



ACT Cycling Participation

Cycling Participation and Bicycle
Tourism Opportunities in the ACT



December 2022



About the NRMA

The NRMA represents over 2.7 million Australians in NSW and the ACT, making it one of the largest tourism and transport companies in Australia. We provide motoring, transport and tourism services to our Members and the community.

We have focused on better transport infrastructure since the beginning, when our founders lobbied for improvements to Sydney's Parramatta Road back in 1920. Independent advocacy is the foundation activity of our organisation and remains critical to who we are today.



Pedal Power
any bike, any where, any time

About Pedal Power

For over 40 years Pedal Power ACT has championed the cause of cycling in Canberra – starting at a protest ride in 1974 and growing into Canberra's largest cycling organisation.

We now represent around 6,000 members, and our team of paid staff is supported by hundreds of volunteers. Our volunteers are the heart and soul of Pedal Power, giving their time, skills and passion to support cycling in Canberra – from board members to event volunteers, social ride leaders and our advocacy team.

No matter what kind of bike we ride, we all share the love of cycling in our beautiful bush capital, and a commitment to our mission of getting more Canberrans riding more often.



Introduction

Cycling has an increasingly important role to play in our cities as people embrace active lifestyles and environmentally friendly transport modes. People cycle for a number of different reasons and motivations:

- Fun and fitness
- As an alternative to driving
- As an environmentally friendly way of getting about.

Cycling fills the mobility gap for distances which are perceived as too far to conveniently walk (>~1km), but too short to consider as a structured journey utilising public transport services (<~3km). It also offers great first and last mile coverage for patrons using multiple transport mode to complete their journeys.

Cycling can support travelling longer distances thanks to the range and convenience offered by electric bicycle (e-bike), an emerging transport class where a battery is incorporated into the bicycle. E-bikes supplement the bicycle's power and reduces the effort required by riders. Also, the pedal assist feature enable riders to travel faster and more conveniently on flat ground and uphill. The battery will usually cut out on fast downhill sections.

Cycling is also playing an increased role in tourism. Some cities have created frameworks to establish bicycle tourism, which incorporates recreational tourism, adventure tourism and sustainable tourism.

There is generally a 10x rule with private motor vehicle driving – i.e. 10% of journeys are under 1km, 20% of journeys are under 2km, 30% of journeys are under 30km and so on. If a small number of shorter journeys could be displaced by cycling, this could reduce motor vehicle congestion and boost parking availability.

Cycling can also support Governments to design better public transport trunk corridors. Take the case of Erindale shopping centre, a sub-regional shopping centre. The catchment area of the shopping centre can be significantly increased by mapping an 8-minute walk and an 8 minute cycle corridor.



Data shows that a large proportion of the population are 'interested but concerned' about cycling.

Commonly reported hurdles to greater adoption of cycling include:

- Safety concerns
 - A lack of physically separated infrastructure
 - Poor societal attitudes to cycling
 - Not confident riding on the road in mixed traffic
- Practical concerns
 - What happens if I have an operational issue? (e.g. wheel puncture)
 - I do not want to be sweaty/exhausted/tired at my destination
- Security concerns
 - How do I park my bike safely and securely at my destination?

Governments need to set an appropriate policy framework to encourage more cycling. It needs to address infrastructure and facilities, educational programs on safer cycling, legislation, communication campaigns to enhance social acceptance, appropriate road design, inclusivity and 'special event' guidelines.

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Key outcomes and observations from this paper

- Active transport will play an increasingly important role (especially for journeys under 3km) in urban mobility, and favourable policy frameworks are needed to make active transport safer and more attractive to commuters.
- The ACT has very high cycling levels compared to national standards but in terms of cycling participation, particularly journey to work, the demography is heavily skewed towards males. In addition, Australian cycling rates are significantly lower than many global cities such as Paris, Amsterdam, Copenhagen and New York.
- Given the relatively small number of cyclists compared to other modes, a small shift towards cycling could easily double participation for journeys to work. Such a mode shift can offset demand for several thousand parking spaces in high demand commercial areas and improve the efficiency of the road network.
- The NRMA and Pedal Power commend the accommodations which have been made for active transport in the Canberra region. Extensive separated infrastructure, bicycle parking facilities and the facilitation of bicycles on public transport make cycling relatively attractive, compared to other jurisdictions, however more work needs to be done.
- The legislative framework for cycling is continuing to evolve. The existing and proposed legislative protections for cyclists (and vulnerable road users more broadly) is aimed at legitimising cycling as a preferred method of travel.
- Active transport is inclusive at its core, but disparities exist, particularly with respect to female participation.
- Bicycle Tourism is a megatrend which is forecast to grow significantly over the coming decades. The ACT could capitalise on opportunities in this sector to further strengthen its visitor economy.
- The NRMA and Pedal Power note the importance of rail trails in developing a vibrant bicycle tourism sector. Consideration may be given to an inter-governmental and asset corridor management agreement to facilitate more rail trail development surrounding the ACT, including to Goulburn and/or Cooma.
- Closed road cycling events are a strong indicator to the cycling community (and the community more broadly) that an area wants to be seen as a cycling friendly. These events draw thousands of cyclists from across the country and contribute positively to the local economy.

