

**Submission  
No 1**

## **REDUCING TRAUMA ON LOCAL ROADS IN NSW**

**Organisation:** Bicycle NSW

**Date Received:** 29 January 2020

Staysafe (Joint Standing Committee on Road Safety)

The Hon. Lou Amato MP

Committee Chair

Parliament House

Macquarie Street

SYDNEY NSW 2000

29<sup>th</sup> January, 2020

Dear The Hon. Lou Amato MP,

**RE: Reducing trauma on local roads in NSW**

Thank you for the opportunity to make a submission to the Staysafe (Joint Standing Committee on Road Safety) on Reducing Trauma on Local Roads in NSW.

Bicycle NSW has been the peak bicycle advocacy group in NSW now for over forty two years, and has over 30 affiliated local Bicycle User Groups, across the state

We welcome the opportunity to contribute to making local roads safer for the people of NSW, and support measures that will enable more people to cycle safely.

Bicycle NSW defines a 'local road' as a place where people live. Freeways between towns and cities with no residential homes adjacent to them fall outside the definition, but other roads and streets are encompassed.

## FATALITIES

Fourteen people died riding their bikes in 2019, a 45% increase compared with the 9 fatalities in 2018 or a 90.9% increase on the 2016-18 average of 7.3 deaths.<sup>1</sup> 2013 was the last time NSW saw such a horrible road toll for people riding bikes.

Ms Brigit Neilsen died when a truck ran over her whilst she was standing with or pushing her bike in Newcastle. Her death was eventually counted as a pedestrian fatality rather than the death of a cyclist.

12 of the 14 deceased riders was wearing their helmet at the time of the fatal crash.

2 of the 14 deaths could be attributed to rider error. In one case the failure to observe and avoid colliding with a parked truck, and in another losing control and riding into a barricade.

2 of the 14 deaths could be accurately described as misadventure. One crash was caused by avoiding a swooping magpie, and another by a stick jamming in the wheel of the bike. Crashes of these kinds, whilst tragic, are difficult to plan for or avoid.

Of the remaining deaths:

- 3 involved heavy vehicles
- 1 saw a bus collide with a young person riding a bike
- 1 person died after he crashed whilst crossing light rail tracks on his bike
- 5 riders died when hit by people driving cars who were later charged with Dangerous Driving Occasioning Death – in two cases these were hit and run crashes where the driver failed to stop.

## INJURIES

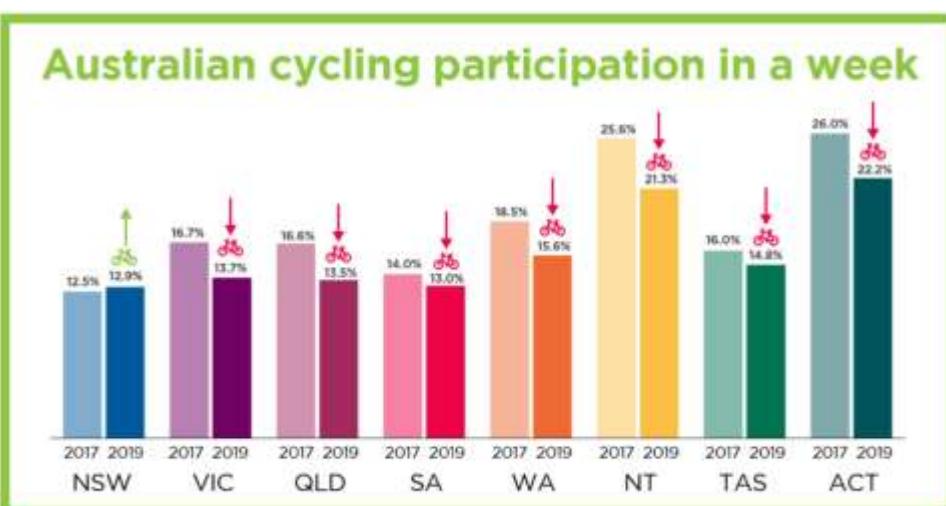
In spite of having Australia's lowest weekly participation rates according to the 2019 Cycling Participation Survey,<sup>ii</sup> cyclist injury rates appear to be on an overall upwards trend according to Transport for NSW data.



As the Sydney Morning Herald pointed out over 1100 cyclists were injured just in Sydney in 2018, 80% more than in 2005.<sup>iii</sup>

## PARTICIPATION

Unsurprisingly NSW has Australia's lowest cycling participation rates, according to the 2019 Cycling Participation Survey,<sup>iv</sup> and 70% of people, when surveyed,<sup>v</sup> are too concerned about safety to ride their bike.



This concern appears well-founded, based on the injury rates outlined previously.

