

Supporting Infrastructure

Definition

Supporting infrastructure facilitates physical activity and makes participation safe and/or increases feelings of safety.

- walking – footpaths, lighting, seating, water fountains, rubbish bins, signage, dog related infrastructure
- cycling – bike paths, bike racks near shops, parks and public places, safe bike parking/lockers at public transport stops and workplaces, bike lockers and way finding signage
- public transport – shelter, seating, lighting, timetable information and natural surveillance of stops from nearby houses and buildings
- social interaction – seating, shade, shelter, attractive open space, provision for dog walking and public toilets
- recreation – seating, play equipment and a range of recreation facilities and well designed and attractive open space.



Lighting and seating enhance day and night social interaction - Noosa, Queensland
Source: SGS Economics and Planning

Overview

Appropriate, well designed and maintained infrastructure that supports active living can promote recreation, active transport options and social interaction. Both the public and private sector have a role to play in providing facilities and infrastructure to support better health outcomes for the community across the life cycle from childhood to older age.

The nature and level of investment required to construct and maintain the infrastructure will vary depending on the location and type of activity.

However, some of the issues to consider in the planning and design of supporting infrastructure include preferences of local residents or user groups such as adolescents, children, older adults and workers; needs of the broader community, site issues and constraints, the level and quality of existing facilities, other endorsed plans and programs, location and level of use and available resources (Mosman Municipal Council, 2005).

Why?

Regular daily physical activity is required to prevent chronic diseases and can provide a wide range of other social and mental health benefits.

Physical surroundings and facilities are necessary to facilitate the uptake and maintenance of regular physical activity. For example the size, range of facilities and aesthetic and landscape features of a park may influence its use (Giles-Corti et al, 2005). Modifying parks to make them more conducive to physical activity is a potential means of encouraging activity (NSW Department of Health, 2002).

Adults are more likely to walk if they have good access to attractive and large public open space (Giles-Corti et al, 2005). There is evidence that children are more likely to be active if they have public open space with exercise related facilities such as basketball courts and running tracks (Everson et al, 2007; Cohen et al, 2006). Unless children have access to these in their local neighbourhood they rely on their parents for transportation (Hoefer et al, 2001).

Whilst there is growing recognition that urban form can influence health, environmental and social outcomes, there is much work to be done, for example in providing high quality infrastructure to support active modes of transport such as cycle paths and cycle parking (Giles-Corti, 2006).



High quality footpath in new residential estate
Watson ACT
Photo: SGS Economics and Planning

Encourage

For both new and existing areas an integrated plan outlining the supporting infrastructure required should consider:

- the profile and needs of the users of the infrastructure
- the full range of supporting infrastructure required to meet the needs of the users across the range of age groups
- how the infrastructure links with surrounding development (eg. bike racks at parks, sporting facilities and schools)
- the appropriate standard required for the infrastructure given the profile of the users
- the optimum location to maximise use
- whether it can be included as part of a routine upgrade or renewal and maintenance of assets, and
- which organisation will be responsible for providing and maintaining the infrastructure.

In general, some of the detailed design principles for supporting infrastructure include:

Footpaths

- Footpaths should be designed as part of an access and movement network and should include safe routes to schools and key destinations. Footpaths should be well maintained.

Bikeways/facilities

- On road and off road bike paths should be well marked.
- Shared facilities should be sufficiently wide for both pedestrians and cyclists and should be suitably marked to indicate the desired use/s.
- Safe bike parking facilities and bike racks should be provided in key destinations such as public transport nodes, workplaces, shopping centres, recreational facilities and public open space.

Public transport stops

- To encourage the use of public transport, stops should be located in areas with good surveillance from houses and passing traffic. They should have good lighting, provide shelter from the weather, be well sign posted and include seating and timetable information (if appropriate).
- Public transport interchanges/stations should provide adequate and safe bike parking to encourage users to cycle to the public transport stop.

Design Principle – Supporting Infrastructure

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Seating

- Seating is required especially for older people and carers of children. It should preferably be located with shade, be sited along footpaths, near children's play areas, be designed for comfort and to maximise views of natural beauty and people watching.

Lighting

- Lighting is required to maximise feelings of and actual safety at night time. It should provide lighting in main walkways, meeting places, road crossings, signage, public transport stops and other well used night time areas.



Seating and shelter encourage use of Parks – Berry, NSW
Photo: SGS Economics and Planning

Toilets

- Public toilets are required in high use public areas. There needs to be good signage, lighting and footpath connections to nearby streets.

Shade

- Shade provision is important in Australia's climate to minimise exposure to the sun. Shade is preferable along streets, footpaths in parks, in play areas and in recreational areas in public spaces.

Water fountains

- Access to drinking water is important in public areas and consideration should be given to providing a water fountain or similar. In public areas that dogs frequent, access to drinking water for dogs is also important.



Public toilets are important facilities in high use public areas - Moss Vale, NSW
Photo: SGS Economics and Planning

Signage

- Signs can provide essential information to the public. Internationally recognised symbols should be used where appropriate.

Fencing

- The placement and type of fencing should be cognisant of safety issues such as good sightlines for overlooking and visibility, and also amenity issues (colour and material) to ensure that fencing enhances physical activity.



Clear and well placed signage is important in public areas - St. Kilda Melbourne, Victoria
Source: Planning Institute of Australia

Rule of thumb

Supporting infrastructure has the potential to enhance active living options. It is best when co-ordinated and integrated with other infrastructure and development and ideally should be part of an overall design of landscape and urban development.



Informative rather than restrictive signs particularly relating to infrastructure for young people
Source: Bell Planning Associates

Avoid

- Ad hoc provision of supporting infrastructure.
- Non-compliance with appropriate standards of design, construction and maintenance.



Unwelcoming signs in parks should be avoided
Photo: Source SGS Economics and Planning

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