Bicycle Tourism is a megatrend which is forecast to grow significantly over the coming decades.

Data

Canberra is arguably Australia's most progressive city with respect to cycling participation and infrastructure. However, there are new opportunities around cycling that the ACT can capitalise on.

Australia's 2021 'cycling census', a cycling participation survey undertaken biennially to support a nationwide standardised dataset, reported:

- **23.3% of ACT** residents had cycled for any reason in the previous week (Australia 18%)
- **30.7% of ACT** residents had cycled for any reason in the previous month (Australia 26.9%)
- **44.3% of ACT** residents had cycled for any reason in the previous year (Australia 40.1%)

The cycling census estimates that 3.4% of households had an e-bike which helped alleviate some of the major hurdles, which were previously identified.

The cycling census outlines that 41% of the ACT population are 'interested' in cycling but do not participate because of their concerns.

Across all of the states, younger age groups tend to have higher rates of cycling participation, and males tend to have a higher level of participation compared to females.

At a formal census level, the only data which is viewed through the lens of cycling is journey to work. For the capital city regions across Australia in 2016, it shows that 82,356 people cycled to work, including 5,367 people in the ACT.

Across the capital city regions of Australia, nearly twice as many people ride a bicycle to work (82,356) compared to riding a motorbike for the same purpose (44,416).

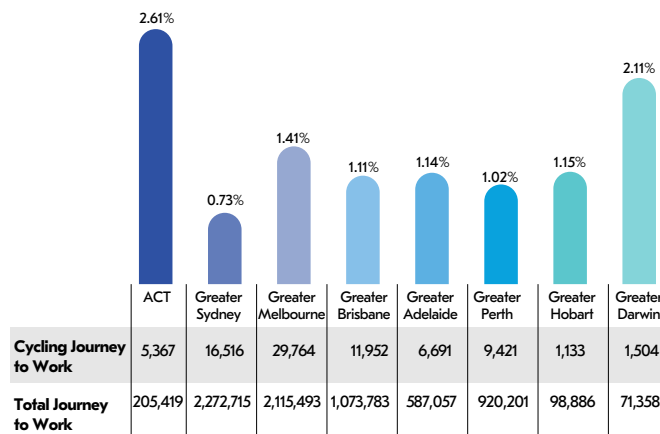


Figure 1. Rates of cycling as a method of journey to work (2016 Census)

As outlined previously, male participation in cycling tends to be much higher compared to females. Of the 5,367 bicycle journeys to work by bicycle in the ACT, 3,729 were by males, compared to 1,641 for females. This modal disparity is the highest in motorbikes (90% male, 10% female), and second highest for bicycles (70% male, 30% female). In contrast, bus journeys, car driver and walking journey to work are all very close to a notional 50%-50% split. This disparity in case of two wheelers can likely be attributed to the perceived safety of these modes.

It is important to note that the Census is always undertaken on the second Tuesday in August, and this tends to not be conducive for cycling participation. It is the middle of winter with cold temperatures and relatively short daylight hours. Despite Canberra's cold winters, it is a standout in terms of cycling to work rates. It goes to show that where accommodations are made to make cycling safe, people will cycle irrespective of the conditions. This is clearly evident in other global cities such as Copenhagen and Amsterdam, where cycling journey to work rates as high as 35% are routinely observed, even in the middle of winter.

In the ACT, 6,071 people drove to work where the journey was less than 2.5km, and a further 41,172 people drove to work where the distance was between 2.5km and 10km.

