

INQUIRY INTO VULNERABLE ROAD USERS

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18 August 2010

Bjarne Nordin
Staysafe (Joint Standing Committee on Road Safety)
Parliament House
Macquarie St
Sydney NSW 2000

Dear Mr Nordin,

Submission to the Staysafe Committee Inquiry into Vulnerable Road Users

Bicycle NSW appreciates the opportunity to contribute to the Staysafe Committee's Inquiry into Vulnerable Road Users.

We are keen to assist the Committee in its deliberations and achieve better outcomes, safety and health, for people using the road space (building line to building line) particularly people riding bicycles. Therefore, our focus is on bicycle riding and its relationship to the road environment and all other people using the road space, typically categorised into groups.

We are of course keen to reduce the number and severity of accidents involving people riding bicycles, although we consider that this has to be done with a commitment to create more safer and more conducive environment that encourages more people to ride a bicycle (and walk) for transport and recreation, supporting health and social equity.

Bicycle NSW would be pleased to accompany members of the Staysafe Committee, either on bicycles or not, to look at bicycle facilities in more detail.

To assist our members and supporters, we shall publish this submission on our website.

If you would like further information on any aspect, please contact us.

Yours sincerely,



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BICYCLE NSW SUBMISSION

In response to the

**STAYSAFE REVIEW OF VULNERABLE ROAD USERS,
FOCUSSING ON BICYCLE AND MOTORCYCLE SAFETY**

August 2010

Contact

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Executive Summary

Bicycle NSW welcomes this opportunity to provide a submission to the NSW Staysafe's Inquiry into 'Vulnerable Road Users' focussing on bicycles and motorcycles, following an earlier inquiry on pedestrian safety.

Bicycle NSW appreciates the increasing awareness of parliaments, local councils and government of the contribution that bicycle riding can make, not only to our transport system but also in the areas of health, environment and the liveability of our communities. Therefore the policy for managing roads needs to demonstrate a greater warrant for making roads safer and reducing a major barrier faced by many people who want to be able to ride on the road and for commuting to work or education. Indeed, we propose that the traditional policy goal and (institutional) practice of road safety needs to be reconciled with the contemporary policy direction of encouraging cycling and walking (and in combination with public transport) as part of transport strategies to reduce reliance on car use; this direction would also be more equitable in improving transport services for people who rely on 'active travel' (walking, cycling and in combination with public transport).

It is opportune that this Inquiry follows Staysafe's report on pedestrian safety as there are significant overlaps in factors contributing to injury and deterring people from walking and cycling. Part of our submission is the Bicycle NSW Commentary (**Appendix 1**) relating bicycle safety actions to Staysafe's recommendations (24) and the actions planned by the RTA in response (June 2010). Our purpose here is to expedite bicycle safety by incorporating cycling into actions aimed at improving pedestrian safety; safety initiatives can often benefit both cycling and walking conditions owing to the central issues of space, design and traffic speed. In assessing the merit/cost of actions, particularly engineering treatments, a stronger case can be made for intervention if the benefits for pedestrians and people cycling are combined, in the policy context of greater support for walking and cycling as part of the NSW road (and transport) system.

Responding to terms of reference, our main points include:

- The starting point for bicycle safety being the policy for planning and management of roads and road space, also governance and funding.
- Better safe speed zone regime, e.g. great legibility for motorists; speed limits to better reflect the risk levels in centres, and use of engineering treatments to enable self-regulation of drivers
- Measures: e.g. changes to road rules; the operation of shared paths - separation issues, widths, user interaction, volumes etc; greater potential for "shared zones" etc
- Interaction between people riding bicycles, pedestrians, motorcycles and other motor vehicles – common and differing interests
- Education – a big activity for Bicycle NSW itself (see Part 3).

The allocation of road space is often regarded as central to the compatibility between these modes, and motorcycling (Haworth 2006; Shoup 2003); yet the in urban centres, the management of the road network retains a disproportionate bias for maintaining speed and high motor vehicle flows, rather than people flows. Priorities of different sections within road authorities and local councils can compromise road safety and access and mobility by pedestrians and cyclists.

The overlap between pedestrian safety and bicycling safety was identified in a number of submissions to the 2009 Inquiry. We support particularly the City of Sydney Council's 2009 submission because of its policy-driven approach to the planning and management of the road system for pedestrian (& cycling) safety, including the allocation of road space.

About Bicycle NSW

Bicycle NSW is a member-based association with over 30,000 members and supporters.

Our association is dedicated to promoting, advocating, and supporting cycling in all its forms as an environmentally sustainable and healthy form of transport, recreation and tourism; we engage with government at all levels, business and the community.

Bicycle NSW is committed to increasing and supporting its Membership (individuals and corporates) and currently has 29 affiliated Bicycle User Groups (BUGS) throughout NSW. Our Membership is made up of people of all ages, cycling abilities and cycling disposition and who ride all kinds of bicycles: foot and hand cycles, recumbent bicycles, tandem bicycles, cargo cycles/stroller bicycles, and 'motor assisted pedal cycles'¹.

We maintain regular contact with our Members, Supporters and BUGs through our website (www.bicyclensw.org.au), a twice-monthly e-newsletter (to 30,000 recipients), and *PushOn* (a monthly online magazine). Bicycle NSW also publishes submissions made to inquiries and consultations.

Safety and health is fundamental to our organisation in performance of our promotional and educational activities. From a safety and health perspective, our activities are directed toward prevention of harm, reducing risk and above all, creating supportive environments in which people may ride bicycles. As a major part of the public domain, the road environment is a significant place for people to ride bicycles.

Our principal activities are education and promotion of cycling; safe cycling is an essential part of our activities. Safe cycling covers road safety and health, the skills for riding a bicycle safely, bicycle maintenance and ensuring the bicycle is 'road worthy' and the roles of schools and workplaces in promoting safe cycling, protection for health (sun and drinking water). Bicycle NSW programs for education and training programs are described and considered below under **Part 3 - Current Measures and Future Strategies (Term D)**.

Our activities include advocacy for bicycling in public policy and in urban projects, recognising that people use and need multi-modal transport systems. We communicate and advocate expressly for the planning and provision of safe cycling facilities (routes, end-of-trip facilities, and maps) as part of NSW government responsibilities and policies for land use and transport planning, and environment protection, health, and social inclusion. We relate to all levels of government. We note the significance of local councils to whom the NSW government delegates responsibilities and who are responsible directly for management of local roads and even footpaths of RTA roads (estimated 80% by IPWEA to the Staysafe Pedestrian Inquiry, 2009), although subject to RTA's control.

Bicycle NSW contributes to consultations on strategic vision and policy and projects for urban renewal and development in which road safety and health are intrinsic, e.g. the NSW Government's policy review of the NSW Metropolitan Strategy and the Metropolitan Transport Plan, and projects e.g. the Sydney Light Rail - Inner West Extension Study and the associated Green Way.

¹ RTA (2007) on motor-assisted pedal cycles. Conclusions supported by *Matheson v DPP (NSW)* NSW SC 550 (5 June 2008).

Bicycle NSW partners with many portfolios of government. For example, Bicycle NSW assists in publicising the RTA's training course "Designing for Bicycle Riders and Pedestrians" – offered as a one day course for managers, councillors, and as a two-day course for planners, engineers, designers and consultants. Bicycle NSW also encourages the application of available guidelines e.g. RTA's Bicycle Design Guidelines, and programs offered by other agencies and councils, notably DECCW's collaboration with AustCycle which provided 420 free cycling proficiency training vouchers for adults, each at a value of \$360.

Our submission structure

Bicycle NSW appreciates Staysafe's initiative to investigate road safety for bicycles and motorcycles as its focus for its inquiry into 'vulnerable road users', following its report on pedestrian safety for the 2009 Ministerial reference.

This submission responds to the terms of reference for this inquiry that focuses on bicycle safety noting that the policy context for safe cycling, like safe motoring and safe walking, is a function of the road system and that riding bicycles is being actively encouraged in the public interest.

Current measures and future strategies for road safety are contingent upon the purpose and policy context of road safety. For example, competing priorities within a road management authority can negate proposals for road safety that would improve conditions for people cycling and walking. One illustration before Staysafe is the rejection in 2005 of the City of Sydney's request for 40km/h under the RTA's 40km/h in High Pedestrian Activity Area (HPAA) program (City of Sydney Submission Pedestrian Inquiry p.5); but it is not as an isolated example. Therefore, Bicycle NSW finds it necessary to first consider the policy context called up through the planning and management of the road system in NSW and in other jurisdictions (Part 1) before making our points on the status of bicycle use and injury (Part 2), and the measures to address safety (Part 3).

We have done our best to structure this document with respect to the terms of reference:

Part 1 – The approach to bicycle safety (Terms E, F and G)

Part 2 - The status of bicycle use and injury (Terms A, B and C)

Part 3 - Measures to address safety for safe cycling (Term D).

In preparing this submission we have utilised input from our members and other stakeholders to bring together useful ideas to assist Staysafe's inquiry, drawn on expertise and gathered material from previous discussions and proposals.

Part 1 – The approach to bicycle safety (Terms E, F and G)

In announcing this Inquiry, the Committee referred to

- the “renewed interest in motorcycle and bicycle riding for economic, environmental, health and convenience reasons makes this a very timely topic for investigation as part of the Committee’s overall responsibilities for monitoring road safety in NSW”
- the exposure of people riding bicycles (and motorcycles) to the risk of serious injury and casualty when using the road network.(Media Release 23 June 2010)

By first addressing Terms E, F and G, we can use our comments on the inclusion of bicyclists in the planning and management of the NSW roads system to frame our response to the factors causing injury, the current measures and future strategies to address road safety or more broadly a ‘sustainable safe road system’.

Bicycle NSW makes a number of comments on the scope and approach to this inquiry.

Policy context for road safety

Staysafe’s role in investigating and reporting on road safety matters in NSW includes “the review of countermeasures to reduce the incidence and severity of road crashes and monitoring of actions taken to address the social and economic consequences of road trauma.”

Bicycle NSW recommends that the above concept of road safety (for institutions) be qualified by the policy context for encouraging access and mobility by cycling and walking and making road conditions suitable for safe cycling.

Road safety needs be set in a policy frame or context which recognises the value of access and mobility where more people are bicycle riding and walking (and motorcycling) for many reasons, as mentioned by Staysafe itself. These reasons include road transport policy for managing traffic congestion, efficiency of energy use (in pavement maintenance and vehicles) and the overall goals of movement of people and goods, rather than merely vehicles. The policy context for road safety has changed since Staysafe was established almost 30 years ago. In the 1990s, major research and new policy of the NSW government articulated the need for a shift away from car reliance to other modes of transport, including an increase in ‘safe cycling’ (the *Action for Air The NSW Governments’ 25 year Air Quality Management Plan*).

Contemporary policy context of integrated land-use and transport planning holds walking and bicycle riding as legitimate forms of transport. Further, in urban areas particularly, policies for the road environment are now also concerned with increasing the level of walking and bicycle riding (and motorcycling) as means of access and mobility. Increasing the share of these modes needs be given greater priority than in earlier policies for road management. Bicycle NSW has addressed these issues in recent submissions to the NSW Government, more recently for its consultation on the preparation of the Metropolitan Plan. The City of Sydney’s 2009 submission illustrates the changed policy context in its greater emphasis on pedestrian (and bicycling) road users and the conflicts with traditional road management practice. Other councils are making similar transitions toward more sustainable transport and efforts to move from ‘unsustainable transport’ (Banister, 2005) toward sustainable transport or access and mobility.

Referring to the RTA’s Centre for Road Safety website, we find its stated purpose to “reduce the loss of life on our roads and make our roads safer”.

<http://www.rta.nsw.gov.au/roadsafety/aboutthecentre.html> [accessed 5/8/2010]

Without a conditional policy context, the covert operational goal falls to the dominant task to allow [motor] traffic to keep flowing, unimpeded by interruptions by people walking or riding bicycles. Without an integrated policy context, as Haworth acknowledges for central road agencies, road safety can produce paradoxical results for efforts towards more sustainable transport and achieving a reduction in car use. This can be exacerbated at the local level where the technical concerns of the RTA are expressed through the Traffic Committee and the Road Safety Officer in fulfilling conventional practice.

We need to overcome the perceived incompatibility in road safety circles of promoting cycling (and walking) with injury prevention, recently described by Howarth (2006) as part of a wider discussion of “vulnerable road users”. The British Medical Association’s 1999 review of Road Transport and Health also considered the prevention of injury; more recent literature examines how increased levels of walking and cycling do not result in a corresponding increase in injury.

This policy context – recognition of the value of walking and bicycling, and increasing their mode share on the road system – is essential as a qualification of road safety. Otherwise, the reluctance of traditional road traffic practice to better provide for safe walking and safe cycling results in the deference of ‘road safety’ to the traditional priority of the road network sections of road authorities. Bicycle NSW is aware of the deterrent effect of the current management of the road network to people to ride bicycles and walk. Reductions in the pedestrian injury numbers has been argued as a partial result of fewer people walking.

‘Vulnerable road users’ → ‘unprotected road users’

The term ‘vulnerable road users’ is examined by Haworth (2006) in a paper presented to the 2006 Australasian Transport Research Forum; she states:

*“In road safety circles, pedestrians, pedal cyclists and motorcyclists are often referred to as ‘**vulnerable road users**’ because of the high severity of injury that often occurs in impacts between these groups and cars. In many parts of the world, vulnerable road users comprise the bulk of road fatalities (World Health Organization and World Bank, 2004).” (Haworth 2006)*

Haworth (2006) also discusses the sources of ‘vulnerability’ for each of category to the three road user groups. Bicycle NSW recognises that the vulnerability of cycling on the road system is partly due to the shared use of road environments as well as the usual risk factors associated with the road, the vehicles and the users – these factors are considered in Part 2 below. The source of vulnerability lies with the relative lack of protection by the road system. Other jurisdictions use different language, referring instead to ‘unprotected road users’ .e.g. the Dutch road safety policy (SWOV 2006).

Haworth (2006) examines the similarities and differences on risk of injury for the three groups, and then examines the utility of putting the three groups together as ‘Vulnerable Road Users’ as has been the practice in traditional road safety circles. The distinctions between the groups have become blurred through changes in technology, greater longevity and the greater inclusion of people with disabilities in the public domain. Pressures on the road system in urban areas are indicated in recent Australian publications on road congestion that recognise a changing role for the road system in urban areas. This would also put a different complexion on the face of traditional road safety.

This 2010 Inquiry directly address the category ‘vulnerable road user’ at least in focussing on the remaining two groups of users of the transport modes, cycling and motorcycling. Bicycle NSW

prefers to interpret the terms of reference as covering two separate types of user/mode, not as if 'motorcycle and bicycle' were to be regarded as a single idea expressed in two words². Bicycle NSW's view is that the two parts, 'motorcycle' and 'bicycle' should stand alone rather than as composite sub-category vis-a-vis walking. It would be a retrograde step to treat them as one or having much in common, possibly as implied by "integration" in Term E. Other jurisdictions as in Term F, such as the Netherlands, also grant them separate treatment, while looking at their interactions and need for separate space.

