

## Legible Sydney - Volume 1

# Wayfinding Strategy





Introduction

1.0 Preface ..... 2

2.0 What is Wayfinding? ..... 3

3.0 Benefits ..... 4

4.0 Project Context ..... 5

5.0 Policy Context ..... 6

6.0 The Need for a Pedestrian Wayfinding System for Sydney ..... 7

7.0 The State of Wayfinding – Conclusions ..... 12

Strategic Framework

1.0 Introduction ..... 16

2.0 Strategic Framework ..... 17

2.1 Users ..... 18

2.2 Strategic Directions ..... 19

2.2 Strategic Directions – Consistency ..... 20

2.2 Strategic Directions – Accessibility ..... 21

2.2 Strategic Directions – Sustainability ..... 22

2.2 Strategic Directions – City Legibility ..... 23

2.3 Environment – Place Hierarchy ..... 24

2.3 Environment – Place Hierarchy – Relationships & Application ..... 25

2.4 Wayfinding System Components ..... 26

2.4 Wayfinding System Components – Fitting Into People’s Journeys ..... 27

2.4 Wayfinding System Components – Existing Elements & Planning Tools ..... 28

2.4 Wayfinding System Components – Mapping ..... 29

2.4 Wayfinding System Components – Current Family of Sign Elements ..... 30

2.4 Wayfinding System Components – Proposed Family of Sign Elements ..... 31

2.4 Wayfinding System Components – Proposed Family of Sign Elements ..... 32

2.4 Wayfinding System Components – Digital & Printed ..... 33

2.4 Wayfinding System Components – Digital Media ..... 34

2.4 Wayfinding System Components – Visitor Information Centres & People ..... 36

2.4 Wayfinding System Components – Public Domain Quality ..... 37

3.0 Design Development – Mapping Features ..... 38

3.0 Design Development – Signage ..... 39

3.0 Design Development – Key Sign Components ..... 40

3.0 Design Development – Colour Palette ..... 42

3.0 Design Development – Viewing Distances ..... 43

4.0 Signage Information Design – Viewing Distances ..... 44

4.0 Signage Information Design – Typeface Testing ..... 45

4.0 Signage Information Design – Consistent Naming Convention ..... 46

5.0 Signage Placement Strategy ..... 47

5.0 Signage Placement Strategy – Principles ..... 49

5.0 Signage Placement Strategy – Site Testing ..... 50

5.0 Signage Placement Strategy – Location 1 ..... 51

5.0 Signage Placement Strategy – Location 2 ..... 52

5.0 Signage Placement Strategy – Location 3 ..... 53

5.0 Signage Placement Strategy – Location 4 ..... 54

5.0 Signage Placement Strategy – Location 5 ..... 55

5.0 Signage Placement Strategy – Examples to a Transport Hub ..... 56

5.0 Signage Placement Strategy – An Approach ..... 57

5.0 Signage Placement Strategy – Planning ..... 58

6.0 Action Plan ..... 59

7.0 Implementation ..... 64

Background Research & Site Evaluation

Policy Context ..... 68

Getting Around the City by Tourists – Research Findings ..... 70

Tourists – Research Findings, Navigation Tools, Landmarks and Destinations ..... 71

Getting Around the City – Accessibility – Introduction ..... 72

Accessibility – Audit & Findings ..... 73

Getting Around The City – Accessibility – City of Sydney Current Situation ..... 74

Getting Around the City – Accessibility – Existing Signage Review ..... 75

Getting Around the City – Language Considerations ..... 76

Getting Around the City – Test Walks ..... 77

Signage Elements ..... 78

Current Wayfinding Signage Components ..... 79

Current Wayfinding System Components – Electronic Wayfinding ..... 80

Visitor Information Centres & People ..... 81

Current Wayfinding System Components – Maps ..... 82

Other Wayfinding Information Sources ..... 83

The City Environment ..... 84

The City Environment – Public Domain ..... 85

The City Environment – Barriers to Wayfinding ..... 86

Infrastructure ..... 87

Geographic Spread of Destinations ..... 88

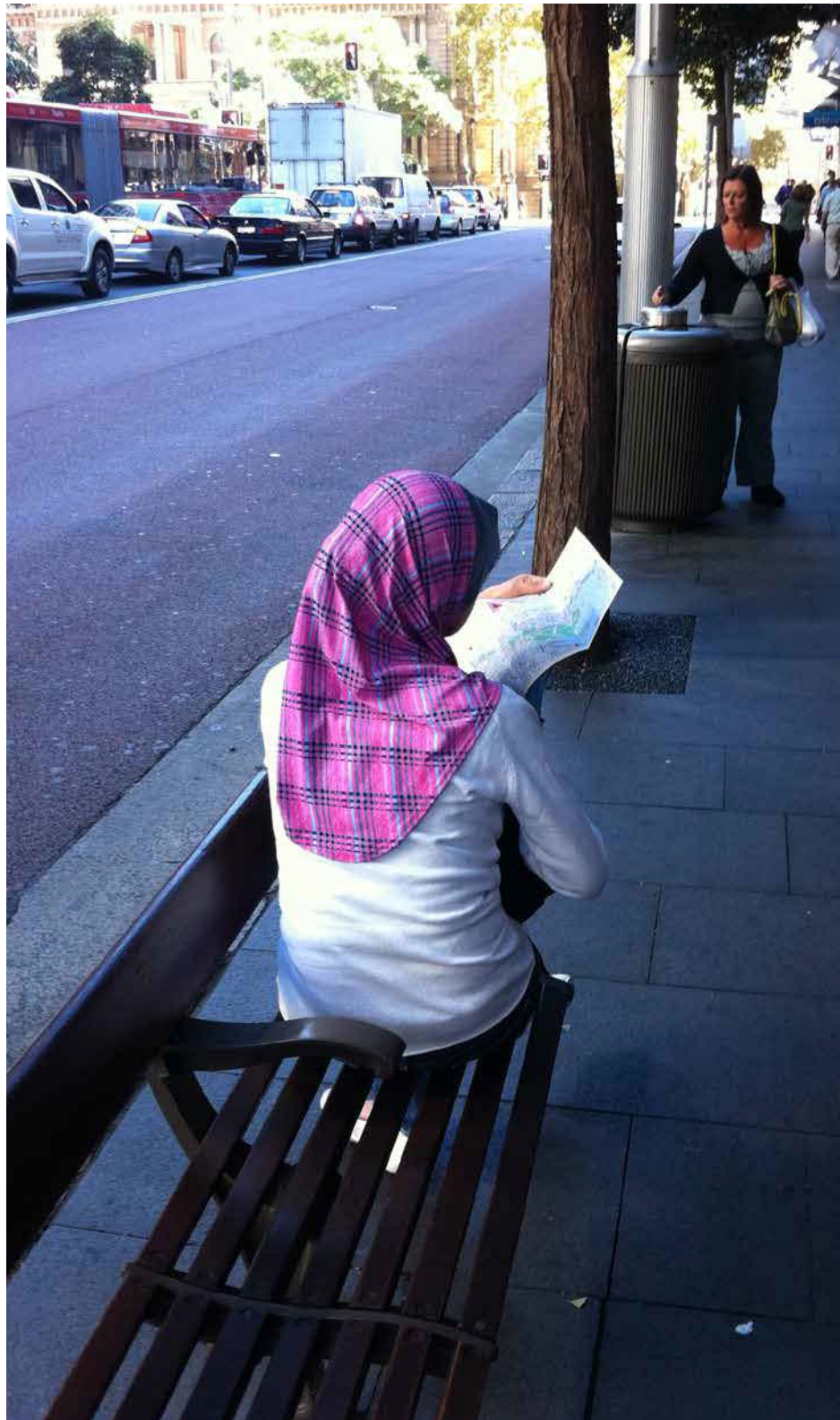
Worlds Best Practice For Wayfinding Systems – Reference ..... 89

