

Portfolio Committee No. 6 - Transport and the Arts

Online questionnaire summary report

Inquiry into the use of e-scooters, e-bikes and related mobility options

The purpose of the questionnaire

As part of its inquiry into the use of e-scooters, e-bikes (including shared schemes) and related mobility options, Portfolio Committee No. 6 - Transport and the Arts provided an online questionnaire to encourage public participation in the inquiry in an efficient and accessible way.

The questionnaire was not intended to serve as a statistically valid, random survey. Participation was voluntary, meaning respondents self-selected to take part. This means that respondents are unlikely to be a representative sample of the New South Wales population. Instead, the responses represent a sample of interested members of the public who volunteered their time to have a say.

The questionnaire was designed to complement, rather than replace, the formal submission process. Individuals and organisations wishing to provide more detailed information on the inquiry's terms of reference could still submit a formal submission. In this regard, some respondents may have completed both the questionnaire and also made a submission.

The questionnaire was available from 7 July to 18 August 2024 and during this period, the committee received 1,298 responses. This summary report provides an overview of the feedback received in response to both the quantitative and qualitative questions. The insights gained from these responses will inform the committee's considerations throughout the inquiry and may be incorporated into the final inquiry report.

Questions asked

In this questionnaire, participants were asked 18 questions regarding their views and experiences with e-mobility devices. To ensure clarity, the committee provided the following definitions for the purpose of the questionnaire:

- **Light electric vehicles** - defined as including electric bicycles (e-bikes), electric scooters (e-scooters), electric skateboards (e-skateboards) and self-balancing scooters (hoverboards)
- **E-mobility aids** – defined as mobility scooters, electric wheelchairs and other electric devices designed to assist individuals with limited mobility
- **E-mobility devices** - an overarching term encompassing both light electric vehicles and e-mobility aids, as well as any emerging forms of electric transportation.

The questionnaire was divided into five sections and featured a combination of multiple-choice and open-ended (free text) questions:

- **Section 1 (questions 1 to 5):** Included mandatory administrative questions to collect basic details, such as name and location. Providing a postcode in question 4 was optional.
- **Section 2 (questions 6 to 9):** Focused on light electric vehicle use and was only available to respondents who indicated they were light electric vehicle users in question 5.
- **Section 3 (questions 10 to 11):** Examined considerations related to the use of light electric vehicles.

- **Section 4 (questions 12 to 15):** Investigated interactions between e-mobility device users and pedestrians.
- **Section 5 (questions 16 to 18):** Addressed rules, regulations and reforms for e-mobility devices.

The full list of questions is provided in Appendix 1.

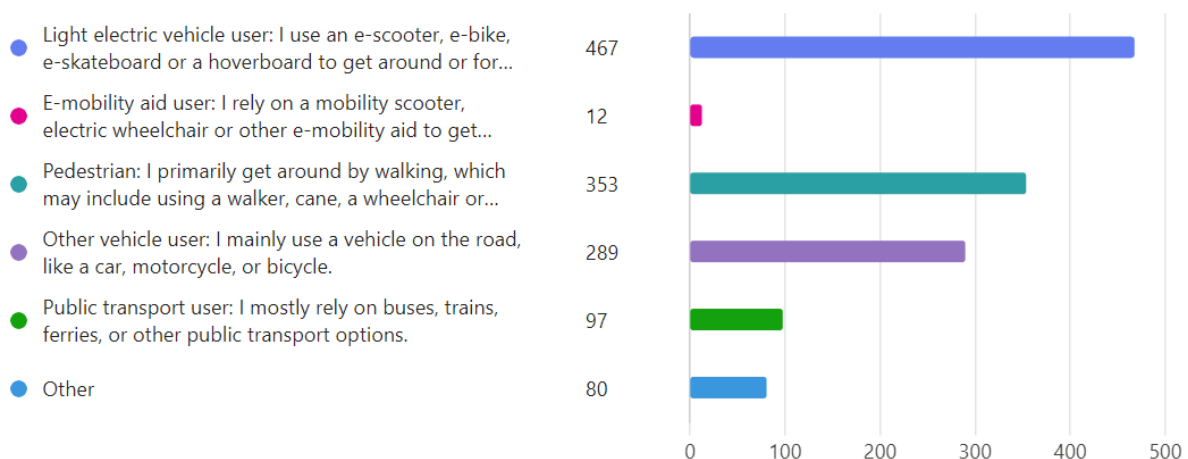
Responses to questions

The vast majority of respondents (99 per cent) indicated that they live in New South Wales. Based on the postcodes provided (as an optional question), the top five suburbs with the most respondents are Sydney Central Business District (5 per cent), Surry Hills (5 per cent), Waterloo (4 per cent), Narrabeen (4 per cent) and Potts Point (3 per cent).

A summary of responses and sample answers are presented for each question below.

Section 1

Question 5: In what capacity are you participating in this survey? Select one.



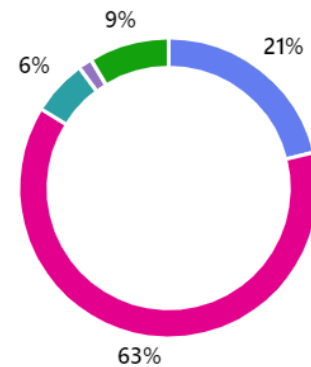
This question aimed to identify the primary role or perspective from which respondents were participating. Out of 1,298 total responses, 467 indicated that they were light electric vehicle users. Pedestrians made up the second-largest group (353 respondents). Of the respondents, 289 identified as users of another vehicle type, such as a car or bicycle, 97 used public transport and 80 identified as using a mode of transport not specified.

Section 2

The questions in section 2 were only available to those who indicated they were completing the questionnaire in the capacity of a light electric vehicle user in question 5.

Question 6: Which of the following light electric vehicles do you currently own or regularly use? Select all that apply.

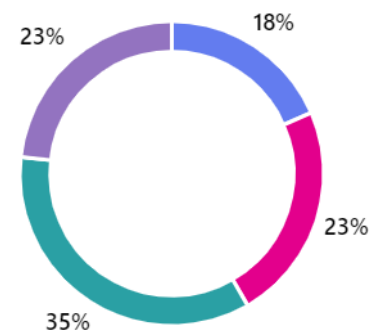
● E-scooter	127
● E-bike	376
● E-skateboard	36
● Hoverboard	9
● Other	52



Among the 600 responses to this question, most indicated they were e-bike owners or users, representing 63 per cent of respondents. By comparison, 21 per cent of respondents were owners or users of e-scooters, while a small proportion of respondents in the other category indicated that they were users or owners of vehicles such as e-trishaws, e-unicycles and mini-segways.

Question 7: How often do you typically use a light electric vehicle? Choose one.

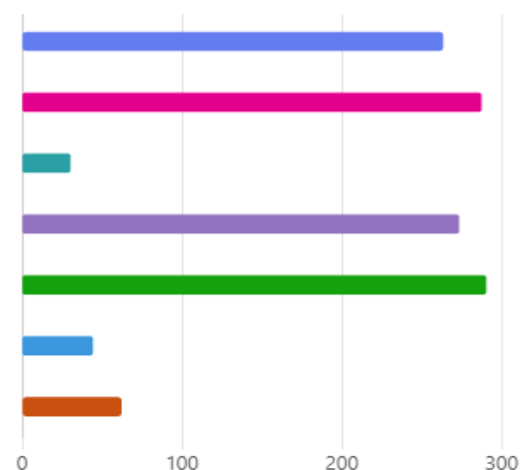
● Rarely (1-2 times a month)	92
● Occasionally (1-2 times a week)	116
● Frequently (3-4 times a week)	175
● Daily	116



Based on 499 responses, the majority of light electric vehicle owners or users indicated that they use their vehicles either daily or on a frequent basis.

Question 8: Why do you use a light electric vehicle? Select all that apply.

● To get to work or school.	263
● To travel short distances to or from a public transport stop (e.g., train station, bus stop) as part of a longer...	287
● For my job (e.g., food or courier delivery).	30
● To run errands and shop.	273
● For fun and exercise.	290
● To help me get around due to a disability or health condition.	44
● Other	62



Among 1,249 respondents, the primary motivations for using light electric vehicles were for leisure, practicality and convenience reasons. Generally, there were three dominant reasons: for fun and exercise, running errands and shopping and commuting to work or school.

Additionally, respondents highlighted the freedom and exploration these vehicles provide, their convenience for city commuting, cost savings over traditional gasoline vehicles, ease of parking and their suitability for certain trips compared to public transportation.

