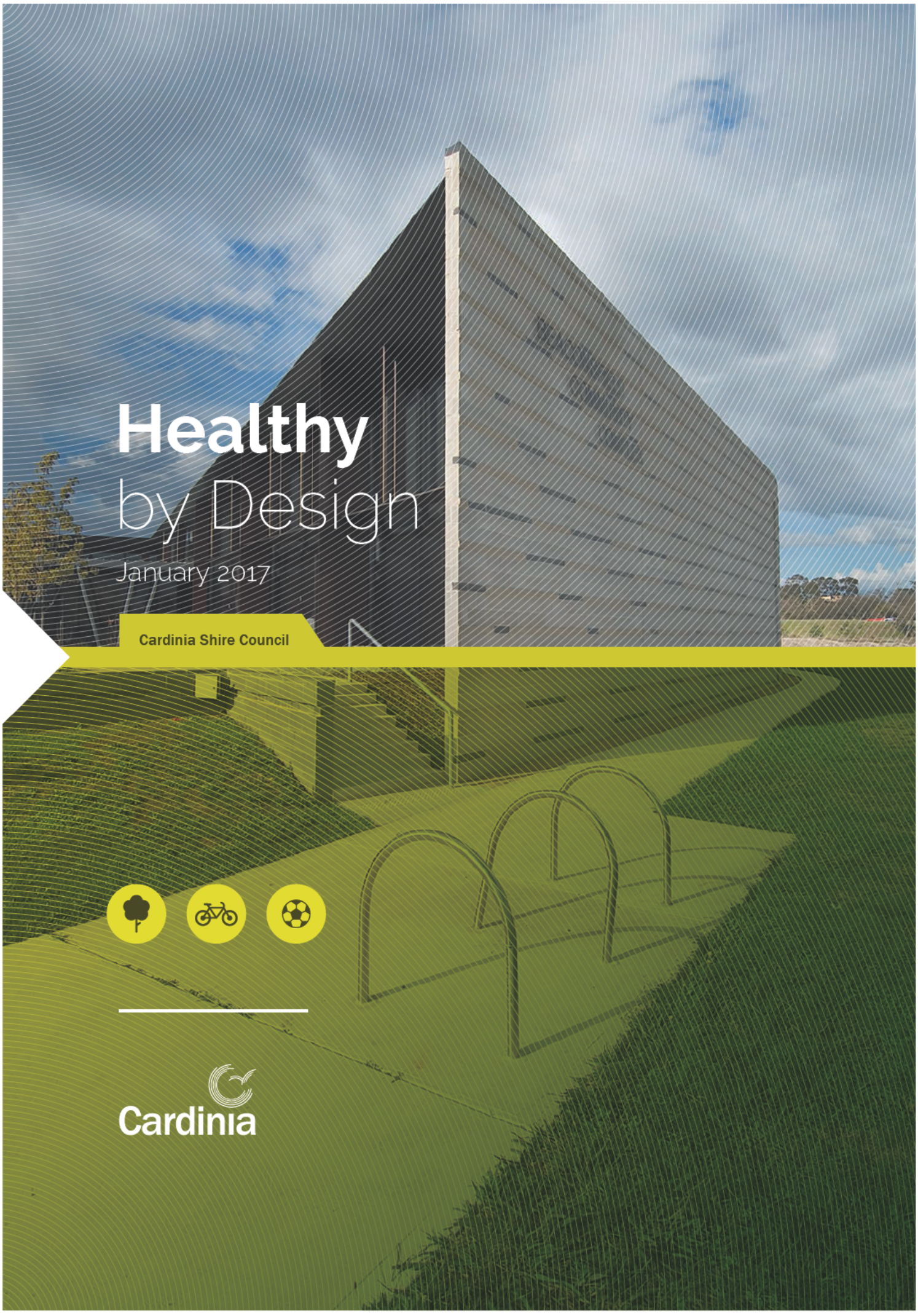


# Healthy by Design

January 2017

Cardinia Shire Council

Cardinia

# What is **Healthy by Design**

## Healthy by Design is a document that was produced by the Heart Foundation in 2004 to support local councils to plan and build environments to support healthy living.