The State of Wayfinding – Conclusions ..... 90





# Introduction



The state of public domain pedestrian wayfinding in the City of Sydney is in need of review and improvement.

Submissions by tourist and retail industry groups and individuals highlight the confusion sometimes experienced by visitors to the City and residents in accessing major destinations.

Sustainable Sydney 2030 has as a strategic direction to create “A City for Pedestrians and Cycling”.

The City’s Liveable Green Network Strategy and Masterplan provides the means to deliver on this direction with an integrated pedestrian and cycle network across the local government area that connects the city centre, village centres and major parks and recreation facilities.

As well as undertaking pedestrian pathway and crossing improvements the provision of wayfinding information is seen as critical in ensuring that the Liveable Green Network routes are clearly defined and understood so people are confident of using and finding their way around the City.

The City Centre and its pending transformation projects such as light rail also provide an opportunity to rethink and improve wayfinding and legibility.

In response the City wishes to develop a pedestrian Wayfinding Strategy to provide a clear co-ordinated framework. This framework will deliver consistent wayfinding components and information to direct people to their desired destinations, and to encourage people to walk with comfort and confidence.

### Project Objectives

The overall project objective is to develop a Wayfinding System that allows the delivery of a more legible public domain that encourages people to walk with comfort and confidence around the City of Sydney.

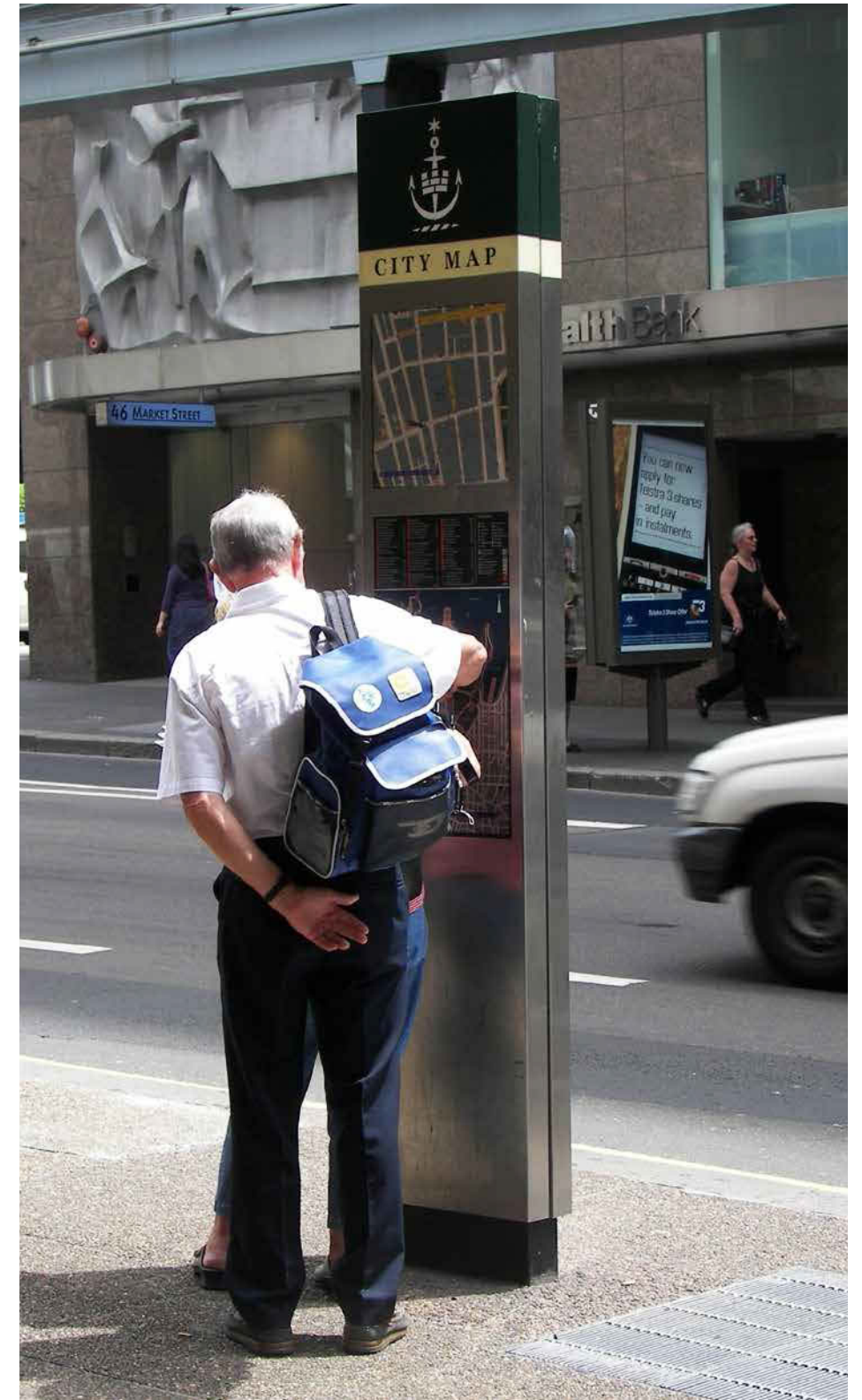
The strategy provides a guiding document to inform future design development and project implementation for the City’s pedestrian wayfinding system. Detailed design of the system will be developed as a separate process and documented in a design specification and manual.

