

## Healthy Spaces and Places

### Fact Sheet by Your Development Administrator posted 10 Jun 2009

The Healthy Spaces and Places project is a unique collaboration between the Australian Local Government Association, the National Heart Foundation of Australia and the Planning Institute of Australia with funding assistance from the Australian Government Department of Health and Ageing. Healthy Spaces and Places identifies key design principles and processes to assist in the design and development of places that support active living and establishes the relationship between the built environment and physical and mental health and wellbeing.

**•Categorised under:**

- Feasibility, Planning, Design, Construction, Lot Creation, Completion,
- Place Making and Social Sustainability, Estate Design,

## Introduction

Over the past 10–15 years, there has been a growing awareness and understanding of the possible effects that the built environment has on people and their health. In particular, there has been considerable interest in the relationship between the quality and form of the built environment and people's propensity to be active regularly and stay healthy.

Developments where consideration for people's health is part of the planning process can create more sustainable communities by contributing to outcomes such as reducing car emissions, creating safer communities and more socially connected communities. There are further benefits in addition to the impact on health, which are not directly covered here, particularly concerning air quality, vehicle emissions and other greenhouse and climate change matters.

Information provided in this fact sheet has been informed by research undertaken for the Healthy Spaces and Places project which was initiated in response to increasing concern about the relationship between the built environment and people's health. This project has focused primarily on the connection between mental and physical health and environments that support physical activity and community interaction. Issues around access to healthy food options are not addressed.

Other fact sheets in Your Development with relevance to health and design include Density, Layout, Connectivity, Design for Mixed Uses, Open Space Provision and Safety fact sheets. This fact sheet provides an overview of the range of issues relevant to creating healthy spaces and places.

## The built environment's influence on health

There are many ways that the built environment influences people's health. Issues for consideration in planning healthy outcomes for new developments include:

- access to, and opportunities for physical activity
- opportunities for social interaction
- creating a sense of place and community
- opportunities for contact with nature
- safety and sense of security
- minimising exposure to air and water pollution
- access to shade

*Pedestrian Path - Somerly, Perth*

*Sydney Harbour Trail - Sydney*

## Why is health important in urban planning?

Physical inactivity is estimated to cost the Australian community around \$10 billion nationally each year in direct health care costs with obesity costs alone as high as \$5 billion. The proportion of overweight and obese Australians increased from 45% in 1995, to 54% in 2005 (Australian Bureau of Statistics, 2007).

Given Australia's growing burdens of disease, its ageing population and the role that regular physical activity has in managing and reducing the risk factors of many preventable diseases, the design and management of the built environment is now recognised as a significant means of promoting regular physical activity.

Developers, planners and other built environment professionals have an important role in promoting the health of the people who live in these communities.

Research shows that regular physical activity improves people's physical and mental health and wellbeing. Regular physical activity locally also engenders a sense of belonging in a community and is a fundamental building block of improving social capital.

## Design Elements associated with increased physical activity

The following design principles have been associated with increased physical activity:

- Active Transport
- Connectivity
- Mixed Land Use
- Mixed Density
- Aesthetics
- Supporting Infrastructure
- Safety and Surveillance
- Social Inclusion
- Environments for All People
- Parks and Open Space

More information on these design principles is provided in Table 1 under “Development Phase Actions” Design

Other factors influencing physical activity include socio-demographic characteristics, personal and cultural variables, topography, weather and time allocation.

*Neighbourhood recreation facilities - Caroline Springs, Victoria*

*Neighbourhood social interaction*

### **Active Transport and Connectivity**

As the proportion of trips made by car is significant at the local level with 10% of all trips less than one kilometre (equivalent to a 10-15 minute walk at average walking speed) and 30% less than three kilometers (Bureau of Transport and Regional Economics, 2002) there are substantial health, environmental and social benefits in encouraging people to walk or cycle rather than drive.