Insights for approaching road safety from another jurisdiction: the Dutch policy (Terms E and F)

Bicycle NSW regards the Dutch 2006 policy *Advancing Sustainable Safety*, published by the SWOV Institute for Road Safety Research ('the SWOV Institute') as useful for resolving some equivalent problems in NSW. *Advancing Sustainable Safety* aims to prevent serious crashes and where this is not possible to almost eliminate the risk of serious injury.

Its starting point is the admission that road traffic is essentially unsafe and many traffic situations are dangerous. However, some people accept a certain level of danger and sometimes even look for it, not just in traffic but also in other areas of daily life, such as sport. Nevertheless the risk of death or physical injury in traffic is socially unacceptable.³ This beginning is compatible, at least with RTA's *Safe System* philosophy, shared by the Australian Transport Council, that interventions to reduce average speeds gain a disproportionate benefit in reducing injury and improving the probability of surviving a crash. As the 2009 City of Sydney Submission pointed out for pedestrians, the risk increases dramatically for traffic speeds above 20-30 km/h (City of Sydney 2009 p. 12).

For NSW, managing bicycle safety in relation to **motor traffic speed and volume**, Bicycle NSW highlights that, the RTA's 2003, *NSW Bicycle Guidelines* adopts international good practice. The sources of its advice are from a range of countries with a substantial commitment to improving best practice such as the Netherlands, Germany, Denmark and the UK. See Figure reproduced in Part 3 below.

Both the Dutch Policy and the RTA's *Safe System* work from the presumption that people are a major cause of crashes, that they make mistakes and do not always obey the road rules, and that people walking, riding bicycles or motorcycles are less protected from injury than people in vehicles. A distinction, in our view is SWOV Institute's overt "user-oriented system approach" (SWOV 2006, p. 13) that entails tailoring the road so that "road safety depends as little as possible on individual road user decisions" (p. 13) relevant to the function of the road in the particular place where it serves access and mobility functions for all users. The SWOV Institute describes its five guiding principles, leading with the road functions for access and mobility for all road users, as set out below:

² With respect to this interpretation, the conjunction 'and' would be being used as a 'hendiadys' (Pearce & Geddes 1996).

³ CROW 2009. *Dutch Road Safety Manual* (English version) CROW Record 26. The Netherlands

Dutch set of guiding principles to achieve sustainably safe road traffic

The functional categorisation of roads. This is quite different from our current concept of road hierarchy which is primarily about the movement of vehicles. Sustainable Safety categorises all roads in the network into three groups based on the two key road functions: access and mobility. Through roads are primarily about mobility (getting from one place to another) both in their mid-block areas and at intersections, the access function (getting to and from houses, places of business and recreation etc) is just as important if the transport system is to run effectively. Motorways, highways are examples of pure mobility. Access roads on the other hand are about providing connections to destinations – residential streets are a good example. To link these two categories is the third type, distributor roads. For this road category intersections generally perform an access function while mid-block road sections provide a mobility function.

Equality in speed, mass and direction. This principle recognises that the road system is made up of people and vehicles all travelling at differing speeds and sometimes in different directions. This Sustainable Safety principle requires that where road users/vehicles with large mass differences use the same traffic space, the speeds should also be so low that the most vulnerable road users and transport modes come out of a crash without severe injuries. (p. 14) In an ideal situation this is achieved by lower travel speeds achieved through the design of the road infrastructure [or engineering treatments like narrowing roads] rather appealing to the users to slow down. On high-speed through-roads different types of road users, and road users travelling in different directions, should be physically separated from each other as much as possible.

Predictability of road design and user behaviour. The layout and design of roads is an important factor in the behaviour of road users. For instance if all the visual elements of a road (linemarking, road width, sightlines, surface etc) give the appearance of a fast road environment, then there will be a tendency towards higher speeds even though the posted limit may be lower. The principle of predictability is based on the idea that human errors, and the resulting crashes, can be prevented by providing a road environment that is both recognisable and predictable. The road features should tell the road user immediately what road type they are driving on, which driving behaviour is expected of them and other road users, and which other types of road user they can meet. In the ideal case, the road should be self-explaining as much as possible. This also means that the design needs to support the user's expectations of the road, and that all components of the design need to be in line with these expectations.

Physical forgivingness in the road environment. This principle (difficult to translate from the Dutch) relates to the need for a physically forgiving road environment (shoulders, collision-friendly barriers etc) which includes both vehicle design (frangible vehicle fronts, air bags and seat belts etc) and user behaviour. Traffic is also a social system in which crash causes can partially be traced to the interaction between road users. Therefore, it is important that road users allow for each other's shortcomings. This is the social elaboration of the principle of forgivingness. Forgiving road behaviour, particularly of the more competent road users, could allow for the less competent road users to commit errors without any serious consequences. However, errors must still be recognised as 'wrong' so as not to lose the corrective effect. Social forgivingness can contribute to errors less often having serious consequences in terms of deaths and hospital admissions.

Road user awareness. Road users are all different from each other and are greatly influenced by their current state of mind, physical stress or fatigue. The principle of road user awareness relates to the capability of a road user to perform adequately within the road environment given the human and environmental factors influencing them at the time. Risk awareness is important in this process. Risk awareness involves the relationship between the actual task requirements and the task requirements as they are assessed by the road user. Road users that have a high state of risk awareness can be considered as relatively safe road users.

Source: SWOV (2006)

The SWOV Institute reports that it has consciously broadened its vision from reducing crash occurrence to the positive, more comprehensive goal of “a sustainably safe traffic/travel system” for all users tailored to the function the road for access and mobility:

“Speeds also need to be less than 30km/h at those locations where pedestrians and cyclists and motorized traffic meet (on distributor roads with a 50 km/h or 80km/h speed limit.” (SWOV 2006, p.22).

The Institute, however, is candid about the limits of its understanding about the full effect of some low-cost solutions for traffic speed reduction or the full potential of improvements for “sustainably safe infrastructure” (p.18) and proposes research of these problems linked with information dissemination.

For NSW, therefore, the mobility requirements of road users should be carefully balanced against their access needs. To a large extent the current road transport system places the mobility needs of motor vehicles above the access and mobility needs of cyclists and pedestrians. To Staysafe’s Pedestrian Inquiry this opinion was also presented; for example the City of Sydney referred to the RTA’s rejection of its proposal for lower speed despite the RTA’s own guidelines for 40km/h in areas of high pedestrian activity as another indication the disproportionate bias for the road capacity to continue to be used by high speed motor vehicles, despite their guidelines on 40 km/h in high pedestrian activity areas.

Indeed, the Committee identified a “consistent theme” in submissions it received (on pedestrian safety) for the road design to take greater account of pedestrians and for greater assistance to vulnerable road user groups. It expressed a desire for the use of technical measures (Staysafe 2009 p. xii) currently available to road safety practitioners to better provide for pedestrians. However, the 2009 recommendations, see Commentary Appendix 1, had few references to:

- the use of technical measures raised in submissions (pedestrian refuges, kerb ramps), see Part 3: or,
- the planning tools used by local councils on the basis of guidance from the RTA, discussed below.

Bicycle NSW recommends that the NSW government should adopt a more human-centred approach to road safety, with access and mobility, along the lines of the Dutch Sustainable Safety Policy (SWOV 2006) – by discussion and consultation for working toward a “a sustainably safe traffic/travel system” to NSW, and continue drawing from the ongoing research for continuous improvements reported by the SWOV Institute.



Member P (City of Sydney) forwarded this image for our submission, on the understanding that The City of Sydney wanted continuous cycleway, but the RTA moved the dotted line on the road so that cars don't have to give way to (or even look out for) cyclists on the Bourke Rd cycleway.

Location: intersection of Bourke Rd and Maddox St, Alexandria.

Planning and management of the road system

In NSW, bicycling is formally part of the planning and management of the NSW urban planning and transport system. Ironically, the relatively low cost for cycling infrastructure is often used as an excuse in overlooking provision for people cycling in plans for major projects.

In NSW, there are good documents describing policy and 'how to' guidelines for urban planning, design and transport planning and management, including retrofitting the urban local road system and designing for growth centres as part of urban renewal, some of which are discussed in the Staysafe (2009) report on Pedestrian Safety (chapter 5), e.g. *Planning Guidelines for Walking and Cycling*,

Other relevant guidelines include: *Transport Management and Accessibility Plans (TMAPs)*, *Bicycle Design*, *How to prepare a Bike Plan*, *How to Prepare a Pedestrian Access and Mobility Plan*, *Producing and Using Transport Access Guides* and other guidance on producing Local Area Traffic Management (LATM) and its newer form, Pedestrian, Cyclist and Traffic Calming (PCTC).

Bicycle NSW also encourages the application of available guidelines e.g. RTA's *NSW Bicycle Guidelines*. Bicycle NSW assists in publicising the RTA's training course "Designing for Bicycle Riders and Pedestrians" – offered as a one day course for managers, councillors, and as a two-day course for planners, engineers, designers and consultants. And the use of DECCW's collaboration with AustCycle.

In 2009, Bicycle NSW recommended to the NSW Government, in its consultations for the NSW Transport Blueprint (October 2009):

Initiative 2: Take systemic measures for safer cycling

Of the many measures available, Bicycle NSW recommends that priority be given to reducing traffic speed to 40 km/h in each of the Metro Strategies Regional Centres and Centres. As unsafe roads are a major deterrent, this measure would reduce risks to cyclists and other road users and improve livability of the Regional centres. (p.17)

The above recommendation is consistent with the RTA's *NSW Bicycle Guidelines*.

Documentation for urban renewal, growth centre guidelines (referenced by Staysafe's Pedestrian Safety Report, pp.44-45) are being updated according to the 2010 Discussion Paper on the review of the Metropolitan Strategy.

Bicycle NSW commends to Staysafe the suite of documents by the City of Sydney, produced after extensive research and community consultation: its vision *Sustainable Sydney 2030*; the study *Public Life and Public Spaces*, and the *Sydney Cycling Strategy*. We also draw attention to the involvement of 15 local councils in the *Inner Sydney Regional Bike Plan Implementation Strategy*, and subsequent research on the cost-benefit of cycling infrastructure; and more its 2009 Submission to Staysafe's Pedestrian Safety Inquiry.

Local roads are significant, as the IPWEA submission to the Pedestrian Safety Inquiry outlined. Councils also manage footpaths where space for pedestrians and people riding on the footpath may be inadequate, particularly for people with mobility difficulties, and people walking companionably, with children or older people. The design envelope is often inadequate. To achieve urban vitality goals, it is essential that the statutory mobility functions of a footpath, including safe cycling, is not

compromised by other uses such as footway dining or even bicycle parking or variable road message signs.

In NSW, the key issue in planning and management of the road system for safe cycling is the need for application of guidelines and implementation of plans, by state agencies and local councils.

Bicycle NSW has again raised this problem with the NSW Department of Planning in its submission on the review of the Metropolitan Strategy earlier this year. We are hoping that this issue will be addressed in the forthcoming Metropolitan Plan due later this year.

Bicycle NSW recommends that the NSW Government arrange for a survey of local councils to document the use and status of Bike Plans and PAMPs.

NSW State Plan target for cycling

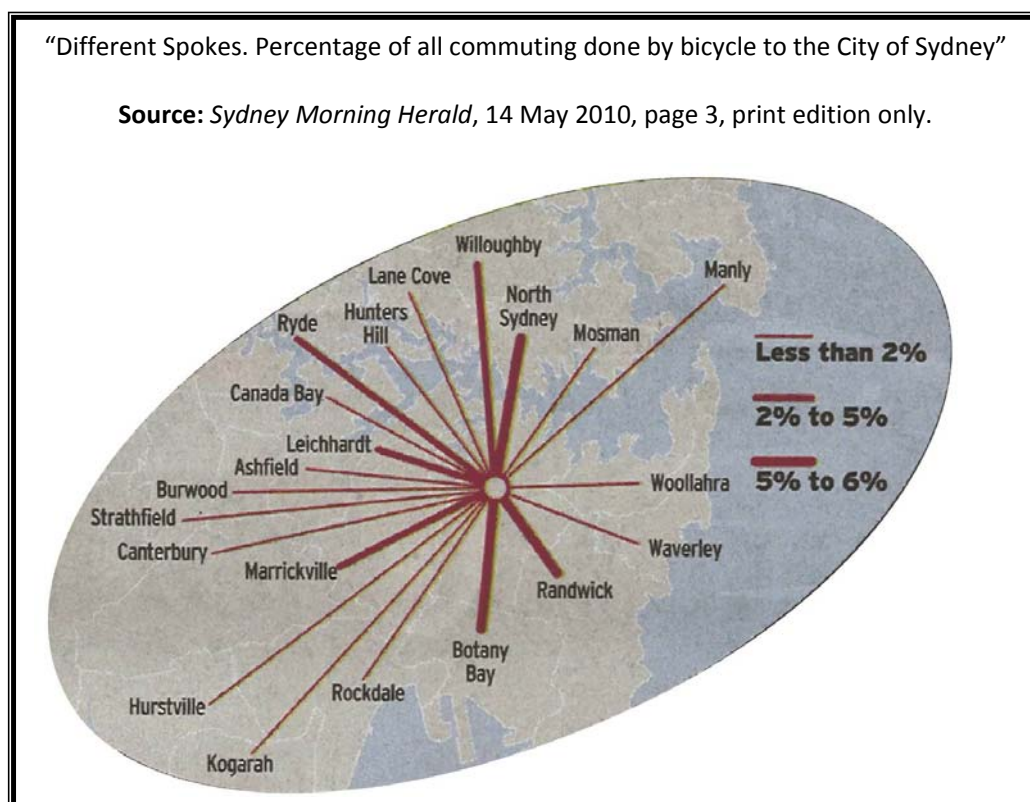
Bicycle NSW expresses its great appreciation that in late 2009 the NSW Government amended the State Plan to introduce a target for cycling:

“Increase the mode share of bicycle trips in the Greater Sydney region, at local and district level, to 5% by 2016.” (NSW State Plan 2010, p.11)
[where Local = a distance of up to 2 km; District = a distance of up to 10 km]

To give some context to this target:

- some high schools have catchments of 10km, e.g. Baulkham Hills High; it would be interesting to know current mode shares of travel to high schools, TAFEs and universities;
- the City of Sydney has a target of 10 % of all trips in the City being made by bike by 2016

The Inner Sydney Bike Plan proposed by 15 Councils is the subject of a new study commissioned by the City of Sydney Council illustrated the current levels of cycling:



ABS 2006 Census data on mode of travel for journey to work, reported residents of Marrickville LGA having a bicycle mode share 3% and whereas Penrith residents had less than 1% trips by bicycle. In 2008, the NSW Minister for Roads stated:

'...we need to double our efforts to double the commuter cycle trips from 0.8 per cent measured in 2006 to 1.5 per cent.