This data, and people's lived experience, is the reason for low rates of bike riding especially amongst women and children, where safe, separated cycleways don't exist. This undermines the goal of the NSW Government's Future Transport 2056 plan to increase the rates of active transport use for journeys of under 10km.<sup>vi</sup>

## RECOMMENDATIONS

Bicycle NSW has amended the Hierarchy of Controls for Risk Management<sup>vii</sup> to focus on hazard reduction for bike riders.

### The Hierarchy of Controls for Bike Riding



## ELIMINATION

NSW has historically underspent on safe separated bike infrastructure that eliminates the hazard posed to people riding bikes by motor vehicles. The state boasts over 1,000km of motorway and a transport budget of over \$10 billion, but less than 1% is spent on bike infrastructure and the state has only 15km of separated cycleway, 60km of bike path, 3,821km of shared path.



<https://bicyclensw.org.au/lagging-behind-the-pack-correction/>

**Bicycle NSW Recommendation:** Invest in safe, separated infrastructure that enables the majority of people to ride from where they live to education, work, and community facilities by 2030.

Instead of hazard elimination, NSW has seen the introduction of hazards into the riding environment. In 2019 Danny Egan died riding his bike whilst attempting to cross light rail tracks in Newcastle, at an intersection where it was impossible to cross at a safe angle.<sup>viii</sup> Banning bikes from the light rail corridor without providing a safe, rideable alternative makes it impossible for people to complete their journeys.<sup>ix</sup>

Following the daily rider safety issues created by construction managers on the Sydney Light Rail, Bicycle NSW prepared a ‘lessons learned’ report for NSW Transport to help avoid the same issues in Parramatta. Early indications are that project managers have not listened, and already a key cycling route along Horwood Place has been severed and a dangerous lip installed on the route that is likely to cause bike riders to crash.

Lilyfield Road is the most used piece of bike infrastructure in NSW with counts of up to 300 riders per hour during morning peak. Bicycle NSW was promised that this route would be preserved during Westconnex Rozelle Interchange works, and that a safe, rideable alternative would be provided to the current pedestrian and bike overpasses spanning Victoria Road and the City 4 Westlink.<sup>x</sup> The proposed alternative is a dangerous, multi-stage traffic crossing with no safe storage for pedestrians or bikes.<sup>xi</sup>

**Bicycle NSW Recommendation:** Hazards to bike riders must be eliminated, not introduced into the riding environment, either during or after construction. Wherever construction necessitates detours these must be safe, rideable, direct and of at least an equivalent standard.

## SUBSTITUTION

Encouraging mode shift to bike riding, active transport and public transport provides for substitution of a hazard to bike riders on local roads. Wherever alternatives to motor vehicle use exist, Bicycle NSW encourages Transport for NSW to promote these.

Shared e-bikes, bicycle delivery services and micro-mobility technologies can provide alternatives to increased motor vehicle movements. They have the potential to contribute to reduced road trauma if clear, transparent regulation were provided setting operating parameters that reduce hazards.

There are many items in the road environment that could be substituted to reduce hazards to people riding bikes on local roads.

Bicycle NSW regularly receives complaints and images of dangerous road features that could easily be substituted including: gutters with lips, sharp or overhanging foliage, slippery paint, potholes, slippery road plates, debris left or swept onto road shoulders or into bike lanes, the introduction of road humps or cushions into bike lanes, stormwater grilles that trap bike tyres, the obstruction of bike lanes by parked vehicles or road signs, installation of temporary signs in bike lanes.

**Bicycle NSW Recommendation:** Transport for NSW to promote and incentivise alternatives to motor vehicle use. This could involve Opal ‘points’ for active transport use, provision of signals and drop-off zones near schools and high pedestrian precincts that make it easier to use active transport and encourage substitution for motor vehicle journeys.

Bicycle NSW recommends Transport for NSW develops a transparent regulatory framework for technologies and innovative businesses providing alternatives to motor vehicle journeys. This should include bike based businesses, micro-mobility and share bike services.

Standards for roadway, bike infrastructure road and bike path maintenance need to reflect safe standards for people riding bikes. Road and construction managers should work with Bicycle NSW and local Bicycle User Groups on safe substitutions for these hazards.

## ENGINEERING CONTROLS

Preventing crashes and hazards from contributing to trauma on local roads should be the first priority. Where this is not possible, harms should be minimized using engineering controls.

These could include improving road features such as providing marked bike lanes, signalised crossings for riders, traffic calming features to slow motor vehicles and using tactile markers to remind motor vehicle operators to avoid people riding bikes.

Transport for NSW already provides excellent training for people designing and building roads in NSW. Unfortunately when attending this course attendees from councils, contractors and NSW Transport expressed a reluctance to implement the measures on the basis that extra expenditure or time would not be allowed on projects.

