Submission No 171

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

Organisation: Inner West Council Bicycle Working Group

Date Received: 17 August 2024

Submission on behalf of the Inner West Council Bicycle Working Group

The Inner West Council Bicycle Working Group is a local democracy group that assists council in developing cycling strategy, policy and designs for the Inner West. We are made up of local residents who have a keen interest in improving the Inner West's cycling environment so that everyone can be more empowered to get around by bicycle regardless of age or ability.

Bicycles are an incredibly important part of our current and future transport system, particularly in urban areas where amenities and the population are more densely packed. They are an efficient means of moving large amounts of people over distances of about 2 to 10km. Bicycles take up much less space than cars to move the same amount of people, require infrastructure that is vastly cheaper than transit or private motor vehicles and have a much lower impact on the urban environment than larger motorised vehicles.

Electrified bicycles and scooters extend the useability of bicycles to longer trips, carrying heavier loads and offer the benefits of cycling to a broader segment of users who may not be able to operate a regular bicycle, with an energy footprint many orders of magnitude smaller than cars.

Our position is that policies that reduce the mode share of cars by encouraging mode shift to mass transit and active travel should be of the highest priority. We believe that bikes, e-bikes and e-scooters have a really important role to play in this modal shift, particularly for shorter length trips. The most effective role governments can play here is proactively building safe, dedicated, high quality cycling infrastructure which will benefit all road users including pedestrians, drivers and public transport users – not just cyclists.

How to read this submission

To address the terms of reference of this inquiry we cannot consider the impacts of bikes and micro-mobility devices, electrified or otherwise, in isolation. They must be viewed within the context of the transport system at large. For instance, it's impossible to talk about the safety of e-bikes or e-scooters without acknowledging the context of their use – do they replace trips in private cars? What infrastructure is provided? What kind of trips do they service? And so on.

This is particularly important when we examine the role these devices play in replacing trips by cars. Media stories and popular opinions about non-car modes of transport are usually guilty of "motornormativity"[1] – an unconscious bias which assumes car ownership and use is an unremarkable social norm. This bias works to accept the hazards and negative externalities of car use without question, but the same grace is not offered to non-car forms of transport.

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[1] https://www.sciencetimes.com/articles/42160/20230201/breaking-down-motornormativity-uncovering-bias-behind-car-culture-driving-study.htm

When an ABC article[2] in December 2023 quoted a Melbourne surgeon who noticed a "marked increase in the number of emergency presentations" due to e-scooter related injuries since the Victorian government began an e-scooter trial in 2022, it didn't *also* make any mention of the 5473[3] hospital admissions due to cars in 2023. When the same article noted that e-scooter injuries can be deadly, it made no comparison between the single e-scooter death and the 295[4] car related deaths Victoria would end up witnessing in 2023 – an increase of 22.4% against 2022.

The context of transport choices is important, because an e-bike trip is not just an e-bike trip, but potentially also a foregone car trip. The e-bike trip may impose some safety, environmental, or cost externalities, but those need to be viewed relative to the foregone externalities of the car trip that otherwise would have been made.

It is our position that the best thing for our transport system is to shift as many trips as possible away from cars and on to other modes. Naturally we believe that bikes, e-bikes and e-scooters play an incredibly important role in this mode shift.

This submission will address the terms of reference in three sections – the benefits of electrified and non-electrified cycles and scooters, the risks they present, and government actions that will help improve the transport system for everyone.

The benefits of bikes, cycles, e-bikes, e-scooters and other micro-mobility devices

Cheaper for the individual

Car ownership is expensive – the vehicle itself is expensive, but so is registration, insurance, maintenance and fuel. The AAA puts this cost at about $27000 a year in Sydney[5]. That figure looks large, but includes the cost of the car itself. However, tallying just the operational costs gives about $11000 a year.

In comparison, top of line electric cargo bikes like the Urban Arrow Family or the Riese and Muller Packster can cost about that same amount, in total, with significantly lower maintenance costs and negligible fuel costs. Regular e-bikes cost even less and non-electric bikes are more affordable still.

