



**BICYCLE  
NETWORK<sup>®</sup>**

*We've got your back*

**NSW GOVERNMENT  
ROAD SAFETY ACTION  
PLAN 2026**

BICYCLE NETWORK SUBMISSION

APRIL 2021

*Prepared by Dr Nicholas Hunter, Bicycle Network*

# Introduction

Around 2.6 million people in New South Wales ride a bike each year<sup>1</sup>. Although rider deaths across the state comprised 2 per cent of the state road toll in 2020, fatalities per capita have been systematically increasing since 2016 (Fig. 1). Over 16 per cent of road crashes where serious injuries were sustained involved a person riding a bike<sup>2</sup>. This suggests we still do not have a good handle on mitigating the risks to people riding bikes in New South Wales, and that urgent action is required to sufficiently safeguard a vulnerable road user (VRU) cohort comprising more than a quarter of the state's population.

It is also important to acknowledge and curb this fatality risk if state and local government efforts to increase bike riding uptake are to be effective<sup>3</sup>. People riding bikes need to be protected, but they also need to feel protected if we are to successfully encourage them to get behind the handlebars and reap the diverse range of health, economic and sustainable benefits associated with riding a bike.

This submission has been prepared to assist the NSW Government in delivering its [Road Safety Action Plan 2026](#), which will set out the state's road toll reduction targets for 2030, and the strategy that will inform the government's approach.

Our submission aims to ensure that people riding bikes in New South Wales will be protected into the future, and that their safety is duly acknowledged in the government's strategies and performance benchmarks. The five recommendations outlined here are intended to complement the action points that were set out in the Road Safety Plan 2021<sup>4</sup>.

Bicycle Network applauds the NSW Government for their commitment to building strong partnerships with the community in shaping the Road Safety Action Plan and providing an opportunity for individuals and groups to provide their views. We offer these recommendations in the spirit of cooperation and in alignment with the state's long-term vision to eliminate road deaths.

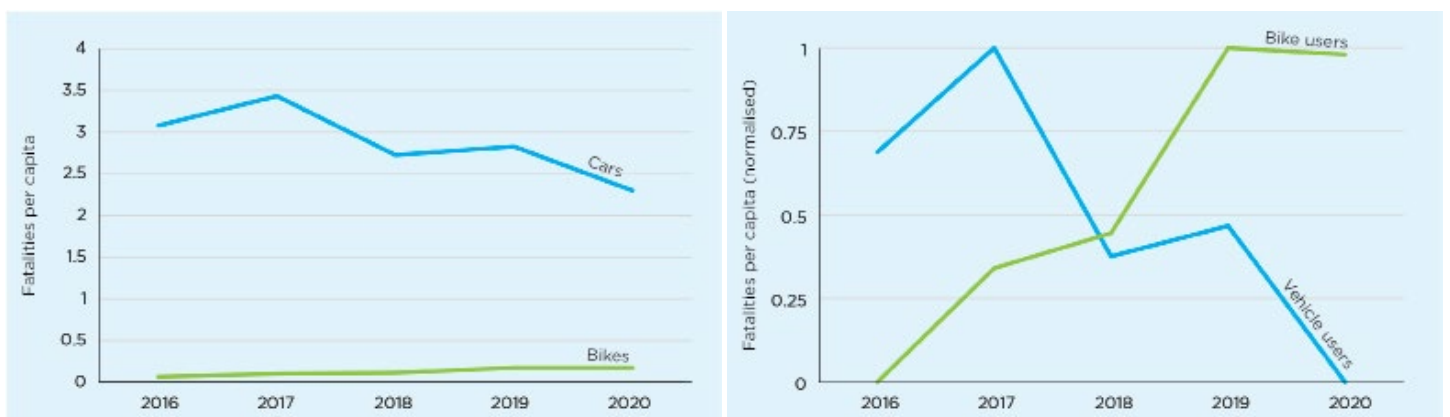


Figure 1 - Vehicle and bike user fatalities per capita in New South Wales between 2016-2020. Data in the left plot are absolute values, data in the right plot are the normalised form, which allows for comparison. Source: Australian Road Deaths Database, Bureau of Infrastructure Transport and Regional Economics (BITRE).

# Recommendations

## Recommendation 1: Be clear on reduction targets

In the Road Safety Plan 2021 a State Priority Target was to '*reduce road fatalities by 30 per cent compared to 2008-2010 levels*'<sup>4</sup>. It did not state what these 'levels' were in terms of absolute numbers, nor how they were calculated (e.g. mean or median of annual fatalities?). While Transport for NSW's (TfNSW) annual Road Progress Reports offer some suggestion of what these targets might be<sup>2</sup>, the figures are not clearly stated in a consistent manner across various reports and strategies.