	Bicycle			Walk		
	<2.5km	2.5km-10km	>10km	<2.5km	2.5km-10km	>10km
ACT	880	3,117	1,266	6,724	1,666	-
Greater Sydney	3,101	9,589	3,193	67,218	15,272	-
Greater Melbourne	4,420	18,665	5,809	44,309	11,231	-
Greater Brisbane	1,769	7,032	2,786	19,531	6,006	-
Greater Adelaide	918	4,341	1,233	8,081	2,502	-
Greater Perth	1,490	4,944	2,631	11,014	2,931	-
Greater Hobart	239	684	170	3,743	1,233	-
Greater Darwin	472	696	264	1,814	213	-
Total	13,297	49,081	17,352	162,440	41,048	-

	Car Driver			Car Passenger			Bus		
	<2.5km	2.5km-10km	>10km	<2.5km	2.5km-10km	>10km	<2.5km	2.5km-10km	>10km
ACT	6,071	41,172	76,423	1,118	5,032	-	435	5,995	-
Greater Sydney	85,652	375,609	642,756	11,838	37,918	-	8,930	76,763	-
Greater Melbourne	74,966	367,486	735,283	9,584	33,006	-	2,081	15,912	-
Greater Brisbane	37,569	192,089	376,131	5,575	21,847	-	2,484	27,416	-
Greater Adelaide	25,348	137,658	195,550	2,958	12,124	-	877	16,923	-
Greater Perth	32,319	174,179	336,139	4,425	16,192	-	2,478	17,911	-
Greater Hobart	5,390	21,271	31,098	747	2,864	-	236	2,752	-
Greater Darwin	4,075	15,318	24,005	621	1,542	-	247	984	-
Total	271,396	1,324,782	2,417,385	36,857	130,521	-	17,776	164,657	-

In the ACT, some private vehicle and bus journeys could easily transition to cycling to work trips (noting the 2016 census was before light rail opening). The table below shows that there is the potential to easily target thousands of additional bicycle to work journeys. Note that this only considers bicycles as an end-to-end journey choice, not bicycle linked public transport journeys (i.e. bicycle and bus or light rail as a new option).

It is also important to note most car drivers will transit through and park in commercial centres. Increased cycle to work journeys could take thousands of vehicles off the road network during peak hour and offset demand for thousands of parking spaces, thereby improving traffic flow and parking opportunities for those who need to drive longer distances (or have a more genuine need to drive).

	Potential Mode Shift Aspiration		New Bicycle Journeys	
	<2.5km	2.5km-10km	<2.5km	2.5km-10km
Car Driver	25%	10%	~ 1,500	~ 4,000
Car Passenger	15%	5%	~ 150	~ 250
Bus	35%	10%	~ 150	~ 600
Total			~ 1,800	~4,850

The ACT has very high cycling levels by national standards but cycling participation - at a journey to work level - is heavily skewed towards males.

Given the relatively small number of cyclists compared to other modes, a small displacement can easily double cycling participation for journey to work. Such a mode shift can offset demand for several thousand parking spaces in high demand commercial areas and improve the efficiency of the road network.

Infrastructure and Facilities

The ACT, from an urban planning perspective, is a relatively 'planned city' compared to the sprawl in other jurisdictions, resulting in better transport corridor preservation. This allows for active transport infrastructure to be deployed on roads, and along green corridors.

The ACT Government reports that it has over 1,000km of shared paths, and 2,500km of footpaths. The shared paths tend to be well-connected and continuous at a macro level (inter-suburb level) and make up a sound network of paths.



Figure 2. Belconnen Bikeway¹

A long-term cyclist count station along Sullivans Creek, which broadly runs along the alignment of Northbourne Avenue has counted approximately 1.7 million cyclists since its inception in late 2017 to the start of 2022. These counting stations help quantify the use of active transport corridors for the community and for Government and feed into funding decisions:

<http://macarthurvedisplayvisio-tools.com/>

The ACT has a bicycle parking code for developments, and the bicycle parking rates tend to be high relative to other jurisdictions. The *ACT Parking Strategy Study*, states "the availability of safe and secure bicycle parking is a priority factor influencing the decision of whether to use a bicycle as a means of transport or recreation.

1 <https://cordcivil.com.au/belconnen-bikeway>



Figure 3. Secure Bicycle storage cage?

Conversely, a lack of convenient bicycle parking is often cited as a discouragement factor by cyclists and non-cyclists alike.” Similar to driving, if there is a perception that parking will not be easily available at their destination, people will tend to consider alternative modes of transportation.

Whilst e-bikes are convenient to ride, owners place considerable value on the need for safe and secure parking, given the cost of these vehicles.

The ACT also allows bicycles on buses and light rail which further supports first and last mile connectivity.

The NRMA and Pedal Power commend the accommodations which have been made for active transport in the Canberra region. Extensive separated infrastructure, bicycle parking facilities and the facilitation of bicycles on public transport make cycling relatively attractive compared to other jurisdictions and encourage more people to ditch their cars for active transport options.

