IMPROVING WALKING AND WAYFINDING IN
THE GOODWOOD ROAD PRECINCT

A REPORT TO THE CITY OF UNLEY AND
THE GOODWOOD CENTRAL TRADERS AND SERVICES ASSOC

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March 2012
‘Making Places More Walkable, Legible and Liveable’
INTRODUCTION AND BACKGROUND

This project was an action identified in the Goodwood Precinct Urban Design Framework endorsed by Council in 2009.

The Goodwood Central Traders and Services Association requested Council to undertake the project as part of its 2011-12 Mainstreet Improvement Program.

Walking was the ‘forgotten mode’ during the last 2-3 decades of the 20th Century. Cities in most of the developed world were planned to accommodate the use of the private car, walking became more difficult and dangerous, and it declined almost everywhere.

However, during the first decade of the 21st Century the growing recognition of the links between walking and issues such as health and obesity, the environment and climate change, car dependence and peak oil, congestion and amenity, and equity issues for the young, old and people with a disability has resulted in a resurgence of interest in all aspects of walking.

There is a growing and widespread recognition that improving the walking environment will have a very large number of local benefits. They include:

1. **Health outcomes** – Walking is the best-value form of exercise for the prevention (and cure) of many major health problems including obesity, diabetes, heart-conditions, mental health, dementia and others.
2. **Recreation** – walking is the most popular recreation activity in most states of Australia – and its potential for growth is significant.
3. **Social Inclusion** – walking is free and a mode available to all ages and groups in society, regardless of income.
4. **Social cohesiveness** – more walking, pedestrian filled streets and good pedestrian environments encourage social interaction and community development.
5. **Improved road/community safety** – good walking environments are safer for all users as drivers slow down in “people places” – and drivers are safer too.
6. **Reduced air pollution** – walking reduces short car trips, which are many more times polluting than longer car trips per km (until catalytic converters warm up).
7. **Reduced greenhouse gas emissions** – GHG emissions are based on fuel use. About 35% of all car trips in most major cities are less than 2kms, many of which can be substituted by walk trips.
8. **Reduced traffic congestion** – Cars making short trips during peak hours generally make up 15-20% of the total vehicles on the roads and contribute significantly to peak hour congestion. Walking can replace many of these.
9. **Improved public transport patronage** – more walking leads to more public transport use, especially when walk access to public transport stops is made safer and easier. Increased public transport use depends on a better walking environment
10. **Advantages for people with disabilities** – a good walking environment is better for people with disabilities – as well as all pedestrians
11. **Advantages for special age groups** – good walking environments make it safer and easier for children to access schools and the increasing aging population to reach local services, shops and friends.

12. **Local economic development** – walking to local shops is good for the economy. In many Centres a surprisingly high percentage of retail and service turnover comes from local residents and workers. Walk access to and within activity centres is important.

13. **Future growth** – local population growth will increase the need for good walking access (and less local car use) to all destination types (schools, shops, public transport stops, etc).

14. **Cost** – providing good walking environments and programs that encourage walking are considerably less expensive to Councils, State Governments and private providers than building/maintaining roads and car parking spaces.

The benefits of making places more pedestrian friendly and encouraging people to walk to more destinations more often are substantial. Improved walking environments benefit individuals, businesses, public transport systems and their users, students too young to drive and the elderly or those with a disability, as well as cyclists. Supporting and encouraging people to walk more, both for transport and recreation is both necessary and affordable. Efforts to encourage and increase walking also involve improving the amenity of public space, making it easy and attractive to the very many who need or want to walk.

A better walking environment also assists cyclists.
1. INTERNATIONAL and AUSTRALIAN EXPERIENCE

Australia as a whole has a walking mode share of around 7-8%, placing it just above the United States but well below most European countries with walking mode shares of between 20-30% of all trips.

As part of the background research for this project we have identified a number of ‘exemplar’ case studies of places where innovative infrastructure and behaviour change projects have produced significant improvements in the numbers of people walking. They have been selected to cover a range of types of areas and issues that affect most cities and urban environments, such as walking to shops and schools. They are drawn from Australia, USA, Canada and Western Europe and illustrate what has and can be done to change places where people can walk (and sit, and spend time and money) and want to walk more.

The first case study covers the classic case of the revival and regeneration of Copenhagen, now one of the world’s most liveable and walkable cities. Other case studies from the work of JA Grant & Associates are also included in Appendix 2. In addition Appendix 2 includes a brief review of the changes that have taken place in Victoria in the past decade, and the types of measures that are now available to Councils to improve the walking environment in local and regional activity centres.
2. GOOD PRACTICE FOR IMPROVING WALKABILITY AND WAYFINDING

There are a wide range of activities that Councils can undertake to increase the rates of walking in an area. There are three major groups of activities including behavioural change programs (information, leadership, events and programs), the provision of signage and information, and infrastructure improvements.

**A spectrum of Activities and Actions**

*To increase walking and active transport*

- **Information** – Promotional media, Advice (Travelsmart)
- **Leadership** – Policy (setting an example)
- **Events** – Walktober, unique local initiatives
- **Programs** – Walking School Bus, corporate challenge

**Signage/information**
- Install pedestrian/cycling wayfinding signage
- Develop Transport Access Guides

**Urban space improvements**
- Improve footpaths & shared paths, add amenity (seating)
- Improve road crossings, speed limits

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**Behaviour change/encouragement Programs**

New and improved infrastructure for pedestrians is important. However, even the existence of a good physical environment may not be sufficient to make people walk more. Usually it needs to be complemented by a range of “encouragement programs” aimed at getting more people to use existing and new pedestrian infrastructure, and to embrace the culture of walking.

There are three basic types of activities and programs known to result in travel behaviour change:

1. **Council leadership.** This includes actions such as the development and promotion of a Walking Policy, identifying what a Council will do to support and promote walking.

2. **The provision of quality information.** This includes the dissemination of relevant information to local residents and other users of Unley’s facilities (such as trader groups, schools, etc.). There is already a large body of information about the personal, community and business benefits of increased walking. Of
particular relevance is the large amount of retail expenditure that is derived from local residents, many of whom already do, or would like to walk to local shops. Retailer groups are more likely to support walking initiatives after exposure to relevant data of this type.

3. **Active involvement in events and programs.** Events introduce people to new behaviours. ‘Walktober’ – the Kinect Australia initiative – encourages organisations to develop walks for a wide range of different purposes and groups, including Seniors Month walks, Pram Walks or walks to raise funds for causes. Walk to School day, Walk to Work day and others are all part of this campaign.

**Pedestrian Infrastructure**

**Pedestrian information.**

Can people find their way? Wayfinding signage, preferably map-based, including walk-time estimates, is already installed in many parts of Australia. Map based signs are complemented by directional signs along major walking routes and street name signs at all corners.

![A Mandurah Wayfinding Sign](image)

On-street signage can be complemented with hand-held or on-line maps, Transport Access Guides and other information that gives people the confidence to embark on a walk from their origin to a given destination.
Improved Walking Infrastructure.

Good practice in the development of walking infrastructure can be identified from a number of different sources. They include the experience gained from cities and centres which already have high rates of walking, from research and experience in Australia and elsewhere, and from on-street interviews and observation of people walking in Melbourne.