Bicycle Network recommends that, for the 2026 Road Safety Action Plan, the road toll reduction targets are more clearly set out. Providing targets in a transparent and well-communicated manner will ensure public confidence in the plan and will allow the community to monitor progress. This is a necessary first step in framing the road safety strategy for the next five years.

## Recommendation 2: Provide separate reduction targets for motor vehicle and vulnerable road users

As is the case across wider Australia, the per capita annual road toll in New South Wales is falling<sup>5</sup>. However, Bicycle Network's recent Bike Rider Fatality Report shows that the per capita reduction rate is vastly different between drivers and riders<sup>6</sup>. Moreover, rider fatalities per capita in New South Wales have grown by 166% since 2015<sup>7</sup>.

Because different road user types interact with the road space in a specific way, they require unique sets of interventions to increase their safety. For the Road Safety Action Plan 2026, we are recommending that these be complemented with a unique set of targets for motor vehicle drivers and VRUs, respectively.

This is particularly important for the road issues that will form key components in the 2026 Action Plan. Regional road fatalities, which comprised more than two thirds of all road fatalities in New South Wales, was acknowledged as a key challenge in the Road Safety Plan 2021 (e.g. page 12). Unsurprisingly, people riding bikes in these environments also have unique risks. In rural areas, over 60 per cent of rider fatalities occur on roads with posted speed limits between 80-100km/hr<sup>6</sup>, and thus require tailored infrastructural safety interventions for people riding bikes. Without targets that are specific to the bike riding cohort, it will be difficult to determine the effectiveness of the state's intervention efforts.

The NSW Government has the opportunity to show leadership by framing their 2026 Action Plan through different lenses. 'Safe roads' for a vehicle driver are not the same as 'safe roads' for a bike rider, so how will their differing needs be accommodated?

Bicycle Network recommends that the NSW Government assign two sets of reduction targets, one for motor vehicle drivers and another for VRUs. Establishing specific targets for VRUs is a chance for the government to demonstrate their commitment to supporting people riding bikes and offer some accountability for their protection. This will also be important for boosting the state's confidence in taking up regular active-based travel.

### Recommendation 3: Frame the 2026 Action Plan within the context of Movement and Place

Our perception of transport systems has changed dramatically. The traditional view has been that roads should be designed to optimise high levels of movement with minimal travel time. However, certain streets may be desirable places in their own right and where, conversely, the community chooses to increase their dwell time. There are, thus, competing demands between the ‘movement’ and ‘place’ elements of transport networks.

Movement and Place methodology (‘Link and Place’ in the UK) recognises that these elements are different for any given road transport environment, and guides road and urban planning to achieve the best functionality for a given space. A common form of visualisation is a Movement and Place Matrix, which places roads and road types between the ‘movement’ and ‘place’ dimensions (Fig. 2). The ‘movement’ and ‘place’ axes may also be viewed as a proxy for the ratio between motor vehicles and VRUs. For example, higher levels on the ‘movement’ axis approximates a higher motor vehicle to VRU ratio, and vice versa for the ‘place’ axis.



Figure 2 - Example of the Movement and Place matrix. Modified from the Government of South Australia’s ‘Streets for people’ report, as documented in Wooley et al <sup>8</sup>.

Movement and Place methods are being used in many capital cities by a number of key bodies, [including TfNSW](#). Active transport has become a vital component of Movement and Place thinking, and transport networks are now being retrofitted and repurposed to better support active-based travel<sup>8</sup>.

NSW Government's Road Safety Action Plans have been framed within the 'Safe Systems' framework, but they should also be framed within the context of Movement and Place. What is considered safe in a high movement road is not the same as what is considered safe in a high place setting. Similarly, these different environments demand a unique set of safe driving and bike riding behaviours (refer Recommendation 2).

As populations continue to grow and more demand is placed on 'liveable cities', it will be increasingly important to address how our road safety strategies conform to the rapidly developing Movement and Place paradigm. The 2026 Road Safety Action Plan offers an opportunity for the NSW Government to incorporate the framework into their thinking and to demonstrate how this informs their priorities and targets.

#### **Recommendation 4: Prioritise separated bike infrastructure in current and future road projects.**

People riding bikes have different safety needs to those driving motor vehicles. Yet, despite having vastly different levels of kinetic energy and speed capability, these users more than often have to share road spaces<sup>8</sup> and combining their respective needs remains a challenge.

