



COMMISSIONER
FOR SUSTAINABILITY
AND THE
ENVIRONMENT

Territory Plan Section
GPO Box 158, Canberra, ACT 2601

To Whom it May Concern,

Thank you for the opportunity to provide a submission in response to *Incorporating Active Living Principles into the Territory Plan*.

While the office welcomes the promotion of active living and active transport principles by the ACT Government, there is an opportunity to strengthen the rationale about why people should convert to these modes. It is also essential to outline the barriers that prevent people incorporating active living principles in their daily lives. The office is aware that this may not be within the scope of the current proposed Territory Plan Variation but our view is that it is essential for these principles to be embodied in the Territory Plan in order to reinforce their importance and assist ongoing uptake.

In the current document the reason for becoming more active is promoted primarily on a health basis – to reduce obesity and related diseases (refer to page 6 ‘The evidence for change’). Some economic benefits of active living are mentioned such as congestion reduction, health, vehicle operating costs and infrastructure savings. Other benefits such as increasing the surveillance of urban and suburban areas are also outlined.

However, active transport has other highly significant co-benefits like:

- economic benefits such as reduced spending on car parking, increased retail space in terms of bicycle parking compared to car parking, reducing air and noise pollution,
- reducing carbon emissions (in the ACT the transport sector contributes about 23% of total greenhouse emissions),¹
- fostering local businesses on the commute such as Sly Fox coffee on the Sullivans Creek cycleway, and
- potentially enhancing relationships in the community, e.g. with the program CANwalk which assists people in Canberra find a walking activity to suit their needs.

These benefits are outlined in our Active Travel video that you can view [here](#).

The 2015 State of the Environment Report, produced by our Office found that petrol consumption accounted for 5% of Canberra’s ecological footprint. Our overall [footprint](#) is 8.9 global hectares per person, three and a half times the global average. More than 60% of

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our footprint is a product of our households. The table below provides some insight into this environmental concern.

1.	Electricity supply	12%
2.	Eating & drinking out	6%
3.	Petrol	5%
4.	Gas supply	4%
5.	Air & space transport	4%
6.	Other food products	3%
7.	Ownership of dwellings	3%
8.	Beer & malt	2%
9.	Clothing	2%
10.	Wooden furniture	2%

Table 1. Top 10 commodities derived from ACT Ecological Footprint

Incorporating Active Living Principles into the Territory Plan makes only one mention of climate change on page 21. This requires elaboration. Hotter, drier summers as a result of climate change will have a significant impact on active living and active transport. Hot weather will be a significant barrier to people exercising and will also impact on people's health. Climate change has the potential to increase expenditure on lighting for ovals as training sessions are pushed into the cooler evening hours. Climate change also has the potential to impact tourism – as we saw when heat prohibited play in the Australian Open.

The changes to the Territory Plan should address how climate change will be considered in urban planning. Some ways to help keep urban open space cooler include:

- incorporation of shade trees – they can reduce the local micro-climate in summer by at least 2 degrees Celsius. Research undertaken by Melbourne City Council has found that the average temperature in Melbourne's CBD is up to 4 degrees higher than the surrounding suburbs and during the evenings, this difference can be as high as 12 degrees.² Director of CSIRO Land and Water, Paul Hardisty, has said climate change is already affecting our daily lives and we need to increase green coverage such as tree canopies, gardens, parklands and green roofs to mitigate summer heat stress and mortality rate,³ and
- the use of water sensitive urban design measures – directing stormwater via permeable surfaces into the soil profile, rain gardens/reed beds, wetland and food gardens. This reduces the amount of concrete and hard surfaces we have in our cities, therefore reducing the urban heat island effect.

A great deal of work has now been done on the value of the urban forest and it could be usefully referenced in any response to this call for submissions. A link to a short video that our office produced about Canberra's urban forest is [here](#).

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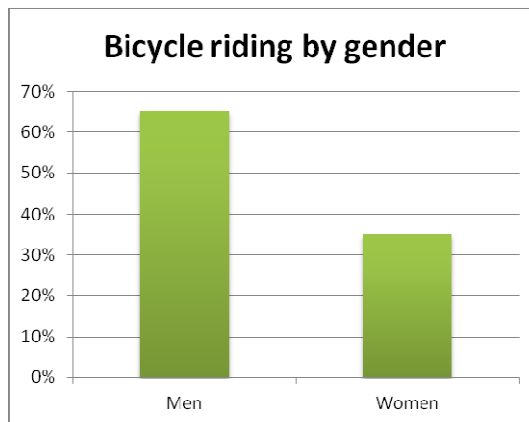
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The active living principles outlined in the document are a useful goal to aim for but it is vital that barriers to active living are acknowledged in order to determine the areas to focus on to increase the number of people using active living in their daily lives. Barriers to active living include:

1. Gender – while cycling in the ACT is higher than the national average,⁴ men (65%) were nearly twice as likely to be bicycle riders as women (35%).⁵ the requirement to wear helmets, safety concerns and riding confidence are associated with this.



