4 Transport and access

Strategy 3

Promote a walking city

Melbourne's international reputation, its liveability and ability to attract businesses, visitors and shoppers, depends to a significant degree on the quality of its pedestrian environment. All trips taken in the inner city include a walking component.

This aspect of the City North experience must be enhanced to reflect the precinct's position as a world renowned knowledge district.

Streets will be upgraded to include generous, connected and safe pedestrian paths which improve permeability. Safe, clear, enhanced pedestrian crossings and links between public transport interchanges and key destinations will contribute to the delivery of a high quality integrated network. Large canopy trees will provide shading and cooling for pedestrian comfort. The intricate laneways in City North will be enhanced and activated to improve the permeability and experience of the area.

Streets should be designed to provide:

- New pedestrian crossings and wider pedestrian crossings at signals along key pedestrian corridors.
- Footpaths of a minimum of 3m wide.
- Large canopy trees for passive shading and cooling.
- Water sensitive urban design.
- Links to open space, urban plazas, community and cultural facilities.
- Traffic calming treatments and lower speed limits.
- Signage to key destinations and attractions including the Queen Victoria Market, the hospitals, the universities, local activity centres, and the Meat Market.

All existing laneways must be retained. Upgraded and new laneways should be designed to be a minimum width of 6m to provide vehicular access for service vehicles, in addition to landscaping.

The City of Melbourne's *Transport Strategy* (Draft 2011) supports the development of a municipal pedestrian plan to identify, cost and prioritise the City of Melbourne's work in improving the pedestrian network.

Pelham Street - a green spine

The amount of space presently dedicated to cars along Pelham Street will be transformed to provide a 'green spine' that provides an enhanced pedestrian link between the new Haymarket civic space, University Square, Lincoln Square and Argyle Square through to Carlton Gardens. (See Chapter 5, Public Realm and Appendix A, Indicative Street Sections).

Pedestrian priority within the Queen Victoria Market vicinity

To improve pedestrian access through the Queen Victoria Market precinct, Queen Street and Therry Street will incorporate wider pedestrian pavements and a generous space for landscaping. The southern end of the Queen Victoria Market will benefit from improvements to pedestrian links to provide enhanced access to the Flagstaff Gardens. (See Chapter 5, Public Realm and Appendix A, Indicative Street Sections).

Actions

This strategy will be implemented through the following actions.



Design

T3.D1

Prepare a municipal pedestrian plan and public realm master plan to upgrade streets and laneways in City North to enhance pedestrian comfort and ease of movement.



Policy

T3.P1

Prepare a planning scheme amendment to implement the new laneway network.



Design

T3.D2

Redesign Pelham Street to provide priority for pedestrians and cyclists and to improve pedestrian access to open space.

T3.D3

Introduce a shared zone in the vicinity of the Queen Victoria Market along Queen and Therry Street to improve pedestrian access to the market.



Policy

T3.P2

Develop and implement a municipal pedestrian plan.



Advocacy

T3.A1

Work with VicRoads to investigate opportunities to improve pedestrian priority at street crossings to reduce pedestrian delays.

Figure 4.1: integrated transport

0 25 50 100 150 200 1:10,000

Strategy 4

Revitalise Haymarket as a vibrant public space and sustainable transport gateway

The historic boulevards of Royal Parade and Flemington Road are major routes to the Central City which converge with Elizabeth Street and Peel Street at the Haymarket roundabout. There is potential for this large intersection, located in the heart of Melbourne's world renowned knowledge precinct, to be transformed into a beautiful gateway to the Central City which is well integrated with the proposed Parkville Metro station. The efficiency of Haymarket's public transport interchange function will be improved and will be complemented by a vibrant public space which capitalises on the expansive view corridors available. for the enjoyment of residents, workers, students and visitors.

Actions

This strategy will be implemented through the following actions.



Work with VicRoads to investigate and progress the Haymarket revitalisation including pedestrian and tram improvements.



Design T4.D1

Investigate the feasibility of, and prepare a master plan for, the revitalisation of the Haymarket gateway.

