

**Submission
No 196**

INQUIRY INTO USE OF E-SCOOTERS, E-BIKES AND RELATED MOBILITY OPTIONS

Organisation: Vision Australia

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Vision Australia Submission: Inquiry into the use of e-scooters, e-bikes and related mobility options

Submission to: NSW Legislative Council Portfolio Committee No. 6 – Transport and the Arts

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Introduction

Vision Australia is making a submission to the Inquiry into the use of e-scooters, e-bikes and related mobility options (**the Inquiry**) to express our support for innovative transport solutions, but also to express our very serious concerns about the extreme safety and wellbeing impact on the blind and low vision community if these devices are allowed to proliferate unregulated, and without accompanying mechanisms that keep pedestrians safe.

Throughout the submission we generally use the word “e-scooters” as a collective, referring to e-scooters, e-bikes and related mobility devices, unless noted otherwise. They all present similar safety and wellbeing risks to our community and must therefore be considered as a group.

In preparing this submission we are mindful of the relevance of the Final Report of the Royal Commission into Violence, Abuse, Neglect and Exploitation of People with Disability. The report articulates an inspiring vision of an Australia that is truly inclusive of people with disability:

“a future where people with disability live free from violence, abuse, neglect and exploitation; human rights are protected; and individuals live with dignity, equality and respect, can take risks, and develop and fulfil their potential.”

Fundamental to the realisation of this vision is the incorporation into all areas of society of a positive duty to eliminate discrimination. The Commission explains:

“Achieving substantive equality requires more than making adjustments for one person. Positive action is required to remove systemic barriers. It means shifting the focus from a reactive model to one of preventing and eliminating systemic barriers for people with disability more broadly.”

While the Commission does not specifically discuss public transport in general or pedestrian safety in particular, there can be no question that transport that allows all pedestrians to move safely and confidently around the community is integral to the operation of a society such as Australia that values inclusion of people with a disability in all aspects of life. As such, governments at all levels and transport regulators must play their part in creating a more accessible, equal and inclusive society. They must be seen, and see themselves, as being impelled by a positive duty to remove existing systemic barriers and prevent new barriers from arising – a duty that must encompass every aspect of the way our transport regulation and infrastructure operate.

Regulators of new or emerging transport technologies such as e-scooters, e-bikes and related personal mobility devices are certainly not exempt from the obligation to foster full inclusion, and they therefore have a responsibility to engage meaningfully with the disability sector as part of their activities. In fact, given the significant safety risks that these technologies pose for people with a disability, government and regulators have an even greater responsibility to work collaboratively with the disability sector and other stakeholders to ensure that these risks are addressed.

Recommendations

The following Recommendations derive from evidence and perspectives discussed in this submission, and are presented for the Committee's urgent consideration.

Recommendation 1

That e-scooters, e-bikes and related mobility devices be prohibited from travelling on pedestrian footpaths except for mobility devices used by people with a disability.¹

Recommendation 2

That e-scooters, e-bikes and related mobility devices be permitted to travel on shared-use paths, bike lanes, and roads with a speed limit of 60km/h or less, if they:

- a) Are equipped with an Acoustic Vehicle Alerting System (**AVAS**) and other safe guard technology, and
- b) Are equipped with tamper-proof technology that automatically limits their speed to a maximum of 10km/h in the presence of pedestrians and when they are detected on a foot path.

Recommendation 3

That e-scooters, e-bikes and related mobility devices not equipped with the technologies specified in Recommendation 2 be prohibited from travelling in all public spaces, including pedestrian and transport infrastructure.

Recommendation 4

- a) That shared-use paths and bike lanes include features that allow them to be clearly identified by pedestrians who are blind or have low vision, for example, by incorporating a change in surface or the installation of barriers that separate them from surrounding pedestrian infrastructure.
- b) That shared-use paths and bike lanes feature clear signage indicating designated speed limits and alerting users to be mindful of pedestrians.
- c) That shared-use paths and bike lanes include features such as speedbumps that limit the speed at which e-scooters, e-bikes and related devices can travel on them.

