A CONNECTED CITY

We manage movement in and around our growing city to help people trade, meet, participate and move about safely and easily, enabling our community to access all the services and opportunities the municipality offers.
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Melbourne is Victoria’s economic engine room and enjoys a vibrant social and cultural scene. Around 840,000 people pass through our city daily. This is likely to rise to more than 1.2 million by 2030. The City of Melbourne is responding to this growth with considered strategies for transport, land use and community services.

The City of Melbourne’s Walking Plan is part of an integrated approach to transport, outlined in the City of Melbourne Transport Strategy 2012. It links all modes and is coordinated with city development and urban renewal.

Melbourne is a walking city with most trips to, from and within the city starting or ending on foot. In 2010, 66 per cent of trips within the municipality were walking trips. This figure is even higher in the CBD with 86 per cent of trips being on foot.

And this figure is set to grow as the city does which will put increasing pressure on footpaths and public transport interchanges. The safety of pedestrians is paramount and we constantly seek ways to improve this, whether through design, education or other strategies.

Walking makes economic sense: a 10 per cent increase in the connectivity of the pedestrian network in the city would add $2.1 billion to the City of Melbourne’s economy.

Our vision for Melbourne as a connected city means a place for people, a city with great streets linked by a well-designed transport system.

The Walking Plan includes strategies and actions that will ensure we keep a strong focus on the vital role that walking plays in the city and continue to improve the environment for walking.

Robert Doyle
Lord Mayor, City of Melbourne

Cathy Oke
Chair, Transport Portfolio
Walking is the most important mode of transport for the City of Melbourne. It accounts for 66 per cent of all trips within the municipality and is part of trips by all other modes.

The purpose of the Walking Plan is to highlight the contribution that walking makes to the municipality, while laying out a practical plan to improve the city’s walking network and encourage more walking.

The walking plan aims to increase the number of walking trips in 2030 by 63 per cent from 2009 levels.

It establishes principles for planning walking in the city including priority access, safety, access for all abilities, planning for future growth, creating attractive walking environments, permeability (ability to cross streets) and reducing delay to pedestrians.

The plan will help the City of Melbourne to work with the State Government to achieve the Plan Melbourne goal of transforming the transport system to support a more productive central city. In particular it supports improving pedestrian crossing times and reducing speed limits to improve pedestrian safety.

The actions in the plan are grouped in three streams.

Planning:
- amending the Melbourne Planning Scheme to improve the walking environment.

Street management:
- changing traffic signal operation to reduce delays to pedestrians;
- increasing the number of pedestrian streets and shared zones; and
- improving legibility and way finding.

Capital works:
- extensive master planning;
- access around tram and bus stops; and
- increasing the number of road crossings.
THE WALKING CITY

The importance of walking in Melbourne

Role of walking

Walking is our most fundamental mode of transport; almost everyone walks, and walking makes up part of every journey in the city.

Walking accounts for 66 per cent of all trips within the municipality. Council has a target for this to grow to 69 per cent by 2030 (CoM, 2012, p. 17). There will be many more people visiting and living in the City of Melbourne by 2030. The number of daily weekday city users is predicted to increase from around 840,000 today to over 1,200,000 (CoM, 2013a, p. 14). The number of walking trips is forecast to increase by 64 per cent over this same period (CoM, 2012, p. 15).

Commuting to work in Melbourne

Virtually every public transport trip begins and ends with a walking trip. The share of people commuting to work in Melbourne by public transport has increased by 11 per cent since 2001 (ABS 2001; 2011a). Over the same period, the share of individuals walking to work has increased by 76 per cent.

Melbourne’s public transport patronage grew at an average of 3.9 per cent a year from 2002 to 2012, and at 6.6 per cent a year between 2004 and 2008 (PTV, 2013, p. 4). Projections indicate that 2011 patronage will double by 2029, meaning that there will also be many more people walking to tram stops and train stations in Melbourne.

Figure 1: Trips within the City of Melbourne by mode, average weekday, 2009/10. (Source: DoT, 2010)

Figure 2: Trips within the Hoddle Grid and Docklands by mode, average weekday, 2009/10. (Source: DoT, 2010)

Figure 3: Method of travel to work in the City of Melbourne, 2001, 2006, 2011 (Source: ABS, 2011a; 2006; 2001)
Pedestrian accessibility provided by the walking network

This map shows how well each property is connected to other areas via the walking network based on walking time. Areas with greater permeability - more streets - laneways - smaller block sizes and parkland - result in higher levels of pedestrian accessibility.

