INCORPORATING ACTIVE LIVING PRINCIPLES INTO THE TERRITORY PLAN

DRAFT VARIATION NUMBER 348



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Environment, Planning and Sustainable Development Directorate

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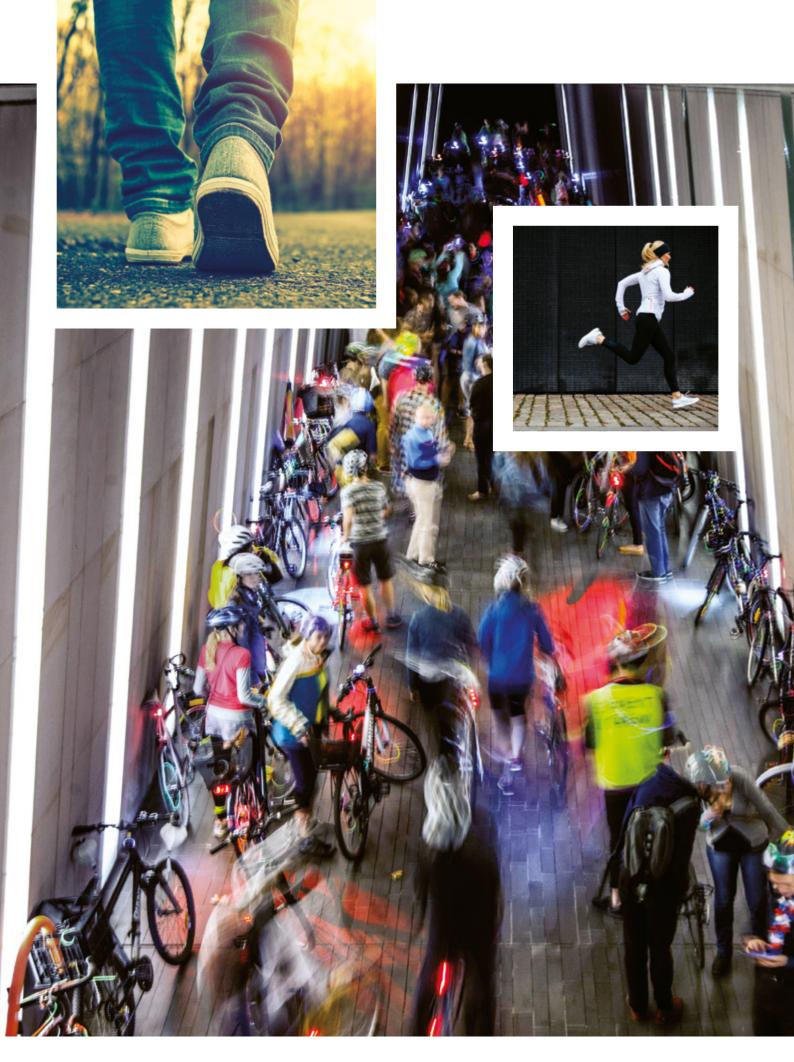
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The ACT Government's vision for Canberra is to be a healthy, active, vibrant city that is well connected, compact and equitable; a centre for innovation, creativity and economic growth. While Canberra has good facilities to support active living, Canberra is a low density and dispersed city that relies on cars as the predominant mode of transport. Car dependency and sedentary lifestyles can contribute to a significant proportion of the population being physically inactive, overweight or obese. This can lead to the onset of chronic diseases and a poorer quality of life.

Urban planning can play a vital role in creating a healthier population, as outlined in the ACT Government's Towards Zero Growth: Healthy Weight Action Plan (2013) and demonstrated through its work with the Heart Foundation (ACT) on the Active Living Program. Urban environments that promote active lifestyles lead to economically, environmentally and socially thriving and resilient cities.

Active living is a way of life that integrates physical activity into daily routines. Whether it is walking, riding a bike, playing in the park, walking the dog or taking the stairs, building incidental physical activity into their day will help Canberrans meet the National Physical Activity Guidelines on a daily basis.

The Statement of Planning Intent (2015) made by the Minister for Planning and Land Management identifies, as an immediate action, incorporating active living principles into Canberra's planning and statutory framework (the Territory Plan) in all aspects of future planning and development. Doing this requires a variation to the Territory Plan to be approved by the Legislative Assembly.

This information paper proposes six principles for active living in the ACT:

- **CONNECTED PLACES**
 - Providing connections between major uses and activity centres
- **OPEN SPACE** Providing high quality open spaces, parks and places
- MIXED LAND USE AND DENSITY Encouraging diversity in
 - activities, land uses and development densities
- SAFE AND ATTRACTIVE PLACES Ensuring places are safe and
 - attractive to everyone using that place
- SUPPORTIVE INFRASTRUCTURE Providing supportive infrastructure that encourages

regular physical activity

ENVIRONMENTS FOR ALL Ensuring places are inclusive and have equitable access by all Canberrans.

These principles are used to identify opportunities for incorporating and supporting active living into the Territory Plan. The 45 specific recommendations proposed by Territory Plan Draft Variation 348 (DV348) are based on: detailed advice from the Heart Foundation (ACT); extensive research from local, national and international case studies; actions from relevant strategic government policy; and input from stakeholder discussions.

Incorporating these specific recommendations into the Territory Plan will create a supportive environment for a healthy, active Canberra.



ACTIVE LIVING IS INTEGRAL TO THIS VISION. ALTHOUGH THEY ARE INTER-RELATED, ACTIVE LIVING AND ACTIVE TRAVEL DO DIFFER SOMEWHAT AND IT IS IMPORTANT TO DISTINGUISH BETWEEN THESE DEFINITIONS. ACTIVE LIVING IS A WAY OF LIFE WHERE PEOPLE INTEGRATE ORGANISED OR INFORMAL PHYSICAL ACTIVITY INTO THEIR DAILY ROUTINES AND ACTIVE TRAVEL IS TRAVEL THAT INVOLVES PHYSICAL ACTIVITY SUCH AS WALKING AND CYCLING (INCLUDING WALKING OR CYCLING TO PUBLIC TRANSPORT). ACTIVE LIVING ALSO ENCOMPASSES ACTIVE TRAVEL.

While Canberra has many facilities that support active living and active travel, such as parks, bushland, recreation areas and bike paths, Canberra's low density and dispersed nature means private vehicles are still the predominant mode of transport.¹

In line with national trends, the proportion of the ACT's population classified as being overweight or obese is significant. It is estimated that about two-thirds of the ACT's adults are overweight or obese. The consequences of obesity include chronic diseases (such as cardiovascular disease, type 2 diabetes, and some cancers) that lead to increased healthcare costs and a poorer quality of life.²

Urban planning can play a vital role in creating a healthier ACT population, as outlined in the Government's *Towards Zero Growth: Healthy Weight Action Plan* (2013) and demonstrated through its partnership with the Heart Foundation ACT for the Active Living Program. Urban environments that promote active lifestyles lead to economically, environmentally and socially thriving and resilient cities.³

- 1 ACT Government, 2011, Transport for Canberra
- 2 Tolley, 2011, Good for Business The benefits of making streets more walking and cycling friendly, National Heart Foundation of Australia
- 3 Commonwealth of Australia, 2013, Walking, Riding and Access to Public Transport: supporting active travel is Australian communities ministerial statement







The Territory Plan is the key statutory planning document for the ACT, providing the policy framework for the administration of land use and planning. The Statement of Planning Intent (2015), made by the Minister for Planning and Land Management, identifies as an immediate action, active living principles being incorporated into the Territory Plan in all aspects of future planning and development. This requires a draft variation to the Territory Plan to be developed and approved by the Legislative Assembly; Territory Plan Draft Variation No. 348 (DV348) incorporates active living principles into the Territory Plan.

This information paper provides the evidence base and informs the decision of the ACT planning and land authority to incorporate the active living principles into the Territory Plan, through a draft variation (Part 5.6 of the Planning and Development Act 2007 (the P&D Act).