...focus on town centres where we know that more than half of car trips across the day are less than five km – equivalent to a 20-minute bike ride.

...This kind of growth will also complement the City of Sydney's goal to lift CBD bike trips from the 2006 result of under 2% of all trips, to 5% by 2011 and 10% by 2016,'
NSW Minister for Roads 2008.

It seems desirable to report journeys using the comparable categories adopted by the NSW Transport Data Centre for describing travel by mode for short, medium, and long trips. It also seems preferable to track this target for each LGA for a number of reasons. For this to happen, investment in facilities will be required.

Bicycle NSW recommends, for monitoring the NSW State Plan target for cycling:

- **the tracking over time of the level of bicycling for all trips before 2016.**
- **the doubling of commuter cycle trips across Sydney and in each LGA and Sub-Region using baseline ABS Census data from 2006 to 2011**

Local government responsibilities

The NSW Local Government Act provisions on strategic planning by local councils, require the council to have regard to the State Plan in their Community Strategic Plan (s402(3)(d)). It would be useful to convene seminars and a support capability to councils to give effect to the State Plan cycling target and achieve increases in cycling levels in their local areas.

Bicycle NSW recommends that reporting on the actions to achieve the cycling target be included by local councils in their State of the Environment reports (s428A, NSW Local Government Act).

Bicycle NSW recommends that the NSW Government develop and achieve the NSW State Plan target for cycling get for all centres and sub-regions and LGAs in Sydney. This should entail some accountability of investment in upgrading bicycle facilities in each LGA, particularly with the statutory obligations with respect to this target (s402(3)(d) Local Government Act 1993) and the state of the environment reporting. (s428A Local Government Act 1993).

Member K (Coffs Harbour) noted:

We have no cycleways in our shire. It is hoped ??? that 1.3 km will be constructed in the next 12 months. (big deal). Our local children cannot ride to any school (approximately 15 schools) in our shire, due to safety concerns. Our roads generally are narrower, not as well maintained and motorists are less cyclist aware than city people. The motorists' opinion of cyclists in the country is that they are people who cannot afford a car.

Member E (Penrith) noted:

- The local council has much responsibility but limited funding (or prioritised to car parking / general road maintenance)
- footpath and road budgets could merge to deliver 'complete streets'

Interactions between cyclists and motorcyclists

Safety issues of motorcycles using cycling facilities. Recent years have seen an increase in the numbers of motor scooters and small motor bikes using the street/road system. Already Bicycle NSW members are reporting a growing (and illegal) use of bicycle facilities by powered two-wheelers particularly in heavy traffic conditions where bicycle lanes offer temptation to sitting in traffic. Bicycle NSW believes that this is primarily an enforcement issue exacerbated by a low level of respect of on-road cycle facilities by some motorcyclists.

Bicycle NSW recommends that any remedial enforcement actions be coordinated with wider public awareness campaigns designed to encourage greater respect of bicycle facilities and the use of such facilities

Motorcycles using bus lanes. An anomaly of the current road regulations permits motorcycles to use bus lanes along with cyclists and taxis. Bicycles have to use bus lanes for practical and safety reasons. Bicycle riders are generally slower moving vehicles which tend to use the kerbside lane or outer part of the roadway. Bus lanes when installed next to the kerb occupy the space normally used by bicycles. If cyclists were not permitted to use these kerbside bus lanes they would be forced to share other travel lanes with faster moving traffic isolated from their normal operating space by large, fast buses – a highly dangerous situation and not the community’s preferred place to ride. Though motorcycles may share a lack of physical protection with cyclists, they are usually required to occupy normal vehicle lanes and have the speed and manoeuvrability to do so. Motorcycles in bus lanes unfairly compete for operating space with cyclists and complicate the already stressful driving task of bus drivers who have to contend with cyclists as well as taxis.

Bicycle NSW recommends that regulations be changed to prohibit motorcycles from using bus lanes in NSW.

Interactions between cyclists and pedestrians

Joint consideration of pedestrians and cycling is recommended by the RTA in the separate guidelines for use by local councils on *How to prepare a bike plan, How to prepare a Pedestrian & Accessibility Plan (PAMP)* as well as the RTA-Department of Planning publication *Planning Guidelines for Walking and Cycling*.

Owing to the greater cost-benefits of interventions (Haworth (2006) p.9), particularly engineering treatments (for speed control and traffic calming) and signalling changes, there is merit in joint consideration. For example, investigating the potential for more “shared zones” to reduce the conflict between motor vehicles and pedestrians could be extended to the conflict between motor vehicles and people riding bicycles, and manage the potential conflict between people walking and people riding bicycles (Recommendations 14& 15, Staysafe Report & RTA’s response; also consider the latent demand for walking and cycling in potential “shared zones”).

Bicycle NSW produced a Commentary – attached as **Appendix 1** – on Staysafe’s recommendations and RTA’s planned actions for pedestrian safety to highlight the relevance to cycling.

Bicycle NSW recommends that Staysafe support the inclusion of safe cycling as identified in Bicycle NSW’s Commentary on RTA Actions for Pedestrian Safety (Appendix 1).

Staysafe’s (2009) recommendations on pedestrian safety did not cover the overlaps with bicycle safety e.g. each faces the risk of falls. However, a number of submissions did discuss the merit of

joint consideration of pedestrian and cyclist safety; for example, the City of Sydney submission dealt with joint issues for pedestrian and cyclist safety.

Bicycle NSW requests that that these submissions be revisited for Staysafe's inquiry so that its report on vulnerable road users would be more complete.

Operation of shared paths - separation issues, widths, user interaction, volumes etc. A major issue in the community is the operation of shared paths. During the past two decades all off-road cycle facilities in NSW have been constructed as shared paths. As the number of users grows, this places pressure on the ability of shared paths to operate effectively and safely. Both cyclists and pedestrians would like a better class of facility which recognises their varying operating characteristics. Recent research in Queensland and Victoria (VicRoads 2010) has looked at the operating capacity and level of service issues on shared paths of varying widths and user volumes. With higher volumes, wider paths are recommended to a point where separate paths for cyclists and pedestrians would be the preferred and safer solution.

that the VicRoads (2010) guidance for off-road shared use paths be adopted for use in NSW and that state and local government authorities move towards a system of provision for off-road cycle and pedestrian facilities that considers separate paths along with existing facility types.

Safety issues on shared paths and bike tracks with powered mobility scooters and mopeds. With growing numbers of ageing cyclists and pedestrians expected on paths and roads as the population ages, the use of vehicles such as electric mobility scooters and electric bicycles may create management and safety issues with the operation of shared paths, footpaths, streets and roads.

Paths that are currently engineered for walkers and cyclists will need to be re-engineered for increasing numbers of elderly people using some form of power assisted vehicle.

Bicycle NSW recommends that the NSW Government provides an update on status of the national regulatory reform process on the operating characteristics of powered mobility scooters and power assisted bicycles to ensure safe operating speeds and conditions for these vehicles on shared paths and bicycle paths.

Part 2 – The status of bicycle use and injury (Terms A, B, C)

Paucity of good data on cycling use and crashes.

Bicycle NSW supports better sharing and integration of statistics across government. We also suggest that systematic information about preventive strategies, such as implementing local Bike Plans and programs for trip generators be documented.

Patterns of motorcycle and bicycle usage in New South Wales

People ride bicycles for all transport purposes. People of all ages ride bicycles. Some people ride bicycles whose ability to walk is impaired; therefore, facilities for safe cycling can be regarded as the subject for affirmative action to benefit human rights.

Bicycle routes are largely within the road space, whether on the roadway or the footpath, but also within parklands that then reconnect to the road system.

Most importantly, the pattern of bicycle usage in NSW is undergoing a major renaissance and overall growth which should have implications for safe bicycle plans by local councils and NSW Government.

For a little information, see above discussion of the State Plan target for cycling.

Member N (Baulkham Hills) noted:

Many of my colleagues would like to try commuting by bike, but living at Campbelltown, they have no safe way of getting to Liverpool. More needs to be done to help this area.

Bicycling for the journey-to-work has considerable benefits for improved reliability of journey times compared to travelling by car or bus, but not by motorcycle. There are other benefits - personal health, employee productivity and environmental quality – and reduced traffic congestion and increased bus capacity, of course.

The increase in bicycling for transport is evident from the ABS Census data which reports journey-to-work, only. This pattern of use has been described in papers by Associate Professor Chris Rissel. These publications document the trends in the mode share of bicycling for the journey-to work by local government areas (LGAs). In relation to this Inquiry, this information demonstrates that:

- The level of bicycling for the journey-to-work varies very greatly across NSW LGAs. Therefore, it is often a misleading practice to aggregate the level of cycling across the Sydney Metropolitan Area to describe mode share as a basis for policy making.
- The trend toward higher levels of bicycling for the journey-to work occurs in LGAs where councils have recognised the value of bicycling for transport and made positive investments including in infrastructure, facilities, updating planning controls (e.g. parking DCPs), offered training courses in cycling proficiency and bicycle maintenance, and used these more effective transport policies for their own corporate mobility management/Travel Demand Management plan (sometimes called 'Workplace Travel Plan') (OECD (2010).

Data on patterns of bicycle usage and as part of the transport system are also produced in NSW by the NSW Bureau of Transport Statistics (formerly the Transport Data Centre). In November 2008, at the Centre's presentation to the Premier's CBD Mobility Forum November 2008 showed the high proportion of car trips that were so short that they had potential for substitution by bicycle. The Minister for Roads, then the Honourable Michael Daley, commented that with the joint problems of motor traffic congestion (described by the RTA at that meeting), and the rising health costs from chronic conditions (preventable by increased frequent physical activity), that it was a "no-brainer" to look for further substitution of some car trips by bicycle.

Member N (Baulkham Hills) riding to Liverpool, observed:

Potholes and broken glass are a daily hazard. Councils need the staff and budget to help address this. Maybe also a way to easily report road hazards that need to be repaired etc.

Member E (Penrith) noted:

The University of Western Sydney is running Cycling Proficiency Training programs for staff and students – an organisational level program.

A few local councils collect, particularly counts on major bicycle routes, whether as part of producing or implementing their Bike Plan; and, increasingly some corporate trip generators (councils, universities, hospitals) document the mode share of people travelling to their sites through travel surveys (employees, clients and visitors).

Research also documents that the current conditions on the road system in NSW deter more people from bicycling. It deters people from riding in all geographic areas of NSW (research conducted for the City of Sydney Cycling Strategy). The extent of bicycling by children, girls and women is very much lower than in comparable jurisdictions.

The current road system clearly acts as a major deterrent to increasing the level of bicycling in NSW. The City of Sydney Council, for example, produced research on the latent demand for bicycling and is now responding to its community through implementing its comprehensive Cycling Strategy that includes retrofitting the road system to reduce the barriers and enable more safe-cycling.

Short and long term trends in motorcycle and bicycle injuries and fatalities across a range of settings, including on-road and off-road uses

Bicycle NSW refers to publications of time series data on crashes, deaths and injuries published by the NSW Centre for Road Safety and the Commonwealth Bureau of Infrastructure Transport and Regional Economics e.g. www.bitre.gov.au/publications/49/Files/IS38_RoadDeathsB.pdf

We understand that in 2009-2010 in NSW, 12 people riding bicycles were killed. The trend appears to be steady despite the rise in bicycle usage on the roads, with a downward trend over the last five

years even in the City of Sydney where the marked increase in bicycle usage is occurring (City of Sydney Submission on Pedestrian Safety, pp. 12-14).

Nonetheless, we note that the Victorian data “supplied to Monash University’s Victorian Injury Surveillance Unit (VISU) has shown that hospital admissions due to pedal-cycle accidents among adult cyclists increased an average of 9 percent each year from 1999 to 2008. This is said to be in line with the growing popularity of recreational and commuter cycling.” (Slater & Gordon 2010)

Bicycle NSW recommends Staysafe to consider expert commentaries on the road injury data. We note the limited value of data for the systemic prevention of further deaths and ‘life-changing’ injuries. Information about the status of Bike Plans may be more worthwhile for the ultimate purpose of preventing and reducing injuries in the context of increasing levels of cycling.

Underlying factors in motorcycle and bicycle injuries and fatalities

The underlying cause of collisions arises from the people within the road environment and particularly the presence of motorised vehicles travelling at speed. Bicycle riders are disadvantaged in a road transport system because of their lack of physical protection and their relatively slower travel speeds to that of motor vehicles. Further, the road transport system has traditionally not ensured safe road space in which people ride bicycles in relation to moving vehicles, parked vehicles (both kerbside and angle parking), and at intersections.

Member D (Blue Mountains) commented:

Failure to provide this infrastructure has left large portions of the public stranded between good reasons for taking up cycling and the dangers of doing so. Funding of cycling infrastructure should be increased manifold, and ultimately funded through savings from car-usage reduction.....

..... Infrastructure should be designed to respond to the urgency and value of increased bicycle usage and reduced car usage. It must facilitate the transition of new riders into experienced riders.

- Networks of safe cycleways for inexperienced cyclists and their companions that aren't interrupted by short dangerous sections. Young riders need to be able to get from A to B without putting themselves in danger, otherwise they won't take acquire the skills necessary for long term bike usage, leading to greater car dependence. Such cycleways will be largely isolated from car traffic, separated by barriers where necessary. They will include cycle-friendly intersections with car traffic.
- Networks of commuting cycleways, where experienced cyclists can ride alongside car traffic, usually in lanes marked as cycleways that exclude cars. These networks must not be interrupted by short sections that are highly dangerous, as this will greatly reduce the efficiency, usage, safety and value of the infrastructure.

Member H (Parramatta) raised the effect of liability for collisions and experience in other jurisdictions, saying:

A crucial aspect in reducing collisions is the attitude that car drivers have towards pushbike/motorbike users. Given the gross discrepancy in personal consequences of a collision between a drivers and rider, unless one expects drivers to be somehow "better people" than riders, there should be some sort of legal pressure making a collision with a cyclist/rider something drivers fear/avoid at all costs. Both riders and drivers do stupid things on the road, both parties can get angry, but that is where the parity stops. The Netherlands has a legal position mandating that drivers take the entire insurance risk for any collision with a rider.

"Strict Liability", supported in law in the Netherlands, leads to driver's insurance being deemed to be responsible in a collision between a car and a cyclist. This makes car drivers very wary of bicycles." Wiki - cycling in the Netherlands

Although I fully support a mutually tolerant approach to collision avoidance, the physics of any accident involving riders and drivers means it is never an equal contest. . If the submission doesn't have material addressing this, I'd be happy to try and flesh this out somewhat.

