

C6 Walk safe

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Purpose

The purpose of this module is to provide the advice and tools to enable council decision makers and practitioners to recognise critical situations related to safe walking and to manage them effectively.

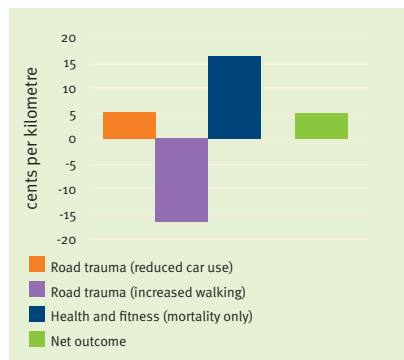
Introduction

Safe walking is important in terms of minimising traffic-related injuries and creating a perception that walking is a safe activity. A perception that walking is risky will reduce the amount of walking and its consequent health benefits. Reversing this perception will require a concerted effort by all stakeholders.

C6.1 How safe is walking?

A significant amount of walking takes place in locations such as parks, shopping centres, shared facilities, sporting venues and beaches. Although the amount of this type of walking is unknown, it is likely that this activity is very safe. That being said, just as with any activity, it is important to be safety-conscious when walking. This is especially true when walking along or across roads, where pedestrians can be particularly vulnerable.

When planning walking programs and/or designing walking facilities, it is useful to acknowledge any potential risks associated with walking, as well as those groups of pedestrians who may be most vulnerable, for example, the young, seniors, people with disabilities, and people who are intoxicated. Additionally, women and seniors may feel particularly insecure in places that are isolated, infrequently used, or not easily seen by other people.



Source: Ker 2004, Table 1

Figure C6-1
Benefits of walking instead of driving

Evidence also suggests that an overall increase in walking, with its associated increase in awareness of pedestrians, and supported by improved walking infrastructure, can further improve the safety of walking.

Awareness of these factors will provide insight into how to plan and design for even safer walking.

Pedestrian safety in context

Those who make the change from car driving to walking benefit from improved health and fitness, with lower rates of fatality and loss of wellbeing from diseases associated with lack of exercise (see Figure C6-1).

C6.2 Walking safely in Queensland

Safety tips

There are a number of resources available to improve walking safety in a variety of circumstances. Aspects of safe design for walking facilities are addressed in Part D *Design, construction, auditing and maintenance*. Some guidelines on the safe use of walking facilities are provided in the box 'Tips for safe walking', while the case study 'Promoting

pedestrian safety' gives an example of an effective walking safety program in Victoria.

Safe routes to school

Some areas in Australia and other countries have implemented *Safe Routes to School* programs. *Safe Routes to School* is a 'whole school and community' approach to road safety. It requires input from the local council, the school, the Parents and Citizens Association, and parents and students.

The principal aims of *Safe Routes to Schools* are to:

- ▶ provide a safer environment for children on their way to and from school
- ▶ encourage children to walk and/or cycle to school
- ▶ decrease traffic congestion surrounding schools during drop-off/pick-up periods.

(WALGA n.d.)

Achievement of this broad range of aims will often be enhanced by developing safe routes in conjunction with school-based travel planning (see C5 *Positively influencing travel choices*).

Safe Routes to School is based on identification and signage of routes surrounding schools and providing safe, convenient access to schools. The process of identifying the routes involves the children of that school working with local government staff in painting footprints on existing footpaths. School Parents and Citizens Associations and teaching staff also undertake an ongoing information/marketing campaign (through school newsletters etc.) to increase parents' awareness.

The location of entry and exit points to the school is very important for directing pedestrians, cyclists and vehicles to the desired places. Gates should be located so that children waiting to be collected by parents/carers can stay inside the school fence. This enhances road safety, by preventing children playing near or on the road, as well as personal safety. Good placement of gates may also remove the need for pedestrian fencing outside the school.

Intended routes from inside the school to various transport facilities, such as bus stops, car parks, footpaths and cycle paths, should be clearly established to avoid conflicts and maximise efficiency of the other facilities.

Children should not have to cross the main entry/exit point to the school or walk through the off-street parking to access other facilities. Gates should be placed at locations that direct children to designated crossing points.