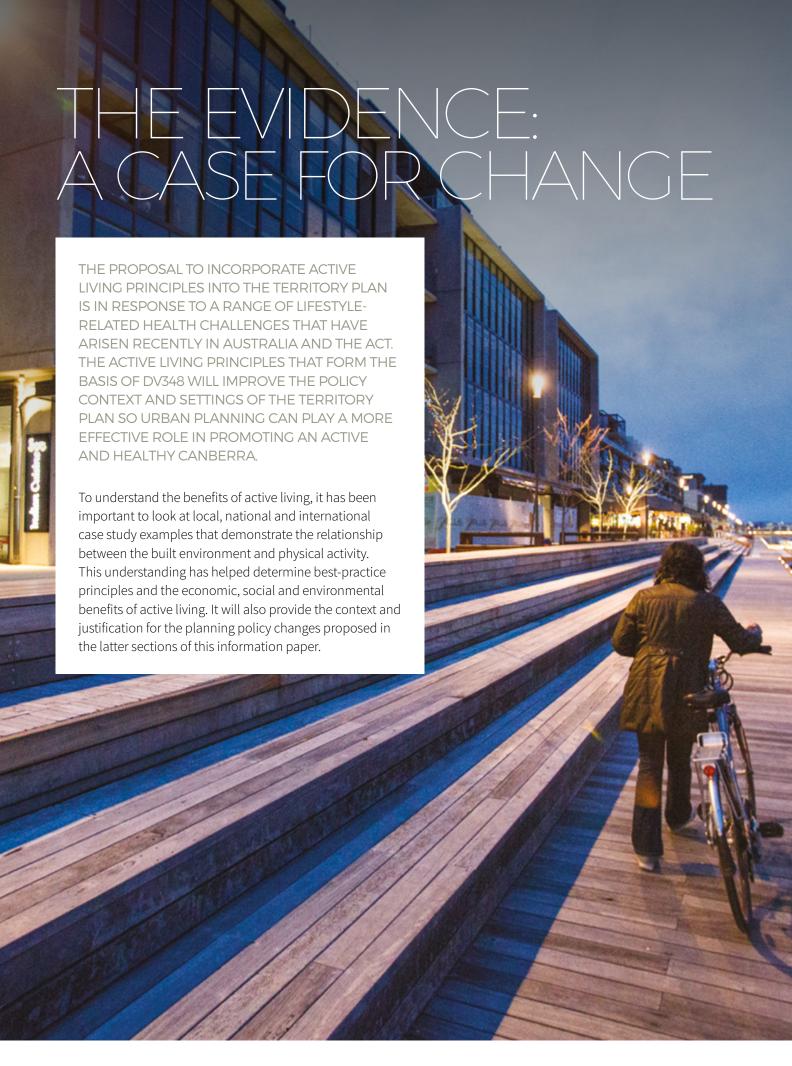
This information paper is the planning investigation into the proposed changes to the Territory Plan. If the proposal progresses to a Territory Plan variation, the information paper becomes a background paper under section 58 of the P&D Act; it will be publicly released and eventually given to the Minister for Planning and Land Management at the approval stage of the process.

Based on advice from the Heart Foundation (ACT), extensive research from local, national and international case studies, actions from relevant strategic government policies and input from stakeholder discussions, 45 specific recommendations are being proposed in DV348.

Broad recommendations to modify the Territory Plan are as follows:

- 1. Amend the Statement of Strategic Directions to include active living principles, in particular ensure that existing principles prioritise active travel and support the connectivity of active travel networks.
- 2. Add objectives to each zone that outline the policy outcomes to be achieved.
- 3. Amend the relevant rules and criteria in the residential, commercial, industrial, community facility, transport and services and parks and recreation zones and estate development codes to:
 - a. prioritise active travel
 - b. promote accessibility of land uses by active travel
 - c. promote connectivity to surrounding active travel networks
 - d.support the development of attractive streets and public places
 - e. consider the minimum safe walking distance in local, group and town centres, along with bus stops, public parks and community facilities.
- 6. Update the Community and Recreation Facilities Location Guidelines General Code to reflect current active living policy goals and objectives.
- 7. Add definitions of active living and active travel terminology to the Territory Plan's definitions.

Embedding active living principles into the Territory Plan can support our city to be accessible with a well-designed and friendly urban environment that promotes active living, the health, wellbeing and social and economic prosperity of all Canberrans. The ACT Government is seeking public comments on the proposed changes to the Territory Plan, not on this information paper.

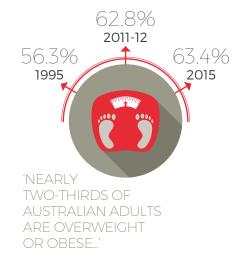


AUSTRALIAN AND ACT LIFESTYLE TRENDS

NATIONAL LIFESTYLE TRENDS

In 2015, nearly two-thirds of Australian adults (63,4%) are overweight or obese, an increase from 56.3% in 1995 and 62.8% in 2011-12.4 Combined with inactive lifestyles, dietary factors play a role with the overweight and obesity epidemic facing Australia. 5 In 2015 49.8% of Australians reported they usually ate the recommended two serves of fruit per day and only 7% ate the recommended five or more servings of vegetables per day. Overall, only 5.1% of Australian adults ate the recommended daily intake of both fruit and vegetables.7

These behaviours put us at an increased risk for a range of chronic diseases, including heart disease, stroke and cancer.8 Chronic diseases result in a significant economic burden to the Australian and ACT healthcare budgets, due to the combined effects of healthcare costs and lost productivity from illness and death. It has been estimated the four most expensive disease groups (cardiovascular diseases, oral health, mental health disorders, musculoskeletal) incurred direct healthcare costs of \$27 billion in 2008–099, equivalent to 36% of all allocated health expenditure. One of the biggest health challenges that Australia faces is transforming the way in which we respond to chronic disease, particularly as many arise from similar underlying causes.10





- ABS, 2015, 4364.0.55.00.1 National Health Survey: First Results.
- Australian Institute of Health and Welfare 2014. Australia's health 2014. Australia's health series no. 14. Cat. no. AUS 178 5
- ABS, 2015, 4364.0.55.00.1 National Health Survey: First Results
- 8, 9, 10 Australian Institute of Health and Welfare 2014

A NATIONAL MEASURE OF CURRENT LIFESTYLE TRENDS CAN BE FOUND IN THE AUSTRALIAN PHYSICAL **ACTIVITY AND SEDENTARY** BEHAVIOUR GUIDELINES THE GUIDELINES PROMOTE THE BENEFITS OF BEING PHYSICALLY ACTIVE AND LIMITING SEDENTARY BEHAVIOUR EVERY DAY FOR IMPROVED HEALTH AND RECOMMENDED:



INFANTS (O-1 YEARS)

Physical activity, particularly supervised floor-based play in a safe environment, should be encouraged.



TODDLERS

(1-3 YEARS)

PRESCHOOLERS

(3-5 YEARS)

Should be physically active every day for at least three hours, spread out across the day.



CHILDREN (5-12 YEARS)

ADOLESCENTS

(13-17 YEARS)

Should accumulate at least 60 minutes of moderate to vigorous physical activity every day and include muscle strengthening activities on at least three days each week.



ADULTS

(18-64 YEARS)

Should accumulate 150-300 minutes of moderate activity or 75–150 minutes of vigorous activity each week and include muscle strengthening activities on at least two days each week.



FIDERIY (64+ YEARS)

Physical activity guidelines for older Australians recommend older people should accumulate 30 minutes of moderate intensity activity, preferably everyday and include a range of activities that incorporate fitness, strength, flexibility and balance.11





THE EVIDENCE: A CASE FOR CHANGE



These guidelines were used as a measure by the Australian Bureau of Statistics (ABS) for the 2011-12 Australian Health Survey into Physical Activity, which provided key findings and trends regarding child and adult physical activity in Australia. ¹² For children and young people the survey found:

- → On average, toddlers and preschoolers (aged 2–4 years) spent an average of around six hours per day engaged in physical activity. They also spent almost one and a half hours (83 minutes) in the sedentary activities of watching TV, DVDs or playing electronic games
- → Five to 17 year olds averaged 91 minutes of physical activity per day and 136 minutes in screen-based activity
- → Three in five, or 60%, of 5–17 year olds averaged at least one hour of physical activity per day. The causes of disease for Australians today are different from what past generations experienced, due to the changes in our lifestyle.
- → Under half, or 44%, of all children and young people aged 2–17 years had at least one type of screen-based item in their bedroom.¹³

With regards to young adults, adults and older adults, the survey found nationally:

- → On average, adults spent an average of 33 minutes per day doing physical activity, with only 43% undertaking at least 30 minutes of moderate intensity physical activity on most days, as recommended by the National Physical Activity Guidelines
- → Young adults aged 18 to 24 years old achieved the highest level of physical activity, with 53% being classed as sufficiently active and physical activity tending to decline as adults aged
- → Physical activity declines as we age. Australians aged 75 years or more (men 31.5% and women 20.1%), engaged less in sufficient physical activity for health compared to 65–74 year old (men 36.6% and women 38.8%).
- → Sedentary activity occupied an average 39 hours per week for adults, with close to 10 hours of this sitting at work
- → Watching TV was the most prevalent sedentary activity, at nearly 13 hours a week, peaking at over 19 hours per week on average for people aged 75 and over
- → People living in areas of greatest socio-economic disadvantage were less likely to be sufficiently active (34%) compared with those living in areas of least disadvantage (52%) with the amount of physical activity per day being comparatively lower (26 minutes compared with 38 minutes)
- → In non-remote areas in 2012–2013, 62% of Indigenous Australians aged 15 years and over reported being sedentary or exercising at low levels.¹⁴

In the early 20th century, people ate fewer processed foods, walked more, did more manual labour, lived with fewer labour-saving appliances, and spent less time in front of televisions and other screens.¹⁵

THE CAUSES OF DISEASE FOR AUSTRALIANS TODAY ARE DIFFERENT FROM WHAT PAST GENERATIONS EXPERIENCED, DUE TO THE CHANGES IN OUR LIFESTYLE.

ACT LIFESTYLE TRENDS

Sedentary behaviour and physical inactivity are significant risk factors for poor health. The ACT Chief Health Officer's Report (2016) found that while more than half of the ACT's adults were sufficiently physically active, 63% were overweight or obese. This figure represents a sharp increase from 1995, where 40% of adults were overweight or obese. The state of the ACT's adults were overweight or obese.