In terms of the other category, respondents could outline different reasons as to their use of light electric vehicles or enter a reason in their own words. Some of the comments were:

- *Can't afford petrol.*
- *Convenience. Easier than trying to find parking for a car and easier than public transport for the type of trips I primarily make.*
- *I live in the city and use an e-bike for all my travel needs.*
- *I don't own a car and I very rarely need public transport. E-bike is the ideal way to travel in inner-city Sydney for me.*
- *Transport children to childcare/school.*
- *To avoid using my car on journeys up to around 20km.*

Question 9: How informed do you feel about the current rules and regulations for using light electric vehicles in New South Wales?

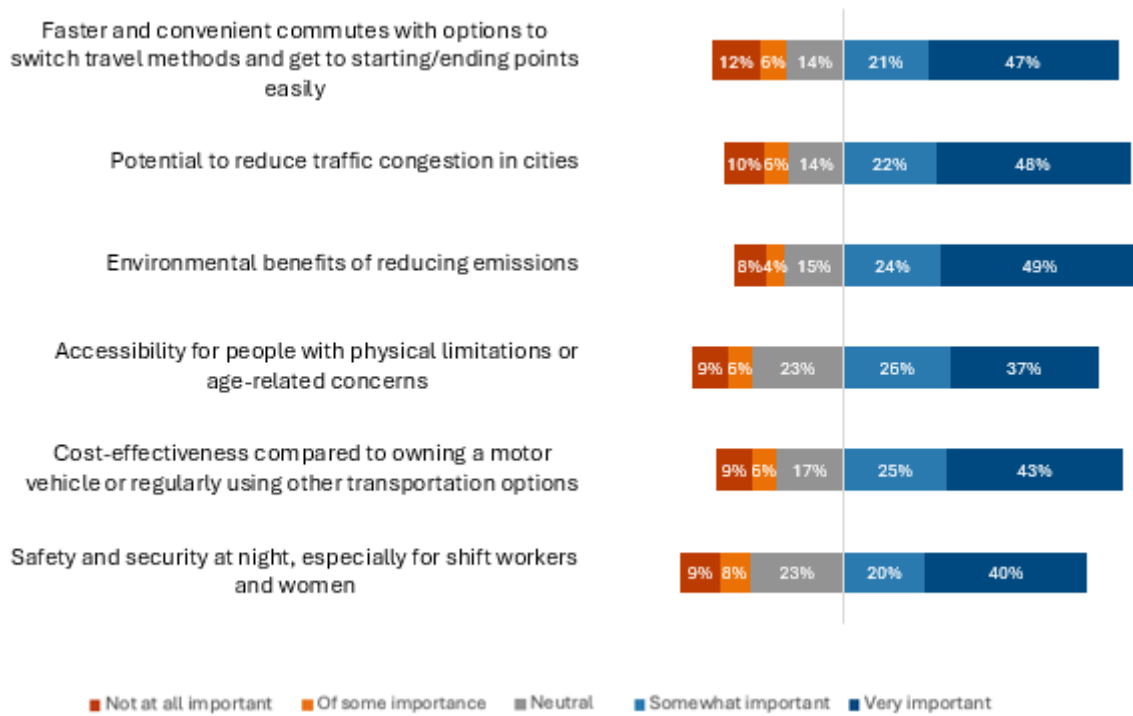


The majority of responses (34 per cent of 499 respondents) indicated they have at least some awareness of the applicable rules and regulations for light electric vehicles. A small minority, 12 per cent, selected the option 'not at all informed'.

Section 3: Considerations for using light electric vehicles

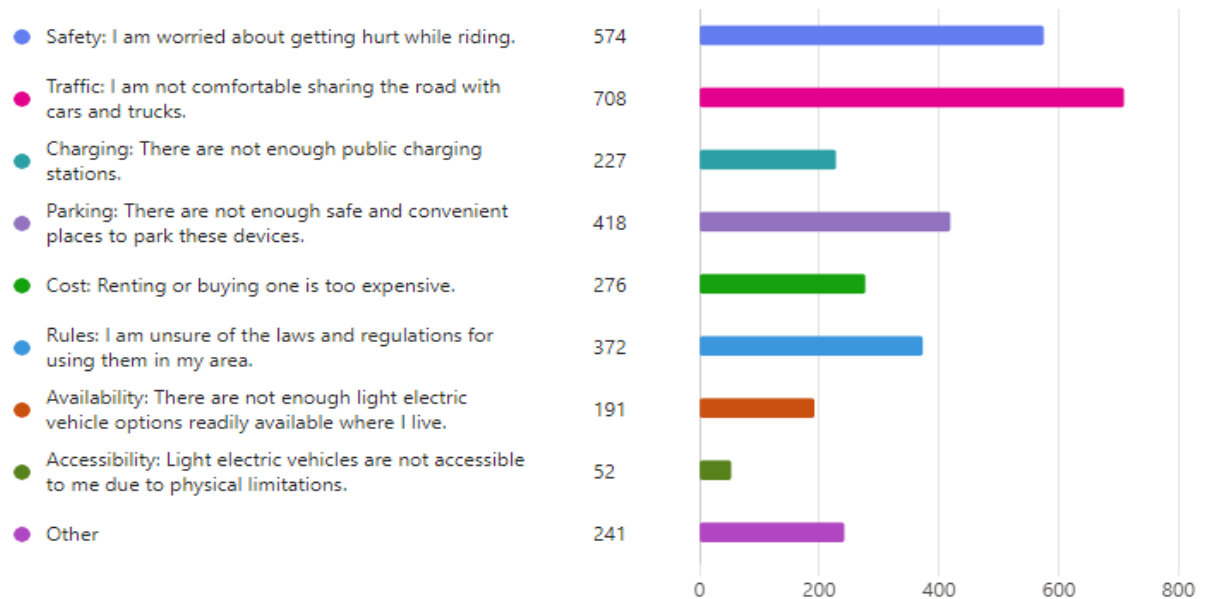
This section of the questionnaire explored the factors influencing people's decisions regarding the use of light electric vehicles. Participants were asked to complete these questions regardless of their prior experience or current interest in using such vehicles.

Question 10: When considering using a light electric vehicle, how important are the following factors in your decision?



Based on responses from 1,298 individuals to this question, where they rated the importance of various environmental, economic, mobility and social considerations in their decision to use a light electric vehicle (on a scale from 'Not at all important' to 'Very important'), the largest factor motivating people was the environmental benefits of reducing emissions, followed by helping to reduce congestion in cities, then it being faster and convenient for commuting.

Question 11: When considering using a light electric vehicle, which of the following factors would most likely prevent you from using it on a regular basis?



Out of the total of 1,298 responses to this question, 708 respondents indicated that sharing the road with cars and trucks in traffic was the primary deterrent for using light electric vehicles regularly. General safety while riding was another significant reason, selected by 574 respondents, followed by concerns related to parking options for devices.

372 respondents also indicated that a lack of understanding about the rules and the uncertainty surrounding laws and regulations was a barrier, as was the cost of light electric vehicles (selected by 276 respondents).

The following is a sample of comments entered in the other category option:

- *Having to wear a helmet, even in low speed or car-free area.*
- *Most share e-bikes do not have a helmet available for use, therefore I can't hire them.*
- *I am frustrated that a user who rides responsibly has to risk a fine to use a scooter. Fine people who use them dangerously, not those who are responsible. Why ruin it unnecessarily?*
- *Not all forms of public transport let me put my bike on. technically buses are supposed to if not busy and regional trains want you to box the bike (that's not doable).*
- *Not enough dedicated bike paths and the few that are available are taken over by people with earphones in and prams, walking 2 and 3 abreast.*
- *The limitation for 250W; on the road this is insufficient for safety, causing large speed differentials between the other vehicles on the roads. More reasonable would be 750w i.e., 1 horsepower will provide adequate power to reduce differential speeds on urban >60k/hr roads.*

Section 4: Interaction between e-mobility device users and pedestrians

Question 12: Should light electric vehicles be allowed on shared paths where pedestrians and e-mobility aid users are present?



The most responses to this question (37 per cent) supported the view that light electric vehicles should be allowed on shared paths where pedestrians and e-mobility aid users could be present, whereas 33 per cent had the opposite view.

Question 13: In your opinion, how well do existing bike lanes, bike paths and shared paths in your area accommodate pedestrians, cyclists and e-mobility device users?

There were a wide range of views put forward in answering this question.

Safety concerns dominated the feedback provided by 1,211 respondents, with many highlighting the potential for accidents and conflicts with pedestrians and e-mobility device users on shared paths, bike lanes and bike paths.

Several respondents called for the implementation of clear regulations and improved infrastructure to ensure safe and efficient use of shared spaces. While some acknowledged that there have been

infrastructure improvements in some areas which have enhanced shared and bike path usability, there were some concerns about the lack of connectivity across suburbs.