4 Transport and access

Strategy 5

Efficient delivery of goods and services

The cluster of hospitals, major tertiary education institutions and businesses in City North has particular service delivery requirements. The Queen Victoria Market hosts a rich concentration of 820 businesses which rely on the delivery of fresh produce and other goods. The hospitals, research laboratories, educational institutions, commercial and retail businesses also have specialised freight and service needs. Mechanisms to minimise the impact of freight and service delivery on traffic congestion and amenity in City North will be implemented. Due to the concentration of major hospitals in City North, safe access for emergency services along major streets will be provided in any design treatment.

Actions

This strategy will be implemented through the following actions.



Advocacy

T5.A1

Work with the state government, key stakeholders and the major institutions to develop a strategy for low impact, efficient freight servicing of City North.

T5.A2

Work with the state government and major hospitals in the preparation of the public realm master plan to ensure high priority access is retained for emergency services vehicles.



Policy

T5.P1

Implement the City of Melbourne's integrated waste management program.

5 + years

Strategy 6

City driving

To optimise access to and within City North and minimise congestion, streets will be designed as highmobility streets. This will prioritise space efficient modes of transport such as trams, buses, walking and cycling, and will capitalise on the space currently designated for cars. Streets in City North need to be redesigned to provide new level-access tram stops, bus priority lanes, safe city taxi ranks, car share parking, bike share parking, dedicated bicycle lanes, and footpath widening. Traffic will be calmed to provide a safe environment for pedestrians and cyclists. Roundabouts in City North have the potential to be redesigned as less space hungry intersections which improve traffic flows. The public transport network will be complemented by the provision of taxis and car sharing.

Road space allocated for parking in City North is an extremely valuable resource and alternate uses need to be explored as the area develops further. For example, on-street parking spaces can be used for short and long term parking, special needs parking and car sharing, or converted for footpaths, trees, public art, trading, dining, bicycle lanes, public transport lanes, tram stop platforms or taxi ranks. In streets with established dwellings that have limited or no option for on-site parking (such as restrictive heritage controls and an established history of permit restricted parking on their local street), the City of Melbourne will provide a well managed resident only parking scheme that matches the number of available parking spaces in the street with the number of dwellings. The scheme will prevent oversubscription and remove access to the scheme for new, additional dwellings which increase the site density.

Actions

This strategy will be implemented through the following actions.



Policy

T6.P1

Review on-street parking provisions and convert existing on-street long term parking into affordable short stay parking or other uses (which support sustainable transport and public realm improvements), where practical.



Design

T6.D1

Develop a strategy to reduce congestion on City North streets by redirecting through traffic to by-pass routes outside the Central City area (including City North). Ensure emergency service vehicle access is maintained at all times.



Advocacy

D6.A1

Work with the Department of Transport to introduce speed limits of 40km per hour on all roads in City North.

D6.A2

Encourage the expansion of car sharing through the provision of additional onstreet spaces and encourage the provision of off-street shared spaces within private developments.



Research

D6.R1

Investigate new design solutions with key stakeholders including VicRoads, to improve traffic flow and accessibility for all modes at major traffic barriers, including Haymarket, the roundabout joining Peel and Dudley Streets, and along Victoria Street.



Research

T6.R1

Prepare an integrated access and mobility plan for City North which addresses the needs of key institutions and destinations, including Queen Victoria Market, medical facilities and the universities.

Strategy 7

Regional transport connections

City North attracts regional and global visitors to central Melbourne due to the presence of the Royal Melbourne, Royal Children's and Royal Women's Hospitals. The Victorian Comprehensive Cancer Centre will also attract people from across the state. In addition to the major hospitals, City North is also home to the University of Melbourne and RMIT University, both of which attract a large number of daily visitors from outside the municipality, including regional Victoria and interstate and international visitors.

The Queen Victoria Market is also a major attraction for both a regional and international audience. Through key upgrades to public transport infrastructure and improved efficiency, access to City North from regional areas will be improved.

Actions

This strategy will be implemented through the following actions.



Advocacy

T7.A1

Advocate for improvements to the efficiency of the entire transport network, through the implementation of the City of Melbourne's Transport Strategy (draft 2011) to improve regional access.

T7.A2

Advocate for improved transport links to Melbourne's airports and regional traffic management, to reduce through traffic in the City North precinct.