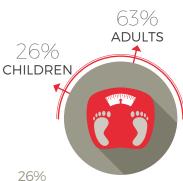
For children aged between 5 to 17 years in the ACT, 26% were classified as being overweight or obese in 2013-2014. An imbalance between energy consumed and energy expended was considered as one of the major contributors to overweight and obesity. Another contributing factor was that 30% of children were not getting enough exercise every day. This is not surprising when it has been found that children and adolescents spend approximately 64% of their whole day, and 64% of their time at school, sedentary.

The area with the highest prevalence of combined overweight and obesity levels in the ACT was Woden at 67.4% and the lowest prevalence was indicated in North Canberra at 55.5% as shown in **Table 1**. In regards to obesity levels only, these were highest in Tuggeranong at 30% and lowest in North Canberra at 18.6%.²¹

Table 1: Prevalence of overweight and obesity among adults in Canberra by district (% of total population)

DISTRICT	OVERWEIGHT	OBESE	TOTAL
Belconnen	35.9	25.6	61.5
Gungahlin	40.8	24.5	65.3
North Canberra	36.9	18.6	55.5
South Canberra	36.0	20.4	56.4
Tuggeranong	35.1	30.0	65.1
Weston Creek	35.1	23.9	59.0
Woden	44.1	23.3	67.4
ACT			63.6

The proportion of people who are overweight and obese may be contributed by our lack of physical activity. The Australian Health Survey found that only 16.2% of adults in the ACT met the target of 10,000 steps a day. This is in contrast with the younger generation, where 17.4% of children aged between 5–17 years met the target of 13,000 and 11,000 steps per day for boys and girls respectively. This trend is similar to other parts of Australia. Overall, 47.6% of adult males and 56.6% of adult females in the ACT were classified as having sedentary or low levels of physical activity.²²



OF CHILDREN IN THE ACT WERE OVERWEIGHT OR OBESE (2013–14)

63%

OF ADULTS IN

THE ACT WERE

OVERWEIGHT

OR OBESE (2016)

¹⁶ Australian Institute of Health and Welfare 2014. Australia's health 2014. Australia's health series no. 14. Cat. no. AUS 178.

^{17, 18} ACT Government, 2016, Healthy Canberra: Australian Capital Territory Chief Health Officer's Report 2016

^{19, 20} National Heart Foundation of Australia. Blueprint for an active Australia. Melbourne: National Heart Foundation of Australia, 2014

²¹ Nichols M, Peterson K, Herbert J, Allender S. Australian heart disease statistics. Overweight, obesity and cardiovascular disease – past, present and future.
Melbourne: National heart Foundation of Australia, 2015.

²² Australian Bureau of Statistics, 2013, 4364.0.55.004 - Australian Health Survey: Physical Activity, 2011-12

Similar observations have been demonstrated for cycling. The National Cycling Participation Survey found that while cycling participation rates of 21.2% within the ACT were higher than the Australian national average at 17.4%, cycling rates were higher among males at 28% than females at 15% (proportion of the population cycling for any purpose during the previous week). Furthermore, cycling participation is significantly lower for 0-9 year olds in Canberra at 34% than the Australian national average at 49%. Overall, the ACT had seen a decline in the percentage of people cycling in 2015 compared to 2011. This was largely attributed to a decline amongst girls aged 0-9 and males aged 10-17 cycling.²³

There are a range of intended and unintended consequences of the population living less active lifestyles. Being overweight and obese is closely linked to lower levels of physical activity, such as cycling and walking, and poor eating habits.²⁴ This may lead to chronic diseases (such as cardiovascular disease and diabetes), resulting in greater healthcare needs and a poorer quality of life.²⁵ This burden is, and will continue to create, enormous challenges for the ACT health system, the economy and, in turn, the community.



INK BETWEEN THE JILT ENVIRONMENT AND PHYSICAL ACTIVIT

The physical and social characteristics of the neighbourhoods in which people spend their lives can have a profound effect on their lifestyles and quality of health. Understanding these linkages provides an essential basis to plan, strategise and implement ways the community can take part in physical and incidental activity.26

The physical environment can be described through a range of built environment characteristics known as the 'Five Ds':

- → **Density** how many residents and/or employees are located within an area
- → **Diversity in the use of land** the degree to which different land uses are located within close proximity of each other, reducing the need to travel outside of the area for common trip purposes
- → **Design centred on pedestrians** how conducive an area is to walking, including the quality of footpaths and road crossings, connectivity of the road and cycling network, and the quality of the pedestrian environment i.e. noise, safety, visual interest, weather protection
- → **Destination accessibility** the proximity or ease of access to opportunities, such as employment and services, which can be measured by distance or time
- → **Distance to transport** how far an area is from the nearest public transport stop or station.²⁷

The Five Ds have been shown to influence the community to take part in more physical and incidental activity through a range of Australian and overseas case study examples. These studies illustrate the positive health impacts and how the physical environment can influence people's physical activity from early childhood through to adulthood and old age.

- 23 Munro C, 2015, National Cycling Participation Survey 2015: Australian Capital Territory
- 24 National Heart Foundation of Australia. Blueprint for an active Australia. Melbourne: National Heart Foundation of Australia, 2014
- 25 Australian Bureau of Statistics, 2013, 4364.0.55.004 - Australian Health Survey: Physical Activity, 2011-12
- 26 McKibbin, 2011. The influence of the built environment on mode choice - evidence from the journey to work in Sydney
- 27 Ewing and Cervero, 2010, Travel and the Built Environment - A Meta-Analysis



RESEARCH: PEOPLE AND THE BUILT ENVIRONMENT

CHII DREN

Lifestyle trends show that children are more likely to be physically active in more walkable neighbourhoods with access to nearby recreation facilities, along with being able to walk to school, in areas with connected street networks and low traffic speeds and volumes. Similar behaviours also extend into adolescence, where adolescents are more physically active in areas with higher residential density and a greater mix of land uses. An example of this trend can be observed though longitudinal and cross-sectional research that shows that living in areas with good sports facilities and a variety of sport options nearby was associated with less TV viewing among children and adolescents.

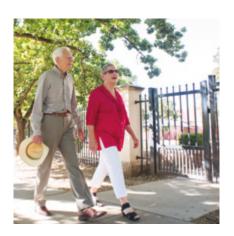
A local community facility, such as a school, can encourage more walking and cycling by children. An observational study in Bristol, England, found that children who walk or cycle to school between 8am to 9am in the morning engaged in 50% more moderate-to-vigorous physical activity than those who travelled by other means. School students were consulted on the development of the Ride or Walk to School Program in 2011. Of those surveyed, the majority of students wanted to use active travel (walk, bike, scooter or skateboard) rather than being driven or catching the bus.

OLDER ADULTS

A recent three-year study found that of the 131 older adults who lived within 650 metres to 16 services and amenities, 45–55% often walked to these services and amenities.³³ Older adult's physical activity choices can be influenced by factors such as a higher level of connected streets that lead to shorter pedestrian distances, safety measures that improved street and traffic conditions, and the proximity to destinations such as retail establishments, parks and green spaces.³⁴

- 28, 29 Ding, Sallis, Kerr and Lee. 2011, Neighborhood Environment and Physical Activity Among Youth A review
- 30 ACT Government, 2012, Ride or Walk to School: A Game Plan to Encourage Active Travel in ACT Schools.
- 31 Cooper, Page, Foster and Qahwaji, 2003, Commuting to School Are children who walk more physically active?
- Tudor-Locke, C., Ainsworth, B., Adair, L., & Popkin, B. (2003). Objectives physical activity of Filopino youth stratified for commuting mode to school. Medicine and Science in Sports and Exercise, 35, 465-471.
- 33 Gauvin et al, 2012, Living in a Well-Serviced Urban Area Is Associated With Maintenance of Frequent Walking Among Seniors in the VoisiNuAge Study
- 34 Rosso, Auchincloss and Michael, 2011, The urban built environment and mobility in older adults a comprehensive review





PUBLIC TRANSPORT USERS

Recent research demonstrates that adults who used public transport were shown to have achieved an average of 35 minutes per day of incidental physical activity. Adults who cycled or walked for transport purposes achieved an average of 38 minutes per day of physical activity. These levels of physical activity were adequate for reaching the recommended 30 minutes of exercise a day, whereas private vehicle users averaged just 10 minutes of physical activity per day.35 Along with public transport, the physical qualities of the environment such as slower speeds and lower volumes of traffic, proximity to recreational facilities and mixed-land use neighbourhoods, were strongly associated with increased physical activity levels.36



³⁵ Beavis and Moodie, 2014, Incidental physical activity in Melbourne, Australia health and economic impacts of mode of transport and suburban location

Ding, Sallis, Kerr and Lee. 2011, Neighborhood Environment and Physical Activity Among Youth - A review

RESEARCH: PLACES AND THE BUILT ENVIRONMENT

'LIVEABLE NEIGHBOURHOODS' – WESTERN AUSTRAI IAN EXPERIENCE

A 2015 study that looked into identifying the mix of design requirements to optimise walking outcomes from the 'Liveable Neighbourhoods' planning policy in Perth, Western Australia found:

- → The likelihood of participants living in the 'connected and compacted developments', doing at least 60 minutes or more per week of recreational walking, was double that of people living in 'disconnected developments'
- → Residents living in the 'green developments' had three times greater odds of doing any or at least 60 minutes per week of recreational walking compared to residents living in the 'disconnected developments'
- → The odds of doing any or at least 60 minutes per week of active travel related walking was double that for those living in the most connected and compact developments than those living in disconnected developments.³⁷

While the design of the physical environment is a key factor in facilitating more active lifestyles, supplementary research from Western Australia found that perceived fear of crime can restrict adults walking rates by 22 minutes a week, recreational walking by 13 minutes a week and transport walking by 7 minutes a week.³⁸ This demonstrates that along with the provision of facilities and services, the attractiveness, amenities and design of the built environment is critical to ensure everyone can take part in more physical and incidental activity, regardless of age and ability.



