

Inquiry into e-mobility safety and use in Queensland

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To whom it may concern:

I own a legal e-bike which I use daily for commuting, errands and recreation. My e-bike has been enormously beneficial for my physical health, mental health and my budget. The rapid and extensive uptake of these devices is clear evidence that **the community broadly likes and wants them**, and I strongly believe that it is both possible and desirable to improve community safety without needlessly curtailing the availability and use-cases of these affordable, practical, flexible, environmentally-friendly vehicles. In this submission, I am primarily considering the use-cases, benefits and challenges that are specific to legally purchased, personally owned e-mobility devices, rather than hire/share schemes.

I would like to emphasise up-front that e-mobility devices, in particular e-bikes, are multi-purpose vehicles that replace a second car for many families, and even a primary car for some people. Commuting on an e-bike, I can ride to work (using an active-transport bridge) in 15 minutes, when driving would take me at least 30 minutes and cost me \$30+ a day in parking charges; it is my best commute option by far. I have many friends and colleagues who do daycare or school drop-off and pick-up on an e-bike, safely transporting an adult rider and 2 child passengers as well as a day's essentials for all three people. I do my grocery shopping and other errands with my bike. I know people who use an e-bike or e-scooter to do food delivery as their primary source of income. I have noticed that very often, public consultations such as this one begin with the assumption that e-bikes and e-scooters and similar devices are primarily used for recreation. **If the Committee has made this assumption, please reconsider** – a lot of us are using e-bikes and e-scooters as serious vehicles that are heavily integrated into our daily routines.

E-mobility devices are beneficial to users

(relevant to Terms of Reference: 1)

There are many reasons why e-mobility devices are beneficial, sometimes life-changingly so, to those who choose to use them to get around. Two reasons that stand out to me are:

1. They are beneficial to the user's physical and mental health. Using any e-mobility device involves standing and balancing, likely replacing a period of sitting (in a car or on public transport) for many users. E-bikes in particular '[provide] much of the cardiovascular health benefits obtained during conventional bike use' [1], improved the mental and physical health of a cohort of overweight regional Australians [2], and were found to **cause 'physiological responses that can confer health benefits'** in a systematic review and meta-analysis [3]. A brief literature search for the health benefits, either physical or mental, of these devices returns dozens of peer-reviewed scientific studies finding clear benefits, far more than I can reasonably cite in this submission.
2. They are affordable. My e-bike cost less than \$3,000 to purchase new, and some e-scooters are available for less than \$500. **In a deep cost-of-living crisis, affordable transportation options are critical** for community equity, enabling people who can't afford car ownership to travel much further than they can on foot and at times or in places where public transport is unavailable. This is critical for enabling some people to get to their workplaces at all. I have personally estimated that using an e-bike instead of a car saves me in excess of \$8,000 per annum that I would otherwise spend on registration, insurance, maintenance, fuel, parking, and vehicle depreciation.

E-mobility devices benefit the community and environment

(relevant to Terms of Reference: 1)

Of the many benefits these devices offer the environment and the community at large, these stand out to me:

1. They offer independence to people who don't drive. There are many people in our community (including teens, elderly people, some neurodiverse and disabled people, and many others) who cannot or prefer not to use cars; e-mobility devices offer **many of us freedom to travel safely and with autonomy**. This is an enormous benefit for age and ability equity.
2. Traffic congestion is a growing problem in Brisbane in particular, but also in regional Queensland cities. **We are in critical need of viable alternatives to driving** in order to reduce the number of cars on the road. E-mobility devices are a viable alternative to driving for many people who don't consider conventional bikes viable. I am an example of this: because I use an e-bike, I commute over a longer distance and more hilly terrain than I could reasonably cover on a conventional bike. I don't need to allocate time to showering and changing at work, and I can still ride to work when I'm tired or when I need to carry a lot of stuff with me. **On my daily commute, I'm surrounded by e-mobility devices on the bikeway** – these devices are widely used and their adoption grows year by year. Unnecessary barriers to their continued use will simply **put more cars back on the road**.
3. As with all electric vehicles, the emissions associated with e-mobility devices depend on how the electricity used to charge them is generated. However, there is no doubt that they are a very low-emissions choice relative to private cars – roughly 12 times lower [4], and **contribute to personal emissions reduction for those who own them** [5].
4. E-mobility devices do not contribute to the pollution of urban environments with noise and fumes. Replacement of a significant number of private cars with such devices could substantially improve the urban soundscape and air quality. Additionally, because these devices have less mass and momentum than cars and much better sightlines, they are far less likely to kill or seriously injure a pedestrian in a collision. When I am walking or just existing outdoors, sharing space with cars is noisy, smelly and stressful. **Sharing space with e-mobility devices is comparatively quiet and peaceful**.

Providing appropriate infrastructure makes everybody safer

(relevant to Terms of Reference: 1,2,5)

As a rider of an e-bike, **I often feel like I don't belong anywhere on the roads I use every day**. If I ride on the road, I am at the mercy of cars and trucks, and I have experienced alarmingly close passes, car doors opening into my path, and other near-misses more times than I can count. If I ride on the footpath, I am constantly aware that I am a guest (and perhaps, a nuisance) in space that belongs to pedestrians, but despite my best efforts to pass at walking speed and alert with my voice and my bell, many pedestrians wear noise-cancelling headphones and are startled and frightened when I pass by. **The most enjoyable, comfortable and SAFE parts of my commute are those where I'm riding on fit-for-purpose infrastructure** that is fully separated from car traffic by physical barriers, and also separated from pedestrians. E-mobility devices are similar in size, speed and momentum to bicycles, and **the same kind of infrastructure that bicycle user groups have advocated for over a period of decades is ideal for us**. The rising popularity of e-mobility devices is yet more evidence that provision of safe cycling infrastructure which is separate from both vehicle and pedestrian infrastructure is extremely beneficial to the community and should be prioritized whenever roads are upgraded or urban precincts are redesigned. In particular, these infrastructure projects are important because **if you build it, they will come** [6,7] – e-mobility devices just make it even more appealing for EVERYONE, regardless of their fitness level or reason for travelling, to consider an active transport mode.

