

Creating Walkable Neighbourhoods

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NSW Healthy Planning Action Resource No. 2

Prepared by the NSW Healthy Planning Expert Working Group

www.activelivingnsw.com.au/resources



The NSW Healthy Planning Expert Working Group

The Healthy Planning Expert Working Group (HPEWG) is an independent NSW expert group which provides advice and guidance to government agencies and healthy planning stakeholders on strategic opportunities to utilise the NSW planning and transport planning systems to promote human health across the State. The HPEWG is comprised of representatives from a range of disciplines including health, planning, transport, urban design and architecture, and across various sectors including local government, state government, professional bodies, non-government entities (NGOs) and education and academia. For more information on members, see Appendix 1.

This is the second in a series of action resources designed to support those working to create places that deliver better health outcomes.



1. Introduction

Walking is both an important transport mode and a valued leisure and recreational activity. Walkability expresses a multifaceted measure of how friendly an area is to walk, taking into consideration a complex and diversified set of features in its evaluation. Walkable neighbourhoods have the following characteristics:

- the distance between destinations is short;
- the transport system is an integrated network of choice between public and active transport options; and
- the use of the private car is for infrequent trips that cannot be accommodated using public and active modes.

Built environment features including density, design, diversity of land uses, distances between uses, destination accessibility and demand management (parking policy) impact walkability and levels of physical activity. When these built environment features are combined and implemented together, they have the biggest impact on walkability.¹



2. The need for action

Health Impacts of Physical Inactivity

Physical inactivity and overweight and obesity are significant public health problems in Australia. Australia's latest Physical Activity and Sedentary Behaviour Guidelines indicate that only 30% of children and 44% of adults currently meet the physical activity guidelines, with physical inactivity currently causing one out of 10 Australian deaths². In NSW in 2017, 53% of adults aged 16 years and over were overweight or obese and 21.4% of children aged 5-16 years were above a healthy weight.³ The risk of developing chronic diseases such as diabetes, cardiovascular disease and some cancers increases with increasing levels of excess weight.⁴

Urban planning that results in a dependence on the private motor vehicle has significant environmental, economic, health and social costs.⁵ Walkability is an essential feature of any healthy, liveable built environment. The creation of walkable neighbourhoods is arguably the simplest and most effective way to improve health and wellbeing and create liveable, sustainable cities and towns.

For implementation tips please refer to page 5.

¹ Udell T, Daley M, Johnson B, Tolley, R, Does Density Matter? The Role of Density in Creating Walkable Neighbourhoods, National Heart Foundation of Australia, 2014

² <https://www.aihw.gov.au/reports/physical-activity/physical-activity-across-the-life-stages/contents/summary>

³ Health Stats NSW <http://www.healthstats.nsw.gov.au/IndicatorGroup/ChildObesityTopic> and <http://www.healthstats.nsw.gov.au/IndicatorGroup/AdultObesityTopic>

⁴ <https://www.nsw.gov.au/improving-nsw/premiers-priorities/tackling-childhood-obesity/>

⁵ <https://soe.environment.gov.au/theme/built-environment/topic/2016/livability-transport>

3. Current research, evidence and data to support action

Research shows that:

- People living in walkable neighbourhoods are on average 3kg lighter than those in non-walkable neighbourhoods.⁶
- People aged 60 and over who do just 15 minutes of exercise a day reduce their risk of dying early by 22%.⁷
- People who live in suburbs where 95% of homes are within 400m of a public open space are over three times more likely to do moderate-to-vigorous physical activity than those who do not have access.⁸
- People who drive are significantly less likely to undertake recommended levels of physical activity than non-car users, and driving to work increases the risk of being overweight or obese.⁹
- Each additional hour spent in a car per day is associated with a 6% increase in the likelihood of obesity. Conversely, each additional kilometre walked per day is associated with a 4.8% reduction in the likelihood of obesity.¹⁰ Strategies to increase land-use mix and distance walked while reducing time in a car can be effective as health interventions. Time spent driving increases as walkability decreases. Distances walked increase with walkability.¹¹

The [Designed to Move: Active Cities](#) report (2015) notes that cities designed for walking and physical activity have increased retail activity, business revenue and economic development. Health care costs, crime rates and pollution are lower. Citizens are happier and healthier.¹²

[Cities Alive: Towards a Walking World](#) (ARUP, 2016) looks at the drivers of change in cities across the world, the benefits of walking, actions and policies to address the various dimensions of walkable cities, and presents 80 case studies from across the world.

