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NSW Legislative Council Portfolio Committee No 6
Parliament House
Macquarie Street
SYDNEY NSW 2000

Via email: portfoliocommittee6@parliament.nsw.gov.au

18th August 2024

Dear Committee Members,

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

Thank you for the opportunity to provide input into the Parliamentary Inquiry.

Bicycle NSW has been the peak bicycle advocacy group in NSW for forty-eight years and has more than 30 affiliated local Bicycle User Groups. Our mission is to 'create a better environment for all bicycle riders', and we support improvements to facilities for pedestrians and cyclists. Bike riding provides a healthy, congestion-reducing, low-carbon form of travel that is quiet, efficient, and attractive for all ages with the correct infrastructure design.

Please note that this submission can be published in full on your website, with Bicycle NSW named as the author.

First and foremost, Bicycle NSW strongly supports emerging and established micromobility

E-bikes and other e-mobility devices are transforming transportation. Young people and low-income workers are leading the charge. Electric micromobility can make a huge contribution to decarbonising our transport system, and creating quieter, less polluted streets which are less dominated by parked and moving cars.

E-bikes overcome topographical challenges, conquer long distances and carry greater loads. E-bikes replace car trips for many riders. With the average annual cost of running vehicles averaging [\\$22,000 per two-car household](#), e-bikes are affordable for people struggling with the cost of living. They provide access to work, education and recreation opportunities, and offer incredible independence to the 40% of the population that can't drive, whether that is due to age, disability, low income or by choice.



Figure 1: In July 2022, there was one lonely bike at Mackellar Girls High School in Manly Vale. On one day in July 2024, there were 93 bikes. There are 1100 students so 8.5% are riding to school. Governments dream of this order of mode shift. E-bikes are the magic ingredient for a veritable #bikeboom! Most of the bikes take a passenger so the mode share is actually higher. As [economists have pointed out](#), "the number of girls riding a bike to school would be a good measure of our success as a society." (Images: Bicycle NSW)

In the regions, e-bikes can address transport poverty and open up new frontiers in bike tourism. Bicycle tourism is a [\\$1.9m industry in Australia](#) but NSW not getting its fair share.

In the cities, many journeys are very short. Although Sydney has sprawled, around [62% of trips to work under 5 km are made by car](#). More than [two million daily car trips are less than 2 km](#). These trips are low-hanging targets for shifting to bikes.

Bicycle NSW welcomes an inquiry to address community concerns about e-mobility

Several issues have arisen because the uptake of micromobility has raced ahead of regulation and education:

- Illegal e-bikes and e-scooters are imported and sold without oversight
- There is no standard certification scheme for batteries, and limited education about safe charging practices
- Untrained riders are using bikes unsafely
- Police are not enforcing riding rules or confiscating bikes

This is important work, and we thank the NSW Government for turning its attention to the regulatory and policy measures needed to 'enhance mobility, the customer experience, and safety for users and the broader community'.

It is vital to clarify that the current problems are largely not the fault of individual riders.

Most concerns around the use of e-bikes and e-scooters are due to systemic failures. Governments have not provided adequate regulation or infrastructure for the safe and comfortable use of e-bikes and other healthy, sustainable and efficient modes. Policy and actions are not aligned to leverage the amazing opportunity offered by e-mobility.

We respectively point out that the [online questionnaire](#) doubles down on the negative narrative in the media, particularly questions 14 and 15. It is not helpful to require respondents to identify problems in order to complete the survey.

Bicycle NSW asks all levels of government to make necessary changes to the regulatory framework **with great care**. Any policy and regulation shifts that reduce the capacity of e-bikes to provide a transport solution will have a harmful impact on the NSW economy and environment.

The #bikeboom must not be put back in the box. The aim must be to expand the industry and enable **more riders**, of all ages, abilities and socio-economic backgrounds, to use micromobility on the road to Net Zero.

This submission sets out a series of **24 recommendations** under **three themes**. The [Terms of Reference](#) addressed by each recommendation are indicated in the summary table on Page 3. Note that the introduction on Pages 1 and 2 responds to Terms of Reference (c) and (f).

The recommendations focus on actions that are within the remit of the NSW Government. The submission finishes with some comments on the key responsibilities of other levels of government.

For example, federal leadership will be critical to ensure a robust and sustainable future for e-mobility. The reclassification of light electric vehicles in the Road Vehicles Act, leading to the removal of the import permit, has reduced 'policing' at the border and allowed poor quality products to flood the market.