In addition to this, I strongly believe that **it is critical that it remains legal for e-mobility devices to be used on the footpath**, keeping the existing provisos that they are operated at safe speeds and in a manner that is respectful of pedestrians. If it were illegal for me to ride on the footpath, my entire commute would be non-viable because of an unavoidable 500-metre stretch of busy road where there are no bicycle lanes. I would never dare to ride on this road in peak hour because it is too much of a risk to my personal safety. Many of the presently-observed community benefits of e-mobility devices could be lost if their use on footpaths was banned.

Another way to reduce conflict between e-mobility riders and pedestrians is to **reduce speed limits** in residential areas to 30km/h in residential streets and 40km/h in 'collector' streets, in accordance with international best practice. When the traffic is calm enough that riders feel safe on the road, we don't need to be on the footpath.

Most people riding unsafely are already breaking the law

(relevant to Terms of Reference: 2,7)

I would like to make it clear that I'm aware of community concerns that some riders of e-mobility devices cause a hazard and public nuisance through behaviours such as speeding, doubling, and riding aggressively or while impaired. Although I am a daily user and strong supporter of these devices, I **acknowledge and broadly share the community's concerns** about poor rider behaviour and the rate of crashes and injuries. I would like to point out that **we already have rules governing safe use of e-mobility devices**. As a few examples:

- It's illegal to ride while intoxicated
- Riders must wear helmets
- There are limitations on the maximum speed and power of the devices
- Riders must obey speed limits on footpaths, or where signed

I would like to note that the majority of behaviours consistently raised by the community as dangerous to riders, dangerous to pedestrians/other road users, or causing public nuisance (particularly speeding and the use of overpowered devices) **are already illegal**. Simply introducing new or stricter rules about how, where, and how fast we may ride will inconvenience those of us who ride legal devices in accordance with the law (perhaps forcing some of us back into private cars) while doing little to stop the dangerous and vexatious behaviour of people who are **already breaking the law by riding the way they do**. If they do not obey the existing laws, what reason is there to believe that introducing new laws will fix the problem? I urge the Committee to recommend that we **prioritise better enforcement of existing laws**, in particular, making it harder to obtain illegal overpowered e-mobility devices. I also think it would be beneficial to prevent people who repeatedly misuse hired e-mobility devices from being able to hire them in the future, perhaps by requiring hire operators to ban riders identified by police as repeat offenders. Introducing stricter laws when what's needed is enforcement will just create barriers for people trying to choose a healthier, more sustainable transport mode.

Concluding statement

In conclusion, I strongly believe that **the benefits of e-mobility devices outweigh the harms and risks**. I strongly urge the Committee to make recommendations that support the continued widespread availability and use of safe and legal e-mobility devices. In particular, I urge the Committee to emphasise in its recommendations that safe separated infrastructure is critical. I also urge the Committee not to recommend measures that would make people's commutes and errands unviable by giving them no option but to ride in traffic (such as banning e-mobility devices from footpaths, which would be disastrous). **E-bikes, e-scooters and similar devices are the electric vehicle revolution we need**, and the vast majority of riders are safe, respectful and responsible. Please support myself and other riders in our desire to drive less, move more, and 'be the change' towards a healthier and more sustainable future.

References

- [1] Hoj *et al* 2018: Increasing active transportation through e-bike use: Pilot study comparing the health benefits, attitudes and beliefs surrounding e-bikes and conventional bikes. JMIR Public Health and Surveillance, doi: [10.2196/10461](https://doi.org/10.2196/10461)
- [2] Anderson *et al* 2022: Health and well-being benefits of e-bike commuting for inactive, overweight people living in regional Australia. Health Promotion Journal of Australia, doi: [10.1002/hpja.590](https://doi.org/10.1002/hpja.590)
- [3] McVicar *et al* 2022: Systematic review and meta-analysis evaluating the effects electric bikes have on physiological parameters. Scandinavian Journal of Medicine and Science in Sports, doi: [10.1111/sms.14155](https://doi.org/10.1111/sms.14155)
- [4] McQueen *et al* 2020: The E-Bike Potential: Estimating regional e-bike impacts on greenhouse gas emissions. Transportation Research Part D, doi: [10.1016/j.trd.2020.102482](https://doi.org/10.1016/j.trd.2020.102482)
- [5] Hagedorn *et al* 2025: Electrifying choices: How electric bicycles impact on mode choice and CO2 emissions. Transportation Research Part D, doi: [10.1016/j.trd.2025.104682](https://doi.org/10.1016/j.trd.2025.104682)
- [6] Rayaprolu *et al* 2018: Impact of bicycle highways on commuter mode choice: A scenario analysis. Environment and Planning B, doi: [10.1177/2399808318797334](https://doi.org/10.1177/2399808318797334)
- [7] Yang *et al* 2021: Bikeway provision and bicycle commuting: City-level empirical findings from the US. Sustainability, doi: [10.3390/su13063113](https://doi.org/10.3390/su13063113)