Australian bicycle injury data shows that one third of injuries are from collisions with vehicles, and another third result from falls. Bicycles are more sensitive to the condition of the road and footpath pavements than motorized vehicles. Local councils and Bicycle User Groups typically work together on hazard reporting systems

Member E (Penrith) noted:

- inadequate facilities, particularly regional routes e.g. Great Western Highway St Marys to Penrith (RTA Regional Route 1) e.g. poor planning for cyclists, the on road cycle lane ends on the crest of the hill!
- Poor condition of sealed roads e.g. Penrith to Hawkesbury campus on Great Northern Road

Member G reflected on this question:

The first action to be taken is to improve awareness towards bike riders. This can be done by making drivers aware of their rights as well as the rights of others on the road. Bicycle riders are entitled to ride in the centre of a lane. Most of them do not as a courtesy to motorists. Unfortunately, as a result of this, many cyclists (including myself) have at times found themselves at risks of hitting road furniture or crashing into the side of the road due to cars overtaking without traversing across the other side of the road. This has happened to me several times and as a result, I consciously enforce my right to the usage of the lane by riding in its centre. I do get honked at and wish motorist would be more educated towards their entitlements. One solution to this issue would be to provide separated lanes for cyclists as it has already been done in cities across the world like Amsterdam, Lyon, Paris or Copenhagen.

Moreover, a staggering amount of people do not look in their side mirrors before opening their doors. Although this may sound trivial, it can be a cause of accident for cyclists. In the past year, I have twice narrowly escaped a crash with someone opening a car door in my path. I remember being told to look in my mirrors before exiting a car, and I am just astonished by the number of people who do not have that very simple piece of common sense.

'Doorings'. A particular issue about the use of road space is the siting of bicycle lanes adjacent to cars parked at kerbside. In this zone, bicycle riders face the hazards of a car door being opened in their path of travel and being hit or getting "doored" – or, avoiding the door by suddenly changing their direction possibly into the path of oncoming vehicles. Despite the provision of marked bicycle lanes, therefore, it may be safer for the bicycle rider to 'take the lane' instead.

Member L (Inner West):

Motorists leaving less than 1.5m space to overtake a cyclist motor cyclist etc, leaves no room at all for said cyclist to fall or dodge safely

'Doorings' have become such a feature of the Australian bicycle injury profile that the Victorian legislation for compensation was amended in 1995. Slater & Gordon motor vehicle accident lawyer, Allan Macrae said the firm was alarmed by the injuries that clients had sustained while riding their bikes and following another death of a cyclist in Melbourne, commented:

"As the number of cyclists on our roads increase, there's no doubt that the tension between motorists and cyclists is also increasing. A cyclist riding their bike to home, work or for recreational purposes, should not also have to be concerned that they're putting their body and life on the line..."

Drivers & passengers should get into the habit of doing a head check before opening the car door, just like checking for blind spots when driving. ..

Our advice is that the easiest way to deal with cyclists on the road is to treat them like any other vehicle and to give them appropriate space and consideration on our roads."

Measures to address these mischiefs are discussed below in Part 3 (Term D).

Part 3 – Measures to address safety: current and future (Term D)

The challenge for all governments is to retrofit urban areas to become more people-friendly and apply the principles of the *Safe System* to managing the road network, e.g. lowering speed limits appropriate to activities and use of the road in the particular area and ensuring legibility of the speed zones. Ideally, a package of inter-dependent measures is required for the goal for safe cycling, and for the broader policy of Travel Demand Management.

People riding bicycles are likely to face unsafe road design, resulting from guidance and practices described above. Poor road design both deters people from riding and induces people who do ride to breach the rules and potentially, but not in many circumstances, put themselves and other road users at risk.

We consider key issues to be the:

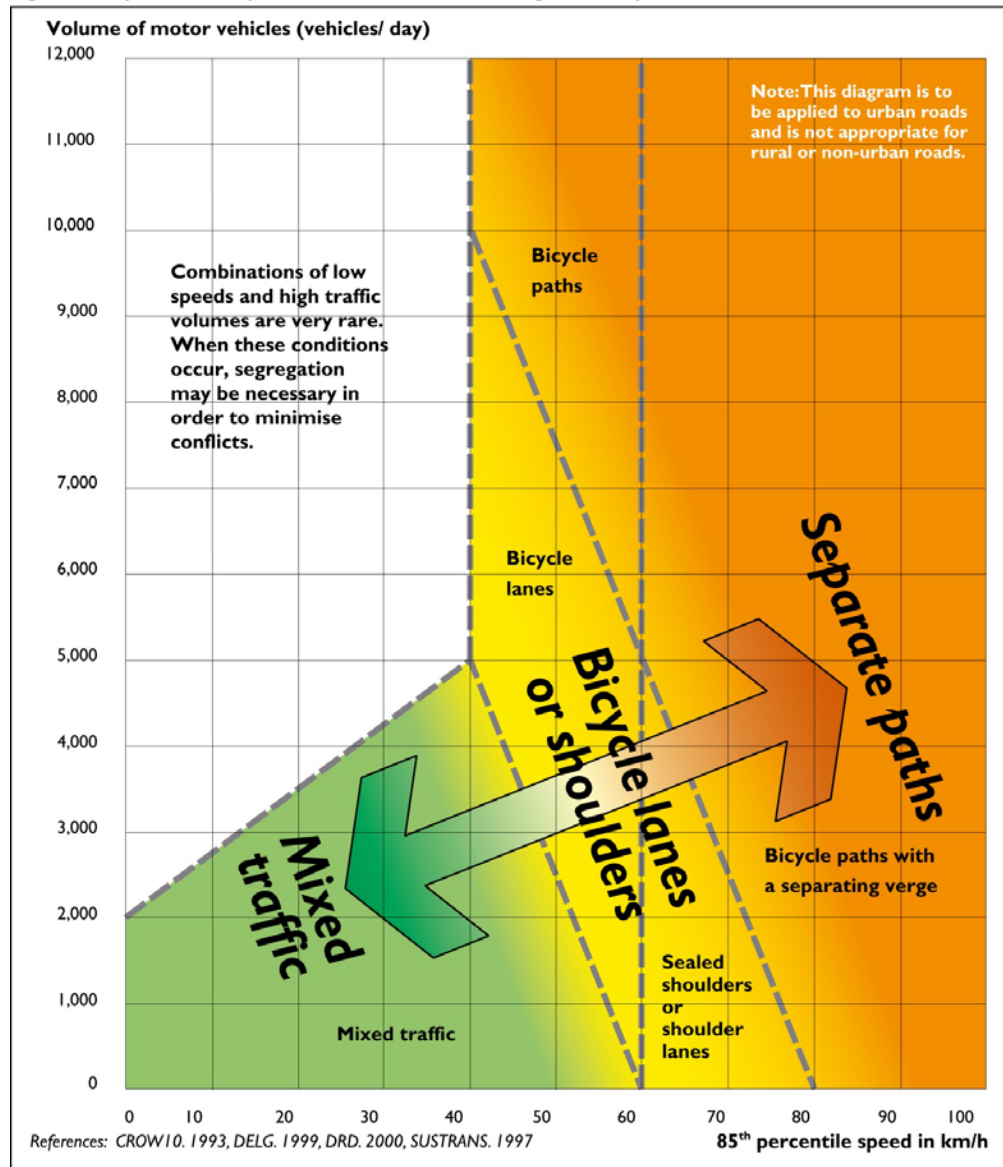
- Governance of the road system – its planning, and management and strategic directions in relation to the integrating policy approaches for safety and health, urban growth and renewal, (motor) traffic congestion, road pricing and other travel demand management measures as a context for road safety (discussed above in Part 1)
- Consistency in the design and implementation of cycle facilities, e.g. bicycle lanes
- The process for approving lower speed limits on local roads, including the 10 km/hour “shared zones” by the RTA and local councils. The role of Traffic Committees needs review.
- Reviewing the role of Road Safety Officers in relation to the emerging role of Sustainable Transport Officers to better inform the local council plans on asset infrastructure and delivery over 10 years
- Resourcing of local councils to implement bike plans and monitoring their implementation in contributing to the NSW State Plan target for safe cycling
- Overcoming the capacity constraints for continuing education of practitioners and the community.

In this Part, we have tried to highlight measures that respond to some real problems with technical practices and technical guidelines of direct relevance to safe cycling. The current road environment does not serve safe cycling well because it does not yet offer connected, safe routes and safe crossings at intersections. The prevalence of one-way streets, even in the Sydney CBD and regional centres like Parramatta, is a hostile traffic circulation system for safe cycling without the introduction of contra-flow bicycle lanes.

Measures for road traffic speed and management

The RTA's *NSW Bicycle Guidelines* adopt the international good practice of measures to reduce risk of conflicts between bicycles and motorists, reproduced below:

Figure 3.2: Separation of bicycles and motor vehicles according to traffic speed and volume.



NSW should adopt a safer speed zone regime.

One of the most beneficial measures for improving the cycling and walking environment is lowering motor vehicle speeds.

The implementation of the general urban speed limit of 50 km/h is fully supported but its patchy introduction has 'muddied the waters' though the RTA's more recent attempt at a system of speed zoning guidance is reintroducing some certainty and consistency back into the system. Nevertheless the lower speed zoning of 40 km/h for schools and high pedestrian activity areas is still too high – it is 20 km/h above the speed where children will survive a collision with a motor vehicle.

Bicycle NSW recommends a speed zoning system based on improving the safety and survivability of all road users as outlined below:

Proposed NSW speed regime (applied in conjunction with the full categorisation of NSW streets and roads – see Part 1 above)

Speed limit	Street/road category	Comments
10 km/h	Shared zones (high access function, permissible mobility function)	This type of facility is useful in certain areas
30 km/h	Home streets. Residential streets with an access function only.	This type of street can be a through street provided that threshold treatments are installed at either end. Mid block closures with cycle access provided can greatly improve cycle safety of through cycle routes.
40 km/h	High Activity Zones. Drop the word pedestrian from this term to be more inclusive. High access function, medium to low mobility function. Local business/shopping streets	These should be supported by street redesign to emphasise a slower speed environment. Cycle access should always be included in these areas. The 40 km/h HPAZ is retained, to save money on sign replacement. Ultimately, these should be changed to 30 km/h so we have a simpler 10-30-50 speed regime.
50 km/h	General urban speed limit	
Above 50 km/h	Distributor Roads, Through Roads, as posted	

On a more rueful note, Member K (Coffs Harbour) commented:

There are back roads with little traffic (say one car every 5 minutes) and yet they won't even reduce the speed limit from 100km /hr. Yet one particular road goes through 4 cattle grids and 3 farms (they are public roads)...

Consistency in facilities: Bicycle Lanes

Bicycle NSW is aware of huge amount of confusion from both cyclists and motorists as to the difference between a Bicycle Lane and the Road Shoulder:

- Bicycle Lane **marked by a sign on a post (R7 – 1-4)**, must be used by cyclists. (It also has painted white bicycle (PS2) on road). A Bicycle Lane includes clearance for car doors when adjacent to parking. This is a risky obligation because the lane may be in disrepair, covered by glass etc.
- Road Shoulder **marked only by white painted bicycle on the road (PS2)**, is not compulsory for cyclists. It is more dangerous as it does not include clearance for car doors when adjacent to parking.

In NSW there is lack of understanding on the difference between 'shoulder lanes' and 'real' bicycle lanes. But the problem is more with the practitioners than the users. With typical roads and streets being only 12.8m wide, and both sides of the street being used for car parking with a 3.0m narrow parking lane (RTA's preference is 3.5m and above), the remaining road space allows only 2 x 1.4m 'bicycle shoulder lanes' (BSLs).

Technically these are **not bicycle lanes** but a **marked use of the shoulder area**. On a rural road the distinction is much clearer. Where a council erects a R7-1-4 sign it becomes a bicycle lane as the sign is the primary 'regulatory device'. Lanes of this width and located so close to parked cars are not consistent with the intent of the guidelines, and compromise safe cycling.

On streets with parallel car parking, bicycle lanes are rarely shown on the road pavement correctly, that is a proper separation strip between the parking and the bicycle lane. We consider that the ACT manages this practice better than in NSW – perhaps it has fewer authorities and gains greater consistency. In our view, too, the new Austroads Guide to Road Design perpetuates the problem.

The lack of consistency in lane marking is the real problem, even greater than the expectation of riders to use the “bicycle lane” created by NSW Road Rule 247. As experienced riders on the NSW road system, we find it is often “impracticable” to ride in the “bicycle lane” as there can be insufficient width to avoid opening car doors or to avoid defective conditions on the road way (holes, uneven utility lids, rubbish and glass). Other road users may not understand that the rider has assessed the conditions and found it impracticable and unsafe to be confined to the “bicycle lane”.

Recognition of bicycle characteristics in RTA traffic signal control and intersection treatments (advance stop lines/boxes)

Though the RTA has generally supported and fostered the recent increase in cycling due to the improvement of some on-road facilities for cyclists, decisions by the traffic signal branch of the RTA are a major impediment to safe and convenient cycling in NSW cities and towns. The restrictive and overly protective practices of the RTA signals designers has led to examples such as the King Street separated cycleway in Sydney CBD, where large numbers of cyclists daily ‘vote with their pedals’ to ignore red cycle signals at three intersections. They do this because the signals ration their movements to mere seconds while the adjacent motor vehicle travel lanes travel unimpeded for minutes.

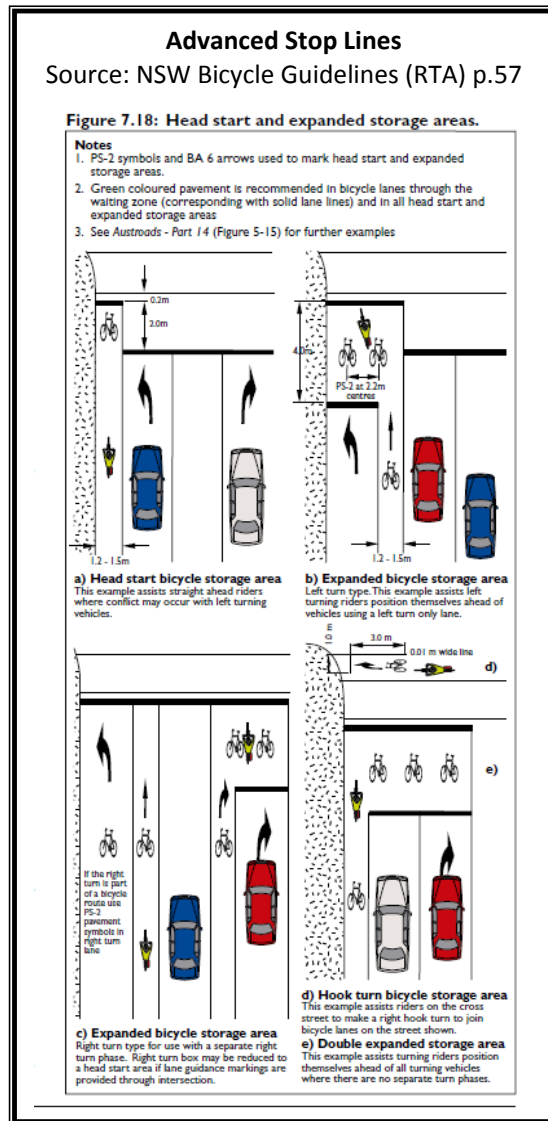
A similar situation exists at the Cathedral Street intersection on the City of Sydney’s Bourke Street separated cycleway. This relatively low volume intersection similarly restricts cycleway travel time to seconds. In road safety terms, facilities and systems which do not recognise or adequately meet the reasonable expectations of the users are described as lacking ‘credibility’. If poorly formulated road rules or poorly designed road facilities are provided then the system lacks credibility with the users leading to errors of judgement and crashes.