Recommendation		Theme	T of R
1	Increase the level of investment in active transport to at least 10% of the transport budget	Theme A: Safer roads are essential. Cities must adapt to accommodate space efficient, low emission and sustainable transport.	a, d, g
2	NSW Government must commit to completing regional networks of separated cycleways		a, d, g
3	Reduce speed limits everywhere		a, d
4	Legislate the application of the Road User Space Allocation Policy and a Road User Hierarchy to prioritise road space and create space for people walking and cycling.		a, b, d, e, g
5	Traffic signal phasing adjusted to prioritize people walking and cycling.		d
6	Empower and require NSW Police to crack down on dangerous driving and riding		b, d, e, g
7	Empower local government to make decisions on safer streets		a, b, e, g
8	Modify the existing e-bike requirements to clarify the definition and allow a wider range of devices to be legal and used in the road related environment.	Theme B: Policy and regulation reform is required to improve the quality and safety of e-mobility devices.	a, b, e, h
9	NSW Fair Trading must crack down on the misinformation and misleading advertising which sells non-compliant bikes as safe and legal e-bikes.		a, b
10	NSW Government to advocate for NSW and Australia to adopt the EU Battery Regulation 2023/1542		b, d, g
11	Establish a 'sunset' program to transition illegal e-bikes into compliant categories or out of the market.		g, h
12	Develop a strong, coordinated state-led framework for <u>shared</u> micromobility		b, c, d, e, f
13	Compel bikes sold and used in NSW to have credentials checked by an authorized body.		b, d, g
14	Impose clear and enforceable rules on food delivery platforms to improve rider safety		b, d, e, g
15	Legislate for universal plugs and transformers to minimise the risk of unsafe charging and mismatched equipment.		b, g
16	NSW Government should take a leadership role in specifying regulatory requirements		a, b
17	Roll out an extensive and wide-ranging education campaign for all road users, with a focus on drivers	Theme C: A plethora of 'soft' measures will support the growth, safety and sustainability of e-mobility industry and users	b, d, g
18	Undertake a comprehensive review of the road rules relating to micromobility to ensure that they maximise safety for people walking and riding.		b, e
19	Subsidies for vehicles must incentivise the use of e-bikes, not oversized cars and utes		f, g, h
20	Initiate a large-scale public education campaign on battery safety.		b, d, g, h
21	Work with innovators to establish battery swapping and outdoor battery charging hubs		g, h
22	Support the development of an ecosystem of mechanics specializing in e-mobility devices		g
23	Provide robust government support for collection and recycling schemes for bikes and batteries		b, h
24	Update development standards to ensure that all buildings have best-practice bike parking		c, d, h

Theme A: Safer roads are essential. Cities must adapt to accommodate space efficient, low emission and sustainable transport.

Recommendation 1:

Increase the level of investment in active transport to at least 10% of the transport budget.

Massive investment is needed to build active transport infrastructure across NSW following decades of neglect. Active transport must not be just valued as a transport investment but equally as a 'magic pill' to prevent disease, a cost-of-living buster and a key pillar to help achieve Net Zero emissions.

NSW currently only spends 0.2% of its transport budget on active travel which is 100 times below the [20% recommended by the UN](#). Bicycle NSW and our colleagues at [Better Streets](#) recommend that the NSW Government [allocates 10% to active transport](#) over the next four years with a view to reach 20% as capability to deliver increases.

At a minimum, [Get NSW Active grants must be doubled](#), with clear commitments in each and every NSW budget. Funding has been stagnant for several years, except for 2022 when \$118m was available. In 23/24, the total was back to \$60m, but only 21% of applications made by councils were funded. Many high-quality, shovel-ready projects are languishing. [In 24/25, a Get NSW Active commitment was conspicuously absent](#).

Recommendation 2:

NSW Government must commit to completing regional networks of separated cycleways.

Research consistently shows that [70% of people would ride more](#) with safe, separated and convenient infrastructure. Riders of both traditional bikes and e-bikes benefit from dedicated infrastructure, as do pedestrians. Riders are less likely to use the footpath, and amenity is improved for everyone, particularly if road space is reallocated for the cycleway, reducing traffic speeds and volumes by removing or narrowing vehicle lanes.

Although shared paths are an appropriate solution in some circumstances, it is essential that local and state governments focus on separated cycleways, with road space reallocated as required. As our population ages, we must not build infrastructure that will discourage walking in the future.

There have been many iterations of a regional network. The latest, the [Strategic Cycleway Corridor program](#), includes the entire six cities region. However, little has been delivered on the ground. Many of the cycleways are [slated to go on state roads](#), reconfiguring the available space to transform traffic sewers into places for people. Project such as Oxford Street East and Sydney Park Junction will provide compelling evidence of the benefits for all road users. When they happen.

Bicycle NSW urges NSW Government to accelerate the construction of 100km of new, connected strategic cycleways promised by 2028, as promised in the [NSW Active Transport Strategy](#). Tie executive salaries to this target to keep Transport for NSW on task.