Healthy by Design seeks to provide the following outcomes:

- well planned networks of walking and cycling routes;
- streets with direct, safe and convenient access;
- local destinations within walking distances from homes;
- accessible open spaces for recreation and leisure;
- conveniently located public transport stops;
- and local neighbourhoods that foster community spirit.

Essentially it aims to integrate health into planning, to allow people to be able to choose to be active in an environment that is convenient, safe, and pleasant.

### Cardinia Shire health and built environment context

Cardinia Shire is a rapidly developing municipality that will still experience a significant growth rate in the foreseeable future. The majority of the development is in the Growth Corridor[1]. In some cases, this has resulted in built environments that are not conducive to cycling and walking, that is, to active transport/lifestyles.

Physical activity is an important part of a person's health and wellbeing. In particular, walking is a simple, cheap and effective way to incorporate physical activity in our daily routines. The difficulty is often finding an environment in which to walk that is well connected, accessible, attractive, and safe.

Currently 30.4% of people in Cardinia Shire do not meet physical activity guidelines[2]. Physical inactivity results in an increased risk of some cancer types, obesity, hypertension cardiovascular disease, osteoporosis, diabetes and depression. Cardinia Shire's Healthy by Design document seeks to encourage increased physical activity by ensuring that the built environment within the Shire naturally supports active lifestyles.

The built environment has an enormous impact on the desire and ability for people to be physically active. Topography, connectivity, path type and width, provision of seating and shade, access to destinations, public transport, perceptions of safety and the aesthetics of the environment all have an influence..

Cardinia Shire's Healthy by Design document seeks to encourage increased physical activity by ensuring that the built environment within the Shire naturally supports active lifestyles.

1. See Cardinia Shire Council: http://www.cardinia.vic.gov.au/Page/Page.aspx?Page_Id=3038

2. See Department of Health: http://www.health.gov.au/internet/main/publishing.nsf/content/health-pub-hlth-strateg-phys-act-guidelines#apaadult

# Benefits

### For the community

Healthy by Design will ensure that new development creates a safe, attractive, and well planned environment that allows residents to maximise their opportunities to undertake physical activity. Being active in public spaces also promotes community interaction and contributes towards an increased sense of belonging. It also reduces reliance on cars for local trips and this, over the long term, saves on petrol and servicing costs, due to reduced wear and tear on vehicles.

Other factors that have a positive impact on the likelihood of people to exercise include providing paths of a gradient, width, surface and type that will be comfortable for the majority of people to use. The use of seating and shade devices, paths to destinations such as shops, community facilities and public transport, and passive surveillance over paths and public open space are important contributors. Attractive spaces that are vegetated and contain appropriate street furniture and links between different areas and neighbourhoods will also have a positive impact. At its heart Healthy by Design is also about fostering community spirit and encouraging people to interact in public spaces.

### For the developer

Research by the Heart Foundation indicates that communities value the outcomes being sought under Healthy by Design[1]. This includes a desire to live close to attractive and usable open spaces, and a preference for paved or concreted footpaths for cycling and walking. This preference is becoming more prevalent as people are increasingly aware of the benefits of living a more active lifestyle.

It is recognised, by both the community and the development industry, that attractive open space, walking and cycling paths are significant selling points for homes. Research by the Heart Foundation indicates that improved walking and cycling environments have a positive impact on property values[2]. Healthy by Design builds on these assets by ensuring these spaces are functional and practical.

Neighbourhood design is an important part of being able to achieve these opportunities. Parks create an attractive outlook for surrounding dwellings, as well as providing spaces for informal recreation activities, contact with nature and play areas for children.

Access to public transport is an important priority for many people, as is being within easy walking distance of a range of local services.

Attractive and activated streetscapes provide a safe environment that encourages walking and also adds value to an area as people see places with these features as a pleasant to live in.