Recent research undertaken by the University of Canberra into the new Canberra suburb of Crace tested assumptions about how 'best practice' in urban development may, by influencing human behaviour, lead to better health outcomes for Crace residents. A survey, completed in the spring of 2014, indicated residents are increasingly satisfied with walking conditions in Crace, particularly with the easy walking distance to the local shops, the trees along streets and the streets being well lit at night. The study found:

- → Residential engagement within Crace has continually risen, with 75% of respondents regularly attending community events in 2014 as opposed to under half in 2012
- → Approximately 20% of respondents using parks and nature reserves, with over 60% of participants using the recreation park and Hilltop Reserve
- → Respondents also felt generally happy in 2014, along with emotional wellbeing remaining positive, with close to 100% of respondents feeling happy quite often.³⁹





Hooper, Knuiman, Bull, Jones and Giles-Corti, 2015, Are we developing walkable suburbs through urban planning policy? Identifying the mix of design requirements to optimise walking outcomes from the 'Liveable Neighbourhoods' planning policy in Perth, Western Australia

Foster, Knuiman, Hooper, Christian and Giles-Corti, 2014, Do changes in residents fear of crime impact their walking Longitudinal results from RESIDE

³⁹ Berry, 2015, The Crace Study – Report Card for 2012 – 2014.



CYCLING EXPERIENCE - CANBERRA

Recent research has looked into ACT cycling trends, where 166 participants undertook a survey to determine whether the Civic Cycle Loop was likely to increase rates of cycling and do so by improving the perception of safety for those that used it. The survey results showed:

- → 48% of respondents either agreed or strongly agreed that they choose to cycle on the loop more frequently since the construction of the loop
- → 73% of respondents either agreed or strongly agreed that the loop made Rudd and Marcus Clarke streets safer for them as a cyclist
- → 64% of respondents either agreed or strongly agreed that the streets had become easier to navigate
- → 73% of respondents either agreed or strongly agreed that the loop had made for a better cycling environment in Canberra.⁴⁰

The findings from the research indicate that cyclists, particularly those who use the route less frequently, do report using the route more frequently since the Civic Cycle Loop was installed and that the new infrastructure does improve the perception of safety.⁴¹

These survey results can be considered in light of a telephone survey involving 156 participants in 2015 with regard to rider perceptions of cycling in the ACT. The survey revealed the most commonly cited reason for not cycling to work (41%), or cycling to school or university (37%) was because these destinations were 'too far'.42 Respondents were also asked to prioritise actions that the ACT road authorities could take to encourage more riding. Some of the most supportive responses included:

- → more off-road paths and cycle ways (54%)
- → better connections between bike paths and schools (50%)
- → more signs highlighting bicycle routes (46%)
- → more bicycle parking (43%)
- → better connections between bike paths and shops (40%).43

The survey results indicate that supportive cycling infrastructure can potentially enable more ACT residents to cycle to workplace and educational destinations, thus contributing to more active lifestyles.

^{40, 41} Kennedy, 2015, Cycling in Canberra-does the Civic Cycle Loop hold promise?

^{42, 43} Munro C, 2015, National Cycling Participation Survey 2015: Australian Capital Territory

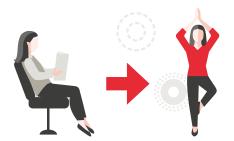


THE HEALTH, ECONOMIC AND SOCIAL BENEFITS OF ACTIVE LIVING

Promoting incidental activity through improved urban design provides a range of social and wellbeing benefits. Pedestrian and cycle-friendly neighbourhood design can lead to greater contact between neighbours, the development of social networks, the potential to increase neighbourhood safety through natural surveillance, and increased transport options to members of the community who may experience 'transport poverty' or restricted mobility access.44

Similarly, the provision of open spaces, parks and trails, the design quality of the built environment and the provision of social infrastructure such as schools, has been found to positively influence physical activity levels and improved mental health outcomes.⁴⁵

A built environment that is designed to encourage active lifestyles for all children, adolescents, adults and older people—can lead to improved health, social and economic benefits for the community. These benefits apply at the global, national and local level and involve a number of factors, including urban design.



HEALTH AND ECONOMIC BENEFITS OF ACTIVE LIVING: A GLOBAL CONTEXT

The International Physical Activity and Environment Network Adult Study (IPEN) was recently conducted in 14 cities around the world. Nearly 7000 adults ranging from 18 to 65 years old participated by using an accelerometer monitoring system to objectively record moderateto-vigorous physical activity for approximately one week. The researchers found that people living in densely populated and walkable neighbourhoods with interconnected streets to shops, services, restaurants, public transit and parks recorded 90 minutes of physical activity a week.46 This is approximately 60% of the 150 minutes recommended for adults in the Australian Physical Activity and Sedentary Behaviour Guidelines.

European research in 2011 examined the health and economic effects of a section of the community that changed their mode of transport from car usage to walking or cycling. It found the economic benefits of switching from driving to cycling was calculated to be a 1300 € (\$1830 AUD) annual contribution to the economy, while air emission reduction was worth 30 €/year (\$42 AUD) for each individual.47

⁴⁴ Giles-Corti, Foster, Shilton and Falconer, 2010, The co-benefits for health of investing in active travelation

Sallis, Spoon, Cavill, et al., 2015, Co-benefits of designing communities for active living an exploration of literature

Sallis et al. 2016. Physical activity in relation to urban environments in 14 cities worldwide - a cross-sectional study

Rabi and Nazelle, 2012, Benefits of shift from car to active travel

A report by the British Department of Transport indicated cost-benefits of cycling. The report found that for every 100,000 people aged between 20 and 60 who regularly cycled for commuting, there were 50 fewer deaths per year, as an aggregate of health benefits, and a reduction of road traffic casualties among those cyclists (or the equivalent to 1660 life years). 48 Assuming a value of around £30,000 (\$53,000 AUD) per life year, this resulted in a net benefit of just over £50 million (\$88 million AUD) from those 100,000 cyclists. Similar trends from the United States found that if 10% of adults began a regular walking programme, the annual savings in costs associated with heart disease would total \$5.6 billion (\$7.35 billion AUD).49

Further research from the United Kingdom has shown the net positive impact of public realm improvements on existing retail performance, urban regeneration, tourism and property prices. It found:

- → Well-planned improvements to these public spaces can boost footfall traffic and trading by up to 40%
- → Investments in walking and cycling projects can increase retail sales by 30%
- → Post-evaluations of pedestrian improvements in the English cities of Coventry and Bristol show a 25% increase in footfall on Saturdays and predict £1.4 million in benefits respectively
- → In Hong Kong, a 17% increase in retail rents from pedestrianisation investments
- → The provision of green spaces has led to rents increasing by up to 20 per cent and for every 1% increase in green spaces has led to a 0.3 to 0.5% rise in average house prices.50

IMPROVED HEALTH OUTCOMES: WESTERN AUSTRALIA AND QUEENSLAND

A recent Western Australian study found that adults living in more walkable neighbourhoods were associated with lower cardiovascular disease risk factors such as obesity and type 2 diabetes.⁵¹ Further research has found that more active behaviour in Melbourne contributed to economic benefits of between 67 and 3511 lives saved annually and savings of between \$8.7 and \$35.1 million in productivity and health costs.52

Similarly, a Brisbane study of 11,037 middle-aged residents across 200 neighbourhoods determined people living in places more conducive to walking for transport, including residents of disadvantaged neighbourhoods, experienced positive health benefits as a result of their higher levels of walking. Greater street connectivity and greater land use mix might help offset the negative effects of less healthy behaviours (e.g. smoking, poor diet), serving to contain or reduce neighbourhood inequalities in chronic disease. 53 This demonstrates an important link towards taking part in incidental activity and mitigating less healthy behaviours.