Case study: Promoting pedestrian safety

Roads Corporation (VicRoads) has worked to make managing pedestrian safety campaigns easy for its local government and municipalities with the production of a guide called *Looking out for pedestrians: an outline* (see Figure C6-2).

The project was initiated by the Vulnerable Road Users Section in VicRoads, which looks after policy and programs on pedestrian safety.

The guide provides advice on tackling the safety issues associated with three key pedestrian groups: the young, seniors and intoxicated pedestrians. Council officers are provided with assistance in using available resources to mount effective, low-cost programs.

One such program was Melbourne's Walk Safe, a coordinated effort to address pedestrian safety promotion and responsibilities and improved pedestrian facilities in high-risk locations.

The document was developed through community engagement and consultation with local municipalities — mainly those with high rates of serious pedestrian injury.

Launched in June 2004, the practical 'how to' guide provides images and existing marketing and promotional material on a CD-ROM.

VicRoads plans ongoing work to involve councils and to encourage take-up of pedestrian safety programs.



Source: VicRoads

Figure C6-2
Looking out for pedestrians: an outline
produced by Roads Corporation (VicRoads)



Tips for safe walking

Walk with a friend

- ▶ Walking with a friend will add to the pleasure of your walk and increase your safety.

Wear sturdy shoes that will give you proper footing

- ▶ A running or walking shoe that firmly supports your foot is best.

Be predictable

- ▶ Other path and road users will almost always try to avoid coming into conflict with a pedestrian. Their job is made more difficult, however, if you suddenly change direction or do something else unexpected.

Plan routes to avoid hazardous crossings

- ▶ The safest crossing points will have:
 - enough room for you to stand back from the roadway
 - crosswalks that are clearly defined on the pavement
 - crossing signals that indicate when you should cross.

Take care when walking in the sun and heat

- ▶ Avoid walking in the hottest part of the day. Mornings and evenings are the best times to walk.
- ▶ Rest in the shade when you are feeling tired.
- ▶ Drink plenty of water.
- ▶ Wear a broad-brimmed hat, sunscreen, sunglasses and protective clothing. Queensland Health's Healthy Living Skin Care website provides advice on how to be 'SunSmart': <http://www.health.qld.gov.au/HealthyLiving/skincancer_p.htm>.

Use footpaths and shared paths whenever available

- ▶ Footpaths and shared paths keep walkers separated from motor vehicle traffic to the greatest extent possible, but be aware of driveways with poor sightlines (e.g. where there are high fences) and intersecting roads.
- ▶ If you must walk on or near a road, remember to walk facing oncoming traffic, so that both you and a driver can see each other. If there is a smooth, stable surface alongside the roadway, that is also a good place to walk — just stay as far to the side as possible and look for oncoming traffic.

Keep left on paths

- ▶ While there is no requirement for a pedestrian to keep to the left on a path, it makes sense to do so, as this minimises potential collisions with other path users.

Be especially careful around parked cars and in car parks

- ▶ Parking areas create special hazards because cars may be turning quickly or backing into or out of a parking space. Be sure to look for reversing lights and listen for engine noise.

Stop and look for traffic in all directions before crossing the street

- ▶ Look to the right, left, and right again — even on a one-way street. Always look right last, because that is the direction that cars will be coming from when you first step off the kerb.

Be aware of turning vehicles at intersections

- ▶ Make sure you look for vehicles making turns. Drivers are concentrating on making their turns and avoiding oncoming traffic, so they might not see you! Exaggerate your head turns so that you look in all directions, including behind you. Always make sure the driver of a vehicle that is turning sees you.

Dress to be seen by drivers

- ▶ It is a good idea when walking, especially at dawn, dusk, and in other low-light conditions, to wear light colours or bright clothing so that you can be easily seen. Fluorescent colours such as blaze orange, hot pink, and day-glow green are ideal in daytime but not at night-time.

Each school environment and community has unique road safety needs. *Safe Routes to Schools* needs to be adapted to suit the needs of each individual school, taking into consideration such issues as provision and quality of footpaths and other infrastructure, and options for the identification of the safe routes.

The benefits of *Safe Routes to Schools* initiatives include:

- ▶ improving the safety of children travelling in their local area
- ▶ providing an important link between the school, local community and local council
- ▶ enabling the school community to identify issues of concern about children travelling to and from school
- ▶ identifying local trouble spots with a view to their improvement and the introduction of engineering interventions
- ▶ provision of appropriate engineering improvements where funding is available.