They could also include improved vehicle safety standards such as manufacturing requirements to reduce blind spots, the introduction of sensors and technology to alert drivers to the presence of people riding bikes or to their own inattention.

NSW has seen a concerning increase in heavy vehicle fatalities. Increased movement of heavy vehicles and truck-and-trailer combinations on local roads has left people exposed to greater risk. Bicycle NSW has campaigned for the introduction of safety measures to reduce the risk of fatality in crashes involving heavy vehicles.<sup>xii</sup>

These include: blind spot detectors, 360 degree vision, turning warnings, side under-run protection, crash avoidance technologies (auto emergency braking, electronic stability and roll stability control programs, and lane departure warnings). These can improve collision avoidance, and reduce the risk of death if a crash occurs.

Bicycle NSW supports calls by the heavy vehicle industry for legal and regulatory reform that focuses on making roads safer and the introduction of these types of measures. We have contributed to the regulatory review process and we are calling for measures that conform with best practice in the United Kingdom and Europe.

Major Aaron Couchman, Brigitte Nielsen, Linda Joley and a female Sydney University student may well still be with us today had these measures been in place.

**Bicycle NSW Recommendation:** That a recognition/award program be developed to recognise excellent safety standards for bicycle riders in road projects. This should be open to developers, councils, contractors, project managers and members of the community to nominate projects for.

NSW Government and Councils should, in their procurement processes, include evaluation criteria related to bike rider safety in all contracts to be carried out in the road related environment.

The NSW Government should urgently adopt improved heavy vehicle safety standards for all vehicles used on government contracts, and phase in the same requirements as soon as possible for all heavy vehicles in NSW.

## ADMINISTRATIVE CONTROLS

In every case of a fatality or serious injury involving a motor vehicle colliding with a person riding their bike, the motor vehicle was too close to the rider. The majority of crashes involving a person riding a bike and a person driving a car were the fault of the driver.

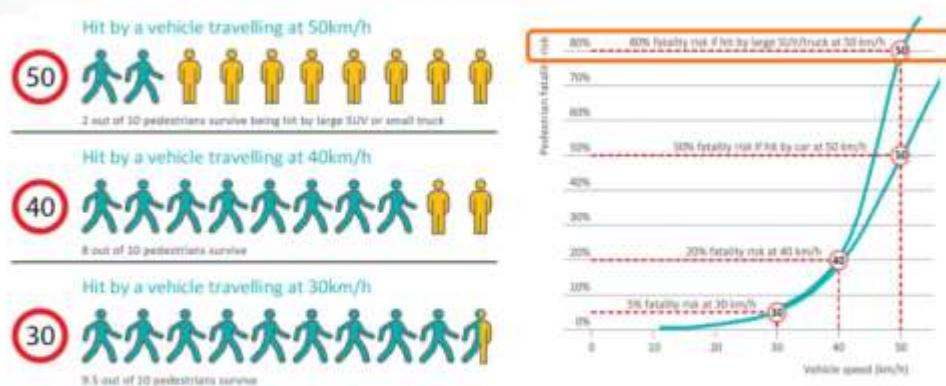
In spite of this, enforcement of Minimum Passing Distance law remains incredibly low, whilst fines issued to bike riders for not having a helmet or bell are very high. In November 2019 we compared the infringements issued, and it appeared that the most important measure to keep people safe riding bikes gets the least attention.<sup>xiii</sup>



Bicycle NSW has:

- Repeatedly called for improved driver education and changes to the learner driver resources to consistently reflect minimum passing law.<sup>xiv</sup> So far these calls have fallen on deaf ears.
- Advocated for speed reductions to protect riders,<sup>xv</sup> and we are relieved Waverley Council's 40km/h trial will go ahead.<sup>xvi</sup> NSW can measure its persistent refusal to prioritise the safety of people, in its death and injury statistics.

### Slower vehicle speeds lead to increased pedestrian safety



Above: Only 20% of pedestrians survive being hit by a large SUV or small truck at 50km/h; 50% survive being hit by a car at 50km/h; 80% survive at 40km/h; and 95% survive a collision at 30km/h. Source: Austroads 2012, On Road Cycling on Higher Speed Roads, and Kroyer (2015). (ATSS Research. Passenger cars make up 58% of motor vehicles registered in Waverley LGA, while SUVs + trucks make up 32%).

- Participated in a review of the Austroads regulations that govern construction management impacting the road related environment,<sup>xvii</sup> and we regularly advocate for implementation of the regulations on behalf of members when project and construction managers have compromised the safety of bike riders.
- Led the #FixMyBikePath2019 campaign to highlight the unsafe, broken, poorly maintained infrastructure that bike riders struggle with on a daily basis.
- Advocated for safe active travel to school.
- Successfully advocated for the development of a high quality road safety campaign to improve safety behaviour by drivers towards bike riders. Instead of current cartoonish or ‘victim blaming’ campaigns used across Australia that tend to imply a rider’s behaviour such as wearing a helmet has the magical power to change the behaviour of motor vehicle drivers.

