

23 March 2021

To: [roadsafetystrategy@infrastructure.gov.au](mailto:roadsafetystrategy@infrastructure.gov.au)

Dear Sir/Madam,

## **Feedback: National Road Safety Strategy (2021-2030)**

Thank you for the opportunity to comment on the draft National Road Safety Strategy. Bike Adelaide (formerly the Bicycle Institute of South Australia) is the peak advocacy organisation representing the interests of utility cyclists in our state. We have been part of the Road Safety Strategy Working Group assisting in the development of a new road safety strategy for South Australia. In particular, I have recently earned a PhD in the field of road safety that touches on the successes of the past, and paradigm changes required to achieve improved road safety results into the future.

Our overarching comment is that the draft National Road Safety Strategy acknowledges the need to transform the system, generate cultural change and embrace change management, but it fails to embed these aspects into itself. The Strategy focuses on the external environment (or community) changing to fit what is essentially a “business as usual” road safety approach, with an expectation that governance, the Social Model and various tweaks to delivery will enhance its traction with the community and hence political leaders. What the draft Strategy does not recognise is that past difficulties in achieving sufficient traction to meet targets are more likely to be due to a fundamental misalignment of values rather than a matter of the framework or methodologies adopted. In focusing tightly on road safety to the exclusion of other community values, the draft Strategy is in danger of positioning itself into a niche with little inherent interest to the community it is seeking to influence. While this obviously relates to our interest area of cycling (and also walking), it is also true of other road safety aspects.

Overall, the draft Strategy has definite signs of being prepared using a view from within the whale. Road safety is largely being positioned as a technical problem rather than a problem in adaptive leadership, and the draft Strategy therefore focuses on the road system at the expense of considering the greater socio-political environment as a subject for road safety practice. In contrast, the most productive period in Australia’s road safety history was marked by the cross-disciplinary involvement of what was called the Human Factors Committee. The road safety profession’s response to the problems of the time was to challenge and re-set the socio-political environment as a key to facilitating its impressive road safety results. This involved agenda setting. We suggest that the new Strategy must do the same for its goals to be achieved. We have provided a critique on three aspects we feel are of most relevance in the appended pages.

Our comments do not merely point to word or phrase changes; they are intended to communicate issues that are hard to see through the close lens of involvement in the draft Strategy. We trust that these comments will enable those involved to appreciate these broader issues. These are roughly summarised as:

- prioritise road safety above the economic value of transport, including rephrasing the goal for heavy vehicles
- as part of the Safe Systems approach to vehicle safety – prioritise modal shift from unsafe vehicles (private car, truck) to safe vehicles (bicycles, public transport, foot), including via priorities and actions challenging drivers’ modal choice behaviours, and education repositioning drivers’ road safety obligations over convenience
- as part of the Safe Systems approach to safe roads – support modal shift via infrastructure planning and investment, through appropriate and significant investment in road infrastructure for active transport
- provide an action for vulnerable road users for active messaging in favour of active transport modes and against common prejudices and myths
- update the Social Model on page 13 for clarity
- use active language in reference to driver responsibility for crashes, including avoiding assigning agency to vehicles

- position road safety as a contributor to community values in terms of population health, liveability and carbon abatement aims, by including actions supporting community desires for realistic access to active travel options (as previously raised regarding modal shift, but also integrated into other priority areas such as remote and regional roads); and acknowledging improved liveability as a desired and likely outcome of the Movement and Place framework
- provide a lead for agenda-setting in terms of policy, research and capacity-building, including by adopting a cross-disciplinary approach via the (currently under consideration) external advisory group.

We don't doubt that the road safety practitioners who have prepared the draft Strategy are experienced professionals who are better placed than we are to know what to add and how to best amend the draft Strategy to address the issues we have raised. We hope they are willing to do so, for the benefit of our constituents, the broader benefit of Australia's road users, and the success of the draft National Road Safety Strategy to 2030.

Yours sincerely,



Dr Fay Patterson BE MAITPM  
Vice Chair, Bike Adelaide



## 1) “Road” versus “traffic” safety

As jargon, “road safety” is useful for practitioners. However, “road” is not defined. In South Australia, the title “Road” is appended to major and arterial roads – what the Movement and Place framework would refer to as “motorways and movement corridors”, such as Main North Road and South Road – compared to the streets in which people live. The proliferation of the term “road” throughout the draft Strategy thus implies that “road” safety is prioritised over “street” safety, with “vulnerable road users” an add-on to be considered at the fringes rather than as an integrated part of the transport system. In many cases, this impression could be overcome by simply changing “road” to “traffic” or by omitting the word “road”.

