

**Submission
No 70**

NON-REGISTERED MOTORISED VEHICLES

Organisation: City of Sydney

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Submission by the City of Sydney

Staysafe Committee

Inquiry into Non-registered Motorised Vehicles

April 2013

Introduction

The City of Sydney has made a number of submissions to Staysafe inquiries in recent years. The current Inquiry into Non-registered Motorised Vehicles will complement these inquiries and provide valuable information and feedback that will help us to develop programs to educate all road users with a goal of preventing and reducing trauma.

With over 850,000 people in Sydney on a typical weekday, pedestrians and vehicles compete for limited space. The City's *Sustainable Sydney 2030* vision has key objectives that relate to road safety issues, including giving greater priority to pedestrian and cycle movements and amenity in the City of Sydney by;

- Integrating pedestrian movement and cycling into transport planning,
- Managing the road space to encourage walking, cycling and the use of public transport,
- Giving pedestrians more priority,
- Reducing speed limits in central Sydney to improve safety and amenity, and
- Developing a liveable green network between activity hubs which will be a safe and attractive walking and cycling network across the City's streets, parks and open spaces.

Background

Cities and urban areas are environments where people of all ages and physical abilities can be expected at all times. It is important for cities to provide safety and amenity for people to move around in comfort and enjoyment.

Road safety is about crash prevention and therefore we should always consider what factors can be controlled either through legislation or behaviour change. Changes to legislation should only be made based on sound evidence that such changes will prevent or reduce road trauma and that the public benefit is greater than the societal or financial cost of regulation and associated enforcement.

Many international capital and major cities are embracing the concept that they are places for people. With that the responsibility for motor vehicles to deliver low-risk movement is biased towards drivers. Planning is based on enhancing movement between places by public transport and motor vehicles. Within the place greater

freedom of movement should be expected by people walking and cycling because it is safer, quieter and creates less harmful local pollution.

Safe System

The Roads and Maritime Services (RMS) and Centre for Road Safety (CRS) have adopted the *Safe System* approach to road safety. *Safe System* seeks to not penalise road users with death or serious injury when they make mistakes.

The key solutions to road trauma within the City of Sydney and particularly central Sydney are clearly seen as reducing unnecessary vehicle access, reducing vehicle speeds and improving pedestrian and bicycle movement within the city.

Many European states have adopted 30 km/h as the standard for residential and CBD areas. This is considered best practice. Speed limits may not always be complied with regardless of road design, however there is evidence that actual vehicle speeds are likely to be lower as a result of lowering the limits.

Electric motor assisted bicycles

The City of Sydney's *Cycle Strategy and Action Plan 2007-2017* sets out the City's program to accommodate an increase in bike riding.

No specific reference is made in the Strategy to electric motor assisted bicycles as they are treated as any other non-powered bicycle.

Since the release of the Strategy the City has seen the benefit in the use of electric bikes as range extenders for non-sports cyclists; boosters for load carrying bikes; longevity assistors for older people to continue cycling; and barrier eliminators for people living in hilly areas.

However, without RMS adopting a standard, the take up of electric bikes has been limited because there is market concern that bikes may become illegal, and also the bulk import of bikes has been limited, keeping prices high. However, if a standard is adopted the City expects a resultant increase in competition from suppliers with a resultant price decrease. This may well result in the European experience where so called "pedelecs" (pedal-electric bicycles) rapidly increase in market share.

Motorised wheelchairs / scooters

The intention of these vehicles is to physically replace lost mobility for affected individuals. These non-registered vehicles also give older people the opportunity to maintain their independence if they give up car use.

With an ageing and more obese population we expect this sector to increase.

Increasing the width of footpaths where physically possible is a key element in implementing the *Liveable Green Network* which will better cater for mobility scooters and motorised wheelchairs as well as enhancing pedestrian movement.