Safe Routes to Schools projects bring many benefits, including:

- ▶ fewer child casualties and road crashes
- ▶ healthier lifestyles
- ▶ safer roads for all, especially pedestrians and children
- ▶ less pollution and congestion
- ▶ greater independence and freedom.

See <<http://www.saferoutestoschools.org.uk>> for more information on implementation of this program.

In Queensland, the *Safe Routes to Schools* concept is incorporated in the *Safe Walking and Pedalling Program* (SWAPP, see below), with a focus on the whole surrounding area rather than on specific routes.

Safe Walking and Pedalling Program

The Queensland *Safe Walking and Pedalling Program* (SWAPP) is part of the *Safe School Travel (SafeST)* program of Queensland Transport. *SafeST* is a collection of programs, schemes and initiatives designed to improve transport safety for all children, regardless of whether they walk, cycle, or travel as passengers in buses or cars.

The objectives of the *Safe Walking and Pedalling Program* are to:

- ▶ involve Queensland Transport, Main Roads, local government, and primary school communities in the identification of children's road safety problems with regard to walking and cycling to school

- ▶ involve local government and primary school communities in developing and providing behavioural, educational and engineering road safety interventions for school children
- ▶ identify and improve major routes that children use to walk or cycle to school and to other community facilities
- ▶ raise local community awareness of child safety issues
- ▶ encourage walking and cycling as safe and healthy forms of transport to and from school.

SWAPP involves the review of the footpaths, bicycle paths and related infrastructure that children use within 3.2 kilometres of a school. Rather than simply making children adopt a particular safe route to and from school, SWAPP also aims to increase the amount of walking and cycling trips by children.

SWAPP has funding for minor works to be carried out, with a cap of \$10,000 for each SWAPP submission. Submissions are prioritised according to factors such as crash history, level of assessed risk, speed environment and departmental objectives. School communities should contact their local road safety adviser for further information on applying for funding under the SWAPP.

Further information can be found at <http://www.roadsafety.qld.gov.au/qt/LTASinfo.nsf/index/rs_safest_swapp>.

Sharing the walking space

There are many issues associated with sharing paths with other users. Some of these relate to the planning, design, construction and maintenance of the paths themselves (see D1.2 *Designing good quality shared facilities*). Presented below is what pedestrians need to know and do in order to share space safely with other path users. Another good resource on shared facilities is *Shaping up* (Queensland Transport n.d.).

There are many different types of pedestrians, just as there are many different types of cyclists and other path users, all with a range of different travel needs:

- ▶ Some will travel slowly (e.g. a young child in a family group), while others may be faster than they appear (e.g. a senior in a motorised mobility aid).
- ▶ Some will be focusing on getting to their destination, while others will be interacting with people on the path.
- ▶ Some will be out for exercise and may not be highly aware of what is going on around them (e.g. a jogger using a music player), while for others the exercise is incidental.



- ▶ Some will be unencumbered, while others will be pushing prams, carrying bags (including schoolbags) or walking the dog.

Following some simple 'rules' (City of Adelaide 2004; Transport WA 1999) will make life safer and more comfortable for all path users (see Figure C6-3):

- ▶ Keep to the left.
- ▶ Do not move into the path of a rider or block other path users.
- ▶ Be predictable.
- ▶ Be seen.
- ▶ Stay alert for other users of the path.
- ▶ When walking in a group, do not block the whole path and be aware that other users, including other pedestrians, may want to pass you.
- ▶ If with small children, be careful that they do not wander or run into the path of other users.
- ▶ Keep dogs under control and on a leash not longer than 2 metres at all times.

Crime prevention through environmental design

The physical design of public spaces is increasingly being recognised as an important factor affecting people's actual safety and security when using these spaces, as well as their perceptions of their safety and security. Places that are perceived to be 'unsafe' or 'threatening' will be avoided by people whenever possible (see Figure C6-4), thus adding to any such problem by reducing the extent of surveillance (i.e. reducing the 'eyes on the street').