Woman cycling in Milan, Edwina Robinson

Cycling rates for women are high in Germany (49%) and very high in Denmark and the Netherlands (55%) compared to the United Kingdom (27%). In the UK, this lower participation rate is due to the “hostile road environment for cycling” according to sustainable transport consultant Alix Stredwick.⁶ This research demonstrates that improving cycling infrastructure should increase the number of women cycling.

2. Socioeconomic – Vampire Index (vulnerability assessment for mortgage, petrol and inflation risks and expenditure) assesses the risk to Australian households arising from the combined impact of rising mortgage costs, high fuel prices and the pressures from inflation. The pattern identified in this research is that people who live further from city centres have restricted access to public transport which means they are much more likely to use their personal cars to drive further distances. The recommendations are that public transport networks be improved.⁷ This is relevant for promoting active living as people who use public transport have higher rates of incidental exercise than those driving their own cars.
3. Age – older people may have limitations to their ability to participate in activity. Investment in targeted infrastructure to support the physical activity of ageing Canberrans is important to help address this issue. Also, the cycling participation rate among children aged under 10 is below the national average so this is an age group that can be targeted.

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4. Distance – this is a major barrier in Canberra for active travel. In answer to the question: “why have you not used a bicycle for travel to work in the past year?” 41% of participants responded that it was too far.⁸ This is reflected by the fact that the greatest percentage of people in the ACT (35.5%) travel an average distance of 10-20km to work and full-time study, the highest proportion of all the States and Territories.⁹ A great initiative in the ACT has been the construction of infrastructure to allow people to use mixed modes of transport. An example is the installation of bike rails, bike lockers and bike cages at bus stops to allow people to cycle to the bus stop and park their bicycle securely while they catch the bus.

5. Appropriate infrastructure, e.g. separate cyclists from the rest of the traffic so that their safety is improved. An example of this is the Civic Cycle Loop.



Separated cycleway, Wikimedia Commons, Paul Krueger

As to the benefits of cycling, Albert Einstein summed it up accurately when he said, in relation to the Theory of Relativity:

“I thought of that while riding my bicycle”.

Our office acknowledges the many other initiatives and endeavours that are currently being pursued by the ACT Government in relation to climate change adaptation and mitigation, and we look forward to commenting on these at an appropriate time in the future.

Please don't hesitate to contact me if you have any questions.

Yours sincerely

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¹ ICRC, 2011, *ACT Greenhouse Gas Inventory*, ACT Government, Canberra.

² Australian Institute of Landscape Architects, 2015, *Cooling Cities – Urban Heat Island Effect, Draft PS for member consultation*, AILA Position Statement, Liveable Cities.

³ Hardisty, Paul, 2016, *A new climate adaptation landscape*, CSIRO, Canberra.

⁴ Munro, Cameron, 2015, *National Cycling Participation Survey 2015: Australian Capital Territory*, Austroads Ltd, Sydney, Australia.

⁵ ACT Government 2011, *Draft Report on Telephone Survey About Cycling in Canberra*, by Winton Sustainable Consultants, dated 21 Nov 2011. Phone survey of 1000 adults, in ACT Government 2015, *Building an Integrated Transport Network: Active Travel*, Canberra.

⁶ Stredwick, Alix, 2015 quoted in *'If there aren't as many women cycling as men...you need better infrastructure'*, The Guardian.

⁷ Dodson, Jago and Sipe, Neil, 2006, *Shocking the Suburbs: Urban Location, Housing Debt and Oil Vulnerability in the Australian City*, Griffith University, Brisbane.

⁸ Munro, Cameron, 2015, *National Cycling Participation Survey 2015: Australian Capital Territory*, Austroads Ltd, Sydney, Australia.

⁹ ABS, 2012, *Environmental Issues: Waste Management, Transport and Motor Vehicle Usage March 2012*, Australian Bureau of Statistics, Canberra.