PMD Project Frequently Asked Questions

Personal Mobility Devices (PMDs)

Does PMD mean Segway?

PMDs are motor-assisted, low-speed, lightweight devices with one, two, three or four wheels. They are designed to transport one person on footpaths, shared use paths, cycleways and trails.

Segway is a brand of PMD. It was a pioneer of the PMD market and extensive studies have been conducted about it all over the world. However, Segways have not been included in this trial.

Where can PMDs be used? Are they legal?

PMDs are a form of motor vehicle and are subject to the same legislation as motor vehicles.

In NSW, motor vehicles must be registered for use on a road or road-related area unless it is specifically exempt (for example, motorised wheelchairs and power assisted pedal cycles are exempt).

In addition, NSW and national legislation requires motor vehicles to comply with specified safety standards for things like headlights and brakes.

However, currently PMDs do not meet the minimum Australian design standards for safety and so cannot be registered.

This means they must not be used on roads or in any public areas such as footpaths, car parks and parks.

Special allowances have been made by the NSW State Government in order for this trial to occur legally on the Macquarie University grounds.

Can you ride PMDs on the road?

No. The same rules and legislation described above applies to all PMDs and Segways.

Is it safe to use PMDs on the footpath?

The purpose of this trial is to see if it is safe to operate PMDs on a footpath.

It is important to stress that the trial will take place in an enclosed and controlled environment at Macquarie University and all volunteers will be trained in using PMDs.

The trial will operate under strict instructions and will closely monitor PMD/pedestrian interaction.

Most of the footpaths used in the trial will be monitored by CCTV.

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Hasn't the State Government just announced a Staysafe inquiry into PMDs, Segways and mobility scooters?

A NSW Parliamentary inquiry, conducted by the Staysafe (Road Safety) Committee, is currently underway. This inquiry commenced in February 2013 to review and report on the increasing use of non-registered motorised vehicles, such as mobility scooters, Segways and electric bicycles on public roads and footpaths and their impact on road safety.

Is this trial part of the inquiry?

No. This trial is independent of the Staysafe inquiry.

The trial is a practical application of certain PMDs in a controlled site, specifically looking at:

- their usage patterns by a range of users
- how they interact with pedestrians and other users of the shared paths.

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The PMD Project

How long will the trial last?

The trial will run from April – June 2013.

What kind of PMDs will be used in the trial?

Two kinds of PMDs will be used in the trial:

- A pair of two-wheeled devices
- A pair of three-wheeled devices.

The two models were selected on criteria previously developed by the trial team.

What were the selection criteria?

The criteria for PMD selection for this trial were focused on the safety of the PMD users and other users of the shared paths.

Criteria were related to weight, width, speed limit, stability, good manoeuvrability and advanced technological features for a controlled, intuitive and safe riding experience.

Segway and other devices (eg YikeBike) have not been included in this trial as either they do not comply with the selection criteria or they were considered unsafe under the specific rules of this trial.

Who will be using the PMDs during the trial?

Participants will be consenting volunteers from Macquarie University staff. They will be using the PMDs during their work day, on shared user paths within the campus.

Each participant will trial a selected device for one week.

Users will be required to undertake a comprehensive education program before enrolling in the trial.

How fast can the PMDs go?

During the trial, devices will be speed limited (hard wired) to a maximum speed of 10kmh. This is the same speed limit as for motorised wheelchairs.

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What measures are being taken to ensure the safety of pedestrians and others during the trial?

Pedestrians will always have right of way on the footpath.

During the trial the PMD users must keep to the left on footpaths and give way to pedestrians.

When approaching a pedestrian from behind, the riders will make a warning sound. When approaching a pedestrian from the front, they will stay to the left and slow down.

During times of heavily congested pedestrian traffic, PMD users will be restricted to moving at walking speed.

What happens if a collision/accident occurs?

All incidents, including near-misses or identified hazards will be reported via online forms in accordance with Macquarie University procedures.

These incidents will also be reported the trial's administrator. The findings will be used to help develop subsequent phases of the trial.