1. Heart Foundation 2011, *Creating healthy Neighbourhoods – Consumer preferences for healthy development.*
2. Heart Foundation 2011, *Good for Business – The benefits of making streets more walking and cycling friendly.*

Being active in public spaces also promotes community interaction and contributes towards an increased sense of belonging.

**Image:** facilities like skate park, exercise equipment provide a great opportunity for fun and recreation.

# What does it apply to?

## The Healthy by Design guide will be used across Council to assess planning applications. It will be applicable to all plans including landscape and engineering plans.

Healthy by Design **will only apply to** new developments or redevelopments that meet any of the following conditions:

- All developments and subdivisions of **20 lots or more**
- Adjacent parcels of land where Council considers that there is **potential for 20 or more dwellings or lots** to be provided overtime
- Where **open space** is being provided on the subject site or immediately adjacent
- Where the need for a **cycle and/or pedestrian link** has been identified in the township strategy, structure plan, other Council strategy-policy or any other relevant consideration.

Where other standards or guidelines are also applicable, the higher standard of detail and delivery will override Healthy by Design (e.g. Precinct Structure Plans).

In addition Healthy by Design should be considered as part of the development of landscape master plans and other Council strategies where relevant.

Healthy by Design principles should be applied where possible but where there are inhibiting factors such as topography or geography, due consideration should be given to these factors.

Healthy by Design should be considered as part of the development of landscape master plans and other Council strategies where relevant.