Personal mobility devices

The general promotion of Personal Mobility Devices (PMDs) is based on reducing the number of motor vehicles by providing an alternative form of transport, particularly to replace short trips.

The City believes that in the future Personal Mobility Devices could potentially complement cycling and walking as major methods of travel for sub-five kilometre trips. Self-balancing mechanisms in some PMDs are potentially useful for people with limited physical ability and most models take less space than mobility scooters.

PMDs could be suitable for use on some bike lanes and cycleways in the City Centre. However, as experience with shared pedestrian/cycle paths demonstrates, there is a phase-in period where mixed uses occur that requires significant levels of oversight and intervention to both educate all users about the changed state, but also to allow people to become comfortable with such changes.

However, unlike cycles, the current width of some of these devices would make mass use of them impractical for footpath use in many circumstances. This is a complex issue, because the benefits may be high for a small number of users, but the ease of use may make them attractive to a far greater number of people (if the cost comes down).

They are potentially suitable for trips up to 10km, though up to five kilometres is more realistic, and could significantly improve access to public transport if transport nodes accommodated storage of them. This would be an advantage in suburban areas where a PMD could be used to get to a station instead of a car, allowing commuters to have easier access to public transport rather than using a car for the complete journey. Storage of PMD's would be more cost effective than storage of cars. Being unregistered, they are also cheaper (though personal insurance rates for use are unknown).

PMDs are currently expensive, heavy and relatively complex. With future developments in technology this is likely to change. As a future mode the City would support a Government review of regulatory controls provided this enhances public transport use and active modes of transport.

Ideally PMDs, replacing motor cars, would be best used on existing roadways. To accommodate this without compromising safety speed limits would need to be

reduced to minimise the speed differential between different vehicle types. If used as a replacement for car travel parking should be easily accommodated using existing parking facilities.

There would be no advantage to the general populace in the City of Sydney if the use of personal mobility devices simply reduced the number of people walking or riding bikes rather than reducing car use. There would then be a greater competition for road space with other motor vehicles and possibly more crashes.

The PMD market is currently so immature that the likely market effects are impossible to predict with any accuracy. The primary concern with such cross-over vehicles is how to fit another mode within the constrained network safely without severely disadvantaging other network users.

Liveable Green Network

The Liveable Green Network is part of the City's plans to make the local government area as green, global and connected as possible. It aims to create a pedestrian and cycling network that connects people to the city and village centres as well as major transport and entertainment hubs, cultural precincts, parks and open spaces.

It is important residents, workers and visitors are able to walk and cycle around a city as large and diverse as Sydney.

Extensive cycling paths have already been put in place. More cycleway projects are currently being constructed or designed.

Separated cycleways also cater for people in powered wheelchairs or legal mobility devices such as motorised scooters.

Network features

Routes laid out for the Liveable Green Network will encourage cycling and walking. Improvements will include separated cycleways, lower speed limits, widened footpaths and improved crossings. Cycling routes will be clearly marked with easy-to-read maps and signage. More seats and bike parking will be built along major cycling paths.

Sustainable Sydney 2030 targets

Sustainable Sydney 2030 is a set of goals to improve the local area's sustainability by 2030. The City is encouraging 10 per cent of journeys in the local area to be made by bicycle and at least half to be made by walking by 2030.

Submission addressing the Terms of Reference

The City of Sydney has reviewed the Terms of Reference for the Inquiry. The City offers the following comments on the specific items identified in the Terms of Reference that relate to our concerns.

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

The *NSW Road Safety Strategy 2012-2021* does not identify what road safety problems are associated with the use of non-registered vehicles. Under *Safer vehicles* the Strategy states, “*Mobility scooters have become increasingly popular*” and under *Key focus for older road users*, states, “*Improve mobility scooter safety for older road users.*” These are the only references made to these vehicles.