Source: Adelaide City Council

Figure C6-3
Sharing our paths and our city brochure



Source: ARRB

Figure C6-4
Safety and security issues for pedestrians. Take note of where people feel comfortable walking. The path to the left was installed after complaints from users (particularly nurses from a nearby hospital) that they did not feel safe using the path through the trees, especially in the evenings. An informal path had already been worn along the roadside by people 'voting with their feet'.

The importance of the perception of safety is exemplified in the responses from people on how they would like to improve their communities. Amongst a wide variety of responses, one common theme is that it 'would be a better place if I felt comfortable walking there' (PPS 2004, p. 1). Some basic principles to support the achievement of this goal have been articulated in the *Safer Places* project in the United Kingdom (see the box 'Attributes of safe, sustainable places').

Environmental design to support safety and security is not a 'recipe-driven' set of rules to be applied in all situations. Rather, it is an approach to thinking about safety and security in a holistic way from the point of view of the community, instead of from the point of view of planners. This can be done only in consultation with the community and other stakeholders (including business) to reflect the local situation and the views of those who will live with the outcomes (ODPM 2004).

Such an approach, based on what Jones (2001) calls a safe assessment, should be undertaken for a local area, rather than for individual streets, so that pedestrian movement and safety are not unnecessarily governed by a single situation that may not represent the whole area.

C6.3 Planning for pedestrians during construction

Maintaining walking route continuity and continuous access paths are especially important when construction is taking place next to the path (see Modules C2 *Walking and urban design* and D2 *Design for accessibility*). The most common impediments to pedestrian access are:

- ▶ Disruption to footpaths resulting from public utility works (e.g. telecommunications, water, gas, electricity). Such disruption is usually short-term and may not completely sever the footpath. However, it will frequently narrow the available path to the extent that it is impassable for people who use mobility aids and for parents in charge of young children.
- ▶ Building construction where there is insufficient room on-site for all the necessary activities or materials. This is most common where building is up to the property boundary rather than being set back from the street. Disruption due to building works is usually long-term, often for the whole period of construction, which can exceed 12 months in the case of substantial buildings. The intrusion of construction sites into public space increases the risk profile, while also transferring risk away from the builder, who would normally have to fence these areas off from the public.

Most councils will have policies that require signage advising of footpath closures. It is important to ensure that signs are located to give pedestrians adequate notice of, and directions to, clear safe and convenient access to an alternative route. This alternative may be a footpath on the other side of the road. Where a road crossing is necessary, pedestrians should be informed at a place where there is a safe road crossing available, not just at the point of the obstruction. In practice, even the most basic requirements are often not complied with (see Figure C6-5), signs being poorly located and difficult to see.

Where construction works are long-term, consideration should be given to more specific and fundamental treatments to maintain pedestrian continuity during the construction period. This may include reallocation of space to pedestrians from other uses (see Figure C6-6), including motor vehicle traffic, although care should be taken to ensure that transitions from the footpath to the alternative space are reconfigured to provide level or 'lipless' access.

Attributes of safe, sustainable places

Safe sustainable places have the following attributes:

Access and movement: Well-defined routes, spaces and entrances provide for convenient movement without compromising security.

Structure: The places are structured so that different uses do not cause conflict.

Surveillance: All publicly accessible spaces are overlooked.

Ownership: These places promote a sense of ownership, respect, territorial responsibility and community.

Physical protection: Necessary, well-designed security features are included.

Activity: The level of human activity is appropriate to the location and creates a reduced risk of crime and a sense of safety at all times.

Management and maintenance: These places have been designed with management and maintenance in mind to discourage crime in the present and the future.

(ODPM 2004)



Source: ARRB

Figure C6-5
Footpath obstruction due to construction without a clear, safe and convenient alternative route for pedestrians

As a spin-off benefit, experience of such reallocation of space may demonstrate that space previously dedicated to, for example, motor vehicles, is not actually needed for the previous use, or can be configured differently. The situation shown in Figure C6-6, for example, worked so well that re-opening of the footpath was accompanied by the removal of the previous clearway provision, thus allowing kerbside parking at all times, improved access to the office building, and separation of pedestrians from through-traffic by a wider margin.





Source: ARRB

Figure C6-6

Where construction is a long-term project, consideration should be given to reallocating space to pedestrians from other uses. In this case, a portion of the kerb lane has been partitioned off for pedestrian use during construction.

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