¹ Refer also recommendation 5

Recommendation 5

- a) That provision be made to consider exemptions to the requirements specified in Recommendations 1, 2 and 3 to allow a person with a disability that requires them to use an electric personal mobility device and who lives in a regional or remote area where there is no convenient or timely access to accessible public transport to use their electric personal mobility device on a pedestrian footpath.
- b) That the process for applying for and granting an exemption referred to in paragraph a), as well as the conditions relating to the use of the exemption, be co-designed with the disability sector.

Recommendation 6

- a) That e-scooters, e-bikes and related mobility devices be permitted to park only in designated parking areas.
- b) That, to the maximum extent possible, e-scooters, e-bikes and related mobility devices be fitted with technology that allows them to be identified and moved remotely in the event that they are found to be in non-compliance with paragraph a).

Recommendation 7

That any expansion in the permitted use of e-scooters, e-bikes and related mobility devices be accompanied by a significant investment in new and existing infrastructure, such as separate bike lanes and parking areas, to allow users and pedestrians to travel safely.

Recommendation 8

That any expansion in the permitted use of e-scooters, e-bikes and related mobility devices be preceded and accompanied by a Government-funded public awareness and education campaign, to be co-designed with the disability sector.

Recommendation 9

- a) That significant penalties be imposed on users of e-scooters, e-bikes and related mobility devices for breaches of regulations, including those related to speed limits, allowed travel zones, and designated parking areas.
- b) That a significant penalty be imposed on users of e-scooters, e-bikes and related mobility devices if they fail to stop and render assistance in the event of a collision with a pedestrian.
- c) That any expansion in the permitted use of e-scooters, e-bikes and related mobility devices be accompanied by a “blitz” on the enforcement of regulations and the imposition of penalties, in order to influence user behaviour.
- d) That all e-scooters, e-bikes and related mobility devices using public transport or pedestrian infrastructure be required to be registered so that owners and users can be identified and prosecuted for regulatory breaches.

E-scooters and Pedestrian Safety

Being able to use public transport and move around the community as pedestrians safely and with the same degree of amenity and convenience as the rest of the community has always been of the utmost importance for people who are blind or have low vision. Over the past 50 years, initiatives such as audio-tactile traffic signals, audio announcements on trams and trains, and the installation of Tactile Ground Surface Indicators (TGSIs) to warn of potentially hazardous situations such as the edge of railway platforms and the top of kerb ramps have been important measures allowing people who are blind or have low vision to move around the community safely and with confidence. More generally, the Disability Standards for Accessible Public Transport have been developed to improve access and reduce barriers for people with a disability when using public transport.

More recently, the UN Convention on the Rights of Persons with Disabilities has emphasised the right to full social inclusion and community participation. For example, Article 19 begins:

“States Parties to the present Convention recognize the equal right of all persons with disabilities to live in the community, with choices equal to others, and shall take effective and appropriate measures to facilitate full enjoyment by persons with disabilities of this right and their full inclusion and participation in the community, ...”

Australia was among the first signatories to the Convention in 2007 and was one of the first Western countries to ratify it in July 2008. While the Commonwealth Government has primary responsibility for ensuring that Australia meets its obligations under the Convention, all levels of government have a responsibility to uphold and promote the rights that the Convention asserts. This is recognised, for example, in subsection 3(e) of the NSW Disability Inclusion Act 2014.

Over the past decade a number of technologies have been introduced into the transport network that are not within the current scope of the Transport Standards, and which have not been scrutinised for their impact on people with a disability and the rights asserted by the Convention prior to their introduction. Electric vehicles are one example, but e-scooters are another.

Both electric road vehicles and e-scooters pose a significant safety risk because they are virtually silent, and so cannot be detected by a person who is blind or has low vision. E-scooters pose an even greater safety risk when they travel on pedestrian footpaths where people expect to be safe while walking. If a person cannot detect a silent electric vehicle or e-scooter, then they cannot take action to avoid a collision. One of our clients recently told us of an incident they experienced that illustrates this risk:

“Last year I was at a shop in Sydney buying some new clothes. After I completed the purchase, I went to step out of the shop, but someone grabbed me and pulled me back in. I felt annoyed because I thought they must have decided that I would trip on the step down to the footpath. So, I said, “what did you do that for – I know there’s a step there”. The person said, “no, if you had stepped down you would have been wiped out by a bike that was flying down

the hill”. I had absolutely no idea there was a bike there – it made no sound at all – certainly no sound that I could hear above the level of the background noise. If that person hadn’t pulled me back out of the path of the speeding bike, I might be dead now, or at any rate seriously injured.”