T7.A3

Work with the state government in the planning and design of the Melbourne Metro rail line linking South Kensington to South Yarra. This will allow for greater connectivity to the City North precinct for regional visitors and it will enhance access between knowledge clusters.

1 year 1 - 5 years 5 + years

30-year vision

City North is characterised by leafy streets and boulevards that link together beautiful parks and vibrant and welcoming public urban spaces, where neighbours, local workers, students and visitors socialise, exercise, play and relax.



5.1 Introduction

Overview

The public realm within City North includes all the public space between buildings - the open spaces (public parks, squares) and the streets and laneways. This accounts for 43 per cent of all the land area in City North.

There are 4.7 hectares of public open space in City North distributed across four parks. Two of these parks, University Square and Lincoln Square, are part of an historical arrangement of nineteenth century formal parks connected by Pelham Street. Bedford Reserve and Courtney Street Reserve are small, attractive local parks. All four parks are primarily used for passive recreation - relaxing, picnicking, with some opportunities for play.

The City of Melbourne's Open Space Strategy (draft 2011) indicates that the growing community in City North will require additional and a more diverse range of open spaces. Opportunities to meet this need exist at Queen Victoria Market, at Haymarket and within the streets.

5.2 Objectives

Principle 2

Create a liveable local neighbourhood

- 1. Ample green, public open space is equitably distributed across the neighbourhood for the community to enjoy.
- 2. A diversity of public open spaces are provided, for people to relax, recreate, play and meet.
- 3. Public open spaces are located and designed to be sunny in winter and shaded in summer, to maximise comfort and enjoyment.

Principle 5

Integrate the area's heritage into urban renewal

- 1. Structures, artefacts and landscaping that reflect the natural and cultural heritage are retained and integrated into open spaces and streets.
- 2. Design and layout of open space appropriately interprets the heritage of the area.

Principle 6

Regenerate the area's public realm

- Well-connected, inviting and safe streets prioritise walking and cycling and connect parks together into an integrated green open space network.
- 2. Streets facilitate social interaction and enable children to be independently mobile.
- 3. Open spaces, streets and laneways enhance the existing character and contribute to the creation of a distinctive landscape.
- 4. Public open spaces are fronted by buildings to activate the space and facilitate natural surveillance.
- 5. Public open spaces are beautiful, replenishing, and provide opportunities to connect with

Principle 10

Grow a city that prospers within the earth's ecological limit

- 1. Public open spaces, streets and laneways are designed to provide passive cooling and shading, decreasing the urban heat island effect.
- 2. Healthy, large canopy trees are provided and protected.
- 3. Stormwater is harvested and reused to irrigate landscaped areas, mitigating the effects of drought conditions and maximise tree health.
- 4. The extent of permeable surfaces within open spaces and streets is maximised.
- 5. Biodiversity is enhanced in all open spaces.
- 6. Stormwater run-off is minimised and the quality of water entering waterways is improved.
- 7. Soil moisture levels are maintained to provide healthy growth of vegetation.

5.3 Issues

1. Opportunity for generous landscaped streetscapes

Streets make up a large area of the public realm in City North, comprising approximately 44 hectares. Around 39 per cent of the land area in City North is streets and lanes, compared with 33 per cent within the Hoddle Grid. Several of the streets within City North, such as Elizabeth Street, Flemington Road, Peel Street and Royal Parade are very wide. The current design of these streets prioritises car movements and car parking.

Streets are the spaces that connect people together.

In City North, streets are simultaneously:

- Transport routes for pedestrians, bikes and vehicles
- Social spaces for people to meet, gather and interact.
- Ecological corridors to support biodiversity - plants and animals.
- Drainage networks to manage stormwater.
- Utilities service networks - electricity, water, gas and others.

There is a significant opportunity to upgrade City North's streets for people to enjoy. City North's wide streets have the potential to provide gathering and activity spaces.

2. Queen Victoria Market

The Queen Victoria Market (QVM) is a Melbourne cultural icon and key attractor in City North, with ten million visitors a year. At present, the seven hectare QVM site accommodates few trees and landscaped areas to contribute to the experience of shoppers and visitors. The QVM has expansive areas of asphalt which create an impervious surface. There is a high level of pedestrian activity in the QVM precinct. However, several streets in the vicinity have a lack of trees to enhance pedestrian comfort. There is significant potential to improve the provision of trees and open spaces which are complementary to the QVM's heritage to strengthen the visitor experience.