Though the ‘advance stop line/ box’ treatment has been covered by nationally recognised guidelines and in use widely in Victoria for at least five years, the RTA signals section has resisted any application of this beneficial facility throughout NSW.

Additionally the RTA has resisted the inclusion of bicycle lanes at signalised intersections at a number of Sydney intersections on the grounds that such bicycle facilities would affect the car-carrying capacity of the intersection. Clearly the RTA prefers car capacity to the safety of people riding bicycles.

Advanced stop lines and contra-flow bicycle lanes

We support measures to improve the visibility of people riding bicycles through the greater use of **advanced stop lines** at crossings and intersections, and **contra-flow lanes** for bicycles. Bike Sydney previously addressed these measures in a submission to the National Transport Commission (copy available) – those proposals we believe serve bicycle safety better than the decision by RTA. We prefer the vantage point of pedestrians and cyclists, literally with the feet on the road pavement, for there to be ‘advanced stop lines’ and greatly prefer this terminology to ‘bicycle storage boxes’ preferred by some sections of the RTA.



BNSW recommends an urgent review of the RTA’s traffic signals procedures with the aim of greatly improved inclusion of bicycle riders in the interests of greater transport equity and road safety.

BNSW also recommends a review of the decision about advanced stop lines/bicycle storage boxes.

Professional and practitioner knowledge and training

In 2003 the RTA developed training courses for practitioners to accompany the introduction of its *NSW Bicycle Guidelines*. Since that time the course has trained hundreds of local government and RTA practitioners. In recent years there is growing evidence from bicycle user groups that there are still a large number of local traffic committee members who routinely display a lack of knowledge on the use and design of quality bicycle facilities.

Bicycle NSW in order to improve the level of professional knowledge in facilities provision, the RTA undertakes a program to support and encourage members of Traffic committees (RTA local reps, council staff and Police) to complete an RTA training course as part of their regular in-service training requirement; places could also be offered to Road Safety Officers and Sustainable Transport/Access Officers of local Councils for skill development.

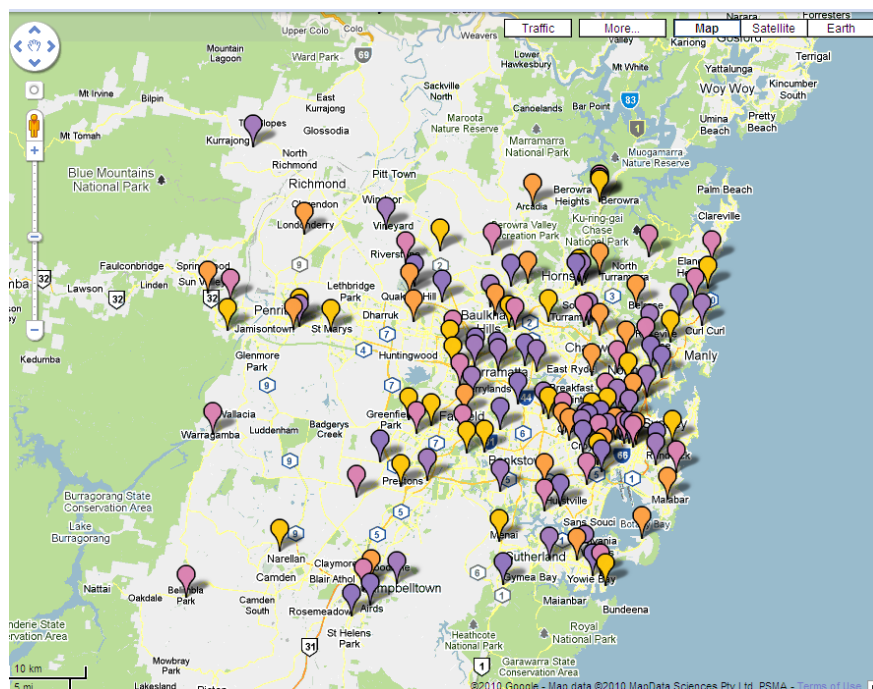
Education programs for users

Our membership strongly supports the availability of education programs; for example Member D (Blue Mountains):

Resources should also be made widely available for bicycle training for all, especially children and young adults.

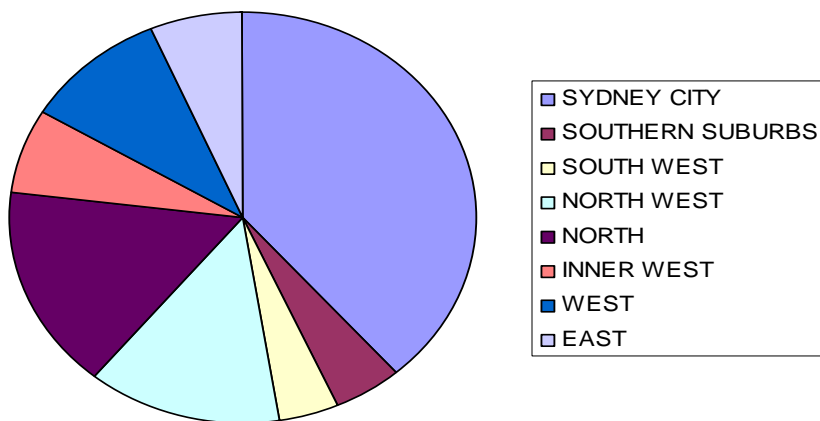
Bicycle NSW supports and undertakes user education and conducts educational programs for consumers in which road safety is an integral part.

Schools Program: promoting active travel to students. 527 Schools in NSW are registered with the Schools Program. The program includes Bicycle Skills Workshops, teaching practical cycling skills to primary and secondary students. Although the workshops are geared to students, consisting of some quite basic skills and games, we have been able to refer and fund a few teachers through the Cycle Skills course run by Cycling Australia; this course is also a pre-requisite for enrolling in the AustCycle Teacher course.



Smart Commuting Program: promoting 'active travel') to workplaces and staff. 762 workplaces in NSW are registered with this program. Active travel refers to the use of human-power by walking and cycling and in combination with public transport in contra-distinction to sedentary car travel (Mason 1999).

WORK PLACE COMMUTER CLUBS - SYDNEY METROPOLITAN AREA		
	NUMBER OF CLUBS	% OF CLUBS
SYDNEY CITY	196	39%
NORTH	81	16%
NORTH WEST	67	13%
WEST	51	10%
INNER WEST	34	7%
EAST	32	6%
SOUTHERN SUBURBS	23	5%
SOUTH WEST	22	4%
TOTAL	506	100%



Commuter Challenge, running between April - December 2010, is designed to encourage the general community to clock up 500km of bike riding by December 2010.

Gear up Girl program: specifically targeted at women of all ages and abilities, giving them the confidence and cycling knowledge, in a non-threatening all-female environment, to cycle. The program includes practical workshops to improve cycling skills and learn basic bike maintenance, and a celebratory, participation ride (the Gear up Girl Challenge). This program is designed to remedy the relatively lower level of participation of girls and women in cycling. At the 2010 annual celebratory ride, the 790 participants were attracted from all over the metropolitan area, shown in the table below:

Area of residence	Number of riders	Percentage of riders	% SMA
Sydney City	72	8	8
Southern Suburbs	250	29	32
South Western Suburbs	107	13	14
North Western Suburbs	131	15	17
North Sydney	208	24	26
Central Coast	22	3	3
Sydney Metropolitan	790		

Ride Leader Training: training courses for affiliated BUGs to equip riders to safely lead rides.

AustCycle is the Australian leader in providing cycling training for all people who want to ride bikes for recreation and transport. AustCycle is based on the AustSwim model and was created to “help people ride better, more often and more safely”. “AustCycle’s aim is to deliver high quality cycling training, by accredited Teachers (trainers) to Australians of all ages so that they can ride further, more often, more confidently and more safely. This will result in healthier, happier Australians and a safer, cleaner environment.” (AustCycle website: Overview)

There are 4 levels of AustCycle training: Level 1 (Beginner); Level 2 (Intermediate); Level 3 (Advanced); and Level 4 (Specialised Skills). Level 3 is of particular importance to this Inquiry because:

- “Level 3 training takes place on real roads in realistic conditions, starting on quiet roads and progressing to busier roads as clients develop skills.”
- “Safety is at the forefront of AustCycle’s philosophy. Basic level programs will be conducted within traffic-free areas such as school grounds, sports grounds and local community facilities. Gradually traffic skills and experience will be introduced such that participants can safely and responsibly handle a wide range of foreseeable road situations.” (AustCycle Manual for Teachers [1])

Constraint: availability of Teachers for safe cycling

A key constraint to the growth of cycling education programs in NSW is the shortage of accredited AustCycle Teachers to run AustCycle Courses. Currently there are only 22 accredited AustCycle Teachers throughout NSW.

AustCycle has been the recipient of a National Grant as part of the Healthy Communities initiative and through this their aim is to achieve 500 accredited Teachers nationally by June 2013.

The cost of the course to become an accredited AustCycle Teacher is currently \$450 + GST. However, prior to this course, candidates must have completed Cycling Australia’s Cycle Skills course (\$145 +GST).

Bicycle NSW recommends the Staysafe Committee enquire into the apparent shortage of trained cycling teachers. In this respect, comparative practice from other jurisdictions may be useful. We would suggest that the Staysafe Committee look at initiatives used overseas, for example the UK, where the Cycling England Bursaries scheme covers 3/5 of the cost to become an accredited teacher.

DECCW's partnership with AustCycle

In 2008, DECCW and AustCycle formed a partnership and launched an initiative to increase adult accessibility to AustCycle training.

In late 2008, the cycling proficiency training voucher scheme for adults was launched. It provided free vouchers to the community for proficiency training for adults. The vouchers were distributed principally through local councils and also Bicycle NSW.

This program provided 420 free training vouchers for adults, each at a value of \$360.00. The voucher program expired at the end of June 2010, with all of the 420 vouchers being distributed. We do not know how many vouchers were redeemed.

Feedback from participants has been very positive. This voucher scheme ended in June 2010.

Comparison with other jurisdictions shows, for example, in the UK the number of children received cycling training in Bristol and South Gloucestershire 10,000 was doubled between 2005-2008 through the Cycling Demonstration Towns program which increased the level of funding for cycling from \$2 per person per year, to around \$30 per person per year (in line with figures in the Netherlands). Cycling training is now offered in over 95% of schools in South Gloucestershire. The training covers skills essential for cycling on roads and children are instructed on how to ride their bikes to the government approved National Standard for Cycle Training.

Bicycle NSW recommends Staysafe to enquire into DECCW's assessment of this program; to request the Minister for Environment/DECCW to find out about ways of mainstreaming cycling proficiency education for adults (sub-groups gym instructors/personal trainers, teachers) and children in NSW through a process of engagement with education agencies (DET, TAFE), health and children's agencies and the RTA to confer with Bicycle NSW and other training providers, Cycling Australia and AustCycle Ltd.

Education of road users about each other and road safety campaigns

Bicycle NSW commends the work of the The Amy Gillett Foundation (www.amygillett.org.au) that was formed to reduce the incidence of death and injury caused by the interaction between cyclists and motorists. A large part of their work centres on education programs, including:

- **A Metre Matters** – A campaign aimed at encouraging motorists to provide more space on the road for cyclists. The campaign includes television, cinema and radio advertising and road signage.
- **Road Right** - An innovative program to encourage learner drivers to better understand the road laws in relation to cyclists
- **AustCycle** – In partnership with Cycling Australia AGF has created a program to train and accredit cycling teachers around Australia with a standardised training program
- **Research Scholarship** – AGF's PHD student completing a three year study on the causal effects of bicycle/vehicle crashes. Publication expected October/November 2010
- **Ride Right** – Educating parents on purchasing the correct fitting bike and helmet, plus the relevant safety accessories (through Big W stores)
- **Amy's Rides** – Fundraising rides conducted, to date, in Adelaide, Geelong and Canberra and soon to be Tasmania and Sydney. These rides spread the message of safe cycling.
- **Sporting Scholarship** – Each year an up and coming female cyclist is placed on scholarship with the AIS road cycling team

Government support is urgently needed to avoid a 'lost generation' - children whose parents do not cycle and do not let them cycle. Recognising this undesirable trend, the UK government through its Cycling England agency, has developed a comprehensive system of cycle training called Bikeability which specifically addresses the task of cycle rider training for children. Bikeability also recognises the increasing pressure society places on schools' curricula and organises its three level program to work independently of the schools but still with their involvement. The internationally regarded Australian-developed BikEd program has had some success in schools but has generally failed to gain widespread application due to the lack of teacher, school and departmental support.

Bicycle NSW recommends the establishment of an Australian version of the Bikeability program to be promoted and run by NGOs such as AustCycle who would work closely with government agencies to ensure a wide reaching delivery of its programs.

Knowledge of Road Rules

Knowledge of, and respect for, the road rules greatly contributes to a safer road system. Difficulty arises when sections of the road rules do not accurately reflect the daily reality in the operation of the road transport system.

This submission has highlighted some deficiencies that are critical to improving bicycle safety. This lack of recognition also restricts transport practitioners from designing the kinds of separated facilities and crossing facilities common place in many other countries.

Recent surveys of public opinion have shown a high public preference for separated facilities rather than on-road lanes. Recognising this, the RTA has constructed many kilometres of two-way off-road cycleways adjacent to the many heavily trafficked main roads under its jurisdiction. More recently the City of Sydney has begun an extensive program to construct a network of separated cycleways throughout its LGA which is planned to connect to similar facilities feeding to other parts of the Inner Sydney region (Inner Sydney Bike Plan discussed in Part 1 above). A major issue for both the designers and users of these facilities is that the current NSW (and Australian) Road Rules do not adequately recognise the needs of cyclists at crossings of minor side streets and at shared path mid block road crossings.

Member A (Newcastle) made these observations:

RTA Road Users Handbook OCT 2007: pg39 *"When overtaking give bicycle riders a safe amount of space. This means at least 1 metre to the side in a 50km/hr zone"*. This is good. Congratulations!

RTA Road Users Handbook OCT 2007: pg40 *"Allow ample room in case a car door is opened. Do not ride between and around parked vehicles"* This is on the way to being good advice. But confusion is still there, as in the second sentence: *"Do not swerve in between parked vehicles, and then out into the traffic lane without checking for other traffic."*

RTA Road Users Handbook OCT 2007: pg88 *"Bicycle lanes: When a bicycle lane is marked on the road, cyclists must use it"*

THIS IS CAUSING ROAD RAGE!!!!!!!!!!!! This is what people quote when they say bikes should be riding where the bike pictures are painted on the road. They are confused with the sign posted bike lanes, because it isn't explained in the Handbook.