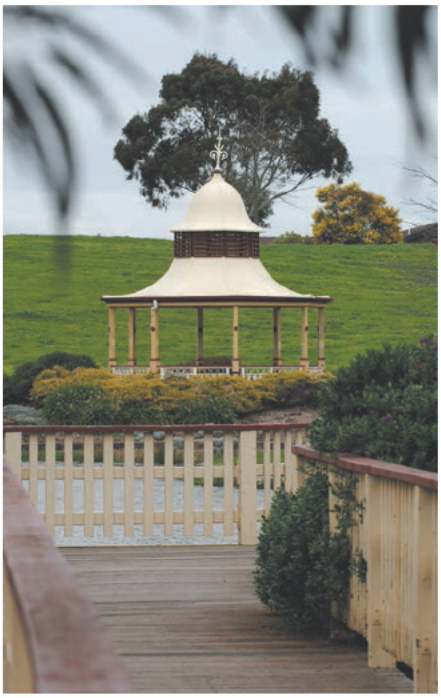


**Image:** kids enjoying a bicycle path.

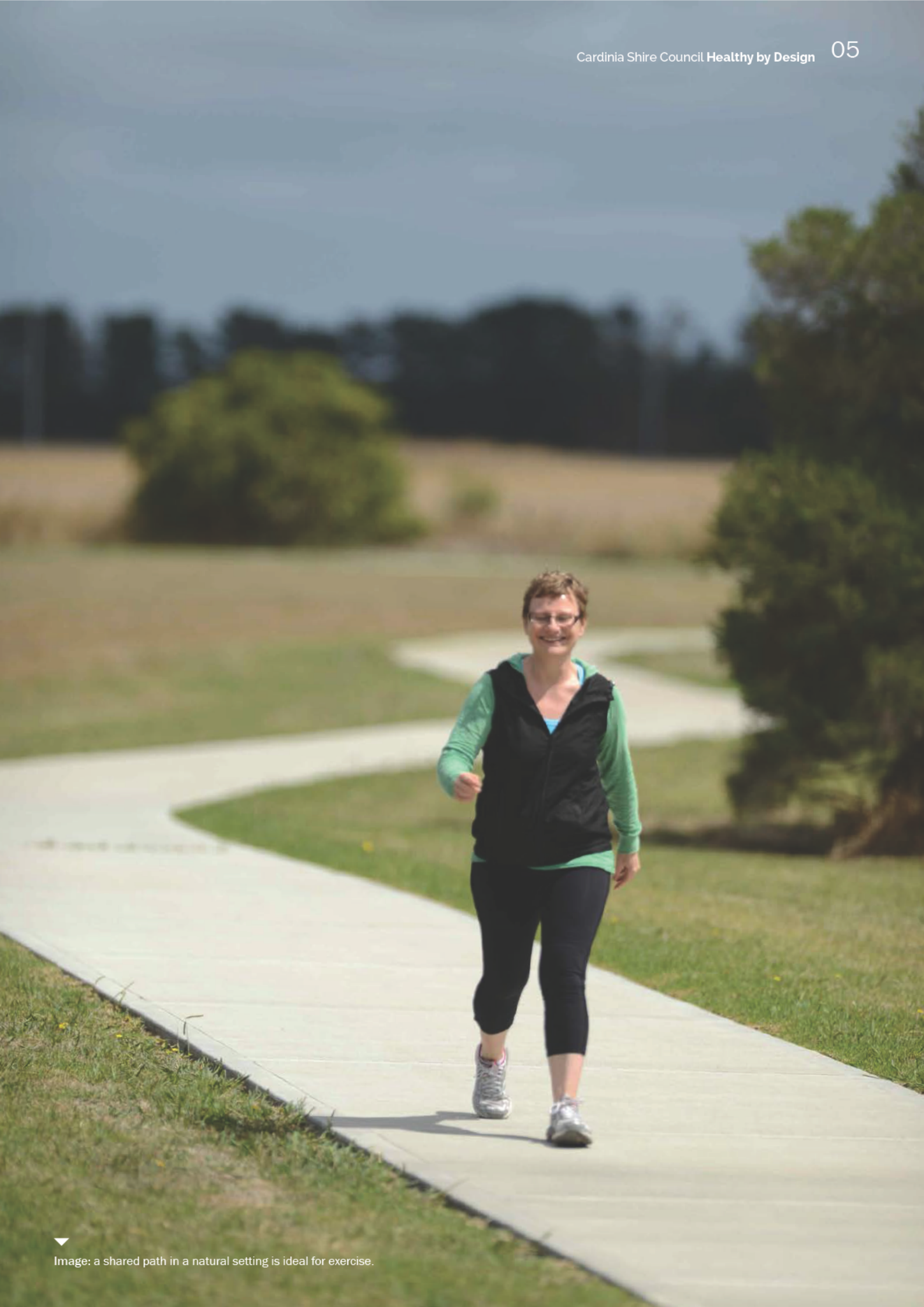
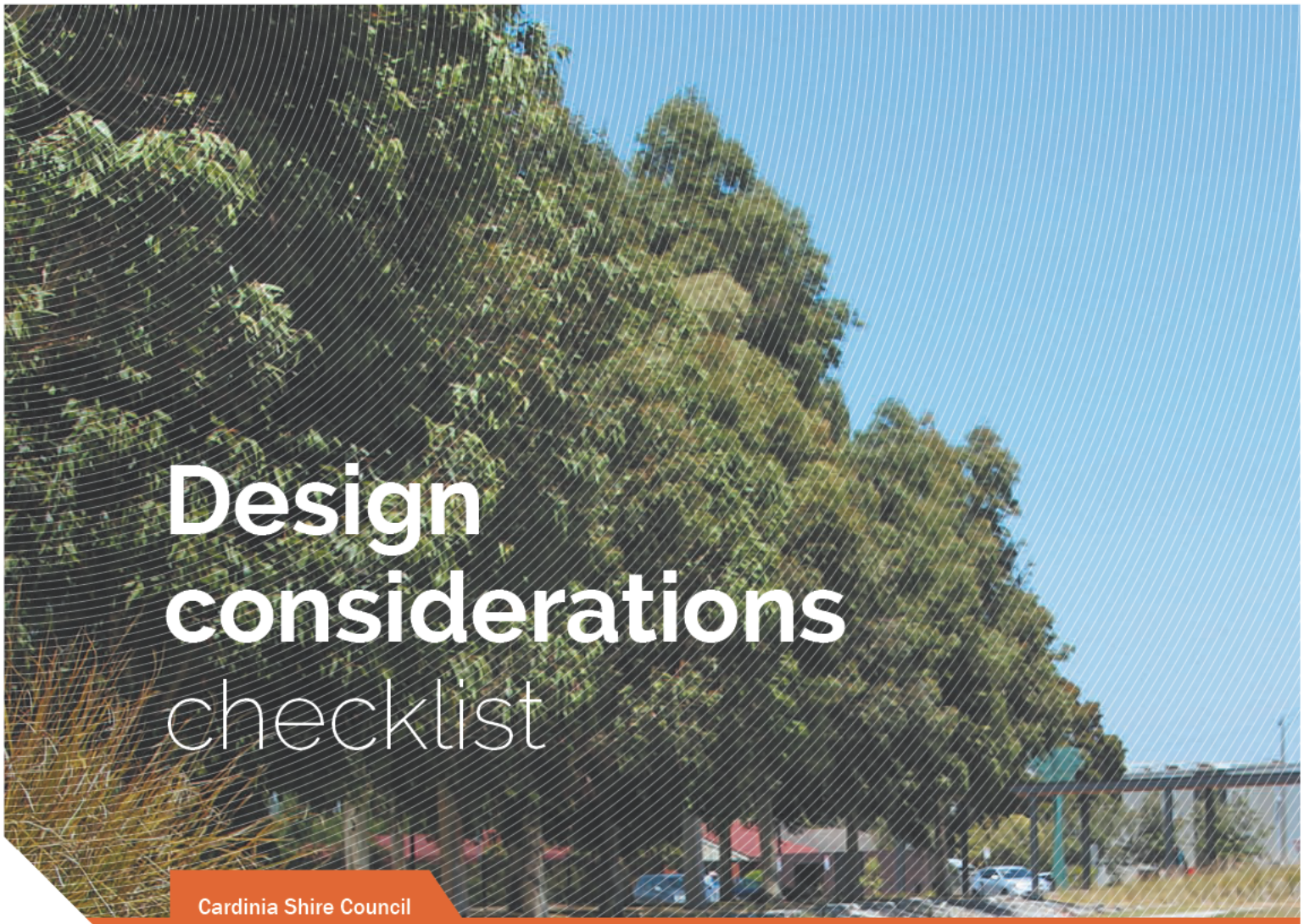