Vision Australia’s Research on Electric Vehicles and E-scooters

In 2018 Vision Australia commissioned research by Monash University’s Accident Research Centre (MUARC) to study the impact of electric/hybrid vehicles and bicycles on the safety of pedestrians who are blind or have low vision. A key and alarming finding was that 35% of respondents had been involved in a collision or near-collision with an electric vehicle. Just as disturbing was the effect on people’s mental and emotional wellbeing: 75% said that the introduction of electric vehicle technologies had reduced their confidence to leave their houses to walk around outside. As noted previously, the fundamental problem is that electric vehicles are silent, especially at low speeds, and so people who are blind or have low vision cannot hear them when crossing roads or walking through carparks and across driveways.

The findings from this research formed the evidence base for our systemic advocacy campaign to make acoustic vehicle alerting systems mandatory on all electric vehicles in Australia. Following extensive stakeholder consultation undertaken in 2023, the Commonwealth Government announced in April 2024 that from November 2025 all electric cars, buses and trucks would be required to include an AVAS so that they can be detected aurally. This will benefit all pedestrians, but especially people who are blind or have low vision and who rely on the sound made by nearby vehicles to detect them.

By 2021 there was growing concern in the blind and low vision community about the sudden and seemingly disorganised and unregulated proliferation of e-scooters, e-bikes and other e-rideables on pedestrian footpaths in several locations in Australia. We received reports of people being injured through collisions or falling over e-scooters that had been carelessly left in the middle of the footpath.

To obtain quantitative and qualitative data to assess the extent of the risks posed by e-scooters (used again in the collective sense noted in the Introduction) and how they were impacting the blind and low vision community more generally, Vision Australia conducted survey research during a six-week period in September-October 2021. The survey was widely promoted in the blind and low vision community through radio interviews, email discussion lists, newsletters and social media channels.

We received 121 survey responses from people who are blind or have low vision of all ages and from across Australia.

Almost 40% of respondents said that they left their houses to walk on footpaths less often now that e-scooters are proliferating. One person said:

“They are far scarier now and cause anxiety. Have nearly been hit on the Southbank walkway in Brisbane with a fast-moving scooter”

Another respondent said:

“It is not safe using footpaths as riders go very fast and have the attitude they have right of way when on the path”

Even when blind or low-vision pedestrians used footpaths, almost 90% said that they felt less safe when walking owing to the increasing use of e-scooters. This comment is typical:

“I do not choose to go to Brisbane now as I feel I would not be safe in the city or visiting museums or the art gallery or just enjoying the environment, Southbank [Brisbane], riverside etc”

Another respondent echoed the same sentiment:

“It’s terrifying, some riders are so fast, they whiz past and I wobble. I have terrible anxiety that I may fall over”

62% of survey respondents said that they had been involved in an accident or near-miss with an e-scooter. This comment is illustrative:

“E-scooter came around a corner and collided with me. I fell, my [Seeing Eye] dog yelped because I yanked the lead accidentally as I fell and the scooter rider just rode off. I was not badly injured, but nobody checked. I limped about 2 km home and felt very upset. Nothing police or council are prepared to do about it”

Here is another comment from a respondent who highlights the lack of rider awareness and also a lack of law enforcement:

“Yes dangerous old person, who was probably about as blind as me, driving full pelt through a shopping centre, collided with me and a set of seats in the middle of the shopping mall. Luckily, it was a glancing blow, but I was knocked over. The best bit was that lots of people saw what happened and helped. Once again, no help from security, police or council.”

A theme of all the comments we received on this topic is that after a collision the e-rider did not stop to offer any assistance.

In the survey we did not ask whether people needed to attend a doctor or hospital following an accident involving an e-scooter. Regrettably, hospitals and medical practices do not routinely keep records of injuries caused to people with a disability, including by collisions with an e-scooter. Because e-riders rarely if ever stop to render assistance if they collide with a pedestrian who is blind or has low vision, it is quite likely that some people do not attend a medical practice because they have no way of getting there or identifying the closest practice to where the collision occurred. And as the previous comment implied, Seeing Eye Dogs and other assistance animals can also be injured, either directly or indirectly, from collisions with e-scooters.