^{48, 49} Davis, A 2014. Claiming the Health Dividend: A summary and discussion of value for money estimates from studies of investment in walking and cycling

⁵⁰ Lawlor, 2014, The pedestrian pound - The business case for better streets and places

⁵¹ Müller-Riemenschneider, Pereira, Villanueva, et al, 2013, Neighborhood walkability and cardiometabolic risk factors in Australian adults - An observational study

⁵² Beavis and Moodie, 2014, Incidental physical activity in Melbourne, Australia health and economic impacts of mode of transport and suburban location

Turrell, Haynes, Wilson and Giles-Corti, 2013, Can the built environment reduce health inequalities - A study of neighbourhood socioeconomic disadvantage 53 and walking for transport





MILLION PER YEAR IN DISEASE RELATED SAVINGS



HEART DISEASE





COLON CANCER

ECONOMIC BENEFITS OF LIVING HEALTHY, ACTIVE LIFESTYLES: AUSTRALIA

There are also a range of economic benefits that can be generated through active living. A 2011 study commissioned by the Queensland Government found that for a typical off-road path in an inner urban area, the economic benefits and savings per kilometre walked or cycled were:

- → congestion reduction (20.7 cents per kilometre walked or cycled)
- → health (up to 168.0 cents per kilometre)
- → vehicle operating costs (35.0 cents per kilometre)
- → infrastructure savings (6.8 cents per kilometre) and environment (5.9 cents per kilometre).54

This indicates that for each person who cycles 20 minutes to work, the Australian economy benefits by \$14.30, while each person who walks 20 minutes to work benefits the economy by \$8.48.55

Further evidence from Western Australia found that if an extra 10% of the population became more active, there would be productivity gains of \$60 million for the state's economy. Based on national figures, potential savings of \$44 million per year would be achieved should a 5% increase in physical activity levels occur in Western Australia. For every 1% increase in the proportion of Australians who are sufficiently active, the national cost of three significant diseases – heart disease, diabetes and colon cancer – could be reduced by about \$3.6 million per year.⁵⁶

Comparative experience has found that by changing car parking to bicycle parking on Lygon Street, a popular mixed-use street in inner Melbourne, \$27 an hour in retail spend was produced for each car space. But if six bike spaces replaced a car space, it would produce \$97 an hour in retail spend.⁵⁷

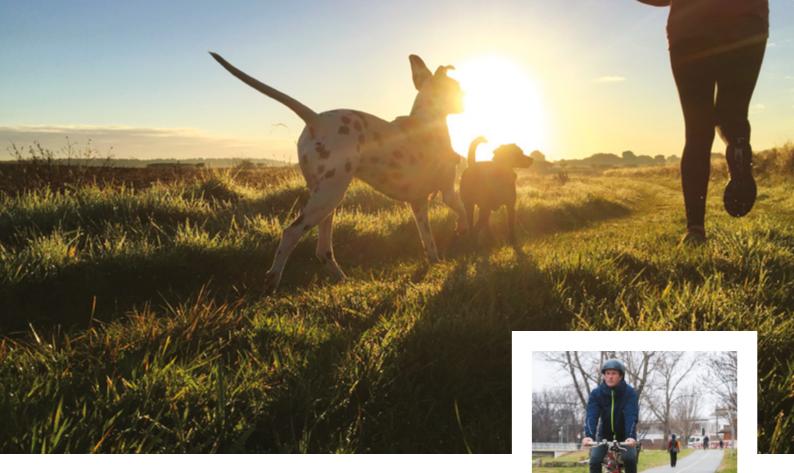
Similar research from a 2008 survey by Northcote City Council in Melbourne found:

- → Visitors to street-based shopping areas (e.g. High Street) tend to walk or catch public transport, while visitors to internalised shopping malls tend to drive. High Street visitors are more willing to lose car parking spaces to accommodate streetscape improvements than visitors to shopping malls
- → Visitors to Northcote shopping precinct place a higher level of importance on cleanliness and maintenance, pedestrian access and safety than business respondents who thought car parking was most important
- → Business respondents tended to overestimate car-based travel and underestimate walking and public transport use among visitors to Northcote Shopping precinct.58

^{54, 55} Commonwealth of Australia, 2013, Walking, Riding and Access to Public Transport: supporting active travel is Australian communities – ministerial statement

Davis, A 2014. Claiming the Health Dividend: A summary and discussion of value for money estimates from studies of investment in walking and cycling

^{57, 58} National Heart Foundation of Australia, 2011, Good for Business - The benefits of making streets more walking and cycling friendly



AUSTRALIANS WANTING TO LIVE MORE ACTIVE LIFESTYLES

The above health, economic and social benefits to active living also resonate with the Australian population. A Grattan Institute survey of 700 residents of Sydney and Melbourne in 2011 found that certain neighbourhood attributes were perceived to be of greater importance, including access to convenient services and amenities, neighbourhood attractiveness, safety and security.⁵⁹

Similarly, a national Newspoll telephone survey commissioned by the National Heart Foundation of Australia in 2011, asked 1400 Australians whether healthy neighbourhood features influenced their decision about where to live. The survey found that being within walking distance of public transport was the most often ranked highest priority, with almost 70% of participants reporting as either very or extremely important. 60 The survey also found that 64% reported being within easy walking distance to a range of local services would be very or extremely important.⁶¹

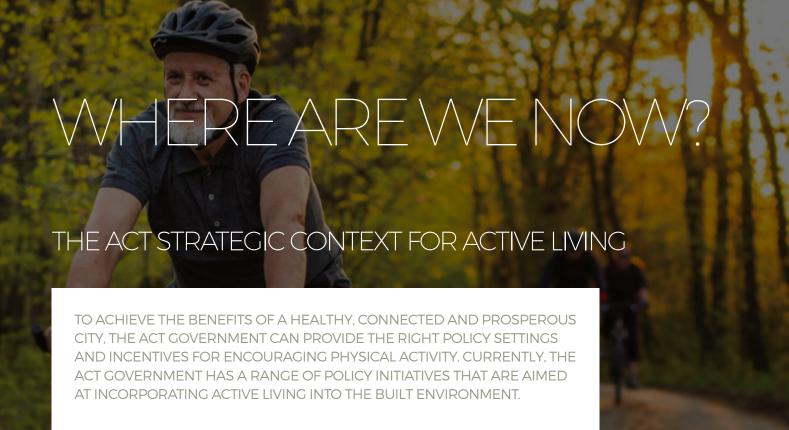
This research has demonstrated a range of benefits from promoting and facilitating active living in the built environment through urban planning and design. In particular, the creation of healthy, inclusive and liveable communities, where places are safe and thoughtfully designed for people, enhanced incidental physical activity and social interaction, provision of green spaces resilient to climate change, a diverse economy and promotion of equitable access for all. Ultimately, designing the built environment to encourage incidental active lifestyles can lead to improved health and economic benefits for the whole community - children, adolescents, adults and older generations.



⁵⁹ Kelly, 2011, The housing we'd choose

⁶⁰ Giles-Conti, Hooper, Foster, Javad Koohsari and Francis, 2014, Low density development, Impacts in physical activity and associated health outcomes

⁶¹ ibid



The ACT's whole-of-government Healthy Weight Initiative, through the Towards Zero Growth: Healthy Weight Action Plan (2013), sets a 'zero growth' target of overweight and obesity levels in the ACT to at (or below) their current levels. The Healthy Weight Action Plan contains actions to improve access to infrastructure for active travel and/or recreation; reduce the availability of energy dense, nutrient poor foods; and reduce the promotion of unhealthy foods. ⁶² The Healthy Weight Action Plan identifies clustered activities around six themes of food environment, schools, workplaces, social inclusion, evaluation and the role urban planning plays in achieving the objectives set out in the plan. ⁶³

The ACT Government has provided the Heart Foundation (ACT) with funding since 2009 through the Active Living Program. The program identifies where policies and practices can be enhanced across government to create a more active built environment for the Canberra community, and has an education focus aimed at up-skilling ACT Government staff on how to incorporate active living into their everyday work practices.

The ACT Government's key planning and transport strategies are implementing active living principles. The ACT Planning Strategy⁶⁴ and Transport for Canberra⁶⁵ encourage urban intensification around key centres and transport corridors to promote safe and sustainable travel options, including walking and cycling.

The Building an Integrated Transport Network – Active Travel Framework⁶⁶ (2015) outlines how to better integrate planning and delivery of active travel initiatives to further encourage and support walking, cycling and riding as part of Canberra's overall planning, transport, health, environment and education systems. The Active Travel Framework provides options for people to walk, cycle, ride and catch public transport to destinations, such as work, shops and schools, further embedding active living and active travel into the city and lives of its residents.⁶⁷



^{62, 63} ACT Government, 2013, Towards zero growth: Healthy Weight Action Plan

⁶⁴ ACT Government, 2012, ACT Planning Strategy – Planning for a sustainable city

⁶⁵ ACT Government, 2012, Transport for Canberra – Transport for a sustainable city

^{66, 67} ACT Government, 2015, Building an Integrated Transport Network - Active Travel

⁶⁸ ACT Government, 2015, Statement of Planning Intent





The Minister for Planning and Land Managements' Statement of Planning Intent (2015)⁶⁸ addresses many immediate, short and medium term challenges, including:

- → creating sustainable, compact and liveable neighbourhoods with better transport choices
- → delivering high quality public spaces and streets through placemaking
- → delivering an outcome-focused planning system to reward design excellence and innovation
- → engaging with the community, business and research sectors to optimise planning outcomes.

The statement identifies an immediate action to incorporate active living principles into the Territory Plan. This action requires a draft variation to the Territory Plan to be developed and approved by the Legislative Assembly. This long-term commitment to consider active living principles in statutory planning schemes is leading to positive development and community focussed outcomes that can be applied in the ACT context.