Some respondents also acknowledged the potential benefits of light electric vehicles for transportation and accessibility, although they emphasised the need for responsible usage and proper oversight to prevent hazards.

The following key themes and comments capture the diverse perspectives expressed by respondents:

Safety concerns

- *It is a hazard. Pedestrians can't even walk with their dogs on paths as bikes come flying and we need to constantly watch out where the bikes are coming from.*
- *The speed difference between pedestrians and any wheeled vehicle (not just electric) is the only concern.*
- *With the proliferation of illegal e-devices (overpowered/ speeds unrestricted) passing speeds can be extreme, with stopping distances being beyond dangerous.*
- *Shared lanes are dangerous for pedestrians, because wheeled vehicles do not have loud enough warning devices. Cheap bike bells are useless.*
- *Some pedestrians can be a bit antagonistic sharing the path, they may have children or dogs with them; some e-scooter riders are reckless in speeding and most existing paths are a bit too narrow for all. Hence dedicated bike paths are essential for safe riding and to avoid conflict with pedestrians.*
- *Most of the paths in my area are shared, which leads to problems with people not sticking to the left and/ or pedestrians wearing headphones who cannot be alerted to a bike rider coming up behind them even at low speeds.*
- *Cycling is my transport mode and whenever I cycle in the share paths I cycle slowly and always give way to pedestrians. Unfortunately, this is not the majority, especially food delivery people that they are always in a hurry and in need of arriving at destination asap.*

Concerns about lack of regulation and education

- *The problem with sharing footpaths with electric bikes and scooters is the children and teenagers who have learnt no road rules, (i.e., do not look for cars backing out of driveways as they speed along) and sadly so many parents of these children don't seem to give them any guidance. Also coming behind people, this age group has no idea and can't begin to imagine the frailty of older people, nor that some of them might be deaf and consequently have no awareness that ringing their bell doesn't mean they've heard them.*
- *The emphasis on safety is skewed against bike riders when pedestrians wear ear/headphones, walk two and three abreast with dogs and prams. Education for pedestrians is equally as important on shared paths, abusing people for trying to pass safely just because they are on an electric bike is not on.*

Concerns about congestion

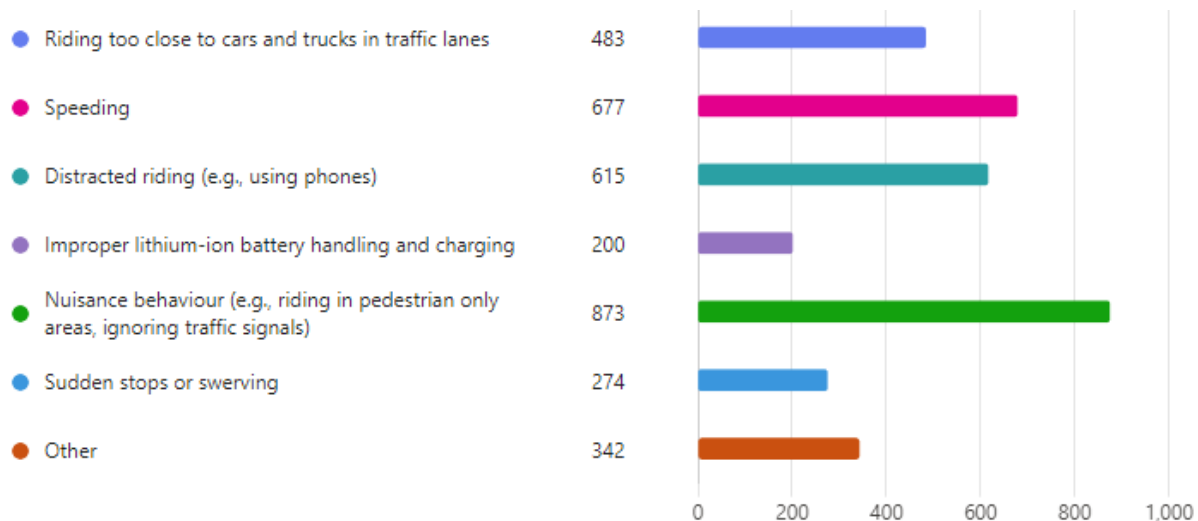
- *Whilst some bike users are polite, there is still the presumption that the pedestrian must make way for the bike.*
- *Paths are already crowded, adding more vehicles will make it worse.*
- *To make the paths and lanes safer, signage could be improved - more and clearer. If there a different user groups all using the same paths, signage could help remind them of the rules on sharing, speed restrictions, etc.*
- *Bike lanes take up a disproportionate amount of valuable and limited road space. Because of the motor vehicle congestion caused by reduced lanes available to disperse cars, bike lanes actually add to pollution especially in narrow city streets.*
- *Pedestrians and e-scooters/ devices do not mix owing to the discrepancy between their typical travel speeds. Therefore, they should not share paths that include pedestrians. Sharing by pedal bicycles and pedestrians has now been generally accepted; these bikes are typically slower and while not perfect, there exists some*

culture of mutual consideration. But pedestrians are given little consideration now that e-devices are being ridden on shared paths.

Concerns about connectivity and infrastructure

- *By comparison with infrastructure for cars/ drivers, the infrastructure for all other modes is terrible. We've over-catered to cars/ drivers.*
- *There aren't enough dedicated bike paths and where bike paths are available, they don't connect with each other well.*
- *A more relevant question is are bike paths/ shared paths in the most useful places? The answer is no: especially paths to/ from shopping centres or popular locations. Then e-devices users use standard footpaths.*
- *Sydney has notoriously bad cycling infrastructure. And there is a culture of drivers not respecting cyclists as people. The city needs to incorporate way more signage and bicycle exceptions like Melbourne does.....*
- *Riding on busy streets, especially those with bus lanes, makes me feel very unsafe. The constant presence of heavy traffic and large vehicles adds significant stress to my commute, highlighting the need for more comprehensive and safer biking infrastructure in our community.*
- *We need more separated active travel lanes as a priority and a reallocation of shared road space where separated lanes aren't feasible (reduced speed limits, traffic calming, modal filters to limit through traffic, control parking to provide space for other users, driver education, etc.).*
- *Wider cycle paths would be better as well as they will be more accessible for people on devices like wheelchairs.*
- *Shared paths are a poor solution and are only reasonable when they are very wide, but even then, separating uses is better. Existing bike lanes and paths are fine to share between e-mobility devices and conventional bikes, but everyone needs better knowledge about etiquette and road rules. And, of course, we don't have anywhere near enough separated bike paths.*

Question 14: While e-mobility devices offer a convenient way to travel, some behaviours can put riders and others at risk. Tell us which of these unsafe practices concern you the most: Please select at most 3 options.

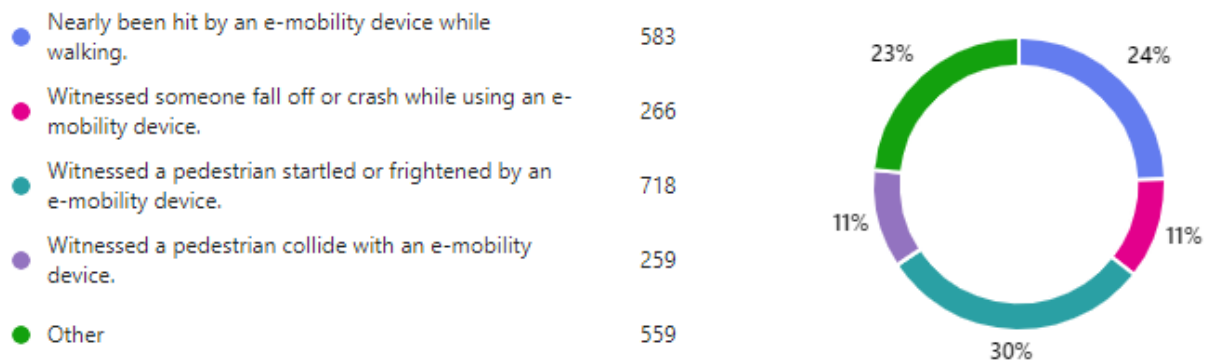


This multiple-choice question allowed respondents to select up to three options that represent their concerns.

The results, based on 873 of 1,298 responses, showed that nuisance behaviours were the highest area of concern relating to the safe integration of e-mobility devices into public spaces. This was followed by concerns about speeding, selected by 677 respondents and distracted riding, highlighted by 615 respondents.

While the question aimed to focus on concerning behaviours specific to e-mobility device use, respondents used the 'other' option to highlight broader safety concerns. Several pointed out that car and truck drivers often pose a greater danger to other road and footpath users due to the potential for severe consequences in accidents. Some respondents also noted concerns about pedestrians using bike paths inappropriately.

