



AUSTRALIAN
BICYCLE COUNCIL



NATIONAL CYCLING
STRATEGY 2011-16

2015

Implementation Report

The Australian Bicycle Council coordinates the implementation of the Australian National Cycling Strategy 2011 - 2016. The Council is supported by Austroads and the Commonwealth Department of Infrastructure and Regional Development.

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Austroads

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Photo courtesy of Pedal Brisbane

Governance

Transport and Infrastructure Council

Commonwealth, state, territory and New Zealand Ministers with responsibility for transport and infrastructure issues, as well as the Australian Local Government Association.

Transport and Infrastructure Senior Officials Committee (TISOC)

Heads of transport departments and road authorities from the Commonwealth Government, each state/territory as well as New Zealand. A representative from local government and the NTC are also members of this group.

Austrroads

Association of Australian and New Zealand road transport and traffic authorities.

Australian Bicycle Council

Australian Bicycle Council

The Australian Bicycle Council (ABC) was established in 1999 to oversee the implementation of the first Australian National Cycling Strategy. The ABC consists of representatives from Commonwealth, state, territory and local government agencies as well as non-government cycling organisations and the bicycle industry.

The role of the ABC is to:

- Oversee and coordinate the implementation of the Australian National Cycling Strategy.
- Provide a forum for the sharing of information between stakeholders involved in the implementation of the Strategy.
- Maintain a repository of information and resources relevant to providing for and promoting increased cycling in Australia.

The secretariat of the Australian Bicycle Council is provided by Austrroads with funding from the Commonwealth Government.

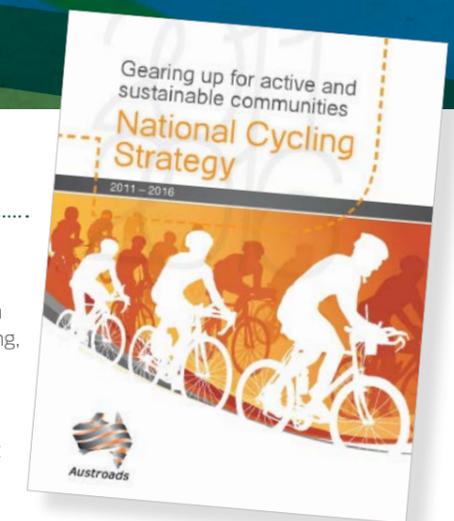
National Cycling Strategy 2011-16

The National Cycling Strategy 2011-16 was approved by Ministers in November 2010. The Strategy aims to double the number of people cycling in Australia by 2016.

This is Australia's third National Cycling Strategy (NCS). Since the first strategy, which was introduced in 1999, the Australian Bicycle Council has played a role in coordinating, implementing and reporting on the strategy.

The Strategy has six key priorities and objectives.

- Cycling promotion:** promote cycling as both a viable and safe mode of transport and an enjoyable recreational activity.
- Infrastructure and facilities:** create a comprehensive and continuous network of safe and attractive bicycle routes and end-of-trip facilities.
- Integrated planning:** consider and address cycling needs in all relevant transport and land use planning activities.
- Safety:** enable people to cycle safely.
- Monitoring and evaluation:** improve monitoring and evaluation of cycling programs and develop a national decision-making process for investment in cycling.
- Guidance and best practice:** support the development of nationally-consistent guidance for stakeholders to use and share best practice across jurisdictions.





Highlights

\$125.4m

invested by
states and
territories in
2014-15.

Photo courtesy of
Department of Planning, Transport and Infrastructure, SA

This report provides an overview of progress made in 2015 towards the objectives of the National Cycling Strategy 2011-16 (NCS). State and Territory Governments are increasingly leveraging the benefits of walking and cycling to create more liveable cities. This approach improves the health of residents and boosts economic activity through reduced congestion and increased business productivity.

The National Cycling Strategy Implementation Report provides an annual update on work that has progressed on cycling-related policy and programs in Australia. This report is the fifth Implementation Report for the current strategy. The National Cycling Strategy finishes at the end of 2016 and there are no plans to develop a future strategy for cycling in Australia.

In 2015, State and Territory Governments spent \$1.8 million on cycling promotion and a further \$123.6 million on improving on-road and off-road cycling networks to key destinations in both urban and rural areas.

State and Territory cycling promotion included programs that encourage cycling for short trips, recreational cycling and cycling to work. Programs that encouraged short trips include Good Move (NSW), Ride2School (Vic, Tas), TravelSMART (SA), way2go (SA), Your Move (WA), Safe Active Streets (WA), Short Trips are Bikeable (NT) and Active Streets (ACT).

Programs that encouraged recreational cycling included event sponsorship, trail development and the promotion of mountain biking. Programs that encouraged cycling to work included the Sydney Rides Business Challenge, bicycle parking requirements and the provision of bicycle fleets.

The importance of cycling to the community can be seen in the strong response received during community consultation on cycling issues. For example, the recent Review of Victorian Cycling Related Road Rules & Legislation received over 10,500 submissions.

Planning for cycling continues to be integrated into wider government policy, with both walking and cycling forming key components in land use plans such as the Darwin Inner Suburbs Area Plans and Darwin Regional Land Use Plan. In 2015, Victoria and the ACT formed offices with resources dedicated to delivering improvements to the walking and cycling environment.

Over the life of the current National Cycling Strategy, there has been a focus on the laws that govern cycling and their role in improving safety and/or encouraging cycling.

A number of jurisdictions have relaxed regulations that govern where cycling is permitted. Cycling is now permitted on footpaths in Queensland, South Australia, the Northern Territory and the ACT. The ACT has also improved the consistency of rules governing footpath cycling by allowing riders to use pedestrian crossings at no more than 10 km/h.

A number of jurisdictions have considered relaxing Australia's mandatory helmet laws. The Northern Territory has already relaxed their mandatory helmet laws. Queensland's recent parliamentary inquiry recommended a relaxation of the mandatory helmet law. The ACT has announced that they will investigate risks and any potential benefits of allowing people to ride bicycles without a helmet in low speed environments.

A number of jurisdictions have introduced minimum passing distance legislation that requires drivers to provide a lateral distance of at least 1m (up to 60 km/h) and 1.5m (over 60 km/h) between their vehicle and a cyclist. Drivers in New South Wales, Queensland, South Australia and the ACT are now required to comply with minimum passing distance laws. Although Tasmania has not changed its legislation, it uses advisory signs and advertising to deliver the same message.

A number of jurisdictions have increased the fines that apply to bicycle riders in line with the fines that apply to drivers for similar offences. Recent changes in NSW have seen increases in bicycle-related fines of up to 500%.

The third National Cycling Participation Survey was carried out in 2015, with the results indicating that cycling participation has not increased or decreased significantly over the life of the current National Cycling Strategy. These results do not meet the target set in the National Cycling Strategy to double cycling participation over the life of the Strategy.

Guidance and best practice has been improved through the work of Austroads and each jurisdiction. An Austroads project on bicycle wayfinding guidance harmonised an area that has threatened to become fractured across jurisdictions. Recent work on protected bicycle facility guidance from jurisdictions highlights the need for nationally-consistent guidance in this area.

The release of a new Australian Standard on Bicycle Parking Facilities spurred a set of work to ensure that related guidance is up to date and relevant to the new Standard.

The Australian bicycle planning practitioner community continues to build capability with several major conferences being held across Australia in 2015. These include the Asia Pacific Cycle Congress in Brisbane, Australian Cycling Summit in Canberra, Cycling Imagineering Workshop in Perth and Bike Futures conferences in Sydney, Melbourne and Launceston.

Priority Area 1 - Cycling Promotion

Action	Strategy Aims	Actions Taken in 2015	Pages
1	Marketing and education programs that promote the benefits of cycling and encourage people to cycle for short personal trips will continue to be developed and implemented. These programs should target: <ul style="list-style-type: none"> i) underrepresented groups, such as school children, seniors and female commuters; and ii) both cyclists and other road users, including motorists. 	Programs that encouraged short trips include Good Move (NSW), Ride2School (Vic, Tas), TravelSMART (SA), way2go (SA), Your Move (WA), Safe Active Streets (WA), Short Trips are Bikeable (NT) and Active Streets (ACT).	p14-15
2	Marketing and education programs that encourage people to take up cycling as a recreational activity will continue to be developed and implemented. These programs should target both local residents and visitors to the area.	Programs that encouraged recreational cycling include event sponsorship, trail development and the promotion of mountain biking.	p14-15
3	Key stakeholders will continue to work with employers to develop cyclist-friendly workplace facilities and projects.	Programs that encouraged cycling to work include the Sydney Rides Business Challenge, bicycle parking requirements and the provision of bicycle fleets.	p14-15

Priority Area 2 - Infrastructure and Facilities

Action	Strategy Aims	Actions Taken in 2015	Pages
1	All jurisdictions will continue to invest in developing local on-road and off-road cycling networks to key destinations in both urban and rural areas that are consistent with national standards, and should commit to the identification of required funds in the relevant budget processes.	State and Territory Governments spent \$123.6 million to improve on-road and off-road cycling networks to key destinations in both urban and rural areas.	p18-25
2	States, territories and local government will continue to develop end-of-trip facilities that make it possible for people to cycle, including considering the introduction of regulations, such as planning policies and building standards, to mandate the provision of facilities.	NSW, Victoria, Queensland, South Australia, Western Australia and the ACT continue to deploy end of trip facilities at transport interchanges. An example is the Bluewater Quay Bike Storage facility in Queensland.	p17
3	Austrroads will ensure that its guides recognise and promote best practice in the design and provision of cycling infrastructure and facilities.	The Australian Bicycle Council works with Austrroads on an ongoing basis to ensure that the guides recognise and promote best practice in the design and provision of cycling infrastructure and facilities.	

Priority Area 3 - Integrated Planning

Action	Strategy Aims	Actions Taken in 2015	Pages
1	All states and territories will develop and publish state or territory cycling action plans. Action plans will include: <ul style="list-style-type: none"> i) a target or set of targets consistent with a national target (see Priority 5 Action point 1) for increasing the number of people cycling in their area; ii) a clear road map to achieve this, including specific actions; and iii) a commitment to integrate cycling actions across its portfolios. 	In 2015, the ACT published <i>Building an Integrated Transport Network: Active Travel</i> . All state and territories have now developed and published cycling action plans.	p31
2	Local governments will take into account the state and territory plans together with community aspirations, priorities and available resources when developing local area cycling action plans. Where necessary states and territories will provide local government support to develop their action plans.	In 2015, Darwin published the <i>Darwin Bike Plan 2015-2020</i> . All capital cities have now developed and published cycling action plans.	p30
3	All states, territories and local governments will ensure that all their land use planning and infrastructure strategy documents take into account active transport needs.	In 2015, the NT Government released the Darwin Regional Land Use Plan 2015.	p27

Priority Area 4 - Safety

Action	Strategy Aims	Actions Taken in 2015	Pages
1	All states and territories will monitor and report on crashes involving cyclists, identifying type, number and severity of crashes for rural, regional and metropolitan areas.	See Australian Cycling Fatalities 2015. See BITRE report on Australian Cycling Safety.	p36-37 p38
2	All states and territories will identify appropriate counter measures for bicycle crashes for rural, regional and metropolitan areas.	See Key Theme: Cycling on Footpaths and Pedestrian Crossings. See Key Theme: Introducing Minimum Passing Distance Legislation. See Key Theme: Reviewing Cycling-Related Laws and Penalties.	p39 p40-41 p42-43
3	The ABC will seek to partner with research institutions to continue and expand on current work to analyse the data received from states and territories to assess the causes of crashes and injuries and make recommendations about how to increase the safety of cyclists.	The National Road Safety Action Plan 2015-2017 supports the implementation of the National Road Safety Strategy 2011-2020. The action plan includes 19 individual actions across four themes.	p33-35
4	All jurisdictions will continue to develop and implement programs that target: <ul style="list-style-type: none"> i) road safety and ii) people's perception of the safety of cycling. 	See Key Theme: Cycling on Footpaths and Pedestrian Crossings. See Key Theme: Introducing Minimum Passing Distance Legislation. See Key Theme: Reviewing Cycling-Related Laws and Penalties.	p39 p40-41 p42-43
5	States and territories will facilitate the roll out of a nationally consistent community bicycle skills training program, including trials where appropriate.	Community skills training continues to be delivered by teachers trained through the AustCycle training program.	
6	States and territories should aim to support the delivery of cycling proficiency and related road safety training for all school students aged between 10 and 14.	An example of cycling proficiency training delivered in 2015 is the South Australian way2go bike ed program.	p14

Priority Area 5 - Monitoring and Evaluation

Action	Strategy Aims	Actions Taken in 2015	Pages
1	States and territories will agree a baseline and target for measuring progress against the goal to double cycling participation across Australia. This target should be structured as a composite indicator, reflecting cycling for the purpose of travelling to work/study, recreational cycling and bicycle ownership.	The Australian Bicycle Council published the 2015 National Cycling Participation Survey in order to monitor the National Cycling Strategy goal of doubling cycling participation over the life of the Strategy.	p46-49
2	All states and territories will develop and implement a nationwide approach to data collection and will submit annual monitoring reports to the ABC Secretariat.	The Australian Bicycle Council publishes the annual Implementation Report (this report) based on data supplied by state and territory governments.	All
3	The ABC will develop an agreed decision-making process, including a robust basis for assessing the costs and benefits of investment in cycling.	The Australian Bicycle Council provides input to the in-progress development of the National Guidelines for Transport System Management which will provide a robust basis for assessing the costs and benefits of investing in active transport.	

Priority Area 6 - Guidance and Best Practice

Action	Strategy Aims	Actions Taken in 2015	Pages
1	The ABC will support the publication of nationally consistent guidance on the following issues:		
	i) developing standardised cycle route classification and web-based cycle route mapping ;	See Key Theme: Bicycle Wayfinding Guidance.	p54-55
	ii) how best to integrate cycling and public transport;	Several States and Territories are building bicycle storage facilities at transport hubs and promoting multi-modal trips.	p13-15
	iii) reviewing the Australian Road Rules in relation to cyclists and promoting amendments to make cycling safer, for example regarding roundabouts and on-road cycle lanes;	See Key Theme: Cycling on Footpaths and Pedestrian Crossings. See Key Theme: Introducing Minimum Passing Distance Legislation. See Key Theme: Reviewing Cycling-Related Laws and Penalties.	p39 p40-41 p42-43
	iv) information in bike shops on local cycling matters, such as cycle routes, social groups and events; and	Ongoing.	
	v) low cost innovations (for example, lowering the speed limit increases safety and costs virtually nothing) that will enable or encourage increased cycling.	Completed in 2014 (see Austroads research report: Low Cost Interventions to Encourage Cycling).	
2	To support local governments, the ABC will:		
	i) conduct a new local government survey in 2012, as part of the longitudinal study commenced in 2007;	Completed in 2012.	
	ii) develop guidance for local governments on how to develop an effective cycling plan;	All States and Territories support local government to prepare effective bike plans. An example of this guidance is the the NSW publication "How to Prepare a Bike Plan".	
	iii) engage with local governments on a regular basis in each state and territory, including organising forums;	Achieved through conferences such as the Asia Pacific Cycle Congress, Australian Cycling Summit, Bike Futures and Cycling Imagineering Workshops.	p58-59
	iv) further develop its relationship with Australian tertiary education institutions to build technical capacity in local governments by ensuring sustainable transport issues are reflected in research, vocational and academic programs.	Achieved through conferences such as the Asia Pacific Cycle Congress, Australian Cycling Summit, Bike Futures and Cycling Imagineering Workshops.	p58-59
3	The ABC will monitor cycling policy issues and identify new areas which require guidance.	See Key Theme: Bicycle Wayfinding Guidance. See Key Theme: Bicycle Parking Guidance. See Key Theme: Guidance for Protected Bicycle Facilities.	p54-55 p56 p57
4	Individual members of the ABC will provide detailed information about best practice case studies for inclusion on the Cycling Resource Centre, including lessons learned and details of relevant contacts.	Best Practice case studies are available on the Australian Bicycle Council website - http://bicyclecouncil.com.au	



Photo courtesy of Asia Pacific Cycle Congress

Investment in Cycling Infrastructure and Programs

The National Cycling Strategy notes that countries that have achieved significant levels of cycling activity have benefitted from extensive and sustained investment in their cycling networks and facilities. The Strategy focuses on three main areas: a safe cycling network, end-of-trip facilities and the ongoing improvement of guidance that promotes best practice design and provision of cycling infrastructure and facilities.

In 2014-15, Australian state and territory governments invested \$123.6 million in cycling infrastructure. This equates to around \$5.34 per head of population across Australia. This figure excludes work that is carried out as part of the general maintenance and construction of roads. This figure also excludes investment made by federal and local governments.