The participants in the trial are University employees and covered under University's workers compensation insurance. The MU General and Product Liability Protection has been extended to include the trial of PMDs on campus.

If the trial is being run on private roads in the University, how does this compare to conditions on public roads? What's the point?

The aim of the trial is to use the controlled space of the University campus to document how people interact with PMDs and how the PMDs perform on roads and footpaths.

Results from the trial will be used to:

- develop a further trial across the Macquarie Park precinct
- develop guidelines for implementation
- build new knowledge of the complexities of urban travel.

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What do you expect to get out of the trial?

1. Use a controlled site to evaluate the usage patterns of PMDs by a range of users and assess the implications.
2. Use the results to help develop licensing and registration policy for PMD use in NSW and Australia.
3. Produce implementation guidelines informed by the results of the trial to be used by Australian Local Governments willing to implement the use of PMDs.
4. Provide a methodological and collaborative foundation for a Linkage project that extends across the Macquarie Park precinct. (This would represent phase two of the trial.)
5. Provide a scientific basis for development of sustainable transport solutions.

Who are the partners in this project?

1. Macquarie University

The following investigators will conduct the trail on campus and evaluate the results:

Robyn Dowling, Macquarie University Department of Environment and Geography

Julia Irwin, Ian Faulks and Eugene Chekaluk, Macquarie University Department of Psychology.

2. City of Ryde

The City of Ryde initiated this project in partnership with Macquarie University and has sought support from State and Federal governments to approve the trial and to consider the trial results in future social and infrastructure planning.

The project is managed according to the City of Ryde's project management model.

3. Transport for NSW and the Commonwealth Department of Infrastructure and Transport

These two agencies are supporting this project to ascertain if PMDs are a valid alternative means of transport.

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Community Benefit

Many of our footpaths are in bad repair or are too narrow. Why not fix these up before you undertake the trial? What are the plans to improve our footpaths?

The PMD trial is specifically to ascertain how PMDs will work with existing infrastructure. There are no plans to modify existing infrastructure to accommodate PMDs.

The trial will not affect any of the Council's plans for footpath maintenance and repair. The Council's asset management and maintenance processes will proceed as usual.

Any decision on footpath maintenance or repair will continue to be informed solely by considerations of pedestrian safety and convenience.

How will the trial benefit the community?

This trial will investigate if PMDs are a valid and safe solution for easing traffic congestion in the Ryde Local Government Area, and potentially in other areas across Sydney and NSW.

The City of Ryde is keen to ascertain if PMDs can provide a safe and convenient option for a person to travel short distances (up to 5km) quickly and flexibly.

PMDs could potentially make it easier to access public transport, community facilities and local services. They may also have potential to reduce transportation costs both for individuals and for the community.

How much has this cost Council?

The project is a collaborative research project between City of Ryde and Macquarie University under the Macquarie Ryde Futures Partnership and it is funded through the Enterprise Partnership Scheme.

The Council's contribution is $40,000 in cash as well as the salary of a full-time project officer and senior staff time in project governance.

Macquarie University has matched this contribution both financially and in kind and Transport for NSW has also provided significant in-kind investment towards successful delivery of the trial.

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What's the benefit to City of Ryde?

The project will contribute to the development of sustainable transport solutions in the Ryde Local Government Area generally, and Macquarie Park in particular. This locality is badly affected by high volumes of vehicular traffic, congestion, and poor accessibility to the peripheral parts of the area, including parts of the Macquarie University campus.

PMDs may be part of a solution to help ease congestion by reducing the level of car usage for short-distance local trips. They may also assist to increase public transport usage by improving access to rail stations and bus stops.

PMDs may also be a viable transport option for those who don't drive a car.

By replacing car trips, PMDs can help reduce air and noise pollution.

PMDs may reduce transportation costs to individuals, the Council and the community.

Changes to physical infrastructure are not required to accommodate PMDs, and they may also contribute to extending the life of the City's assets such as roads and footpaths.