Active transport modes such as walking and cycling are readily accessible forms of physical activity available to many people. In designing and managing places developers, designers and planners need to remain aware of creating effective opportunities for people to walk or ride.

Highly walkable neighbourhoods, with mixed density, mixed land uses, high connectivity and good provision for active transport, are more likely to encourage walking and cycling for transport, especially for local trips.

The National Heart Foundation research (Gebel et al. 2007) into supportive environments for walking has found the following environmental attributes influence an area’s walkability: street connectivity and grid pattern street networks, footpaths, walking routes, safe crossing points on roads, access to public transport stops and frequency of public transport services.

Planning systems that provide incentives for walking and cycling as modes of transport as well as recreational uses bring many short and long-term benefits to local communities. Creating a walkable and cycleable environment is an important part of creating a sustainable place. Further it is more likely that residents will be physically active in local environments that are considered safe, friendly and attractive by local residents.

*Glenelg, South Australia*

*Footpath detail*

### **Mixed Density and Mixed Land Use**

Urban environments which are compact and intermixed create shorter distances (proximity) between desired destinations, thus encouraging people to walk. This reinforces the notion that spatial landform patterns, density and land use mix are interrelated and all encourage walking.

Mixed land uses, walkable neighbourhoods and clustering services such as local shops and community facilities near to public transport, not only supports healthier lifestyles for local residents but contributes to local economies, provides environmental benefits and creates marketing opportunities.

*Caroline Springs, Victoria*

### **Aesthetics**

Attractiveness of the neighbourhood environment has been associated with overall physical activity levels, and with recreational walking. Attractive neighbourhood aesthetics such as scenery and pleasantness have been found to have a positive relationship with measures of overall physical activity (Giles-Corti et al. 2005). Public art, seating or signage can all have an impact on the aesthetics of a place and can be influenced by planning and design decisions.

*Public Art - Melbourne, Victoria*

### **Supporting Infrastructure**

Supporting infrastructure refers to built facilities that encourage regular and safe physical activity such as:

- Walking – footpaths, lighting, water fountains and signage
- Cycling – bike paths, bike lockers, signage and showers
- Public Transport – safe shelter and lighting
- Social interaction – seating, shade, shelter and toilets
- Recreation – seating, play equipment and facilities

Appropriate, well-designed and maintained infrastructure that supports active living is critical to support recreation, social interaction and active transport options. Both the public and private sector have a role to play in providing a range of facilities and infrastructure to support better health outcomes for the community.

### **Safety and Surveillance**

Perceptions of safety influence the nature and extent that people use spaces and places. Street and place design that aims to reduce crime can enhance the physical, mental and social wellbeing of a community.

Public spaces, walking and cycling routes, entrances and exits to buildings and public transport facilities that are designed for safe use can improve perceptions of safety and encourage people to use them and therefore be more physically active.

The provision of well-designed and maintained places and facilities where all members of the community can meet and socialise can increase the likelihood of people feeling safe and secure and enhance social capital.

### **Social Inclusion**

Social inclusion refers to a society where all people and communities are given the opportunity to participate fully in political, cultural, civic and economic life. International research has shown that social inclusion can lead to greater social cohesiveness and better standards of health. Designing facilities to encourage meeting and social interaction in communities can improve mental health.

Cycling, walking and public transport can stimulate social interaction on the streets as well as have health benefits for residents. Suburbs that depend solely on cars for access can isolate people without cars – particularly the young and old. Social isolation and lack of community interaction are strongly associated with poorer health.

### **Environments for All People**

Environments for all people means that neighbourhoods, towns and cities are safe and easily accessible for all members of the community regardless of age, ability or income, with a suitable range of facilities and services that are available to all. The aim is for people to feel connected to, and part of a community.

Research has shown that getting out and about, meeting people and making social contacts can help people have longer and physically and mentally healthier lives. Conversely, people with fewer social contacts, networks and emotional support are more likely to be obese (Department of Human Services, 2002).