3. Intrusive through traffic

City North is divided by major through-traffic routes - Victoria Street, Flemington Road, Elizabeth Street and Peel Street. The high vehicle numbers and speed are a barrier to pedestrian movement and discourage walking and cycling trips. Bedford Reserve is surrounded by wide streets which carry minimal traffic. On-road car parking (central median and parallel parking) takes up a significant area within many streets, limiting space for landscaping and pedestrian-based activities (for example, on-street dining or public seating areas).

4. Haymarket roundabout

Two of the main boulevards leading into the Central City are Royal Parade and Flemington Road. They meet at the Haymarket roundabout. This is a gateway to the Central City and at 0.5 hectares, it is a major public realm area. Current and proposed developments (the Victorian Comprehensive Cancer Centre, the Peter Dougherty Institute and School of Medicine), will reinforce this iste as the public realm heart of the bio-medical knowledge cluster. The intersection, however, is totally dominated by traffic because of its roundabout format. Recent signalling upgrades have improved its safety but it remains an unattractive, space hungry traffic circus. Haymarket roundabout should instead be an iconic gateway, an activity hub and be optimised for pedestrians, cyclists and trams.

5. Provision of public open space

The public open space in City North is distributed across four parks which are primarily used for passive recreation such as relaxing, picnicking and play. Although the space within the Haymarket roundabout is 30 per cent larger than City Square, it is not available to the public for recreational purposes. This isolated, grassed traffic island has a singular role in facilitating vehicular and tram movements through this busy intersection. (See Figure 5.2).

Due to the size of the parks in City North, there is limited opportunity for diverse activities such as community sport and recreation. Improving access to major open spaces located north of the study area (Princes Park and Royal Park) and improving access to private open spaces within the University of Melbourne may begin to address this deficiency.



Figure 5.1: existing conditions at Haymarket

As the City North community grows, additional open spaces will be required. Apartment developments provide only small private open spaces, generating additional demand for high quality parks and recreational spaces.

The Melbourne *Open Space Strategy* (draft 2011) identifies the following spaces will be required to respond to City North's growing population:

- Two local open spaces of between 0.26 and 0.9 hectares.
- Three small local open space of between 0.03 and 0.25 hectares.

These spaces will provide for a diversity of community recreation and informal activities, and will be located within an easy and safe walking distance of the majority of the community.



Figure 5.2: gap analysis - walking access to existing open space (gaps shown in white).

74 6. Low level of street tree coverage

Although around 39 per cent of the area of City North is made up of streets and lanes, the area has a tree canopy cover of only 14 per cent. The urban heat island effect is caused by:

- The removal of vegetation and introduction of hard impervious surfaces including buildings, roads and footpaths, which increases the extent of thermal mass which retains heat.
- Low tree canopy coverage, which decreases natural cooling that occurs from the shading of impervious surfaces and through evaportranspiration.

Although the majority of streets within City North have some trees, the tree canopy cover is low. The trees are a small size of species which are often unsuitable and sparsely planted. There are also some key areas in City North where there are few or no trees.

Despite the size of the Queen Victoria Market precinct, there are very few trees, particularly in the expansive car park which also creates an impervious surface. Victoria Street, adjacent to the Queen Victoria Market also has no trees. In addition, no streets in City North contain water sensitive urban design or storm water harvesting systems to irrigate trees. Space to retain and plant large trees with integrated water sensitive urban design systems must be included in the street design.

The City of Melbourne's *Urban*Forest Strategy (draft 2011)
identifies opportunities to
strengthen the urban forest - the
sum of all trees, vegetation, soil and
water that supports the ecosystem.
This will play a critical role in

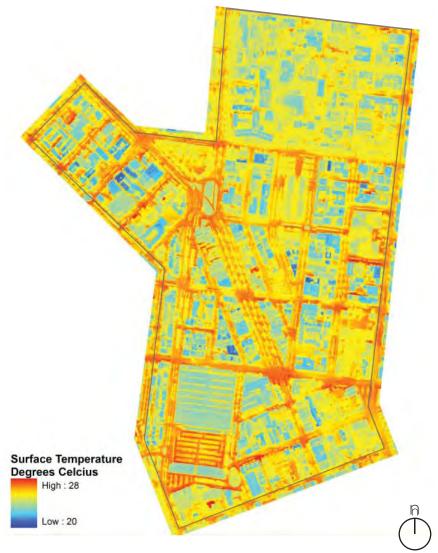


Figure 5.3: urban heat island (UHI) effect indicated by thermal heat map

enhancing livability. The urban forest can mitigate hot summer temperatures by providing shade and cooling.