However, the “road” focus of the draft Strategy is confirmed by the fact that none of the priority areas mention modal share in terms of road safety, and hence the benefits of encouraging alternatives to private car use. The statement in bold on page 6 reinforces this: the focus is on private car use (not public transport or active transport) and trucks. In terms of the Safe Systems approach, “safe vehicles” aspect is addressed by technological fixes to vehicles, not by changing travel behaviour from using unsafe vehicles (cars, trucks) to safe vehicles (bicycles, public transport, foot.) This can be contrasted to European applications of the Safe Systems approach that include a focus on alternatives to unsafe vehicles, including measures such as banning trucks from city centres and stimulating use of cargo e-bikes instead, which have a much lower risk profile to other road users.

In a similar vein, the goal for heavy vehicle safety is to “Support safe movement of freight and passengers and reduce harm to all road users”. I.e. the movement of freight and passengers (which is increasing around Australia) is embedded as a priority of the draft Strategy. This presents conceptual difficulties in situations such as in Adelaide where the transport network response is to facilitate freight movements through residential suburbs. Here, “road safety” is used as part of the nominal justification for increasing capacity, even though encouraging heavy vehicles to travel through populated areas will naturally produce a negative road safety result. An alternative wording that puts road safety first could be “Reduce harm to all road users related to the movement of freight and passengers”.

As part of developing the South Australian Road Safety Strategy, modelling of road safety measures was undertaken and the action with the highest return on investment was providing significant funding of cycling infrastructure in inner-urban council areas over a 10-year period. This achieved the highest rating due to the impact on reducing car driving and hence exposure to the related road safety risk. The draft National Road Strategy’s omission regarding the exposure risk of motor vehicles presents a mismatch with community values, where parents would like to allow their children to walk or cycle to school but do not believe it’s safe enough, or where people cite safety as their biggest barrier to cycling for utility reasons. While development of cycling infrastructure might be captured by the “Movement and Place frameworks informing infrastructure planning”, the Social Model shown on page 13 provides no apparent linkage between “vulnerable road users” (who are considered in terms of risky/safe road use) and infrastructure (a key factor for their safe use of roads), safe vehicles (though vehicles could have minimum safety ratings regarding their likelihood of killing pedestrians and cyclists) or heavy vehicles (which have a disproportionate representation in road deaths and, again, for which safety related to vulnerable road users could be significantly improved). From this diagram, it is difficult to see how the Social Model operates or what it is intended to achieve.

The Infrastructure Planning and Investment action “Manage speeds where conflicts between vehicles and road users with infrastructure and roadside hazards cannot be avoided...” is similarly unclear. This seems to imply that vehicles/road users are only ever in conflict with infrastructure/roadside hazards, rather than conflicts existing between road users, such as drivers versus a pedestrian or cyclist. It also assigns agency to vehicles without the intermediary of a driver. In comparison, vulnerable road users need to be educated about protective clothing and helmets, although in urban areas, “almost one third of all road crash deaths are pedestrians” – or, to put it another way, almost a third of those killed by drivers are pedestrians. If the draft Strategy minimises the responsibility of the driver in road deaths, it cannot be expected that a responsibility for safety will be embraced by those who drive or that drivers will naturally link their choice of mode of travel with others’ safety risk.

The draft Strategy needs to incorporate priorities and actions challenging drivers' modal choice behaviours, and education repositioning drivers' road safety obligations over convenience. Messaging that contradicts the inevitable victim-blaming that occurs whenever cyclists are killed, and pushing back at drivers' prioritisation of motorised over non-motorised road users, need to be included as actions for vulnerable road users. Otherwise, the cultural change proposed as an enabling action has no scope to address the ongoing and damaging conflict between these road users.

## **2) Value of a life and liveability**

Not surprisingly, the draft Strategy focuses on lives lost through the road system. However, society doesn't – and nor should it.

In 2016, in addition to the 1,293 road deaths that occurred in Australia, there were 45,392 deaths from cardio-vascular disease and 44,100 from cancer. The fact that these types of deaths are encountered by people on a far more frequent basis than road deaths obviously undermines attempts to position road safety as a major priority for the community. And given that inactivity is a leading contributor to cancer, cardio-vascular disease, stroke, diabetes and many other preventable health problems, it is arguable that road safety practitioners would achieve a greater reduction in early deaths if they simply focused on encouraging active transport over private car travel. Indeed, this was the conclusion of the modelling undertaken for the South Australian Road Safety Strategy: not only did investment in cycling infrastructure give the best road safety result, this result was dwarfed by societal health benefits. Again, however, this broader community concern is not acknowledged by the draft Strategy.