When visiting a strange new place, people need to be able to find their way to their destination. Wayfinding is how people navigate throughout a journey. When navigation decisions need to be made people use wayfinding information, and the surrounding environment to read, understand, experience a place and to help form decisions for travel.

A good wayfinding system will allow people to reach their destination easily and quickly by providing the cues and information to: know where you are, where you are headed, and how best to get there; and recognize when you have reached your destination.

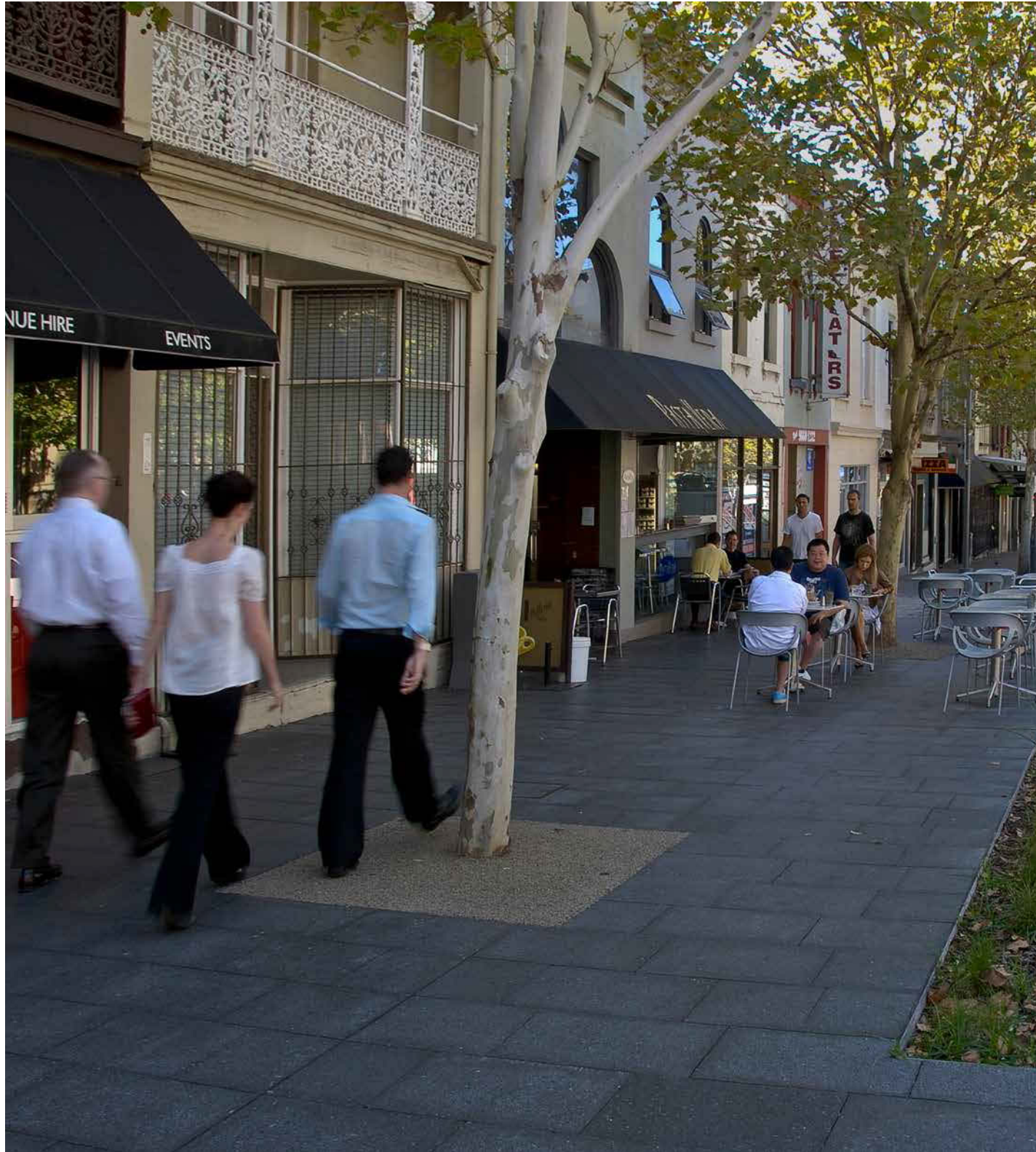
Urban planner Kevin A. Lynch borrowed the term for his 1960 book *Image of the City*, where he defined wayfinding as “a consistent use and organization of definite sensory cues from the external environment”.

In 1984 environmental psychologist Romedi Passini’s *Wayfinding in Architecture* expanded the concept to include signage and other graphic communication, architecture, public space planning, audible communication, tactile elements, and provision for special-needs users.





## 3.0 Benefits



A well designed pedestrian wayfinding system provides many benefits as outlined below:

### Encourage Active Transport

A city that encourages walking for tourists and locals creates social and economical benefits. Many destinations, especially retail will benefit from passing traffic.

Predictable, consistent wayfinding information is the key to building pedestrians confidence in reaching desired destinations.

