ACRS Submission to Inquiry into the Safety, Regulation and Penalties Associated with the Use of e-Rideables

About the Australasian College of Road Safety

The Australasian College of Road Safety was established in 1988 and is the region's peak organisation for road safety professionals and members of the public who are focused on saving lives and serious injuries on our roads.

The College Patron is Her Excellency the Honourable Sam Mostyn AC, Governor-General of the Commonwealth of Australia.

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Introduction

The Australasian College of Road Safety is the region's peak membership association for road safety with a vision of eliminating death and serious injury on the road. Our members include experts from all areas of road safety including policy makers, health and transport professionals, academics, community organisations, researchers, federal, state and local government agencies, private companies and members of the public. The purpose of the College is to support our members in their efforts to eliminate serious road trauma through knowledge sharing, professional development, networking and advocacy. Our objectives include the promotion of road safety as a critical organisational objective within government, business and the community; the promotion and advocacy of policies and practices that support harm elimination; the improvement of relative safety outcomes for vulnerable demographic and user groups within the community; the promotion of post-crash policies and practices; and the promotion of a collegiate climate amongst all those with responsibilities for and working in road safety.

The College believes that we should prevent all fatal and serious injuries on our roads; the road traffic system must be made safe for all road users; system designers should aim to prevent human error and mitigate its consequences; life and health are not exchangeable for other benefits in society; and that all College policy positions must be evidence based.

ACRS response to the Terms of Reference

a) The regulatory framework governing 'for hire' eRideable devices and current compliance of existing regulations

When referring to 'for hire' eRideables, most of these devices will be eScooters. Regulations for the use of 'hire' devices have the same requirements as private use eRideables.

The current eRideables regulations in Western Australia came into effect on 4 December 2021 based on Australian national model rules incorporated into the Australian Road Rules, specifying size/weight restrictions and speed limits for eRideable devices, and minimum age and helmet requirements for riders. On public infrastructure, eRiders must be over 16 (unless the device is speed restricted to 10 km/h and a power of not more than 200 Watts); must wear a helmet and must not carry a passenger. Speed must be restricted to no more than 25 km/h on roads (and only permitted on 50 km/h undivided local roads), 25 km/h on bicycle and shared paths, and 10 km/h on footpaths.(1, 2)

The current legislative, regulatory and operating environments do not sufficiently protect users of these devices or other road users, most notably people walking. Although 'for hire' devices can have measures to enforce road rule requirements, such as speed limits, geographical prohibited areas, and be of a size and power that meet classification requirements, other requirements of the Road Traffic Code are not as easy to automatically apply.

There is no requirement for riders who hire an eScooter to prove that they are within the drink drive limit and there is nothing to prevent more than one person riding the eScooter at the same time, or that the rider is wearing a helmet. There is the potential to improve the requirements of 'for hire' eRideables to make it more difficult to not comply with the Road Traffic Code requirements.

There are many factors to consider, and the potential for having better compliance with existing Road Traffic Code regulations is just one of the changes required to improve outcomes for riders and other road users. People walking with vision impairments are especially concerned with the use of eRideables due to their speed and lack of noise, and a review in WA has demonstrated that pedestrians feel unsafe using paths due to experiences of near-misses or inappropriate riding from eRideable users.(3)

Research undertaken in Western Australia has demonstrated that 'for hire' or 'shared' device riders are more likely to engage in risky behaviours and four times more likely to not wear a helmet compared to private device riders.(1) Enforcement and improved compliance are needed for hire eRideables.

Existing Road Traffic Code rules that can be better enforced with the use of a hire eScooter;

- Age – it can be easier to enforce the requirement to be 16 years old if an account or credit card is needed
- Speed – the maximum speed of the eScooter can be limited and geofenced to certain areas for different limits
- Location – the location of the eScooter can be better controlled and prevent use in areas not deemed appropriate
- Vehicle classification – compliance with design rules is easier to enforce as private individuals are not purchasing the device.

However, other rules are not able to be better enforced with 'for hire' eScooters currently;

- Helmet use – even if a helmet is available on each device there is no apparent automatic check by the device to see if the rider is using a helmet
- Multiple riders on a device – more than one person can ride on the device
- Drunk rider – there is no ability for the device to detect and prevent use by a person who is over the drink drive limit
- Mobile phone use – people will have to use their mobile phone to hire the device and there is nothing to prevent those riders from using their mobile phone whilst riding
- Use on roads that are not within the required definition, ie have a speed limit greater than 50 km/h or a centre dividing line or device.