In many of the highly walkable cities of Europe there is generally a high density of housing and population, good quality public transport, a calmed traffic environment and a transport and land use planning system that is focused on ensuring it is safe and easy to walk, cycle and use public transport. In Copenhagen, for example, the planners have progressively removed CBD parking, improved public transport, opened the streets to people (and closed them to cars) and assisted in creating a culture where walking and cycling are the norm. In other eminently walkable cities, such as Zurich, most of the city
centre is car-free, public transport is frequent and inter-connected and walking is
considered to be the natural mode of choice for most short trips (1km or less) by people
of all ages. The culture and local and state planning practices emphasise walking and
active transport modes.

An excellent source for identifying good practice in the provision of infrastructure for
walking in western-european, car-focused urban environments is the “Pedestrian
Planning Design Guide” (New Zealand Land Transport Dept. Dec 2007). This
comprehensive manual is based on a review of good practice infrastructure
development from throughout the world, with an emphasis on what can be done to
improve conditions for pedestrians in cities and suburbs that were developed during the
20thC, typically found in Australia, New Zealand, the UK, Canada and the USA. These
countries generally have a low mode share for walking.

Infrastructure improvements can be divided into two major groups – those needed “off-
road” (footpaths, etc.) and those needed “on-road” (crossings, etc.). Each of these
major groups can be further subdivided into a series of more specific groups.

Off-road infrastructure consists of two basic types:

1. **Footpaths (and shared paths).** Can people actually walk? Do footpaths exist
   where they are needed? Are there gaps in the system? Are they direct or do they
   require a detour? Are they wide enough for the volume of pedestrians and people
   using walking aids? Are they blocked by café seats, poles, pooled water or other
   obstructions? Are they even, in good condition with no trips and slips? Are there
too many crossovers for cars? Is the gradient and crossfall low enough for
pedestrians of all ages? Are there good quality pram-ramps at all corners and
crossings? Are tactile pavers installed where needed? The footpath system
should be comprehensive and in good condition.

2. **Amenity elements.** Is the pedestrian environment as safe, functional and
   attractive as it can be? The elements consist of seating, safety and related items.
   Is there sufficient seating for the volume of people? Are seats in good condition,
   with arms and backs? Other amenity elements include: shade and protection
   from the weather; the availability of water bubblers; appropriate lighting in night-
time use areas; quality landscaping; cleanliness; the absence of graffiti and other
   signs of vandalism; good sight-lines and overlooking by windows (rather than
   blank walls). The most important safety element is “people” who provide
   movement, interest and mutual security.

On-road infrastructure designed to assist pedestrians consists of six basic types:

1. **Road crossings with traffic lights.** Can people safely cross roads where they
   need to? There are a number of different types of these pedestrian crossings,
   including where there are traffic lights (at intersections or on straight stretches of
   road) and signalised zebra crossings. Are there sufficient numbers of crossings,
   where people need them, linking origins and destinations? Are the lights
sufficiently “responsive” to call buttons? Is there enough time to cross the roads? Are “Green Light” treatments installed – e.g. Automatic Green Man, Advanced Green Man? Are Walksafe treatments installed? Is the road pavement surface and road marking in good condition?

2. **Road crossings without traffic lights.** These consist of unsignalised zebra crossings, mid-block speed hump/raised crossings of roads and other marked crossings often between kerb outstands, or between road medians. Are sufficient numbers installed linking origins to popular destinations? Is the road pavement and marking in good condition? Is it of sufficient width? Do the marked lines match the pram ramp entry? A recent innovation in Melbourne has been the installation of zebra crossings at roundabouts. Without these, vehicles have right-of-way. Roundabouts without zebras on local streets are particularly difficult for both the old and the young to navigate, and deter walkers.

3. **Part-time crossings.** These exist when and where school crossing supervisors are on duty. Do schools have sufficient crossings with supervisors?

4. **Traffic management treatments.** These include treatments such as raised pedestrian islands, coloured centre of road “medians”, kerb outstands and road narrowing designed to make it safer and easier to cross a road by reducing both traffic speed and volume. Within this group are the “Continuous Path of Travel” (CPT) raised crossings linking the footpaths across side streets along the main roads in retail Precincts.

5. **Speed limit signage.** Is the marked speed limit appropriate for the amount of pedestrian traffic, especially near schools, shops, public transport stops and stations and other “people” destinations? Are speed limit signs easily visible? Is the road treated to restrain traffic speed to the speed limit? Are the speed limits sufficiently low to give people the feeling of safety and the confidence to walk?

6. **Other signage for drivers.** These signs include items like “yellow legs” warning signs for drivers, as well as other signage for schools, public transport stops and parks, playgrounds and the like. Are they installed and in good condition?

While this is not a fully comprehensive list of every type and variant of infrastructure that can be used to assist walkers, it covers most of the basic categories and their relevant considerations.

The combined effects of both new infrastructure (where necessary), pedestrian signage and information, leadership, information, travel plans and involvement in events and programs is evidenced by the experience of a small number of inner-suburban schools in Melbourne (e.g. Elsternwick PS, Albert Park and Spensley St PS in Abbotsford) where the schools have produced Travel Plans and there have been active and progressive campaigns to reduce car traffic and encourage walking through both campaigns and the improvement of infrastructure around each school. The number of students driven to school dropped by 50% following the implementation of each Schools’ Travel Plan.
Walking (and cycling) rates to these schools have remained low over the past years as the culture of the schools has changed, surrounding walking infrastructure was improved and momentum was maintained through strong leadership from within the schools and ongoing external support from Council.

Creating better walking environments combined with the promotion and encouragement of walking will generate a positive spiral, which builds on itself and strengthens over time.

Council will need to be the major catalyst in this process, but the extent of behaviour change will depend largely on the willingness of residents, visitors and major stakeholders to embrace and support the need for change and develop the capacity to bring about change. Council engagement with and the generation of the support of those groups is vitally important.

The Victoria Walks program is illustrative of this process. It seeks to stimulate the formation of community, school or precinct-based groups of people with an awareness of the benefits of walking. It then provides them with the skills, resources and information to enable them to “audit” their own locality, to successfully pursue improvements to the local walking environment and to own and value the outcomes. The program is the process.
3. AUDIT RESULTS FOR GOODWOOD ROAD

The Goodwood Road Precinct has the potential to be a much more attractive, safe and thriving area than it now is. It is surrounded by quality, medium density housing, providing a significant potential local ‘spend’. Some of this will leak to other precincts given the existing quality of the precinct’s walking environment and retail mix. There are two Primary Schools and one tertiary college within the Precinct and it is served by the Glenelg tram, the Goodwood train station and bus routes on Goodwood Road. It is also served by the West Circuit Community Bus Route. These public transport services bring people to the local shops and services and they need to shop on foot.

Goodwood Road contains the Goodwood Library/Community Centre and the Capri Cinema, as well as large numbers of shops, cafes, restaurants, and personal and business services. There are few vacant premises. (This observation is confirmed by the Report - January 2012 Goodwood Road commercial vacancy rate was 3.7% (source CBRE report to Council UBED committee meeting item 41/12)

The broader precinct contains the Unley Swimming Centre, the Wayville Showgrounds, Orphanage Park and the Goodwood Oval, all of which attract a large and varied customer base – many of whom access the area by public transport and who then need to walk.