Question 15: In your experience, have you encountered any of the following safety concerns involving e-mobility devices? Select all that apply.



This multiple-answer, multiple-choice question asked respondents to select all safety concerns they had experienced involving e-mobility devices.

24 per cent of respondents indicated that they were nearly being hit by an e-mobility device while walking, whereas 30 per cent indicated that they had witnessed a pedestrian being startled or frightened by an e-mobility device. Less common, but still significant, were reports of witnessing someone fall or crash (11 per cent) and instances of a pedestrian colliding with an e-mobility device (11 per cent).

The following is a sample of comments entered for the other answer option:

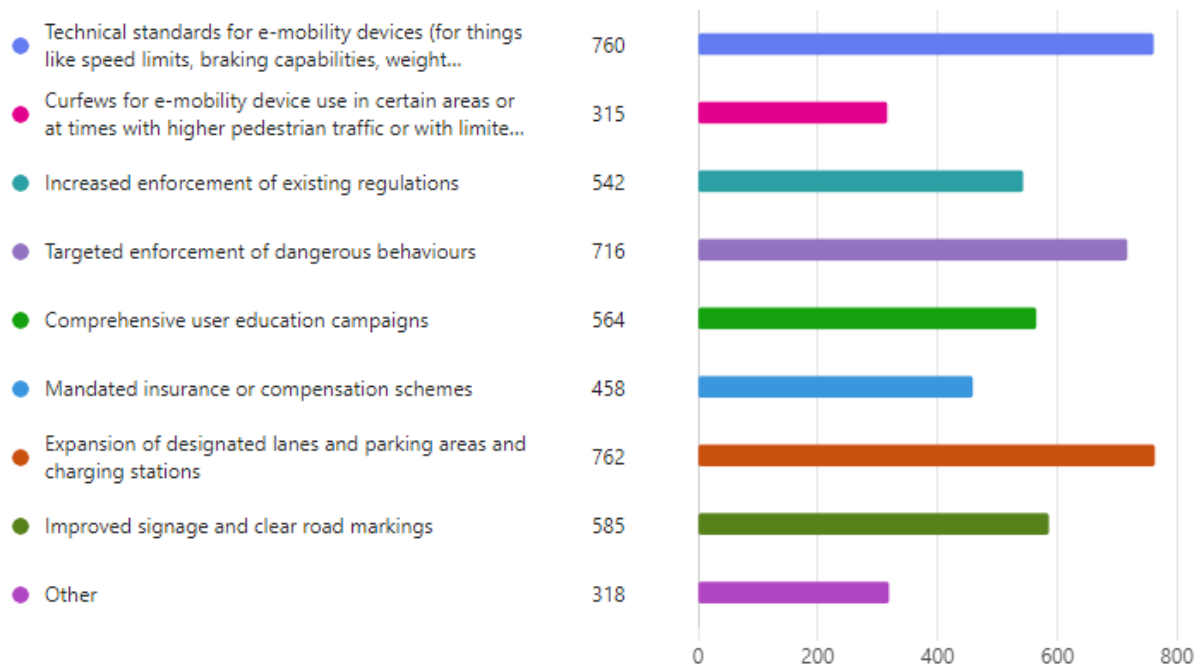
- *Witnessed a dog being almost hit in a designated off leash area by an e-bike rider.*
- *Pedestrians verbally abused for not letting e-bikes pass on a footpath.*
- *I have routinely witnessed riders forced to circumvent unsafe (cracked, broken, inconvenient, or otherwise unsafe) paths in favour of the road.*
- *Seen many instances of two to three children riding on one e-moped without helmets or any other safety gear.*
- *Witnessed Car crash caused by scooter dumped in the middle of the road, bicycle crash by scooter dumped across path at night.*
- *Witnessed people vandalising e-bikes or damaging batteries placing others and property at risk.*

Additionally, some respondents identified instances where e-mobility device users were put at risk due to the behaviours of motor vehicle drivers or pedestrians.

- *Please note that many pedestrians are not aware of the rules. They are not aware that they are walking on a bicycle lane for example. It is not right to ask whether I've witnessed a pedestrian startle or frightened because they nearly always are, especially the elderly. The elderly are usually frightened with any loud noise or sudden activity around not just e bikes.*
- *I have had numerous pedestrians walk into cycle lanes without looking. Similarly, cars often turn into cycle lanes without properly checking. Finally, vehicles - fire trucks, police cars (both not on call), delivery drivers and sometimes private cars, frequently park in cycle lanes, blocking their access.*

Section 5: Rules, regulations and reforms

Question 16: To enhance safety for both users and the community, which regulatory or other reforms around e-mobility devices do you believe are most important? Select all that apply.



This multiple-answer, multiple-choice question asked respondents to select which regulatory or reform measures they believe are most important to enhance safety for both e-mobility users and the broader community.

The most widely supported measures, each backed by approximately 760 respondents, included implementing technical standards for e-mobility devices (such as speed limits and braking capabilities) and expanding dedicated infrastructure (such as lanes, parking and charging stations). Targeted enforcement of dangerous behaviours also garnered strong support from over 700 respondents, while more than 500 responses favoured increased enforcement of existing regulations. Additional proposals, such as improved signage, comprehensive user education and mandatory insurance or compensation schemes, received support from 450 to 600 respondents.

The least popular measure was the introduction of curfews for e-mobility device use in certain areas or times (315 respondents).

In the other category, below are a sample of comments.

- *Please apply any and all of the above to cars - this will make e-mobility device use safer and more attractive. Most users of such devices are also drivers; they don't usually need much additional 'user education' on road rules. If the pedestrian space is insufficient, this is a win for active transport and you need to cater for that by re-allocating space, not by trying to micro-manage conflict in the existing space. There is already insufficient enforcement of truly dangerous (and often deadly) behaviour involving car drivers - where are the resources going to come from to target cyclists going 'too fast'? Please reframe your thinking - the danger is not on the shared path, it's on the road next to it!*
- *Wider paths on high-use routes; kerb ramps to Australian standards everywhere.*
- *Provision of greater powers to councils to enforce all of the above rather than relying on the NSW police force.*

- *I would like to see a section in the NSW Road Rules booklet that specifically covers rules for bikes etc. so that the rules and rights are clear to all. I would also support an online test of rules before anyone can ride an e-bike etc.*
- *Making removal of bikes from improper places mandatory - and in a short time frame. 24 hours is too long. Try 5. I live in a densely populated area. We can have multiple bikes build up. Our footpaths are no go areas - plus the bikes whizz past and knock us down.*
- *Removal of the requirement of a helmet. So many countries do not have this rule. It should be the risk of the rider. There are never helmets available. Communal helmets if available are not hygienic. They [are] vandalised or stolen. It is a major reason bikes are not used. No one wants to wear a dirty helmet. No one carries a personal helmet around in case they want to use a bike it is a silly law for publicly shared bike services and should only be mandatory for privately owned bikes/devices.*
- *The "wattage" rule - should be speed limited, not power.*

Question 17: Are there any other suggestions you have for rules, regulations, or other measures that could make e-mobility devices safer and more widely used, both now and in the future?

This open-ended question invited respondents to provide additional suggestions for rules, regulations or other measures that could improve safety and encourage the wider use of e-mobility devices, both now and in the future.

A total of 957 respondents engaged with this question, offering a diverse range of views. Generally speaking, the responses focused on several key themes, including the need for stricter enforcement of existing regulations, better infrastructure (such as dedicated lanes and parking), enhanced user education and the implementation of technical standards for devices. Many respondents also emphasised the importance of balancing safety with accessibility to promote the responsible and widespread use of e-mobility devices.

Below are some sample of comments across the key themes.

Need for clearer regulations

Respondents called for clearer regulations and stricter enforcement around the sale and use of e-mobility devices, reflecting a desire for more consistency and transparency in the legal framework governing these vehicles. Several areas were identified where current regulations are either inadequate or ambiguous:

- **Definition and classification of e-bikes:** Some respondents highlighted confusion surrounding the classification of different e-bike types, particularly the distinction between throttle-operated and pedal-assist models, as well as 'fat bikes'. Some questioned whether more powerful e-bikes should be classified as motorcycles, requiring a license to operate them.
 - *E-bikes should be considered a light motorcycle. They need to be registered and be insured and checked for safety similar to motor bikes. Insurance and registration can be less than a motor bike but enough to be taken seriously.*
 - *Class 2 e-bikes (no speed limitation and no pedal assisted power) should fall into the small motorcycle license. In my opinion, they should require a test to at least know the traffic rules and if the speed is not limited, they should ride in the road, not in the sidewalks or bike lanes.*
- **Modification of e-bikes:** Some respondents contended that the legal status of modifying e-bikes to increase speed or power output is often unclear, creating a regulatory grey area that some riders exploit without consequences.