State & Territory Cycling Investment 2010-2015



State & Territory Cycling Investment 2014-15

per head of population



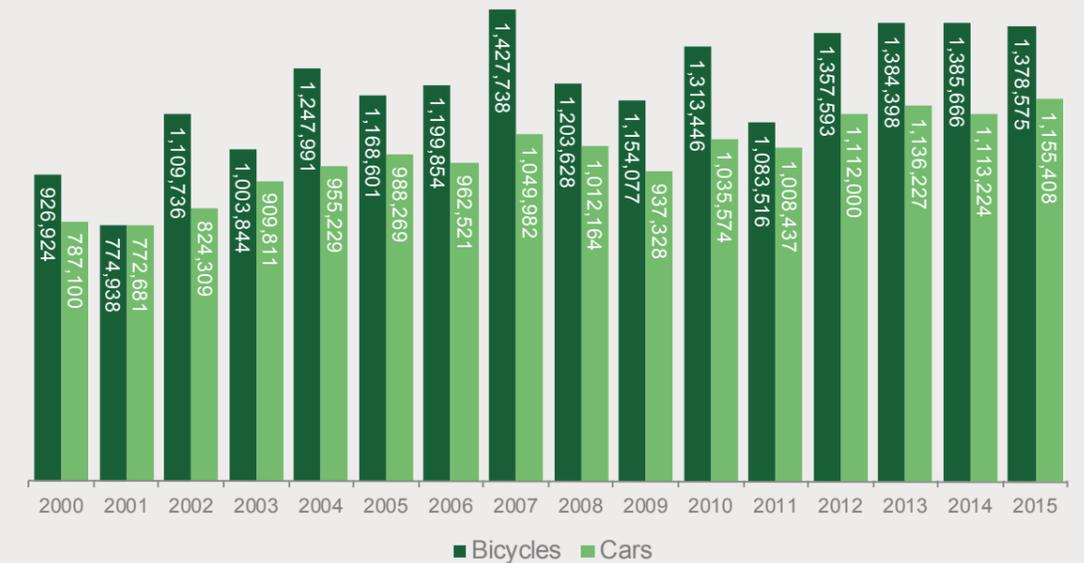
Source: Expenditure provided by jurisdictions

Bicycles Sales

Bicycle sales have remained strong for many years, with the total number of bicycles sold annually, consistently outnumbering the number of cars sold. Over the past 15 years, a total of 17.7 million bicycles were imported into Australia with bicycle sales outnumbering car sales by more than 3 million in total over 15 years. More than half of all Australian households have at least one bicycle.

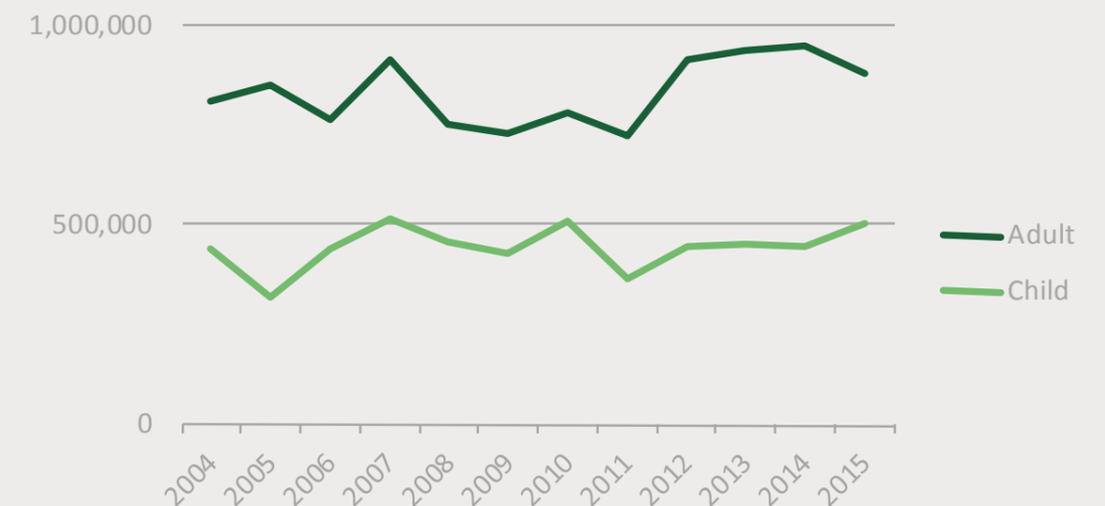
Bicycles are an incredibly cheap form of transport and are easily accessible for most Australians. While the majority of Australians have access to a bicycle, the key is to provide an environment that encourages increased cycling participation. Cycling as a recreational activity has many benefits, most notably, improvements in health. Cycling for transport has additional benefits for society by taking cars off congested roads and providing a more resilient transport system.

Australian bicycle and car sales 2000-2015



Australian bicycle sales 2004-2015

adult and child bicycle sales



Source: Bicycle sales based on Australian Customs import figures and provided by the Cycling Promotion Fund. Car sales based on VFACTS from the Federal Chamber of Automotive Industries.

1

Cycling Promotion

The National Cycling Strategy sets out to promote cycling as both a viable mode of transport and as an enjoyable recreational activity. While promoting transport cycling and recreational cycling can involve slightly different approaches, they both require efforts to focus on the ease and enjoyment of cycling. An undue focus on safety and on the need for special safety precautions reduces the appeal of cycling and unfairly places the responsibility on the cyclist to protect themselves from external dangers.

In 2015, states and territories promoted cycling for short trips, for recreation and for the journey to work. A particular focus has been promotional campaigns such as the Good Move campaign (shown below) which have recognised the important role that walking and cycling can play in short trips and multi-modal journeys. Recreational cycling has primarily been encouraged through event sponsorships and the provision of in-kind support for mass participation rides. Cycling to work has primarily been encouraged through the installation of end-of-trip facilities. The City of Sydney also ran the Sydney Rides Business Challenge which focused on recruiting champions within businesses to encourage their colleagues to ride to work.



Cycling to the station
...good move

Cycling to the station
...good move

Look good, feel good, get healthy.

Look good, feel good, get healthy.

Take another look at your travel options
transportnsw.info

Transport

Transport

New South Wales: Good Move

The New South Wales Government introduced the Good Move walking and cycling promotional campaign in 2015.

The program aims to encourage multi-modal trips that combine active transport with public transport.

A series of posters were produced that use the message "look good, feel good, get healthy" to highlight the benefits of active transport.

Photo courtesy of
Dept. Planning, Transport and Infrastructure, SA



Photo courtesy of Pedal Brisbane

Above: Riders gather at one of the Brisbane Bicycle Fringe Festival events which was held in conjunction with the 2015 Asia Pacific Cycle Congress. The fringe festival was coordinated by Pedal Brisbane and included a variety of events including a cyclovia, night rides and a film night.



The South Australian Government invested \$0.5 million in the way2go bike ed program.



The "short trips are bikeable" campaign looks to promote cycling for short trips in the Northern Territory.

Promoting Cycling for Short Trips

The National Cycling Strategy 2011-16 asks policy-makers to deliver marketing and education programs that promote the benefits of cycling and encourage people to cycle for short personal trips. A variety of such projects have been delivered by states and territories in 2015.

The NSW Government introduced the *Good Move* walking and cycling promotional campaign. The campaign encourages customers to consider walking or cycling part of their overall transport journey. Posters were placed in high density commuter areas across the NSW transport networks to maximise exposure.

The Victorian Government invested \$660,000 in the *Ride2School* program which encourages children to be more active by walking or riding their bicycle, scooter or skateboard to school. The program was delivered by Bicycle Network in partnership with local schools and councils.

The Queensland Government invested \$10 million over three years on a package of infrastructure, policy and behaviour change projects to increase active transport in three *Active Towns* (Cairns, Mackay and Robina). Across the three towns, the program constructed 26km of bike paths and two end-of-trip cycle facilities. Over 82,000 residents were reached through the cycling promotion events.

The South Australian Government delivered the *TravelSMART* program to households within a specific target area. Through a collaborative conversation the program aims to influence a shift in personal transport behaviour towards safer, greener and more active travel choices. The South Australian Government provided funding to BikeSA to deliver the *way2go bike ed* program to 6000 students in 71 schools in both metropolitan and regional areas. The program provides basic bicycle skills and road safety awareness to children between 9 and 13 years.

The Western Australian Government initiated the *Safe Active Streets* Program using innovative local street modifications to enable a post speed limit of 30km/h. The aim of the program is to support and promote local short trips in a safe environment with benefits to all road users. The *Your Move* program that provides travel choice information and fitness coaching to residents for active transport expanded to the City of Wanneroo with over 10,000 people signing up for the program.

Tasmania encouraged students to achieve their recommended 60 minutes of daily exercise through the *Ride2School* program which Tasmania adopted as part of the overarching *Cycling Safety Program*.

The Northern Territory Department of Transport promotes cycling for short trips through the *Short Trips are Bikeable* video which was created by Bicycle NT with the assistance of the City of Darwin. The commercial was launched in March 2015 and is shown consistently on local TV stations and at local cinemas. The Northern Territory Department of Transport is promoting transport cycling through popular community open days at the Darwin and Alice Springs Road Safety Centres.

The ACT Government delivered the *Active Streets* pilot program which encourages parents to provide more opportunities for their children to make healthy choices about how they get to and from school. The program is being trialled in Macquarie, Macgregor, Latham and Mount Rogers primary schools as part of the *Ride or Walk to School* initiative.

Promoting Recreational Cycling

The National Cycling Strategy 2011-16 asks policy-makers to deliver marketing and education programs that encourage people to take up cycling as a recreational activity. A variety of such projects have been delivered by states and territories in 2015.

NSW Bike week is a weeklong celebration of cycling in NSW. Local communities come together to hold cycling events that encourage more people to cycle more often. Over 60 events were held across the state ranging from bicycle film festivals, family fun rides, bicycle confidence courses and ride to work days. Transport for NSW and Roads and Maritime Services work together to promote events through localised advertising campaigns supported by local councils and community groups.

The Victorian Government invested around \$90,000 in the sponsorship of recreational rides and bicycle races including the RACV Great Victorian Bike Ride, Tour of the Goldfields, Austral Wheelrace, Mitchelton Bay Cycling Classic, Cadel Evans Great Ocean Road Race, Jayco Herald Sun Tour, Cycling Australia Road National Championships and the Cycling Australia Junior Mountain Climbing Championships.

The Queensland Government and Cairns Regional Council held regular group rides delivered through the *Active Towns* pilot program to show members of the community some great spots to cycle in the Cairns region. Some rides also utilised the infrastructure delivered during the 3-year pilot program.

The Tasmanian Government encouraged trail riding by providing support and assistance to guide the development of a high quality, consistent, recreational trail network in line with the *Trails Tasmania Strategy*. The Tasmanian Government encouraged mountain bike riding by using a whole-of-government approach to develop, manage and market world-class mountain bike trail infrastructure in line with the *Tasmanian Mountain Bike Plan*.

The Northern Territory Government has developed an extensive network of mountain bike paths in Charles Darwin National Park in Darwin which add to the Territory's popular mountain bike trails in Alice Springs.

Encouraging Cycling to Work by Developing Bicycle-Friendly Workplaces

The National Cycling Strategy 2011-16 asks policy-makers to work with employers to develop cyclist-friendly workplace facilities and projects. A variety of such projects have been delivered by states and territories in 2015.

The Sydney Rides Business Challenge, organised by the City of Sydney, ran from 23 March to 20 April 2015 and encouraged workplaces to support staff to ride. The free business-based competition encouraged organisations of similar size to compete in six different categories to get the highest proportion of staff riding. 4,804 people from 293 organisations took part, making this the largest event of its kind in the world. Transport for NSW promoted the challenge within the NSW Government Transport cluster.

The Victorian Government engaged in a community consultation process designed to inform the development of an updated Victoria's Cycling Strategy. Initiatives to increase cycling participation, including cycling to work, will be included in the updated cycling strategy due for release in 2016.

The Queensland Government in conjunction with Cairns Regional Council ran the *Love To Ride Cycle Challenge* through May 2015. The *Love to Ride Cycle Challenge* was funded through the *Active Towns* pilot program and saw 52 organisations around Cairns take part. The challenge was designed to encourage workplaces to compete to get the most people riding a bicycle.

The Western Australian Government performed an inventory of end-of-trip facilities in private buildings in the Perth CBD.

The University of Tasmania installed a bike hub at its Inveresk campus to make it easier for both staff and students to travel to work by bicycle. The hub features 40 secure and sheltered storage spaces, solar powered recharging points for electric bicycles, repair and water filling stations, and is located near shower and change facilities. The hub cost approximately \$65,000 and was supported by a \$10,000 grant from the Tasmanian State Government.

The Northern Territory Government requires end of trip facilities for employees (and visitors) as part of commercial and other developments in relevant Central Business District and other zones under the NT Planning Scheme. The NT Government is working with major employment destinations such as Royal Darwin Hospital, Charles Darwin University and Darwin International Airport to improve cycling infrastructure and encourage cycling to work. In 2015, the NT Government worked with Alice Springs Town Council and the City of Darwin to promote National Ride to Work Day.

The ACT Government provides a bicycle fleet to encourage employees to cycle to nearby meetings. Similarly, the Government's *Ride or Walk to School* program encourages students cycling and walking to around 50 participating ACT schools.

Photo courtesy of
Department of Planning, Transport and Infrastructure, SA

2 Infrastructure & Facilities

Investment in cycling infrastructure and facilities creates the foundation on which to increase cycling participation. Investment in encouragement and education is ineffective if those who choose to cycle do not feel safe or are made to endure unnecessary delay or inconvenience.

In 2014-15, Australian state and territory governments invested \$123.6 million in cycling infrastructure. This equates to around \$5.34 per head of population across Australia. The bicycle infrastructure investment figures mainly reflect spending on facilities that are separated from motor vehicles. This figure excludes investment made by federal and local governments except where noted in the following pages.

The investment made in 2014-15 exceeds the 2013-14 figure (\$111.2 million) and the 2012-13 figure (\$111.7 million) and is a significant increase over the 2011-12 figure (\$93.8 million) and the 2010-11 figure (\$82.9 million).

Victoria: Parkiteer Bike Storage

The Parkiteer Bike Program provides convenient, undercover and secure facilities to encourage commuters/cyclists to park their bikes and to use public transport. A bike cage on average holds 26 bikes.

To access the cages, cyclists register with Bicycle Network and are provided with card access. This card allows members to use any cage on the rail network. Bicycle Network provides a 24/7 helpline service.

Currently there are 85 Parkiteer Bike Cages across the metropolitan and regional rail network

In 2015, Public Transport Victoria installed bike cages at Tarneit and Wyndham Vale Stations. On opening (September 2015), the usage ratio for the bike cages was 54% at Tarneit Station and 51% at Wyndham Vale Station.



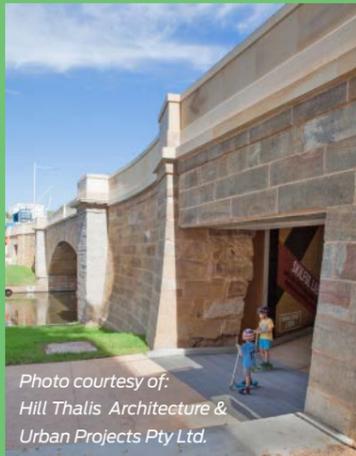


Photo courtesy of Hill Thalys Architecture & Urban Projects Pty Ltd.

The Lennox Bridge Portal project gives people who choose to walk and cycle an opportunity to pass through the bridge as a cross section through time, passing through the 1935 DMR extension to the 1830 convict built structure, while the remains of the pier of the 1806 Gaol Bridge have been preserved under the floor of the northern portal for future generations. The Portals officially opened in September 2015 allowing travel along the northern side of the Parramatta River between Westmead, the Parramatta City Centre and Western Sydney University.



The Forster-Tuncurry Cycling Towns project aims to make cycling a realistic mode choice for local residents to connect to the town centre, nearby schools, recreational and employment areas. The project is a multi-faceted approach to improving cycleway connections, end of trip facilities and wayfinding through transport and travel planning, infrastructure installation, project evaluation and assessment.

New South Wales

The New South Wales Government invested \$30.2 million on bicycle facilities as part of their 2014-15 work plan. Around \$21 million was spent on priority cycleways across Sydney and Regional NSW. These figures do not include bicycle infrastructure projects that were built as part of larger transport projects.

New South Wales - Bicycle infrastructure investment in 2014-15	
Projects in Partnership with Local Governments	State Govt Contribution
Northern NSW 9.54 km of bicycle facilities in partnership with Balina, Coffs Harbour, Clarence Valley, Lismore, Port Macquarie, Hastings, Richmond Valley and Tweed Heads Councils.	\$2,320,000
Hunter Region 0.5 km off-road facilities and 100 m on-road facilities in partnership with Gosford, Lake Macquarie, Newcastle and Wyong Councils.	\$345,000
Southern NSW Region 3.25 km of bicycle facilities in partnership with Bega Valley, Eurobodalla, Queanbeyan, Kiama, Shoalhaven, Upper Lachlan, Wingecarribee, and Wollongong Councils.	\$1,372,000
South-West NSW Region 11 km of bicycle facilities in partnership with Albury, Deniliquin, Griffith, Harden, Hay, Jerilderie, Leeton, Murray, Narrandera, Tumbarumba, Tumut, Wagga Wagga, Yass Valley and Young Councils.	\$1,027,000
Western Region 8.8 km of bicycle facilities in partnership with Brewarrina, Cabonne, Forbes, Gilgandra, Mid-Western, Moree Plains, Orange and Warrumbungle Councils.	\$1,065,000
Sydney Region 2.8 km of bicycle facilities in partnership with Campbelltown, Fairfield, Ku-ring-gai, Marrickville, Mosman, North Sydney, Pittwater, Rockdale, Sutherland, Warringah, Waverley and Willoughby Councils.	\$2,975,000
Priority Cycleways	
Regional NSW 20 projects across 14 local government areas providing approximate 7.77 km of priority cycleway links within Ballina, Bega Valley, Brewarrina, Coffs Harbour, Cowra, Moree Plains, Murray, Newcastle, Orange, Queanbeyan, Shellharbour, Shoalhaven, Wollongong and Wyong.	\$4,480,000
Sydney Region 28 projects across 17 Local government areas providing approximate 14.5 km of priority cycleway links to Blacktown, Parramatta, Liverpool, Penrith, Sydney Airport/Mascot, North Sydney/St Leonards, Bondi Junction, Randwick/Kingsford, Inner West and Sydney City Centre.	\$16,510,000

Victoria

The Victorian Government invested approximately \$25 million on bicycle infrastructure during 2014-15. This figure does not include investment by local government. A selection of infrastructure spending is presented below.