Our audit identified a number of issue areas which we believe need to be addressed in order to improve the walking, and thus the retail/consumer, environment. They relate to:

1. Footpath condition;
2. Amenity issues;
3. Road crossability, including pram ramps;
4. Traffic speed; and,
5. Wayfinding signage and maps.

1. Footpath condition.

Trips and slips are common causes of injury, especially amongst older people. Wheelchair and electric buggy users, those using ‘walkers’ or pulling shopping jeeps all need flat and even footpaths.

During the audit we noted a number of parts of the footpaths on both sides of Goodwood Road that needed reinstatement. They are illustrated below. Their location can be identified from the context background in the photographs. Most of these are in the northern half of the precinct.

However, the footpaths on both sides of the street should be regularly inspected and minor items repaired before they become major problems, and result in an injury to a local resident.
2. Amenity Issues

Amenity issues cover seats, toilets, shade and general cleanliness.

There are a number of artworks in the street, a mosaic seat, verandahs providing shade covered with vines and an eclectic mix of shops and services – ranging from a charity shop to an adult shop and much in-between. Amenity levels are generally high.

There was little or no graffiti found in the core of the precinct. Inevitably some was found at the station underpasses, but there was little else to show that vandalism is a local problem.

Public seating could be improved. Older people need seats with backs and arms, which are not too low to the ground – so it is easy to get up holding shopping. In this regard we recommend that all of the seats are replaced and more are added, so that there are always an ample number of seats available along Goodwood Road that are in the shade either in the morning or the afternoon – under a verandah or a tree. Seats provide meeting and conversing opportunities – and places from which people can
watch the world go by. (The Goodwood Urban Design Framework ‘Street Furniture Plan’ identified the need for an additional 13 bench seats along the footpaths – we endorse this proposal and the recommended locations.)

We saw no water bubblers or external public toilets. The Library has a toilet but there is no signage to it. Any new map-based signage for the precinct should include icons showing elements like toilets, seating, art installations and the like.

3. Road crossability, including pram ramps.

There are three separate elements in this issue area.

a. When travelling N-S along Goodwood Road the quality of the crossings of the many side streets is generally poor. Currently many of the pram ramps do not align correctly with each other. Some do, but most do not. Some contain ‘tactile plates’ but most do not. Some direct people out into the middle of the road, especially where the corner has been ‘curved’ to allow cars to turn more easily – and more swiftly.

Our recommendation is to make the crossings of the side streets in the core part of Goodwood Road into a ‘Continuous Path of Travel’ (CPT). The high priority streets for this treatment are those used to access the rear car parks – Florence, Rosa, Lily and Surrey, as well as Victoria and Gilbert Streets.

CPTs have been installed in central Adelaide. The vehicle driver knows that he/she is travelling over a pedestrian space, rather than vice-versa. This reverses the ‘polarity’ and makes drivers much more aware of the needs of pedestrians.

(NOtE: almost everyone who drives to the precinct parks and then walks to the shops. Any small delay caused by requiring them to give way to pedestrians at CPTs or elsewhere will be gained back again when they become a pedestrian themselves)
b. Pram ramps at some crossings of Goodwood Road are too narrow.

The 1m wide pram ramps are unique to South Australia.

In our view the ramp should be the full width of the crossing – closer to 4m wide, so that any number of people with shopping jeeps, prams, or in electric buggies can cross simultaneously anywhere on the crossing, rather than just where the ramp is sited. The ramp should also be fitted with a tactile plate when it is replaced. This option should be applied to any other crossings of Goodwood Road where the narrow ramps are sited.
c. Pedestrian Signal responsiveness.

There are four places where people can cross Goodwood Road at some form of traffic lights – at Goodwood/Leader, at Goodwood/tram and at 2 pedestrian activated signals (PAS) – outside the school (Goodwood/Rosa) and another at Goodwood/Victoria.

The Goodwood/Leader lights are time activated at the T-junction and the Goodwood/tram lights are activated by the tram.

At the two PAS crossings the pedestrian wait time varies, but can be up 60-70secs. Because traffic may be held up at the Goodwood/Leader and Goodwood/tram lights there are sometimes gaps in the traffic or the traffic is halted. During the wait time at the PAS many people cross between cars rather than wait for the lights to change. By the time the lights do change the cars stop, but many if not all the pedestrians have already crossed the road. Everyone loses in this situation – people cross the roads in danger and cars stop for nothing.

There is logic to reducing the PAS wait times – it improves pedestrian safety and has limited impact on traffic flow.

However, this recommendation needs to be viewed in the context of the following discussion on traffic speed in Goodwood Road.

4. Traffic Speed on Goodwood Road.

The current posted speed limit on Goodwood Road is 60kph at all times. This is too fast for a suburban shopping street.

The speed of traffic on roads is a major influence on whether people are willing to walk, or are willing to let children walk (or cycle). In built-up urban areas the posted speed limits should not just reflect driver expectation of the safe vehicle speed on the road, but should also reflect the expectations of other users (not in vehicles) to be able to share the road space and cross the roads safely. In Unley the safe crossing of roads (especially Goodwood Road) should be seen as a high priority.

The Pedestrian Perspective.

There has been a review of speed limits in Victoria. (Review of Victorian Speed Limits. Nov 2005). The review highlighted the relationship between vehicle speed on impact with a pedestrian during a crash, and the “risk of death” to that pedestrian. The graph shows that at 60km/h the risk is high (up to 100%), that it diminishes to 85% at 50km/h but drops significantly, to 25% at 40km/h. This is the basis for the 50km/h default speed limit in built-up areas in Victoria and the 40km/h speed limits outside schools and in many suburban strip shopping areas.
Clearly, from the pedestrian perspective, 40km/h is preferable to 50km/h. With lower traffic speeds it is likely that there will be fewer crashes and drivers will be able to slow their vehicles more quickly and easily prior to a crash taking place. As a result slower speed limits result in dramatically reduced speeds on impact and, therefore, the severity of crashes.

The default 50km/h speed limit in built up areas was introduced in Victoria in Jan 2001, and the effects were reviewed by Monash University Accident Research Centre in March 2002 (Evaluation of 50km/h speed limits in Victoria. MUARC. 2002).

The results were:
- all casualty crashes reduced by 13% compared with roads that remained at 60km/h
- crashes involving pedestrians reduced by 22% compared with roads remaining at 60km/h
- crashes involving pedestrians that resulted in fatal and serious injury reduced by 46% compared with roads remaining at 60km/h.

There were fewer crashes between vehicles, and a 46% reduction in deaths and injury to pedestrians – everyone became safer.

Pedestrians' perceptions of vehicle speed and resultant levels of danger are important and this is the major reason why they are unwilling to walk or let others (older or younger members of their family) walk to shops, friends, services or schools. From a pedestrian perspective the slower the speed limit, the better.
**The driver perspective**

There is sometimes reluctance by drivers to reduce their travel speed from 60km/h to 50km/h or below. In a review of the likely effect of implementing a 50km/h across all of Australia it was noted that

“The major factor determining the effect of a reduction in the speed limit is the size of the actual reduction in travel speed. (National Transport Commission Report No. 69. 2001). It noted that travel time increases are likely to be overestimated because they do not take into account route substitution, destination substitution or trip suppression effects of the speed limits (i.e. changed driver behaviour). Implementing the lower urban speed limit on local streets, collectors and arterial roads currently zoned 60 km/h, was predicted to result in an average increase in travel time per head of population in Australia of about nine seconds per trip. If Australians were to accept travel time impacts of this order, it is estimated that about 2,900 casualty crashes would be prevented each year”.