The RTA needs to fix this straight away! I suggest: When a bike lane is signposted, cyclists must use it, unless impracticable to do so [NSW RR 247]. Other non-sign posted bicycle picture lanes are narrower and usually don't give enough room when a car is also parked in it. Cyclists are not required to ride in non-sign posted bike lanes.

For a shared path or bicycle path (cycleway) paralleling a major road to provide an adequate level of service to cyclists (and walkers) the path should at least be designed and constructed to mirror the level of service of the parallel major road. However, the lack of explicit give way guidance for cyclists at intersections creates the anomaly, particularly on shared paths, where pedestrians legally have right of way to cross at some intersections whereas cyclists do not.

As footpath cycling was not permitted in NSW when the current road rules were formulated, the Rules were worded to reflect this reality. Nowadays with a growing number of off-road shared paths and new separated cycleways there is an urgent need to revise the current rules for coherence that would permit such things as:

- Recognised types of crossings for both shared paths and bicycle-only paths. Currently there is no crossing type which offers cyclists the level of service and safety as a pedestrian crossing and the lack of a dedicated shared path crossing type creates ambiguity and an unnecessary severance of off-road facilities (cyclists are not permitted to use pedestrian crossings on a shared path road crossing).
- Priority crossings of intermediate low-volume side streets for paths paralleling major roads. A cyclist travelling in on-road bicycle lanes fitted to a through road has right of way over exiting and entering traffic as do vehicles using the through road lanes. If the cycle facility is instead located off-road, it would lose its travel priority at each intervening side street intersection. This deficiency in the NSWRR makes it very difficult for transport facility designers to provide off-road cycle facilities of a sufficient level of service to meet community expectations.

BNSW recommends that the NSWRR and ARR be reviewed and updated to permit the safe design and operation of separated cycleways and bicycle lanes within the road corridor and to explicitly require vehicles travelling along a through road to give way when attempting to turn across the path of cyclists using cycle facilities (either on- or off-road) along the same road; further, more the RTA develop guidelines and approved designs for cycle-only and shared path crossings with similar priority to Zebra type crossings.

Inadequate knowledge by motorists of road rules in relation cyclists and pedestrians leads to inattentive driving and greater risk taking. Without continual refreshment of existing knowledge and adoption of new knowledge people are apt to forget and ignore information that is not in the forefront of their everyday behaviour. The current system of lifetime licencing of road users does not adequately provide for a safe operating road environment for cyclists and pedestrians. Surveys of motorists show that knowledge of road rules is particularly poor in areas of little interest such as bicycle and pedestrian operation.

An aspect of road rules knowledge which is lacking in many road users is the complicated give way rules for intersections (NSWRR Rules 72 and 73). A lack of up-to-date knowledge is also lacking in relation to the increasing application of on-road bicycle lanes, hook turn boxes, advance stop boxes and green surface colour. There is a tendency for some drivers to either ignore new cycle facilities or not understand fully their operation.

Bicycle NSW recommends as a general road safety initiative (but one that particularly assists intersection safety) the introduction of a computer based road rules test which all drivers would complete (either at a motor registry or on-line) to obtain their licence renewal. The German system has a graphical interface which presents questions as a series of simulated scenarios for road users many involving interaction with cyclists and pedestrians.

Member E (Penrith) suggested:

Integrate cycling education with obtaining car licence – state wide program

Member N (Baulkham Hills) stated:

We already have excessive (120) hours of training for L plate drivers. We also have compulsory rider courses for motorcycle riders, which is good. What I'd like to see is car, truck and bus drivers to be educated that cyclists and motorcyclists deserve just as much respect as any other road user.

Bullbars and other matters

A fundamental safety issue for all road users not just the vulnerable modes is the use by some car drivers of bullbars on vehicles within major urban centres. All the good work in frangible car front designs is negated by the installation of bull bars on vehicles. The evidence for removing them from all vehicles driven on NSW Metropolitan streets and roads is supported by the data and information provided in the RTA's submission to the 2009 Staysafe Pedestrian inquiry.

Bicycle NSW recommends that the NSW Government moves quickly to restrict the use of bullbars on vehicles to roads outside of major urban centres.

Many other safety matters are addressed in the Bicycle NSW Commentary in Appendix 1.

Conclusions and Summary of Recommendations

As a part of its recommendations, Bicycle NSW requests that it be noted that:

- a) In NSW, the concept and practice of 'Road safety' for cyclists and pedestrians needs to be qualified by, or coupled with, encouraging and enabling walking and cycling. Road safety contains a paradox: safety measures can deter people from walking and cycling, described by the British Medical Association as 'health-promoting travel' (1999) . Putting children on a bus rather than providing safe routes to school would bring us closer to a 'Yes, Minister' scenario!
- b) Contemporary policy for land use and transport planning is for urban areas to be made, or renewed, as being more 'walkable' and 'cyclable' and the use of public space in cities to become more people-friendly by taming the motor traffic – toward a 'new access and mobility culture'. These policy directions, in managing the mode shift away from heavy reliance on private motor vehicles, can be integrated into policy approaches to "vulnerable road users" (Haworth 2006).
- c) Cycling and walking present overlaps for road safety, and the interactions between cycling and motorcycling needs attention (but not "integration").
- d) With broad policy objectives more appropriately informing the planning and management of the road system (State and local), NSW people need a step-change in conditions for cycling and walking, particularly in urban areas undergoing urban renewal and population growth. With respect to Staysafe's (2009, p.47) Report on Pedestrian Safety we place some hope through the Director, Centre for Road Safety quoted: "... in principle it is correct to assert that the engineering solution is one which will work for road safety and one where other countries are doing better than all of Australia."
- e) The capacity of NSW Transport and Traffic practitioners to provide for the needs of cyclists are constrained by the NSW (and Australian) Road Rules that are not fit for the purpose of planning and managing the NSW road system for safe cycling.

Bicycle NSW recommends:

1. that the concept of road safety (for institutions) be qualified by the policy context for encouraging access and mobility by cycling and walking and making road conditions suitable for safe cycling.
2. that the NSW government should adopt a more human-centred approach to road safety, with access and mobility, along the lines of the Dutch Sustainable Safety Policy (SWOV 2006) – by discussion and consultation for working toward a “a sustainably safe traffic/travel system” to NSW, and continue drawing from the ongoing research for continuous improvements reported by the SWOV Institute.
3. that the NSW Government arrange for a survey of local councils to document the use and status of Bike Plans and PAMPs.
4. for monitoring the NSW State Plan target for cycling, the tracking over time of the level of bicycling for all trips before 2016, and the doubling of commuter cycle trips across Sydney and in each LGA and Sub-Region using baseline ABS Census data from 2006 to 2011.
5. that the NSW Government develop and achieve the NSW State Plan target for cycling for all centres and sub-regions and LGAs in Sydney. This should entail some accountability of investment in upgrading bicycle facilities in each LGA particularly with the statutory obligations with respect to this target (s402(3)(d) Local Government Act 1993) and the state of the environment reporting. (s428A Local Government Act 1993).
6. that any remedial enforcement actions be coordinated with wider public awareness campaigns designed to encourage greater respect of bicycle facilities and the use of such facilities
7. that regulations be changed to prohibit motorcycles from using bus lanes in NSW.
8. that Staysafe support the inclusion of safe cycling as identified in Bicycle NSW’s Commentary on RTA Actions for Pedestrian Safety (Appendix 1).
9. that the VicRoads (2010) guidance for off-road shared use paths be adopted for use in NSW and that state and local government authorities move towards a system of provision for off-road cycle and pedestrian facilities that considers separate paths along with existing facility types.
10. that the NSW Government provides an update on status of the national regulatory reform process on the operating characteristics of powered mobility scooters and power assisted bicycles to ensure safe operating speeds and conditions for these vehicles on shared paths and bicycle paths.
11. Staysafe to consider expert commentaries on the road injury data. We note the limited value of data for the systemic prevention of further deaths and ‘life-changing’ injuries. Information about the status of Bike Plans may be more worthwhile for the ultimate purpose of preventing and reducing injuries in the context of increasing levels of cycling.

12. a speed zoning system based on improving the safety and survivability of all road users as outlined below:

Speed limit	Street/road category	Comments
10 km/h	Shared zones (high access function, permissible mobility function)	This type of facility is useful in certain areas
30 km/h	Home streets. Residential streets with an access function only.	This type of street can be a through street provided that threshold treatments are installed at either end. Mid block closures with cycle access provided can greatly improve cycle safety of through cycle routes.
40 km/h	High Activity Zones. Drop the word pedestrian from this term to be more inclusive. High access function, medium to low mobility function. Local business/shopping streets	These should be supported by street redesign to emphasise a slower speed environment. Cycle access should always be included in these areas. The 40 km/h HPAZ is retained, to save money on sign replacement. Ultimately, these should be changed to 30 km/h so we have a simpler 10-30-50 speed regime.
50 km/h	General urban speed limit	
Above 50 km/h	Distributor Roads, Through Roads, as posted	

13. an urgent review of the RTA's traffic signals procedures with the aim of greatly improved inclusion of bicycle riders in the interests of greater transport equity and road safety.
14. a review of the decision about advanced stop lines/bicycle storage boxes.
15. in order to improve the level of professional knowledge in facilities provision, the RTA undertakes a program to support and encourage members of Traffic committees (RTA local reps, council staff and Police) to complete an RTA training course as part of their regular in-service training requirement; places could also be offered to Road Safety Officers and Sustainable Transport/Access Officers of local Councils for skill development.
16. the Staysafe Committee enquire into the apparent shortage of trained cycling teachers. In this respect, comparative practice from other jurisdictions may be useful. We would suggest that the Staysafe Committee look at initiatives used overseas, for example the UK, where the Cycling England Bursaries scheme covers 3/5 of the cost to become an accredited teacher.
17. Staysafe to enquire into DECCW's assessment of this program; to request the Minister for Environment/DECCW to find out about ways of mainstreaming cycling proficiency education for adults (sub-groups gym instructors/personal trainers, teachers) and children in NSW through a process of engagement with education agencies (DET, TAFE), health and children's agencies and the RTA to confer with Bicycle NSW and other training providers, Cycling Australia and AustCycle Ltd.

18. the establishment of an Australian version of the Bikeability program to be promoted and run by NGOs such as AustCycle who would work closely with government agencies to ensure a wide reaching delivery of its programs.
19. that the NSWRR and ARR be reviewed and updated to permit the safe design and operation of separated cycleways and bicycle lanes within the road corridor and to explicitly require vehicles travelling along a through road to give way when attempting to turn across the path of cyclists using cycle facilities (either on- or off-road) along the same road; further, more the RTA develop guidelines and approved designs for cycle-only and shared path crossings with similar priority to Zebra type crossings.
20. as a general road safety initiative (but one that particularly assists intersection safety) the introduction of a computer based road rules test which all drivers would complete (either at a motor registry or on-line) to obtain their licence renewal. The German system has a graphical interface which presents questions as a series of simulated scenarios for road users many involving interaction with cyclists and pedestrians.
21. that the NSW Government moves quickly to restrict the use of bullbars on vehicles to roads outside of major urban centres.

Acknowledgements

Bicycle NSW expresses its thanks to the many Members and Supporters who have contributed to preparing this submission, and also to BIKESydney for organising their BrainsTrust Q&A session with experts on bicycle safety to encourage informed discussion on this topic in relation to Staysafe's Inquiry. For Bicycle NSW, the submission was prepared by Dr Chloë Mason, Warren Salomon (Sustainable Transport Consultants), and Tom Tansey.

References

Key RTA and other NSW Government publications:

NSW Department of Planning & RTA (2004) *Planning Guidelines on Walking and Cycling*
www.planning.nsw.gov.au/PlansforAction/Transportplanning/PlanningGuidelinesforWalkingandCycling/tabid/182/language/en-AU/Default.aspx

NSW Government (2003) *Guidelines for Transport Management and Accessibility Plans*

RTA (2005) *Bicycle Guidelines*
www.rta.nsw.gov.au/sitesearch/search

RTA [How to Prepare a Bike Plan - An easy 3 stage guide](#)

RTA [How to Prepare a Pedestrian Access and Mobility Plan - An easy 3 stage guide](#)

RTA-SEDA *Producing and Using Transport Access Guides*.

RTA training course "Designing for Bicycle Riders and Pedestrians" – offered as a one day course for managers, councillors, and as a two-day course for planners, engineers, designers and consultants.

RTA (2007) *Better Regulation of Motor-Assisted Pedal Cycles. A Discussion Paper*. Registration and Vehicle Management Section, Driver and Vehicle Services Branch, October. And the related case: *Matheson v DPP (NSW)* NSW SC 550 (5 June 2008).

The Australian Senate report by the Rural and Regional Affairs and Transport References Committee into the Investment of Commonwealth and State funds in public passenger transport infrastructure and services. August 2009

Australian Government. COAG (2009), Communiqué -National Objective and Criteria for Future Strategic Planning of Capital Cities. www.coag.gov.au/coag_meeting_outcomes/2009-12-07/index.cfm#attach_B

BITRE June 2010 *Road Deaths Australia*
http://www.bitre.gov.au/publications/66/Files/rda_june2010.pdf

Austrroads (2006) *Urban design and place-making* in 'Minimising Pedestrian-Cyclist Conflict on Paths' Information Note No 3 January.
www.austrroads.com.au/documents/03_Urban_Design.pdf

Ashley B. *Bike !! Sydney – A Back Street Guide for Cyclists*. It's an A to B guide of bike friendly routes in and across town.

Banister, David (2005), *Unsustainable Transport : City Transport In The New Century* London : Routledge.

Bicycle NSW recent previous submissions in response to:

- the Discussion Paper, Sydney towards 2036 for the Metropolitan Strategy Review and the Metropolitan Transport Plan in the context of the National Criteria for Planning Capital Cities issued by the Council of Australian Governments (COAG);
- the *NSW Transport Blueprint*;
- the *Inquiry into Sydney's Public Transport* (Christie Review) sponsored by the Sydney Morning Herald;
- the Henry Review on Taxation;
- Environmental Assessment of the Sydney CBD Metro; and
- the Senate *Inquiry into Commonwealth and State Government Investment in Public Transport Infrastructure and Services*.

<http://www.bicyclensw.org.au/category/news/submissions>

BIKESydney Submission to the Review Steering Committee on The Review of the National Transport Commission. March 2009

Haworth, Narelle L. (2006) *Integrating policy approaches for vulnerable road users*. In: 29th Australasian Transport Research Forum, 27-29 September 2006, Gold Coast, Australia. <http://eprints.qut.edu.au/13024/>

Henry Review (2010), *Australia's Future Tax System. Final Report*. www.taxreview.treasury.gov.au

Mason C (2000) 'Transport and Health: en route to a healthier Australia?', *Medical Journal of Australia*, 6 March. Introducing the concept 'active travel' from the UK and other parts of Europe following the tri-partite meeting of European Ministers for Transport, Environment, and Health and the publication by the WHO European Office Charter on Transport, Environment and Health.