Figure 4: Pedestrian accessibility provided by the walking network.
The walking economy

Walking trips are important for the economy. About 63 per cent of trips made within the City of Melbourne for a work purpose are on foot (DoT, 2010). Walking is the primary mode for shopping, tourism and city visitors (DoT, 2010). Walking has also grown as more people have come to live in the municipality – 35 per cent of residents of the Hoddle Grid and 34 per cent of Southbank residents walk to work (ABS, 2011b).

Walking and agglomeration

Central business and retail precincts in large cities, such as in the Hoddle Grid and the expanded central city in Docklands and Southbank, foster connections within the central city community. These connections generate knowledge which circulates through both formal and informal links, and from this knowledge income is generated. Much of this knowledge transfer takes place face to face and is often the result of a walking trip within the central city. This is why dense city centres are so important to the economic prosperity of cities and nations. The large number of people located in close proximity to each other allows ideas to be quickly generated, refined into knowledge and put to work solving complex problems. There is a strong relationship between connectivity and productivity. This relationship is referred to as agglomeration economies.

Analysis of the impact of walking on agglomeration has found that if the walking connectivity within the Hoddle Grid was increased by 10 per cent, the value of the economy of the Hoddle Grid would be increased by up to $2.1 billion per annum. This represents a 6.6 per cent increase in the value of the current economy (SGS, 2013, p. 2).

Agglomeration can be measured using Effective Job Density (EJD). Figure 5 shows the EJD provided by the walking network; that connectivity across the walking network contributes to the economy of the City of Melbourne.

Areas with darker colours represent both a richer walking network and a higher concentration of employment and economic activity. This measure of EJD is based on the number of jobs (working people) that can be reached within 30 minutes by walking on the pedestrian network (scaled by the time it takes to reach them).

Walking connectivity contributes to EJD by supporting knowledge transfer. The connectivity of the walking network across the City of Melbourne is shown in Figure 4, demonstrating how well each land parcel is connected to other land parcels. It shows the amount of land that can be reached by a 30-minute walk, divided by how long it takes to reach each of the land parcels within the 30-minute catchment.

Attractive streetscapes enhance the city experience

A high-quality walking environment is key to delivering on the vision of the city’s retail and hospitality strategies. Walking is low cost, environmentally sustainable and promotes physical and mental health. As a mode of transport, walking is also the main mode of transport for tourists and visitors for events. However, one of the main problems reported by visitors to Melbourne is the difficulty of walking around the city due to narrow footpaths or delays at signals (Destination Melbourne, 2010, p. 60).

Policy background

There is a significant policy background supporting the goals of this plan including documents from the Commonwealth and State governments as well as the City of Melbourne. Details of these documents are available in Appendix 4.
Economic impact of the walking network

Figure 5: Effective Job Density (EJD) provided by the walking network

This map shows the connectivity across the walking network and its contribution to the economy of the City of Melbourne. Areas with darker colours represent both a richer walking network and a higher concentration of employment and economic activity. This measure of EJD is based on the number of jobs (working people) that can be reached within 30 minutes by walking on the pedestrian network (scaled by the time it takes to reach them).
Achievements to date

Walking environment

For more than 30 years the City of Melbourne has been transforming the municipality’s walking environment. Melbourne’s iconic Bourke Street Mall opened officially in 1983. Guided by the Places for People studies in 1994 and 2005, the City of Melbourne has widened footpaths, laid high quality pavements, encouraged outdoor dining and reduced traffic signal cycle times to support improvements to public transport to make Melbourne a more attractive place to be.