Note: The State Government contributions in the table below reflect the total funding allocated for each project and not the actual expenditure for 2014/15.

Victoria - Bicycle infrastructure investment in 2014-15			
Metropolitan Melbourne	State Govt Contribution	Regional Victoria	State Govt Contribution
Whitehall St/Parker St intersection, Footscray - On-road shared traffic.	\$1,100,000	Eaglehawk Rd & Fenton St, Long Gully, Long Gully - On-road bicycle lane/shoulders	\$305,000
Footscray Rd West/Pearl River Rd intersection, Footscray - On-road shared traffic.	\$350,000	Ewing Blyth Dr (Thirteenth Beach Rd to Bridge Rd), Barwon Heads - On-road bicycle lane/shoulders	\$150,000
Footscray Rd West/Waterfront Way intersection, Footscray - On-road shared traffic.	\$350,000	Corio Waurm Ponds Rd & Bells Pde - On-road bicycle lane/shoulders	\$317,000
Victoria Pde/Lansdowne St, East Melbourne - On-road shared traffic.	\$350,000	Warragul Rail Precinct - Shared zone	*
Belmore Rd (Buchanan Ave to Hilda St), Balwyn - On-road shared traffic.	\$90,000	Mitchell Shire Trails - Shared use trail	\$88,000
Barkly St (Carlisle St to Inkerman St), St Kilda - On-road shared traffic.	\$440,000	Eldorado Track - Shared use trail	\$275,000
High St at Barkers Rd, Hawthorn - On-road shared traffic.	\$146,000	Mansfield Shire - Shared use path.	\$100,000
Wellington St/Glenferrie Rd intersection, Kew - On-road bicycle lane/shoulders	\$240,000	Alpine Shire - Shared use trail.	\$1,000,000
Murrumbena Rd (North Rd to Crosbie Rd), Murrumbena - On-road bicycle lane/shoulders	\$681,000	Alexandra Gardens - Shared use path.	\$200,000
Beach Rd (Balcombe Rd to Bluff Rd), Black Rock - On-road bicycle lane/shoulders	\$320,000	Murchison Box Ironbark Trail - Shared use path (Rail trail)	\$150,000
Chapel Street, South Yarra - On-road bicycle lane/shoulders	\$1,050,000	O'Keefe Rail Trail (Axedale to Heathcote) - Shared use path (Rail trail)	\$1,900,000
Hallam Rd Upgrade, Hampton Park - Shared use path.	*	Old Beechy Rail Trail - Shared use path (Rail trail)	\$500,000
Stud Rd Upgrade, Wantirna - Shared use path.	*	Mt Buller & Mt Stirling - Mountain bike trail	\$375,000
Cardina Rd Upgrade, Officer - Shared use path.	*		
Bicycle Parking			
Warragul Trail Station		Tarneit Train Station	
Warun Ponds Train Station		Wyndham Vale Train Station	
Glen Waverly Train Station			

* Bicycle project completed as part of a major road upgrade project.



The Bicentennial bikeway is Brisbane city's busiest shared pathway and an important cycle and pedestrian link in the active transport network. Situated adjacent to the Brisbane River and connecting the Brisbane CBD to the inner city suburb of Toowong, each day the bikeway carries up to 6500 pedestrians and cyclists.



The Hilliard's Creek Crossing project completed an important missing link between Wellington Point and Ormiston in the 150km Moreton Bay Cycleway in south-east Queensland. The Moreton Bay Cycleway will eventually connect Redland Bay to Redcliffe. This project provides a safe off-road route across Hilliard's Creek and connects cyclists to Wellington Point train station.

Queensland

The Queensland Government invested \$22.1 million in the construction and design of bicycle facilities during their 2014-15 work plan. This figure does not include money that was spent to comply with the Cycling Infrastructure Policy or the Queensland Development Code. These policies require that various road, housing and other projects provide facilities that accommodate bicycles. For example, the Queensland Development Code requires the provision of end of trip facilities that are suitable for the particular land use type. The Queensland budget for bicycle facilities and programs for the 2015-16 work plan has increased to \$37.0 million.

Queensland - Bicycle infrastructure investment in 2014-15

Separated Paths in Metropolitan Queensland	State Govt Contribution	Local Government Co-Contribution
Bicentennial Bikeway Stage 4 530m bi-directional separated bicycle facility	\$5,460,000	\$8,040,000
Shared-use Paths in Metropolitan Queensland	State Govt Contribution	Local Government Co-Contribution
Moreton Bay Hilliards Creek Crossing - 434 m	\$703,000	\$703,000
Brown St Bridge - 1.21 km	\$1,650,000	\$1,650,000
Dutton Park Bikeway Stage 1 - 50 m	\$180,000	\$180,000
Helensvale Cycleways - 1.0 km	\$31,000	\$125,000
Biggera Creek Greenway - 3.2 km	\$535,000	\$536,000
Loders Creek Greenway Stage B - 815 m	\$176,000	\$176,000
Cascade Gardens - 250 m	\$47,000	\$47,000
South Pine Road, Brendale - 1.3 km	\$129,000	\$129,000
Moreton Bay Cycleway, Lakefield Dr to Orana Esp - 490 m	\$173,000	\$173,000
Moreton Bay Cycleway, Masthead Dr to Wharf St - 1.2 km	\$423,000	\$423,000
David Low Way, Blanch Ct to McDonalds Rd - 1.1 km	\$650,000	\$1,011,000
Sippy Downs Cycle Facilities Stage 2 - 300 m	\$350,000	\$350,000
North Brisbane Bikeway Stage 1A-1 - 500 m	\$4,060,000	\$0
Gateway Additional Lane - 1.2 km	*	\$0
Cottesloe Dr, Ron Penhaligon Way to University Dr - 950m	\$573,000	\$0
Educated Ways Stage 2 - 430 m	\$276,000	\$0
Investigator Dr, Robina State HS to Laver Dr - 70 m	\$66,000	\$0
Rail Station to Town Centre - 270 m	\$146,000	\$28,000
Ron Penhaligon Way, Cheltenham Dr - Commerce Dr - 420m	\$180,000	\$0
Town Centre to Glen Eagles Dr, Robina - 1.3 km	\$561,000	\$181,000
Bicycle Lanes/Shoulders in Metropolitan Queensland	State Govt Contribution	Local Government Co-Contribution
Mallawa Dr to Nineteenth Ave Roundabout Upgrade	\$80,000	\$154,000
Ferry Grove to Samford Corridor Stage 1 - 1.7 km	\$123,000	\$163,000
Waterways Drive Bicycle Lanes - 1.69 km	\$500,000	\$849,000
Demeio Rd, Second Ave to Demeio Pk, Marsden - 500 m	\$100,000	\$252,000
Samford-Wardell Upgrade, Enoggera - 450 m	*	\$0
Miles Platting Rd, Eight Mile Plains - 150 m	*	\$0
Birkdale Rd, Birkdale - 10 km	\$350,000	\$0
Old Cleveland - Redland Bay Rd, Gumdale - 7 km	\$1,000,000	\$0
Logan Sub-Arterial Rd, Eight Miles Plains - 100 m	\$50,000	\$0
Klump Rd, Nathan - 100 m	\$40,000	\$0
Sandgate Rd, Clayfield - 4 km	\$250,000	\$0
Capalaba, Chermside, Pullenvale - 3 km	\$1,300,000	\$0



Photo courtesy of Queensland TMR

Shared-use Paths in Regional Queensland	State Govt Contribution	Local Government Co-Contribution
West Creek Bridge - 40 m	\$250,000	\$353,000
Brisbane Valley Hwy Brassall Intersection - 1.3 km	*	\$0
BWT and Cross City Connectivity - 1.24 km	\$992,000	\$629,000
Cross City Link Stage 1, Archibald to Webberley - 620 m	\$314,000	\$73,000
Cross City Link Stage 2, Webberley to Bridge - 830 m	\$697,000	\$368,000
Gooseponds Link Part 1, Bruce Hwy to Willetts Rd - 250 m	\$1,229,000	\$839,000
Redlynch to Freshwater Connection - 4 km	\$1,917,000	\$1,027,000
Sarina Link - 1 km	\$270,000	\$225,000
Bicycle Lanes/Shoulders in Regional Queensland	State Govt Contribution	Local Government Co-Contribution
South Street, Harristown - 2.6 km	\$75,000	\$75,000
CBD to Showgrounds Link Stage 2 & 3 - 6.44 km	\$260,000	\$260,000
Nelson St and West St, Kearney's Springs - 1.8 km	\$100,000	\$100,000
Ruthven St, Toowoomba - 400 m	\$54,000	\$54,000
Brisbane Valley Hwy, Brassall - 1.8 km	*	\$0
Bicycle Wayfinding Signs	State Govt Contribution	Local Government Co-Contribution
Brassall Bikeway and Goodna Creek Bikeway	\$10,000	\$13,000
Capalaba to Cleveland Cycleway	\$5,000	\$5,000

* Bicycle project completed as part of a major road upgrade project.



Keswick underpass before (above) and after (below) showing the transformation that was achieved by a \$2 million investment in the Marino Rocks Greenway. The underpass forms an important link connecting existing paths on either side of this busy intersection and improves the attractiveness and directness of the Marino Rocks Greenway. The underpass also improves access to the Adelaide Showground station on the Belair, Seaford and Tonsley rail lines. The underpass completed the Adelaide Showground Station project, jointly funded by the Australian and South Australian Governments as part of the Goodwood Junction upgrade.

South Australia

The South Australian Government invested \$5.1 million in bicycle facilities as part of their 2014-15 work plan. Major investments were made in the Outer Harbour Greenway and the Norwood Bicycle Boulevard. The South Australian Government contributed \$92,500 and leveraged a further \$137,500 from local government to fund the development of local area strategic bicycle plans for Mid Murray Council, Naracoorte Lucindale Council, City of Marion, Adelaide Hills Council and City of Unley. The South Australian bicycle budget for the 2015-16 year is \$2.8 million.

South Australia - Bicycle infrastructure investment in 2014-15

	State Govt Contribution	Local Government Co-Contribution
Metropolitan Adelaide		
Outer Harbour Greenway	\$2,200,000	\$0
Belair-City Bikeway - Bicycle crossing	\$35,000	\$0
Sir Donald Bradman Dr, May St - Bicycle crossing	\$19,000	\$0
Grand Junction Rd, Montrose Ave - Bicycle crossing	\$150,000	\$0
Nottage Terrace - Bicycle crossing	\$50,000	\$0
Fullarton Rd, Elizabeth St - Bicycle crossing	\$100,000	\$0
Magill Rd, Fullarton Rd, Grand Junctions Rd, Churchill Rd - Bike lanes through intersections	\$95,000	\$0
Bealah Rd, Norwood - Bicycle boulevard	\$1,050,000	\$0
Prospect Bikeway - Shared use path	\$50,000	\$0
Curtis Rd (Andrews Rd to Stuart O-Grady Bikeway) - Road shoulders	\$23,333	\$11,667
Sussex Tce (Grange Rd to Egmont Tce) - Advisory treatments.	\$10,000	\$50,000
Grange and Angus Rd on Sussex Tce - Roundabout	\$13,333	\$6,667
Main North Rd (Ridley Rd to Philip Rd) - Shared use path	\$65,333	\$32,667
King George Ave (Whyte St to King St) - Bicycle lanes	\$23,183	\$11,592
Unley Rd and Glen Osmond Rd to Frome St - Shared use path	\$53,333	\$26,667
Anzac Hwy to Tapleys Hill Rd, Brighton Rd to Adelphi Tce - Bicycle lanes	\$53,333	\$26,667
Barton Tce East and O'Connell St from Braund Rd to Frome St - Shared use path	\$50,000	\$200,000
Park 20 (Peakcock Rd to Unley Rd) - Shared use path	\$50,000	\$170,000
Mike Turtur Bikeway Stages 2 to 5 - Lighting	\$98,000	\$100,000
Dry Creek Trail to O'Bahn Trail - Shared use path	\$37,500	\$37,500
Carlton Rd, Cork Rd and Lindie Cr - Shared use path	\$50,000	\$50,000
Rugby St (Cross Rd to North Pde) - Advisory treatments	\$8,000	\$8,000
Various bicycle route improvements	\$470,000	\$0
Regional South Australia		
Mount Gambier (Fitzroy Tce at Braund Rd, Prospect; Greenhill Rd at Beaumont Rd, Eastwood; South Rd at King St, Hilton; Marion Rd at Hounslow, Cowandilla) - Bicycle lanes	\$98,280	\$0
Naracoorte (Cadgee Rd from Higgs Rd to Burkes Rd) - Bicycle lanes	\$66,403	\$33,201
Whyalla (Norrie St, Flavel St and Russell St) - Shared use path	\$37,500	\$37,500
Whyalla (Broadbent Tce, Sundowner Hotel road) - Shared use path	\$15,000	\$30,000

Western Australia

The Western Australian Government delivered \$19.1 million of bicycle facilities as part of their 2014-15 work plan. Significant stretches of shared use path such as the Gateway Principle Shared Path were delivered in metropolitan Perth. A large number of smaller projects were delivered through co-funding arrangements with local councils as outlined below. \$1.84 million was spent on the installation of secure bike cages across the rail network and bike repair stations were also installed at a number of reserves and other popular destinations.

Western Australia - Bicycle infrastructure investment in 2014-15

	State Govt Contribution	Local Government Co-Contribution
Metropolitan Perth		
Gateway Principle Shared Path	\$5,900,000*	\$0
Shenton to Karrakatta (Stage 1 of Shenton to Loch)	\$2,590,000	\$0
Bassendean to Lord St (incl. Lord St underpass)	\$1,160,000	\$0
Erindale to Balcatta	\$2,325,000	\$0
Principle Shared Path Design	\$810,000	\$0
Success Hill to Guildford	\$755,000	\$0
West Pde & Queens Rd, South Guildford - 1.6 km shared-use path	\$940,200	\$0
Ranford Rd, Harrisdale - 880 m shared-use path	\$73,620	\$73,620
Belmont Ave, Cloverdale - 380 m on-road bicycle lane/shoulder	\$28,693	\$78,170
Southport St, West Leederville - 90 m shared-use path	\$15,380	\$15,380
Kalinda Dr, City Beach - 1 km shared-use path	\$147,034	\$147,034
Ashburton St, Bentley - 800 m shared-use path	\$176,250	\$176,250
Holder-Marquis Sts, Bentley - 270 m shared-use path	\$21,000	\$21,000
South Beach, South Fremantle - 880 m shared-use path	\$96,900	\$96,900
Winterfold Rd, Samson - 280 m on-road bicycle lane/shoulder	\$87,500	\$93,649
Carrington St, Fremantle - 590 m shared-use path	\$111,730	\$144,806
Trailwood Dr, Woodvale - 500 m shared-use path	\$80,856	\$80,856
Allnutt St, Mandurah - 810 m on-road bicycle lane/shoulder	\$34,250	\$53,867
Leach Hwy, Bateman - design only	\$8,000	\$11,525
Keane St, Peppermint Grove - 110 m shared-use path	\$9,657	\$9,658
Stirling Hwy, Peppermint Grove - 80 m shared-use path	\$15,107	\$15,107
Soldiers Rd, Mundijong - 1 km shared-use path	\$166,676	\$166,676
Brentwood Ave, Woodlands - 250 m shared-use path	\$32,677	\$32,677
Morley Drive, Dianella - 850 m shared-use path	\$81,057	\$81,057
Miller St, Victoria Park - 530 m on-road bicycle lane/shoulder	\$51,712	\$51,712
Vincent St, Leederville - 550 m shared-use path	\$22,500	\$66,637
Metro Perth End-of-trip Facilities etc		
Bike Shelter Program - Various Train Stations	\$1,836,000	\$0
John Curtin College of the Arts	\$3,400	\$3,400
Whitegum Valley Primary School	\$3,400	\$3,400
End of Trip Facilities - Various locations	\$4,991	\$7,088
Bike Repair Stations - Woodland Reserve, Oxofrd St Reserve, Beatty Park Leisure Centre, Forrest Park, Bourke St, Bands Reserve, The Foyer/The Yard.	\$3,600	\$3,600
Transport Hub (Cockburn Station, Oats St Station, CCTV)	\$355,000	\$0

* Includes funding from the Federal Government.



The Dampier Highway Shared Path completes a missing link in the bicycle network by creating a connection to two local primary schools. By completing this link, the level of safety is also improved for cyclists through the provision of an off-road alternative to the on-road cycle lane on Dampier Highway, a 70km/h route.



Bicycle lanes were marked along 236m of Winterfold Rd to address issues identified in the City of Fremantle Local Bicycle Plan. The lanes were constructed to provide a dedicated space for cycling and to allow green paint to be used to highlight conflict areas at intersections.



The upgrade of Rokeby Rd, Tasmania included shared paths on the Tollard Drive extension.



A shared path and refuge crossing was built along Stony Rise Road, Tasmania linking a large residential area with the Devonport Homemaker Centre.



A shared path was constructed along the shoulder of John Lees Drive, Tasmania to improve walking and cycling safety.

Western Australia - Bicycle infrastructure investment in 2014-15 (cont...)