Recommendation 3:

Reduce speed limits everywhere

Even when a complete network of regional routes is in place, riders will need to use the roads for parts of every trip. But most bike riders will feel only safe using the vehicle lanes if traffic speeds and volumes are **very low**.

Lower speed limits, both in metropolitan and regional areas, are an essential tool to improve road safety, enhance place outcomes and encourage walking and cycling. [NSW Centre for Road Safety](#) found that in a crash between a car and somebody walking, there is a 10 per cent risk that the person will be killed at 30 km/h, 40 per cent risk at 40 km/h, and a 90 per cent risk at 50 km/h. Research from around the world shows that a [1% reduction in speed leads to a 4% reduction in fatalities](#).

It is relatively easy and inexpensive to physically reduce using signage and enforcement. In terms of Return-On-Investment, there is no cheaper way to save lives. The evidence is in and there is no need for trials, or fragmented change.

Bicycle NSW advocates for a default urban speed limit of 40km/h with 30km/h rolled out in areas of high pedestrian activity, on mixed traffic cycle routes and around schools.

The [NSW speed limit guidelines](#) have recently received a much-needed update. We now have official recommendations for 30km/h speed zones, and it should be easier for councils to implement change.

However, Transport for NSW still impedes the rapid roll out of lower speed limits. We urge NSW Government to empower councils to manage speeds on their road network.

NSW Government must lead the conversation, build public support for change and put an end to the piecemeal approach that has hindered change for far too long. Clearly communicate that lower speeds will contribute to more liveable cities with [Better Streets](#).

Recommendation 4:

Legislate the application of the Road User Space Allocation Policy and a Road User Hierarchy to prioritise road space and create space for people walking and cycling.

In recent years, the NSW Government has published excellent strategies and policies to prioritise walking and cycling in transport and land use planning.

These include:

- [The Movement and Place Framework](#)
- [Providing for Walking and Cycling in Transport Projects Policy](#)
- [Road User Space Allocation Policy](#) (updated and strengthened in 2024) and the accompanying [Road User Space Allocation Procedure](#)
- The revised [Future Transport Strategy](#)
- The ground-breaking [Active Transport Strategy](#)
- The exciting [Strategic Cycleway Corridors program](#)

Alongside these, the [TfNSW Cycleway Design Toolbox](#) clearly sets out the physical requirements of bike infrastructure, providing a benchmark for projects across the state. The [Walking Space Guide](#) has similar ambition for pedestrian infrastructure.

These policies and strategies demonstrate a clear understanding of the urgent need to improve our physical and mental wellbeing, our safety, the health of the economy and environmental sustainability. They aim to address the ongoing culture of car-first planning on health, urban liveability, road trauma and air quality.

However, efforts to improve the environment for walking and cycling continue to falter, move at snail's pace, and get overrun by vested interests. There is a deep disconnect between the fine strategies and policies and the delivery of NSW Government's intended active transport outcomes.

Failure to prioritise the movement of people outside a car is not the fault of one administration. It is the legacy of [default car-first thinking](#) by current and previous NSW governments.

Bicycle NSW has prepared a discussion paper for a Healthy Streets Bill which **proposes to legislate policies and laws to elevate active transport across NSW** and create a new base line for transport and development projects that interact with the road-related environment.

The Bill intends to kick-start a complete overhaul of the governance at Transport for NSW. But alongside this important work, we again urge NSW Government to be **a leader** in communicating how much-needed changes to the streets will improve health, liveability, transport choices and safety.

We welcome the opportunity to ramp up conversations about the Bill with decision makers and government policy experts.

Recommendation 5:

Traffic signal phasing adjusted to prioritize people walking and cycling.

Of all the things that will make active transport more convenient and attractive, changing signal times is the simplest and cheapest.

[Research](#) has shown a delay of more than 30 seconds at a signalised crossing will tempt pedestrians to cross against the 'red man'. Across NSW, 120 second waits are very common.

Bicycle NSW is working with Better Streets and Walk Sydney to advocate for poor signal phasing to be addressed. Our 2023 article [Pedestrians Are Fed Up With Begging](#) explores the significant barriers to change. We made several recommendations for Transport for NSW, including reducing cycle lengths to no more 60 seconds.

One problem is the small, stretched team managing NSW's signalised intersections. Transport for NSW's Sydney Coordinated Adaptive Traffic System (SCATS) was developed here in the 1970s and sold around the world. It uses real-time data about actual traffic demand to adjust signal timing at each signalized intersection. But the system is all about reducing delay for cars. It is very hard for engineers steeped in maximising vehicle throughput to think about other road users.