A vehicle will travel 1km in 60seconds at 60km/h. A reduction of the speed limit to 50km/h will increase travel time over a kilometre by 12 seconds, while the reduction to 40km/h will increase travel time by 24 seconds. Over a 10 kilometre journey a speed reduction from 60km/h to 50km/h for 1 of the kilometres travelled during that time will result in an approximate 1% increase in total trip travel time and a reduction to 40km/h will increase total trip travel time by around 2%. These increases in total trip travel times are negligible, not noticeable by drivers and of no economic value to any individual driver. The increased total trip travel time would not be sufficient to reduce the number of trips that could be taken by a commercial vehicle in one day.

Driver and other groups’ objections to reduced speed limits are often based on misconceptions about the actual amount of delay and cost. In most busy retail Centres actual travel speeds are already quite low, due to congestion at peak periods. The main benefits of reduced posted speeds come (a) when traffic is lighter and higher speeds are possible, and (b) because pedestrians perceive streets to be safer, they walk more and drivers slow down in “people places”.

**Options for speed reduction on Goodwood Road.**

Council should work with DPTI to improve pedestrian environment by reviewing the speed limit. There are two options that could be reviewed.

There has been discussion of the option of reducing the posted speed through the precinct from 60kph down to 50kph. This is option 1.

An alternative option (option 2) is to retain the 60kph limit while the AM and PM clearways are in operation and to reduce the posted speed to 40kph for the hours between the inbound AM clearway and the outbound PM clearway times. (If necessary the 40kph limit could be extended into the evenings when people may still wish to shop or attend activities in Goodwood Road). This would require the installation of a number*
of part-time, flashing 40KMH signs, which are now found on large numbers of major roads passing through suburban strip shopping centres in both middle and inner suburbs of Melbourne.

This latter option has the benefits of not being seen to reduce peak hour traffic flows, but making the road environment much more ‘benign’ outside of peak demand. Currently the high demand on Goodwood Road is attributed to the works being undertaken on South Road (see: The Advertiser – March 14, 2012. p.4."The upgrades to South Rd need to be completed to reduce the pressure on Goodwood Road" Copy of website article attached as Appendix 1). Given this situation it would be difficult to argue that the reduction to 40kph off-peak while retaining 60kph during the peaks would result in additional traffic delays.

The fact that there are four sets of lights in the precinct undoubtedly reduces traffic flow. The Goodwood/Leader and the Goodwood/tram lights change when they need to. The two sets of PAS lights can be adjusted to have approximately 60sec+ responsiveness during the peaks and much less than this off-peak, when traffic flow is reduced and when most of the pedestrians are on the street shopping and using local services.

(*The LED signs cost about $10-12K each installed. However, rather than have 4 of them it would keep costs down to install only 2 (1 each end of the Precinct on the left side of the road AND also install static signage about 50m before each 1 showing that 40kph is in operation between the clearway times. This would reduce the signage costs for this option to about $30-35K)

5. **Wayfinding signage and maps.**

It is commonly assumed that everyone knows their way around an area. Frequently, however, this is not the case – for business and social visitors, new residents and others. Even longer term residents may only know their way around by car – if this is the only mode they have ever used, and not know the best way to get to the Swimming Centre or the rail station on foot.

During the audit we obtained only one map (of the west half) of Unley – the Community Bus map. This contained little detail and had no distance scale on it. It would be difficult for most pedestrians to use it for wayfinding purposes. The City needs a good map for wayfinding for pedestrians, cyclists, public transport users and those with mobility problems.

The audit also showed that there was a moderate amount of wayfinding-type signage in the precinct. Most of this is in the form of directional signage.

The cycling signage usually has a bike symbol, with white on blue and/or blue on white information – usually containing the bike-route name and the destination. However, the city bike route signs were different.
The directional signs to local destinations come in a variety of shapes and sizes and different colours. None indicate distances or the route changes that are necessary to reach the destination. In the case of the Swimming Centre and the Station the two signs on Leader Street give no indication that different turns are needed to get to each one. These signs are intended primarily for drivers. The route to the station is via Richards Terrace, and the route to the Swimming Centre is via Ethel Street (although the follow-up sign cannot be seen by people travelling west along Leader Street). However, these routes are not the shortest ways of getting to either the Swimming Centre or the Station from the precinct on foot.

In most cases the white-on-blue directional signs are either so close to the destinations that they are probably unnecessary or so far away that they serve little purpose.
The only sign to the Showgrounds is at the Station. There is no other signage at the Station, none at the Tram stop and only a moderate amount along Goodwood Road.

The precinct would benefit significantly from the introduction of a high quality, map-based, heads-up signage system. The details of the attributes of such a system are identified in the ‘Local Government Guide to Pedestrian Wayfinding’ by JA Grant & Assoc. A copy has been supplied to Council. (This is attached as Appendix 1 to this report)

A typical signage system for a small centre is illustrated below.
The Kew Junction ‘family of signs’ contains a Map Panel (MP) and a set of Independent Directional Signs (IDS), pointing to specific directions.

The maps have some interesting and innovative characteristics:

- They are ‘heads-up’ maps – so that ‘where you are is what you see’ and people walking along a street can see the area ahead of them. Destinations above the ‘you-are-here’ icon are in front of you in the real world. The top of the map does not always point north.
- The panels are usually double-sided. This means that the side seen, for example, from the south has north at the top and the side seen from the north has south at the top. One panel can thus efficiently provide information about a large area of a city for people walking along a footpath in both directions.
- The panels can contain a ‘reference map’ showing the whole of a large signage area, and a more detailed map of the part of the signage area surrounding the site where each sign is located.
- Maps contain either walk-time contours or walk-time grids and the scale on the maps can be represented in both distance (metres) and walk-time (minutes). People walk at approximately 5kms/hr and cover 1km in 12 minutes. Walk time contours often show where you can get to in a 10min walk.
- They are ‘pedestrian-focussed’ maps and thus include elements such as footpaths, crossings, indications where walking is difficult (steep gradients) as well as the amenities that pedestrians value. The detail of which amenities are illustrated is decided at the ‘map design’ stage, as required by the Council, but will generally include items such as public toilets, seating, public transport stops, major ‘destinations’ (shopping areas, civic buildings, etc.) and other local attractions.
- Landmark buildings are illustrated with a 3D representation, so that people will know what to look for and will know when they have arrived at the destination.
- The panels are ‘user oriented’ (with the walking icon in the top banner). They are clearly marketed to people on foot.
- The panels can contain pointers to major destinations at the top, to provide a ‘quick-guide’ to these major destinations, without having to search the map.
- The panels can contain a directory of streets and destinations, based on the panel grid system.

The MP and IDS would need to be professionally designed, but the map sign to be used in the Goodwood Rd precinct could have the following broad format. The possible shape of the signage area and the coverage of the map are indicated below. This illustration is copied from the Community Bus Map.
Items such as the walk time/distance scale and walk time contours, ‘you are here’ icons, details of the destinations, pedestrian facilities and amenities as well as map keys are included at the map design stage. A typical outcome is illustrated below.

The suggested locations of the Map Panels (MPs) and the Independent Directional Signs (IDS’s) are illustrated below.