Regional Western Australia	State Govt Contribution	Local Government Co-Contribution
Guy St (stage 2) - 250 m shared-use path	\$24,894	\$24,894
Fallon Rd - 160 m shared-use path	\$21,700	\$53,708
Delewarr St - 120 m shared-use path	\$12,113	\$12,113
Dampier Hwy - 770 m shared-use path	\$170,376	\$170,376
Stephen St - 490 m shared-use path	\$50,000	\$92,837
Marshall-Wittenoom Sts - 400 m shared-use path	\$50,000	\$57,618
Railway Rd, Three Springs - 570 m shared-use path	\$35,112	\$38,837
School Tafe Connection (Inkpen St to Forrest St) - 680 m shared-use path	\$60,179	\$77,373
Allenby, Kitchener, Woolgar Sts, Merredin - 800 m shared-use path	\$82,300	\$82,315
Bridge Link, Toodyay - 120 m shared-use path	\$19,828	\$20,699
Anzac Ave, Toodyay - 280 m shared-use path	\$21,760	\$22,340
Kirkwood St, Corrigin - 770 m shared-use path	\$46,142	\$86,508
Albany Hwy, Albany - 1.9 km shared-use path	\$237,510	\$622,510
Barnesby Rd, Albany - 250 m shared-use path	\$52,490	\$52,490
Middleton Rd, Albany - 250 m on-road bicycle lane/shoulder	\$5,000	\$52,490
South Coast Hwy, Denmark - 1 km shared-use path	\$112,250	\$113,903
Johnson St, Manjimup - 380 m shared-use path	\$40,600	\$65,491
Graphite Rd, Manjimup - 230 m shared-use path	\$39,900	\$52,446
Crampton Ave, Eaton - 600 m shared-use path	\$56,832	\$56,833
Eaton Ave, Eaton - 370 m shared-use path	\$38,239	\$38,239

Tasmania

The Tasmanian Government invested \$1.6 million in bicycle infrastructure as part of their 2014-15 work plan.

Tasmania Australia - Bicycle infrastructure investment 2014-15

Shared Paths	State Govt Contribution	Local Government Co-Contribution
East Derwent Hwy - 240 m shared-use path	\$47,000	\$0
Rokeby Stage 1 - 500m shared-use path	\$225,000	\$0
Tollard Ave, Howrah - 250 m shared path	\$100,000	\$50,000
Rokeby Stage 2 - 1.1 km shared path	\$495,000	\$0
Tasman Bridge Ramps - 460 m shared path	\$205,000	\$0
Stony Rise - shared path	\$147,000	\$127,000
John Lees Drive, Dilston - shared path	\$107,000	\$53,000
Road Shoulders	State Govt Contribution	Local Government Co-Contribution
Perth to Breadalbane - 2.5 km road shoulder	\$50,000	\$0
Signs	State Govt Contribution	Local Government Co-Contribution
Statewide rollout of minimum passing distance signs	\$150,000	\$0



Photo courtesy of Northern Territory Department of Transport

Northern Territory

The Northern Territory Government invested \$1.2 million in bicycle infrastructure as part of their 2014-15 work plan.

Northern Territory - Bicycle infrastructure investment in 2014-15

Lanes and Paths in Metropolitan and Regional NT	State Govt Contribution	Local Government Co-Contribution
Howard Springs - Shared-use path	\$18,830	\$0
Lambrick Avenue Palmerston - Shared-use path	\$38,242	\$0
Undoolya Road Alice Springs - Shared-use path	\$8,128	\$0
Larapinta Drive Alice Springs - Shared Use path	\$11,000	\$0
Upgrades various location Darwin - Shared-use paths	\$111,913	\$0
Casuarina Reserve Darwin - Shared-use path	\$159,672	\$0
Darwin various locations - Shared-use paths	\$601,320	\$0
Alice Springs various locations - Shared-use paths	\$278,909	\$0

Australian Capital Territory

The ACT Government delivered \$19.3 million of bicycle infrastructure projects as part of their 2014-15 work plan. The ACT Government has budgeted a record \$23 million to fund bicycle paths and footpaths in 2015-16.

Australian Capital Territory - Bicycle infrastructure in 2014-15

Bicycle Lanes and Paths	State Govt Contribution	Local Government Co-Contribution
Majura Parkway - Separated path	\$12,000,000 *	N/A
Civic Cycle Loop - Separated path	\$1,800,000	N/A
Bowen Park Upgrade - Shared path	\$600,000	N/A
Bunda St Shared Zone - Shared zone	\$2,300,000	N/A
Various off-road upgrades	\$2,000,000	N/A
Various on-road upgrades	\$250,000	N/A
End of Trip Facilities	State Govt Contribution	Local Government Co-Contribution
Kippax and North Weston - Bicycle storage cages	\$350,000	N/A

* Includes funding from the Federal Government.

The Casuarina Reserve shared path in Darwin which was significantly upgraded in 2015 with path widening, resurfacing and bridge replacement. Bike counts indicate that the path has the highest usage in the Darwin region. It provides a key cyclist and pedestrian link to Charles Darwin University, Royal Darwin Hospital and other major employment destinations as well as being a popular recreational path.



A bridge that was replaced in 2015 on the Casuarina Reserve path in Darwin.



Bike racks have been installed at major bus stops in Darwin and a new policy has been introduced to allow the carriage of folding bikes on buses.

Photo courtesy of
Queensland TMR

3

Integrated Planning

The National Cycling Strategy 2011-16 aims to consider and address cycling needs in all relevant transport and land use planning activities. This integrated approach to planning is necessary because there are many facets of planning that are required to create an environment that is conducive to cycling.

By increasing cycling participation, the National Cycling Strategy aims to improve health, reduce congestion, improve air quality, improve road safety, save people money, build social capital, make cities more liveable, promote eco-tourism and improve transport accessibility and resilience. While these benefits are accrued across many different government portfolios, it is primarily through transport and land use planning that the physical environment can be moulded to create a safe and effective environment for cycling.

Darwin Regional Land Use Plan

The NT Planning Commission, the NT Department of Lands, Planning and the Environment, and the NT Department of Transport are working together to effectively integrate active transport and land use planning.

In 2015 the NT Government released the Darwin Regional Land Use Plan 2015. The Plan recognises the contribution of active transport to transport networks and in fostering liveable and sustainable communities. Area plans developed under the Regional Land Use Plan consequently provide detailed planning principles for active transport. At the same time, a draft Darwin Regional Transport Plan was released in 2015 which highlights active transport and integrated planning as key objectives.





Photo courtesy of Northern Territory Department of Transport

Key Theme: Formation of Active Transport Governance Structures

The transport agencies in some smaller jurisdictions such as the Northern Territory and Tasmania have for a long time placed responsibility for walking, cycling and other policy areas with a single person, mainly due to limited resources. In larger jurisdictions, the responsibility for walking is sometimes undefined or distributed across many areas.

Over the past few years, many of the larger jurisdictions have sought to develop policy and programs through a single team that is responsible for both walking and cycling. In 2015, Victoria and the ACT both announced the creation of groups dedicated to the planning of active transport policy and programs.

Victorian Department of Economic Development, Jobs, Transport and Resources: Active Transport Victoria

The Victorian Government announced in October 2015 that they will establish Active Transport Victoria. This group will coordinate the investment of \$100 million through the Safer Cyclists and Pedestrians Fund to build infrastructure that keeps cyclists and pedestrians safe on our roads.

Victoria's state cycling strategy will be revised to guide the establishment of Active Transport Victoria. It will also incorporate the Government's commitment to improving safety and increasing participation, and will guide future cycling investment.

Cyclists and other road users will be able to provide feedback by completing an online survey. This feedback will be incorporated into a draft updated strategy, which will be made available for comment before being finalised for release in mid-2016.



Transport for NSW: Active Transport Team

The NSW Government is committed to working with Local Government to make walking and cycling more convenient, safe and enjoyable. By targeting investment to improve walking and cycling in the areas where most short trips occur, the NSW Government aims to support more accessible, liveable and productive towns, cities and centres. Encouraging walking and cycling for short local trips will reduce road congestion and free up capacity on the public transport system for those customers that need to travel further.

In line with the NSW Long Term Transport Master Plan (LTTMP), Sydney's Cycling Future and the ten Regional Transport Plans, there is a focus on improving walking and cycling connections within centres. The purpose of this is to increase opportunities for people to walk and cycle in order to help reduce congestion and free up capacity on public transport, particularly around schools, workplaces and universities, particularly at peak times.

The aims of the Walking and Cycling Program's funding programme are based on Sydney's Cycling Future. They are to:

- assess the eligibility of projects for NSW Government State funding.
- prioritise eligible projects for delivery.
- provide guidance to councils and other stakeholders.
- provide accountability and transparency.

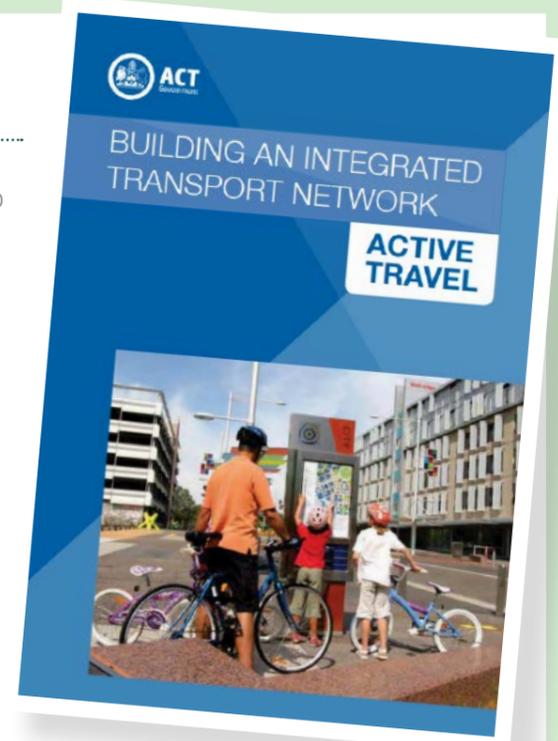
Transport for NSW, Roads and Maritimes Services and Local Government work together to deliver walking and cycling infrastructure and programmes in NSW.

Australian Capital Territory: Active Travel Office

In early 2015, the ACT Government announced the establishment of a new Active Travel Office (ATO). The ATO serves as the single point of contact within Government on active travel policy and implementation, including coordination and engagement with the community on active travel matters.

Underpinned by the ACT Government's vision for active travel to make Canberra Australia's cycling capital and most walkable city, the ATO has developed a program of activities for implementation. These activities include items related to planning, delivery, encouragement and management/regulation of active travel in line with the principles of the Active Travel Framework which was released in May 2015.

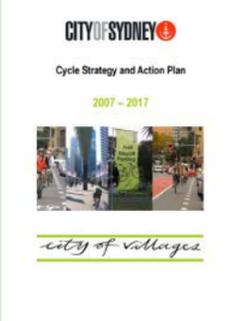
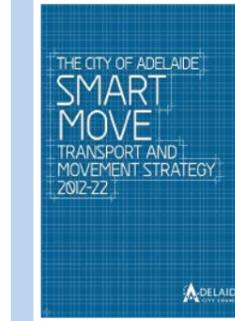
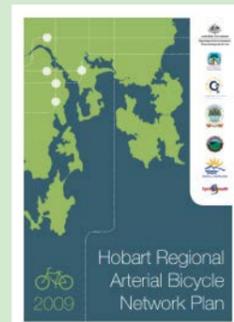
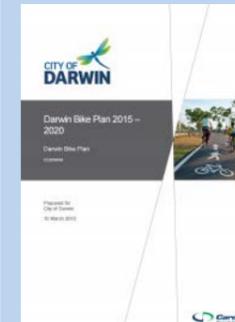
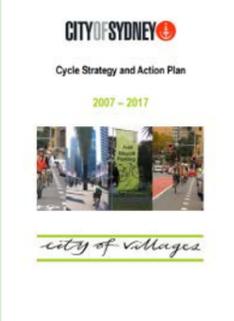
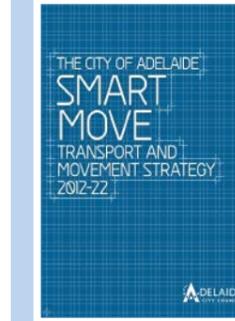
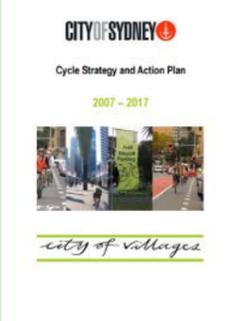
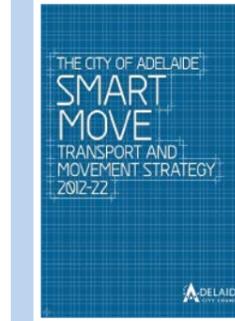
The Active Travel framework recognises that walking, cycling and riding are essential parts of Canberra's transport system. The framework outlines how the government can better integrate planning and delivery of active travel initiatives to further encourage and support walking, cycling and riding as part of Canberra's overall urban planning, transport, health, environment and education systems.



Capital City Bicycle Strategies

Walking and cycling fit naturally into dense urban environments where space is limited and congestion is a barrier to productivity and liveability. It is in these constrained environments where mobility is best served by facilitating walking and cycling through strong investment in infrastructure and a variety of "soft" interventions such as marketing and education.

Australia's capital cities have taken a variety of approaches to planning for cycling, with some choosing to release dedicated strategies for cycling (Sydney, Melbourne, Perth, Hobart and Darwin) and others choosing to incorporate cycling into a wider mobility strategy (Brisbane, Adelaide and ACT). The shortest delivery time frames are 4–5 years (Melbourne, Darwin) with the longest time frame being Perth which is planning to 2029.

<p>City of Sydney</p>  <p>Cycle Strategy and Action Plan 2007-2017</p> <p>The City of Sydney Cycle Strategy and Action Plan 2007-2017 commits to making cycling an equal first choice transport mode along with walking and using public transport.</p>	<p>City of Melbourne</p>  <p>Bicycle Plan 2012-16</p> <p>The Bicycle Plan 2012–16 is the City of Melbourne's plan for bicycle infrastructure and programs to make Melbourne safer and more attractive for current and future cyclists.</p>	<p>City of Brisbane</p>  <p>Brisbane Active Transport Strategy 2012-2026</p> <p>The vision for Brisbane is to create a high quality, connected, accessible pathway network which will attract people of all ages to walk and cycle. The primary goal is that 1 in 5 transport trips will be by walking or cycling by 2026.</p>	<p>City of Adelaide</p>  <p>Smart Move - Transport and Movement Strategy 2012-22</p> <p>Smart Move outlines Council's desired transport and movement outcomes for the City, and the strategies to achieve these over the next ten years. The Strategy aims to make the City more accessible by accommodating greater travel choices to meet the needs of all users.</p>	<p>City of Perth</p>  <p>Cycle Plan 2029</p> <p>The City of Perth anticipates that the proposed strategic cycle network and complementary cycling infrastructure will be fully implemented and operational by 2029.</p>	<p>Hobart City Council</p>  <p>Hobart Regional Arterial Bicycle Network Plan</p> <p>In 2008, this plan was developed by Cycling South through consultation with a working group made up of representatives from city councils and the Department of Infrastructure, Energy and Resources.</p>	<p>City of Darwin</p>  <p>Darwin Bike Plan 2015-2020</p> <p>The City of Darwin and the NT Department of Transport have jointly developed the inaugural Darwin Bike Plan. The Plan was formulated with the help of 1000 responses to a community survey and includes a five year Implementation Plan with a commitment to funding.</p>	<p>Australian Capital Territory</p>  <p>Building an Integrated Transport Network: Active Travel</p> <p>The framework outlines how the government can better integrate planning and delivery of active travel initiatives to further encourage and support walking, cycling and other forms of active transport.</p>	<p>New South Wales</p>  <p>Sydney's Cycling Future</p> <p>This report was published in December 2013 and builds on the vision set out in the NSW Long Term Transport Master Plan which was released in 2012. It includes the objective of integrating cycling across transport portfolios to meet NSW 2021 State Plan mode share targets which are consistent with national targets.</p>	<p>Victoria</p>  <p>Victorian Cycling Strategy</p> <p>The Victorian Cycling Strategy: Cycling into the Future 2013-23 was released in December 2012 and provides a high-level view of how the Government will encourage cycling over the next 10 years. The Victorian Cycling Action Plan 2013-14 identifies actions the Victorian Government will take to support the Victorian Cycling Strategy.</p>	<p>Western Australian</p>  <p>Western Australian Bicycle Network Plan 2014-2031</p> <p>This plan aims to make WA a place where cycling is a safe, connected, convenient and a widely-accepted form of transport. Its principal target is to double the number of cycling trips within 5 years which is in line with the National Cycling Strategy.</p>	<p>Tasmania</p>  <p>Tasmanian Walking and Cycling for Active Transport Strategy</p> <p>The Tasmanian Strategy was released in 2010. It does not include targets consistent with the national strategy. It does include actions and a commitment to integrate cycling across portfolios.</p>	<p>Queensland</p>  <p>Queensland Cycle Strategy 2011-21</p> <p>The Queensland Cycle Strategy was released in 2011. It includes targets consistent with the national strategy, a road map to achieving targets with actions, and a commitment to integrate cycling across portfolios.</p>	<p>Northern Territory</p>  <p>NT Connected and Safe</p> <p>The 2012 Connected and Safe summary provides an overview of the Territory's major cycle path networks. It includes a high level commitment to active transport and actions to increase cycling, however it does not include targets consistent with national targets.</p>	<p>Australian Capital Territory</p>  <p>Building an Integrated Transport Network: Active Travel</p> <p>The framework outlines how the government can better integrate planning and delivery of active travel initiatives to further encourage and support walking, cycling and other forms of active transport.</p>	<p>South Australia</p>  <p>Safety in Numbers, A Cycling Strategy for South Australia 2006-2010</p> <p>The South Australian Strategy is currently under review.</p>
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State and Territory Cycling Strategies

The National Cycling Strategy 2011-16 set the goal that all states and territories publish a cycling action plan as part of a holistic commitment to cycling across the country. Key areas to address in these plans include: setting targets for an increase in cycling participation, defining a concrete set of actions to be undertaken to achieve these goals and integration of goals across the state portfolios.