63% of survey respondents said that they had tripped over an e-scooter left on the footpath. One person also said:

“They block footpaths and force my Seeing Eye Dog and I to go onto road to get around them which is more dangerous”

And another respondent commented:

“They seem to drop them where they like without consideration for pedestrians. I've trodden on more than a few”

This is a comment that, like many others, emphasises that there is more than one hazard caused by e-scooters, often simultaneously:

“Devices left in random places. Silent motors and people speeding and swerving in and out of people.”

53% of respondents said that the near-silent operation of e-scooters was the biggest factor in making them unsafe for blind or low-vision pedestrians. One respondent commented:

“They come up close too fast. Because they are quiet, they frighten me. I feel unsafe.”

Another respondent said:

“I feel it's only a matter of time before I have an incident involving one of these things. They are very fast and very quiet.”

This is a comment from a respondent who also has a physical disability in addition to a vision impairment:

“because they are silent, you cannot hear them coming, and they hit my wheelchair, and a number of near misses”

A further comment illustrates the impact of the silent nature of e-scooters:

“I am actually concerned equally about their being almost silent as I am about their speed as not hearing them means I can't take evasive action and if I am not I could be badly injured even at slow speeds but more at high speeds.”

Some of the above comments also note that the speed at which many e-scooters travel (which is often faster than the legal speed limit) also presents a significant safety risk for pedestrians who are blind or have low vision. In fact, 31% of survey respondents identified speed as the most significant safety issue for them. This respondent's experience echoes a client comment quoted earlier in this submission:

“I have stepped out from a cafe when a speeding scooter zoomed past and I was extremely shaken as my support person pulled me back or there would have been a serious impact.”

This respondent also links speed and rider awareness:

“Scooter users don't expect to come across people who are blind or have low vision. Their speed and movements are unpredictable. I feel like I am on a potentially dangerous highway”

Another respondent also commented about the combination of speed and lack of rider awareness:

“They speed so quickly along the pavements and don't always watch where they are going or warn pedestrians in their path.”

A number of respondents highlighted that e-scooters are only one potential hazard that pedestrians who are blind or have low vision must contend with, and that the effect is cumulative and can also impact other pedestrians:

“Cars backing out of driveways and me hesitating and then going at the same time as the car. Bikes and e-scooters whizzing around me at high speed frightening me so almost lose concentration on where I'm going and bump into other people.”

Another comment again highlights the multi-factorial nature of the safety hazards that e-scooters pose for pedestrians who are blind or have low vision:

“I was walking on the footpath during the day and went to change direction when a person on an e-scooter zipped past, very nearly knocking straight into me. In the aftermath, as they carried on unfazed, I was left to feel unsafe and as if it was my fault.”

A final comment sums up the overall impact on wellbeing by highlighting the unrelenting nature of the hazards:

“It happens almost daily. I don't hear or see them and they frighten us constantly.”

Issues and Solutions

After reviewing the results of the survey discussed above, it becomes clear that the impact of e-scooters on pedestrians who are blind or have low vision is real, significant to the point of being life-threatening, and largely unmitigated by current legislation or regulation. Because of their silent operation and high speed, e-scooters are virtually undetectable and therefore pose an extreme safety risk; because riders often leave them in random locations that block footpaths or access to pedestrian crossings, they are a serious trip hazard; because riders are often inconsiderate or unaware of the needs of pedestrians who are blind or have low vision, these hazards are compounded; and because there is an inconsistent or lax approach to the enforcement of regulations, there is no incentive for riders to change their behaviour, or redress for those pedestrians who are injured.

The introduction of e-scooters without substantial mitigation of the pedestrian hazards they pose would be a complete abrogation of the Government's moral and ethical responsibilities to its citizens, and an unprecedented betrayal of the blind and low

vision community. Fortunately, there are a number of interlocking measures which, if introduced together, will make e-scooters safe for all pedestrians, including pedestrians who are blind or have low vision. The underlying technology is safety-neutral, but it is in poor or ill-considered implementation and use that safety risks are created and magnified.