The Heart Foundation's discussion paper, [Good for Business: The benefits of making streets more walking and cycling friendly](#) (2011) shows that increasing walking not only provides health benefits, but supports economic vitality, with improvements in the walking and cycling environment generating more business and stimulating the local economy. Increasing walking also provides gains in relation to climate change, traffic congestion, social cohesion and community safety.¹³

City of Sydney's [Walking Strategy and Action Plan](#) outlines a number of economic, social and environmental benefits of walking, including:

- walking supports local business (people who walk more tend to spend more time at local businesses), encourages diverse land uses and improves employee productivity;
- walking is socially inclusive and equitable, a safe and flexible mode of transport, and improves quality of life through better social connections and physical and mental health; and
- walking minimises local pollutants and greenhouse gas emissions, reduces congestion and minimises noise pollution.

[The Benefits of Regular Walking for Health, Well-being and the Environment](#) (C3 Collaborating for Health, 2012) summarises the evidence of the benefits of walking for physical and mental health, as well as the features of the built environment necessary to facilitate walking and case studies demonstrating best practices in a variety of socio-demographic and geographical settings.

There is also evidence to suggest that better walkability adds substantial value not only to retail property but also to office and residential property.¹⁴

⁶ Ewing, R., Schmid, T., Killingsworth, T., Zlot, A., Raudenbush, S. Relationship Between Urban Sprawl and Physical Activity, Obesity, and Morbidity The Science of Health Promotion September/October 2003, Vol. 18, No. 1 p.47-57

⁷ Claris, S., Scopelliti, D. (2016). Cities Alive Towards a Walking World. ARUP p.18-35

⁸ Hooper, P., Boruff, B., Beesley, B., Badland, H. & Giles-Corti, B. (2018). "Testing spatial measures of public open space planning standards with walking and physical activity health outcomes: Findings from the Australian national liveability study". Landscape and Urban Planning, 171 March, p.57-67. (cited 2 April 2018)

⁹ Wen L, Orr N, Millett C and Rissel C. Driving to work and overweight and obesity: findings from the 2003 New South Wales Health Survey, Australia. International Journal of Obesity. 2006; 30:782-786. Available from: www.nature.com/jjo/journal/v30/n5/full/0803199a.html

¹⁰ Claris, S., Scopelliti, D. (2016). Cities Alive Towards a Walking World. ARUP p.18-35

¹¹ Frank LD, Andresen MA, Schmid TL. "Obesity relationships with community design, physical activity, and time spent in cars". Am J Prev Med 27, 87-96

¹² Designed to Move: Active Cities Report, 2015. <http://e13c7a4144957cea5013-f2f5ab26d5e83af3ea377013dd602911.r77.cf5.rackcdn.com/resources/pdf/en/active-cities-full-report.pdf>

¹³ Tolley, R., 2011, Good for Business: The benefits of making streets more walking and cycling friendly (Discussion paper), National Heart Foundation, Australia. Available from: <https://www.heartfoundation.org.au/images/uploads/publications/Good-for-business.pdf>

¹⁴ Pivo, G., Fisher, J., 2010, The Walkability Premium in Commercial Real Estate Investments. Available from: <http://www.u.arizona.edu/~gpivo/Walkability%20Paper%20February%2010.pdf>

Other relevant research/reports:

- [The Benefits of Street-Scale Features for Walking and Biking](#) (Active Living Research, 2015)
- [Estimating the benefits of walking: A cost benefit methodology](#) (PricewaterhouseCoopers, 2010)
- [NSW Walking Strategy Literature Review](#) (AECOM Australia Pty Ltd 2011)

4. The NSW legislative and policy context

Various pieces of legislation, regional and district plans, strategies, policies and guides support and promote the implementation of walkable neighbourhoods and the creation of liveable, sustainable and healthy communities. Some key ones are listed below.

Legislation

[Environmental Planning and Assessment Act \(EP&A\) 1979](#)¹⁵

Relevant objects of this Act:

- (a) to promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources,
- (b) to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment,
- (g) to promote good design and amenity of the built environment.

[Region Plans and District Plans](#)

A key focus of the Greater Sydney Region Plan, [A Metropolis of Three Cities](#) (2017, Greater Sydney Commission) is liveability, including supporting healthy lifestyles and connected communities. A key direction of the strategy is to develop a more accessible and walkable city, prioritising 'infrastructure investments which enhance walkability and cycling, particularly those focused on access to the transport network and within five kilometres of any strategic centre or within 10 kilometres of the Harbour CBD' (p.86).