### **Parks and Open Space**

Parks and open space refers to land that has been reserved for the purpose of formal and informal sport and recreation, preservation of natural environments, provision of green space and/or urban storm water management.

There are numerous health benefits associated with access to public open space and parks. Access to vegetated areas such as parks, open spaces, and playgrounds has been associated with better perceived general health (de Vries, 2003; Maas, 2006), reduced stress levels (Grahn, 2003; Nielsen, 2007), with reduced depression (Morita, 2007) and more walking (Li, 2005; Giles-Corti, 2005). Moreover, there is a substantial body of evidence demonstrating that increased walking improves physical and mental health (Manson, 2002; Fritz, 2006; Murphy, 2002; Tsuji, 2003).

## **Key Issues**

## Benefits

- Encouraging people to be active especially by supporting walking and cycling means healthier lifestyles and better health outcomes.Â

- Reducing the number of local trips made in private vehicles will also result in greenhouse gas emission reductions.

- Communities designed for health outcomes result in residents having more choices about transport options â€“ it is not always necessary to use a car to get to destinations.

- Residents are usually prepared to pay for high quality physical environments with a range of facilities.

- Older residents, young people and children are particular beneficiaries, giving them more independence in movement.

- Healthy communities are more sustainable than communities designed without consideration of health outcomes.

- Communities with higher levels of physical activity have higher social capital.

## Risks

- Poorly designed community facilities, destinations and cycling and pedestrian infrastructure may be underutilised and therefore not contribute to healthy, active lifestyles.

## Savings

- Physical inactivity is a huge impost on the health of the Australian community and costs the community and government significantly. Well-designed communities that encourage walking and cycling will assist in reducing this cost burden to the community.

- There is potential for shared use of community facilities such as schools (halls and ovals) and sporting facilities between the local and wider community. This may also result in sharing the costs of provision.

- Reduced car use will result in reduced household fuel cost and in some cases may prevent the purchase of, or allow the sale of a second car and can result in improved air quality and a subsequent reduction in adverse health outcomes.

- A socially interactive community is one that is more likely to be productive, and foster better mental health and wellbeing.

## Costs

- Most of the costs involved are inherently part of any development. Design details such as ensuring suitable path surfaces and widths, parks and open space (with play equipment, seating, shade and other facilities) and landscaping may require additional costs.

- Provision of community facilities and high quality public spaces may be an additional cost but there are opportunities for sharing costs with other developers, governments and other agencies.Â

- Maintenance of public facilities is an ongoing cost for local government or other land owners and managers

## Barriers

- Lack of knowledge about the benefits of creating healthy urban environments and the opportunities and mechanisms to achieve them.
- Lack of clarity about who is responsible for designing, planning and maintaining health related infrastructure.
- Competing priorities for use of open space i.e. active space versus pedestrians versus space for ecological or water retention purposes.
- Benefit goes to government and community if people are healthier not developers, therefore less reason to spend extra money unless there is consumer demand and they are willing to pay more for these facilities

## Benchmarks

Healthy Spaces and Places: A national guide to designing places for healthy living.

Prepared by the Australian Local Government Association, National Heart Foundation of Australia and the Planning Institute of Australia with funding assistance from the Australian Government Department of Health and Ageing  
[www.healthyplaces.org.au](http://www.healthyplaces.org.au)

Healthy By Design – a planner’s guide to environments for active living. National Heart Foundation (Victorian Division)

[http://www.heartfoundation.org.au/document/NHF/Healthy\\_by\\_Design.pdf](http://www.heartfoundation.org.au/document/NHF/Healthy_by_Design.pdf)

Liveable Neighbourhoods: Guiding new developments for a more sustainable urban future. Western Australia Department of Planning and Infrastructure – an implementation tool for the sustainability objectives of the State Planning Strategy.

[www.wapc.wa.gov.au/publications/26.aspx](http://www.wapc.wa.gov.au/publications/26.aspx)

Under Cover Guidelines – Guidelines for shade planning and design Shade planning and design guidance has been developed in association with the Cancer Council.