2 <https://www.bicyclenetwork.com.au/newsroom/2022/05/16/parkiteer-is-growing/>

Safety Laws

One of the key hurdles to the adoption of cycling in Australia is the lack of legislative protection for cyclists. In many other global jurisdictions, in the event of a collision between a motor vehicle and a cyclist, for civil and insurance purposes, the driver is presumed to be at fault, unless the driver can prove otherwise. For criminal purposes, there remains the 'innocent until proven guilty' and 'beyond reasonable doubt' threshold.

In recent years, all Australian jurisdictions have introduced minimum passing distance legislation for cyclists. Many collisions between cyclists and vehicles were a result of a 'sideswipe', and Governments introduced minimum passing distance legislation to protect cyclists on the roads. In the ACT, this means that drivers must provide at least 1m of passing distance under 60km/h, and a minimum of 1.5m of passing distance over 60km/h. Drivers can straddle unbroken lines when overtaking a cyclist to provide the minimum passing distance, provided it is safe to do so.

As an Australian first, the ACT has introduced legislation around negligent driving resulting in harm to vulnerable road users. Until now, across Australia, a collision with a vulnerable road user (where there was negligence involved) was legally the same as a collision with any other road user, despite a potentially significant difference in the outcome.



Figure 4. Incident in ACT resulting in calls for legislative change³

In the event of a driver's negligence which resulted in harm to a pedestrian or cyclist, the injury threshold for more serious charges was grievous bodily harm (not merely serious injury), which is an exceptionally high legal threshold. Where the grievous bodily harm charge cannot be met, police would have no option other than to impose a negligent driving infringement, which is a far lesser offence, and may not be commensurate with the outcome of the crash⁴.

The purpose of this is to ensure that drivers are more mindful around vulnerable road users and is based on the same premise which results in more serious driving infringements being imposed in school zones.

The legislative framework for cycling has evolved and is continuing to evolve. The existing and proposed legislative protections to cyclists (and vulnerable road users more broadly) is a step which is aimed at legitimising cycling as a preferred method of travel.

3 <https://www.facebook.com/pedalpoweract/videos/338793430904839/>

4 There is already considerable precedent for more severe penalties where there is demonstrated higher risk, such as higher speeding offences in school zones, or more severe penalties for higher BACs

Inclusiveness

Active transport (including cycling) can be a highly inclusive form of mobility. Unlike motorised vehicles such as cars, bicycles are comparatively inexpensive and do not require a license to operate.

As previously outlined, there is a significant gender disparity when it comes to cycling to work journeys. This can likely be attributed to the perceived safety of cycling and the various points outlined in this paper may help address gender balance in cycling participation in the long term.

In recent decades, there has been a marked decline in the proportion of children who get to school by walking and cycling. One Australian study investigating children's physical activity trends found that between 1985 and 2001, the proportion of children who walked and cycled to school more than halved. A large part of this decline has been attributed to the road safety concerns of parents. Significant cultural and attitudinal shifts need to be made with respect to speed limits to address their anxieties.

"The widespread acceptance of the idea that speeds of 50 to 60 km/h in residential streets are acceptable when driving children to school (or sport) indicates that a major cultural shift in attitudes is necessary before there can be any significant change to levels of children's independent mobility in Australian cities."

Proceedings of the Australian Transport Research Forum 2017)

Research into travel behaviour shows that travel preferences tend to be highly inelastic, and that travel patterns which are established in childhood tend to be carried over into adulthood. Therefore, strong nudges are required to encourage people to utilise active methods of transport.

Additionally, if there are any operational issues with a vehicle (flat tyre, flat battery etc), drivers may typically have roadside assistance support. However, anecdotal evidence from Pedal Power ACT suggests that limited roadside service support is a significant hurdle to the uptake of cycling.

Active transport is inclusive at its core, but disparities exist, particularly with respect to female participation.



Bicycle Tourism

Bicycle tourism is a rapidly growing global tourism megatrend. Domestically, Victoria has a strong bicycle tourism sector, and internationally, New Zealand and the USA are big draw cards for tourists looking for an active holiday.



Figure 4: Bicycle tourism is highly inclusive

In New Zealand, a comprehensive economic evaluation of the cycling trails program found it delivered a 3.55:1 benefit cost ratio, with wide ranging economic, social and environmental benefits to the designated regions.

In Victoria, the north-east region is establishing itself as a bicycle tourism mecca⁵. It has 300km of 'rail trails', ten mountain biking parks and renowned road cycling routes including the seven peaks. The region is reported to get over 100,000 bicycle tourists per year, contributing \$50 million to the local economy. The cycle tourism sector is forecast to grow to 250,000 people per year by the mid-2020s.

In 2018, the ACT Government released a bicycle tourism strategy which sought to establish the ACT as a key cycle tourism destination and establish the ACT as a leader with respect to cycling infrastructure. The report estimates that growing this sector could deliver \$400 million in aggregate benefits to the ACT economy by 2030.