Other relevant Objectives include:

- Objective 7: Communities are healthy, resilient and socially connected
- Objective 12: Great places that bring people together
- Objective 14: A Metropolis of Three Cities – integrated land use and transport creates walkable and 30-minute cities
- Objective 15: The Eastern, GPOP and Western Economic Corridors are better connected and more competitive
- Objective 17: Regional connectivity is enhanced
- Objective 30: Urban tree canopy cover is increased
- Objective 31: Public open space is accessible, protected and enhanced
- Objective 32: The Green Grid links parks, open spaces, bushland and walking and cycling paths
- Objective 33: A low-carbon city contributes to net-zero emissions by 2050 and mitigates climate change

Other NSW Regional plans and the Greater Sydney Commission's District Plans also include an emphasis on liveability, active transport and healthy built environments.

[Local Strategic Planning Statements](#)¹⁶

Local councils are required to prepare and make a local strategic planning statement (LSPS) and review the statement at least every seven years. The statement must include or identify the basis for strategic planning in the area, having regard to economic, social and environmental matters.

[Local Environmental Plan](#)¹⁷

[The Standard Instrument – Principal Local Environmental Plan \(LEP\)](#) prescribes the form and content of all LEPs throughout NSW. All local councils are required to prepare an LEP for their local government area in accordance with the standard LEP instrument which contains standard definitions, zones, clauses and land-use tables as well as a standard format.

[Local Development Control Plans](#)

A Development Control Plan (DCP) provides detailed planning and design guidelines to support the planning controls in the Local Environmental Plan developed by a council. Some councils have DCPs related to tree and vegetation management. The planting of appropriate trees can provide additional shade and therefore encourage and support walkability.

¹⁵ <https://www.legislation.nsw.gov.au/#/view/act/1979/203/full>

¹⁶ http://www5.austlii.edu.au/au/legis/nsw/consol_act/epaaa1979389/s3.9.html

¹⁷ <https://www.legislation.nsw.gov.au/#/view/EPI/2006/155a/full>

Local Government Act 1993¹⁸

Relevant [Principles of this Act](#):

8A Guiding principles for councils

- (c) Councils should consider the long term and cumulative effects of actions on future generations.
- (d) Councils should consider the principles of ecologically sustainable development.

36 Preparation of draft plans of management for community land

- (1) A council must prepare a draft plan of management for community land.
- (2) A draft plan of management may apply to one or more areas of community land, except as provided by this Division.

402 Community strategic plan

- (1) Each local government area must have a community strategic plan that has been developed and endorsed by the council. A community strategic plan is a plan that identifies the main priorities and aspirations for the future of the local government area covering a period of at least 10 years from when the plan is endorsed.
- (2) A community strategic plan is to establish strategic objectives together with strategies for achieving those objectives.

Other NSW Strategies and Policies

A key NSW Government's Premier's Priority is to reduce overweight and obesity rates of children by 5% over 10 years. The [Delivery Plan](#) for this Priority acknowledges the critical role the built environment plays in influencing the opportunities for physical activity.

To support the Premier's Priority for Overweight and Obesity, the NSW Ministry of Health's [Healthy Eating and Active Living \(HEAL\) Strategy](#) aims to encourage the community to make healthy lifestyle changes and support healthier living through better planning and transport solutions. The strategy advocates for built environments that support active living with one of the key targets of the current strategy being to increase the mode share of walking trips made in the Greater Sydney region at a local and district level (p4).

Transport for NSW's [Future Transport 2056 Strategy](#) is the 40 year strategy for transport planning and delivery in NSW. It promotes the vision for a city that is liveable, productive and sustainable, recognising that liveability promotes social inclusion and community health and wellbeing. The strategy is underpinned by the Movement and Place Framework which aims to facilitate active transport and walkable communities. The strategy indicates that a key issue for the future transport network is to promote sustainable development and healthy lifestyles (p81).

The Government Architect NSW's [Better Placed](#) is an integrated design policy for the built environment of NSW. It advocates that a well-designed built environment is healthy for all members of our communities, promoting physical activity and walkable environments (p22). It also recognises the community benefits that are created through walkable access, cycling and public transport (p40).



¹⁸ <https://legislation.nsw.gov.au/#/view/act/1993/30/full>

5. Implementation tips

The following strategies are suggested to create walkable neighbourhoods:¹⁹

- Prioritise walking and active travel, including cycling and public transport in urban planning, transport planning and infrastructure funding;
- Design compact, mixed use neighbourhoods;
- Design neighbourhoods to incorporate the built environment features of density, design, diversity of land uses, distance to public transport, destination accessibility and demand management (parking policy); and
- Engage in placemaking to transform streets and the public domain into vibrant community places.