- *E-bikes that have been modified for throttle control and are not pedal assist need to be confiscated and made illegal to sell, ride and own.*
- *They need license plates just like cars. They're no different to a motorbike when they're modified.*
- Enforcement powers: Respondents noted inconsistencies in enforcement, partly due to the unclear or overlapping authority of various agencies (such as police and local councils).
 - *Pedestrians should be prioritised. Reckless/illegal rider behaviour should be permanently policed, as far as I can see there is no policing at all.*
 - *Cycling reps on every council traffic committee. Increased and forced spending on cycling infrastructure in every council area in Sydney. Must be minimum 20% of traffic budget.*
- Device standards: Some respondents highlighted the lack of standardised requirements for e-mobility devices, noting that this has led to substandard or unsafe products being on the market, contributing to safety concerns.
 - *Enforcement of the Australian standards are import. There are countless sellers offering illegal e-bikes that are overpowered and/or not speed restricted and/or not suitable to carry pillion passengers but advertised as being able to be used in public spaces... (All get around the laws with disclaimers of "off road use only" or switchable modes hidden in the fine print of their advertising, or simply tell customers that it's not a problem as no one enforces it) The sellers of the illegal e-bikes should be investigated on how they imported the illegal e-bikes, whether they paid the relevant duty and bikes that are obviously not intended for off road use should be assessed as such (which is part of the current standard)...*
 - *I am a bicycle repairer and almost every day I see worn out brakes and often the customer has no idea how badly worn the brakes are, most of the e-vehicles have brakes that are insufficient and wear out usually in 6 months, tighter reg[ulation]s on what products can be brought in or compulsory inspections of e-vehicles.*
 - *Lithium-ion fires are greatly concerning, especially in strata properties (which are preferentially located in areas which are more likely to adopt e-mobility). Can model by-laws be written to help prevent and direct responsibility in the event of a fire? Does the federal government need to ban third party batteries or improve Australian standards?*
 - *Compliance should be enforced on the supply side, i.e., on manufacturers and sellers. Whether this is done by outright banning of those that exceed regulations (which may be problematic if there are legitimate uses on private land), or by way of requiring a compliance plate or sticker to be affixed, this would better enable any non-compliant vehicles to be identified.*

Speed regulation and control

Some respondents highlighted the need for improved speed management strategies for e-mobility devices, particularly in areas with high pedestrian traffic. Key views included:

- Implementing variable speed limits adapted to the environment, such as reducing speeds in pedestrian-heavy zones and increasing them in designated lanes or for specific vehicle types.
 - *I think all e-bikes could be given a max power rating of 30km/h. This would allow bike riders to blend in with traffic flows. The current speed differential leads to impatience by car/ motorcycle drivers which causes safety issues for cyclists and car drivers.*
 - *We need different categories. All should begin with speed limitation as baseline.*
For example:

1 - Slow speed - for mobility scooters and 'small child devices' up to 10kg mass, limited to 10km/h, allowed on footpaths and other shared areas like malls etc, no registration or license

2- Low speed - for non-pedelec scooters (must have spring-loaded thumb-throttle) maximum speed 25km/h, on-road or designated 'shared footpaths'... all allowed to cross footpaths but not drive on them, enabling use for 'last mile deliveries'; no registration or license

3 - Medium speed - for mopeds, pedelec cycles and semi-enclosed vehicles (may have removable 'weather proof doors'); speed restricted to 50km/h; on road only... ; hydraulic brakes capable of stopping as for regular cars, park brake, turn signals, horn, wiper(s) optional, seat belts, no helmets if roll bar fitted (some of these have a roof as well); rider or driver license, registration as for moped.

4 – New energy vehicle - as per USA rules but limited to roads of speed no greater than 60km/h (so can be used in regional areas where not all local roads are limited to 50km/h), registration as for moped category, similar safety equipment like horn, turn signals, brake lights, lights, wipers, park brake, retractable seatbelts, roll bars

5 – Light electric vehicles - Totally new category. Designed to provide cheaper electric vehicles that are more like normal cars, but not capable of more than existing 110km/h highway speed. So must be strictly speed limited to prevent breaching this finite upper limit. Registered as 'light electric vehicles' and not required to comply with crash testing etc. (as "light weight") but which should have all the other Australian design rules ticked.

On the other hand, some respondents advocated for increased speed limits or wattage, particularly in a state like New South Wales, where the terrain and diverse usage scenarios could benefit from better integration with vehicle traffic.

- *Placing limitations on the devices such as maximum motor wattage is nonsense as some devices absolutely demand a minimum motor wattage to even be functional. Such as electric unicycles that rely solely on a high torque and high wattage motor to be able to balance the riders weight even whilst stationary, typically between 5,000-10,000 watts just to be able to operate, which is far more than e bikes between 250-1,500 watts so this outdated and uneducated method of limiting the devices motor wattage is not in line with the requirements for the technology to function. There are motorbikes being sold road legal that are capable of over 300kph, performance cars that can do over 250+kph, traditional vehicles like these are not having their motors or kw output levels regulated, a similar system for micro electric mobility devices should also be implemented where it is not the device that is limited (due to reasons stated above) instead it is the responsibility of the operator to not exceed the set speed limits or face the associated penalties.*

Some respondents also expressed strong opposition to e-mobility devices, calling for outright bans on shared bikes, e-bikes and e-scooters in certain areas, particularly on footpaths, busy streets, or even city-wide restrictions in some cases.

Dedicated active transport infrastructure

Many respondents advocated for better infrastructure to support the safe use of e-mobility devices. Many observed that the current practice of sharing pathways with pedestrians or cyclists often leads to congestion and safety issues. Key recommendations included:

- Dedicated lanes: Creating separate lanes for e-mobility devices to minimise conflicts with pedestrians and cyclists.
 - *E-mobility devices would be safer for all road users if they had access to and felt safe using the roads currently dominated by motor vehicles and had access to dedicated paths for moving vehicles like bicycles.*

- *Build more separated rider lanes along more arterial roads or along areas with focused pedestrian activity, e.g., streets with a concentration of shops/restaurants - increasing rider accessibility encouraging separation of pedestrians and riders, while also increasing activity and throughput for the area.*
- Wider lanes: Expanding existing lanes to safely accommodate various types of users.
 - *Make mobility infrastructure part of the road design requirements considering dedicated pedestrian, micromobility and vehicle spaces. Even just wider footpaths with pedestrian and micromobility “lanes” clearly marked would be a significant improvement to safety and amenity, making clear for everyone to know what to expect.*
 - *Paths have to be maintained and built wider. Vegetation constantly grows over the paths near us and I report it. It does get done eventually but there is no regular trimming and it needs to be cut right back to give everyone room to pass.*
- Enhanced urban connectivity: Improving city infrastructure to support the growth of e-mobility by developing better network connectivity and providing sufficient, designated parking areas.
 - *Point to point docking scheme rather than a free-for-all system with no structure/ rules that is open to abuse.*
 - *We need routes to be joined up into a cycle super highway as has happened in London so that cycling can become a safe and convenient alternative to taking the car - especially using e-bikes because of the many hills in Sydney. It would be much safer, if like London, there was a dedicated green stopping zone for bikes at junctions in front of the cars rather than forcing bikes into the gutter where they can't be seen.*
 - *A commitment to rolling out the Strategic Cyclway Corridors program to create safer spaces for cyclists and e-mobility devices.*
 - *I am not supportive of unbridled construction of cycleways, unless proper risk assessments are done and the general road utility to other users is not compromised. It shouldn't be phrased as “cars vs cyclists, for the environment”. It's not a war. Many of us use multiple modes of transport at different times. It is important our roadways and footpaths are safe for elderly and disabled, including when negotiating new intersections and narrowed roads when cycleways are constructed. New cycleways should not be designed in such a way that causes traffic jams.*
- Road space reallocation: Reassessing current road allocation policies to integrate e-mobility devices more effectively with other road users.
 - *Existing infrastructure is heavily car-centric, making it both disingenuous and irresponsible to label e-mobility devices as inherently unsafe. Despite the current high road toll, conventional vehicles are not subjected to the same level of scrutiny as e-mobility devices. It's essential to shift this perspective to create a more balanced and fair assessment of all transportation modes.*
 - *This questionnaire presents itself as about "e-mobility devices and safety" yet appears to rest on an assumption that it's the e-mobility device users that cause the danger rather than being subject to it. Any perceived conflict between e-mobility device users and pedestrians should be reframed to show how those two groups are pushed into fighting over the scraps of road space that remain after drivers have been allocated virtually all of it.*
 - *Stop building bike lanes. They are a nuisance for drivers and cyclists alike. Many cyclists prefer to use the road instead of bike lanes because cars can easily drift slightly left and hit a cyclist in the lane. This isn't the driver's fault, as lanes often become narrower when bike lanes are added, leading to more congestion and safety concerns. Cyclists avoid bike lanes because they are unsafe*

and underutilised. Even if bike lanes are made wider or have lane dividers, they can still increase congestion and disrupt road design, causing more confusion and traffic problems.