Pearce & Geddes (1996 and subsequent editions) *Statutory interpretation in Australia*. Butterworths Roads Australia (2010), Congestion Chapter, Draft Policy Statement on Reliability, August.

Shoup Donald C (2005), *The high cost of free parking*, Chicago: Planners Press.

Slater & Gordon Lawyers & AEA (Victorian ambulance union)(2010). "Slater & Gordon and ambulance union urge motorists to be more vigilant of cyclists", Media Release, 13 May 2010 www.lhmu.org.au/news/slater-gordon-and-ambulance-union-urge-motorists-to-be-more-vigilant-of-cyclists [accessed 6 Augusts 2010]

SWOV (2006). *Advancing Sustainable Safety. National Road Safety Outlook for 2005-2020* (English version) SWOV Institute for Road Safety Research. The Netherlands

The City of Sydney, *Sustainability Sydney 2030*. www.sgsep.com.au/sustainable-sydney-2030

VicRoads (2010) "Widths of Off-Road Shared Use Paths", *Cycle Note* 21, June 2010.

Willson RW (2003) "Does Discussion Enhance Rationality? Communicative Rationality in Transportation Planning." *Journal of the American Planning Association*. 69: 354 - 367 (with Marianne Payne and Ellen Smith).

Staysafe 2009 Inquiry – Pedestrian Safety

<http://www.parliament.nsw.gov.au/Prod/parlment/committee.nsf/0/470A78AD08FC1474CA2575B5001B1F1D>

FINAL REPORT

[http://www.parliament.nsw.gov.au/Prod/parlment/committee.nsf/0/49e8b00facb1a8fdca2576800019edaf/\\$FILE/Final%20Report%20\(Colour\).pdf](http://www.parliament.nsw.gov.au/Prod/parlment/committee.nsf/0/49e8b00facb1a8fdca2576800019edaf/$FILE/Final%20Report%20(Colour).pdf)

Roads Minister's letter & its attachment

[http://www.parliament.nsw.gov.au/Prod/parlment/committee.nsf/0/49e8b00facb1a8fdca2576800019edaf/\\$FILE/Government%20Response%20-%20Minister%20for%20Roads.pdf](http://www.parliament.nsw.gov.au/Prod/parlment/committee.nsf/0/49e8b00facb1a8fdca2576800019edaf/$FILE/Government%20Response%20-%20Minister%20for%20Roads.pdf)

Cited submissions: IPWEA, The City of Sydney Council, North Sydney Council, Russ Webber

Appendices

Appendix 1: Bicycle NSW Commentary on the NSW Government's Response to Recommendations of the Staysafe Pedestrian Safety Inquiry.

APPENDIX 1

BICYCLE NSW COMMENTARY ON RTA'S POSITION ON RECOMMENDATIONS FROM THE STAYSAFE INQUIRY INTO PEDESTRIAN SAFETY (2 June 2010)¹

We note the RTA's submission to Staysafe's Pedestrian Inquiry 2009. In it the 'speed kills' message comes through very strongly, yet in practice, it seems difficult to achieve agreement to reduce the traffic speed below 50 km/h. The history of introducing the 50 km/h speed is salutary here. Many communities and councils initiated speed reduction in urban areas of high people activity for safety reasons, as part of valuing high pedestrian and cycling activity, ahead of agreement with the NSW Government. Without agreement, the RTA required councils to erect a lot of speed signs and pavement markings to mark these speed zones on a street by street basis – a hugely expensive exercise. In retrospect, and with a general urban speed limit of 50 km/h, we wonder what the fuss was all about. Yet here we are, seemingly stuck on 50 km/h with all attempts to bring in 30 km/h local street resisted – for the present. Déjà vu. So, we need a shift in approach!

Lower speeds are immensely beneficial to cyclists and walkers alike. If done correctly lower speeds can be applied across the NSW urban environment with the support of the great majority of the motoring public – if only more politicians and more senior public servants would provide some leadership on this issue!

Proposed NSW speed regime (applied in conjunction with the full categorisation of NSW streets and roads)

Speed limit	Street/road category	Comments
10 km/h	Shared zones (high access function, permissible mobility function)	This type of facility is very useful in certain areas eg QE Drive in front of Bondi Pavilion
30 km/h	Home streets. Residential streets with an access function only.	This type of street can be a through street provided that threshold treatments are installed at either end. Mid block closures with cycle access provided can greatly improve cycle safety of through cycle routes.
40 km/h	High Activity Zones. Drop the word pedestrian from this term to be more inclusive. High access function, medium to low mobility function. Local business/shopping streets	These should be supported by street redesign to emphasise a slower speed environment. Cycle access should always be included in these areas ; by keeping 40 km/h High

¹ Provided by the Hon David Borger, Minister for Roads & Minister for Western Sydney, to the Legislative Assembly.

<http://www.parliament.nsw.gov.au/Prod/parliament/committee.nsf/0/49E8B00FACB1A8FDCA2576800019EDAF>

		(Pedestrian) Activity Zone, money would be saved on sign replacement. These should be changed to 30 km/h so we have a simpler 10-30-50 speed regime.
50 km/h	General urban speed limit	
Above 50 km/h	Distributor Roads, Through Roads, as posted	

Notes on above table. School zones should also be 30 km/h if located on an access street or on specific distributor streets where required by the conditions. We note the use in Hobart of solar-powered school zone signs that flash during school times only.

Shared paths

A curiosity of Staysafe's Pedestrian Report is the absence of any recommendations on shared paths, despite a number of submissions referring to their use and managing conflicts between pedestrians and cyclists.

On shared paths, in Victoria (and soon in Queensland) technical advice is now available on the provision of adequate shared path widths according to user type volumes. For high capacity paths separation is also recommended and guidance is given to assist practitioners to determine the path widths for each user type. Refer to VicRoads "Widths of Off-Road Shared Use Paths", *Cycle Note 21*, June 2010.

NSW lags other States in this critical area. The RTA mostly builds shared paths to accompany its new and existing roads and should be developing separated facilities for high volume cycle and pedestrian use and providing appropriate technical guidance.

	STAYS SAFE RECOMMENDATION	COMMENT	ACTION	RELEVANT TO BICYCLE USE
1.	The Roads and Traffic Authority, in consultation with the Institute of Public Works Engineering Australia, the NSW Institute of Trauma and Injury Management, the NSW Police Force and NSW Health, develops agreed definitions of injury severity, based on internationally recognised standards of classification. In addition to obtaining uniform data, this will also assist in estimating the costs of such injuries, enabling the design of approved treatment options and appropriate countermeasures based on reliable data	<p>The RTA ceased making the distinction between serious and minor injuries because of poor reliability in the data the RTA reviewed. The proposed National Road Safety Strategy (NRSS) will establish national targets for reductions in both deaths and serious injuries to the end of 2020. The RTA has started scoping how to address the inability to distinguish between minor and serious injuries.</p> <p>The RTA supports the need to determine agreed definitions of injury severity however the real issue to be tackled is the quality and validity of data on the level of injury.</p>	<p>The Road Safety Data Management Committee (noted in recommendation below) will overview the process to distinguish between serious and minor injury data in NSW.</p> <p>The Committee will consult with Associations and Research Centres to investigate the definitions of injury severity and to determine a process to estimate serious vs. minor injuries. Definitions of injury and severity need to be determined and agreed in a national context</p>	<p>This recommendation and RTA actions are relevant to cycling. The RTA needs to devote greater resources to obtaining quality data on pedestrians and cyclists.</p> <p>We also support the merit of recognising severe 'life-changing' injuries, as represented to the Pedestrian Inquiry, because such injuries should be given the same importance as fatalities for the purposes of informing measures to reduce the risk of further incidents resulting in injury or death, and improve the amenity of the road space for users.</p>
2.	The Committee reiterates recommendations made in its Young Driver Safety & Education Programs report and again recommends the establishment of an interagency crash data working group, comprising the Centre for Road Safety, NSW Health, NSW Police Force and other government agencies currently collecting statistical information on road	The RTA supports the recommendation to establish an interagency crash data working group comprising government agencies collecting and collating statistical information on road safety issues.	The RTA will issue invitations to relevant NSW government agencies (including Health, Police, Ambulance, and Motor Accidents Authority) and the University of NSW's Injury Risk Management Research Centre (IRMRC) in mid-2010 to the inaugural meeting. The focus will be to establish the terms of reference for the working group and to highlight the key issues to be	Relevant to cycling – for young and old!

	safety issues. The Working group should examine road safety data management in other jurisdictions in order to develop a comprehensive plan for the collection and dissemination of consistent road statistics in NSW.		addressed, including injury severity.	
3.	As part of the interagency crash data working group review of current data collection and management, the Centre for Road Safety updates its local government boundaries in order to accommodate recent changes	The RTA supports the need to incorporate changes to the local government boundaries in the crash data system.	RTA has a manual matching technique to reconcile this in the short-term (which is in use). An automated solution is also under development that will ensure crash data are coded to the correct LGA. Crashlink Phase 2 (Data Collection System) is in the development stage and the LGA boundaries will be fully corrected within the new system.	Relevant to cycling.
4.	That the Centre for Road Safety gives priority to examining improved user functionality for professional groups accessing data, such as Road Safety Officers, and ensures that collected data is made widely available, free of charge and in a variety of formats to meet the needs of diverse stakeholders and interest groups.	Supported	The RTA provides a wide range of data in a range of formats and free of charge. See footnote (a). The RTA also supplies user-defined custom crash data upon request.	Relevant to cycling.
				The following four Recommendations (5-8) & Actions relate to education for pedestrians but what about educating drivers? In NSW what consideration is being given planning for older drivers

				<p>compared to other jurisdictions (e.g. US DoT 2001)? Or, programs to facilitate older drivers relinquish their licence by promoting packages of mobility options suited to the services available in the particular local community?</p> <p>The system of lifetime-licencing means that drivers cannot easily be kept up to date with a changing road rules system nor can they be checked for driving skills and ability. A system of retesting for knowledge of current road rules using an interactive computer simulation system as used in Germany should be investigated for use in NSW. The German system is comprehensive and includes testing on new road rules and interaction with cyclists and pedestrians.</p>
5.	<p>The Roads and Traffic Authority and the Department of Education & Training develop a training program for early childhood centres and primary schools focusing on crossing roads safely. This training program should monitor and provide direct feedback on individual responses to traffic in order to strengthen decision making and awareness of risk and include</p>	Supported	<p>Road safety education to children attending children's services and primary school, appropriate to their needs and development, is already extensively delivered across NSW. RTA will continue to work with Children's Services, Schools and parents to enhance the existing road safety education program.</p> <p>See footnote (b) for further</p>	<p>Bicycle education for children in NSW is not widely available through schools. The scheme is not well resourced and there are difficulties due to the availability of trained teachers and the willingness of schools to take on additional programs. Also adults and young people who did not have the opportunity at school, need to have access to cycling proficiency</p>

	gap selection skills, choosing safe crossing locations and hazard awareness.		information.	training. The RTA (in conjunction with other partners) should investigate a state-wide implementation of bicycle education along the lines of the UK Bikeability program. Partnering with BNSW and the AustCycle organisation may achieve better results.
6.	The training program should incorporate a module for parents to be made aware of the risks of unsupervised crossing behaviour and the importance of holding young children's hands when crossing the road.	Supported	An extensive parent education and road safety awareness program is already in place to address this issue. The RTA school curriculum resources include this critical road safety component.	No comment.
7.	The training program should include a training manual and that the program be promoted to road safety organizations throughout NSW.	Training programs of this nature are limited in their effectiveness due to the limited cognitive development of young children.	The RTA will continue to work with the Early Childhood Road Safety Education Program and the 3 educational sectors to ensure best practice road safety education awareness programs are provided to the NSW community.	Relevant to cycling and to activities of Bicycle NSW, and other providers.
8.	Increased emphasis to be placed on pedestrian safety , as part of the Personal Development, Health & Physical Education syllabus in NSW schools, particularly for students commencing their secondary education who are more likely to be travelling independently to school . Additional resources should be provided to support them in	Supported The RTA school curriculum resources include this critical road safety component with resources specifically targeting risk taking behaviour in the 11-18 age groups. See footnote (b) for more detail on RTA school resources.	The RTA released a new resource for senior school students in 2009. <i>Limiting risks, protecting lives – Choices for novice drivers and their passengers</i> is a young driver / passenger resource that targets students in years 10 and 11 to support school-based student welfare/pastoral care and Personal Development and Health school-	All good and applicable to safe cycling safety, and as part of promoting walking and cycling for transport (as part of Travel Demand Management), for health and social inclusion. But does the program include awareness of cyclists and pedestrians ie motorist/cyclist-

	identifying and managing the risks associated with pedestrian travel to school.	The RTA currently funds Youthsafe to develop parent information. This project has developed a <i>On the way to high school: Helping teenagers to travel safely</i> . This resource is promote to primary (year 6) and high schools.	based programs. This resource has been developed to support teaching and learning about driver/passenger safety. It provides activities to challenge student attitudes about driving and it aims to promote deeper thinking and better decision making about road safety for students as drivers and passengers. The resource explores low-risk driving skills and speeding. An awareness of these issues will assist young drivers in safely sharing the road with pedestrians.	pedestrian interaction?
9.	The Roads and Traffic Authority provides greater levels of funding and support for the Road Safety Officer Program in order to increase local government involvement in locally based road safety initiatives , such as the provision of additional transport options for younger pedestrians at increased risk of casualty after late night socialising.	The RTA is reviewing its Local Government Program.	<p>The RTA review will focus on the provision of road safety initiatives by Local Government.</p> <p>The provision of alternative transport is not directly the responsibility of the RTA. However, the RTA will raise this issue across the NSW Government.</p> <p>The RTA will continue to gather support and funding commitments from stakeholders in order to establish community-owned alternative transport scheme to address drink driving in areas with limited transport options at key drinking times.</p>	<p>Relevant to cycling. This seems to be the only recommendation that refers to Road Safety Officers. We suggest Staysafe obtain more information about the purpose, scope and timing of the review.</p> <p>RSOs greatly influence the funding of facilities built specifically for pedestrians and cyclists. Their views/mindset are critical to safer walking and cycling and with a modern orientation can be combined with the promotion of walking, cycling and public transport (in a very few councils undertaken by Sustainable Transport Officers situated in</p>

				Environmental Services/sustainability sections rather than the Traffic section of council). Some jurisdictions (e.g. England and English Local Authorities) have combined the roles, creating Mobility Management Coordinators who promote safe walking, safe cycling and public transport use and corporate programs.
10.	The Centre for Road Safety commissions increased numbers of safety programs and public awareness campaigns for older pedestrians. The programs and campaigns should focus on increasing understanding of safety risks, improving and refreshing knowledge of road rules and informing older pedestrians about the use of pedestrian facilities and mobility aids.	The RTA does not support the development of campaigns for older pedestrians as evidence suggests that such campaigns have very little impact. Physical engineering measures and appropriate speed limits and enforcement of speeding provide the most effective protection for older pedestrians.	Nil	<p>Recommendations 10 and 11 cover the issue of elderly pedestrians. Relevant to cycling, and to elderly cyclists.</p> <p>This issue does impact on the operation of shared paths, particularly growing use of powered mobility scooters and managing conflicts between pedestrians and people riding bicycles.</p> <p>While we can agree with the RTA that campaigns have little impact the issue does require action. Therefore, Staysafe could request a status report on the program for physical engineering measures, recognised by the RTA as more effective for protection. Some submissions sought greater use of kerb extensions, and traffic islands.</p>