An increase in pedestrians can also lead to major benefits for the transport system, environment economy and public health.

### Tourism / Economic Benefits

A city for walking is a tourist-friendly city and the local economy benefits directly. Retailers can gain benefits with having people walking past their shops as it increases passing trade and impulse buying

### Surveillance / Safety

More people walking and using the public domain can also increase perceptions of safety and increased surveillance with more “eyes on the street”.



The City of Sydney Local Government Area covers approximately 26.15 square kilometres, within the Sydney metropolitan area. It comprises Central Sydney, the Rocks, Millers Point, Ultimo, Pyrmont, Surry Hills, Woolloomooloo, Kings Cross, Elizabeth Bay, Rushcutters Bay, Darlinghurst, Chippendale, Darlington, Camperdown, Forest Lodge, Glebe, Alexandria, Beaconsfield, Centennial Park, Erskineville, Newtown, Redfern, Rosebery, Waterloo, and Zetland.

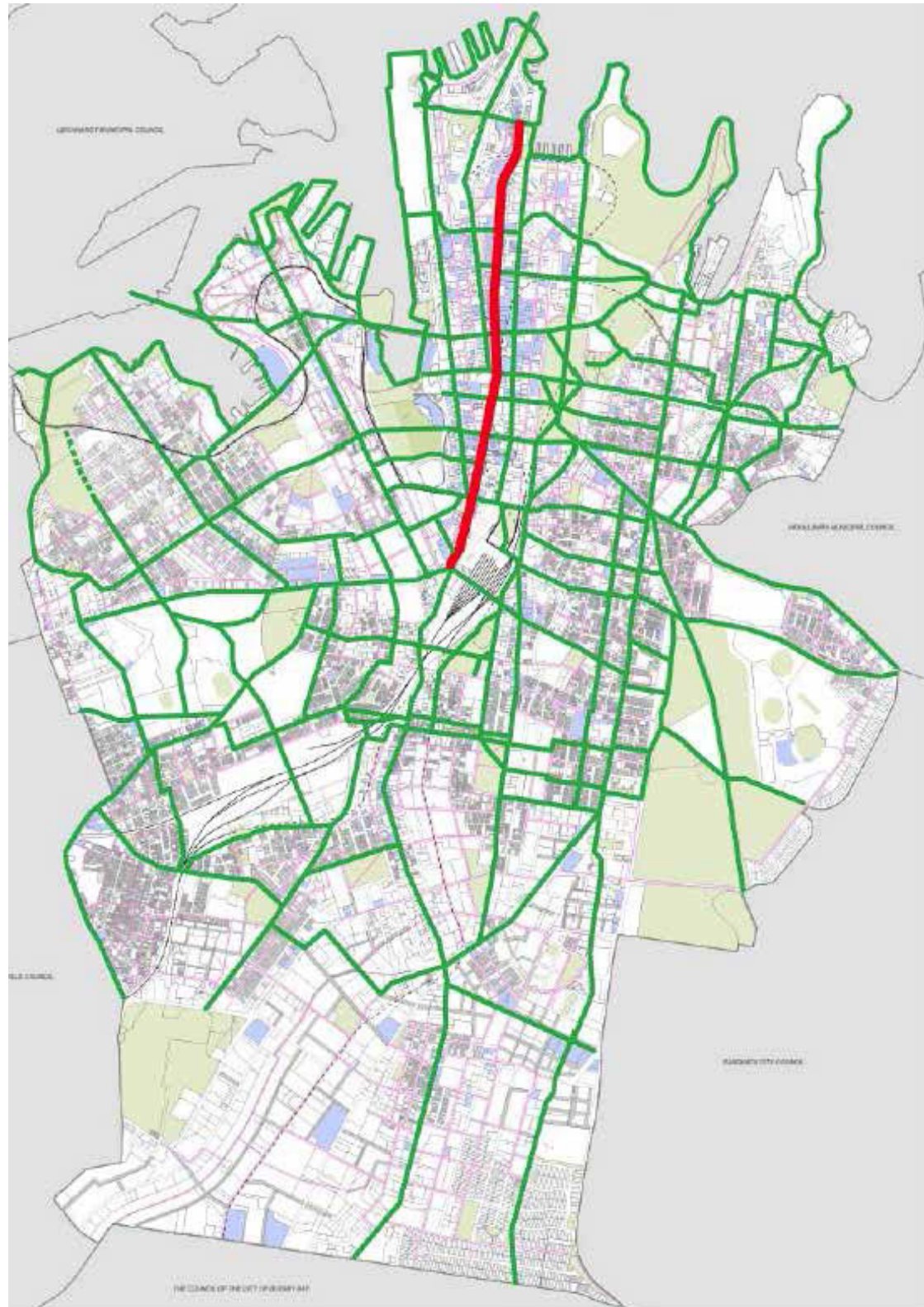
Includes:

- City Centre, the area between Darling Harbour on the west, Circular Quay and the Sydney Harbour Bridge on the north and the Royal Botanic Garden, and the Opera House on the east, stretching from the Harbour to Central Station;
- City East, taking in the Sydney support areas along William Street, Oxford Street and in west Surry Hills, Woolloomooloo and Darlinghurst;
- Pyrmont–Ultimo, based along the Harris Street spine and including the former Pyrmont wharves and eastern shore of Blackwattle Bay;
- Sydney Education and Health precinct on the south west edge of the Sydney along Broadway and Parramatta Road including the tertiary education campuses including University of Sydney, UTS, Notre Dame University as well the large Camperdown teaching hospital complex with associated medical support facilities and the ABC headquarters;
- Redfern Centre including the area around Redfern Station, the Australian Technology Park and north Eveleigh area.





## 5.0 Policy Context



- George Street
- Citywide Main Pedestrian Network
- Local Pedestrian Network

Part 2 – Background Research and Site Evaluation – provides an overview of the various city and state government policy and project initiatives that this wayfinding project compliments.