Safety gear

Many respondents supported the idea of mandatory safety gear, particularly helmets, to reduce injury severity in accidents. While some recognised the value of enforcing helmet mandates, others expressed concerns about their potential to deter usage.

- *In order to see a higher uptake in e-mobility devices, I would like to see it being optional to wear a helmet when in a low speed area 40km/h and below. I still support the requirement to wear a helmet when travelling in roads/paths with higher speed limits.*
- *The government has stopped being concerned about whether or not people wear bike helmets. Now that kids are riding these e-bikes and getting up to speeds equal to the motor vehicle speed limits, the government must start getting serious about enforcing helmet rules.*
- *E-mobility devices for hire often don't have helmets with them. This should be enforced (perhaps not being able to be unlocked unless a helmet is with it).*
- *Back to base built into the apps with fees for not returning shared bikes and scooters, helmets attached to the bikes and scooters which are unlocked by the app and need to be locked back on the bike before you can exit the app/rent another bike.*

There was also support for encouraging the use of safety accessories on e-mobility devices, such as lights, to improve visibility during low-light conditions, especially at night.

- *Better advice/ regulation about bike lights - they're extremely important for safety of the rider but when set at the wrong angle, they are blinding to pedestrians and oncoming traffic. This is due to the strength of the lights you can buy now.*

Public education and awareness

A recurring theme raised by respondents was the need for greater public education on safe e-mobility practices. Many noted that users often lack awareness of local traffic laws or the risks associated with improper use. Some respondents emphasised that educational efforts should extend beyond e-mobility users to include drivers and other road users, as the general public may be unfamiliar with how to safely share spaces with e-mobility devices.

Suggested measures included launching public awareness campaigns, particularly in schools, to educate both e-mobility users and other road users on safe riding practices, proper use of infrastructure and compliance with local regulations.

- *Schools need to get onboard with teaching kids about road rules early. I've only witnessed negligent behaviour from school kids on these bikes or young people going to the beach.*
- *Remind pedestrians of their safety obligations as happens in Canberra and Queensland. Also teach cycle safety to car drivers e.g., leaving 1.5m when overtaking and checking before opening a car door. I've never had a close shave with an e bike. I've had many with poor drivers.*
- *Determine the infrastructure available at the schools for e-bikes including but not limited to:*
 - *Adequate and secure and safe bike racks, including locations for bike helmet storage.*
 - *E-bike battery charging facilities.*
 - *Safe egress in and out of the school, including separating car, pedestrian and bike access. In some schools, current pedestrian gates act as a funnel and are only approximately one meter wide, not designed to allow for safe use of both bikes and pedestrians at the same time at school opening and closing times. Car access limited to driveways to carparks. Bikes, including e-bikes should have specific entry and exit locations.*

- *Education on riding safely on footpaths and roads in high pedestrian areas, particularly during the hours when school zone speed limits are in operation.*
 - *Once dispersed from the school e-bike riders should be aware of the road and footpath conditions. Driver training has been a feature in schools, now e-bike rider training should be a feature.*
 - *Schools should consult with their insurers to ascertain the risks of not providing safe egress and storage of e-bikes on the ground of their school.*
 - *Parents should also consult with their insurers, medical and general, to ascertain they have appropriate insurance in the case of an accident, (the riders' fault or otherwise) damage or stolen.*
- *In collaboration with schools and riders, the council should identify popular cycling routes and modify existing cycle and shared paths to accommodate e-bike riders, ensuring the safety of all users. Let all riders know through infomercials, supply outlets, regular signage on pathways and built up areas, so they can continue spreading the word by word of mouth, social media or by any means the message that the responsibility to all riders to be safe and to regard the safety of non-riders and respectfully give way to the same and endeavour to give way to all vehicles heavier than you is high priority for safety.*

Licensing, age restrictions and insurance

Several respondents suggested implementing licensing systems or age restrictions to ensure users possess the necessary maturity and knowledge to operate e-mobility devices safely. Additionally, some respondents highlighted that younger users are at a higher risk of accidents, especially when carrying passengers or neglecting to wear safety gear.

Key proposals included:

- Setting a minimum age limit for e-scooter and e-bike riders, with many suggesting 16 or 18 years as an appropriate minimum.
 - *Children under 16 should not be allowed to use e-bikes. If they want to, they can use a bicycle and use pedals to propel their bicycle. Under 16's are not safe to be on an electric bike on the road.*
 - *Any person under 18 years of age should not be allowed to operate any e-vehicle.*
- Requiring users to obtain a basic license or certification after completing a safety course or proficiency test, similar to motor vehicle licensing.
 - *There should be a licencing regime for any vehicle capable of travelling at more than 15km. There is no difference between a fat bike speeding and a petrol motorcycle, except the fat bike is often on the foot path and if they either do the wrong thing or hurt someone, they can just speed off. There is no licence plate to find and identify them. It should be clearly spelt out by advertising and where these are purchased on the liability that the parents have, who are generally buying these bikes for their kids.*
 - *I think that e-bikes which have the ability to use power without pedalling (e.g., throttle only), can exceed 25km/h, or can accommodate a pillion should require a registration scheme much like a boat licence.*
- Mandating third-party insurance for e-mobility devices to promote responsible use and accountability.
 - *Insurance must be mandated including third party and property damage.*
 - *Insurance and registration can be less than a motor bike but enough to be taken seriously.*

- *If injury occurs from someone, usually children and young adults, there is no insurance and as they don't have registration, no way to track the person responsible.*
- *I've been hit by a cyclist and have ongoing issues it would have been nice to have been able to have a recourse back through some form of insurance given the idiocy of the cyclist who is anonymous while I have life-long issues to deal with.*

Some, however, raised concerns that insurance and licensing could create barriers to entry by discouraging use of e-mobility devices due to added costs and administrative hurdles.

- *Insurance, curfews, speed limits, restricted areas, etc. are all not helpful ideas. We don't need more regulation, when e-mobility is already struggling so hard in Sydney.*
- *Curfews and mandatory insurance would be a horrible imposition on an activity that presently represents a wonderful freedom from the economy of car ownership and all it entails.*

Technology integration

Several respondents emphasised the potential for technology to enhance e-mobility safety, such as using geo-fencing technology to restrict e-mobility devices from entering certain areas (e.g., pedestrian zones) or to automatically reduce speeds in specific locations.

- *Share e-bikes & other devices must be geofenced within specific areas & have a shutdown applied if exceeding the geofenced area.*
- *A solution which is used in other cities (e.g. London and Paris) is to Geofence the locations they can be left in high traffic areas - away from narrow footpaths and pedestrians.*
- *Proper geolocation mapping and speed control for personal scooters. Creating a government-controlled map and giving access to specific e-mobility providers will allow for proper control of safety measures.*

Penalties for non-compliance

Several respondents advocated for stricter penalties and visible enforcement to address non-compliance with safety regulations, such as not wearing helmets or riding at excessive speeds. Key proposals included:

- **Imposing fines or penalties for unsafe behaviours, such as riding without a helmet or using e-mobility devices in restricted areas.**
 - *The hire bikes are a blight on the city. In a 650m walk I counted 49 bikes parked or strewn on the footpaths. Only three had helmets. This is absurd and these hire bikes should be banned from the city streets (ok in parkland like Centennial Park). How is it that kids have to wear helmets, but these hire bike riders can get away without wearing helmets - are there really two sets of laws?*
 - *Rules around them being taken on public transport. They are a hazard and often obstruct access to the doors. Sometimes later at night there are 2 or 3 in the one vestibule. Is there any risk of batteries exploding on trains? I don't feel safe with them on the trains.*
- **Creating monitoring systems to enforce these penalties, potentially in collaboration with e-mobility companies, local councils and law enforcement.**
 - *Limit the amount of share bikes a company can distribute in local government areas across NSW.*
 - *Pedestrians should be able to ring and report dumped or wrongly located bikes to someone who will come and remove in a limited time window. 24 hours is too long for a footpath on a busy road to be obstructed. What are pedestrians to do - walk in the traffic?*