This integrated planning should occur, not only across transport agencies, but across other important policy areas such as health, education and land use planning. The table below provides an overview of the state and territory bicycle action plans.



4

Safety

The National Cycling Strategy seeks to “enable people to cycle safely”. The specific actions required to achieve this goal include: collecting data that helps to identify safety issues, implementing programs that target road safety (and people’s perception of the safety of cycling), and rolling out a nationally-consistent bicycle skills training program.

In 2015, significant work was carried out on the revision of bicycle-related road rules. These reviews have resulted in changes to the road rules in several jurisdictions, most notably, the implementation of minimum passing distance laws in New South Wales and the legalisation of footpath cycling in South Australia. Minimum passing distance laws are now in place in New South Wales, Queensland, South Australia and the ACT (with Tasmania also running a communications campaign on the same topic). Footpath cycling is now legal in Queensland, South Australia, the Northern Territory and the ACT. There are investigations into Australia’s mandatory bicycle helmet legislation with recommendations for future change flagged by Queensland and the ACT broadly in line with changes adopted by the Northern Territory in the 1990s.

National Road Safety Action Plan 2015-2017

The *National Road Safety Action Plan 2015-2017* supports the implementation of the *National Road Safety Strategy 2011-2020*. The action plan includes 19 individual actions across four themes.

The actions that have a direct impact on cycling include:

- Action 1 Prioritise and treat high-risk rural and urban roads, focusing on the main crash types and vulnerable road users.
- Action 12 Expand the application of lower speed limits in areas with high pedestrian and cyclist usage.
- Action 17 Implement and promote a range of Safe System demonstration projects in urban settings, with a focus on the safety of vulnerable road users.

The actions that have some impact on cycling include:

- Action 3 Review road infrastructure safety programmes to establish best practice processes for identifying, prioritising and developing projects based on fatal and serious casualty reduction criteria.
- Action 13 Implement programmes to build community understanding and support for effective speed management measures.
- Action 15 Strengthen national police enforcement operations to improve road safety compliance.
- Action 19 Examine and progress options to improve measurement and reporting of non-fatal and disabling injury crashes, particularly through the development of matched crash and hospital database systems.

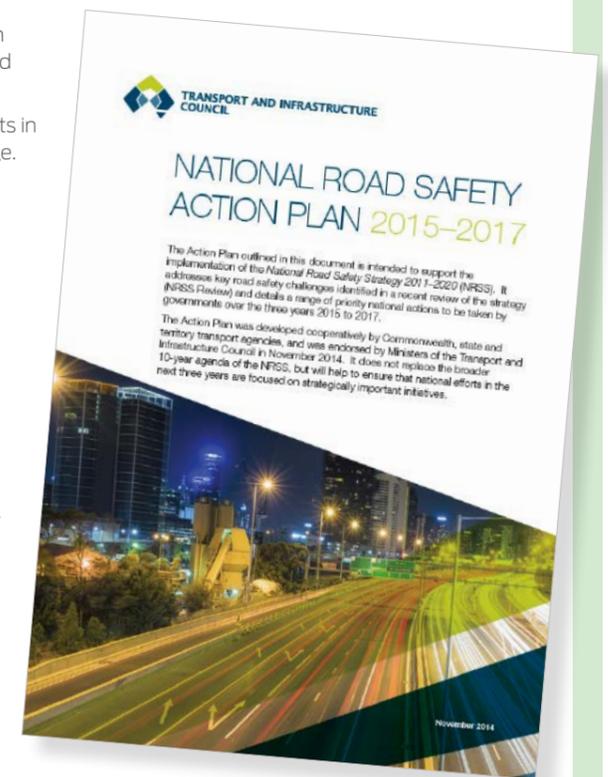


Photo courtesy of the Northern Territory Department of Transport



Photo courtesy of Queensland TMR

Review of the National Road Safety Strategy

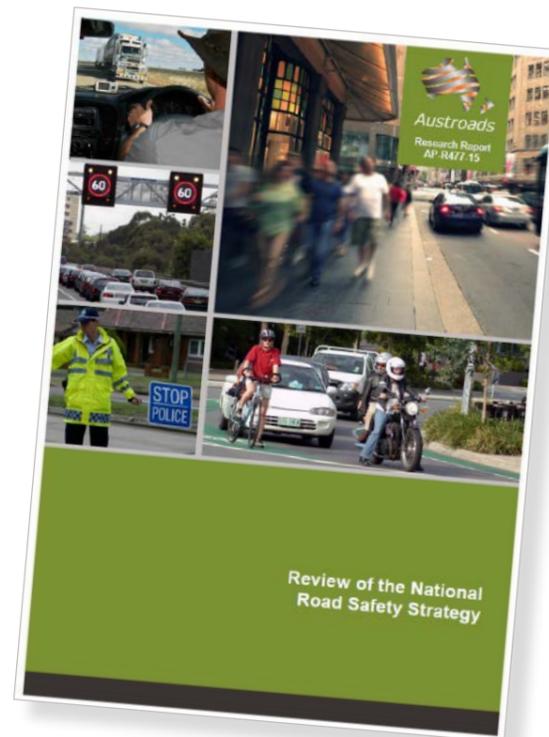
This report details the results of a 2015 review of the 2011 Australian National Road Safety Strategy (NRSS) designed to identify new countermeasures or changes in trauma patterns that would support changes to priorities in the next Action Plan. With regard to vulnerable road users, the report notes:

The Safe System philosophy for vulnerable road users is not as well developed as for vehicle occupants. This has been found to be true nationally and internationally, with even leading countries such as Sweden increasing their focus on vulnerable road users. The main finding of the recent review of road safety from the International Transport Forum was that vulnerable road users are receiving smaller benefits from recent road safety improvements than vehicle occupants.

The analysis of fatal crashes in Australia from 2008-13 showed the same pattern as internationally, with vehicle occupants accounting for most of the reduction in fatalities. There was almost no change in total fatalities involving vulnerable road users, with fatalities of motorcyclists and cyclists rising over the period. The analysis of hospital separations data found a much higher proportion of road-related injuries involving motorcycling and cycling than shown by the police-collected data. It also showed that injury cases among these road user types are increasing.

The "First Steps" and "Future Steps" agendas include some actions to assist vulnerable road users including improved infrastructure, lower speed limits, vehicle regulations and the development of a GLS for motorcyclists. These could be expanded and strengthened in the next action plan.

A number of infrastructure improvements have been shown to improve safety for vulnerable road users; these include improved pedestrian crossings, cyclist friendly intersection design, separation of bicycles and motor vehicles and improved road surfaces. There is also evidence that pedestrian safety would be enhanced by the rapid introduction of forward collision avoidance systems such as Autonomous Emergency Braking (AEB).



With the encouragement of active travel modes it is expected that walking and cycling will continue to increase. Both the safety and amenity provided to cyclists could be improved by better cooperation between road safety professionals and urban planners.

There is also a need for research to better understand what constitutes a Safe System for vulnerable road users. Although pedestrians, cyclists and motorcyclists are often grouped together as vulnerable road users, the three modes demonstrate different crash patterns and have different requirements of a Safe System.

As with its pedestrian coverage, the NRSS (2011) provides little more than passing references to cyclists as vulnerable road users. This minimal coverage was noted by Shaw, Poulos, Rissel and Hatfield (2012) who added that, while the NRSS sees the Safe System approach as underpinning the entire NRSS, it is essentially applied to motorists rather than vulnerable road users. Shaw et al also pointed out that while major cycling documents such as the National Cycling Strategy 2011-2016 and Austroads guides relevant to cycling state that the Safe System approach is relevant to cyclist (and pedestrian) infrastructure, these documents tend to focus on the cyclist and offer few suggestions as to how to apply Safe System principles to promote cycling safety in the broader context of the transport system.....

In their review of literature on infrastructure and cycling, Reid and Adams (2011) also partly foreshadowed Dumbaugh and Li (2011) because, while they noted that cyclist casualties are primarily consequences of human behaviour, they pointed out that they occur in a context formed by infrastructure, law, culture and the behaviours of other road users. Significant infrastructure-related risk factors for cyclists in single-vehicle incidents appear to be slippery surfaces and poor or defective road surfaces. For multi-vehicle collisions, the risk factors appear to be the prevailing speed limit and encounters with other road users at junctions and intersections (Reid & Adams, 2011).

Similarly to Dumbaugh and Li's (2011) position, Reid and Adams (2011) also pointed out that large roundabouts are effective at maximising motorised vehicle traffic speed and flow through intersections, and in reducing the chances of severe crashes for motorists, however, roundabouts remain especially hazardous for cyclists. Some cyclist-specific infrastructure treatments, such as painted cycle lanes and cycle advanced stop lines (or boxes) have shown only limited effectiveness in improving cyclist safety. Moreover, while providing segregated paths for cyclists has had some success in reducing cycling risks, this tends not to be the case where the segregated paths intersect with roads. Indeed, there is evidence that the risk to cyclists at such locations is not offset by the safety benefits of segregating them from motorised road users (ibid).

Overall, Reid and Adams (2011) considered that the best approach to improving cyclist safety is to reduce motorised traffic speeds in conjunction with segregated pathways. However, this approach, in Dumbaugh and Li's (2011) view, would not address the more fundamental issue: the tension between cyclist safety and traffic conflicts where the road environment allows cyclist pathways and motorised traffic to intersect.

Traffic conflicts involving cyclists were recently studied in the Netherlands by Schepers (2013). He found that more collisions occur at intersections where the cyclist has right of way, but that the crash probability can be reduced if there are raised bicycle crossings at the intersection and if the cycle path approaches to an intersection are deflected between 2 and 5 metres away from the road.....

Harris et al (2013) also investigated infrastructure interventions at non-intersection sites such as dedicated cycle paths. They found that cycle tracks alongside major streets but physically separated from motorised traffic reduced collision risk. On local streets cycle tracks were safer when there was infrastructure that tended to divert motorised traffic away from using the streets having cycle tracks. In California, Nuworsoo, Cooper, Cushing and Jud (2012) reported that other cycle track infrastructure such as cycle parking, route directness of the track, wide lanes for passing each other and traffic light phases for cyclists crossing a road are likely to increase usage of cycle tracks, thereby removing cyclists from regular roads and reducing the incidence of cycle/motor vehicle crashes. Increased usage of dedicated cycle tracks following enhancement of facilities was also demonstrated in Portland, Oregon (Monseré, McNeil & Dill, 2012). In that study, both motorists and cyclists liked the separation of road user types, with cyclists particularly reporting greater perceptions of safety, although motorists were more likely to attribute travel delays to the cycle paths. Pedestrians also appreciated cyclists' separation from traffic, but had concerns about interactions with cyclists when crossing the track.

Khan and Langlois (2011) reported that accommodating cyclists in the transportation system requires infrastructure ranging from common-use traffic lanes to separate, dedicated, barrier-protected lanes. However, they considered that risk-analysis methods need to be developed to characterise and evaluate suitable lane designs to support decision making. Desirably, such methods will estimate potential collisions when they are applied to defined lengths of travel lane and take into account variables such as the aerodynamic forces when motorised traffic passes cyclists, the wide variety of large vehicle types and sizes, evolution and variety in bicycle design and variability in cycling proficiency.

While the NRSS (2011) advocates providing more cycling infrastructure, the document nonetheless concedes that limits need to be placed on infrastructure expenditure per kilometre of Australia's lengthy road network. The NRSS encourages Willingness to Pay (WTP) approaches to inform road investment decisions. Recent research in Ireland (Laird, Page & Shen, 2013) shows that WTP estimates from potential users of proposed cycling infrastructure installations on rural roads indicate rural installations represent value for money. Research in Auckland (Raith, Nataraj, Ehrgott, Miller & Pauw, 2011) notes that cost-benefit estimates for proposed infrastructure projects need to be prioritised, allow for the infrastructure to be phased in over time, based on user demand forecasts and be informed by estimated usage over the life of the cycling infrastructure. Raith et al have developed a user demand forecast model to inform project selection and prioritisation in benefit-cost calculations. This model carries the advantage that benefit-costs of infrastructure installations are calculated across a whole road network rather than applied on an individual project basis.

Cycling Fatalities 2015

Over the past 15 years, the number of bicycle fatalities has varied around an average of 37 per year with a minimum of 29 in 2003 and a maximum of 50 in 2013. After poor years in 2013 and 2014, bicycle fatalities decreased significantly in 2015 to a six year low of 32 fatalities.

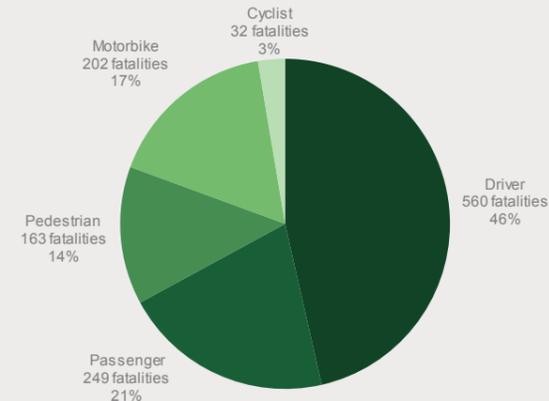
As in recent years, bicycle fatalities in 2015 were heavily skewed towards older riders, with 75% of riders aged 40 years or more. This result is inversely proportional to cycling participation data which shows that cycling drops significantly with age. The high representation of older riders may be due to increased exposure to crash risk or due to a decreased ability to survive a crash.

Males are significantly over-represented in bicycle fatality data, accounting for 30 of the 32 fatalities in 2015. This over-representation is partly due to the higher levels of weekly cycling participation in males (22%) vs females (13%) as found in the National Cycling Participation Survey 2015.

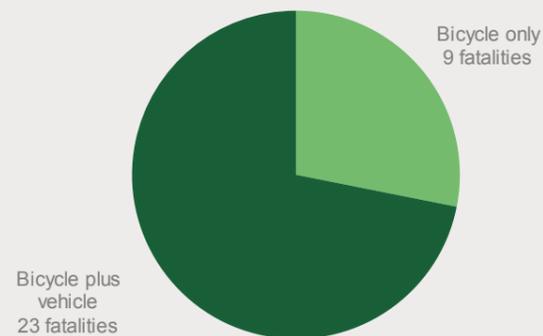
Bicycle fatalities in 2015 were 2.5 times more likely to have involving a second vehicle (23 fatalities) than to have occurred in a single vehicle incident (9 fatalities). While fatalities on high-speed roads (100 km/h) were equally likely to be the result of a single vehicle crash as a multiple vehicle crash, fatalities on roads with a 40-70 km/h speed limit were four times more likely to involve a second vehicle (16 fatalities) than to be a single vehicle crash (4 fatalities). This data highlights the importance of providing protection for vulnerable road users, even in environments with moderate traffic speeds.

Weekday bicycle fatalities were spread across the day from 5 am to 9 pm with peaks during the morning and afternoon commute times. Weekend bicycle fatalities were concentrated between 8 am and 11 am. No fatality occurred between 9pm and 5am, suggesting alcohol is unlikely to be a significant factor.