We ask Transport for NSW to implement a great model from London. Significant resources are allocated to reviewing the optimal phasing of every light, every 5 years. [The Timing Review Programme \(TRP\) adjusts 1200, or 20%, of the city's traffic signals annually](#). Time savings for pedestrians and bus passengers are the key metric used to determine success.

A systematic approach like this would be a game-changer for NSW.

Recommendation 6:

Empower and require NSW Police to crack down on dangerous driving and riding

Motor vehicles kill people walking and cycling. Road trauma statistics have trended in the wrong direction over the last few years. [351 lives were lost](#) in 2023 in NSW, 70 more than in the previous 12 months. **This is a 25% increase**. And 2024 is on track to be worse.

There is too much casual speeding and aggressive behaviour from car and truck drivers.

Ensuring compliance with the road rules is essential to keep people safe. Three factors improve compliance: the likelihood of being caught, the severity of the penalty and the swiftness of the penalty.

More resources must be dedicated to enforcing dangerous and high-risk behaviors such as speeding, red light running and unsafe passing. This should include more speed cameras, without warning signs, and additional police patrols.

Although less dangerous, there are risks posed by reckless or thoughtless bike riders. It is important to recognize that the *perceived threat* of collision is a barrier for vulnerable citizens to fully use public space.

Encourage NSW Police to enforce dismounting in pedestrian zones and work with the community to minimise dangerous riding.

However, as per the behaviour change pyramid, enforcement is not the main strategy to improve rider skills and behaviour. Warnings and education are the first step. And it is essential to align enforcement to risk, with evidence-based criteria informing enforcement programs and the setting of appropriate fines for bike and micromobility riders. Policing must not disincentivise active transport.

Of course, people only ride on footpaths when the road is unsafe. Which circles back to the need to make roads safer.

Recommendation 7:

Empower local government to make decisions on safer streets

Active transport advocates have long been frustrated by the slow machinations of Local Traffic Committees where even small changes to streets to improve conditions for walking and cycling face inexplicable red tape. Projects are delayed and cancelled while seeking compliance with documents drafted decades ago.

In NSW, the Local Traffic Committee was formed in 1976, with police representation added in 1983. Delegation guidelines were written in 2009. However, there hasn't been a single independent review of LTCs since 1976. Moreover, here's no review requirement under the Road Transport Act.

A major issue with LTCs is that representatives are 75% untrained. In addition, performance isn't bound to current local or state policies. For instance, delegates may not have heard about or agree with the Movement and Place Framework. As a result, many LTCs will regard *safety* through the lens of maintaining fast, efficient traffic flow. The process duplicates basic functions. Transparency is partial with limited public access to meetings and minutes.

In February 2023, Transport for NSW issued a new '[Temporary Delegation to Councils](#)'. This exempts a range of minor traffic works on local streets from review by the Local Traffic Committee (LTC) process. As a result, councils now have an alternative approval pathway for [pedestrian crossings and 10 other minor street upgrades](#). The new delegation is a huge step forward. Small changes to kerbs, refuges and signage can have a big impact on comfort and safety. But councils need to wrestle back more control.

Bicycle NSW, Walk Sydney and Better Streets urge the NSW Government **to review local governance of streets**. Councils can handle low-to-medium complexity issues that are minimum risk. An expert review panel would tackle complex cases. Clear guidelines would trigger reviews, aligning with council strategies and focusing on outcomes like walking, cycling, and public spaces. Councils would also decide the panel's composition based on their priorities, striking a balance between overarching strategies and localized perspectives.

Theme B: Policy and regulation reform is required to improve the quality and safety of e-mobility devices.

Recommendation 8:

Modify the existing [e-bike requirements](#) to clarify the definition and allow a wider range of devices to be legal and used in the road related environment.

- Increase the maximum assisted speed for 'electrically power-assisted cycles' to 30 km/h (or 32 km/h to align with US and other jurisdictions). This would make it easier for riders to share the road with vehicles, and aligns with the optimal urban speed limit of 30 km/h.
- Education and enforcement will encourage riders to use speeds appropriate to the context.
- Include throttle-only devices with the maximum throttle-only speed capped at 15 (or 20 km/h, to be determined by policy experts). This fulfills many use cases, such as disabled riders, seniors, longer rides, heavy cargo, and broaden the range of people who will use micromobility.
- No restriction on maximum continued rated power as long as the assisted speed is capped. More power is needed for cargo bikes, disability scooters, hilly areas, and heavier people.
- Trikes and mobility aids are included.
- E-scooters with a maximum throttle-only speed capped at 15/20 km/h can be accommodated, if and when they are legalised.
- Speed limiters can be incorporated into bike motors for voluntary use by young or inexperienced riders.
- No licensing or registration is required.
- No minimum age. Education campaigns will support the safe use of e-bikes by teenagers.
- Riders with Bicycle NSW membership will be insured.
- Remove the historic 'Power-assisted pedal cycle' with a maximum power output of 200W from the [NSW e-bike definition](#). This category has caused great confusion with the public, retailers, government and the police. It has made it easier to import, sell and use non-compliant e-bikes in NSW.
- Any devices that are not compliant with these rules, or are illegally imported, or have not been through the certification process are then classed as motorbikes and need rego plates, rider licences and insurance.