- *All e-bikes should be clearly numbered and an online site created for public reporting of faulty e-bikes, with sufficient monetary penalties to deter improper disposal. E-bike companies should be required to collect/remove improperly parked bikes promptly or face additional penalties.*
- *Love to see a registration system. Doesn't need to be a paid one but a system where e-mobility must be a registered plate before allowed on the roads/paths. I've been hit by a cyclist and have ongoing issues it would have been nice to have been able to have a recourse back through some form of insurance given the idiocy of the cyclist who is anonymous while I have life-long issues to deal with.*

Policy harmonisation and national approach

Several respondents highlighted inconsistencies in regulations across Australian jurisdictions and called for a unified, national approach, which would make it easier for e-mobility users to move between different regions of Australia. Key suggestions included:

- Developing a national framework to standardise rules governing e-mobility devices, ensuring consistent regulations across all states.
 - *Review of National Transport Commission rules which are out of date and do not allow for future tech improvements.*
 - *NSW is out of step with the rest of Australia. There needs to be a national approach. It is crazy watching states independently develop e-bike/ scooter/ skateboard standards. The time for a national approach is long overdue. I can have a 500watt legal e-bike in NSW which immediately becomes illegal when I cross the border.*
- Aligning New South Wales regulations with other jurisdictions to permit the use of e-scooters in public spaces.
 - *Create regulations that are simple and commonsense. The rules for e-scooters should be as close as possible to bikes. Literally just copy and paste the Queensland regulations.*
 - *Looking at other jurisdictions, many permit them subject to regulations on: (a) technical matters (e.g., weight, bell, lights, proper brakes and speed/acceleration/power); and (b) where and how they can be used (e.g., in cycleways, roads with speed limits of 50 km/h or lower and footpaths provided they do not exceed 10 km/h). In simple terms - provided (a) is regulated correctly, there should be no need to impose any regulations on (b) that are any different from bikes.*
 - *Victoria might be about to only legislate for e-scooters and not the broader definition of personal mobility devices/e-mobility as described in the Australian Road Rules (and NSW's terms of reference). Please don't make this mistake too. Address the whole category (especially including electric unicycles). All states in Australia which have legislated (and South Australia who have announced they will) use the broader definition. Please try to maintain and improve national consistency on this. Also, consider whether e-bikes need to be treated any differently to other e-mobility. Are e-bike laws just to shoehorn them into existing bicycle laws in the absence of broader e-mobility laws?*

Reducing red tape

Some respondents suggested making regulations less strict and removing red tape to encourage the use and growth of e-mobility devices. They expressed concerns that excessive regulation discourages adoption and limits the convenience of e-scooters and e-bikes.

- *Simplify regulations to the core issues, e.g., speed and use of helmets to make it more clear for everyone in the industry to understand including law enforcement and riders. Confusing regulations*

with motor wattage, seat specifications or bizarre items does not make any real sense, nor does it really have any impact towards the core issues being identified of speeding for example.

While safety remains a priority for many, some respondents also highlighted that over-regulation could stifle uptake and diminish the benefits of e-mobility devices.

- *There are already so many rules and signs. Over regulation is also bad as it makes be so hyper-aware of doing 'wrongs' and ways to punish others. Letting people be can also be an option! And pedestrians seem very unfamiliar that a blue line means a shared path. Either scrap the concept or do something better. They aren't on a bike, so aren't looking for cycling signs and indicators etc.*
- *If light electric vehicles including electric scooters are legalised, I oppose a registration system that generates revenue – This would push would-be riders towards cars or motorbikes instead. It would increase the cost of ownership, discourage light electric vehicle usage and reduce the benefits that they offer. Bicycles are an example of a similar-sized vehicle that's successful without a registration system.*
- *Treat e-mobility just like bikes, manage the risk through signage, speed and separation wherever possible. There's no need to create new regulation for what is a rapidly evolving market that needs room to grow and fill the various niches of transport that are in demand for this transport flexibility in our billy suburbs.*

Question 18: Is there anything else you would like to share about your thoughts on e-mobility devices?

This open-ended question invited respondents to share additional thoughts on e-mobility devices, yielding 810 responses that revealed a variety of perspectives. Several key themes emerged:

- Safety concerns: A large number of respondents expressed worries about the safety of e-mobility devices, particularly regarding accidents, rider control and insufficient safety measures. Concerns were also raised about the unsightliness and potential hazards posed by abandoned share bikes.
 - *It is important to differentiate between law abiding users of legal e-bikes and those who choose to illegally modify their (usually throttle assisted) e-bike and/or to ride it dangerously.*
 - *A consumer watchdog to keep out low quality products.*
 - *The fact that some footpaths have now become shared paths - simply by virtue of painting broken lines down the middle - means that adults can legally ride on the footpath - great for the rider but not for the pedestrian.*
 - *Apart from riding and speeding on footpaths, the issue of the “dumping” of bikes anywhere on footpaths is a major hazard. There should designated areas for the location of these bikes, funded and maintained by the companies.*
 - *Private owners of e-mobility devices have more incentive to ride their devices safely and appropriately since they own the device (which are quite costly) and they have more to lose if they misbehave. It's actually those who hire the devices who are more prone to behaving badly since they don't own the device and aren't as familiar with them.*
- Regulation and enforcement: Many respondents called for clearer regulations, stricter enforcement and more progressive rulemaking for e-mobility devices. Several mentioned that New South Wales should align its policies with those of other states and countries, such as Queensland, Western Australia, Seattle (USA) and Taiwan's YouBike system.

- *There's no accountability by government or institutions: police are slow to respond, council argues it's outside their control, state government does not introduce laws to empower the latter and the media ignores it until there's an injury and all the while pedestrians and other road users are at risk.*
- *Councils just defer issues/feedback/complaints to Transport or the Police, but councils let the hire e-bikes into their area (e.g., City of Sydney) - but they take no accountability for issues - hence Roles and Responsibilities are not well defined. There needs to be a regulatory function to ensure councils manage hire e-bike operators more effectively, have contracts/key performance indicators with them and impose sanctions if those key performance indicators are not met (needs to be done in conjunction with enforcement services). If councils don't want to comply with this then they can't allow e-bike hire operators to function in their areas. There should be an audit of this every year - by Transport for NSW if the relevant body?*
- *Please start booking people who are riding illegal (i.e., not speed limited) vehicles (e-scooters and e-bikes) and get these off the streets. Get bikes and scooters (not mobility aids) off footpaths and roads. I ride an e-bike myself and love scooters, but am sick of having to worry about being injured when I am walking on a footpath.*
- *I've been riding an electric unicycle around Parramatta regularly for two years. Enforcement of regulations on e-mobility seems non-existent as I have ridden past police officers multiple times and have never been asked to stop by them.*
- *The police have been passive at enforcing the law to date which may seem to have little consequence when there is no event causing injury or death. The Police's inaction is encouraging more and more bikes to be ridden illegally on our roads and footpaths because of the lack of any consequences for this illegal behaviour.*
- *Abolishing motor wattage regulations would open the market to use better cargo bikes etc. and really the easiest rules for police to enforce is speed and helmets which really are the core issues.*
- *The fact e-scooters have not been legalised is farcical. Any trial of e-scooters using solely rental schemes is even more farcical, as riders will not care for the laws or vehicles as they would if they were on their own vehicles.*
- *I wish there was a regulatory body I could escalate my concerns to. I would also like to see bikeshare apps being held to account for poor parking of their vehicles.*
- **Positive impacts:** Respondents also acknowledged the positive effects of e-mobility devices, including reducing traffic congestion, environmental benefits and promoting physical activity, especially for individuals with limited mobility.
 - *Every small, electric or manual vehicle on the streets reduces traffic, congestion, pollution and wear and tear off the road surface. Along with pedestrians, these are road users that should be prioritised above cars.*
 - *E-bikes are revolutionising urban mobility, offering a sustainable and efficient alternative to traditional transportation methods. In a bustling city like Sydney, e-bikes can alleviate traffic congestion, reduce carbon emissions and promote a healthier lifestyle. However, to fully embrace this eco-friendly mode of transport, it is crucial to establish dedicated parking spaces for e-bikes. These spaces would not only ensure the security of the bikes but also encourage more residents to adopt this green mode of travel, ultimately contributing to a cleaner and more accessible urban environment.*
 - *In the current "cost of living crisis" additional legal methods of transport in the form of e-mobility devices has the power to help families and individuals. There are clear environmental and road*

congestion benefits as users move towards "last mile" transport methods. More accepting regulations are well overdue as technologies and new transport methods have become available. People who are trying to do the right thing are excluded from modern conveniences and benefits because of the outdated classifications of e-mobility devices.