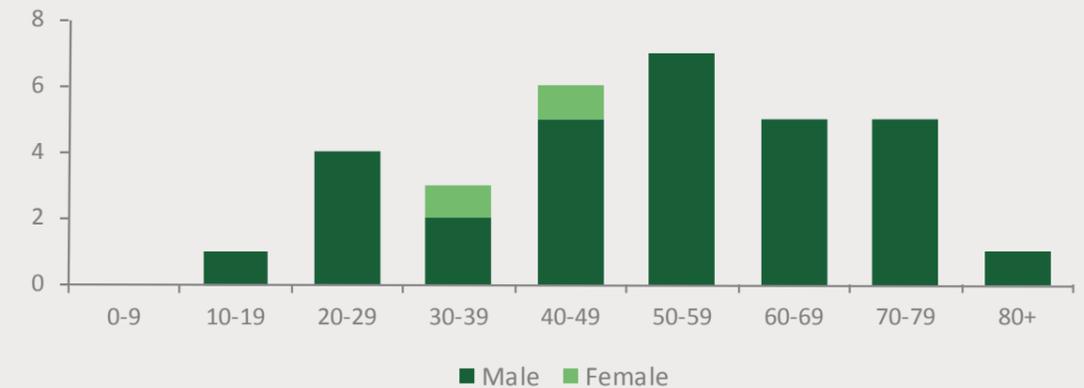
Australian road fatalities 2015



Australian cycling fatalities 2015



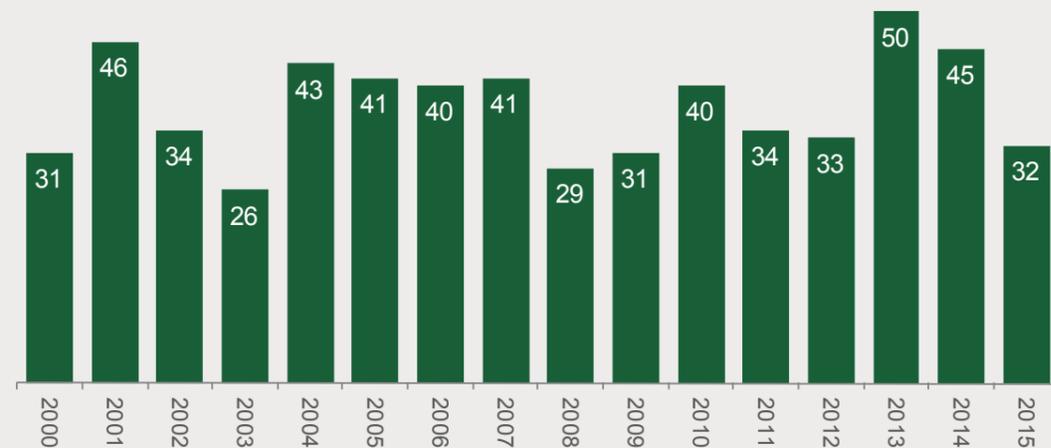
Australian cycling fatalities against age and gender 2015



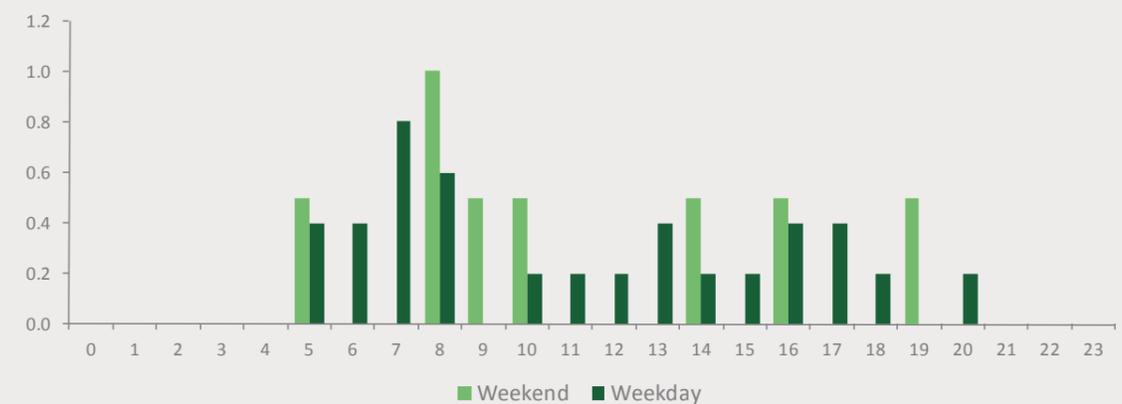
Australian cycling fatalities against speed limit 2015



Australian cycling fatalities 2000-2015



Australian cycling fatalities hourly distribution 2015



Source: Australian Road Deaths Database, www.bitre.gov.au/statistics/safety/fatal_road_crash_database.aspx (accessed 25 January 2016).

Source: Australian Road Deaths Database, www.bitre.gov.au/statistics/safety/fatal_road_crash_database.aspx (accessed 21 January 2015).

Australian cycling safety: casualties, crash types and participation levels.

In July 2015, BITRE published a report which presented analysis of cycling safety in Australia. Topics included:

- analysis of casualties by demographics.
- types of crash that result in cyclist injuries.
- recent trends in cycling participation.

Interestingly, while the total number of fatalities on Australian roads has been steadily decreasing over the past decade, annual hospitalisations have been increasing. This suggests that the survivability of crashes is improving (perhaps due to improved vehicle design) but that crash risk is not improving. Unfortunately, improvements in vehicle design that result in improved collision survivability for vehicle occupants do not usually have the same benefit for vulnerable road users such as pedestrians and cyclists.

The report noted that 90% of crashes involving a casualty cyclist involved a second vehicle and that in 86% of these cases, the second vehicle was a light car. While trucks/buses were involved in only 3% of bicycle injury crashes, they were involved in around 24% of bicycle fatality crashes.

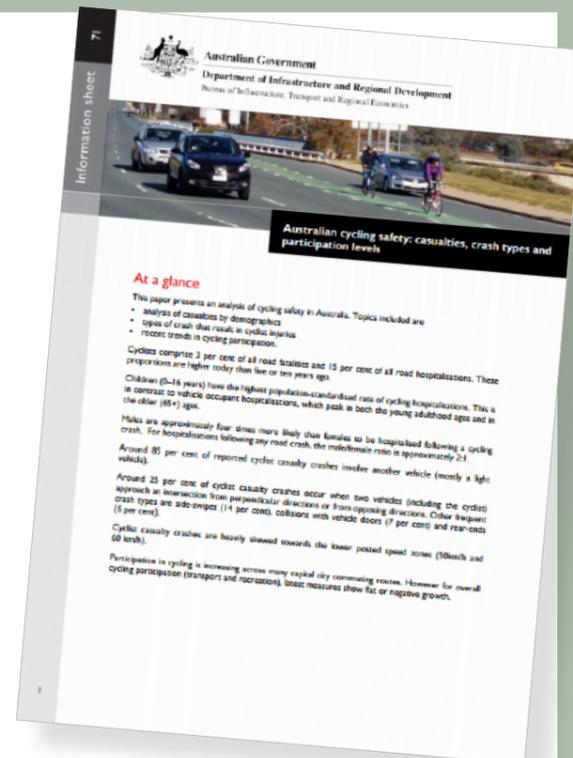
Only 10% of crashes involving a casualty cyclist were single vehicle (involved only the cyclist). As pedestrians are not deemed to be vehicles, single vehicle crashes include pedestrian-bicycle crashes. Of the single-vehicle cyclist crashes, only 5% involved a pedestrian. This result shows that only 0.5% of crashes that result in a cyclist casualty involve a pedestrian. Between 2008 and 2013, there were around 60 casualty crashes per year involving a cyclist and a pedestrian. Of these, 45% involved an injury to the pedestrian only, 13% involved an injury to the cyclist only and 40% involved injuries to both.

While most of Australia has all-age mandatory bicycle helmet laws, the Northern Territory allows people over the age of 17 to ride without a helmet under certain circumstances such as on bicycle paths and footpaths (footpath cycling is legal in the Northern Territory).

Despite more relaxed laws regarding footpath cycling and helmet use, the report found that the Northern Territory had the lowest proportion of both cycling fatalities and hospitalisations as a proportion of all traffic fatalities/crashes by jurisdiction in the period 2005-2014.

The low proportion of fatalities and hospitalisations in the Northern Territory cannot be explained due to low cycling participation. In fact, in 2015 the Northern Territory had the highest level of weekly (24.1%), monthly (32.6%) and yearly (46.1%) cycling participation in Australia*.

* Australian National Cycling Participation Survey 2015



Single-vehicle Crash Types (one cyclist only)

Non-collision (Straight) - Out of control	47%
Non-collision (Straight) - Off Left	10%
Non-collision (Curve) - Out of control	8%
On Path - Object/Animal	5%
Miscellaneous - Fell from vehicle	3%
Non-collision (Curve) - Off at right bend.	2%
Pedestrian - Nearside	2%
Other	20%

Total case count 1,765

Multi-vehicle Crash Types

Adjacent Direction - Cross Traffic	14%
Opposing Direction - Right Thru	12%
Manoeuvring - From Footway	10%
Same Direction - Side-Swipe	8%
On Path - Vehicle Door	7%
Manoeuvring - Emerge from Driveway	6%
Same Direction - Read-end	6%
Same Direction - Turning Side-Swipe	6%
Adjacent Direction - Right Near	6%
Adjacent Direction - Left Near	5%
Other	20%

Total case count 19,420

Key Theme: Permitting Cycling on Footpaths and Pedestrian Crossings

The Australian Road Rules do not permit adults to ride on footpaths, however children under 12 (and anyone accompanying a child under 12) are permitted to ride on footpaths. In 2015, the South Australian Government changed their road rules to permit people of all ages to cycle on footpaths. This change followed similar changes in previous years in Queensland, the Northern Territory and the ACT where adults are currently permitted to cycle on footpaths. The Western Australia Government is also reviewing cycling on footpaths for all ages.

This change reflects a general trend in Australia that is seeing the construction of more safe spaces for cycling and the relaxation of road rules to allow cycling in existing safe spaces. These changes are made in recognition of the fact that people's primary concern about cycling is the danger presented by motorised traffic. People feel safer when they are separated from motor vehicle traffic and will be more likely to cycle when given safe spaces.

South Australia: Cycling on Footpaths

South Australia have joined Queensland, the Northern Territory and the ACT in allowing people to ride bicycles on footpaths. From 25th October 2015, the road rules were changed to introduce a minimum distance for motor vehicles passing people on bicycles and the legalisation to allow footpath cycling.

The introduction of the new rules were accompanied by a communications campaign that highlighted the need for bicycle users to provide clear warnings, give way to pedestrians and to travel at a safe speed on footpaths.



Australian Capital Territory: Cycling on Crossings

The ACT already allows people of all ages to ride a bicycle on footpaths, however, from 1 November 2015 a two year trial allows cyclists to also ride slowly across signalised marked foot crossings, children's crossings and pedestrian crossings (at no more than 10km/h). Cyclists must only ride on a marked foot crossing if the crossing is showing a green bicycle/pedestrian light.

Cyclists will be required to slow to 10km/h on the approach to the crossing, check for any approaching traffic and be prepared to stop. This is to allow motorists to see and respond to the cyclist before they make the crossing. Cyclists must also keep to the left of the crossing and give way to any pedestrian on the crossing.

The change to allow cyclists to ride across crossings is intended to provide amenity for cyclists, without compromising safety for cyclists or any other road user.



Key Theme: Introducing Minimum Passing Distance Legislation

In 2014, Queensland began the trial of “minimum passing distance” legislation, a new law that requires cars to provide a certain amount of clearance when overtaking a person riding a bicycle. In 2015, several other jurisdictions have adopted similar laws, or will be trialling similar laws. These changes have generally been introduced as part of a package of reforms that address other cycling-related issues such as allowing cycling on footpaths.

Typical “minimum passing distance” legislation requires that a motorist must allow the following clearance between their motor vehicle and a bicycle rider as they pass:

- ☘ a lateral distance of not less than 1 metre if the applicable speed limit does not exceed 60 km/h and
- ☘ a lateral distance of not less than 1.5 metres if the applicable speed limit exceeds 60 km/h.

New South Wales: Go Together

The NSW Government announced in December 2015 that the state would trial minimum passing distance laws from the 1st March 2016. Drivers found to have broken the new law would incur a \$319 fine.

This “minimum passing distance” legislation requires that a motorist must allow the following clearance between their motor vehicle and a bicycle rider as they pass:

- ☘ a lateral distance of not less than 1 metre if the applicable speed limit does not exceed 60 km/h and
- ☘ a lateral distance of not less than 1.5 metres if the applicable speed limit exceeds 60 km/h.



South Australia: Wider of the Rider

The South Australian Government introduced a package of road rule changes on the 25th October 2015. The package of changes included:

- ☘ minimum passing distance legislation which also allows motorists to cross centre lines where safe to do so in order to comply with the minimum passing distance requirements.
- ☘ footpath cycling legislation that permits people of all ages to cycle on footpaths provided that they keep left unless impracticable to do so, give way to pedestrians and give a warning to pedestrians or others using the footpath if necessary.

Tasmania: Distance Makes the Difference

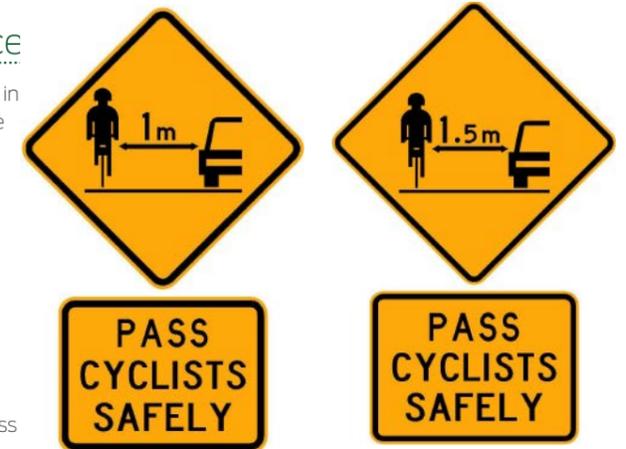
The Tasmanian Government introduced new signs in February 2015 that encourage motorists to observe a minimum passing distance when overtaking people on bicycles.

The signs aim to:

- increase driver awareness of the presence of cyclists on roads popular with cyclists; and
- encourage motorists to pass cyclists safely, but only when safe to do so.

To complement this, changes have been made to the Tasmanian road rules to allow motorists to cross centre lines to pass cyclists, when safe to do so.

The Tasmanian Government also produced a campaign using the message “Distance makes the difference” to communicate the desired behaviour.



Australia Capital Territory: A metre matters

The ACT Government introduced a two year trial of safer cycling reforms on 1 November 2015. The trial follows an ACT Legislative Assembly inquiry into vulnerable road users that identified a range of measures that could be introduced in the ACT to improve safety for cyclists and other road users.

Motorists are now required to provide a minimum distance of one metre when overtaking a cyclist in speed zones at or below 60km/h and one and a half metres in speed zones above 60km/h.

To enable drivers to provide the minimum overtaking distance on narrow roads or roads with narrow lanes, motorists are allowed to cross centre lines, straddle lane-lines and drive on painted islands, provided the motorist has a clear view of any approaching traffic and that it is safe to do so. Where there is no clear view ahead or it is not safe to provide the distance, motorists need to slow down behind the cyclist and wait until it is safe to pass.



Key Theme: Reviewing Cycling-Related Laws and Penalties

Over the past few years, several Australian jurisdictions have examined bicycle-related laws and other issues through a variety of mechanisms such as parliamentary inquiries, citizen's juries and through the development of action plans.

These reviews have looked at minimum passing distance, bicycle helmet laws, fines for cycling offences and a range of other issues. In 2015, a number of jurisdictions again investigated bicycle-related laws.

Review of Bicycle Helmet Legislation

Australia led the world with the introduction of mandatory bicycle helmet laws across Australian jurisdictions in the late 1980s and early 1990s after the Federal Government made a portion of State Government funding contingent on the introduction of the laws in each state. While other Australian safety innovations such as mandatory seat belt laws have been adopted worldwide, very few countries have adopted Australia's mandatory bicycle helmet laws. The reluctance to adopt mandatory helmet laws internationally is due to concern that these laws are a barrier to increasing cycling participation.

Since the introduction of bicycle helmet laws in Australia, the Northern Territory relaxed the laws in the early 1990s to allow cyclists over 17 years of age to ride on footpaths and shared paths without a helmet.

The ACT recently announced that they will "investigate the risks and any potential benefits of allowing people to ride bicycles without a helmet in low speed environments."

In 2013, the Queensland Parliamentary Inquiry into Cycling Issues recommended a trial and evaluation of changes that would exempt cyclists aged 16 years and over from the mandatory helmet road rule when riding in parks, on footpaths and shared/cycle paths and on roads with a speed limit of 60 km/h or less. The exemption would also apply for those aged 16 years and over using a bicycle from a public or commercial bicycle hire scheme. The recommendations were not adopted by the Queensland Government.

In 2015, the Senate Economics References Committee started an inquiry into *Personal choice and community impacts*. One of the areas of inquiry was: *bicycle helmet laws, including any impact on the health, enjoyment and finances of cyclists and non-cyclists*.

At the dissolution of the Senate and the House of Representatives on 9 May 2016 for a general election on 2 July 2016, all parliamentary committees ceased to exist. As this inquiry had not been completed by the Senate Economics References Committee by this date, the inquiry lapsed.

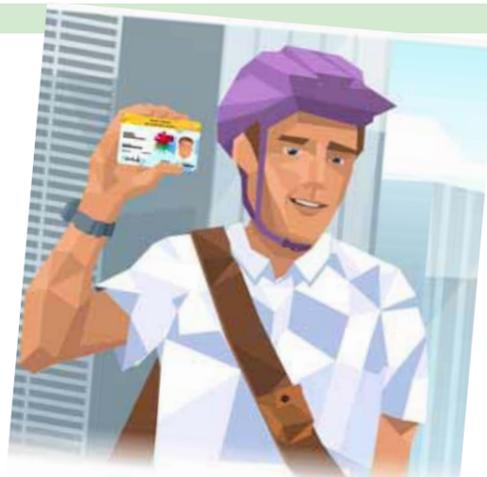
New South Wales: Go Together

The NSW Government announced in December 2015 that the state would trial minimum passing distance laws from the 1st March 2016. Drivers found to have broken the new law would incur a \$319 fine.

The trial will also be accompanied by several other measures which are designed to make cyclists more accountable for their behaviour on the road.

From 1 March 2016, all bicycle riders aged 18 and over must carry photo identification. Fines for five offences will increase so that bicycle riders receive the same fines as motorists for high risk behaviour. Increased penalties will apply to bicycle riders who are caught:

- ⦿ Not wearing a helmet (up from \$71 to \$319)
- ⦿ Running a red light (up from \$71 to \$425)
- ⦿ Riding dangerously (up from \$71 to \$425)
- ⦿ Holding on to a moving vehicle (up from \$71 to \$319)
- ⦿ Not stopping at pedestrian crossings (up from \$71 to \$425)



Penalties for other bicycle rider offences will also increase from \$71 to \$106, including the offence of riding at night without lights. The announcement also included a recommendation that bicycle riders allow pedestrians a metre of space on shared paths, where possible.