- Sustainable Sydney 2030;
- Liveable Green Network;
- George Street Transformation;
- Open Sydney;
- City of Sydney Public Art Strategy 2011;
- City of Sydney Public Domain Design Codes:
  - Sydney Streets Design Code (Interim) 2010;
  - Sydney Lights Design Code (Interim) 2006;
- Woolloomooloo Accessibility and Wayfinding Study 2009;
- Connecting Our City 2012;
- Destination NSW and Visitor Economy Taskforce;
- Transport for NSW wayfinding system development;
- City of Sydney Inclusive (Disability) Action Plan 2007 – 2011;
- City of Sydney Tourism Strategy 2012 (under preparation);
- City of Sydney Retail Strategy 2012 (under preparation).



## 6.0 The Need for a Pedestrian Wayfinding System for Sydney

### 6.1 Global City

Sydney is a Global City. It is the 75th largest city by population, in the top 26 cities by economic output, and in the top 20 cities on a range of indices including being in the top 10 world cities in terms of quality of life.

The City of Sydney is at its heart, and contributes a quarter of NSW's Gross Domestic Product and eight per cent of the Australian economy. It is host to almost 400,000 jobs and over 180,000 residents. It is Australia's largest commercial centre and features a number of world famous tourist destinations. It is home to approximately six in 10 of all Asia-Pacific regional headquarters located in Australia and nearly three-quarters of all Information and Communications Technologies headquarters.



## 6.0 The Need for a Pedestrian Wayfinding System for Sydney

### 6.2 Our Visitors

A Global City attracts many visitors who are unfamiliar with Sydney's layout and location of destinations.

A wayfinding system can be a key component in welcoming visitors and providing information to help them get around with ease and access the wealth of attractions on offer.

#### 6.2(a) Tourists

Tourism both domestic and international is a significant industry for Australia and in particular the City of Sydney is the focus of large tourist visitor numbers estimated to be around 4.1 million people (or 41 percent of Sydney's arrivals) in 2010.

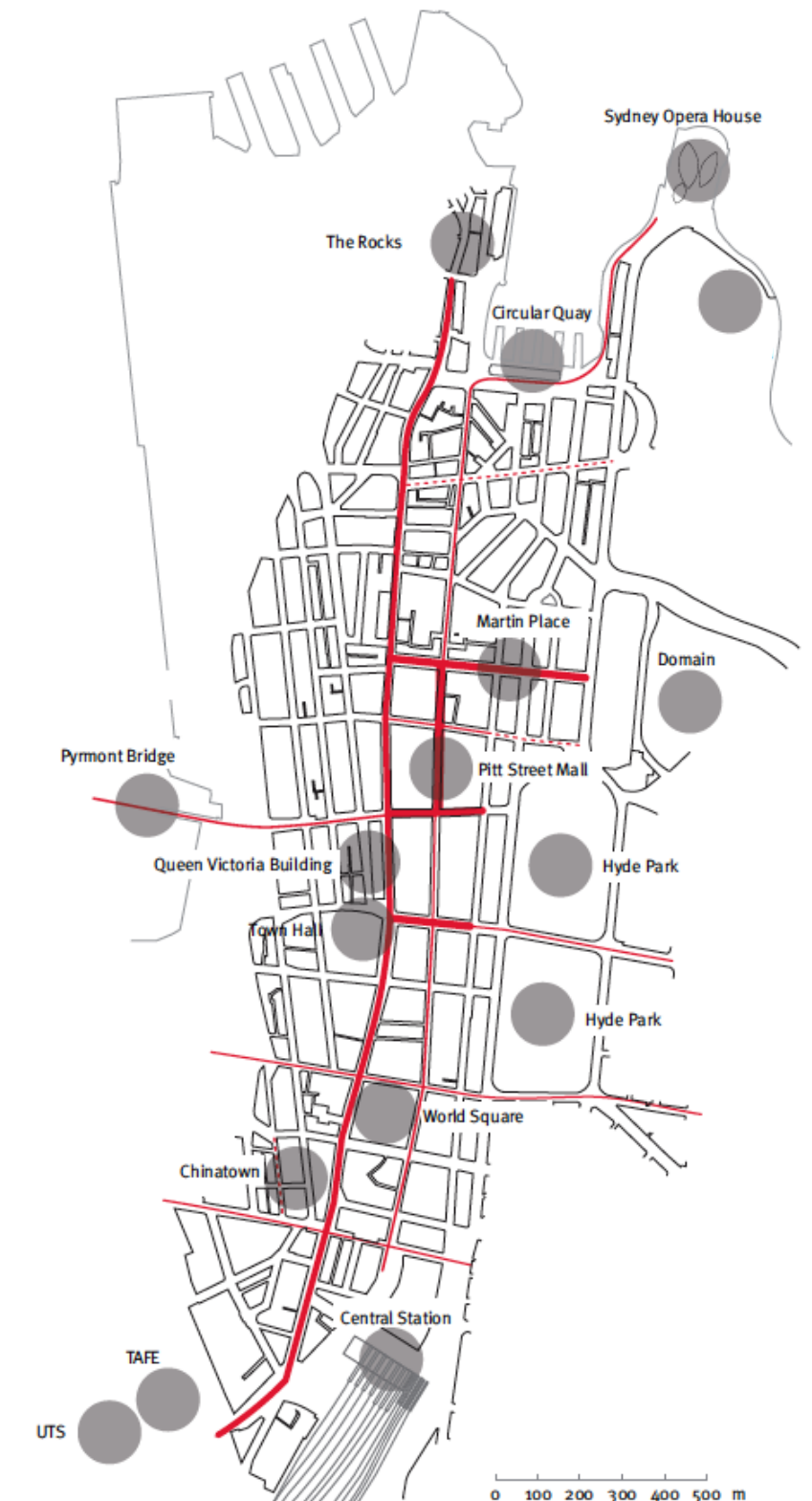
The LGA is also home to 60 percent of metropolitan Sydney's hotel rooms. On any one night there are around 27,000 visitors staying in the LGA. Annual guest nights now exceed 10 million.

These visitors delivered a direct spend into the LGA of over \$5 billion per annum. The combined shopping spend of international and domestic visitors to the LGA is estimated to make up around 25 – 30 percent of the city's.