The definition of a Mobility Scooter, in the *NSW Road Safety Strategy 2012-2021*, is a mobility aid equivalent to a wheelchair but configured like a motor scooter. For current **statistical** purposes in NSW, a mobility scooter is classified as a motor vehicle, not a pedestrian. This differs from the *NSW Road Rules 2008*, for which the term pedestrian includes;

- a person driving a motorised wheelchair that cannot travel at over 10 kilometres per hour (on level ground),
- a person in a non-motorised wheelchair,
- a person pushing a motorised or non-motorised wheelchair,
- a person in or on a wheeled recreational device or wheeled toy.

There are already rules that determine the maximum speed of mobility scooters (10 km/h) and who may use them (people with a disability).

The Roads and Maritime Services (RMS) publishes Vehicle Standards Information (VSI) on *Mopeds and power assisted bicycles* (VSI 27) and lists prohibited vehicles on its website.

Prohibited vehicles include Personal Mobility Devices such as the *Segway Human Transporter*, motorised foot scooters and motorised skateboards, all of which can only be used on private property away from roads and road related areas. The City has no records of any incidents involving these types of vehicle.

From what data is available we cannot identify any major road safety problems relating to the use of motorised wheelchairs, mobility scooters or prohibited vehicles. Based on anecdotal information we may consider that there could be an increase in collisions between mobility scooters and walking pedestrians on footpaths, or with

motor vehicles whilst travelling across or along a roadway if scooter numbers were to significantly increase.

A power-assisted pedal cycle is a cycle that is designed to be propelled primarily by human power and has one or more auxiliary propulsion motors attached that have a combined output of no more than 200 watts. This means that the rider must be able to pedal the cycle; the motor is for assistance only. A rider of a power-assisted pedal cycle does not have to hold a licence, however it is compulsory to wear an approved bicycle helmet and obey the same traffic laws as bicyclists.

The City prefers to separate bike riders from pedestrians where possible. The City's *Cycle Strategy and Action Plan 2007-2017* shows the intention to have a network of separated cycleways across the City's Local government Area. This network not only provides safe routes for bicycle riders, including power assisted bikes, but also allows mobility scooters and wheelchairs a more convenient accessible route.

Separation creates a smoother traffic flow for path users, reduces pedestrian anxiety and makes travel times quicker. However, it is recognised that traffic signal controls are made more complicated by separated lanes, particularly where the RMS does not allow cycle lanes and pedestrian crossings to operate simultaneously.

Greater support from state government agencies to increase facilities for bike riders is seen as a major contribution to prevent crashes involving motor assisted and all other bikes.

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

Crash data is collected by police and processed by the NSW Centre for Road Safety. It is distributed to local government twice yearly as raw data and some processed data sheets. The latest crash data is up to 31 December 2011. We understand that as the *CrashLink* program is further developed we will receive all crash data as soon as it is entered into the system. Currently we receive fatal crash data within 48 hours of the event.

The RMS *CrashLink Reporting System Data Manual* classifies vehicles by Traffic Unit Type. This covers the majority of vehicles. Vehicles covered in this submission are detailed below, with the classification type used by *CrashLink* and the number reported as involved in crashes between 2007 and 2011:

Motorised wheelchair – six crashes

Quad bike – no crashes

Mini bike – one crash

Moped / motorised pedal cycle – 10 crashes

Special Mobility Scooters – one crash

Total crashes involving all vehicles in this period are 9,851. Based on this data there are no measurable major crash issues relating to non-registered motor vehicles.

These crashes are those reported to the police and entered into the CrashLink system. It is believed that a majority of crashes are not reported in this way where there is no significant personal injury or property damage. Records of crashes occurring on private premises, shopping centres, stations, parks and open spaces and other places people have public access to are generally not recorded.

Use of ambulance and hospital admission data may provide more accurate information on crashes involving non-registered vehicles. Research in the past has identified some ethics issues with health services releasing their data.

