

## Executive summary

The use of e-mobility devices in Queensland is increasing rapidly, driven by their convenience, affordability and sustainability benefits. While these devices offer clear advantages when used safely and responsibly, rising injury rates, the prevalence of illegal and unsafe devices on Queensland's roads, and ongoing enforcement challenges identify a need to ensure that the regulatory framework is modern and fit for purpose, and emerging risks are robustly addressed.

The 28 recommendations within this report draw on submissions from over 1,200 submitters and over 140 witnesses from across the state. There was strong community sentiment that the current situation is unsustainable and that measured and practical reform is required.

A coordinated, multi-agency approach – encompassing regulatory amendments, strengthened enforcement, improved community education, and infrastructure investment – will be required to enhance public safety and mitigate the key risks associated with e-mobility use.

### Safety concerns

At its core, this inquiry focussed on public safety. The safety of e-mobility riders, many of whom are children, as well as pedestrians and other road users. Queensland Health reported more than 6,300 e-mobility related emergency department presentations in the year to March 2025, a figure understood to likely underestimate the true number of incidents. Over 200 cases involved major trauma, with more than 60 requiring intensive care, predominantly for head and facial injuries. Evidence to the inquiry indicates a clear trend of severe, disabling and long-term harm associated with these incidents.

Tragically, last year in Queensland, 12 people died in e-mobility device incidents, including several children. Evidence indicates a rising number of e-mobility incidents involving children and young people. Experts advised the committee that children under 16 often lack the cognitive and motor skills required to safely operate powered devices in dynamic environments. Limited understanding of road rules further elevates their risk.

Fires linked to e-mobility batteries are also an increasing concern. The Queensland Fire Department advised that while lithium-ion batteries used in these devices are efficient and lightweight, they can become highly volatile if damaged, leading to sudden and severe fires. Since 2023, e-mobility devices have represented the largest share of lithium-ion battery fire incidents, with most cases involving e-scooters. Between March 2022 and July 2025, QFD firefighters responded to 4 fatal incidents and a number of cases of serious burns.

Queensland's response to these safety issues is critical to the effective integration of e-mobility devices into the state's transport network. The key risk factors are well established, including the widespread use of illegal and modified devices, excessive speeds, failure to wear helmets, and riding while impaired. Evidence also indicates a rising number of e-mobility incidents involving children and young people.

Achieving meaningful progress will require strong leadership from the Queensland Government and coordinated action across all levels of government and relevant agencies.

Underpinning these reforms is a need to improve data collection at both the state and national levels to better understand trends and injuries resulting from the use of e-mobility devices. This information is important to informing future regulatory settings. It is also important that state and local governments embed e-mobility into their strategic transport infrastructure planning. The Queensland Government should work with local governments to achieve greater investment and delivery of high quality, connected and separated pathway networks. The committee has recommended that the Queensland Government also advocate for local governments to provide dedicated parking for e-mobility devices in designated areas.

### **Regulatory reform**

This report focusses its attention on several key areas of regulatory reform. A critical first step is ensuring that e-mobility devices sold and used in Queensland meet product safety standards.

The committee has recommended that the Queensland Government update state legislation to align definitions of compliant e-bikes, personal mobility devices (PMDs), and batteries with recognised product safety standards – including EN15194–*Electrically power assisted cycles* for e-bikes, and an equivalent product standard for PMDs.

The committee has also recommended that the Queensland Government continue to work with national agencies towards the implementation of mandatory national safety standards for lithium-ion batteries in e-mobility devices, to enhance consumer safety and reduce the risk of fires. The committee has recommended that the Queensland Government, in consultation with the Battery Stewardship Council, investigate and support local government and/or private waste disposal sites, and retail and point of sale disposal opportunities, to facilitate responsible battery disposal. There is also an opportunity for the Queensland Government to support and expand education campaigns focussed on e-mobility battery safety and fire risks.

It is evident that the current import settings, which were amended in 2021 by the Australian Government, have enabled large numbers of unsafe, high powered and non-compliant devices to enter Queensland. This has created significant safety risks, including battery related hazards, for riders and the wider community. Mandatory controls at the point of import are essential to improving safety outcomes.

Faster and more powerful devices undoubtedly present increased safety risks. The committee has therefore recommended a two-tiered approach to regulation with devices capable of exceeding 25km/h being subject to a more stringent regulatory framework.

The committee has recommended that law be amended to expressly provide that any device that does not meet the definition of a compliant e-bike or PMD and which exceeds a top speed of 25km/h be defined as a motorcycle, moped or other appropriate

classification. The committee has recommended that it be made clear in legislation that riders of these devices must hold an appropriate driver licence (such as a motorbike licence), devices must be registered and insured under Compulsory Third Party provisions and be compliant with Australian Design Standards. These devices should be restricted to road use only and should be sold by licensed motor dealers.