Stromlo Forest Park has been constructed by the ACT Government as an outcome of the strategy. This facility incorporates a multisport activity park, with facilities for road cyclists, mountain bikers, walkers/runners and horse riders. The facility has a 1.2km criterium track (sealed road cyclist course) and over 50km of mountain biking trails.

Bicycle Tourism is a tourism megatrend which is forecast to grow significantly over the coming decades. Various jurisdictions may be able to capitalise on opportunities in the bicycle tourism space.

5 https://www.tourismnortheast.com.au/wp-content/uploads/sites/54/Cycle-Tourism-Stakeholder-Session-Presentation_18052016.pdf

Rail Trails

Most commonly, the bicycle tourism sector has piggybacked on disused railway corridors. Converted railway corridors are amenable to bicycle riding as there is no road traffic, and the gradients of the trails are seldom uncomfortable to even the most inexperienced of cyclists (<3% vertical gradients). The trails are often continuous and link many townships.



Figure 5: Great Victorian Rail trail⁶

The ACT is at a relative disadvantage in this sense in that it does not have any railway corridors (except for a few kilometres between Queanbeyan and Kingston). The operational line north to Goulburn, and the disused corridor to Bombala are both on NSW land. The railway corridor between Bungendore and Willamsdale is on the border of the ACT and NSW

In somewhat close proximity to the ACT, NSW's first rail trail opened in 2020, linking Rosewood and Tumbarumba. This 21km long closed rail corridor can be used by bicycles, scooters,

mobility scooters, prams and runners/walkers. Consideration is currently being given to extending the trail to Wagga Wagga (a total distance of 130km)⁷.

Within metropolitan Sydney, Transport for NSW has published guidance for active transport links within operational rail corridors and the ACT Government may be able to leverage similar access agreements in partnership with the NSW Government and railway corridor managers⁸.

The NRMA and Pedal Power note the importance of rail trails in developing vibrant bicycle tourism sectors. Consideration may be given to an inter-governmental and asset corridor manager agreement to facilitate more rail trail development surrounding the ACT.

6 <https://worldexpeditions.com/Blog/australias-great-victorian-rail-trail-vs-the-murray-to-the-mountains-rail-trail>

7 <https://www.visitnsw.com/destinations/snowy-mountains/tumbarumba-area/tumbarumba/attractions/tumbarumba-rosewood-rail-trail>

8 https://www.transport.nsw.gov.au/system/files/media/asa_standards/2019/t-hr-ci-12180-st-v2.0_0.pdf

Cycling Events

Annual closed road cycling events can draw large numbers of cyclists from across the country, and help reinforce the concept that an area is cycling friendly. An example of this is the L'Étape Australia event run within NSW. It is a one day cycling event which is reminiscent of a stage of the Tour de France.

They have successfully run events around the Snowy Mountains. The roads are closed in a controlled manner for a day, and thousands of cyclists ride distances of up to 200km.

L'Étape is organised with the direct support of organisations like the Tour de France and Destination NSW. It was recognised as the 'best public event' and the 'best regional event in Australia' in 2017 and 2018, which is reflective of quality, popularity and the economic benefits thousands of cyclists bring to the area.

These events can have representation from the professional cycling community, including winners of the Tour de France.

While ACT already hosts events such as Big Canberra Bike Ride (generally aimed as a low intensity social rides as little as 6km) and Fitz's Challenge (a more arduous recreational ride with courses up to 250km), there is potential to leverage the excellent cycling infrastructure and beautiful locations to organise large scale cycling events.

Closed road cycling events are a strong indicator to the cycling community (and community more broadly) that an area wants to be seen as a cycling friendly area. These cycling events draw thousands of cyclists from across the country and have a positive contribution to the local economy.



Conclusion

The ACT leads Australia's cities with respect to cycling participation. While a solid foundation has been laid by the community, more action is needed from industry and government to support ACT residents to embrace cycling as a preferred form of mobility.

Despite the inelasticity of travel choices, there is some evidence which shows that cycling can be a significant beneficiary of positive feedback loops. This means that the more cyclists someone sees, the more likely they are to adopt it as a potential mode of travel. A bicycle tourism sector would support a groundswell of cycling activity, which would in turn result in increased uptake of cycling in the ACT for recreational purposes and daily commutes.

Cycling has a range of benefits to individuals, as well as to the community. Increased cycling rates could reduce road trauma, positively impact the health and wellbeing of the community, help the nation attain its emissions reduction targets, reduce noise pollution and foster social inclusion.



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