Increased tree canopy cover will minimise the discomfort of hot summer nights (the urban heat island effect) and improve day time thermal comfort at street level for pedestrians.

The urban heat island effect is illustrated in Figure 5.3.

The Useful Life Expectancy (ULE) of existing trees varies greatly. Critically, 1% of the trees have a ULE of less than 1 year. These are primarily located within the traditional boulevards and University Square. (See Figure 5.5). A coprehensive revegatation programe is incorporated into the *Urban Forest Strategy*.



Figure 5.4: existing canopy cover

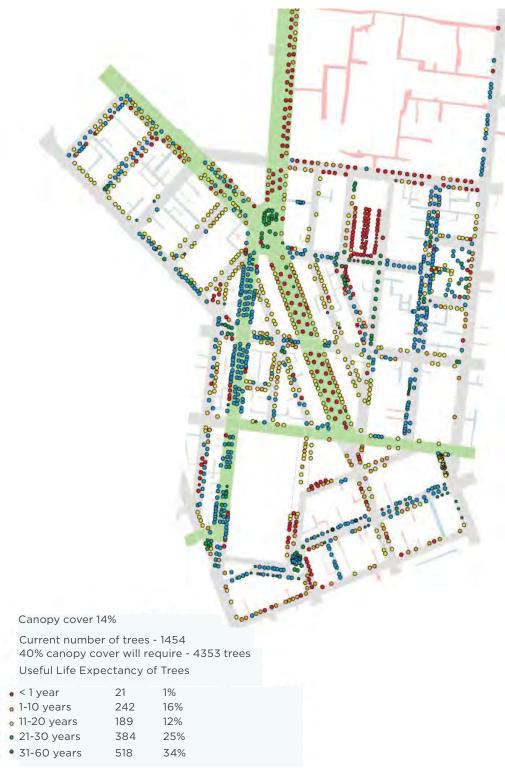


Figure 5.5: useful life expectancy of City North's existing urban forest

5.4 Strategies

Strategy 1

Deliver an expanded public open space network

There are five opportunity sites where new public open spaces can be created to meet the social, health and wellbeing needs of a growing community. Each site and the opportunities it presents are highlighted below.

1. Queen Victoria Market vicinity

The Queen Victoria Market is a key attractor for tourists in Melbourne. It is also a local activity hub, where the local community shops and socialises. As the local population grows around the market, a significant opportunity exists to build on this vitality, through the provision of improved landscaping and new public open space in this vicinity. These spaces could be designed for a range of community events and leisure activities that are complementary to the market's role. Incorporating open spaces and large canopy trees in the market precinct would improve the environmental performance by enhancing permeability and reducing the urban heat island effect. This new space could become a significant meeting space for the northern end of the Central City, complementary to Federation Square in the south.

On the east of the market. Victoria Square is an existing small open space co-located with the City of Melbourne's Multicultural Hub. A redesign of the tram stop connected to improvements to Victoria Square could also increase the provision of green public open space in the market's vicinity.

A redesign of Victoria Street (see Strategy 2) would provide further opportunities to enhance the character and amenity of this precinct.

2. Haymarket - from roundabout to place

The Haymarket is co-located with the proposed Parville Metro station, the Victorian Comprehensive Cancer Centre, the Peter Dougherty Institute and the Melbourne Medical School. It is currently a missed opportunity to create a significant civic gathering space within the centre of this knowledge precinct and at an important gateway to the Central City.

The Haymarket roundabout can be transformed into a new, accessible public open space co-located with a transport interchange and activity hub. This will provide a focal point as a gathering space for workers, residents, students and visitors and become the iconic public space of the bio-medical knowledge cluster. It would also extend the Pelham Street open space spine. Indicative design options for the Haymarket Roundabout are illustrated in Figures 5.6-5.11.