The City of Sydney local government area includes many of Australia's top visitor attractions such as the Opera House, Harbour Bridge, Darling Harbour, The Rocks, and Chinatown as well as significant late night precincts – Kings Cross, the City Centre and Oxford St that attract both domestic and international tourists.

Growth in visitor numbers is expected in the coming years.

This includes visitors from the growing global trend in boat cruising. In the 2010/11 season, a record 300,000 cruise ship passengers visited Sydney, up 26 percent on the previous year. Carnival Australia, the country's largest operator of travel cruise boats expects the local cruise industry will carry one million passengers by the year 2020.





### 6.2(b) Business Visitors

Business visitor growth is also expected. Sydney houses over half of the nation's 100 largest corporations and hosts over 2 million business visitors per annum.

Business Events Sydney, the official body responsible for promoting Sydney as a business events destination, secured 69 events in the year ended 30 June 2010 which brought in 43,000 delegates. The majority of these events were held in the Sydney LGA, mainly in the Sydney Convention and Exhibition Centre.

### 6.2(c) Education

Growth in international student nights has more than doubled over the last decade from 8.5 million in 2000 to 19.5 million in 2010. International student enrolment in higher education, vocational and English language sectors have experienced strong growth since 2004. This growth looks set to continue in the coming years with increased numbers of students from India and Asia.

Major tertiary Educational institutions include Sydney University, Sydney Institute, UTS, Notre Dame, COFA and Sydney Art School. Private colleges such as Taylor College at Waterloo and GCA and Redfern also generate significant pedestrian activity. Primary and secondary schools are distributed around the Village Centres and also generate local pedestrian and cycle activity.

### 6.2(d) Metropolitan Sydney

The City of Sydney LGA is only one part of a larger metropolitan Sydney region. The large geographic spread of metropolitan Sydney means that many Sydneysiders are infrequent visitors to the city centre and surrounding village areas when they come here for business, shopping, family outings, attend events or exhibitions.

Even though they are "locals" many Sydneysiders require legible and accessible wayfinding information to make their visit comfortable and welcoming.





## 6.0 The Need for a Pedestrian Wayfinding System for Sydney

### 6.3 A City of Pedestrians

The City is the focus of much pedestrian activity on a daily basis particularly in the City Centre. Many of these pedestrians need wayfinding information and confirmation they are heading in the right direction to their destinations.

#### 6.3(a) Public Transport

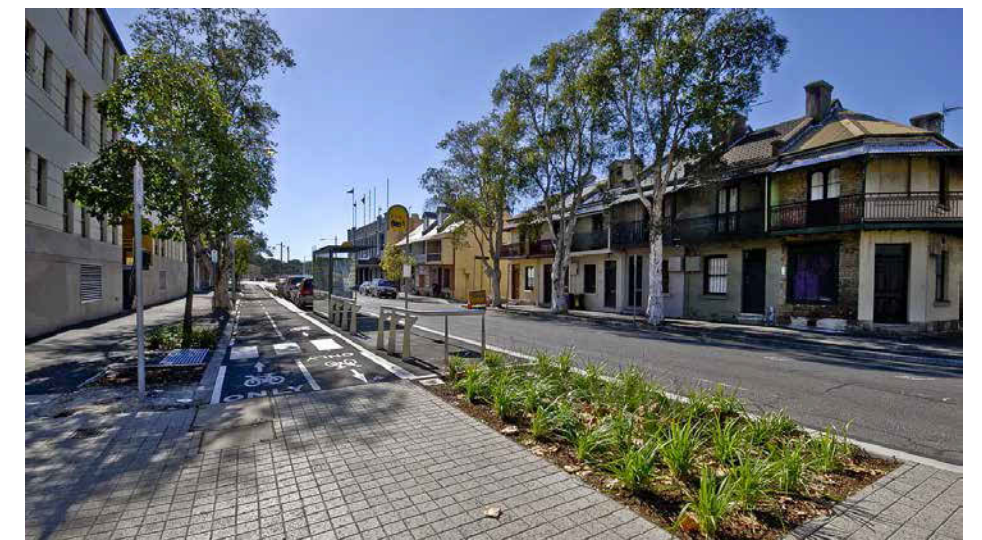
- The city is at the centre of Sydney's public transport network (refer map) and is Australia's public transport capital with three quarters of all people working in City Centre using public transport to get to work. When people alight from trains, buses or ferries they are pedestrians for at least part of their overall journey;
- Consequently train stations, ferry terminals and bus stops are points of arrival for many visitors need information to orientate their location in the City continue their trip as a pedestrian. Conversely people need wayfinding information to locate public transport nodes so they can depart from the City or travel to another location within the LGA;
- The number of public transport commuters to central Sydney is expected to increase by 35 per cent by 2036;
- The City Centre is compact and walkable. Consequently pedestrians account for 93 per cent of internal trips within the City Centre;
- When walking trips by tourists as well as walking trips made in connection with public transport trips are added there are over 1 million pedestrian trips daily in City Centre made by around 450,000 people;
- Outside the City Centre the neighbouring Village areas are also the focus of high pedestrian activity particularly the employment and entertainment areas of Pyrmont, around university precincts at Broadway and Camperdown, Redfern Station, night time entertainment areas of Kings Cross and the village main streets such as King Street Newtown, Crown Street Surry Hills.

#### 6.3(b) City of Sydney Residents

The City has an estimated population in 2010 of 180,000. Trip patterns by City of Sydney residents are substantially different from those for average Sydney residents with a much higher proportion of walking trips and much lower proportion of car trips which reflects close proximity to major destinations and attractions including the City Centre, major universities, hospitals, cultural and entertainment precincts.