Further, considering only those killed or injured on our roads as defining "road safety" overlooks the societal context that is set by the safety risk of the transport environment. Considering walking and cycling in the 1970s and currently, most Australians would perceive the truly remarkable reduction in road crash deaths that has occurred over the last 50 years as being associated with a deterioration in road safety. The contrast with the perception for driving provides a disturbing picture of modal winners that is not in keeping with a fair and balanced society. With pedestrian fatalities stubbornly high, a traffic management approach based on delivering only minimum standards for walking (or no standards at all, on the basis of the inconvenience this would cause to drivers) does not deliver a safe, pleasant or convenient environment for pedestrians. This is the broader context for Movement and Place, but this isn't clear in the draft Strategy, which frames use of the approach around speed management and safe systems road treatments.

We would contend that the draft Strategy would find broader acceptance and traction if road safety were placed within this broader context of community values, in terms of enhancing population health and liveability, rather than as an end in and of itself.

## **3) Agenda-setting**

Partly because of the lack of connection with core community values, the draft Strategy struggles to establish a compelling agenda for road safety in Australia. New policy, a strong research agenda and cross-disciplinary linkages are not strong features of the draft Strategy. Even the Guiding Principle of "Broad and shared responsibility" mentioned on page 11 seems to seek other partners to adopt the draft Strategy's aims rather than to consider how the draft Strategy can achieve its own aims through the agendas of other areas. Particular omissions are population health (as already mentioned), mental health and carbon abatement (noting that transport is the largest emitter of greenhouse gases after stationary energy, which is rapidly de-carbonising.) There is plenty of opportunity for such agenda-setting.

- In terms of policy, Roads Australia (2018)<sup>1</sup> found that Australia's most populous cities should be actively discouraging private car use and investing heavily in mass transit systems. This would have clear alignment with our previous comments on modal contribution to road safety risk, and underpinned by the fact that Roads

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<sup>1</sup> *Cities for the Future Report 2018*. Pub. Roads Australia, Melbourne, Vic.

Australia's position is based on broader cost-benefit considerations, including impacts from congestion – a major concern of city residents. Organisations such as Bike Adelaide have a clear interest in cycle infrastructure development, which has considerable potential to achieve modal change given the under investment that has occurred in Australia compared to our European peers and the still-nascent penetration of e-bikes as an enabling technology.

- There is a need for adequately-funded research to off-set the tendency of road agencies towards the application of deterministic approaches to safety assessment. These use simplistic assumptions of cause and effect, rather than identifying knowledge gaps and encouraging inferential hypothesis testing. In collecting more data that can be used for these approaches, the National Data Hub is likely to entrench the deterministic approach over the conduct of robust research across different domains of knowledge.  
Here, oversight and enabling coordination between jurisdictions might be seen as a key task for Austroads, but the terms of reference for Austroads' research agenda specifically exclude it from considering policy decisions undertaken by state and national governments that undermine road safety, or the negative safety results of road-building. And as a body whose membership only comprises government-based road and transport agencies, Austroads has limited capacity to take a multi-disciplinary view of road safety problems and their solutions. This highlights the value of an external advisory body with cross-disciplinary expertise that can provide a broader perspective on a road safety approach that has otherwise become solidly settled within the traffic engineering paradigm. Such a body is "being considered" in the draft Strategy and would be likely to have a constrained remit. A stronger commitment to such a body, and active response to the perspectives provided, would be highly beneficial for delivery of the draft Strategy's goals.
- Capacity-building for road safety practitioners and others tasked with responsibility for the transport system is also notably absent. For example, the draft Strategy reiterates a commitment to the Safe Systems approach, which is based on the defence-in-depth concept, but there is no mention of the "fallacy of defence-in-depth" argument<sup>2</sup>, how this undermines the Safe Systems approach, or how traffic managers should attempt to combat it. And this is despite the slow progress achieved under the previous commitment to the Safe Systems approach.

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<sup>2</sup> Rasmussen, 1997 (Risk management in a dynamic society: A modelling problem, *Safety Science*, Volume 27, Issue 2, pp183-213.) Per Le Croze, 2018 ("Managing the Unexpected. Wiley Handbook of Safety Principles", Möller N, Hansson S, Holmberg J and Rollenhagen C (eds), pub. Wiley & Sons Inc, Hoboken, New Jersey).