A presentation by Scooters Australia to the Australian Competition and Consumer Commission (ACCC) Reference Group meeting on Scooter Safety September 2009 stated that older users of mobility scooters are likely to be safer riding a scooter than driving a car.

The City believes there is an opportunity to improve the density of data collection by the implementation of a smart-phone application that allows both pedestrians and cyclists/scooter operators to record incidents, categorised by severity with a simple radio button selection, noting whether emergency services were called, rating the personal impact and an allocation of fault (in the view of the recorder). While this data would not be statistically sound, it would provide a far more open opportunity to understand perceptions of safety. It is more often perceptions that lead to calls for regulatory change than actual incidents. Some of the data would be verifiable, and because it would be an “opt-in” system there is no privacy issue. Using photographic and geographic positioning from telephones would also enable cross-matching of reports. Such a system is relatively cheap to develop (<\$15 000), and depending on who received it and managed it, is unlikely to incur significant administrative costs (maximum one FTE at circa \$70 000 per annum to manage, report and analyse the data across the entire metro area).

Crash data reporting and collection has been discussed in previous Staysafe inquiries and reports.

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

This section comes under the jurisdiction of the RMS and the Federal Department of Transport and Regional Services who determine the Australian Design Rules (ADRs) that govern the safety of vehicles.

The following is from information sourced from the RMS and ADRs:

All devices with a motor that meet national design and safety standards must be registered for use on a road or road-related area unless they are specifically exempt.

Motor assisted pedal cycles with electric or petrol engines are exempt from registration, provided the maximum engine output power does not exceed 200 watts.

These vehicles must have been designed as a bicycle - that is, to be propelled by human power, with the motor attached as a supplementary aid only. Riders must follow the same road rules as for pedal cycles without motors, including wearing a helmet (*RMS web pages, <http://www.rta.nsw.gov.au/registration/unregisteredvehicles/scootersminibikes.html>).*

Motorised wheelchairs and other types of disabled persons' conveyances are exempt from registration and operators of these vehicles must comply with the same road rules as pedestrians. This is provided:

- They are used solely for the conveyance of a person with a disability that substantially impairs the person's mobility.
- They are not capable of travelling at more than 10km/h.

Some vehicles are prohibited and may only be used on private property as it is an offence to ride/drive an unregistered vehicle. This includes the following vehicles (irrespective of the power output of the motor) which are banned from use on roads or in public areas:

- Motorised foot scooters (with or without a seat) – electric/petrol engine
- Mini bikes or monkey bikes
- Motorised human transporters such as the WheelMan, or SEGWAY
- Motorised skateboards – electric/petrol engine

Basically, aside from power assisted bicycles, currently there are no other legal non-registered vehicles available for use by people without a disability in public areas.

If PMD's are to become popular they could pose a risk if unregulated but allowed. As with motor-vehicles there may well be a "power war" with increasing speed capability. Many PMD's are relatively harmless at low speed, even where a collision with a pedestrian occurs. However, as speed increases the effect of mass follows and the results could be quite severe. Further, the ability to maneuver safely at low speed to avoid a collision becomes extremely difficult to control at higher speeds. The arc of a curve increases proportional to the speed at which it commences, so the possibility of colliding with greater numbers of people at greater force becomes more likely.

At the very least, adopting a standard maximum weight and speed that encompasses reasonable PMD's without crimping market innovation or competitiveness would assist in enabling the suppliers to know what is able to be legally considered and imported for sale.

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

Motorised scooters

The National Roads and Motorists' Association (NRMA) have produced a booklet, "*Scooter Safe – User guide*" which has been in circulation for some years. These are distributed by suppliers of mobility scooters and council libraries and community centres.

Some suppliers of mobility devices provide training in the use of motorised mobility scooters. Aidacare is an example of a key supplier of healthcare equipment including sales and rentals of motorised wheelchairs and mobility scooters. This company is retained by the RMS to assist in local safety programs.