Image: a shared path in a natural setting is ideal for exercise.



# Design considerations checklist

Cardinia Shire Council

# Walking and cycling routes

01 CHECKLIST

Assess as: **P** – present **PP** – partially present **NP** – not present **NA** – not applicable

| Item | Design consideration | Assessment |
|---|---|---|
| 1.1 | Plan a variety of paths, offering both direct and leisurely routes | |
| 1.2 | Provide walking routes along predictable and desired paths of travel; including, but not limited to, approaches to schools, open space, parks, public transport and shopping precincts. | |
| 1.3 | Where there is the opportunity provide circuit paths to improve visual interest by avoiding back tracking. | |
| 1.4 | Ensure any internal paths connect with any existing or proposed paths outside the boundary of the development to provide route continuity. | |
| 1.5 | Create spaces for people to walk where they can be seen by cyclists, other pedestrians, motorists and nearby residents. Avoid tunnels and overpasses where possible to increase visibility and perceptions of safety. | |
| 1.6 | Ensure clear sightlines along walking and cycling routes using appropriate landscaping, low walls, permeable fencing and effective lighting. Avoid blank walls or high solid fencing. | |
| 1.7 | Provide footpaths on both sides of the street. | |
| 1.8 | Provide durable, non-slip, continuous footpaths. | |
| 1.9 | Ensure gradients at crossing points are minimal, safe and comfortable for people with limited mobility and those using wheelchairs, prams and trolleys. | |
| 1.10 | Footpaths should be a minimum of 1.5 metres in width to minimise bottlenecks. | |
| 1.11 | Provide shared paths a minimum of 2.5 metres in width along arterial roads and approach routes to desired destinations. | |
| 1.12 | Provide dedicated bicycle infrastructure, such as lanes and paths, in areas with current and foreseeable high demand in the future. | |
| 1.13 | In residential areas provide protection for pedestrians from vehicles by providing an outer nature strip width of 0.5m or more. Choose barrier not 'rollover' curb design when there is no nature strip. | |
| 1.14 | Plant trees along walking and cycling routes for aesthetics and shade. | |
| 1.15 | Plant trees that require minimal maintenance and will not impact paths or clearances when fully grown. | |
| 1.16 | Ensure that the planting does not provide opportunities for concealment of people. | |
| 1.17 | Plants along shared paths should have a minimum clearance of 0.5m from the edge of the path when fully grown. | |