Note that Bicycle NSW has suggested revised speed, power and throttle levels but this is only a starting point for further research and discussions with policy experts and the industry. The NSW Government must review international best practice and evidence against desired outcomes to reach a consensus with industry, community and NSW Police on optimal figures. A compromise will be required. However, our stakeholders are clear that a slightly higher maximum speed will reduce the number of riders choosing to use unregulated or modified e-mobility devices.

Recommendation 9:

NSW Fair Trading must crack down on the misinformation and misleading advertising which sells non-compliant bikes as safe and legal e-bikes.

It is currently legal to sell e-bikes which exceed the speed and power requirements for an Australian standard e-bike, if these are marketed as for use on private land only. Authorities have no power to stop sales or dangerously high-speed, high powered or otherwise modified vehicles, including those which pose a high fire risk.

This 'loophole' must be closed with:

- penalties for selling non-legal bikes to consumers who will use them on the road
- strict anti-tampering clauses that make it illegal to modify compliant e-mobility devices
- stringent monitoring of direct-to-consumer sales
- clear markings on e-bikes that are not road-legal with significant fines for removal of marking

Recommendation 10:

NSW Government to advocate for NSW and Australia to adopt the EU Battery Regulation 2023/1542

Low-quality lithium-ion batteries may contain defects, inadequate safety provisioning and contamination introduced during manufacture. This can lead to short-circuiting, battery cell malfunctions or system faults. Devices modified at home using recycled parts can be the riskiest. Overcharging or use of non-compliant charging equipment creates additional risks.

A nationally consistent regulatory framework must be developed as soon as possible with clear requirements for the testing, labelling, transportation, storage, recycling and disposal of lithium-ion batteries.

In addition, NSW Government must collect accurate data about the cause of fires to ensure a strong evidence base for future legislation around e-mobility devices. We are concerned that non-evidence-driven policy and regulation will jeopardise tourism, grow inequity and discriminate against less abled people and those who may not have access to other forms of transport. Bicycle NSW raised this in [a submission](#) to the NSW Parliament's Inquiry into Electric and Hybrid Vehicle Batteries in January 2024.

The [EU Battery Regulation 2023/1542](#) was enacted in July 2023 after years of research and consultation. It is considered the best regulatory framework in the world.

EU 2023/1542 defines battery safety, carbon footprint measurement, labeling, recycling standards and more. The [extensive and detailed requirements](#) increase every year to 2030. Quality batteries already comply with the regulations, and manufacturers will deliver sustained and deliberate improvements over the next 7 years.

This is the gold standard. There is no need to reinvent the wheel. Australia must not try to be a policy maker in battery regulation.

It is important that Australia does not end up with lesser standards and become a dumping ground for poor quality and dangerous products.

Recommendation 11:

NSW Government to establish a 'sunset' program to transition illegal e-bikes into compliant categories or out of the market.

For example:

- Set a near term date where all new light electric vehicles/batteries must comply - say 1 January 2025
- Set a longer date where all non-compliant light electric vehicles must be removed, made compliant, traded in or scrapped - say 1 January 2026
- Offer a bounty for handing in non-compliant e-bikes/batteries. This could be a subsidy towards purchase of a new light electric vehicle/battery or a simple cash back.

Singapore, [New York](#) and Spain have introduced and funded such programs.

Recommendation 12:**Develop a strong, coordinated state-led framework for shared micromobility**

Shared bikes are an important part of a sustainable transport system but there have been negative effects due to haphazardly parked bikes and footpath riding in NSW. The community is frustrated by an industry that has expanded without sufficient oversight. Unregulated bike share has impacted the social licence for all e-mobility.

Bicycle NSW urges the NSW Government to work quickly in collaboration with operators to develop one set of regulations that apply state-wide, with agreed variations to meet the needs of different urban, suburban and regional context. Consistent rules that stretch across the borders of LGAs are essential to achieve a successful bike share system.