We recommend the installation of 4 freestanding double-sided map-based wayfinding panels.
MP1 – on the footpath at the SW entrance/exit to the Glenelg-bound tram stop.  
MP2 – on the footpath at the SE entrance/exit to the City-bound tram stop.  
Both have an E<>W alignment so they are seen from the N & S.

![MP1](image1.png)  
![MP2](image2.png)

MP3 – on the footpath in the centre of the precinct. The exact site has not been recommended, as it may be necessary to relocate a planter box and/or rubbish bin to create an appropriate site.  
MP4 – on the footpath at Victoria Street. The exact site has not been recommended.  
If/when a CPT is installed here the panel could be installed on a slightly extended footpath area.

![MP3](image3.png)  
![MP4](image4.png)

MP3 Relocate furniture to created a site  
MP4 extend a corner to create a site

We recommend the installation of 2 **wall-mounted** (and thus single-sided) map panels.

MP5 – on the wall of the Library, inside the ‘old’ front door on Goodwood Road. Here there is a blank wall, inside the building, which can be seen through the old shop window. It is a perfect site for a map-panel. (no photo available)  
MP6 – on a wall at the Station. Because of the station and platform layout, there is no ideal site where the sign can be seen by all users, and which is unlikely to get
vandalised. The best available site is on the wall at the east exit. Here it would need to be behind toughened glass or perspex, and probably cleaned regularly.

All of the maps are basically the same. The only differences are the location of the ‘You are Here’ icon (indicating the site of the map panel) and whether it is seen from the north side (= south at the top) or the south side (= north at the top).

The destinations that are illustrated or marked on the map(s) should include all of the places that people may wish to walk to/from. This list will include all of the obvious places such as the station, tram stop, bus stops, community facilities (Showgrounds, Library, schools, swimming centre, etc.), the Cinema and any other places that the City or the Traders Association members would like to see included. Generally we recommend against listing individual shops for 2 reasons – (i) they may change and the map becomes outdated, and (ii) if any are missed out this may cause grievances. However, shopping areas should be clearly illustrated in the map so that no-one is in doubt about the location of the local retail opportunities.

If the walking routes to/from the tram stop to the station and the swimming centre, or to the Oval are marked on the maps this could obviate the need for any IDS’s to/from these locations. People can easily walk from the tram stop along either Railway Street North or South and use the Station underpasses to access the station platforms or the swimming centre. This is about a 6-8min walk.

However, it would be useful to provide a small number of IDS signs pointing to the ‘Goodwood Road Shopping Precinct - 5mins Walk’ from within the surrounding neighbourhood. Possible sites for these signs could include: On Leader Street, outside the Showgrounds entrance; at the junctions of Hardy/Mitchell and Hardy/Albert Streets; and, near the Goodwood Oval. These signs are to alert people of the proximity of the Precinct on foot.
4. SUMMARY OF RECOMMENDATION & COST ESTIMATES (WHERE AVAILABLE)

This is not an engineering report and it is thus not possible to provide reliable cost estimates for all items. Where possible we have based costs on previous experience elsewhere. We have summarised the recommendations and given each a priority level.

This prioritisation between the recommendations is a ‘composite’ based partly on (i) what is most needed in the short-term, (ii) an estimate of how long it may take to agree on, design and install each item, and (iii) the estimated cost and the capacity for the City to budget for each item. Generally we recommend implementing the lower cost and more easily implemented items as soon as possible and working on the future implementation of the more contentious and expensive items in the longer term.

<table>
<thead>
<tr>
<th>Recommendations</th>
<th>Indicative costs, issues and comments</th>
<th>Responsible agency/agencies</th>
<th>Priority*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Repair footpaths</strong></td>
<td>Est approx $100 -200m2. 3 main sites $500. Regular inspections needed</td>
<td>CofU</td>
<td>1</td>
</tr>
<tr>
<td><strong>2. Amenity issues</strong></td>
<td>Install or replace up to 13 new seats – over 3 yrs - @ $800/item purchased and installed = $10400</td>
<td>CofU</td>
<td>Install over 3 yrs</td>
</tr>
<tr>
<td><strong>3. Road Crossings</strong></td>
<td>Depends on design, drainage, road width etc. No reliable estimate possible</td>
<td>CofU</td>
<td>2</td>
</tr>
<tr>
<td>a. Install 5 new CPTs</td>
<td>Est approx $100-200m2. 4m2 on each side of crossing = $1000+ per PAS</td>
<td>CofU</td>
<td>1</td>
</tr>
<tr>
<td>b. Install wider pram ramps at PAS crossings</td>
<td>No est possible. Depends on existing mechanisms.</td>
<td>CofU +</td>
<td>1</td>
</tr>
<tr>
<td>c. Re-phase PAS responsiveness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>4. Traffic speed changes</strong></td>
<td>Review Options and</td>
<td></td>
<td>2-3</td>
</tr>
</tbody>
</table>

*Priority: 1 = high/short – term, 2 = medium, 3 = longer
5. **Install Wayfinding signs**
   a. Develop wayfinding map of Goodwood Pct.  
      Would need to obtain quotes for quality map designed specifically for pedestrian wayfinding.
      CofU  1
   b. 4 F’s standing panels to hold maps  
      $3500/item at 2012 prices, but obtain quotes for construction and installation  
      CofU  3
   c. 2 wall mounted maps.  
      1 at library – no cost. 1 at station est $1000 for glass/perspex + installation  
      CofU  2
   d. Install 4-5 IDS in surrounding area  
      Est $300/item, including pole, sign design, manufacture and installation = $1500  
      CofU  2
APPENDIX 1 Longer delays on city routes in peak hour traffic

by: Transport writer Michael Milnes From: The Advertiser March 14, 2012 12:00AM

ADELAIDE'S peak-hour congestion is worse than the national acceptable level and it's getting worse.

The latest RAA Travel Time survey shows morning commuters trying to avoid South Rd's major upgrade have been blamed for Goodwood Rd-city trips increasing by 11 minutes, while the North East Rd-city journey is six minutes longer.

RAA spokeswoman Wendy Bevan conceded there had been some improvements in 2011. "(But) there are still unacceptable levels of congestion on sections of every route we surveyed," she said.

"Motorists are opting to take Goodwood Rd as an alternative to South Rd, which is also slow and congested. The upgrades to South Rd need to be completed to reduce the pressure on Goodwood Road and ease congestion around the city."

She said the improvements occurred mainly in the morning peak period.

"It represents only a very small amount of evidence which will need to be observed in the coming years to determine trends. The RAA observed a downward trend in average travel speeds during afternoon peak, no road in the surveyed network now operates with an unimpeded flow at peak times."

This is the first year since the completion of the Gallipoli Underpass that the survey has been conducted on South Rd.

"Over the 10-year period from 2002 to 2011, the survey results show that the average travel time and level of service on the major monitored arterial roads into and out of Adelaide's CBD area remain at an unacceptable efficiency level," Ms Bevan said.

A government spokeswoman said they are constructing the north-south corridor, which will be a non-stop road between Gawler and Old Noarlunga.

"Construction is also underway on the South Road Superway between the Port River Expressway and Regency Rd and work is also underway on duplicating the Southern Expressway," she said.
Appendix 2 – Case Studies of Walking Improvements and the Victorian experience.

