheelchair/scooter.*
- *Accidents most commonly occurred on a footpath or road.*
- *Eight per cent felt safe all or most of the time when using their motorized wheelchair/scooter.*
- *Seventy three per cent found other pedestrians or motorists to be polite all or most of the time.*
- *When asked what would make their journey safer and easier, most requested wider and smoother footpaths.*

b) Blayney Shire Council

In March 2012 the Blayney Road Safety officer conducted a Mobility Scooter Safety & Education Day at the Centrepont Sports & Leisure Centre. The target audience included all community members and members from groups such as Pensioners and Superannuants, Senior Citizens, Probus, Rotary, Inner Wheel, Red Cross, Health One and community organisations and groups catering to the needs of the disabled, frail or aged.

As a lead up to this event the Road Safety Officer conducted a session where some nominated councillors and senior staff of Blayney Shire Council, a representative from Youth Council and the Blayney Shire Access Committee completed a course of the Blayney township in mobility scooters/motorised wheelchairs. The aim of this exercise was to provide education on the use of motorised scooters and mobility aids and highlight the issues faced by mobility aid users as they manoeuvre existing infrastructure thus providing Councillors, staff and committee members a firsthand experience of where considerations may need to be given for future planning.

The issues identified from these activities Included:

- Lack of visibility, particularly at intersections
- Limited flexibility of users limiting sighting
- Poor access across pedestrian ramps
- Poor condition of footpath surfaces
- The steepness of some streets / footpaths

More information can be obtained by contacting the Blayney Road Safety Officer at Blayney Shire Council.

c) Parkes, Forbes and Lachlan Shire Councils

A joint project has been carried out by Parkes, Forbes and Lachlan Shire Councils over the past 18 months. The Executive Summary contained in the Draft Report titled "*Motorised Wheelchair (Mobility Scooter) Safety - the issues, the solutions*" project Prepared for Parkes, Forbes and Lachlan Shire Councils prepared by GTA Consultants summarises the project as:

The "Motorised Wheelchair (Mobility Scooter) Safety- the issues, the solutions" project is a pilot project implemented by Parkes, Forbes and Lachlan Shire Councils and funded by the Roads and Traffic Authority. This project aimed to explore the safety issues surrounding the increasing use of motorized wheelchairs (mobility scooters) and provide a framework that outlines how the Councils may respond to motorised wheelchair (mobility scooter) issues in terms of safer users, safer roads and safer vehicles.

One of the major outcomes of this study was to identify educational issues which would be of benefit to users. Section 2.6 of the report lists these issues as:

2.6 Educational Material

Safety guidelines for motorised wheelchairs (mobility scooters) can increase awareness and provide valuable information to users. As demonstrated in following sections, licensing for motorized wheelchairs (mobility scooters) is not required. Current motorised wheelchair (mobility scooter) safety guidelines fill part of this knowledge gap though these are prepared by a variety of sources: not-for-profit organisations with an ageing focus, motorist insurance companies, government transport departments and local governments. These guidelines include driver capabilities, safe operating procedures, a review of Australian Road Rules and maintenance information. Common educational material includes the following aspects:

Driver capabilities (often in the form of a self-assessment checklist)

Physical abilities:

- *Balance, endurance, co-ordination, strength and vision:*
 - *e.g. turning head 90 degrees to the left and right to check roads when crossing*
 - *e.g. can I keep my balance on rough surfaces*
 - *e.g. can I see pedestrians in my periphery vision.*

Mental Capabilities:

- *Perception, thought process, memory, feelings and judgement:*
 - *e.g. identifying steep grades that are unsafe*
 - *e.g. reacting quickly to pedestrians or traffic*
 - *e.g. operating vehicles safely when around other individuals.*

Road rule awareness:

- *e.g. if operating on the road do I know where I need to drive and passing procedures.*

Good habits and safe operating procedures

- *Plan the journey*
- *Know where you can go*
- *Prepare yourself:*
 - *Wear sunscreen and a hat*
 - *Be visible-wear bright colours*
 - *Make sure that rain covers do not impair driving*
 - *Check that any medication will not impair your ability to drive.*
- *Use basket/ racks to carry items rather than your lap*
- *Keep feet on the floor while in motion*
- *Check mirrors*
- *Lock seat*
- *Never make sharp turns at high speeds*
- *Never go up or down ramp at an angle*
- *Never stop on an incline or decline to dismount or rest*
- *When in a crowded area travel at the same speed as pedestrians*
- *Call out or use horn if approaching a pedestrian to let them know you are there*
- *Cross at pedestrian crossings or traffic signals*
- *Cross from footpath to footpath.*

Maintenance suggestions

- *Recharge battery nightly when used on a daily basis (do not recharge in room where sleeping)*
- *Check the tire pressure weekly*
- *Check the battery level weekly*
- *Service the motorised wheelchair (mobility scooter) annually.*

This report is comprehensive and deals with all aspects of the use of mobility scooters on local roads. It also contains a literature review and an analysis of available crash statistics.

At the time of preparing this submission this report had not been publically released. Access to the report is available by contacting the Road Safety & Injury Prevention Officer at Parkes, Forbes & Lachlan Shire Councils.

These Councils have also run Scooter Safety Seminars local communities during Senior's or Disability Week. The Seminars are free and are aimed at current mobility scooter users, potential mobility scooter users and their families and/or carers. Guest Speakers include; NSW Police, a local Occupational Therapist, a local mobility scooter retailer and the Road Safety Officer. Topics covered include; the road rules, rights and responsibilities, a health perspective, safety tips, insurance and maintenance. Over the past 10 years numerous workshops have been conducted across the Parkes, Forbes and Lachlan Shire Council areas.