Actions to consider include:

- Limit the number of operators in an area
- Cap the number of bikes (and e-scooters, if and when these are legalised) that can be deployed in an area
- Establish a clear system for increasing or decreasing numbers based on usage.
- Create circular economy obligations for operators
- Modify the NSW Road Rules to allow share bikes to park on the road. They are vehicles!
 - Ensure it is possible for council to reallocate car parking spaces for designated share bike parking corrals.
 - Allow the use of 'No Stopping' zones at the departure side of intersections.
 - Make more use of 'in lane' bus stops to free up kerb space – while improving bus priority and multi-modal connectivity.
- Integrate share bikes into the Opal system, offer transfer discounts and low-cost rides for short first-and-last mile trips.

NSW Government must recognise that bike share is a valuable part of a transport network. State funding, support and subsidy is needed.

Recommendation 13:**Compel bikes sold and used in NSW to have credentials checked by an authorized body.**

In July 2024, NSW Fair Trading designated e-bikes, e-scooters, e-skateboards and self-balancing scooters (hoverboards) and the Lithium-ion batteries used to power these devices as 'declared electrical articles' under the *Gas and Electricity (Consumer Safety) Act 2017* with a staged implementation plan over a period of 18 months. The final order may be accessed via the [NSW Gazette](#).

This is a promising first step in the process of overhauling regulations to ensure that products comply with new compulsory standards.

NSW Government could also consider:

- Mandating compliance plates on bikes
- Creating an online database of approved electric bikes and batteries that are legal for sale/use in NSW (other countries have done this).
- Defining penalties for tampering with an e-bike to de-restrict maximum speed or power

A clear method of identifying the maximum power and speed of an e-bike must be developed and communicated to police and industry. NSW Police would be empowered to check compliance and confiscate uncertified devices, or certified devices used incorrectly. Education is needed to ensure police officers know the rules.

Recommendation 14:**Impose clear and enforceable rules on food delivery platforms to improve rider safety**

Again, we urge NSW Government to work closely with the relevant industry stakeholders to develop appropriate regulations. Bicycle NSW is in no way qualified to draw up rules, but we make some suggestions:

- Riders must use legal, certified bikes with the delivery platforms responsible for compliance.
- All riders undergo a training course on road rules and riding safely on the road, cycling infrastructure and share spaces.
- Mapping apps used by riders must be configured to show safe routing
- Time limits for each job must allow for a safe route and safe speeds
- Riders must wear hi-viz jackets and certified helmets.

Recommendation 15:**Legislate for universal charging plugs and transformers to minimise the risk of unsafe charging and mismatched equipment.**

Bicycle NSW would like the e-mobility industry to [adopt a single universal charging plug for e-bikes](#). Standardised chargers will be more convenient for users, but also safer. This is because chargers regulate battery temperature, voltage and other parameters. When these parameters are variable there is greater chance of mismatched products which can have dangerous outcomes. A similar situation used to plague EV safety. Since May 2019, almost every EV in Australia has been sold with a standard 2-pin plug.

Recommendation 16:**NSW Government should take a leadership role in specifying regulatory requirements**

Wide variations in legislation and regulation across Australia have emerged. The lack of alignment between import, sale and use regulations (especially in NSW) and the lack of clarity produced by this process has significantly impacted the growth and safety of e-mobility in NSW.

NSW Government must collaborate with other states and lobby federal government to support the development of a national certification system for all e-mobility devices and related batteries. A standard definition of road legal e-mobility devices is required. Import permits for e-bikes must be re-introduced.

Harmonisation must be a priority for all levels of government.

Theme C: A plethora of ‘soft’ measures will support the growth, safety and sustainability of e-mobility industry and users

Recommendation 17:

Roll out an extensive and wide-ranging education campaign for all road users, with a focus on drivers.

Effective campaigns must blitz the media with digestible information road rules, sharing the paths and roads, and minimum passing distance legislation.

Campaigns must be well-resourced and continuous to reach all corners of the community. For example, [Minimum Passing Distance legislation](#) has been in place since 2018 but public awareness is limited. The most recent Transport for NSW [Share the Road video](#) disappeared into the ether. It is over 8 years since the last major campaign “Go Together”.

The focus of messaging must shift from victims to drivers. For example, "Walk Safely to School Day" sends the wrong message about who should modify their behaviour. This driver-centric mindset has led to ‘solutions’ such as pedestrian fencing and overbridges to keep pedestrians from being harmed by vehicles. But this is 100% car infrastructure that creates enormous barriers to active transport.

The need to tailor the communication strategies for young drivers was raised at the [2024 Road Safety Forum](#). It was acknowledged that traditional approaches fall far short of reaching the target audience. One obvious moment to engage with teenagers is when they are learning to drive. Unfortunately, the Learner Driver handbook does not include information about driving around bicycles. Transport for NSW has a quick-read guide to the [Top 10 Misunderstood Road Rules](#) that all learners and supervising parents are asked to refer to. But MPD rules are not mentioned.