- *As a middle-aged woman with a disability, I love travelling to places where e-scooters are legal, my husband and I have a great time and see more of an area than at our home town. The trial in Wollongong is very promising and I hold great hope it will not only be successful but go on to be an example of how electric light vehicles can change a city in all the ways talked about here.*
- *E-scooters and e-mobility devices are very important for those of us with disabilities who aren't able to get government support/permission to use e-mobility devices. Not just those with physical disabilities but neurodivergent people too. It is safer and more accessible for us to use e-mobility devices as opposed to walking. E-scooters also make commuting at night more safe for women and non-binary people, especially those who can't afford to live within walking distance of a train station. Especially considering the housing crisis, not everyone can move into an area with decent public transport, so e-mobility devices would be very helpful, especially in regional and remote areas.*
- *It is a privileged and shortsighted perspective to treat e-mobility devices with such disproportionate levels of scrutiny, especially when considering the record levels of road trauma caused by standard vehicles. While conventional cars continue to contribute significantly to accidents and fatalities, they are not subjected to the same intense examination as e-mobility devices simply because of the established status quo. This bias is not only unjust but also counterproductive. E-mobility devices provide an affordable and efficient means of transport, particularly for younger generations who may find it increasingly difficult to afford and maintain a conventional vehicle. Holding these devices to a higher standard is unfair, especially given the undeniable benefits they offer in terms of cost, convenience and environmental impact. Furthermore, it is important to acknowledge that any trauma statistics related to e-mobility devices often result from their operation in a hostile, car-centric environment.*
- **Medical and liability issues:** A smaller group of respondents expressed concerns about liability for medical expenses arising from accidents involving e-mobility devices. They emphasised the need for clear policies to address such incidents, particularly in cases where insurance coverage is unavailable.
 - *I'm concerned as to who pays any medical expenses when a pedestrian is injured on a footpath by a person on an e-bike, most often not an adult. They are difficult to hear in high traffic areas and come up behind you quite quickly and if you move to the side not knowing they are behind you they have little time to stop or swerve to avoid hitting you.*
 - *I also think insurance is a big issue, if someone gets knocked over, they could break a bone and be up for thousands of dollars of medical bills.*

Appendix 1

Inquiry into the use of e-scooters, e-bikes and related mobility options

Online questionnaire

On 6 June 2024, the New South Wales Legislative Council's Portfolio Committee No. 6 - Transport and the Arts commenced an inquiry into the use of e-scooters, e-bikes (including shared schemes) and related mobility options. The inquiry aims to explore how these options can be safely integrated into our communities.

Further information about the inquiry, including the terms of reference, can be found on the committee's website. <https://www.parliament.nsw.gov.au/>

As part of the inquiry, the committee is seeking online submissions from **New South Wales residents** through the following questions. **Responses are due by 18 August 2024.**

Your voice matters: Your anonymous responses will inform the committee's report to the New South Wales Government.

Focus on recommendations: The committee aims to develop recommendations for the government to consider.

Constructive feedback appreciated: We encourage respectful and solution-oriented responses.

Terminology

For the purposes of this questionnaire, the following terms are used:

- Electric bicycles (e-bikes), electric scooters (e-scooters), electric skateboards (e-skateboards) and self-balancing scooters (hoverboards) are collectively referred to as **light electric vehicles**.
- Mobility scooters and electric wheelchairs, along with other electric mobility aids designed to assist people with limited mobility, are collectively referred to as **e-mobility aids**.
- together, light electric vehicles and e-mobility aids, as well as other e-mobility options, fall under the broader category of **e-mobility devices**.

Section 1: Respondent information:

Your name and email address will be kept strictly. Your responses will be reported anonymously.

1. Name:
2. Email address:
3. Are you a resident of New South Wales? Please select one of these options
 - Yes
 - No
4. Post code in New South Wales (shown only if answer to Q3 is yes (optional):

5. In what capacity are you participating in this survey? Select one.
- Light electric vehicle user: I use an e-scooter, e-bike, e-skateboard or a hoverboard to get around or for recreation.
 - Light electric vehicle user: I use an e-scooter, e-bike, an e-skateboard or a hoverboard to get around or for recreation.
 - E-mobility aid user: I rely on a mobility scooter, electric wheelchair or other e-mobility aid to get around.
 - Pedestrian: I primarily get around by walking, which may include using a walker, cane, a wheelchair or other assistive device.
 - Other vehicle user: I mainly use a vehicle on the road, like a car, motorcycle, or bicycle.
 - Public transport user: I mostly rely on buses, trains, ferries, or other public transport options.
 - Other (please specify)

Section 2: Light electric vehicle use

6. Which of the following light electric vehicles do you currently own or regularly use? Select all that apply.
- E-scooter
 - E-bike
 - E-skateboard
 - Hoverboard
 - Other (please specify)
7. How often do you typically use a light electric vehicle? Choose one.
- Rarely (1-2 times a month)
 - Occasionally (1-2 times a week)
 - Frequently (3-4 times a week)
 - Daily
8. Why do you use a light electric vehicle? Select all that apply.
- To get to work or school
 - To travel short distances to or from a public transport stop (e.g., train station, bus stop) as part of a longer journey
 - For my job (e.g., food or courier delivery)
 - To run errands and shop
 - For fun and exercise
 - To help me get around due to a disability or health condition
 - Other
9. How informed do you feel about the current rules and regulations for using light electric vehicles in New South Wales?
- Very informed
 - Informed
 - A little informed
 - Not at all informed

Section 3: Considerations for light electric vehicle users

We are interested in understanding the factors that influence people's decisions about using light electric vehicles. Even if you have not used one before or are not currently considering one, please answer the following questions:

10. When considering using a light electric vehicle, how important are the following factors in your decision?

Consideration	Not at all important	Of little importance	Neutral	Somewhat important	Very important
Faster and convenient commutes with options to switch travel methods and get to starting/ending points easily	1	2	3	4	5
Potential to reduce traffic congestion in cities	1	2	3	4	5
Environmental benefits of reducing emissions	1	2	3	4	5
Accessibility for people with physical limitations or age-related concerns	1	2	3	4	5
Cost-effectiveness compared to owning a motor vehicle or regularly using other transportation options	1	2	3	4	5
Safety and security at night, especially for shift workers and women	1	2	3	4	5

11. When considering using a light electric vehicle, which of the following factors would most likely prevent you from using it on a regular basis? Select all that apply.
- Safety: I am worried about getting hurt while riding.
 - Traffic: I am not comfortable sharing the road with cars and trucks.
 - Parking: There are not enough safe and convenient places to park these devices.
 - Charging: There are not enough public charging stations.
 - Cost: Renting or buying one is too expensive.
 - Weather: I do not want to ride them when it is raining.
 - Rules: I am unsure of the laws and regulations for using them in my area.
 - Availability: There are not enough light electric vehicle options readily available where I live.
 - Accessibility: Light electric vehicles are not accessible to me due to physical limitations.
 - Other (please specify)

Section 4: Interaction between e-mobility device users and pedestrians

12. Should light electric vehicles be allowed on shared paths where pedestrians and e-mobility aid users are present?
- Yes
 - No
 - It depends

In your opinion, how well do existing bike lanes, bike paths and shared paths in your area accommodate cyclists, e-mobility device riders and pedestrians (including those with mobility aids)?

13. While e-mobility devices offer a convenient way to travel, some behaviours can put riders and others at risk. Tell us which of these unsafe practices concern you the most: Please select at most 3 options.
- Riding too close to cars and trucks in traffic lanes
 - Speeding
 - Distracted riding (e.g., using phones)
 - Improper lithium-ion battery handling and charging
 - Nuisance behaviour (e.g., riding in pedestrian paths, ignoring traffic signals)
 - Sudden stops or swerving
 - Other (please specify)
14. In your experience, have you encountered any of the following safety concerns involving e-mobility devices? Select all that apply.
- Nearly been hit by an e-mobility device.
 - Witnessed someone fall off or crash while using an e-mobility device.
 - Witnessed a pedestrian startled or frightened by an e-mobility device.
 - Witnessed a pedestrian collide with an e-mobility device.
 - Other (please specify)

Section 5: Rules, regulations and reforms

15. To enhance safety for both users and the community, which regulatory reforms around e-mobility devices do you believe are most important? Select all that apply.
- Technical standards for e-mobility devices (for things like speed limits, braking capabilities, weight limitations, lighting requirements, batteries and safety features)
 - Curfews for e-mobility device use in certain areas or at times with higher pedestrian traffic or with limited space
 - Increased enforcement of existing regulations
 - Targeted enforcement of dangerous behaviours
 - Comprehensive user education campaigns
 - Mandated insurance or compensation schemes
 - Expansion of designated lanes and parking areas and charging stations
 - Improved signage and clear road markings
 - Other
16. Are there any other suggestions you have for rules or regulations that could make e-mobility devices safer and more widely used, both now and in the future?
17. Is there anything else you would like to share about your thoughts on e-mobility devices?