The city has increased pedestrian safety and level of service with:

- Widened footpaths, especially in areas of high pedestrian use, such as approaching train stations;
- Creation of Bourke Street Mall and transformation of Swanston Street into a pre-eminent civic space;
- High-quality pedestrian environments including bluestone paving, trees and street furniture;
- Level access trams stops;
- Signalised pedestrian and zebra crossings;
- Safe staging points for pedestrians to cross busy roads;
- Reductions in traffic signal waiting times especially in the central city;
- Extending the time that walk signals are displayed to give pedestrians a longer window in which to cross at signals;
- Shared zones with speed limits reduced to 10 km/h, which allow pedestrians and drivers to share the road and make more efficient use of space;
- 30 km/h and 40 km/h speed limits in key pedestrian streets;
- A speed limit in the central city of 40 km/h;
- Conversion of laneways to active uses including retail and hospitality;
- Negotiating laneways to be built in new developments;
- Conversion of underused road space to pedestrian use, such as removing slip lanes;
- Enhancement of existing public spaces, such as City Square in 2000 and the creation of new spaces such as Queensbridge Square in 2006;
- Signal cycle time reductions at Spencer and King streets to reduce pedestrian wait times and crowding;
- Painted pedestrian medians on Toorak Road, Errol Street and Victoria Street; and
- Expanding the amount of footpath space by 160,000 square metres or nearly 15 per cent since 2007, from 1,107,627 square metres to 1,270,793 square metres in 2012.

Walk 21 Charter

In 2008 the City of Melbourne became a signatory to the Walk21 International Charter for Walking. This requires the city to ‘work with others to create a culture where people choose to walk’ (Walk21, 2006) through the following strategic principles:

- increased inclusive mobility;
- well-designed and well-managed spaces and places for people;
- improved integration of networks;
- supportive land-use and spatial planning;
- reduced road danger;
- less crime and fear of crime;
- more supportive authorities; and
- a culture of walking.
Challenges for walking in Melbourne

Growth

The City of Melbourne will experience significant increases in residential and employment populations which will result in more people walking in the municipality.

Some key footpaths in the city are already routinely overcrowded with people forced to walk on the roadway. The volume of pedestrian traffic in Melbourne will rise as the city grows from about 844,000 daily visitors in 2012 to 1.256 million per day in 2030 (CoM, 2013a, p. 14). The central city is expanding into urban renewal areas including Southbank, Docklands, Fishermans Bend, City North and Arden-Macaulay. Figure 7 shows where growth will be concentrated. These areas need to be designed to offer similar levels of walkability to that currently experienced in the central city.

Crowding and delay

Crowding is already a significant issue for the walking network in Melbourne and city growth will exacerbate this. Locations where crowding occurs include in and around public transport stops and stations and in areas of the retail core of the city, such as Swanston Street.

Crowding discourages people from walking, creates delays which waste time and money and undermines Melbourne’s international reputation for livability. It can ‘squeeze out’ other normal functions of a footpath, such as socialising, window shopping or enjoying a space, and it can undermine retail and hospitality experiences.

Overcrowding and delays that result from waiting at intersections can cause annoyance and discourage people from returning to the city.

Traffic congestion in Melbourne costs the city’s economy $3 billion a year. This is projected to rise to $6 billion by 2020 (BTRE, 2007, p. 13). A significant amount of traffic congestion experienced in Melbourne is suffered by people walking, especially through delays at traffic lights or other crossings.
Growth in the City of Melbourne, 2012 – 2031

Figure 7: City of Melbourne growth 2012 – 2031

- **Arden-Macaulay**
  + 9,860 residents (+370%)
  + 14,750 jobs (+280%)

- **City North**
  + 5,820 residents (+46%)
  + 11,930 jobs (+67%)

- **Hoddle Grid**
  + 25,020 residents (+109%)
  + 108,200 jobs (+49%)

- **Southbank**
  + 15,160 residents (+118%)
  + 15,820 jobs (+37%)

- **Docklands**
  + 8,890 residents (+121%)
  + 11,690 jobs (+31%)

- **Fishermans Bend** (includes precincts in City of Port Phillip)
  + 37,440 residents
  + 18,720 jobs

- **Lorimer precinct** (part of Fishermans Bend)

- **E-Gate**
  + 6,820 residents

- **Arden-Macaulay**
  + 9,860 residents (+370%)
  + 14,750 jobs (+280%)

- **City North**
  + 5,820 residents (+46%)
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  + 37,440 residents
  + 18,720 jobs

- **Lorimer precinct** (part of Fishermans Bend)

- **E-Gate**
  + 6,820 residents
The walking city

Connecting to public transport
Public transport nodes attract the largest and most concentrated walking activity in the city. For example, 171,160 people use Flinders Street Station each weekday, 111,290 use Southern Cross and 47,360 use the Federation Square tram stop (PTV, 2011a, 2011b).