Families who are able to replace a car with one or more ebikes can be thousands of dollars better off each year because of it.

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2 https://www.abc.net.au/news/2023-12-20/e-scooter-injuries-rise-as-hospitals-struggle-to-treat-riders/103246314

3 https://www.tac.vic.gov.au/road-safety/statistics/online-crash-database/search-crash-data?date-after=Jan+2023&date-before=Dec+2023&meta_J_orsand=&meta_P_orsand=&query=%21padrenull&collection=tac-xml-meta&clive=tac-injuries-xml

4 https://www.tac.vic.gov.au/road-safety/statistics/lives-lost-annual

5 https://www.finder.com.au/car-insurance/cost-of-owning-a-car

Cheaper for everyone else

Cars are heavy and cause significant damage to roads when they use them, which incurs a maintenance cost that is mostly borne by local governments and their ratepayers (not drivers)[6].

Bikes in comparison cause next to no damage to roads meaning their dedicated infrastructure is much cheaper to maintain.

Gender inclusivity

E-bikes are enabling more women to take up cycling for their commute. This year's "super Tuesday" bike count saw women representing 24% of cyclists (a number that has remained largely constant over the past few years) but 36% of e-cyclists[7].

Improves health outcomes

Despite many feeling the roads are too unsafe to ride on, cycling is associated with lower all-cause mortality[8].

Even with electrical assistance, e-bikes still provide exercise. Swapping a car for an e-bike gives the user a lot more exercise and even swapping a regular bike for an e-bike can still provide the user with more exercise as they're able to travel further[9].

Streets with fewer cars driving on them are nicer as well as safer

Repurposing space for cars as space for people can make a street a nicer place to be which, for high streets, translates to economic gains for local businesses[10]. Fewer (and slower) cars on streets bustling with people also mean fewer safety incidents. This safety gain is even greater when some of the repurposed road space is turned into dedicated cycleways for bikes, e-bikes and e-scooters.

The risks of bikes, cycles, e-bikes, e-scooters and other

Collisions

All vehicles impose a safety risk on their users as well as other road users. That risk, however, is orders of magnitude smaller for bikes, e-bikes and e-scooters than it is for cars. With no change in the built environment, a simple replacement of cars to bikes would make the streets safer for pedestrians, cyclists and drivers, even if some of those bikes end up riding on the footpath.

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[6] https://alga.com.au/policy-centre/roads-and-infrastructure/roads-funding/

[7] https://bicyclenetwork.com.au/newsroom/2024/05/07/new-bike-count-data-shows-women-embracing-e-bikes/

[8] https://pubmed.ncbi.nlm.nih.gov/34279548/

[9] https://www.sciencedirect.com/science/article/pii/S259019821930017X

[10] https://theconversation.com/do-the-sums-bicycle-friendly-changes-are-good-business-58213.

When dedicated infrastructure is sparse and the road environment hostile, bikes and scooters will compete with pedestrians for footpath space. This is unsafe for pedestrians. Fortunately dedicated cycleways serve both to protect cyclists from cars as well as protecting pedestrians from cyclists.

Batteries

Recently there have been some news articles reporting battery fires related to (but not always) e-bikes[11]. Put into perspective, however, there have been two tragic deaths due to e-bike fires while deaths on the state's roads are a near daily occurrence[12]. Further, the state is already well equipped to fairly regulate lithium ion batteries just as they have for other classes of consumer products like phones and laptops[13][14]. Any policy that places undue requirements on e-bike or e-scooter batteries that aren't present for other lithium ion products risks introducing more barriers to transport mode switch that could result in poorer safety outcomes.

The role of government

As stated earlier, the role government should play is to do the utmost to encourage people to swap car trips for active transport or mass transit (or a combination).

Build cycleways

The most effective way to encourage people to ride instead of drive is to provide them with safe, dedicated, high quality cycleways. Good quality bicycle infrastructure gets bikes out of the way of drivers and means they don't need to compete with pedestrians for space.

More spending on active transport

The UN recommends governments allocate 20% of their transport spending to active transport[15]. The 2023 NSW budget allocated 0.13% to active transport[16].