Implementation of the following three planning requirements will also assist in achieving walkability:

- All new medium or higher density residential development is located within 'walkable' precincts.
- 95% of new homes are built within 400m of quality public open space and all high density residential areas (over 60 dwellings/ha) are within 200m of quality public open space.
- 95% of new homes are built within 400m of public transport stops, with at least two services per hour.

In existing low-density areas that are unlikely to change in the near future, walking for recreation is likely to be a more successful policy option to get people active than walking for transport.

Local Government Integrated Planning and Reporting (IP&R) framework

The IP&R framework allows NSW councils to draw their various plans together, understand how they interact and get the maximum leverage from their efforts by planning holistically and sustainably for the future. A local council can address the issue of walkability by identifying objectives, priorities and actions for increasing walking in council documents such as the Community Strategic Plan (CSP), Delivery Program and Operational Plan (OP). An action may include developing a walking strategy to improve walkability and increase walking, for example, Parramatta City Council's walking strategy [Parramatta Ways](https://www.cityofparramatta.nsw.gov.au/sites/council/files/2017-06/Parramatta%20Ways%20Walking%20Strategy.pdf).²⁰

Strategic Land Use Planning under the EP&A Act

Councils are encouraged to address walkability and active transport within Local Strategic Planning Statements, LEPs and DCPs. Councils are required to reflect Regional Plan and District Plan objectives related to walking and active transport within their local plans. It is suggested that councils advocate to the Department of Planning and Environment to amend the Standard Instrument for Local Environmental Plans to incorporate walking and active transport issues.

Plans of Management

The Local Government Act requires council to prepare Plans of Management for community land and their catchments and this presents a significant opportunity for councils to improve conditions for walkability such as improving visual amenity, planting additional shade trees and providing infrastructure including footpaths, toilets and seating.

Pedestrian Access & Mobility Plans (PAMPs)

PAMPs are partnerships between State and Local Governments to co-ordinate investments on safe, convenient and coherent pedestrian infrastructure on key pedestrian routes. It provides a framework for developing pedestrian routes or areas identified by the community as important for enhanced, sustainable safety, convenience and mobility, and can be used to enhance walkability.

The following resources and tools may also assist with implementation.

- [Addressing active living and healthy eating through local council's Integrated Planning and Reporting framework](#) (Active Living NSW 2016)
- [Movement and Place Practitioners Toolkit](#) (Transport for NSW & Government Architect NSW, coming soon)
- [Planning and designing for pedestrians: guidelines](#) (Western Australian Government, 2016)
- [Easy Steps: a toolkit for planning, designing and promoting safe walking](#) (Queensland Government, 2005)
- Victoria Walks [Developing a Walking Strategy – A Guide for Local Councils](#) (Victoria Walks, 2013) and [Walking Audit tools](#) (Victoria Walks, 2011)

¹⁹ Udell T, Daley M, Johnson B, Tolley, R. Does Density Matter? The Role of Density in Creating Walkable Neighbourhoods, National Heart Foundation of Australia, 2014

²⁰ <https://www.cityofparramatta.nsw.gov.au/sites/council/files/2017-06/Parramatta%20Ways%20Walking%20Strategy.pdf>

- Heart Foundation Neighbourhood Walkability Checklist
<https://www.heartfoundation.org.au/images/uploads/publications/Neighbourhood-walkability-checklist.pdf>
- [Healthy Active by Design](#) web resource (Heart Foundation, 2018)
- [Healthy Urban Development Checklist](#) (NSW Health, 2010)
- Jeff Speck's book [Walkable City](#) outlines ten steps of walkability (and [TED talk](#))
- [Pedestrians First: Tools for a Walkable City](#) (US Institute for Transportation and Development Policy, 2017) facilitates the understanding and the measurement of the features that promote walkability in urban environments around the world at multiple levels.
- [Creating Walkable and Bikeable Communities](#) (US Department of Housing and Urban Development, 2016)
- [Steps to a Walkable Community](#) (America Walks, 2014)
- [Active Design Guidelines](#) (New York Centre for Active Design, 2010)
- [Green Star Communities Guide for Local Government](#) (Green Building Council of Australia, 2014)

Relevant Funding Opportunities

[The Metropolitan Greenspace Program \(MPG\)](#)²¹

The MPG supports local councils in Greater Sydney and the Central Coast by co-funding projects that enhance open spaces, parks, bushland, natural areas, waterway corridors and tree-lined streetscapes. For example, the Parramatta Ways Walking Strategy project was jointly funded by the NSW Government under the Metropolitan Greenspace Program.