The Learner Driver materials must be revised urgently to reinforce rules that must be adhered to when sharing the road with vulnerable road users.

Bike training for new riders, children and teenagers, needs to be rolled out at scale and fast. Bike skills should be embedded in the school curriculum. NSW Government has been working to establish an active travel to schools program for over 12 months. \$10million has been granted for infrastructure upgrades but nothing tangible has happened to deliver training. There are [great trials to learn from](#) but the time for pilots is over.

A final point. NSW Government needs to clearly communicate issues around liability and insurance, and the risks associated with riding both legal and illegal e-devices. Education on these topics is particularly important for parents of minors who may be unaware of the legal and insurance implications.

Recommendation 18:

Undertake a comprehensive review of the road rules relating to micromobility to ensure that they maximise safety for people walking and riding.

The NSW Road Rules have not been reviewed since 2014. The Australian Road Rules 14th Amendment Package made recommendations to improve the rules for people using micromobility, but these were not adopted in NSW. [Queensland has done great work](#) to clarify the rules for bicycle and e-mobility device riders and prioritise their safety. The NSW rules urgently need a similar overhaul.

It is important to remove unintentional anomalies (and absurdities), and the inconsistent treatment of micromobility, cycling and walking.

Many possible amendments have been identified by advocates and policy experts. These include:

- Change road rules relating to give way (rules 72, 73, 74, 75, 80 & 81 and also 64 & 65,) to append “any pedestrian” with “or any rider of a bicycle or a personal mobility device” exactly as per the Queensland road rules ([Rule 72](#)).
- Change road rule 148 Giving way when moving from one marked lane or line of traffic to another, to specifically include bike lanes, so that it is clear drivers must give way to bicycles travelling in the bike lane they are entering.
- Change all road rules in Part 15 “Additional rules for bicycle riders” by including “personal mobility device” along with bicycle, modelled on the Queensland road rules.
- Change road rule 248 to allow riders of bicycles and personal mobility devices to use unsignalised pedestrian crossings, modelled on the Queensland rule
- Change road rules 67 & 68 Stopping at a stop sign/line to add an exemption for bicycle riders if they can safely give way. This is known as an “Idaho Stop” which research has shown increases safety. It reduces exposure in the intersection as momentum isn’t fully lost.

Bicycle NSW would be happy to assist Transport for NSW with a deep dive look at all road rules relating to walking and cycling.

Recommendation 19:

Subsidies for vehicles must incentivise the use of e-bikes, not oversized cars and utes.

It is essential that e-bikes are included in the any policy to subsidise vehicles. Subsidising e-bikes is much cheaper than subsidising EVs and a subsidised e-bike is affordable for far more people.

There are many schemes around the world that should provide inspiration for state and federal governments. There are over [300 tax-incentive and purchase-premium schemes](#) for across the globe offered by national, regional and local authorities. In late 2023, [Tasmania](#) launched e-bike subsidies. [Adelaide](#) has now followed.

Bicycle NSW has written about [the compelling case for e-bike subsidies](#). Modelling released in 2021 and updated with figures included in the Australian Transport Assessment and Planning guidelines released in 2022 identify a return on investment of \$7 to each dollar invested in promoting the purchase of e-bikes.

E-bike purchase incentives can specify battery and standards guidelines to promote the purchase of higher quality e-bikes.

The subsidy could take a variety of forms depending on the target community. It may be that e-bike loans, or subsidised rental, may be more effective than straight discounts on purchase, with the level and length of support means-tested.

Alongside support for e-mobility, Bicycle NSW urges governments to remove existing incentives for oversized motor vehicles, to improve road safety and bring down emissions. [Tax breaks for large utes cost Australians over \\$250 million in 2023](#). This is more than ten times the Federal Government’s Active Transport Fund for the construction and upgrade of cycle paths every year, and 4 times the current Get NSW Active grants.

Recommendation 20:**Initiate a large-scale public education campaign on battery safety.**

October 2023, the Australian Competition and Consumer Commission (ACCC) released a [report](#) warning consumers about rare but serious fire hazards from lithium-ion batteries.

Consumers, manufacturers, retailers, repairers, consumers, fleet businesses and emergency services need accessible guidance on the practical steps they can take to help mitigate safety risks:

- how to select, use, store and dispose of lithium-ion batteries safely
- how to identify when batteries are at risk of being unsafe
- practical steps and risk mitigation strategies users can take to help stay safe.

School programs could reach children at an early age. Strata committees could provide information about how to safely maintain lithium-ion batteries in any device, not just a bike or e-scooter. Infographics and simple advice in multiple languages is suggested.