The City of Sydney proposes to run Motorised Scooter Workshops as part of the City's over 55s program. These workshops include a presentation compiled by the RMS. The presentations will be delivered by road safety officers or specialists approved and engaged by the RMS.

It covers:

- Road Rules
- Safety of other pedestrians
- General skills needed
- Rules relating to and the effects of alcohol and other drugs
- Safe travel tips

- Use of safety features, such as flags, lights and mirrors.

The City's program will offer some practical elements provided by RMS approved industry specialists.

With so few incidents being recorded it is difficult to assess the value of any current education program or resources. It is worth noting, however, that the take-up rate of training versus the sale of devices suggest few people require training to operate without incident. Whether they operate without risk is another issue. However, the sheer size of scooters makes them highly visible, and it appears the greatest threat to safety is the relative instability of short wheelbase models.

Power assisted bicycles – City of Sydney training

The City of Sydney provides free low-risk bike riding courses at the Sydney Park Cycle Training Centre. A number of new riders are taking the course on power assisted bikes. Our professional instructors do not consider a special program is needed for this type of bike and they are mixed in with ordinary pedal cycle courses. As they assist the rider their advantage or benefit is that they allow less physically able riders to keep up with stronger riders on traditional bikes.

The City's training courses have received a lot of positive feedback over the three and a half years they have been operating.

Our experience indicates that power assisted bikes are usually ridden by people who are not competitive or riding for fitness. There is no evidence to suggest that they represent a higher risk of being involved in a crash than other types of bicycle.

The City of Sydney has been operating a program, *StreetShare*, for around two years that aims to inform all bike riders of their responsibility to keep to the road rules and behave appropriately. There has been specific emphasis on riders on Shared Paths.

e) Insurance implications of injuries and fatalities sustained and caused by non-registered motorised vehicles;

Insurance implications for local government are limited to whether or not Council has failed in its duty of care. The onus is on the individual road user, including those on a power-assisted bicycle or mobility scooter, to have appropriate insurance cover.

However, it is not entirely clear to many users how to obtain the appropriate insurance cover, nor is it clear that people with a disability could reasonably afford private insurance cover.

A full investigation by Transport for NSW, with assistance from the Motor Accidents Authority (MAA), on the insurance liability and coverage options for people operating mobility scooters, and potential issues for people using PMD's is recommended. It is

quite possible that the insurance industry would rate use of a PMD as a risky undertaking, and not provide cover. This is particularly true if there is no regulatory standard covering use, power, speed or weight. It is noted that cyclists generally have to seek third party insurance while cycling for third party protection if required.

f) Initiatives taken by local councils and other jurisdictions to certify, register and regulate the use of currently non-registered motorised vehicles;

Registration and licensing of vehicles is the responsibility of state government. Local government may be able to prohibit the use of vehicles within their property but cannot override rules relating to prohibited vehicles such as Segways and powered skateboards.

Currently there is no identifiable need to further regulate the use of mobility scooters or motor assisted bicycles that comply with the current regulations.

g) Any other related matters.

There are complex equity issues with non-registered vehicles, including bicycles, that make regulation difficult. Children are able to operate these vehicles without legal implication, particularly below the age of 10 where they have no legal responsibility. Further, below the age of 13 they can operate unimpeded on footpaths. However, on the 13th birthday they are pushed into the traffic with no formal requirement for instruction or competence.

Adults can be penalised, though the range of offences is limited largely to riding in a dangerous manner. Speed limits are as they apply to motor vehicles, and of course, there is no requirement to have a speedometer, so knowing whether or not you are exceeding a speed limit is beyond most people to judge accurately.

The City has never called for registration or speed limits to apply to PMD's or cycles. It does support mass limits and speed restrictors on PMD's. PMD's should also have minimum reflectivity, a requirement for lights (either on the person or the vehicle) and a minimum braking capacity. Like bicycles, it believes all riders and PMD users should be able to choose, based on their self-assessment of safety, whether to ride on a footpath or a roadway.