To address safety concerns, the committee has recommended that the law be amended to provide that compliant e-bikes and PMDs can only be ridden by individuals aged 16 years and over. This age requirement reflects the cognitive skills needed to assess traffic risks and reduces the likelihood of serious injuries among younger riders. Aligning age limits for both e-bikes and PMDs provides a clearer and simpler framework for implementation.

The committee has also recommended that riders of e-bikes and PMDs be required to hold at least a Queensland Class C Learner Licence which requires the completion of the PrepL learning and assessment program. The committee considers that this recommendation is important to ensuring that riders possess a sound understanding of Queensland road rules and how to operate devices safely.

Hundreds of submitters raised concerns about the safety of pedestrians. Many reported near misses and unsafe interactions, with some indicating they no longer feel safe using public pathways. These risks are heightened for older people, those with vision, hearing or cognitive impairments, and families with young children. The committee identified a real need to change the culture of riders. Accordingly, the committee has recommended that the Queensland Government amend legislation to reduce the speed limits on all footpaths, for all e-mobility devices, to a maximum of 10km/h; and that legislation be amended to prescribe an offence of riding an e-mobility device in the vicinity of a pedestrian without due care and attention.

The committee also recommends that the Queensland Government support local governments to use local laws to prohibit or set lower speed limits for high pedestrian zones and pathways. There is also opportunity for the state and local governments to improve signage relating to speed limits and requirements to give way to pedestrians.

## **Retail**

Retailers have a clear responsibility to ensure accurate representation of the products they sell. While many businesses act responsibly, the committee received reports of traders engaging in unscrupulous conduct, including implying that illegal devices are acceptable for use on public roads or providing advice and products that enable legal devices to be modified into illegal ones. The committee is of the view that the Queensland Government should take targeted action to reduce the sale of unsafe e-mobility devices in Queensland, including that laws be amended to require that e-mobility devices sold in Queensland align with recognised safety standards such as EN15194 for e-bikes and an equivalent standard for PMDs; and that non-compliant devices sold for use on private property only, are to be clearly marked with permanent and visible markings that indicate

for consumers and enforcement officers that the device is 'for use on private property only'.

The committee has also recommended that the government introduce anti-tampering laws to prohibit the sale of and use of modification kits or assistance by retailers to increase the power and speed of devices.

There is also opportunity for the Queensland Government to support retailers to provide information and educational resources at the point of sale, including information about compliance with safety standards, road rules and penalties for non-compliance, battery safety and disposal, and the legal use of the device on public roads and pathways.

### **Enforcement**

Effective enforcement is also vitally important. The Queensland Police Service (QPS) has reported a growing number of incidents involving unsafe and illegal e-mobility device use and dangerous riding behaviours. There was widespread support from inquiry participants for enhanced enforcement against riders who are not complying with the road rules and who are putting themselves and others at risk.

QPS adopts several enforcement approaches, which were welcomed and encouraged by inquiry stakeholders. Operation X-Ray Surety, a statewide campaign that ran from November 2025 through to the end of January 2026, focussed on reducing road trauma and improving compliance with e-mobility regulations. Over 2,000 infringement notices were issued, 120 illegal devices seized, and engagement activities took place in over 70 schools during the operation. That said, QPS reported several practical enforcement challenges, which are not unique to Queensland.

To provide the QPS with the tools it needs to take illegal devices off Queensland roads and paths, the committee has recommended that laws be amended to provide that the QPS has sufficient powers to seize and impound illegal devices on a first offence. This should include the ability of QPS to dispose of or destroy the device.

The committee has also recommended that the government consider strengthening the existing penalties associated with the most significant risk factors such as riding at excessive speeds, failure to wear a helmet, riding under the influence of alcohol or drugs, or hooning activities. The committee has also recommended that the law be amended to enable the State Penalties Enforcement Registry (SPER) to pursue 16 and 17 year old riders who breach e-bike and PMD regulations and to provide that parent/guardians can be pursued for penalties for breaches of e-mobility device regulations by children under 16 years of age.

The committee has also recommended that laws be amended to ensure that e-bike or PMD riders under the influence of alcohol or drugs can be dealt with in the same way as alcohol or drug impaired drivers of motor vehicles on roads, including undertaking Random Breath Tests.

The recommendations outlined in this report are significant. The committee encourages Queensland Police Service and the Department of Transport and Main Roads to work closely to ensure that education and enforcement are proportionate while transitioning to any new reforms.

### **Education**

Finally, the committee has recommended that the Queensland Government implement a wide-ranging community education campaign outlining e-mobility rules, and changes to those rules in Queensland. Rider and community education is key to making devices safer. While not an exhaustive list, key themes could include what devices are legal to ride in Queensland, where and how you can ride, penalties for dangerous or illegal riding and battery charging and disposal tips. A comprehensive campaign that focusses on clear and consistent communication is essential to the success of the regulatory framework.