[http://www.cancersa.org.au/asp/Under\\_Cover\\_Guidelines.aspx](http://www.cancersa.org.au/asp/Under_Cover_Guidelines.aspx)

Safer design - most states have adopted safer design guidelines. The Guidelines have been developed to assist planners and designers apply design principles that will improve the safety of the built environment, minimise the opportunity for crime and promote safe, accessible and liveable places.

[www.dse.vic.gov.au](http://www.dse.vic.gov.au) or [www.crimeprevention.vic.gov.au](http://www.crimeprevention.vic.gov.au)

Designing places for active living is a web-resource developed by the New South Wales Premier’s Council for Active Living. [http://www.pcal.nsw.gov.au/planning\\_design\\_guidelines/](http://www.pcal.nsw.gov.au/planning_design_guidelines/)

## Development phase actions

### Feasibility

It is important to consider how a development relates to its surrounds and how residents will access employment and facilities such as public transport, schools, education facilities, shops and community facilities. Links and connections to surrounding areas must be planned for. Access to public transport, walking, cycling paths and routes that connect with destinations is vital so residents have choices about transport options. At the feasibility

stage developers need to account for the cost of early provision of transport and community infrastructure, including loss leading to retail nodes, so that travel behaviour is affected immediately on purchase and households, in turn, delay the purchase of a second car.

## Planning

Detailed planning needs to address the key issues of accessibility, affordability, connectivity, proximity and diversity. Consideration of both macro scale (regional, strategic, metropolitan issues) as well as micro or local detailed scale is important.

The aim is to achieve developments where

- people are engaging in regular physical activity
- there is a sense of community and social inclusion
- there is a sense of place
- there are positive health impacts on future health burden

The development plan should be supportive of walking and cycling within the development and also when connecting to adjacent areas this should create a development where non-motorised transport is the easiest option.

The needs of all members of the community must be considered. Design must also include the needs of people with disabilities.

Housing choice must be incorporated into any development, including housing of different sizes, densities and prices. Healthy living environments must not only be available to the wealthy.

The early provision of community facilities including meeting places, schools, shops, walking, cycling paths and public transport within the development, is also vital.

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## Design

Key design principles are:

- Active Transport
- Connectivity
- Mixed Land Use
- Mixed Density
- Aesthetics
- Supporting Infrastructure
- Safety and Surveillance
- Social Inclusion
- Environments for All People
- Parks and Open Space

## Construction

Construction activities should consider access to facilities and safety of walking and cycling routes through the development.

## Lot Creation

A variety of lot sizes should be included and lot orientation should maximise solar access and air movement. The street layout should facilitate connectivity and access.

## Completion

Information brochures about walking and cycling paths and the location of facilities that can be distributed to new residents is helpful in encouraging use of pedestrian and cycle facilities.

*Ellenbrook, WA*

*Brunswick, Victoria*

## Links

- [Victorian Planning Provisions – Clause 56 Sustainable Neighbourhoods Section 50 Particular Provisions](#)
- [Guidelines for Residential Subdivision in the Macedon Ranges Shire: Designing in Health and Wellbeing](#)
- [City of Greater Bendigo – “Walk Bendigo”™ initiative](#)
- [The World Health Organization \(WHO\)](#)
- [Europe, Copenhagen, WHO Regional Office](#)
- [International Physical Activity and the Environment Network](#)
- [The Sydney Resolution – “Healthy People in Healthy Places on a Healthy Planet”™](#)
- [Active Living](#)
- [Active Living by Design \(USA\)](#)
- [Smart Growth America](#)
- [American Planning Association – “Planning and Designing the Physically Active Community Project](#)
- [UK Department of Health](#)
- [“Watch Out for Health – Planning Checklist”™](#)
- [Living Streets \(formerly call the Pedestrians Association\)](#)
- [New Zealand Ministry for the Environment Urban Design Protocols](#)

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## Link to Content

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