Leveraging New Technologies to Ensure Pedestrian Safety

Since conducting our e-scooter survey in 2021 we have become aware of the development and implementation of new technologies by a number of rental e-scooter companies. These technologies include an effective AVAS for e-scooters, allowing them to be detected by pedestrians who are blind or have low vision, and technology that can detect the proximity of pedestrians and automatically reduce the speed of the e-scooter to a level that is considered safe for pedestrians. We understand that the latter technology is also able to use GPS and mapping data to identify areas where pedestrians are likely to be present (such as pedestrian shopping malls and areas around railway stations and bus stops) and slow the e-scooter down to a safe speed while it is travelling through those areas.

However, even with such technology, it is unlikely that an e-scooter would be able to avoid pedestrian collisions on footpaths in all situations. For example, if a pedestrian who is blind or has low vision stepped out of a shop straight into the path of an e-scooter, as described by two clients earlier in this submission, it is almost certain that the detection technology would not have time to initiate risk mitigation measures such as reducing the e-scooter's speed.

Our strong view, therefore, is that e-scooters should be completely prohibited from travelling on pedestrian footpaths. We note with approval that this is the approach that has been taken by the Victorian Government in its regulatory framework for e-scooters.

Recognising the importance of AVAS and detection technologies, we believe that e-scooters should only be allowed to travel in shared-use zones, bike lanes, and on roads with a speed limit of 60km/h or less, if they are equipped with both of these technologies. E-scooters that do not incorporate an AVAS or automatic speed-limiting technologies should be prohibited from travelling in all public spaces, including pedestrian and transport infrastructure.

In addition, shared-use paths and bike lanes must be clearly designated and identifiable by pedestrians who are blind or have low vision, and must feature appropriate signage indicating designated speed limits and alerting users to be mindful of pedestrians.

We do recognise that e-scooters can be of significant benefit to people with certain disabilities, especially in regional or remote areas where there is no convenient or timely accessible public transport. In these situations, it may not always be possible to obtain an e-scooter that is equipped with an AVAS and speed-limiting capabilities, but it may also not be safe for the rider to travel on the road.

We recommend that an exemption process be co-designed with the disability sector to address the needs of people with a disability who require the use of e-scooters, to ensure that the mobility benefits are maximised and the pedestrian safety risks are minimised.

Importance of Designated Parking Areas

Our e-scooter survey identified the serious trip hazard that can be caused for pedestrians who are blind or have low vision by e-scooters that are not parked in designated parking zones but left dumped on the footpath or blocking pedestrian crossings. Some e-scooter rental companies now have technology that can identify an inappropriately parked e-scooter (or respond to a report of one) and move it by remote control to a more appropriate parking location.

At this stage we are uncertain about the widespread availability of this technology and whether it is inherently limited to only certain models of e-scooter, but we recommend that it be a requirement to the maximum extent possible for e-scooters that are permitted for use on pedestrian infrastructure. In any case, e-scooter users must be prohibited from parking them on footpaths, pedestrian crossings, and other areas where they will constitute a trip hazard for pedestrians.

Need for Infrastructure Investment

Pedestrian and transport infrastructure have evolved, more-or-less haphazardly, over centuries. This infrastructure is not optimised for the safe integration of new technologies such as e-scooters. If the community concludes that e-scooters bring sufficient benefits in independent personal mobility that they should become widely available, then the Government must invest in new and existing infrastructure such as separate, safe lanes and parking areas, so that e-scooters and pedestrians can both travel safely. The amenity and convenience of e-scooter users do not take precedence over pedestrian safety, and the only way to ensure the entire community can travel safely is to optimise (and, as far as possible future-proof) pedestrian and transport infrastructure, which can only be done through significant Government investment.

Need for Public awareness and Education

A theme of many responses to our e-scooter survey is that users of e-scooters have little awareness of or consideration for pedestrians, especially pedestrians who are blind or have low vision. This is shown in their failure to stop after a collision, their propensity to travel at high speed in the presence of pedestrians, and their disregard for others when they park their e-scooters in areas where they will cause a trip hazard.

We therefore recommend that any expansion in the permitted use of e-scooters be preceded and accompanied by a Government-funded public awareness and education campaign, to be co-designed with the disability sector. The purpose of this campaign will be to ensure that the public generally, and e-scooters in particular, are aware of their obligations and responsibilities to others, including pedestrians who are blind or have low vision, and that they are familiar with the regulations that govern e-scooter usage and the penalties for breaching them.