# Public open space

02 CHECKLIST

**Assess as:** **P** – present **PP** – partially present **NP** – not present **NA** – not applicable

| Item | Design consideration | Assessment |
|---|---|---|
| 2.1 | Provide open space within 400m of dwellings. | |
| 2.2 | Provide large local parks within safe and comfortable walking distance from dwellings (e.g. 800m). | |
| 2.3 | Landscape public and open space to provide pleasant environments for people to sit, meet and talk. | |
| 2.4 | Plant trees, other vegetation and construct shelters within open space to provide shade and weather protection for people. | |
| 2.5 | Provide a range of facilities to create active recreation opportunities for all ages. | |
| 2.6 | Where appropriate, provide exercise and training equipment along walking paths to encourage more vigorous activity. | |
| 2.7 | Consider the provision of amenities (e.g. BBQ, rotundas, drinking fountains, public toilets) appropriate to the location and importance of the open space in accordance with the Asset Management Strategy (2014-2018).. | |
| 2.8 | Locate parks to encourage maximum public access and to facilitate natural surveillance from nearby housing, businesses or people passing. | |
| 2.9 | Orientate houses to overlook parks for passive surveillance. | |
| 2.10 | Avoid solid fencing or walls along park perimeters, instead use fencing that enables clear sight lines of the open space. | |
| 2.11 | Plan multiple accessible pedestrian entry and exit points to public open spaces. | |
| 2.12 | Install bike and scooter racks at local destinations. | |
| 2.13 | Ensure that creeks have sufficient buffers to accommodate landscape and trails for the community. | |

# Streets and access ways

03 **CHECKLIST**

Assess as: **P** – present **PP** – partially present **NP** – not present **NA** – not applicable

| Item | Design consideration | Assessment |
|---|---|---|
| 3.1 | Local roads and access ways should be designed to ensure a low speed vehicle environment. | |
| 3.2 | Street layouts should be based on a grid that provides legible travel routes. They should be well integrated with the existing or proposed surrounding streets. | |
| 3.3 | Avoid cul-de-sacs but when required ensure they are well signed and have foot and cycle access through to adjoining streets and, where possible, along desire lines. | |
| 3.4 | Design attractive, interesting and welcoming street frontages. Encourage porches, verandas and shop fronts along commercial streets rather than high solid walls or security shutters and/or solid fences. | |
| 3.5 | On residential streets avoid continuous garages, dense hedges and continuous rear or side fences. | |
| 3.6 | Plant trees to provide shade and a pleasant environment for people on the street. | |
| 3.7 | Design streetscapes to enable natural surveillance of people walking, cycling and gathering at points of interest. | |
| 3.8 | Advocate for pedestrian crossings at key desire lines along VicRoads declared arterials roads in accordance with VicRoads warrants. | |
| 3.9 | Crossing points should be considered for roads adjacent to places such as shopping precincts, schools, large retirement villages, regional parks and other major pedestrian destinations. The type of crossing will need to respond to the local context (e.g. desire lines) and meet Council's requirements and VicRoad's warrants. | |
| 3.10 | Maintain clear sightlines for people travelling on or across streets on foot or bike, particularly intersections, roundabouts and pedestrian crossings. | |
| 3.11 | Use long lasting tactiles that best suit the environment to mark pedestrian crossings. | |
| 3.12 | Advocate to the responsible authority (e.g. VicRoads) for lower speed limits in peak pedestrian areas such as shopping precincts, schools and community facilities. | |
| 3.13 | Avoid the use of roundabouts in areas of intense bicycle and/or pedestrian activity. | |
| 3.14 | Where roundabouts or other traffic management devices exist, maximise visibility and safety of pedestrians and cyclists. | |
| 3.15 | Encourage the provision of separated bicycle lanes or paths along streets with traffic speeds over 50km/h. | |
| 3.16 | Consider the installation of visual and/or tactile markings along bike lanes to create clear divisions between cyclist, pedestrian and vehicle spaces. | |
| 3.17 | Maintain safe, unobstructed paths of travel for cyclists and pedestrians. | |