Victoria: Review of Victorian Cycling Related Road Rules & Legislation

As part of the Victorian State Government's Road Safety Action Plan 2013-2016, a review of cycling-related road rules and legislation has been conducted. The review involved a literature review, stakeholder interviews, crash data analysis and both a council and community survey.

Community participation in the process was strong, with 10,500 Victorians responding to the survey. The independent consultant's summary report was released in March 2015.

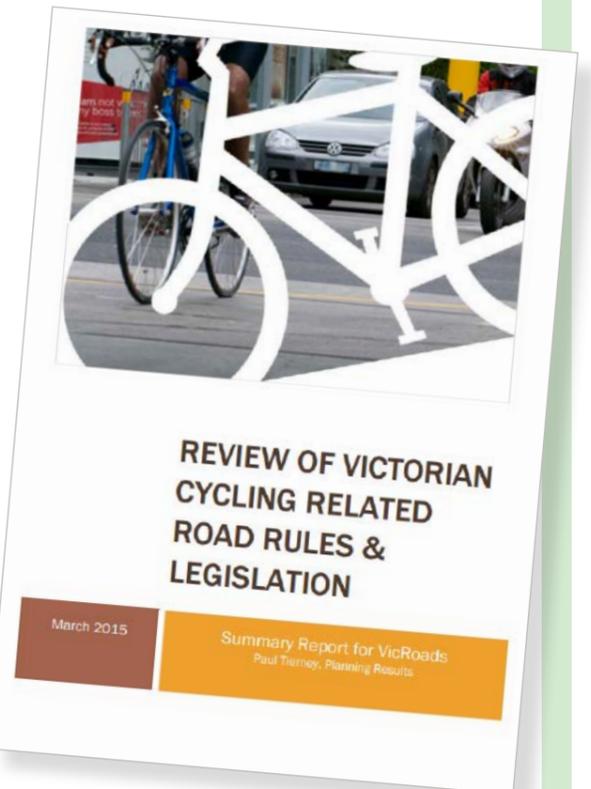
Looking at crash data from a 10-year period (from 2004 to 2013), the report found that:

The most common bicycle related crash type is DCA 121 which is failure of a right turning vehicle to give way to an oncoming vehicle travelling straight through an intersection. The second most common DCA is 110, which is a failure of a vehicle to give way at a cross intersection, and the third is DCA 163 which is caused when a driver opens their door into the path of a passing vehicle, an incident more commonly known in bicycle riding circles as 'car dooring'.

The report made many recommendations including road rules suggested for minor amendment, more complex rule amendments requiring further consideration, and a range of rules requiring further communication.

VicRoads released an update on the Cycling Road Rules Review in November 2015 which provided clarity on the positions held by VicRoads. The update included the following 4 steps:

1. Work with Government to consider amending particular road rules that have been recommended for change to: allow infringement notices to be issued to bike riders committing mobile phone use offences, rather than having to take them to court; update rules to clarify that motorists must give way to bike riders crossing on a green bike light; delete the rule that requires bike carriers to be removed from the back of cars when not carrying a bicycle.
2. No immediate action: keep the current riding two abreast rule as it stands, keep a watching brief on the overtaking rules in other jurisdictions.
3. Investigate the following five issues:
 - a. Left-hand turn rules are confusing and don't work well together.



- b. Riding on footpaths for special purposes (i.e. riding with children in baby seats, and allowing anyone 12 years and over to accompany children under 12 years old on footpaths, instead of allowing adults only to accompany children under 12 years old).
- c. Rules for bike riders on multi-lane roundabouts.
- d. Bicycles are not currently permitted in bus lanes unless signed otherwise.
- e. Improve work site traffic management practices to be improved to better accommodate pedestrians and bicycles.
4. Deliver an education campaign to communicate the 20 road rules that are not well known or need better compliance.

The findings from current investigations will be published in 2016 and will be used to form a position on each road rule proposed for amendment. These positions will be presented to the Government for their response, with a view to implementing solutions that improve safety for all Victorian road users.

5

Monitoring & Evaluation



The National Cycling Strategy seeks to improve the monitoring and evaluation of cycling programs as well as to develop a national decision-making process for investment in cycling projects. A key component of this strategy is to monitor the progress of the National Cycling Strategy against the goal of doubling cycling participation over the life of the Strategy.

The Australian Bicycle Council conducted the National Cycling Participation Survey in 2011, 2013 and 2015. This survey forms the primary tool to measure the results that have been achieved by the National Cycling Strategy against the target of doubling cycling participation.

During 2015, work progressed on the development of the Active Transport component of the National Guidelines for Transport System Management, with the draft guidelines to be published in 2016. Active Healthy Kids Australia published a report card on physical activity in children which highlights the trend in developing countries of decreasing physical activity. Following the publication of South Australia's Citizen's Jury into Sharing the Road Safely in 2014, South Australia has published several updates on the progress achieved in meeting the recommendations.

Australian Infrastructure Statistics - Yearbook 2015

This report was delivered by the Bureau of Infrastructure, Transport and Regional Economics in 2015. The report aims to provide "a single, comprehensive annual source of infrastructure statistics for use by policymakers, industry leaders, transport analysts and the wider Australian community."

The report provides transport information such as transport infrastructure investment, road investment, vehicle kilometres travelled (VKT), vehicle ownership, and vehicle sales. Road investment is broken down into federal, state and local government expenditure which provides a useful benchmark with which to compare spending on bicycle-related projects.

The latest annual total for road-related expenditure by all public and private sector sources was \$26.3 billion in 2013-14. With a total of 18.0 million vehicles and 16.6 million license-holders in Australia, road expenditure is approximately \$1600 per license holder.



Australian National Cycling Participation Survey

In order to monitor progress towards the National Cycling Strategy goal of doubling cycling participation between 2011 and 2016, the Australian Bicycle Council carries out a biennial survey called the Australian National Cycling Participation Survey. The survey has been held in 2011, 2013 and in 2015.

The 2015 results show that:

- Western Australia, the Northern Territory and the Australian Capital Territory have higher cycling participation than the remaining five states. Higher cycling participation rates in these jurisdictions is primarily due to high levels of transport cycling. Surprisingly, these three jurisdictions have the lowest level of recreational cycling, while still having the highest level of overall cycling participation.

- Cycling participation has not increased or decreased significantly since 2011.
- Cycling participation is generally higher in regional areas than in metropolitan areas.
- More males ride than females and the imbalance becomes more pronounced with age. There is a large drop in female cycling participation in the teenage years.
- People who had cycled in the past week in Victoria, Queensland and Tasmania had cycled for longer than those who had cycled in other jurisdictions.
- Bicycle ownership is strong, with more than 50% of households owning at least 1 bicycle.

Cycling Participation in 2015

Percentage who cycled in the past week / month / year.



Cycling Participation in 2011, 2013 and 2015

Percentage who cycled in the past week



Source: Australian National Cycling Participation Survey 2015

Cycling Participation in Metro vs Regional Areas in 2015

Percentage who cycled in the past week.



Cycling Participation in Metro Areas in 2015

Percentage who cycled in the past week / month / year.



Cycling Participation in Regional Areas 2015

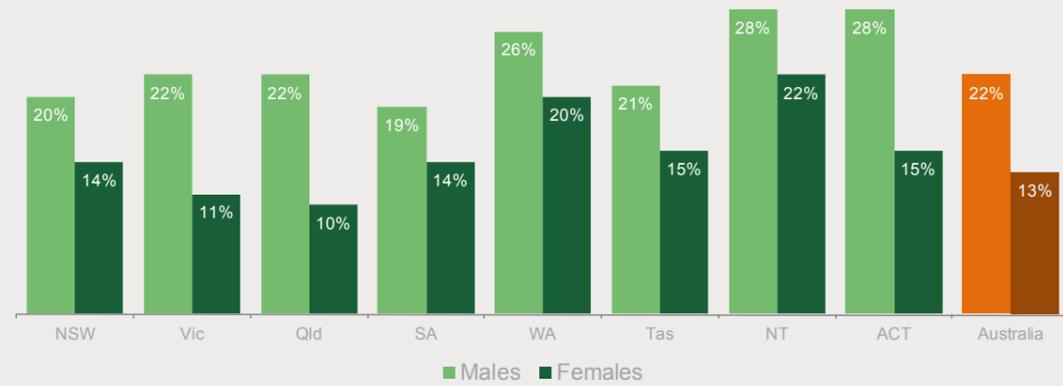
Percentage who cycled in the past week / month / year.



Source: Australian National Cycling Participation Survey 2015

Cycling Participation of Males vs Females in 2015

Percentage who cycled in the past week.



Cycling Participation for Recreation vs Transport in 2015

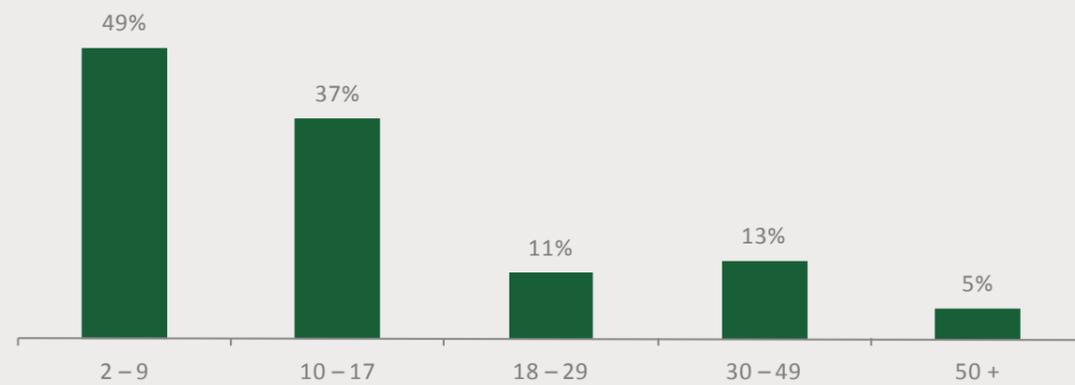
Of cycling in the past week, what percentage was for recreation or transport



* NSW Data is from regional NSW only.

Cycling Participation for Different Age Groups in 2015

Percentage who cycled in the past week.



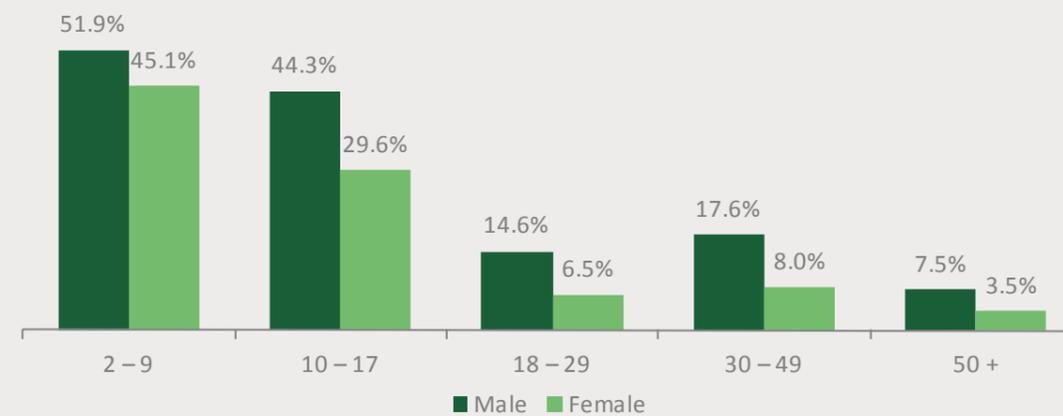
Cycling Participation Average Weekly Duration in 2015

For those who cycled in the past week, how many minutes were cycled.



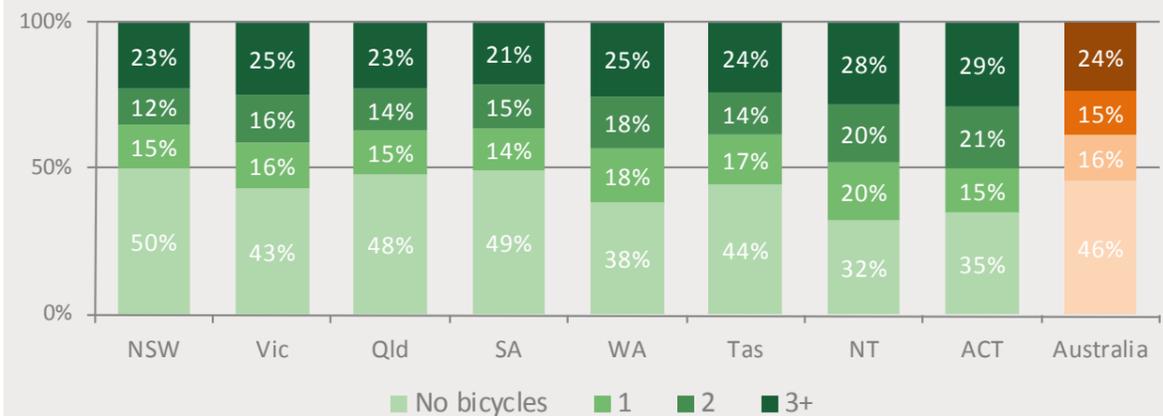
Cycling Participation for Different Age Groups and Genders in 2015

Percentage who cycled in the past week.



Bicycle Ownership in 2015

Number of bicycles per household.



Source: Australian National Cycling Participation Survey 2015

Source: Australian National Cycling Participation Survey 2015

Active Healthy Kids Australia - The Road Less Travelled 2015 Progress Report Card

Active Healthy Kids Australia (AHKA) is a collaboration among Australian children's physical activity and health researchers. In 2015, AHKA published The Road Less Travelled which aims to:

- Encourage all Australians to increase physical activity participation and reduce sedentary behaviours among the children and young people of today and tomorrow.
- Inform policy changes and decision-making across various sectors with the aim of increasing physical activity participation.
- Highlight where more research is needed to better understand the physical activity of Australian children and young people.

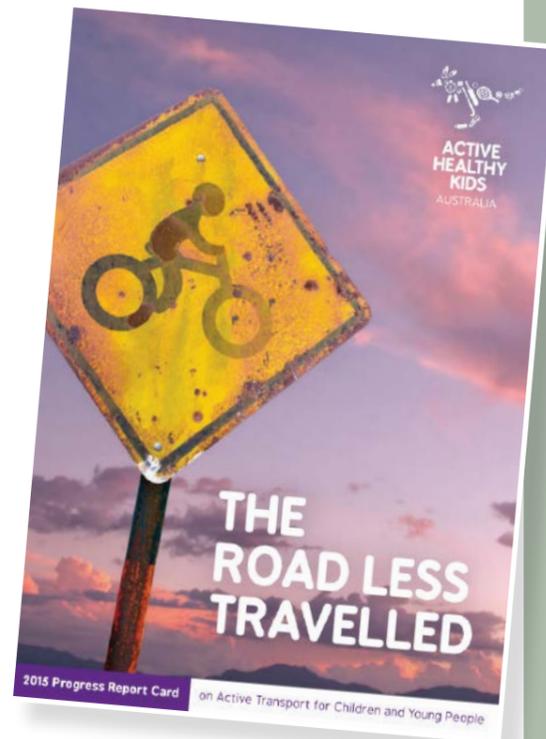
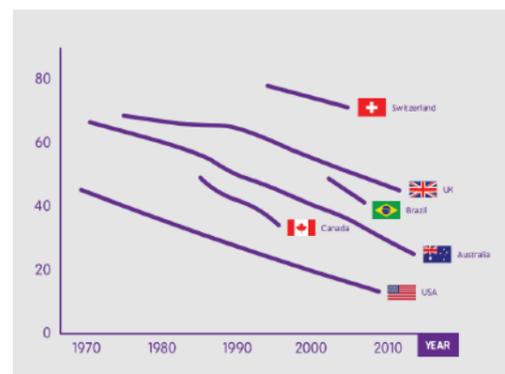
The Report provides guidance on recommended activity levels and what is the appropriate age for children to travel to school independently. The Report provides information on how parents, schools and the built environment can help to facilitate healthy activity.

The Report gathers data from a number of National and State-based surveys conducted from 2009 onwards. The grade assigned to Australia's active transport levels was based primarily on information from the national datasets.

The Report provides a grading of "C" for childhood active transport in Australia and found that:

"Typically, only half of Australia's children and young people use active transport at least once per week to travel to and/or from school just below half of primary school students and just above half of secondary school students using active transport to and/or from school at least once per week."

These findings continue a long-running trend of decreasing active transport participation in the developed world over the past 30-40 years. The below graph (Figure 2 of The Road Less Travelled) shows these declines across Switzerland, Brazil, Canada, the UK, the US and Australia.



The decreasing trend in active transport participation for school children is related to the fact that *"the distances needed to travel to school have increased with time due to continuing urban sprawl, schools amalgamating and the increase in school size. More parents are also choosing to send their children to schools (both government and private) outside of their designated school zones."*

However, the report identified that there are ways we can get more kids to cycle:

"90% of Australian households have at least one child's bike in working order but only 11% of children currently ride a bike to/from school with only 25% of those kids who do not currently ride to school, having ever ridden a bike to school before. 87% of parents are confident in their ability to teach their child how to ride a bike but only 45% of parents believe it is important that children receive formal cycle training. For 42-51% of parents the main reasons why they did not allow their child to ride to and/or from school was that they were concerned with stranger danger and the dangers posed by traffic and other road users, and yet only 11% of children have ever received formal cycle training."