The actions within the Statement of Planning Intent (2015) also support and underline the recent release of Canberra: A Statement of Ambition⁶⁹. These ambitions include: winning the global contest for investment and talent; opening and diversifying our knowledge-based economy; better metropolitan infrastructure; and integrated smart-city initiatives. A key to this vision is a city that is an inclusive, welcoming society, open to diverse talents and determined to help everyone reach their full potential.

The current policy context is fundamental to how we can successfully support more active Canberrans, who are able to adapt to future trends with resilience. Active living can help to facilitate these future challenges as the ACT heads deeper into the 21st Century.



ACT GOVERNMENT REPRESENTATIVES, WITH THE PLANNING INSTITUTE OF AUSTRALIA AND THE HEART FOUNDATION (ACT), DEVELOPED SIX ACTIVE LIVING PRINCIPLES, BASED ON THE HEALTHY SPACES AND PLACES (2009) DESIGN PRINCIPLES, DEVELOPED AT THE NATIONAL LEVEL.⁷⁰

These principles describe in more detail what active living means for the ACT and help frame how urban planning can play a vital role in shaping our city into a healthier, more prosperous and greener city. The six principles are proposed to be incorporated into the Territory Plan, and include:

- Providing connections between major uses and activity centres
- 2 OPEN SPACE

 Providing high quality open spaces, parks and places
- MIXED LAND USE AND DENSITY

 Encouraging diversity in activities, land uses and development densities
- 4 SAFE AND ATTRACTIVE PLACES
 Ensuring places are safe and attractive to everyone using that place
- SUPPORTIVE INFRASTRUCTURE

 Providing supportive
 infrastructure that encourages
 regular physical activity
- 6 ENVIRONMENTS FOR ALL
 Ensuring places are inclusive and have equitable access by all Canberrans.





PEDESTRIANS



PRIVATE VEHICLES

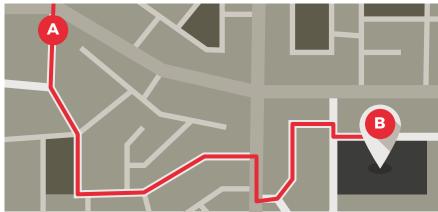
TRANSPORT USER HIERARCHY

CONNECTED PLACES

Connected places provide easy and safe access to work, education, shopping and recreational venues. They offer opportunities for positive interactions between people, helping to contribute to active, vibrant places where people can meet, live, work and play.

All types of transport networks, whether for pedestrians, cyclists or drivers, should provide interconnected and continuous safe routes, particularly to major destinations and community places such as shopping centres, parks, schools, health facilities and public transport. Connected places particularly encourage people to choose to walk or cycle to local destinations rather than use a car.

POOR PROVISION OF ALTERNATIVE ON-STREET CYCLE ROUTES



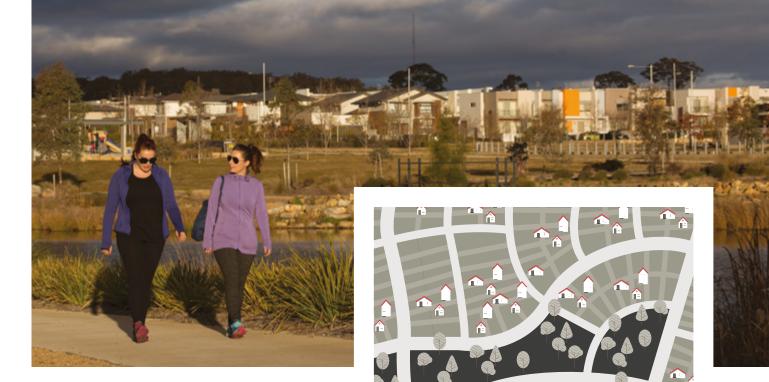
IMPROVED PROVISION OF ALTERNATIVE ON-STREET CYCLE ROUTES



This principle assumes the adoption of the 'transport user hierarchy' of pedestrians, cyclists, public transport and private vehicles, with pedestrians at the top.

CASE STUDY – SULLIVANS CREEK SHARED PATH

The Sullivans Creek shared path is an off-road cycle and walking path that runs alongside Sullivans Creek in inner-north Canberra. The Sullivans Creek shared path is recognised as one of Canberra's most well used cycle and pedestrian paths. Its proximity to nearby residential and commercial properties, retail premises and the Australian National University education precinct attracts riders to commute to Civic and to Lake Burley Griffin and beyond.



OPEN SPACE

Open space and parks are places for active sport and quiet recreation, the preservation of natural environments, the provision of green space and urban storm water management. Open spaces can vary in size, form and function. Open spaces are successful where they are of a sufficient size and shape to cater for their intended purpose, adaptable to a wide variety of users and activities, and inclusive for all sectors of the community to use.

Exposure to natural spaces (everything from open countryside to parks and gardens) has generally been found to have positive benefits for mental and physical health and well-being, which can flow into improved workplace productivity and other aspects of life.

The design of an open space network as an integral part of the urban structure can offer a variety of safe and attractive spaces that are easily accessible throughout a neighbourhood. These spaces should be accessible, connected and cater to the sporting and recreation needs of the community.

Good quality, accessible and connected open space provides the opportunity for people to undertake physical activity.



CASE STUDY: CRACE

Crace is a new suburb in Canberra's district of Gungahlin with housing choice to allow for ageing in place, and commercial and community mixed-use development at its centre. Open space is integral to the suburb's design, with a connected network of walking and cycling paths within Crace, that build on the central linear hilltop naturalised park that provides linkages to parks, local playgrounds and a community garden.



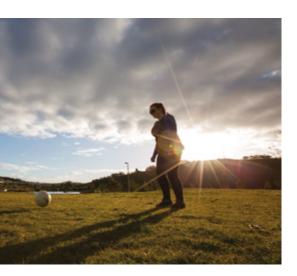
MIXED LAND USE AND DENSITY

A mixture of land uses and of development densities creates variety, interest and multiple destinations, helping to build connected spaces. Clustering related and compatible land uses and activities together can create a strong sense of place, improve accessibility, reduce travel distances and build incidental physical activity into a person's day. Good design can reduce conflicts between different land uses, such as noise. It can also lead to high quality design outcomes and street activation. This in turn can result in the creation of attractive, vibrant places for people through well connected, mixed-use and active neighbourhoods that can lead to improved economic and tourism outcomes across the ACT.

Places with mixed land use have a variety of land uses and activities located together along a street or one above the other (such as shops at ground level, offices and residential development above).

Mixed density usually refers to a range of residential development that contains a mix of housing types and a variety of development forms (such as size and height).

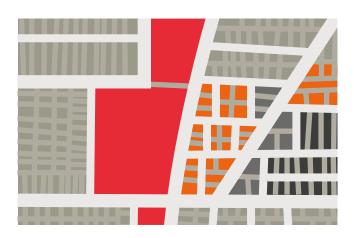
To ensure that mixed density developments create variety, interest and connected spaces, they should be integrated with surrounding development. Examples include areas with connected street networks, mixed land uses, public transport and supporting infrastructure including walkways, public areas and cycle paths.

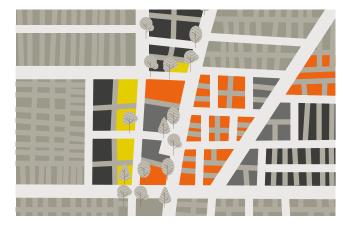




CASE STUDY: ROUSE HILL TOWN CENTRE

Rouse Hill Town Centre is a mixed-use development on a greenfield site in Sydney's north-west. The town centre is designed to encourage active living, with a traditional open air 'main street' layout blended with contemporary open-air and mall-style retail, commercial offices, community facilities and residential living. The development is a contemporary example of transitoriented development, with well-planned links to public transport, a high quality public domain and programs that encourage walking and cycling.





- LOW DENSITY RESIDENTIAL
- MEDIUM DENSITY
- OFFICE/COMMUNITY

COMMERCIAL

- MIXED USE
- RETAIL

SAFE AND ATTRACTIVE PLACES

All public places should be safe and attractive to all users. People need to perceive a place is safe before they use it. Perceptions of safety can include adequate lighting, having other people using the space and clear lines of sight.

In the context of urban environments, attractiveness relates to the combined effects of various elements such as the visual quality of the architectural and landscape design, the quality of views and vistas, and the amenity of elements such as furniture in the public realm. Attractiveness is associated with the overall experience and use of an area, including how pleasant it is to sit, walk, cycle, view and talk. When people feel safe and find a place interesting and attractive, they are more likely to visit and to stay longer, which benefits local business.

CASE STUDY: KINGSTON FORESHORE

The Kingston Foresore is a safe and attractive community designed at the precinct level where people live, work, dine and are entertained. The precinct is easily accessible by walking, cycling and public transport through the use of clear sightlines to entrances and exits of routes and buildings. Lighting and active frontages are also prevalent, with windows overlooking and building entrances facing the street. This promotes natural surveillance and safety at night while contributing to a lively, inviting place.







SUPPORTIVE INFRASTRUCTURE

Facilities in public places and spaces that support physical activity can enhance people's experience, build a sense of community and encourage regular activity.

Supportive infrastructure might include a wide variety of measures to make using a place more inviting and comfortable, such as street furniture, lighting, street trees and landscaping, shade, water bubblers, way-finding signs, access ramps, public art, bike racks and bus shelters. This infrastructure contributes to the quality of public spaces, enhancing the overall feel and experience of a place and encouraging people to stay.