The State Government's Metropolitan's subregional planning for the Sydney City Region provides a picture of how City of Sydney residents travel. It reveals that:

- The Sydney City Subregion has the highest proportion of any subregion of short trips;
- 72 per cent of trips by City residents are less than 5 kilometres long (traditionally viewed as lengths ideal for walking and cycling);
- There is a very close job/ residence match in the City with nearly 60 per cent of the resident workforce living and working within the subregion – the highest self-containment for employment of any subregion;
- Over a quarter of City of Sydney residents walk to work (27%), compared to only 4% for the Sydney metropolitan area.
- Just over half of the trips made by residents on an average weekday (58 per cent) trips start and finish within the Sydney City Subregion;
- On an average weekday, only a third of all trips by Sydney City residents are made by vehicle, less than half the Sydney metropolitan average;
- Almost half of all trips are made by walking and cycling.



### 6.3(c) Night Time Economy

The City as a destination for night time activity means there are significant crowds on City streets after 11pm on Friday and Saturday nights, in some places equalling daytime pedestrian peaks.

Many of these pedestrians need wayfinding information to public transport, attractions and other destinations.

In 2010, the City of Sydney undertook the Late Night Management Area Research (LNMAR) Project.

- City Centre South is the busiest night time precinct in the City with pedestrian flows up to 7,600 persons per hour between midnight and 1.00am during December 2010;
- Oxford Street has the second highest pedestrian flows of 6,900 persons per hour;
- Kings Cross has the most number of pedestrian hot spots in the top 10 with peak pedestrian flows of around 5,900 persons per hour occurring between midnight and 2.00am at various times of year;
- The Rocks experiences the lowest pedestrian flows in comparison to the other precincts with varying levels of activity between 2,000 and 4,000 persons per hour.

### 6.3(d) Events

As well as regular night time attractions the City of Sydney is also host to many events of worldwide reputation that attract both domestic and international visitors and residents of metropolitan Sydney. These include New Years Eve, Chinese New Year and Sydney Festival.





## 7.0 The State of Wayfinding – Conclusions

Background Research and Site Evaluation provides a review of current wayfinding conditions.

Key conclusions are:



### Lack of Co-ordination Between Wayfinding Systems

There is limited information consistency between signage, printed and web wayfinding information. There are many systems however little coordination; Users have to encounter and interpret a range of signage systems throughout the whole journey.



### Public Transport Interchanges and Nodes

Railway stations, ferry wharves and bus stops are the arrival point for the majority of city visitors however these areas can be confusing, lack legible information for people to orientate themselves.



### Accessibility

Wayfinding systems need to consider the needs and abilities of a range of users.



### Need to Consider Entire Journey

The geographic spread of wayfinding systems is limited. Existing systems do not provide information across the entire journey.



### Poor Placement of Signs & Wayfinding Information

Questionable whether location of current City wayfinding structures are most useful locations where people need to make navigation decisions.

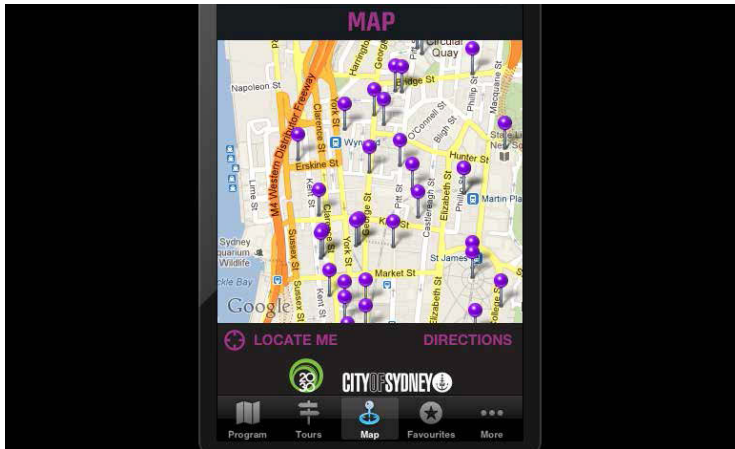


### Poor Connection to the City and Villages

Existing wayfinding systems do not connect journeys into and across the City. From the City Centre there is little information to connect to villages.



Background Research and Site Evaluation provides a review of current wayfinding conditions. Key conclusions are:



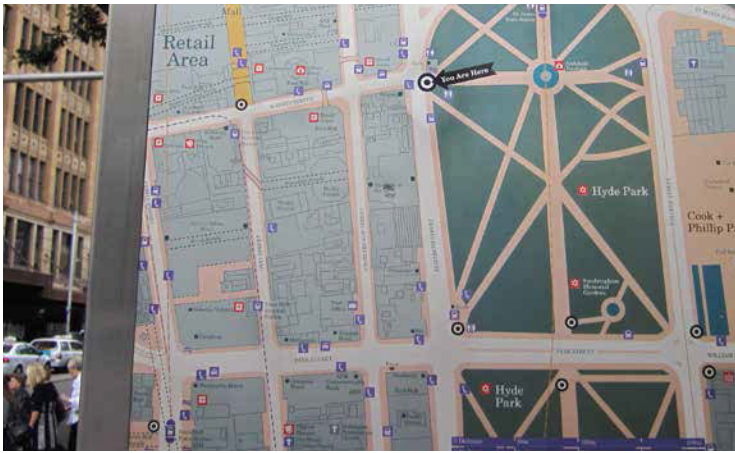
Need to Embrace Technology

Advances in digital technology will direct a rethink on how cities provide wayfinding information in the public domain.



Usability

Printed material is inconsistent, creating a sense of disorder. There is little use of 3D graphics which would enhance mental mapping.



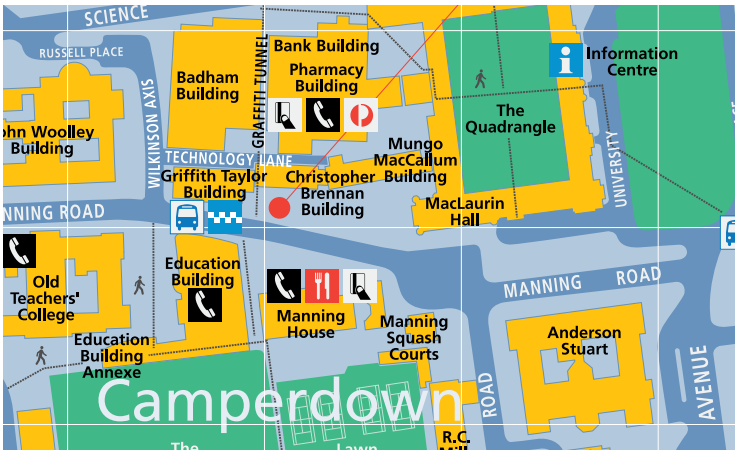
Outdated Information

Current information on some wayfinding signage requires updating to be relevant and useful. Information needs regular updating.