The regulation of riding cycles and PMD's is complex, because deciding what constitutes safe riding is for a large part self-determined. Whereas a confident and skilled rider may navigate safely at 30 km/h, an inexperienced rider may be safe at only 15 km/h. A pedestrian being passed by a PMD or cyclist at either speed may feel threatened or entirely comfortable. The subjectivity of the situation and the perceptions makes it extremely complex.

Recommendations:

The City's recommendations for consideration by the Staysafe Committee are consistent with those made to previous inquiries, including the *Inquiry into Pedestrian Safety 2009*. These recommendations generally support the movement of pedestrians and bike riders but would also enhance the safety of people in motorised wheelchairs, mobility scooters and power assisted bikes.

The City's recommendations relating to this inquiry are:

- A consistent regime of 40km/h speed limits, or lower, is introduced for central Sydney and high density urban areas. Lower speed limits will mean reduced speed differentials between different types of vehicle. This improves safety.
- Criteria for vehicle/pedestrian/cyclist Shared Zones should be revised to include consideration of the specific needs of any particular Local Government Area. Conflict between road user types can be reduced through the general improvement of pedestrian facilities such as low-speed Shared Zones and wider footpaths.
- Increasing the time for pedestrians to cross at traffic lights can reduce the potential for collisions with pedestrians and other vehicles including those not requiring registration.
- The City does not support any measures that would restrict the use of power-assisted bicycles or mobility scooters, but supports a standard maximum power output regulation.
- Implement a program to improve crash data collection that enables all agencies to act quickly and efficiently to local crash trends. Crash data also needs to be definitive, not just identifying fatal, injury and damage only as reported to police, but to include degrees of injuries sustained. Data collection should also encourage reporting and recording of incidents that affect perceptions relating to risks involved in moving around.
- Any proposed regulation of motorised bicycles, PMDs and other currently non-registered motor vehicles should be based on standards relating to weight and speed, maneuverability, braking and visibility. They should be

clearly defined so as to encourage the sale and use of such vehicles as alternatives to motor cars and their derivatives.

- Transport for NSW together with the Motor Accidents Authority should fully investigate insurance cover for the use of PMDs.

Conclusion

The City of Sydney will continue to implement the programs for Sustainable Sydney 2030, concentrating on improving amenity and safety for people walking and people who choose to ride a bike. These represent active travel modes that have no or extremely little negative effect on the environment and have a positive effect on health, through basic exercise.

Electric motor assisted bicycles allow people who would not normally consider a bicycle the opportunity to ride in areas where there are steep inclines. It also enables people who might have difficulty riding a purely pedal powered bicycle to ride as a preferred choice of travel mode, or casual cyclists to increase their comfortable trip distance.

Mobility scooters and motorised wheelchairs provide people with disabilities the opportunity to be mobile and give them greater access to the City and should largely be exempt from regulation that might prevent their customisation to the particular disability of the user.

A key area of concern is that of the use of any novel powered vehicle where it may conflict with pedestrians and cyclists. There is potential for currently prohibited Personal Mobility Devices in the choice of travel modes provided they are required to comply with standards that render them safe to mix with pedestrian and cycle traffic, particularly related to speed, visibility and braking ability.

References:

Mobility Scooter Safety, Presented by Scooters Australia to the ACCC Reference Group meeting on Scooter Safety, September 17th, 2009 in Canberra

Scooter Safe – User guide, The National Roads and Motorists' Association (NRMA) and Council on the Ageing (ACT) Inc., 2002.

Cycle Strategy and Action Plan 2007-2017, City of Sydney, 2007.

Inquiry into Pedestrian Safety 2009, Staysafe, Sydney 2009 – submission from the City of Sydney.

Mobility scooter usage and safety survey report, NRMA; ACCC; Choice; EnableNSW & Flinders University, 2012.