Supporting walking through the collection of data: Copenhagen, Denmark

Copenhagen’s main street, The Strøget, was pedestrianised in 1962 amid widespread and strident opposition, particularly from city traders, who assumed that a permanently car-free Strøget would be their ruin. The fears proved unfounded – the Strøget soon boasted more shoppers, an explosion in café seating, and eventually a new kind of urban culture focused on outdoor public spaces. Building on the Strøget’s success, the network expanded piecemeal – another street and a few more squares were emptied of cars in 1968, and again in 1973 and 1980 and 1992. From those first 15,800 square metres of the Strøget, Copenhagen’s pedestrian network has expanded to about 100,000 square metres.

The city also developed a unique set of empirical data to chart the pedestrian network’s impact. Starting in the early 1970s, Jan Gehl and Lars Gemzøe showed the steep growth in ‘stationary activities’ in central Copenhagen – people seated at outdoor cafes or around the rims of fountains, people window-shopping or watching buskers. From 1968 to 1995, the average number of people so engaged on a summer afternoon had shot up 330 percent, an increase in magnitude virtually identical to the growth in the pedestrian network’s size.

Gehl and Gemzøe also assembled overwhelming qualitative evidence of the success of Copenhagen’s pedestrian reconquest. Their 1996 study Public Spaces Public Life, for example, overflows with before-and-after photos within that publication of the city streets that look like they were shot in different universes. Each pair of pictures depicts the same radical transition: on the left, in black and white, a desultory 1950s-era parking lot; on the right, a modern full-colour scene of strolling shoppers and hustling foot-propelled commuters, market stalls and buskers and people seated in animated conversation. The document became a very powerful tool for shifting the mindset of very large political organisations.

Copenhagen continues to collect comprehensive data on walking which enables it to set detailed targets of a 20% increase in pedestrian traffic from 2008-15 and a 20% increase in the time spent in public space. It has signed the International Charter for Walking and is one of the first cities in the world to adopt the “Making Walking Count” benchmarking methodology.

Now Copenhagen routinely tops world surveys of quality of life in cities. Its per capita income is higher than every US city, and it achieves this with a modal split of around 50% on foot and bike (compared to less than 5% in most US cites). Americans in consequence, spend 20% of their income on health care compared to 8% in Denmark. The City of Copenhagen is in the process of developing a pedestrian strategy. Its principles are outlined below.
‘More people to walk more and more people to stay longer’ – A strategy for pedestrian traffic in Copenhagen

Copenhagen has a vision. We have already been crowned the world’s most liveable city by the magazine Monocle. We will continue to be this - a sustainable city with urban space inviting people to a unique and varied urban life. We will become a metropolis for people.

Copenhagen will develop a pedestrian culture which will benefit urban life, the urban environment and health.

The International Charter for Walking

As the first step, the City of Copenhagen signed The International Charter for Walking in 2008. This political commitment to the Charter has paved the way for the development of a pedestrian strategy for Copenhagen, in which the charter’s proposal for action can be developed concretely. The strategic principles in the charter set the course for our work by creating safe and secure conditions in all city districts where ease of movement and accessibility are prioritised, as well as creating comfortable conditions in public areas.

Public participation

We are developing the pedestrian strategy in a wide ranging dialogue with those who live in and those who use the ten city districts of Copenhagen. Here, Copenhageners will convert ideas into concrete improvements for pedestrians and contribute creatively to developing local city life as well as laying down a local network of pedestrian routes. Local committees in the individual city districts have an important role in arranging debates and activities including, city walks, events and public workshops.

Collaboration across sectors

The pedestrian strategy is being developed as a wide cooperative effort across the different sectors of the municipality. Thus, the strategy will be the common thread linking strategies covering for example, urban life, urban space, green areas, accessibility, safe pedestrian traffic, culture and leisure, health, children and young people as well as concrete projects across the administrations of the municipality.

Pedestrian Strategy

The pedestrian strategy ‘More people to walk more and more people to stay longer’ is the framework for a number of simultaneous initiatives. It contains: 1) A pedestrian plan with goals, initiatives and pedestrian routes, including concrete actions in relation to The International Charter for Walking. 2) Indicators for measuring urban life and pedestrian traffic as well as counts of pedestrian traffic and analyses of citizens’ expectations and their satisfaction to be used as a systematic goal-related follow-up. 3) Pilot projects for pedestrian friendly layout and furnishing of the shopping thoroughfares and traffic junctions. Pilot projects for initiatives to get people to walk instead of taking the car for short trips. 4) Operational improvements of pedestrian areas to be carried out continuously.
Creating a safer street at low cost through community involvement

DIY Streets Project, UK

DIY Streets is now a UK-wide project that helps residents to re-design their own streets affordably, putting people at their heart, and making them safer and more attractive places to live. The project has twin aims: to further embed robust community involvement into transport and highways practice and to pilot low-cost capital solutions to the most common local traffic problems including speeding, nuisance parking and rat-running.

The first DIY street was in the Ashley Vale area of Bristol (see photos). Residents were encouraged from the outset to participate in all aspects of the research, design and even physical implementation of the schemes, with some important consequences in terms of the project’s outcomes.

The scheme was completed for about £17,500, (very significantly less than the sums required for typical ‘home zones’). The whole process from the first residents’ survey to completion in June 2004 took only 18 months, and 8 months from agreement of the design. The costs were kept low by:

- maintaining existing drainage and levels,
- building the planters on top of the original tarmac,
- plantings being carried out and maintained by residents,
- using local recycled materials where possible,
- residents agreeing the design quickly,
- minimising signage
Supporting walking for health by mapping routes around Doctors’ surgeries - Walking Maps for Camden, London

Walk England and National Health Service (NHS) Camden have worked together to develop a series of accessible, safe and attractive 30 minute walks around doctors’ surgeries to encourage sedentary patients to walk more. Colourful maps have been designed to be legible and easy to follow and are distributed by health staff at the surgeries. The maps have also been made available at libraries and community centres and are used by health trainers to encourage physical activity with their clients.

Walk England consulted and involved sedentary people, older people’s groups, ethnic minority groups and people with pre-existing health conditions to help choose and audit the best walking routes and ensure the maps were practical and easy to use. Routes were chosen to reflect desires to be more socially connected and set personal health challenges. A selection of interconnecting walks from each surgery reflected these experience themes over measured distances to allow walkers to benchmark their walking ability by measuring the time they took for each route and giving the opportunity to progress their health over time by walking faster and for longer.

In partnership with the local transport authority the accessibility, character and management commitment was audited for each path. The audit included a review of steps, gradients, cross slopes, crossings, surfaces, widths, obstructions, signs, waymarking and other route characteristics. The local highway authority identified a number of works to be included on their maintenance lists.

Simple, uncluttered maps that make it easy to see where you are and give confidence to know where to go were created using a three dimensional illustrative style. Informed by the opinions of health centre staff the maps are available from an A4 tear off pad which typically sits on a doctor’s desk or at the surgery reception.

The project is still being evaluated for longer term impacts, but initial feedback from surgeries has been very positive. The idea is now being rolled out across England under the ‘Walk4Life’ brand, with 2012 audited, mapped and signed routes to be created by 2012, potentially the largest walking program in the world.