These should be government-backed programs to ensure consistent messaging for all users. It could be on the scale of a Slip, Slop, Slap or Life Be In It campaign due to the pervasiveness of batteries touching every Australian every day.

Recommendation 21:**Work with innovators to establish battery swapping and outdoor battery charging hubs**

To ensure safe e-bike usage and charging, New York City Department of Transportation (DOT) has worked to expedite approvals for property owners to [install e-bike battery swapping and charging cabinets](#) on public sidewalks.

A successful [6-month trial](#) targeted 100 delivery riders who tried Swiftmile's fast charging stations, and [Popwheels](#) and Swobbee's battery swap cabinets. These start-ups are addressing risks with storage in apartments without negatively impacting [the people who need e-mobility most](#).

Recommendation 22:**Support the development of an ecosystem of mechanics specializing in e-mobility devices**

There is a lack of workshops and technicians with the skills to fix e-bikes. There is risk that bikes are being discarded rather than repaired, with huge environmental impact.

TAFE programs must be developed to train e-bike mechanics who will ensure bikes can be maintained, fixed and have a long life. The rating for bicycle mechanic in the ANZSCO should be elevated from from unskilled Level 5 to Level 3, recognising the complex skill set needed to maintain and repair a range of electronic, hydraulic and mechanical systems.

Recommendation 23:**Provide robust government support for collection and recycling schemes for bikes and batteries**

It is time to ramp up a nascent industry and ensure that e-mobility devices and their lithium-ion batteries are embedded in the circular economy.

[B-Cycle](#) is Australia's national, government-backed independent stewardship initiative. B-Cycle collects batteries and offers a transport, logistics and storage service.

There are currently two lithium-ion battery recyclers in Australia, both located in Melbourne. Envirostream and Ecobatt/Ecocycle. 95% of Li-Ion materials can be recovered.

[Revolve Recycling](#) recycles and redeploys bikes, e-bikes, scooters and other personal transport vehicles. It's a social enterprise that aims to keep bike out of landfill.

Expanding the footprint of these organisations, and encouraging more innovative businesses to open in all parts of Australia, will require sustained government funding.

Recommendation 24:

Update development standards to ensure that all buildings have best-practice bike parking

Include best-practice minimums for bike parking NSW Government policy. Bike parking should be at ground level in secure spaces with good surveillance. Access from the street must be easy, with wide doors, no steps and minimal turns. A variety of racks should be provided to suit different types of bikes. Some racks need to be fixed to the ground to accommodate heavier e-bikes and longer cargo e-bikes, and users who can't lift bikes. The 2016 Austroads report [Bicycle Parking Facilities: Guidelines for Design and Installation](#) remains the best reference.

Bicycle NSW has engaged with the Owners Corporation Network to ensure we have fair and proportionate strata bylaws, which are based on real risks and solid evidence. Following Bicycle NSW feedback, the draft bylaws were amended to be more practical, given that every building is different.

Unit complexes should provide safe bike storage and charging facilities so it is more convenient for occupants to store and maintain their bikes outside of apartments. Strata and building managers should not impose any bans which will impact those who most need e-mobility.

Further comments on the role of the federal and local government

Federal Government must:

- Enhance import standards to ensure only high-quality compliant devices enter Australia.
- Update ROVER portal to require import permit (\$55 Advisory Notice) for all bikes entering Australia.
- Lead national harmonisation of the e-bike definition and regulations for lithium-ion batteries, motor and battery power, and throttle. Australia is a small market for global micromobility manufacturers so it's ridiculous to have 8 sets of rules.
- Develop a national certification system for all e-mobility devices and related batteries
- Withdraw 5% tariff on all e-bikes
- Introduce FBT exemptions for bicycles utilised to travel to work
- Develop an ecosystem of local testing labs in Australia to ensure compliance with safety standards for e-bikes and PMDs. This would simplify certification and reduce barriers to innovation
- Commit MUCH more funding for infrastructure
- Lead the conversation about what makes better cities

Local government must:

- Include projects in the operational budget to fill in gaps in the active transport network each and every year
- Develop comprehensive and deliverable active transport plans
- Create policy to ensure that road re-sheeting includes upgrades to walking and cycling paths

- Deliver [safe routes to all schools](#) with a razor-sharp focus on new raised crossings, wide, continuous footpaths, and low speed limits on key routes used by student
- Champion active transport, be role models to the community
- Apply for available funds and grants
- Amend DCPs to ensure high-quality bike parking is included in all developments.

In Conclusion

Bicycle NSW is hopeful that strong and progressive policy to support the future growth of sustainable transport options emerges from the inquiry. We look forward to presenting our recommendations at the public hearing and reading the report in a few months.

Please do not hesitate to get in touch with Bicycle NSW if we can assist further at this stage.

Yours sincerely,



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