Crash data with regards the use of 'for hire' devices compared to private devices are not available as that data are not currently collected. It would be beneficial if these data were collected.

b) The usage and policing of eRidables in entertainment precincts and other highly used pedestrian areas

A high profile incident occurred in Perth at the end of May that resulted in fatal injuries to a pedestrian after a collision with an eRideable.(4) The rider of the eRideable was allegedly under the influence of alcohol and carrying a passenger at the time of the crash - behaviours that are already illegal under the Road Traffic Code 2000. Greater enforcement is needed but there are competing demands for police resources. There is opportunity cost in taking police resources away from other enforcement such as highway speed and alcohol, to monitor eRideables on paths and in some entertainment areas, pedestrian behaviour that may be a result of alcohol. It is best to design a system where enforcement is part of the solution but not the only solution.

Operators of e-mobility fleets should geo-fence speed control in areas of high pedestrian traffic, and switch devices off if double riding and/or alcohol use is detected.

c) Compliance and classification of devices, including illegal modifications and importation

Despite legislation that describes and regulates the classification of eRideables,(2) it is still possible to buy eRideables that do not conform to these regulations. As these devices can be purchased in shops, or online, members of the public are either unaware that the device is not legal to be used on roads in Western Australia or choose to ignore this knowledge and ride the devices anyway. Better education and publicity of legal devices, especially for sellers of eRideables and parents, may be a beneficial way to improve knowledge and compliance.

European countries such as The Netherlands, and to a lesser extent Germany, have rules that require eScooters to be registered to obtain a Vehicle Identification Number (VIN).(5) The devices do not need a number plate but simply a VIN that can be used to track which devices are compliant or modified illegally. In Germany, eScooters must be covered by insurance with the requirement for an insurance sticker to be applied to the device which lasts for 12 months.(5) The insurance covers third-parties in the event of a crash and damage being caused by the rider of the eScooter.

Tampering should be prohibited by legislation for e-mobility devices. This also requires importation legislation to be updated to ensure that devices are built and imported into Australia with anti-tampering devices installed directly from the factory to minimise (and ideally negate) the ability of end users to tamper with devices.

d) Injuries as well as insurance claims related to eRideables including: frequency, severity, location and time of day

Data for crashes involving eRideables are collected through the Road Safety Commission and published through both Main Roads and other government agencies. So far this year there have been 5 fatal crashes for riders of eRideables and separately 1 pedestrian has been killed and other injuries caused by eRideables. The trend for injury and crashes appears to be getting worse with data supplied by Main Roads for an ACRS workshop on the 10 July 2025 demonstrating 5 riders having been killed in the first half of 2025 compared to 2 riders in the whole of 2024 and 1 rider in 2023. (WA Department of Main Roads, personal communication, 10 July 2025)

Data from Royal Perth Hospital published back in July 2023 demonstrated that injuries and the severity of injuries are increasing, with 2 hospital admissions in 2017 and 33 in 2022.(6) Legislation to allow the use of eRideables was introduced in 2022. EScooter riders accounted for half of the hospital admissions with eSkateboards and eBicycles making up an equal number of the remaining admissions. Non-helmet use was recorded in 54% of admissions and 39% of admissions involved alcohol and/or drugs.

E-Rideables and in particular eScooters, are significantly different from pedal cycles and e-bikes and this results in different risk and trauma outcomes. This is influenced by their smaller wheels, electric power that can be fully controlled by a throttle and the higher and further forward position of the rider's centre of gravity.

The European Transport Safety Council (ETSC) found that the design of eScooters places the rider at risk of falls and head injury because 'loss of control when navigating defects or changes in surface level is more likely at higher speeds and results in more severe head injuries' and that 'surface level defects caused half of the falls in a study of e-scooter casualties'.(7)

Although greater enforcement will be helpful, clarification of the road rules will also be beneficial. At present where riders can legally use their device is not clear to all users, such as the road must have a speed limit of 50 km/h or less and have no dividing line or device. They can be ridden on these streets if the speed limit if 50km/h and there is a bicycle lane. They can also be ridden on roads with a separated cycle facility. The placement of dividing lines or devices is not consistent on roads, and this is often not a good gauge of safety. Speed limits for devices may also cause confusion as footpaths have a different speed limit to shared paths. It is not clear how a footpath and a shared path is defined for road users. Confusion for users can therefore mean they travel at a speed higher than allowed or intended.