Achieving change through demonstration projects - Times Square and Broadway, New York City

Mid-town Manhattan is deficient in public space. Times Square is a world famous square, but it was filled with traffic, with nowhere for people to sit or linger. A ‘demonstration project’ created a pedestrian plaza almost overnight in late 2009, using cheap materials, moveable seating, and paint. Many sceptics predicted that traffic gridlock would result.
After an 8 month trial, Mayor Bloomberg confirmed that the plaza would be made permanent and that Broadway from 47th to 42nd Streets and 33rd to 35th Streets would remain closed to traffic. The change was ostensibly made to increase safety, reduce pollution, and improve traffic flow at choke points where Broadway meets the avenues.

Pedestrian injuries are down 35%, drivers/passenger injuries down 63% and traffic is moving about seven percent faster in Midtown as a result of the new configuration.

However, the underlying philosophy was to improve the experience of Midtown for people on foot and in this it has been a striking success. The plazas have proven hugely popular with locals, visitors and tourists. Foot traffic is up by 11% and the satisfaction rating amongst residents and office workers is up from less than half in 2007 to 75% now. It has shifted the paradigm for what a street and sidewalk experience is supposed to be like in New York City.

Now that the success of the concept has been proven using an ‘overnight intervention’ method and cheap materials, there are plans now to re-design the space with new paving and seating to make it a world-class plaza.

Achieving high quality streetscapes through innovative design and by questioning standard approaches: Kensington High Street, London

Kensington High Street lies at the heart of the Royal Borough of Kensington and Chelsea and is not only a major east-west radial route to the centre of London, but also an important commercial/retail street flanked by highly desirable residential areas. In recognition of this the Borough Council initiated a programme of streetscape improvements in the mid-1990s to improve the quality of the public realm as an attractive place to live and work, and to sustain the vitality and viability of the High Street as a major shopping destination in the face of other competing retail developments.
Despite agreement that the new street should accommodate existing traffic flows, a forward thinking Councillor lead the Kensington High Street Working Party and the design objectives started to shift away from standard traffic engineering solutions to a more radical streetscape design. This redressed the balance from vehicles to pedestrians and created a coherent, legible and easily accessible street.

Completed in 2003 the revamped street has clearly achieved these aims by removing all unnecessary visual and physical clutter, coordinating the design and location of new street furniture, and coherently defining the footway/carriageway boundary. The use of a limited palette of high quality paving materials, implemented with excellent detailing and workmanship, creates a visually coherent floorscape which, combined with the clearly defined footway kerbline, adds to the simple elegance and legibility of the street.

Rearrangement and simplification of pedestrian crossings and the extension of the central reserve allows the road to be crossed easily and safely. The removal of barriers to movement, especially guardrails at staggered crossings, provides a sense of liberation to the pedestrian, trusting both pedestrians and drivers to use the street responsibly. The removal of guardrailng has been controversial, with traditional views holding that railing is essential to pedestrian safety.

However, the first three years of the scheme saw a 47% reduction in accidents in High Street compared with a 35% fall elsewhere in the Borough. The improvements have proved a tremendous success and show what can be achieved with the vision and will to push the boundaries of accepted practice.

**Reframing the relationships between people in cars and people on foot:**

*Shared space in Bendigo.*

‘Shared space’ is a term used to describe an emerging approach to urban design, traffic engineering and road safety in Europe and, increasingly, in Australasia. Shared space is defined as:
‘a street or place accessible to both pedestrians and vehicles that is designed to enable pedestrians to move more freely by reducing traffic management features that tend to encourage users of vehicles to assume priority’
A key element of shared space is the removal or reduction of traffic signs, markings and other instructions to drivers, so that the road no longer looks like a space designed for traffic. One variety of shared space is shared surface, which requires the removal of the separation between motorised vehicles and other road users, mainly through the removal of the traditional footpath, kerb and controlled crossing points, resulting in a shared surface streetscape.

Shared Space confounds traditional stances, which hold that separation of vehicles and pedestrians is a pre-requisite of safe co-existence. However, the operation of shared space schemes in Continental European countries has in no case resulted in casualty increases and given the increase in usage of such places by pedestrians and cyclists, this represents a reduction in risk. Moreover, shared space is not JUST a traffic management issue or a safety issue, though it does bring great benefits in these areas. Shared space also offers the opportunity to reorganise space in a city centre to make it more comfortable and attractive, using urban design rather than traffic management principles. This also allows the removal of many signs and other traffic-related clutter and the provision of attractive seating, lighting, public art and other aesthetic benefits.

Shared space areas can thus be both safe and beautiful. The City of Bendigo, Victoria, has, for example, turned a former traffic intersection in front of the Town Hall into a shared surface Town Square, winning greater safety and attractiveness in the process with a street layout that civilises retail streets for walkers and cyclists whilst still allowing slow vehicle access and parking.

The comprehensive and integrated approach taken in formulating the CBD Plan generated widespread interest and praise from other cities in Australia culminating in receiving the 2008 Australia Award for Urban Design.

**Inter-agency partnership to increase levels of walking to school; Halton District School Board, Ontario**

This is a successful Canadian pilot project, which implemented the Active and Safe Routes to School program to influence and change student transport behaviours. With health promotion theory as the backbone of the strategy, project management its
methodology, and multi-sector collaboration its matrix, the results allowed further expansion in one school board and adoption by another.

For the first time in Canada, a school board has taken the lead in addressing student active transportation (walking and biking) by hiring an in-house Active and Safe Routes to School (ASRTS) Project Manager. This new position has received recognition and praise from a variety of active transportation supporters from across North America. In June of 2009, the Halton District School Board (HDSB), Ontario, Canada, recommended to their Board of Trustees the expansion of the active transportation program to 20 of their schools. This recommendation came on the heels of a final report submitted after a one-year pilot project between HDSB and the Halton Region Health Department.

During 2008 (January-December), eight schools from across the Region implemented the ASRTS program. It ran walking school buses and promoted student travel by foot/bike with the hope of reducing arrival by car.

The pilot project plan drew on the expertise and collaboration of a number of sectors. A Health Promoter worked with four municipalities, the Region, the School Board and the Regional Police Service to establish safe walking routes for students. In addition, the Health Promoter worked with a Communication Specialist to market the program/project and an Epidemiologist to evaluate project outcomes. After only four months of implementation, 50% of schools increased their walking behaviour beyond baseline percentages and 62% maintained a trend over a two-month period. One school was able to maintain 98% of their walk-to-school population for the four-month period.

The evaluation data (student and parent surveys) provided credible information on parental barriers and enablers toward active transportation. In September 2009, the School Board adopted an active transport philosophy, expanding the program to 20 schools and seconding the Health Promoter.

A new project plan was written and currently 18 schools are participating with more schools to join in the next school year (2010/2011). Now, the project is set for creating permanent Regional change in the way children get to school.