Follow existing policies

NSW already has in place a suite of great policies including the Road User Space Allocation Policy[17] and the Movement and Place Framework[18].

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[11] https://www.abc.net.au/news/2024-03-14/new-south-wales-lithium-battery-related-fires/103585608
[12] https://www.transport.nsw.gov.au/roadsafety/statistics
[13] https://www.accc.gov.au/system/files/lithium-ion-batteries.pdf
[14] https://www.nsw.gov.au/housing-and-construction/safety-home/electrical-safety/lithium-ion-battery-safety
[15] Share the Road Global outlook on walking and cycling, October 2016, https://www.unep.org/resources/report/share-road-global-outlook-walking-and-cycling-october-2016
[16] https://www.betterstreets.org.au/blog/category/budget
[17] https://www.transport.nsw.gov.au/system/files/media/documents/2024/road-user-space-allocation-policy_july-2024.pdf
[18] https://www.movementandplace.nsw.gov.au/

TfNSW already have a wonderful resource in the Cycleway Design Toolbox[19] for designing world class cycleways.

These resources should be used extensively.

Slow cars down

Slower speed limits result in fewer crashes and reduce the severity of those crashes that do happen. The international standard for a safe default speed limit in urban centres is 30 km/h[2021].

Make traffic lanes narrower

Contrary to traditional traffic engineering notions, research time and again suggests narrower traffic lanes are safer[222324]. One reason for this being the necessity for drivers to be more alert. Not only are narrower lanes safer, they aid in transferring road space to non-car vehicles and pedestrians. Consequently, they are able to handle greater volumes of a diverse mix of road users, making streets more vibrant and livable.

Mixed use zoning

Bicycles excel at shorter trips and better land use planning that places residences closer to amenities makes it more attractive to swap car trips for bike trips. This is already the reality in many inner city suburbs like the Inner West where 60% of car trips are less than 5km[25].

In contrast, urban sprawl on the city's fringe which place residences and businesses in separate areas ensures residents are left with no choice but to drive for every trip, locking them into a costly and dangerous mode of travel with limited alternatives.

Financial incentives

Electric vehicle rebate schemes and tax incentives should include e-bikes as eligible vehicles. In fact, the incentive for e-bikes should be greater than that for electric cars given they burden society with much fewer externalities.

Presumed liability

Presumed liability is a standard for insurance payouts that places the burden of proof that they were not at fault, on a motorist in car-bicycle or car-pedestrian collisions. This, or some

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[19] https://www.movementandplace.nsw.gov.au/design-principles/supporting-guides/cycleway-design-toolbox-designing-cycling-and-micromobility

[20] https://www.20splenty.org/

[21] https://www.gov.wales/introducing-default-20mph-speed-limits

[22] https://publichealth.jhu.edu/2023/narrower-lanes-safer-streets#:~:text=But%20when%20you%20compare%2012,on%20streets%20with%20narrower%20lanes.

[23] https://www.forbes.com/sites/lauriewinkless/2023/12/20/want-safer-city-streets-make-traffic-lanes-narrower/

[24] https://www.researchgate.net/publication/277590178_Narrower_Lanes_Safer_Streets

[25] https://www.innerwest.nsw.gov.au/explore/parks-sport-and-recreation/walking-and-cycling/cycling-strategy-and-action-plan

variation of this standard is in place in most of Europe including France, Spain, Denmark, The Netherlands, Italy, Germany and Sweden[26].

Presumed liability recognises that damages in car-bicycle and car-pedestrian collisions are significantly imbalanced and the pedestrian or cyclist is much more likely to suffer injuries and require hospitalisation which severely impedes their ability to deal with insurance claims. It also recognises that motorists are overwhelmingly at fault in these kinds of collisions and so sets a sensible baseline (a 2011 Monash study found drivers at fault in 87% of car-cyclist collisions[27]).

[26] https://www.slatergordon.co.uk/newsroom/cycling-accidents-and-presumed-liability-uk-vs-europe/

[27] https://theconversation.com/helmet-cam-captures-bike-accidents-and-could-make-cycling-safer-3540