E-Scooters are likely to pose more risk to pedestrians than bicycles and face similar risks to bicycles on roads. On low volume streets there should be more focus on implementing lower speed limits (such as 30-40km/h) to create a safer environment for shared use and less likelihood that eRideables will be sharing footpaths with people walking.

e) Benefits and opportunities created by eRideables for urban mobility and active transport

The potential for eRideables to contribute to sustainability, accessibility and social inclusion was demonstrated in a recent research report in June 2025 from University of Melbourne and University of Birmingham in the UK, which found that 'e-rideables have the potential to generate significant benefits for transport systems, not only for sustainability, but also accessibility and social inclusion'.(8) There are various asserted benefits of e-mobility devices, including greater mobility choices, reduced traffic congestion environmental benefits and for some devices (such as e-bikes), health and fitness benefits.(9)

The potential benefits of less car use, with associated positive externalities such as improved health (due to reductions in noise and air pollution), social interaction and potentially road safety need to be realised without creating new and extensive road safety issues. 'Last kilometre' connectivity can be improved with the use of eRideables and help remove the negative externalities that car dependency for even very short journeys brings.

However, e-mobility devices (excluding e-bikes that still require pedalling), while presented as active transport options and solutions for 'last-kilometre' travel, do not require any physical activity or action from the rider to travel. Also, the benefits of e-mobility devices in terms of reducing car use have been shown to be limited as they tend to more often replace walking or public transport.(10, 11)

Conclusion and Recommendations

The ACRS appreciates the opportunity to make this submission and contribute to improving community safety.

We are particularly keen to highlight that:

- Transport and mobility plans need to be integrated to promote a wide range of transport and mobility options;
- Commitments to reduce road trauma require legislative and regulatory measures that enable and provide the safe use of eRideable devices for all road users, including device users, pedestrians and other road users; and
- ACRS supports continued research into safety issues facing all eRideable options including eScooters and eBikes. Nationally consistent definitions and data would be a significant enabler of this research.

Please do not hesitate to contact us should you need any further information.

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References

1. Roberts P, Yan A, Hasan R. Risky behaviour and regulation compliance in eRiders and cyclists in metropolitan Perth Western Australia. Transportation Research Part F: Traffic Psychology and Behaviour. 2025;114:513-34.
2. Road Safety Commission. eRideables: Government of Western Australia; 2025 [updated 21 January 2025; cited 2025 20 July]. Available from: https://www.wa.gov.au/organisation/road-safety-commission/erideables.
3. WA Road Safety Commission. Review of the eRideable Road Rules. https://www.wa.gov.au/system/files/2025-05/rsc433_erideable_report_may_2025.pdf: Western Australia Government; 2025.
4. Ho C. Perth man Thanh Phan dies after being hit by e-scooter in alleged drunken crash https://www.abc.net.au/news/2025-06-03/thanh-phan-dies-after-being-hit-by-e-scooter-in-perth-cbd/105370284. ABC News. 2025 3 June.
5. European Consumer Centre Germany. Country overview: E-scooter regulations in Europe: ECC-Net; 2025 [updated 1 April 2025; cited 2025 20 July]. Available from: https://www.evz.de/en/travelling-motor-vehicles/e-mobility/two-wheelers/e-scooter-regulations.html#:~:text=The%20use%20of%20electric%20scooters%20is%20regulated%20by%20Danish%20law.&text=Children%20and%20young%20people%20under,not%20allowed%20on%20the%20roads.
6. East Metropolitan Health Service. Admissions to Royal Perth Hospital from E-rideable injuries. https://www.injurymatters.org.au/wp-content/uploads/2023/08/RoyalPerthHospital_AdmissionsToRPHFromERideableInjuries.pdf: Government of Western Australia; 2023.
7. European Transport Safety Council, Parliamentary Advisory Council for Transport Safety. Recommendations on Safety of E-Scooters. https://etsc.eu/recommendations-on-safety-of-e-scooters/: ETSC; 2023.
8. Curtis C, Ma X, Reardon L, Legacy C, Stone J. Micro-mobility: A Policy Vacuum in Australia. Urban Policy and Research. 2025:1-18.
9. National Transport Commission. Barriers to the safe use of personal mobility devices, Decision Regulation Impact Statement. https://www.ntc.gov.au/sites/default/files/assets/files/NTC-Decision-RIS-PMDs.pdf: NTC; 2020.
10. Sucha M, Drimlova E, Recka K, Haworth N, Karlsen K, Fyhri A, et al. E-scooter riders and pedestrians: Attitudes and interactions in five countries. Heliyon. 2023;9(4):e15449.
11. Christchurch City Council. 12. E-Scooter Permit Recommendations 19/155248 Paper tabled at Council on 28 February 2019. https://ccc.govt.nz/assets/Documents/Consents-and-Licences/business-licences-and-consents/public-spaces/Council-E-scooter-Permit-Recommendations-28-February-2019.pdf: Christchurch City Council; 2019.