Supportive infrastructure has the potential to enhance the range of active living choices and the experience of using a particular place.

CASE STUDY: PLACES FOR PEOPLE, CITY OF MELBOURNE

The Places for People initiative by the City of Melbourne, with assistance from renowned Danish urban planner Professor Jan Gehl, sought to create 'a vibrant, charming 24-hour place' with the installation of gathering spaces of excellent quality. This was achieved by redesigning existing squares, providing more urban plazas, improving access for people with disabilities and providing feature lighting. Improving the street furniture and increasing active frontages—and discouraging through traffic—supported physical activity. This in turn enhanced people's experience, encouraged regular activity and helped existing businesses.

ENVIRONMENTS FOR ALL

All public spaces and places should be designed to allow easy access and use by all people, regardless of age, culture, ability or income. The aim is for people to feel connected to, and part of, a community. Engendering a sense of belonging can positively benefit an individual's mental health and wellbeing. The considerations of the qualities that make a space more inclusive and child-friendly or age-friendly are also important factors when considering, designing and implementing environments for all.

CASE STUDY: BOUNDLESS PLAYGROUND, PARKES

Located on the shores of Lake Burley Griffin in King's Park, the Boundless playground is a safe, inclusive environment where children with disabilities can play in the same space, with the same equipment, as other children and have fun without many of the usual barriers to play or inclusion. The playground caters for children and young people with vision, hearing and mobility impairments, as well as children with spectrum disorders. The playground is a destination attraction for national, interstate and local families.





study, shop and socialise and having ready access to public open space within easy walking and cycling distance. This requires strong public policy support not only from government, but also from the industry and community sectors through an integrated approach when planning our cities and towns. This is crucial as the location, accessibility, layout and design of spaces and places all affect the extent to which people are likely to make healthy choices and lead active lives, bringing a range of health, social and economic benefits to the ACT.

An example of this is the Australian Government Department of Health's role in funding a unique partnership between the Australian Local Government Association, the National Heart Foundation of Australia and the Planning Institute of Australia for the Healthy Spaces and Places project. This project developed a Healthy Spaces and Places national guide that provided a range of practical tools, case studies and guidelines to plan, design and create sustainable communities that encourage healthy living.71

The guide aimed to:

- → encourage the development of built environments that provide opportunities for physical activity and other health-related activities
- → continue to improve health outcomes for all Australians through better-designed built environments
- → raise awareness of the relationship between physical activity and the built environment
- → contribute to a national policy setting.⁷²











The role of non-government organisations is important in the development of active living policy and advocacy. The National Heart Foundation of Australia's Blueprint for an Active Australia sets out 13 action areas for governments and the community to increase levels of physical activity and reduce sedentary behaviour. Of particular interest is action area 1: Built Environments, which explores how neighbourhood design impacts on how frequently we walk, cycle or use public transport and participate in recreational walking and physical activity.⁷³ This work complements the Heart Foundation's work with the Cycling Promoting Fund on Move It: Australia's Healthy Transport Options, with this initiative developing a 10 step national policy framework to boost participation in active travel.74

The Heart Foundation's research has been translated into the development of state-based planning resources, such as Healthy by Design SA, a guide to the planning, design and development of healthy urban environments in South Australia.⁷⁵ It includes a range of planning and design considerations to inform seven key areas, ranging from walking, cycling and public transport to local destinations, supporting infrastructure and food grown in urban areas.⁷⁶

Taking an integrated approach to active living involves considering how the built environment can influence travel behaviour through the provision of footpaths and a safe, connected street network. Access to safe cycling and walking routes will encourage people to cycle and walk. Easy to access and reliable public transport will encourage more people to use it, leave the car at home, and get incidental exercise through walking and cycling to the bus stop. Mixed-density housing, mixed land-use, active travel options, considered design and the location of workplaces and access to healthy food make for healthy places.

National Heart Foundation of Australia, 2014, Blueprint for an active Australia, 2nd edn

National Heart Foundation and Cycling Promotion Fund, 2014, Move it - Australia's healthy Transport Options

^{75, 76} National Heart Foundation, 2012, Healthy by Design SA – A guide to planning, designing and developing Healthy urban environment in South Australia



PRIOR TO THE RELEASE OF DV348, THE ENVIRONMENT, PLANNING AND SUSTAINABLE DEVELOPMENT DIRECTORATE (EPSDD) IN PARTNERSHIP WITH THE HEART FOUNDATION (ACT) UNDERTOOK PRELIMINARY DISCUSSIONS WITH GOVERNMENT, INDUSTRY AND DESIGN PROFESSIONAL REPRESENTATIVES TO DEVELOP A BETTER UNDERSTANDING OF THE OPPORTUNITIES FOR INCORPORATING ACTIVE LIVING PRINCIPLES INTO THE TERRITORY PLAN.

The first step in this process involved collating information from relevant sources, including a roundtable workshop with ACT Government representatives in mid 2014. This information was used to identify gaps in the Territory Plan, with a gap analysis report produced. A focus group consisting of ACT Government agencies reviewed and discussed the gaps, including areas where the Territory Plan could be strengthened and issues requiring further analysis and investigation.

Building from this process, EPSDD in partnership with the Heart Foundation (ACT) undertook preliminary discussions with industry and built environment stakeholders in late 2015 and early 2016 to seek their perspectives on active living.





This included discussing the six active living principles, any potential barriers and impediments to the proposed changes that could arise, and identifying additional information or resources that could be used. The key messages heard from these discussions were:

- 1. All participants broadly supported incorporating active living principles into the Territory Plan, which demonstrated the ACT Government's vision to plan for active living for current and future generations and to work in partnership with the Heart Foundation (ACT) to embed the concept of active living. Some of the benefits identified by incorporating active living principles into the Territory Plan included:
 - a. Provision of supportive infrastructure, such as public transport, cycling and walking infrastructure
 - b. Positive flow-on effects to the local and visitor economies of bringing more people into commercial and business districts
 - c. Development of green spaces, places and destinations where people want to sit and spend time
 - d. Reducing the cost burden imposed on the health system by encouraging people to undertake incidental exercise, thus improving their physical and mental health.
- 2. The participants raised the importance of increased density and mixed land use as a means to implement active living principles in the Territory Plan, encouraging more people to live more active lifestyles.
- 3. The participants noted that for the active living principles to be effective and have a sound statutory standing, they should be embedded within the precinct codes of the Territory Plan for established and future urban areas. Active living principles could be demonstrated in precincts in new Greenfield developments to higher density, mixed-use infill developments.
- 4. **Participants raised the issue of over-regulation**, particularly the extra time and costs imposed upon applicants and developers. Participants also raised concerns about the ongoing maintenance of infrastructure that encourages active living.
- 5. Some participants questioned whether current policy already attempts to embed active living into the built environment. Participants noted that the move towards embedding the active living principles into the Territory Plan would be a move away from a prescriptive rule and criteria based planning system to a more performance based system. A positive outcome of this change for applicants and developers would be that they would allow more innovative solutions for implementing active living concepts into their developments.
- 6. While participants noted the benefits of active living would bring for current and future generations, some felt there was a demographic bias toward more affluent and younger **generations** who would benefit more from these policies, as opposed to the older demographic who relied on private transport. It was therefore important to ensure the initiative is inclusive of all sectors within society and not perceived to be favouring one socio-demographic group over the other.

MANY OF THE COMMENTS RAISED IN THE PRELIMINARY DISCUSSIONS WITH STAKEHOLDERS HAVE BEEN INCORPORATED INTO THE 45 PROPOSED RECOMMENDATIONS THAT FORM PART OF DV348 AND MEET IN PART THE FOUR PLANNING PRIORITIES UNDER THE STATEMENT OF PLANNING INTENT (2015) MADE BY THE MINISTER FOR PLANNING AND LAND MANAGEMENT.



DRAWING ON ADVICE FROM BY THE HEART FOUNDATION (ACT) ON DEVELOPING AND EMBEDDING ACTIVE LIVING PRINCIPLES INTO THE TERRITORY PLAN, THE ACTIONS FROM THE STATEMENT OF PLANNING INTENT (2015) MADE BY THE MINISTER FOR PLANNING AND LAND MANAGEMENT AND THE COMMENTS RAISED DURING THE EPSDD'S PRELIMINARY DISCUSSIONS WITH INDUSTRY, PROFESSIONALS AND OTHER BUILT ENVIRONMENT STAKEHOLDERS, 45 RECOMMENDATIONS HAVE BEEN DEVELOPED TO INCORPORATE ACTIVE LIVING PRINCIPLES INTO THE TERRITORY PLAN THROUGH DV348.

As outlined throughout this paper, these changes would contribute to the ACT Government's vision for an active, healthy Canberra by embedding the concept of active living into the Territory Plan, rather than by the introduction of additional codes. The changes range from the inclusion of active living as a concept into the Strategic Directions and zone objectives, to the implementation of new rules, terms and definitions the Territory Plan. The changes would make a significant difference to implementing active living measures within Canberra, providing a range of benefits to the broader community and supporting industry and businesses.