11.	The Roads and Traffic Authority consults the NSW Council on the Ageing and the Independent Living Centre in the design of engineering solutions to provide safer pedestrian access to the road network .	Supported	The RTA will consult with the NSW Council on the Ageing and the Independent Living Centre in the design of engineering solutions to provide safer pedestrian access to the road network.	Relevant to cycling. Designing solutions needs to take account of movements of both pedestrians and cyclists.
12.	Continuing funding be provided to consolidate and expand the You're Welcome project of the Independent Living Centre to support its work with local councils in NSW.	Noted	Action needs to be referred to the NSW Department of Human Services, Ageing, Disability and Homecare.	The Department of Human Services could convene a group to consider this recommendation for mainstreaming this initiative, ensuring consistency with local council plans (e.g. Pedestrian Access & Mobility Plans (PAMPs, and Bike Plans, LATMs/PCTC), reporting on status of implementation and fulfilling the objectives of DDA and "affirmative action" for young people and positive aging.
13.	Encouraging greater pedestrian use of designated crossings in busy metropolitan areas and therefore recommends that scrambled crossings be utilized at all appropriate intersections to minimise the chance of conflict between pedestrians and vehicles.	Supported in appropriate locations. Scramble crossings only serve intersections with a very strong diagonal pedestrian desire line. These types of crossings add significant time for waiting pedestrians and the additional waiting time can actually lead to road safety issues.	The RTA is investigating the potential for scramble crossings at appropriate locations.	The issue of cyclist access at signalised crossings is currently a major impediment to increased cycle use in the Sydney LGA. Concerns exist with the RTA Signal design section owing to restricted provision for cyclists (plus the lack of 'advanced stop lines') relative to motor vehicles. For example, view the King Street separated cycleway in Sydney CBD, where large numbers of cyclists daily 'vote with their pedals' to ignore red cycle signals at three intersections. They

				<p>do this because the signals ration their movements to mere seconds while the adjacent motor vehicle travel lanes travel unimpeded for minutes.</p> <p>Cyclists operate at signals more like cars than pedestrians yet the RTA treats cyclists routinely as pedestrians with extremely short phase times and other restrictions. Cyclists should be permitted to ride across signalised crosswalks without the need for the expense of additional cycle lamps.</p> <p>Kerb extensions at intersections can reduce the width of roadway to be crossed, benefitting pedestrians and cyclists, were also raised in submissions.</p>
14.	The Roads and Traffic Authority extends the system of shared zones in appropriate metropolitan locations, to reduce conflict between motor vehicles and pedestrians in local areas of high pedestrian activity.	Supported – for investigation	The RTA will investigate suitable locations for additional shared traffic zones.	<p>Relevant to cycling.</p> <p>The combined benefits to pedestrians and cyclists would result in more locations being designated shared zones, leading to greater familiarity for motorists in NSW.</p>
15.	In order to better reflect the emphasis on pedestrian safety in such areas, shared zones be renamed pedestrian zones	<p>Not supported</p> <p>The proposition has been placed before the Australian Road Rules Management Group and declined</p>	The RTA will investigate a more suitable name than shared zone, while maintaining concerns with the proposed alternative name.	<p>The term ‘Shared zone’ is widely accepted in road law and practice. It means what it says – shared space.</p> <p>In NSW all shared zones must</p>

		<p>on two occasions. The main reason for this is that Shared Zones do not give blanket priority for pedestrians to wander about on the road at will, as the proposed name Pedestrian Zone could imply. Pedestrians in Shared Zones are still required to comply with all rules including those about crossing roads, not walking along roads or obstructing vehicles, using pedestrian crossings, etc. The only difference with Shared Zones is that drivers must give way to pedestrians who are on the road. In reality, most Shared Zones are installed in areas which have clearly defined roads and footpaths, and calling these Pedestrian Zones could give pedestrians a false sense of what they can do. Some proponents of Shared Zones have the mistaken impression that they are pedestrian priority areas, whereas the Road Rules do not have a concept of priority, but stipulate when road users must give way to other road users.</p>		<p>display a speed limit of 10km/h – no other speed is allowed. (RTA Technical Direction TDT 2006/6)</p> <p>It is not a pedestrian zone even though, like shared paths, the pedestrian has right of way. The term ‘pedestrian zone’ should be used to describe those areas only accessible to pedestrians.</p> <p>A more equitable way of describing the 10 km/h shared zone facility would be: <i>shared zones are areas which reduce vehicle travel speeds so that a more equitable sharing and mixing of the various modes can take place.</i></p> <p>Shared zones are equally important to cyclists in providing safer road environments and more direct, connected routes.</p>
16.	The Committee recommends that the Roads and Traffic Authority examines the feasibility of extending the pedestrian phase of signals at intersections with high pedestrian traffic and at peak	<p>Supported</p> <p>The RTA is constantly trailing ways to improve pedestrian priority at traffic signals. For example, the traffic signals installed to support</p>	<p>See footnote (c).</p> <p>The RTA will investigate opportunities to improve safety for pedestrians.</p>	<p>The system of traffic signals is the main means by which the RTA maximises the flow of motorised vehicles around NSW cities and towns. This system operated ostensibly to protect non-motorised</p>

	pedestrian commuter times.	<p>the new interchange at Chatswood include:</p> <ul style="list-style-type: none"> • Railway St – signals assigned to pedestrian green for approximately 50% of time; and • Interchange – constant green for pedestrians with actual bus movements triggering green for vehicles. 		<p>system users (pedestrians and cyclists) but it mostly disadvantages them by providing a poor level of service and limited access to the road system.</p> <p>Signals provide maximum control of intersections but this control has severe limitations on intersection throughput and capacity. Motor vehicles are given maximum priority and cyclists and pedestrians are barely tolerated.</p> <p>There are many ways of improving access for pedestrians and cyclists at signals as demonstrated in other countries and Australian jurisdictions. The RTA needs to greatly improve its performance and provide a vastly improved level of service to people riding bicycles or walking or using mobility scooters. It needs to catch-up with the community!</p>
17.	The Committee recommends that the Roads and Traffic Authority reports on the trial of pedestrian user-friendly intelligent (PUFIN) crossing technology conducted in Sydney and, if successfully evaluated, implements the introduction of this technology at all appropriate locations in NSW.	<p>Supported</p> <p>PUFIN crossings have a detector than can extend the pedestrian phase for late crossing or slower pedestrians. They may also have a presence detection that can cancel calls for a pedestrian phase if a pedestrian is no longer waiting to cross.</p>	Two PUFIN type crossings were installed in NSW in 2002, one with both detectors (Bondi) and one with just the pedestrian phase detection (North Rocks). The trial of the technology at these sites has not been positive. This technology has proven to be quite unreliable and has offered limited road safety or travel time (queuing) benefits.	No comment.

		<p>PUFIN crossings are extensively used in the UK as well as New Zealand and Victoria. Evaluation conducted indicates that there may be benefits to pedestrians when PUFIN crossings are installed. PUFIN crossings in the UK typically have both sets of detectors while other jurisdictions may only have the pedestrian phase extension detection (eg VicRoads)</p>	<p>Detection is unreliable – especially in bright sunlight or high winds. Only the facility in Bondi remains operational.</p> <p>However technology has advanced since the commencement of the Bondi and North Rocks trial and there is an opportunity to reconsider this initiative using current available technology. The RTA is proposing to conduct a new trial using the pedestrian phase extension detector at 2 intersections.</p>	
18.	<p>The Committee recommends that the Roads and Traffic Authority, as a matter of urgency, conducts the proposed trial of pedestrian countdown timers to ascertain their suitability and effectiveness in discouraging pedestrians from disobeying walk signals and to improve safety at major intersections.</p>	<p>RTA has determined that the only timer type that is suitable for use in the SCATS system is the countdown to the end of the flashing DON'T WALK phase (ie Clearance).</p>	<p>The RTA has engaged ARRB Group (in late January 2010) to validate the available technical option and to undertake a detailed literature review and international scan (via telephone) on the timer option available for use in the SCATS system. A Steering Committee comprising RTA and City of Sydney has been convened and is managing this analysis. The ARRB study will inform the decision on whether to proceed to trial the timers counting down the flashing DON'T WALK phase. The study is nearing completion and RTA will provide further advice on the potential trial following completion of the study.</p>	<p>The use of cycle countdown timers has greatly improved signal compliance in the Netherlands and is considered a great success. The important aspect of this type of facility is that it provides an explicit indication to the user that they have been recognised by the traffic signal system. In NSW cyclists do not expect traffic signals at intersections to detecting their presence; this is an influencing factor in the patterns of cyclist non compliance with signals (others being the lack of provision of road space , such as lanes and 'advanced stop lines', to improve visibility and safety. Respect in the system only</p>

				comes when the system respects all users all the time not selectively.
19.	The Committee recommends that the Centre for Road Safety continues its research into the pedestrian safety benefits of new vehicle technologies and actively promotes the most cost-effective solutions to vehicle manufacturers and consumers.	Supported	<p>Ongoing – the RTA financially supports ANCAP and the promotion of vehicle safety features. RTA is currently working on an innovative initiative to improve customer awareness of all vehicle safety features (ie crash avoidance, occupant crash protection and post-crash assistance).</p> <p>The RTA is part of the new development and application of newly emerging ITS technology and is starting to investigate dedicated short-range communication opportunities.</p>	
20.	The Committee recommends that the Roads and Traffic Authority addresses the current shortcomings in the monitoring and enforcement of the Australian Design Regulations in relation to vehicle design protection for pedestrians through appropriate Ministerial and intergovernmental processes.	Supported – noting that this is largely Federal responsibility and RTA can only provide advice and seek to influence policy decisions.	<p>Ongoing</p> <p>In 2003/04 NSW adopted Australian Standard AS 4876.1 <i>Motor vehicle frontal protection systems Part 1: Road user protection (except for Clause 3.2)</i>, which applies to bull bars fitted to vehicles built on, or after, 1 January 2003. NSW is the only jurisdiction that calls up the Australian Standard for frontal protection systems in regulations. RTA Vehicle Inspectors Bulletin Number 5 provides vehicle inspectors details as to how the</p>	<p>Relevant to cycling.</p> <p>The RTA’s comment and action responding to Staysafe’s recommendation does not emphasise the need to restrict the widespread use of bullbars. All the good work in frangible car front designs is negated by the installation of bull bars on vehicles. Bullbars should not be permitted on vehicles within urban areas – a recommendation made to the Inquiry in submissions.</p> <p>The RTA comment left is unclear.</p>

			<p>standard is to be applied.</p> <p>The impending introduction by the Commonwealth of an Australian Design Rule relating to pedestrian safety will provide the framework within which jurisdictions can adopt the entire AS 4876, including clause 3.2 (which relates to head impact protection levels for pedestrians).</p> <p>RTA will continue to seek police enforcement of illegal protrusions on vehicles (such as fishing rod holders on the bulbar of a 4 wheel drive).</p>	<p>We request Staysafe seek clarification for the current Inquiry.</p>
21.	<p>In order to reduce the incident of pedestrian casualties and improve safety for all road users, the Committee recommends that the NSW Government introduces legislation to enable the installation and deployment of random, covert speed cameras throughout NSW.</p>	<p>Supported</p> <p>The introduction of new ways to use camera technology in NSW was a key recommendation of the Road Safety Roundtable held in July 2009.</p> <p>The introduction of 200 safety cameras (red light and speed enforcement) at intersections over the next four years will have a positive impact on pedestrian casualties.</p>	<p>The Minister for Transport and Roads announced the reintroduction of mobile speed cameras on 29 March 2009.</p>	<p>Relevant to cycling. Supported in the context of improved cyclist safety.</p>
22.	<p>The Committee recommends that the Roads and Traffic Authority ensures there is greater consultation with local councils in</p>	<p>RTA consults with Local Councils in regard to speed limit changes noting that speed limit setting is a technical process.</p>	<p>Ongoing</p>	<p>See our preface to this table. The RTA's comment here appears to confuse the policy goals for roads and their uses (and the growing</p>

	<p>relation to the determination of speed zones in their local government areas.</p>	<p>Councils are also able to recommend speed limit changes to the RTA.</p>		<p>commitment to the role of walking and cycling) with the technical process of setting the speeds. This confusion readily arises in public policy undergoing change (use of the road system, for example), resulting in political controversies with technical institutions; these disputes are worthy of more open, deliberative discussion.</p> <p>The transition toward conditions befitting more walkable and cyclable communities appears to be unduly slow.</p> <p>We also suggest an independent body be commissioned to examine how to secure a policy shift for NSW in the approach to governance for meeting and conferring on road user needs to combine access to the road system (so as to be people-friendly) and safe.</p>
23.	<p>The Committee recommends that the Roads and Traffic Authority commissions a major education and media campaign to alert the community to the potential road safety dangers of using mobile communication and entertainment devices when navigating the road</p>	<p>Supported – The RTA is planning to implement a campaign on the dangers of distraction devices. The extent of the campaign must be balanced against the size of the road safety contribution relative to speeding and drink driving.</p>	<p>The campaign is being scoped for use in line with the introduction of the change in the 8th Amendment Package of the Australian Road Rules which clarifies the road rules governing mobile phone and device usage.</p>	<p>Currently these risky practices by road users appear to be rising; rather than wait for them to increase we suggest a carefully target campaign for primary prevention of the practice. Reducing the risk would be more effectively achieved by media in</p>

	system.			<p>conjunction with enforcement, as we learned from achieving reductions in drink-driving (and smoking, and discrimination). The authorities need to send a very clear message to the community that this is risky and prohibited for that reason.</p>
24.	<p>The Committee recommends that the Roads and Traffic Authority conducts a public education campaign to specifically target the lack of awareness of the requirements of Australian Road Rules 72 to 75, requiring drivers to give way to pedestrians at certain road locations.</p>	<p>RTA will review the current communication provided to the general public on these issues.</p>	<p>The RTA will investigate marketing opportunities to communicate pedestrian safety measures to the general public.</p>	<p>The RTA admits in other parts of this document that education measures alone do not work, see Recommendation 10 above.</p> <p>The Australian Road Rules on giving way to pedestrians and cyclists is very complicated and not well understood in the community.</p> <p>The ARR needs to be simplified.</p> <p>As for cycling, the ARR has been written as if cycleways are not located off-road. This means that on-road facilities offer a much higher level of service than off-road even though the community expresses a high preference for off-road or physically separated facilities.</p>