Public transport use has grown strongly in recent years and is expected to continue to grow based on central city job growth and new infrastructure such as Melbourne Metro and Regional Rail Link. Providing an efficient walking network supports public transport operation.

Increases in tram patronage and crowding at tram stops will also require the conversion of some high-intensity tram stops to new designs that provide more space for people waiting, more permeable access from footpaths and potentially low-speed road space to increase opportunities for pedestrians to cross roads.

The walking network
Increasing the number of pedestrian connections and ensuring new developments are permeable is a challenge for the future.

A rich walking network with many routes, links, crossings and connections provides more walking choices, spreads the pedestrian load, stimulates more walking, reduces walking times, creates more economic activity by bringing people into new spaces and reduces walking distances.

New developments must be able to provide new connections whilst remaining viable both in their own right and in order to deliver a net community benefit through the viability of the development yield and the pedestrian network overall.

Links may be footpaths, lanes, shared zones or formal or informal pedestrian crossings. They also include part-time links through arcades and other public connections through private property.

The walking network in the Hoddle Grid is relatively rich with many through-block connections, mid-block pedestrian crossings, laneways and little streets. There are still opportunities to add connections to this network. In urban renewal areas, however, the walking network is relatively less rich and will require significant improvement to achieve its development goals.

Safety
In the City of Melbourne, a pedestrian is killed or sustains a serious or other injury every two days. There were 956 pedestrians injured or killed in the five years to 2011 (VicRoads, 2011, p. 7). The City of Melbourne has the highest rates of pedestrian death and injury in the state.

The road safety approach in a people city is to reduce death and injury by addressing the road danger posed by vehicles while supporting the growth of walking and the expansion of the walking network. City of Melbourne’s Road Safety Plan 2013–2017, approved in July 2013, seeks to deliver an environment in which pedestrians are prioritised and supported by a safe, attractive and engaging urban environment.

People walking in Melbourne need to feel personally secure. A high level of personal security will encourage more people to walk more, including at night and in places with which they are not familiar. This encourages more economic activity. Passive surveillance is a key factor in creating a feeling of personal security.

Balanced transport priority
Walking is the most fundamental mode of travel in the City of Melbourne and decisions about the transport network and land use should reflect this priority. The walking network in Melbourne should be planned and managed to increase the priority given to walking to reduce delay and avoid overcrowding.

Access for all
Providing access for people of all abilities and ages is a key component of developing the walking network in Melbourne.

Attractive walking environments
The City of Melbourne will continue to strive to create attractive walking environments. This includes creating walking environments that encourage a variety of uses: places to pause or window-shop, space for kerbside dining, art, seating and expansion of the urban forest.
Pedestrian network volumes

This map shows the overall walking dynamic across the city by approximating volumes across the pedestrian network. A range of data sources have been combined to approximate where people walk from car parks, train stations and other places in the city to shops, jobs, classes or other activities. Pedestrian counters across the city have been used to refine the results.

Data used includes ABS Census journey to work, Victorian Integrated Survey of Travel and Activity (VISTA), City of Melbourne Census of Land Use and employment (CLUE) and the City of Melbourne Pedestrian Counting Program information.
GOALS

1. Expand the pedestrian network

The City of Melbourne Council Plan 2013–17 has a four-year priority of expanding and prioritising a connected, safe and easy to access pedestrian network.

The City of Melbourne will create an excellent and safe walking environment for residents, workers and visitors, with seamless high-priority links between the city’s public spaces and the public transport system.

2. Plan for future growth

A key goal of this plan is to accommodate increasing amounts of walking in Melbourne. The city is experiencing significant growth. Figure 9 shows that walking will account for 30 per cent of all trips to, within and from the City of Melbourne in 2030, corresponding to over one million walking-only trips (on top of walking connections to public transport trips) on an average weekday. Decisions about the transport network and land use that affect pedestrians should take into account the likely future growth in numbers of people walking in Melbourne and plan accordingly.

3. Reduce delay

This plan will reduce delays to pedestrians through changes to the walking network, footpaths, intersections and traffic signals.

4. Improve safety

The safety of people walking in the City of Melbourne is very important. This includes personal safety and road safety. The City of Melbourne faces a significant challenge addressing the high numbers of people injured by vehicles while walking.

Figure 9. Walking mode share and trip growth in the City of Melbourne
Figure 10. Example of pedestrian crowding at Collins and Swanston streets