## PERSONAL PROTECTIVE EQUIPMENT

NSW has in place mandatory helmet laws. Bicycle NSW does not dispute the medical evidence that wearing helmets can reduce some types of head injury. However most people seriously injured or killed riding bikes were wearing a helmet at the time.

As highlighted in the hierarchy of controls, personal protective equipment is the least effective way of mitigating a hazard. Unfortunately the least effective safety measure in the hierarchy of controls has taken center stage in terms of education and enforcement in NSW.

The outsized risk posed by motor vehicles and their operators receives inappropriately low levels of education and enforcement.

Bicycle NSW is also aware of technologies used successfully overseas that replace bicycle helmets and may prove more effective at protecting against concussion.

**Bicycle NSW Recommendation:** That the NSW Government cease its disproportionate focus on helmets, the least effective hazard mitigation measure. That international helmet and head protection technology be investigated for its effectiveness in preventing concussion, skull fracture and head trauma.

Yours faithfully,  
Bastien Wallace -BA LLB

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Bicycle NSW

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- <sup>i</sup> NSW Transport; Centre for Road Safety, Monthly Bulletin of Preliminary Traffic Crash Data for December 2019, NSW Government, [Online 22/1/2020] <https://bit.ly/3aKwHex>
- <sup>ii</sup> Austroads, Australian Cycling Participation 2019: Results of the 2019 National Cycling Participation Survey, [Online 28/1/2020] <https://bit.ly/2U08x9S>
- <sup>iii</sup> Nigel Gladstone, Cyclist injuries reach record high as families fight for bike paths, (2019) Sydney Morning Herald, 11/10/2019 [Online 28/1/2020] <https://bit.ly/2U8IvRE>
- <sup>iv</sup> Austroads, Australian Cycling Participation 2019: Results of the 2019 National Cycling Participation Survey, [Online 28/1/2020] <https://bit.ly/2U08x9S>
- <sup>v</sup> Sydney's Cycling Future: Cycling for everyday transport, (2013), NSW Government, [Online 28/1/2020] <https://bit.ly/3alblJi>
- <sup>vi</sup> Future Transport 2056, NSW Government, [Online 28/1/2020] <https://future.transport.nsw.gov.au/>
- <sup>vii</sup> Kevin Druley, The Hierarchy of Controls: Strategy for safety singles out hazards before work starts (2018), Safety and Health, The National Safety Council, [Online 28/1/2020] <https://bit.ly/2U1B5jm>
- <sup>viii</sup> Bicycle NSW, Newcastle Light Rail Crossing Fatality, (2019) [Online 28/1/2020] <https://bit.ly/313bLuK>
- <sup>ix</sup> Bicycle NSW, Congestion Brewing, (2019), [Online 28/1/2020] <https://bit.ly/2GtVN39>
- <sup>x</sup> Bicycle NSW, A Better Bike Detour for Rozelle, (2019) [Online 28/1/2020] <https://bicyclenew.org.au/a-better-bike-detour-for-rozelle/>
- <sup>xi</sup> Bicycle NSW, Help Us Protect Lillyfield Road, (2019) [Online 28/1/2020] <https://bit.ly/2RzwDGv>
- <sup>xii</sup> Bicycle NSW, Australians Deserve Safer Heavy Vehicles, (2019) [Online 28/1/2020] <https://bit.ly/2U3tDEn>
- <sup>xiii</sup> Bicycle NSW, Money Talks, (2019) [Online 28/1/2020] <https://bit.ly/3188zhp>
- <sup>xiv</sup> Bicycle NSW, Driver Education not Teaching Safety Behaviors, (2020) [Online 28/1/2020] <https://bit.ly/2GvroBB>  
Driver Education Key to Cyclist Safety, (2018) [Online 28/1/2020] <https://bit.ly/2U04V7T> NSW Parliamentary Inquiry - Driver Education Training and Road Safety, (2019) [Online 28/1/2020] <https://bit.ly/3188E4H>
- <sup>xv</sup> Bicycle NSW, Reducing Speed Limits, (2018) [Online 29/1/2020] <https://bit.ly/2Gw42fh>
- <sup>xvi</sup> Bicycle NSW, A New Way Forward, (2019) [Online 29/1/2020] <https://bit.ly/37Lya2p>
- <sup>xvii</sup> Bicycle NSW, Improving Construction Management, (2019) [Online 29/1/2020] <https://bit.ly/2uCZy3M>