Parkes Shire Council has conducted two Access Awareness Days in recent years. The events see the Access Committee (Council Staff (engineers and planners), Councillors, local community representatives and other stakeholders) make their way around the Parkes CBD

on wheelchairs, mobility scooters, motorized wheelchairs or with vision impairment goggles. The event highlights locations where there are access issues and council staff work on solutions.

Addressing the Terms of Reference

The remainder of this submission will refer mainly to the use of mobility scooters since these currently appear to be having the major impact on road safety. The following sections summarise the general views of member councils on the specific Terms of Reference.

a) The current status of non-registered motorised vehicles in road rules definitions and the extent of road safety problems related to their use;

Mobility scooters are currently classified as pedestrians under existing road rules. This creates difficulty in identifying all fatalities and serious injuries from accident statistics.

In addition, the fact that there is no system of registration for these vehicles means that there is no accurate measure of the number of this type of vehicle being used within the community. This is an important consideration if additional resources are to be provided to accommodate this type of vehicle.

b) The adequacy of data collection for injury and fatality rates arising from the use of nonregistered motorised vehicles;

As stated above mobility scooters are currently classified as pedestrians under existing road rules. This creates difficulty in identifying all fatalities and serious injuries from accident statistics. This shortcoming needs to be addressed so that adequate management of and planning for these vehicles can be carried out.

c) Vehicle standards requirements for nonregistered motorised vehicles, including vehicle design, engine capacity, mass and speed controls;

The Parkes et al. Report referred to earlier provides some very useful information on the various types of mobility scooter available together with their design uses. Difficulties arise when vehicles designed for indoor use are used within the outdoor street environment.

One of our regional council members reports:

My personal experiences have involved picking up elderly people from the gutter after they have rolled their scooters. The incidents have all involved the 3 wheel electric scooters toppling over as the person has tried to cross the road. The attempted crossings have occurred at VKC's, pedestrian laybacks and directly at the kerb & gutter. Rural Towns are full of uneven surfaces and sometimes have limited concrete paths. My opinion is that a stability standard needs to be applied, or simply the three wheeled version be removed from sale.

There is an obvious question about the need for some form of roll over protection for all classes of vehicle covered by the Terms of Reference.

d) The extent and effectiveness of education and the necessity for skills and competency training for users of nonregistered motorised vehicles, particularly in relation to safe use;

From all the information available to the Roads & Transport Directorate this is the single most important outcome of all research carried out by councils to date. Many users of

mobility scooters are unaware of the rules covering their operation and the limitations on these vehicles imposed by different environments.

e) Insurance implications of injuries and fatalities sustained and caused by nonregistered motorised vehicles;

The insurance implications of accidents resulting from the use of these vehicles is outside the experience of the Roads & Transport Directorate. Data needs to be obtained on the costs and benefits of insurance cover to allow an objective assessment to be made.

f) Initiatives taken by local Councils and other jurisdictions to certify, register and regulate the use of currently nonregistered motorised vehicles;

The section titled Local Government Activities above details some of the research and investigation that has been carried out by councils. This work has generally been initiated to identify issues and improve the safety for road users, pedestrians and Non-registered Motorised Vehicles.

Our initial view is that while implementation might be carried out by councils the certification, registration and regulation of these vehicles is one for consideration on a national basis with any introduction being carried out through the state road authorities. These are not matters to be considered on a council by council basis by the existing 500+ councils.

g) Any other related matters.

More detailed research needs to be carried out to determine how non-registered motorised vehicles should be integrated into our transport networks. Are they, indeed, pedestrians requiring that some of our shared paths need to be shared between bicycles, mobility scooters and pedestrians? To date Pedestrian Access and Mobility Plans (PANP) have not addressed this issue.

Is it more appropriate to consider them as bicycles in which case they should be planned for in Bike Plans? Again, this has not been the case in the past.

The Roads & Transport Directorate is of the view that Non-registered Motorised Vehicles, particularly mobility scooters will become more prevalent within ageing communities and that appropriate planning needs to occur now to ensure that these needs are met within the wider transport planning process.

Conclusions

1. The lack of satisfactory definitions for various types of Non-registered Motorised Vehicles needs to be redressed so that adequate data can be identified to assist in the future planning for these vehicles;
2. Information on demand and usage must be accumulated to ensure that appropriate decisions are made in relation to design, operation and insurance cover for Non-registered Motorised Vehicles.
3. Non-registered Motorised Vehicles, particularly mobility scooters will become more prevalent within ageing communities and as a result appropriate planning needs to occur now to ensure that these needs are met within the wider transport planning process.
4. Safety guidelines for motorised wheelchairs (mobility scooters) including driver capabilities, safe operating procedures, and the implications of the Australian Road

Rules should be developed on a national basis to increase awareness and provide valuable information to users.

5. An educational programme needs to be developed so that the users of motorized wheelchairs (mobility scooters) can be instructed in the use of their means of transportation in terms of safer users, safer roads and safer vehicles.

IPWEA (NSW) and the Roads & Transport Directorate appreciate this opportunity to have input into the Staysafe Committee inquiry into non-registered motorized vehicles and would value any opportunity to provide additional details arising from the above submission.

For further information in relation to the submission please do not hesitate to contact the undersigned on:

A handwritten signature in blue ink, appearing to read 'Savage', is positioned above the typed name.

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