In the Road Safety Plan 2021, the Minister of Roads Maritime and Freight states that safety should be at the core of NSW's planning, design, operation and maintenance of roads<sup>4</sup>. The document acknowledges the need for protecting VRUs and refers to 'separation' in several pages. For the 2026 Safety Plan, it will be of great benefit to be clearer on what this means.

'Separated infrastructure', or 'separated bike facilities', refers to designated sections of the road reserved for VRUs and that are separated by a physical barrier. This type of infrastructure should be the gold standard for current and future road projects. Stratifying the road space for different users means that we can more appropriately allocate the safety provisions required for each road user type.

A wealth of evidence shows that cities with high bike riding volumes have better road safety outcomes and that this is concomitant with the installation of separated infrastructure<sup>9-11</sup>.

Bicycle Network recommends that the NSW Government carefully detail in their 2026 Action Plan how separated infrastructure will be included in the five-year strategy. This is more than simply changing the wording. Separated infrastructure should be at the forefront of current and future road projects. It should be viewed as the critical intervention component for actioning the safety needs of people riding bikes.

## Recommendation 5: Increase the accessibility and compatibility of crash data available to the public

It is important that the public have the necessary resources to make independent inquiries into road incidents involving serious injury or fatality. TfNSW highlighted this as a continued commitment in the Road Safety Plan 2021 (page 5)<sup>4</sup>. Indeed, the Centre for Road Safety (CRS) offers a [user-friendly online resource](#) with interactive crash statistics that are regularly updated and produces annual progress reports with detailed insights and trends. These are helpful for basic insights but not at all practical for more rigorous investigation of crash characteristics.

Bicycle Network encourages the CRS to provide raw crash data that is tabulated and exportable (e.g. csv format), and details the characteristics of individual crash cases. This should be readily available for download on the [Data.NSW](#) website.

Part of forging strong partnerships with the community should involve sharing all information in a transparent and flexible manner. More thorough open datasets would allow the New South Wales public to be better informed on the salient road safety factors affecting the state. Most states are currently providing their crash data in this way, and it will be of enormous benefit to the NSW Government to conform with national efforts on data sharing.

## Who we are

With nearly 50,000 members, [Bicycle Network](#) is one of the top five member-based bike riding organisations in the world. We are committed to improving the health and wellbeing of all Australians by making it easier for people to ride a bike.

Operating nationally, we have a measurable, successful and large-scale impact in community participation and the promotion of healthy lifestyles through bike riding.

We achieve this through:

- improving the bike riding environment by working with government at all levels to provide better infrastructure, legislation, data, policies and regulations;
- delivering successful, large-scale behaviour change programs such as Ride2School and Ride2Work;
- providing services and insurance that support bike riders through nationwide membership;
- running mass participation bike riding events such as the Great Vic Bike Ride; and
- being a key national spokesperson on issues related to cycling and physical activity.



# References

- 1** Munro, C. & Gardner, E. National Cycling Participation Survey 2019: New South Wales. (Austroads, Melbourne, Australia, 2019).
- 2** Transport for NSW. NSW Road Safety Progress Report 2019. (NSW Government, Sydney, Australia, 2019).
- 3** City of Sydney. Cycling Strategy and Action Plan 2018-2030. (City of Sydney, Sydney, Australia, 2020).
- 4** Transport for NSW. Road Safety Action Plan 2021. (NSW Government, Sydney, Australia, 2018).
- 5** Bureau of Infrastructure Transport Regional Economics. (BITRE Canberra, Australia, 2015).
- 6** Bicycle Network. Bike Rider Fatality Report 2001-2020. (Bicycle Network, Melbourne, Australia, 2021).
- 7** Bureau of Infrastructure and Transport Research Economics. Australian Road Deaths Database. (Canberra, Australia, 2020).
- 8** Woolley, J., Stokes, C., Turner, B. & Jurewicz, C. Towards Safe System Infrastructure: A Compendium of Current Knowledge. (Austroads, Canberra, Australia, 2018).
- 9** Ling, R., Rothman, L., Cloutier, M. S., Macarthur, C. & Howard, A. Cyclist-motor vehicle collisions before and after implementation of cycle tracks in Toronto, Canada. *Accident Analysis and Prevention* 135, doi:10.1016/j.aap.2019.105360 (2020).
- 10** Marshall, W. E. & Ferenchak, N. N. Why cities with high bicycling rates are safer for all road users. *Journal of Transport and Health* 13, doi:10.1016/j.jth.2019.03.004 (2019).
- 11** Thomas, B. & De Robertis, M. The safety of urban cycle tracks: A review of the literature. *Accident Analysis and Prevention* 52, 219-227, doi:10.1016/j.aap.2012.12.017 (2013).



**BICYCLE  
NETWORK<sup>®</sup>**

*We've got your back.*