As an integrated transport hub the Haymarket will provide an intermodal public transport hub connecting existing and proposed tram routes to the proposed Parkville Metro station with a high quality safe and attractive pedestrian priority public place.

The structure of Haymarket will be legible, safe and accessible for all modes of mobility with dedicated lanes for cyclists. Cars and trucks will continue to move into and through the Haymarket but without compromising the role and function of other transport modes.

The Haymarket will provide a significant and animated open space area for residents, workers and visitors. Connected by shared paths, landscaped with large canopy trees and activated by adjacent buildings, the open space will create a green public place for the northern end of the Central City.

A prominent and iconic gateway will be developed, to link the Central City, the Queen Victoria Market and knowledge precinct along an active corridor. Higher buildings, which frame view corridors, will contribute to the prominence of the area and create a sense of address.

As an open space and transport hub, with enhanced pedestrian and cyclist linkages to the area, it will create a destination and become a draw-card for the development of Melbourne's Central City extension and knowledge precinct.

The transformation of the Haymarket roundabout into a hub of activity and an iconic gathering space should provide:

- Direct and prioritised tram movements through the intersection.
- Direct pedestrian access to tram stops and across each side of the junction.
- Shared paths for safe pedestrian access along major streets which lead to small pockets of open space located adjacent to the intersection.
- Dedicated bicycle paths and intersection waiting areas to enhance efficient and safe movement.
- Traffic signals to enhance safety and efficiency of car movements.
- Creation of significant corridors of shared spaces.
- Protection of vista corridors.
- Shared paths along major streets and back streets to provide for safe pedestrian access throughout the precinct. These would be integrated with generously expanded footpaths that could be used by ground floor activities such as cafes, bars and restaurants.

- Iconic gateway and built form to relate to public open space areas.
- Designated bicycle paths along major roads, with minimal crossing of tram routes or major roads.

3. Elizabeth Street

Elizabeth Street is one of Melbourne's prominent boulevards and a historic route into the Central City. Over half of the 60m width is road carriageway and parking. A redesign of this boulevard could reprioritise the way the street is used to redistribute more of the width to pedestrian activity and enhance the provision of large canopy trees. Opportunities for small local open spaces could be integrated into this redesign.

character of the boulevard are over 120 years old and in poor condition. Replacement of these trees will be needed within the next one to ten years to ensure Melbourne's urban forest is managed appropriately for the next century.

The existing trees that define the

Policy

P1.P2

Prepare and implement a Development Contributions Plan to contribute funds to the redevelopment of Haymarket roundabout, Elizabeth Street and Bedford Reserve.

P1.P3

Implement a rate in Clause 52.01 of the Melbourne Planning Scheme which specifies open space required – policy to take land in lieu of a cash contribution to contribute funds to the redevelopment of Haymarket roundabout, Elizabeth Street and Bedford Reserve.

P1.P4

Implement the Public Park and Recreation Zone over Haymarket to re-designate this area from a road use to public open space.



Design

P1.D2

Prepare a public realm master plan that will address the redesign of Haymarket, in partnership with VicRoads, and the expansion of Bedford Reserve.



Prepare a master plan for the Queen Victoria Market precinct to investigate new open space in the vicinity of the market, including a redesign of Victoria Square.

Implement the Open Space

Strategy in City North.

This Strategy will be implemented through the following actions.

Policy

P1.P1

P1.A1

Advocacy

Advocate for the public space within the Carlton United Brewery site to be secured by the City of Melbourne to own and manage.

4. Bedford Reserve and Courtney Street Reserve

The small, local park at Bedford Reserve could be expanded and connected to Courtney Street Reserve to create one larger park. The surrounding streets carry minimal traffic, offering an opportunity to incorporate some of the street space into this consolidated park area.

5. Carlton United Brewery site

A privately owned, publicly accessible open space is being developed as part of the Carlton and United Brewery redevelopment. The handover of this open space to the City of Melbourne would secure it as a long term public open space owned and managed for the enjoyment of the broad community.

Actions



Figure 5.6: plan of potential Haymarket redesign Option 1





Figure 5.7: perspective of potential Haymarket redesign Option 1