# Seating, signage, lighting, fencing and walls

04 CHECKLIST

**Assess as:** **P** – present **PP** – partially present **NP** – not present **NA** – not applicable

| Item | Design consideration | Assessment |
|---|---|---|
| 4.1 | Provide seats to rest at frequent intervals. The seating should be located atop a firm non slip surface with sufficient space for a wheelchair or pram adjacent to the seating. Arrange seats to facilitate social interaction (e.g. position at right angles). | |
| 4.2 | Provide seating, including some with backs and armrests. Seats and armrest height should also be set at levels to suit adults. Provide seating at a suitable height for children, where possible. | |
| 4.3 | Provide shaded seating options. | |
| 4.4 | Align seats with attractive vistas and points of special interest, e.g. outlooks over play areas, wetlands, local views or sports ovals. | |
| 4.5 | Seating should have suitable clearance from shared paths for safety. | |
| 4.6 | Advocate for directional signage and site maps to guide people to points of interest such as major community destinations. | |
| 4.7 | Ensure signage is free from visual obstructions. | |
| 4.8 | Illuminate signs at night or locate signs under street lights. | |
| 4.9 | Where shared paths or recreational walking trails are present include signage leading to the paths or trails and at regular intervals along the route. Include distance, destinations, gradient, trail type, directional indicators and locally relevant information. | |
| 4.10 | Locate lighting where people are likely to gather, along walking and cycling routes, at key road crossing points and intersections with pedestrian and/or cyclist demand. | |
| 4.11 | Avoid the exclusive use of low level or in-ground lights as it limits visibility for pedestrians and cyclists. | |
| 4.12 | Provide lighting in areas intended for night use and/or areas accessed by pedestrians after dark. Avoid lighting areas not designed for night use. | |
| 4.13 | Use low walls or transparent fencing along primary street frontages and open space. Design side fences to achieve a balance between privacy and visual connection to the public realm. | |
| 4.14 | Design habitable buildings so that they interact with public space. | |

# Public transport

05 CHECKLIST

**Assess as:** **P** – present **PP** – partially present **NP** – not present **NA** – not applicable

| Item | Design consideration | Assessment |
|---|---|---|
| 5.1 | Ensure development is located to take advantage of access to public transport. | |
| 5.2 | Advocate for the location of public transport stops to be within a comfortable walking distance for most people (i.e. between 400 and 800 metres) from residential areas and activity centres. | |
| 5.3 | Plan clearly signed, well lit and direct routes for people walking and cycling to public transport stops. | |
| 5.4 | Advocate for the location of public transport stops to be in active locations and clearly visible from surrounding developments such as shops and houses. | |
| 5.5 | Advocate for shelters at public transport stops that provide weather protection, comfort and appropriate lighting and seating. | |
| 5.6 | Advocate for clearly displayed legible public transport service information. | |
| 5.7 | Advocate for the installation of adequate facilities for bike parking at train stations. | |
| 5.8 | Advocate for a regular inspection and maintenance program of public transport facilities. | |
| 5.9 | Ensure clear and safe crossing points adjacent to public transport stops. | |
| 5.10 | Provide a collector road network that is suitable for bus circulation. | |
| 5.11 | Advocate for express bus routes along major arterial-collector roads between major destinations (e.g. large towns, important shopping centres, etc). | |

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