Importance of Robust Law Enforcement

Many respondents to our e-scooter survey expressed concern and disappointment that the police and other authorities appeared to take a “hands off” approach to e-scooter users and made little apparent attempt to enforce existing penalties. In some jurisdictions where e-scooters have been permitted there also seems to have been an inadequate penalty regime to enforce their safe use.

We therefore recommend that any expansion in the permitted use of e-scooters be supported by an appropriate penalty regime, and strong action to enforce it. One penalty in particular that we believe is essential is for e-scooter users who fail to stop and render assistance in the event that they collide with a pedestrian.

In order to instil responsible and safety-conscious behaviour in e-scooter users from the outset, we also recommend that there be an enforcement “blitz” to coincide with the initial stages of any expansion in e-scooter use.

We also believe that there is significant merit in requiring that all e-scooters be registered, to allow proper enforcement of penalties and facilitate obtaining legal redress in the event of injury to pedestrians.

Conclusion

In this submission we have argued that because e-scooters pose an extreme safety risk for pedestrians who are blind or have low vision, any expansion in their use must be accompanied by a combination of measures designed to protect pedestrians and allow them to move safely and confidently in the community. We believe that the recommendations we have made are necessary but also reasonable. New technologies must be introduced in ways that are safe for everyone, and which bring benefits to all.

As we were preparing this submission, we heard that Melbourne City Council have voted to terminate the contracts of two hire e-scooter companies², effectively banning their use in the city CBD. The ban follows “overwhelming” complaints received from businesses, residents, and the Royal Melbourne Hospital, focusing on safety and the increase in accidents and serious injuries. Clearly, pedestrians who are blind or have low vision are not the only section of the community negatively impacted by the proliferation of e-scooters. The Recommendations we have proposed in this submission would therefore benefit all sections of the community.

In conclusion we draw the Committee’s attention to the NSW Disability Inclusion Plan, which was developed under the NSW Disability Inclusion Act 2014. This Plan, which creates actions and obligations for government departments and agencies, and the government as a whole, has four key focus areas, one of which is the creation of liveable communities.

² <https://www.abc.net.au/news/2024-08-15/share-hire-e-scooter-laws-australia-melbourne-ban/104224386>

There is no conceivable interpretation of a liveable community that would accept a person being “frightened” or “terrified” to leave their house and walk on a footpath, as some of the respondents to our e-scooter survey are. A liveable community is not a community where the blithe e-mobility of some leads to the petrified immobility of others.

About Vision Australia

Vision Australia is the largest national provider of services to people who are blind, deafblind, or have low vision in Australia. We are formed through the merger of several of Australia’s most respected and experienced blindness and low vision agencies, celebrating our 150th year of operation in 2017.

Our vision is that people who are blind, deafblind, or have low vision will increasingly be able to choose to participate fully in every facet of community life. To help realise this goal, we provide high-quality services to the community of people who are blind, have low vision, are deafblind or have a print disability, and their families.

Vision Australia service delivery areas include: registered provider of specialist supports for the NDIS and My Aged Care Aids and Equipment, Assistive/Adaptive Technology training and support, Seeing Eye Dogs, National Library Services, Early childhood and education services, and Felix Library for 0-7 year olds, employment services, production of alternate formats, Vision Australia Radio network, and national partnership with Radio for the Print Handicapped, Spectacles Program for the NSW Government, Advocacy and Engagement. We also work collaboratively with Government, businesses and the community to eliminate the barriers our clients face in making life choices and fully exercising rights as Australian citizens.

Vision Australia has unrivalled knowledge and experience through constant interaction with clients and their families, of whom we provide services to more than 30,000 people each year, and also through the direct involvement of people who are blind or have low vision at all levels of our organisation. Vision Australia is well placed to advise governments, business and the community on challenges faced by people who are blind or have low vision fully participating in community life.

We have a vibrant Client Reference Group, with people who are blind or have low vision representing the voice and needs of clients of our organisation to the board and management.

Vision Australia is also a significant employer of people who are blind or have low vision, with 15% of total staff having vision impairment.