**Supporting retail activity through increasing space for people on foot: Acland Street, City of Port Phillip**

Observations of pedestrian movements in 2003 showed that the main section of Acland Street was subject to chronic congestion, preventing the safe and comfortable passage of pedestrians. This was brought about by the narrow footpath, high level of footpath trading and heavy ‘window shopping’ (cake shops). As a consequence, the Council proposed widening the footpath area by relocating existing footpath trading to the parking bay area for 85 metres and removing nine parking spaces.
This proposal was opposed by the Acland Street Traders Association. In response it commissioned its own market research study in June 2003. It found that:

- ‘Walking to the precinct is important and popular’ – Of locals interviewed, over 50% walked to the centre. All walk within the centre;
- Local residents comprise over 50% of all visitors;
- On average the local resident makes 184 visits to the Acland Street precinct each year;
- Local residents account for over 85% of the total expenditure;
- 57.2% of expenditure is ‘walked’ to the centre and a further 16% from cycling / public transport.
- Only 26% of total expenditure share emanates from those driving to the centre cf. 74% from those who did not drive;
- 27% of visitors to the Acland Street precinct visit on a daily basis.

The traders realised that removing car spaces would only affect around a quarter of their customers (and at least some of those would return on other forms of transport, anyway). But more importantly, they recognised that their largest and most loyal customer group was actually local. Improving the walking environment for them was likely to actually increase their loyalty and might help attract them back to the area more often – which would translate into a bonus for local business.

As a consequence, the Association withdrew its opposition to the Council proposals, which have since been carried out. Indeed, it actually transformed the traders association into one of the strongest supporters of the change. Acland St is undoubtedly more walking-friendly than it ever was, and everyone has benefited.

This case study reaffirms research carried out in many other cities which shows that car parking is of less significance to local retail activity than is often thought, and that space for people on foot is a more significant attribute.

**The transformation of Kew Junction Shopping Centre – changes implemented following a report by JA Grant & Assoc.**

Kew Junction Shopping Centre is a small strip shopping centre in Melbourne’s inner eastern suburbs. It includes High Street and Cotham Roads, both of which meet at the 5-way intersection at Kew Junction. The VicRoads HQ is 5mins walk from the retail area.

A study of this Centre was conducted in 2007 and the recommended improvements were implemented in 2008/9.

They included:

1. Improvements to the responsiveness of all POS to the pedestrian call button (reduced from a 60 sec to a 40 sec wait for pedestrians)
2. Reduction of centre speed limit from 60kph to 40kph from 8am-7pm on all main trading days

3. Colour coordination of all street furniture in ‘Kew Corporate Colour’

4. Installation of ‘Continuous Path of Travel’ raised footpaths at all side street crossings.
5. Renewal and branding of all older wooden seating

6. Replacement of all 'decorative signage' with modern wayfinding signage

The local Traders Association encouraged Council to implement these changes and report a very positive reaction from the users of the Centre. Council has estimated that there is has been a significant increase in pedestrian traffic in this area and will be implementing similar improvements in all its other strip centres.

*Other Victorian examples of improvements for pedestrians, based on reports from JA Grant & Assoc.*
1. The installation of a new zebra crossing from Heidelberg Station to the adjacent Austin Hospital

2. Installation of a walkway along Burgundy Street to the main pedestrian entrance of the Austin, previously only accessible by stairs or a detour via an overpass.

3. The installation of zebra crossings on a 4 sides of a number of roundabouts near schools and a small shopping centre in Port Phillip/Bayside area
Recent Progress in Victoria.

Over the past decade there has been a major shift in the Victorian Government’s approach to walking. During the 20thC the ‘traditional approach’ prevailed – walking was not seen as a transport, economic, equity or health issue, but primarily as a safety issue. Vehicular traffic and pedestrian safety were the main foci in transport planning. However, pressure from inner-city councils, health organisations (VicHealth, VicFit, the Heart Foundation, etc) and other groups, as well as international evidence and experience on the benefits of walkable environments, has led to a major policy shift. VicRoads, Victoria’s road authority, has now embraced walking as a major element in the state’s transport system.

In Victoria speed limits have been reduced around all schools and in many shopping strips. VicRoads appreciates the role played by pedestrians in the local economy, and the fact that people on foot are recognised users of the road system – because they need to cross roads. This is part of the ‘safe systems’ approach. In this approach the focus is one where speed limits and calming devices are used to encourage people to cross safely while reducing the danger from vehicles. (See VicRoads Traffic Engineering Manual Chapter 7 Revised Nov 2006)

Its priority actions for pedestrians are:

• To introduce more appropriate speed limits in shopping strips
• Encourage through-traffic to avoid shopping strips and to use alternative routes where feasible
• Improve the amenity of areas of intense pedestrian activity alongside arterial roads
• Establish a program to provide greater priority for pedestrian access across busy arterial roads that sever community activities

Under this approach pedestrian facilities are provided in different forms to manage the interaction between vehicular traffic and pedestrians.

Examples of pedestrian facilities include:

• Kerb extensions - Pedestrian refuges
• Pedestrian crossings (zebra crossings)
• Pedestrian crossings (without flashing lights)
• Pedestrian operated signals
• Pedestrian facilities integrated with intersection signals
• Provision for pedestrians at roundabouts
• Improved public lighting
• Lowering traffic speeds.
In 2004 the Victorian Government committed $16 million to the Local Area Access Program (LAAP), which supported local governments to develop and deliver small-scale infrastructure projects that improved access to local facilities and services and supported the use of sustainable transport alternatives, particularly walking and cycling.

VicRoads provides $3.5 million a year to improve walking networks through pedestrian facilities that help people cross arterial roads, paying particular attention to the needs of people with disabilities.

In Sept 2010 the State Government released the Victorian Pedestrian Access Strategy – a Strategy which identified the benefits of increasing walking in Victoria, what the State Government has done over the past decade to support walking, and what its priorities and plans are to increasingly develop walking. The Pedestrian Access Strategy identifies five main objectives.

- Encourage people to walk by changing attitudes and behaviour. This aims to make walking the top-of-mind choice for Victorians – especially for short trips – by making walking for transport a visible and valued part of daily life.
- Collaborate to improve provision for walking. This aims to clarify the roles and responsibilities of both state and local governments in providing for walking. The Victorian Government will work with local governments to ensure they have the capacity and information they need to provide better pedestrian facilities.
- Create pedestrian-friendly built environments, streets and public spaces. This aims to ensure the built environments across Victoria facilitate easy and efficient pedestrian movements.
- Increase the safety of walking. This will identify and address risks to pedestrians across the transport system and give pedestrians the skills to negotiate road environments.
- Continue integrating walking with public transport. This aims to ensure more Victorians walk in combination with public transport. Walkers need to find it easy to get to major public transport hubs across Victoria and easy walking access should be provided at public transport stops.

The State Government initiatives are complemented by programs developed and delivered by independent organisations. Some examples include:

**Walktober** is a program developed and administered by Kinect Australia (formerly VicFit) to encourage a wide range of activities in the month of October each year aimed at motivating people to walk for transport and recreation. Since 2006, the Victorian Government has provided $580,000 for major activities including the Workplace Challenge, the Community Challenge, Walk to School, and Walking for Seniors. In 2009, 90,000 people participated in the programs and activities during October and around 700 activities were conducted under the Walktober umbrella.

**Victoria Walks** is a new, independent walking-for-transport health promotion body, supported by VicHealth with $1 million funding, and is increasing awareness of the
benefits of walking and promoting walking for transport by conducting campaigns, events and promotions. It provides leadership through submissions, resource provision, policy, research, forums and social marketing, and it supports communities to change their neighbourhoods into walk-friendly environments. (see: [www.victoriawalks.org.au](http://www.victoriawalks.org.au))

The Victoria Walks website contains a section on ‘Do a walking Audit’ produced by JA Grant & Assoc.