South Australia: Sharing the Road Safely Citizen's Jury

In 2014, a Citizen's Jury was established in South Australia to answer the question: *"Motorists and Cyclists will always be using our roads. What things could we trial to ensure they share the roads safely?"* The Citizen's Jury released a report in November 2014 outlining a set of recommendations to help answer the question.

On 22 January 2015, the South Australian Premier presented the South Australian Government's response to the Sharing the Roads Safely Citizen's Jury report.

Since the release of the Government response, three "update reports" have been issued (Apr 2015, July 2015 and Jan 2016). The latest update report provides the status of a variety of initiatives associated with the findings of the Citizen's Jury.

The following measures have been implemented:

- Legislate to define a minimum overtaking distance.
- Trial an integrated safe cycling road rule education program.
- Combine the two handbooks (The Drivers Handbook and Cycling and the Law) into one publication.
- Amend the learner's test to include questions on bicycles.
- Legislate to allow cycling on footpaths for all ages.

The following measures will be applied on an ongoing basis:

- Promote road rules through the EzyReg website and through a road rules quiz campaign.
- Make bicycle paths/lanes continuous.
- Maintain bicycle lanes/paths regularly.
- Apply a realistic standard width for bicycle lanes.
- Plan for cycle paths and lanes on future roads.
- Extend and connect existing Greenways and bicycle tracks.
- Install green bicycle storage boxes at major intersections.
- Continue and enhance initiatives relating to visibility.
- The construction of bicycle cages at public transport interchanges is not currently underway as there are no upgrades currently planned.



The following measures are being trialed:

- Trial the use of Audio Tactile Line Markings (ATLM) on bicycle lanes to gauge their effect on lane positioning and cyclist's perception of safety.
- Trial interventions designed to reduce traffic speeds such as pavement markings and variable speed limit signs.
- Trial interventions to alter traffic flow.

The following measures are being developed:

- A creative brief has been developed for a road safety campaign targeting cycling safety.
- MAC is working with Bike SA and the LGA SA on the development of a "safe cycling environment" award scheme.
- The installation of bicycle racks on the front of buses is pending further investigation on the feasibility and potential impacts.



6 Guidance & Best Practice

The National Cycling Strategy seeks to support the development of nationally-consistent guidance that enables stakeholders to use and share best practice across jurisdictions. The focus is on providing consistency where standardisation is beneficial or where economies of scale can be achieved without impacting on the flexibility of states, territories and local councils.

In 2015, Austroads published a research report on bicycle wayfinding signs that provides recommended content for several Australian Standards and Austroads Guides. A new version of Australian Standard 2890.3 on Bicycle Parking Facilities was published and other related guidance are currently being revised to reflect the changes to the Standard. Queensland published several guides in the past two years that focus on providing protected infrastructure for bicycles.

In 2015, a number of conferences were held that drew international and national audiences. The biennial Asia Pacific Cycle Congress was held in Brisbane in conjunction with the Brisbane Bicycle Fringe Festival. Bike Futures conferences were held in New South Wales, Victoria and Tasmania. The Inaugural National Cycling Summit was held in Canberra. Western Australia held a Cycling Imagineering Workshop.

Growing Cycling Tourism in Victoria

Tourism Research Australia published a report on "Growing Cycling Tourism in Victoria". The key findings were:

- Although the cycle tourism market is relatively small, those involved are highly engaged.
- Respondent awareness and knowledge of cycle tourism is low.
- Many would consider taking a holiday involving cycling in the future, with Victoria the most commonly preferred destination.
- Online information can generate awareness and educate the market on Victoria as a cycling destination.





Key Theme: Wayfinding Guidance

Wayfinding signs are a critical element of any transport system, providing information that helps people to navigate the available network. Wayfinding signs are particularly important for bicycle networks as they help people to make use of bicycle infrastructure and to avoid barriers such as steep hills, busy roads and impermeabilities. Wayfinding signs play an important role in legitimising cycling and indicating to all road users that cycling is a viable option for a variety of trips.

In the past, varying bicycle wayfinding guidance has been developed by local councils and state/territory jurisdictions, leading to inconsistencies across jurisdictional boundaries.

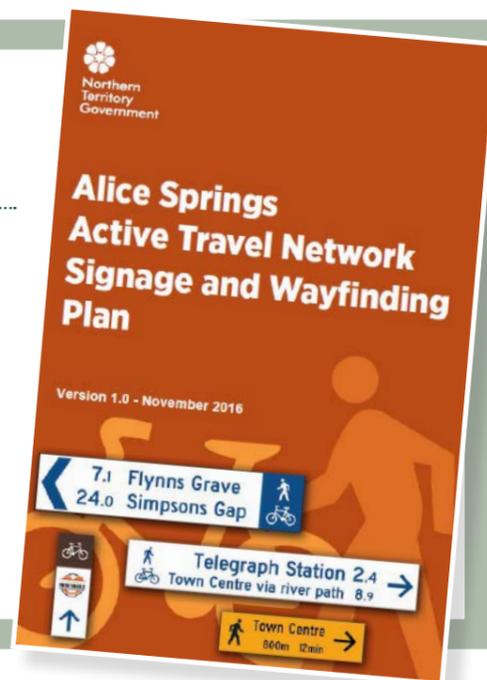
In 2015, Austroads published two research reports on bicycle wayfinding signs. These reports provide the basis for the adoption of a consistent methodology for bicycle wayfinding planning and design across Australian Standards and Austroads Guidance.

The new guidance has already been utilised in the development of the Alice Springs Signage and Wayfinding Plan shown below.

Alice Springs: Active Travel Network Signage and Wayfinding Plan

Guided by the Austroads Bicycle Wayfinding Research Report, the NT Government has worked with local government and community representatives to develop an Alice Springs Signage and Wayfinding Plan. The Plan aims to provide a consistent and coordinated directional signage system for cycling and walking routes in and around Alice Springs.

A sign design manual has also been developed to provide technical guidance for the planning and installation of a signage system across the network. Implementation of the Plan will assist riders and walkers to easily locate destinations, build user confidence in the network, increase personal safety and improve information and access to community facilities.



Austroads: Bicycle Wayfinding Literature Review

This report documents the bicycle directional signs and wayfinding systems currently in use in seven major cycling nations and in seven Australian and New Zealand jurisdictions. It provides a detailed analysis of the way directional signs are used in these jurisdictions, studying issues such as:

- relevant guidelines
- sign types
- layout and design of signs (including colour and typeface)
- route branding and numbering
- marking of named facilities
- the use of map signs
- pavement markings for wayfinding assistance
- sign system planning methodology
- sign mounting systems
- innovative and useful sign applications and other implementation issues.

Austroads: Bicycle Wayfinding

This report provides an analysis of some of the issues raised in the Austroads Bicycle Parking Literature Review (shown above) and presents recommendations for bicycle wayfinding signs in Australia.

The recommendations are provided as detailed guidance to be included in future revisions of relevant Australian Standards and Austroads Guides.

Appendix A provides recommended content for AS1742.9 – *Manual of Uniform Traffic Control Devices – Bicycle Facilities*. This includes basic sign elements such as colours, reflectorisation, bicycle stencil design and the sign families: primary, local, tourist and detour.

Appendix B provides recommended content for *Austroads Guide to Traffic Management Part 10: Traffic Control and Communications Devices*. This content includes sign types, route types, sign plans, sign layouts, sign schedules and sign maintenance.

Appendix C provides recommended content for AS1743 *Road signs – Specifications*. This content includes fonts and detailed dimensioning for graphics and sign layouts.

These guides and standards are currently under revision and are due to be published in 2016.



Photo courtesy of Harry Seidler & Associates and Dirk Meinecke

Key Theme: Bicycle Parking Guidance

The release of the new Australian Standard for Bicycle Parking (AS2890.3) is a significant event that requires other organisations to consider and revise all guidance relating to bicycle parking. The standard affects the compliance of many developments that are required to provide bicycle parking "in accordance with the standard" as specified in local government Development Control Plans and other planning documents.

Austroads is currently updating related guidance such as the *Austroads Guide to Traffic Management Part 11: Parking* and will publish this document (as well as supplementary guidance) in 2016.

Standards Australia: AS2890.3:2015 Bicycle Parking

This Australian Standard provides planners, especially those in local government, with a Standard that will enable them to provide safe, secure and convenient parking for bicycles to suit different types of users.

Changes of note in this revision include:

- (a) Introduction of a bicycle spacing envelope.
- (b) A new requirement for a minimum of 20% of ground level (horizontal) bicycle parking spaces in any bicycle parking facility.
- (c) Further guidance for off-carriageway and on-carriageway design requirements.
- (d) Updated typical bicycle dimensions.
- (e) Information about types and characteristics of various styles of bicycles and tricycles.
- (f) Additional guidance for clearance from kerb to parking facilities.
- (g) Guidance for ramp access to underground and above ground parking.



Key Theme: Protected Bicycle Facility Guidance

Developed nations that have the highest levels of cycling participation have extensive networks of protected bicycle facilities. Protected facilities lower the greatest barrier to cycling which is the risk presented by motorised vehicles.

Australian design guidance has begun to reflect a growing need for safe, separated cycleways that protect users and encourage people of all ages and abilities to cycle more often. Below are a section of such guides.

Queensland TMR: Selection and Design of Cycle Tracks

This document provides guidance on how to separate bicycle traffic mid-block and at intersections on urban roads. This will help to achieve a direct, safe and comfortable cycle network for use by people of all ages and abilities.

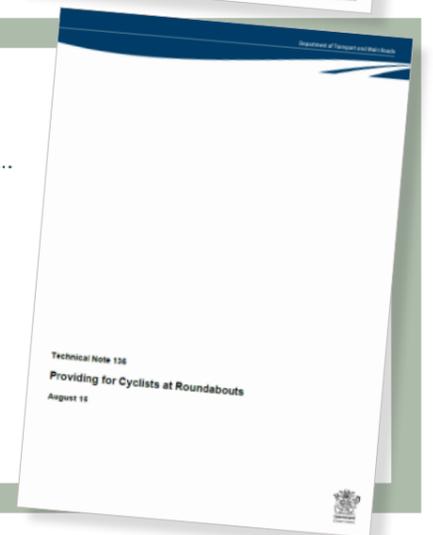
This document supplements information provided in the Austroads Road Design and Traffic Management guides by providing detailed guidance on bicycle facility selection. It has been prepared to support Transport and Main Roads' Cycling Infrastructure Policy and to provide additional guidance to local government.



Queensland TMR: Providing for Cyclists at Roundabouts

This Technical Note provides guidance for designers and looks to improve bicycle safety at the over 3,400 existing roundabouts in Queensland. Roundabouts represent about 4% of all intersections on the Queensland state controlled road network and approximately 15% of all bicycle social crash costs at intersections on state controlled road.

The guidance contained in this Technical Note is targeted at brownfield sites, however some of the treatments may be applicable to greenfield roundabout projects. In some situations other intersection types besides roundabouts may be safer and more appropriate for cyclists.



City of Sydney: Standard Cycleways Treatment Overview

The City Cycle Strategy and Action Plan 2007-2011 identified 'bi-directional separated cycleways' as the typical treatment for the local and regional bike network. Other treatments are also proposed to respond to the variety of contextual constraints that exist on Sydney's streets. These include such issues such as varying road widths, traffic volumes and bus routes as well as pedestrian movement.

This document collates some of the Standard Cycleway treatments used by the City of Sydney. The treatments outlined in this document are to be used as a guide to the design of cycleways within the City of Sydney.

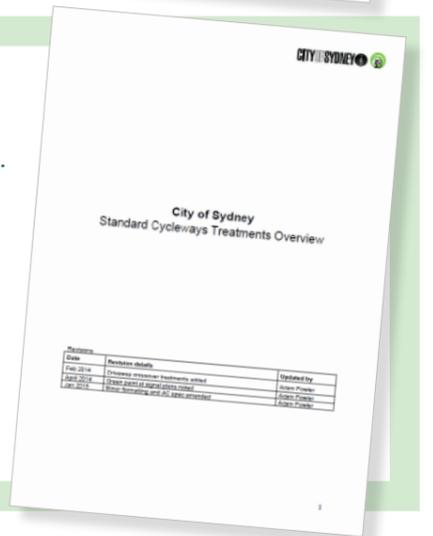




Photo courtesy of the Asia Pacific Cycle Congress

Key Theme: Building Practitioner Communities

For many years, the Australian bicycle planning practitioner community has been building expertise in best-practice planning for bicycles through a number of conferences, seminars and working groups. In contrast to many bicycle conferences which focus on the retail bicycle market, these conferences focus on building skills within the planning, policy, transport, health, tourism and other related areas with a view to encouraging bicycle use.

In 2015, Queensland hosted the Asia-Pacific Cycle Congress, bringing together bicycle planning practitioners from across Australia and the rest of the Asia-Pacific region. Sydney, Melbourne and Launceston hosted Bike Futures conferences. Canberra hosted the inaugural Australian Cycling Summit. Western Australia hosted a Cycling Imagineering Workshop.

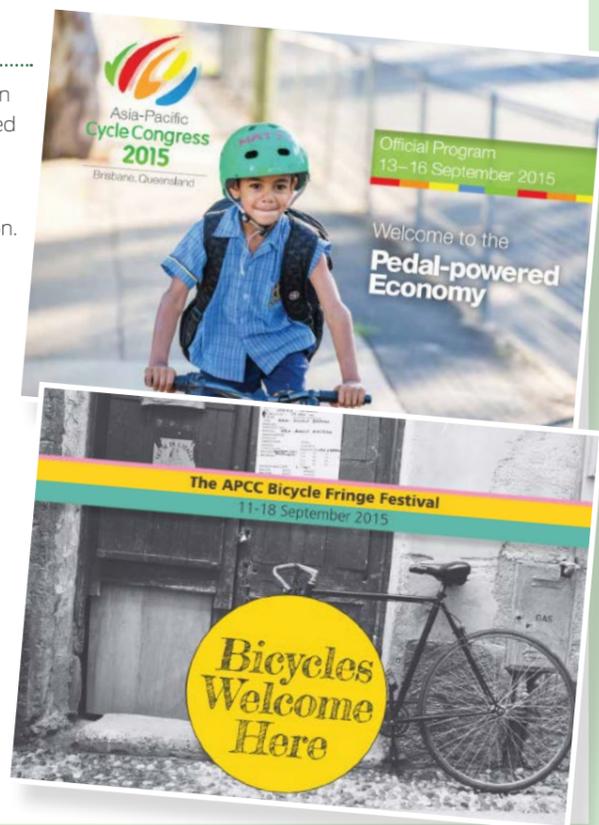
Asia Pacific Cycle Congress

The third Asia Pacific Cycle Congress (APCC) was held in Brisbane in September 2015. The 2015 Congress focused on the “the pedal-powered economy” and explored the following issues:

- ⦿ Economic benefits from cycle tourism and innovation.
- ⦿ Health and safety benefits of cycling.
- ⦿ New opportunities and markets.

The APCC was headlined by an impressive array of speakers and guests who facilitated a diverse range of activities including keynote addresses, spin cycle presentations and a Q & A session hosted by the ABC's Tony Jones.

The Bicycle Fringe Festival was held in conjunction with the Asia Pacific Cycle Congress, providing rides and events throughout Brisbane during the week from the 11th to the 18th September. Events such as the “Bicycles Welcome Here” mass group ride, Bicycle Film Festival and the City Cycle Twilight Tours provided social events for congress participants and all those looking to enjoy the festival atmosphere.



Inaugural Australian Cycling Summit

Australia's cycling advocacy organisations and industry leaders united at the inaugural Australian Bicycle Summit, held at Parliament House in Canberra in March 2015. Eleven bicycle advocacy organisations from around Australia came together at the summit, which highlighted the economic, social and environmental benefits of cycling and identified solutions to generate the investment and policies required to get more Australians cycling.

The Summit Parliamentary Dinner had significant representation from MPs and Senators who heard from global travel demand expert, Rose McArthur (Mott McDonald), and Director of Engineering Services (and Active Transport expert) at the City of Gold Coast, Alton Twine. The Ambassadors of the Netherlands and Denmark attended in support of Australia's effort to raise the profile of transport cycling in this country.

The Summit was followed by an E-bike test event at Parliament House and a series of meetings with Ministers, Shadow Ministers, MPs and Senators in which the national advocate organisations presented their joint proposals for action to promote greater participation in cycling.



Western Australia: Cycling Imagineering Workshop

From 15 to 18 March 2015, the Western Australian Department of Transport and the RAC hosted a visit by two expert Dutch Cycle Planners/Designers for the purpose of exploring innovative cycling solutions for Perth and Regional Cities/Towns. The visit emanated from a cycling study tour of the Netherlands in 2014 in which the Department of Transport participated.

The visit consisted of three planning days and a full day Imagineering Workshop. The planning days provided the Dutch experts with an overview of the Perth context and an opportunity to experience Perth on a bicycle. The workshop and associated Ministerial Roundtable Dinner resulted in the initiation of the \$3m Demonstration Safe Active Streets Program for 2015/16.



Bike Futures

In 2015, Bike Futures professional development conferences were run by Bicycle Network in New South Wales, Victoria and Tasmania. Themes for the conferences included:

- ⦿ Connecting Australia's next great cities.
- ⦿ Building support in difficult conditions.
- ⦿ Getting children riding again.
- ⦿ Tourism, jobs, economic diversity and community.

Keynote speakers included Gabe Klein (Chicago and Washington D.C), Kyle Wagenshutz (Memphis TN), Dougal List (New Zealand National Cycling Manager) and Evan Freshwater (Manager of the NZ Cycle Trail).