By undertaking this broad approach, the relevant sections of the Territory Plan will be strengthened by reinforcing and making clear the active living concepts that are already present in the Territory Plan.

This approach also addresses the need for applicants to consider active living as part of their development application without having to refer to an additional Code. Taking an integrated policy and regulatory approach to active living will ensure that existing and future urban areas are designed to encourage current and future generations to live active and healthy lifestyles.

DV348 also complements and responds to the relevant actions of the Minister for Planning and Land Management's Statement of Planning Intent (2015) as outlined in Table 2. These include investigating the inclusion of outcome- and performance-based provisions in Territory Plan precinct codes aimed at targeted urban renewal areas to encourage new design approaches and provide incentives for innovation and sustainable design, along with reviewing the Estate Development Code of the Territory Plan to be more outcomes-focused and less prescriptive. Concurrent actions into the review of the Parking and Vehicular and Access General Code and the Bike Parking General Code, along with the selection of the first demonstration precincts along the Northbourne Avenue corridor and in southern Canberra, are important actions that strive to create sustainable, compact and liveable neighbourhoods with better transport choices.

For further details, refer to DV348 for the proposed changes and wording for each of the recommendations that are proposed to be incorporated into the Territory Plan.

STATEMENT OF STRATEGIC DIRECTIONS

The role of the Territory Plan's Statement of Strategic Directions (the Statement) is to set out the broad strategic principles to guide the long-term planning for the ACT that give effect to the main object of the Plan (under section 52 of the P&D Act 2007). As the Statement is the overarching strategic direction for the Territory Plan, active living principles should be comprehensively incorporated within the Statement to ensure the broad direction of the Territory Plan supports active living.

The Statement establishes broad principles under a triple bottom line framework of environmental, economic and social sustainability. The Statement considers some active living principles, such as open space, but has gaps in the inclusion of other active living principles such as mixed land use and density.

Some of the gaps identified include:

- → The Statement identifies the need to provide networked systems of open space, but fails to address the need for connected active travel networks. Terms such as active travel and active living are not included, nor is there reference to providing infrastructure that supports regular physical activity and inclusive environments
- → While recognising the need to support employment and enhance the role of centres, the Statement does not promote connecting employment with housing, or recognise the connection between the two is an important contributing factor for active living
- → Mixed-use development is only mentioned once in the Statement. In some sections, centres are described as only retail or commercial centres, which may limit consideration of these locations as centres with a genuine mix of activities and uses.

Six recommendations have been proposed that seek to revise the Statement to include active living principles. These recommendations ensure existing principles prioritise active travel and support the connectivity of active travel networks. The Statement incorporates new principles that refer to supportive infrastructure, the enhancement of public spaces and places, and the connection between employment and housing location.

ZONE OBJECTIVES

Land use planning in Canberra is controlled by a zoning system. The framework for this system is established under the P&D Act 2007. The current system is predominantly a prescriptive standards system and divides land uses into the following broad categories:

- a. Residential
- b. Commercial
- c. Industrial
- d. Community Facility
- e. Parks and Recreation
- f. Transport and Services.

Each zone includes objectives that outline the policy outcomes to be achieved in the code for that zone. The objectives for each zone need to be consistent with the Statement. This ensures an obvious policy line of sight between high level performance objectives and detailed requirements. This also ensures that the broad direction of the Territory Plan supports active living.

An analysis of the objectives for each zone reveals gaps in supporting the ACT active living principles. For example there is no direct mention of active living principles within the zone objectives.

Based on this premise, 12 recommendations have been proposed that seek to incorporate active living principles as new objectives for the residential, commercial, industrial, community facilities, parks and recreation, and the transport and services zones. Key terms and concepts to be incorporated range from active living and active travel to attractive, safe and well-lit pedestrian environments and safe pedestrian and cycle access.

DEVELOPMENT CODES

Development Codes apply to specific zones or development types, such as the Single Dwelling Housing Development Code for Residential Zones. Development Codes are divided into sections called Elements that describe the various issues for consideration, such as building and site controls. Each element has intent, rules and criteria:

- → Intent describes the purpose of the development controls
- → Rules provide definitive controls for development (some rules are mandatory while others permit an addressing against criterion)
- → Criteria provide the qualitative controls for development.

An analysis of all the Development Codes across the Territory Plan found a number of gaps that did not address active living concepts:

- → The transport user hierarchy with prioritisation of pedestrians, cyclists and public transport over private transport
- → The connectivity of active travel networks
- → Bike parking for multi-unit development
- → Communal open space provisions
- → Stairwell location and design to support active living.

Consideration of these matters within Development Codes, along with providing further detail to existing requirements, would ensure the incorporation of active living principles at this level of the Territory Plan. As such, 19 specific recommendations have been proposed, including under the following five development codes:



MULTI UNIT HOUSING **DEVELOPMENT CODE**

- → Amend the relevant rules and criteria for Element 4: Site Design relating to communal open space to ensure reasonable functionality and space to support active living and reasonable accessibility and inclusion for all residents.
- → Incorporate a rule regarding the use and placement of stairwells to encourage physical activity by providing an inviting alternative to lifts and to ensure they "are open or provide a clear line of sight to facilitate natural surveillance, where appropriate".



INDUSTRIAL ZONES **DEVELOPMENT CODE**

→ Retitle Rule 4.1 from 'Vehicle Access and Parking' to 'Access and Parking' to encompass all transport modes.



COMMERCIAL ZONES DEVELOPMENT CODE

- → Reword Element 5: Access to read: "to ensure safe and efficient access for pedestrians, cyclists and vehicles".
- → Include a new Element: Connectivity, to address the connectivity of commercial zones to surrounding areas, whereby all pedestrian and cycle paths must connect to pedestrian and cycle networks that feed into surrounding areas.



COMMUNITY FACILITY ZONE **DEVELOPMENT CODF**

→ Add a new element that addresses access and/ or connectivity issues for community facilities. In particular, connectivity for pedestrians and cyclists to existing active travel networks (also known as the community path system/shared path network).



PARKS AND RECREATION 70NES **DEVELOPMENT CODE**

→ Reword the intent of Element 4: Parking and Site Access to reflect the transport user hierarchy and reorder rules and criteria to prioritise active travel.

GENERAL CODES

General Codes may apply to defined development types, and/or planning and design issues, and are applied to development in different zones. These are found in Part 11 of the Territory Plan.

Analysis has found that the Access and Mobility, Bicycle Parking and Crime Prevention Through Environmental Design General Codes consider the active living principles. General Codes such as the Community and Recreational Facilities Location Guidelines General Code demonstrated less integration with the active living principles. Based on this lack of integration with the principles, three recommendations have been proposed to incorporate active living into the Community and Recreational Facilities Location Guidelines General Code. These changes include incorporating the concepts of permeability, shade, amenity and proximity to public transport.



Part 13 of the Territory Plan provides:

- a. definitions of development (including common terminology to describe these terms)
- b. definitions of terms.

It is proposed that two new definitions for active living and active travel be introduced:

- → **Active travel** is defined as physical activity undertaken as a means of transport and not purely as a form of recreation. Active travel can include walking and cycling - as well as skating, skateboarding, and the use of mobility aids. Active travel also includes using any of these forms as incidental activity associated with the use of public transport.
- → Active living is a way of life that integrates physical activity into daily routines.

DEVELOPMENT

The Estate Development Code applies to all proposals to subdivide land in the ACT, where they require an estate development plan. This code provides additional planning, design and environmental controls to support the objectives of the proposed zones.

The code generally incorporates active living principles; there are several areas in the Code that could be further enhanced. Three recommendations have been proposed that would incorporate concepts relating to active landscapes and public places, walking, cycling and public transport, as well as the provision of well-lit access.

NEXT STEPS





NEXT STEPS

THE ACT GOVERNMENT'S VISION FOR A HEALTHY, ACTIVE AND VIBRANT CANBERRA THAT IS WELL CONNECTED, COMPACT AND INCLUSIVE, AND A CENTRE FOR INNOVATION, CREATIVITY AND ECONOMIC GROWTH. NEEDS TO BE SUPPORTED NOT ONLY BY POLICY, BUT ALSO IMPLEMENTATION AND UNDERSTANDING IN DAY-TO-DAY OPERATIONS AND DECISION-MAKING. THIS IS SUPPORTED BY A WEALTH OF EVIDENCE AND RESEARCH THAT OUTLINES THE BENEFITS OF ACTIVE LIVING AND HOW A MORE ACTIVE, HEALTHY CANBERRA CAN BE ACHIEVED.

The Territory Plan is a powerful tool for influencing planning and development decisions and can apply active living principles to new development, urban renewal and infrastructure. It can be used as a mechanism for implementing Canberra's future vision as introduced through policy documents such as Canberra: A Statement of Ambition (2016), the Minister for Planning and Land Management's Statement of Planning Intent (2015), the ACT Planning Strategy (2012) and Transport for Canberra (2012).

This information paper provides the background discussion supporting Territory Plan Draft Variation DV348 (Incorporating Active Living Principles in the Territory Plan). Following community consultation, the outcomes will be used to inform the finalisation of the Territory Plan is sought. The implementation of these recommendations to embed active living principles within the Territory Plan, will further facilitate the ACT Government's policies, commitments and vision for an active, healthy Canberra.





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