[Road & Maritime Services \(RMS\) Walking and Cycling Programs funding](#)²²

The RMS Active Transport (Walking and Cycling) Program is in line with the NSW Government's Future Transport 2056 Strategy, Greater Sydney Services and Infrastructure Plan, Regional NSW Services and Infrastructure Plan and the Greater Newcastle Future Transport Plan. There is a focus on improving connectivity for customers who choose to walk and cycle to major centres and public transport interchanges.

[Open Spaces and Greener Sydney Grants](#)²³

\$290 million funding from the NSW Government to make NSW communities more liveable and greener. This funding includes the [Five Million Trees for Greater Sydney Grant Program](#)²⁴ which supports local councils in Greater Sydney to enhance urban tree canopy by co-funding tree planting projects in public spaces such as streets, parks and plazas. Funds are awarded to councils on a matched dollar-for-dollar basis.

[NSW Office of Environment and Heritage \(OEH\)](#)²⁵

OEH administers a number of funding programs and initiatives.

[Climate Change Fund Grants](#)²⁶

NSW councils can apply for grants to plant trees, put up shade clothes and install water-misting systems in public places under the state government's \$3.5 million grant program under the Climate Change Fund.

Further funding opportunities can be found at: www.nswpcalipr.com.au/resources/funding-opportunities/



²¹ <https://www.greater.sydney/metropolitan-greenspace-program>

²² <https://www.rms.nsw.gov.au/business-industry/partners-suppliers/lgr/active-transport/index.html>

²³ <https://www.planning.nsw.gov.au/openspace>

²⁴ <https://www.planning.nsw.gov.au/Policy-and-Legislation/Open-space-and-parklands/5-million-trees/Five-Million-Trees-grant>

²⁵ <https://www.environment.nsw.gov.au/grantsandfunding/index.htm>

²⁶ <https://www.environment.nsw.gov.au/grants/ccfund.htm>

6. Further reading and case studies

International Resources and Case Studies

- Walkability case study - [Manhattan, New York, USA](#)
- Case study building homes within 400m of green open space – [Being in Bogota. Project for Public Places](#)
- [Transport for London Walking Action Plan](#)
- [National Complete Streets Coalition](#) (America)

National resources and case studies

- Guidelines to help local councils develop Principal Pedestrian Networks (Victoria)

NSW resources and case studies

- [Development and Active Living: Designing Projects for Active Living - A Development Assessment Resource & Navigational Tool](#) (Premier's Council for Active Living, 2010)
- [Development and Active Living: Designing Projects for Active Living: Developer's Checklist \(with Case Studies\)](#) (Premier's Council for Active Living, 2010)
- [Sydney's Walking Future: Connecting People and Places](#) (Transport for NSW, 2013)
- City of Parramatta Walking Strategy - [Parramatta Ways](#) (City of Parramatta, 2017)
- City of Sydney [Walking Strategy and Action Plan](#) (City of Sydney, 2015)



Appendix 1: HPEWG Members

Agencies/organisations:

- Active Living NSW
- Australian Institute of Landscape Architects NSW (AILA)
- Cancer Council NSW
- City Wellbeing Program, City Futures Research Centre, University of NSW
- Council on the Ageing (COTA)
- Government Architect NSW
- Hunter New England Local Health District
- Landcom
- National Heart Foundation
- Northern NSW Local Health District
- Northern Sydney Local Health District
- NSW Council of Social Service (NCOSS)
- NSW Ministry of Health
- NSW Office of Sport
- Office of Local Government NSW
- Planning Institute of Australia (PIA)
- South Eastern Sydney Local Health District
- South Western Sydney Local Health District
- Sydney Local Health District
- Transport for NSW
- University of Sydney
- Western Sydney Local Health District
- Willoughby City Council

Individuals:

- Peter Sainsbury
- Danny Wiggins





A man in a black long-sleeved shirt and blue jeans is walking away from the camera on the left side of the path.

A red bicycle is parked on the left side of the path, near a traffic light.

A couple is walking away from the camera in the middle of the path. The man is wearing a dark shirt and the woman is wearing a patterned dress.

A street sign on a lamp post indicates a pedestrian and bicycle crossing.

In the background, a white van is visible on the street, and a colorful banner is hanging across the road.

Contact:

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Active Living NSW is a partnership between NSW Ministry of Health and the National Heart Foundation of Australia to support the physical activity and healthy built environment deliverables of the NSW Healthy Eating and Active Living Strategy. Under this partnership agreement, Active Living NSW coordinates and provides the secretariat for the HPEWG.



The NSW Government, Active Living NSW, National Heart Foundation of Australia and NSW Healthy Planning Expert Working Group acknowledges the Traditional Owners and custodians of Country throughout Australia and their continuing connection to land, waters and community. We pay our respect to them and their cultures, and Elders past, present and future.