Use of Landmarks

People use landmarks and visual cues to get around – these need to be considered in developing the system particularly the map graphic.



Maps

Maps are an important wayfinding tool.



# Strategic Framework

## 1.0 Introduction

Legible Sydney is a wayfinding project designed to provide a system of consistent information throughout the City of Sydney to promote informed journeys for pedestrians. The system will offer benefits for our transport system, for public health, the economy, tourism and the environment.

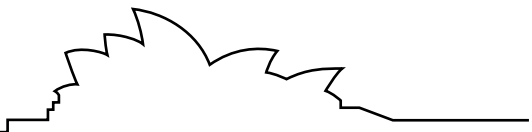
The purpose of the strategic framework is to provide an overview of the Legible Sydney system kit of parts, place naming, route planning and information component placement.

For residents, visitors and commuters a coherent wayfinding system throughout the Sydney LGA is paramount. The system requires two conventions – ie. naming and placement policies; and visual information such as maps and signs.

The principal requirements are:

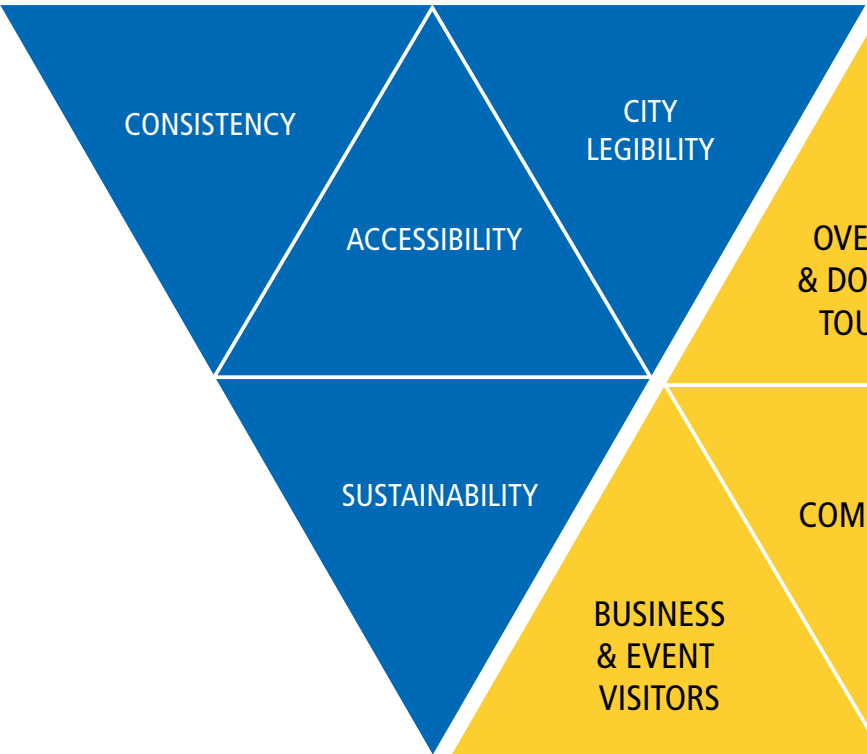
- Enabling pedestrians to assess and plan (to “understand”) their journeys and find their way about at street level with ease and confidence;
- To help build up and reinforce an effective and reliable cognitive map of Sydney for pedestrians;
- To create a common and constantly updated central information system flexible enough to be applied in all relevant forms and media, such as maps, signs and websites;
- Provide the information overlay to the Liveable Green Network across the City of Sydney local government area.



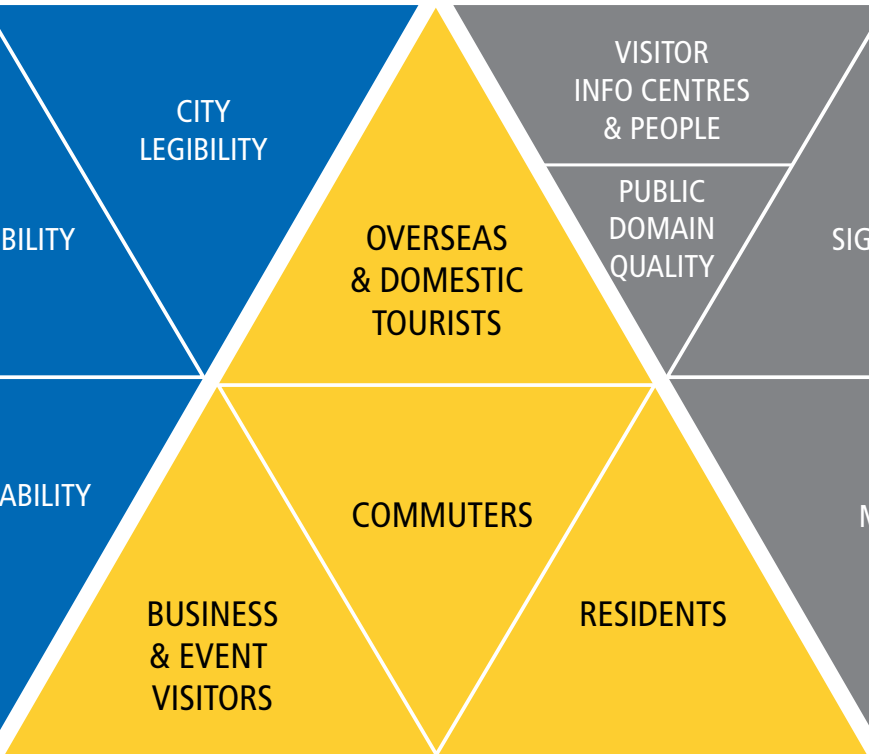


2.0 Strategic Framework

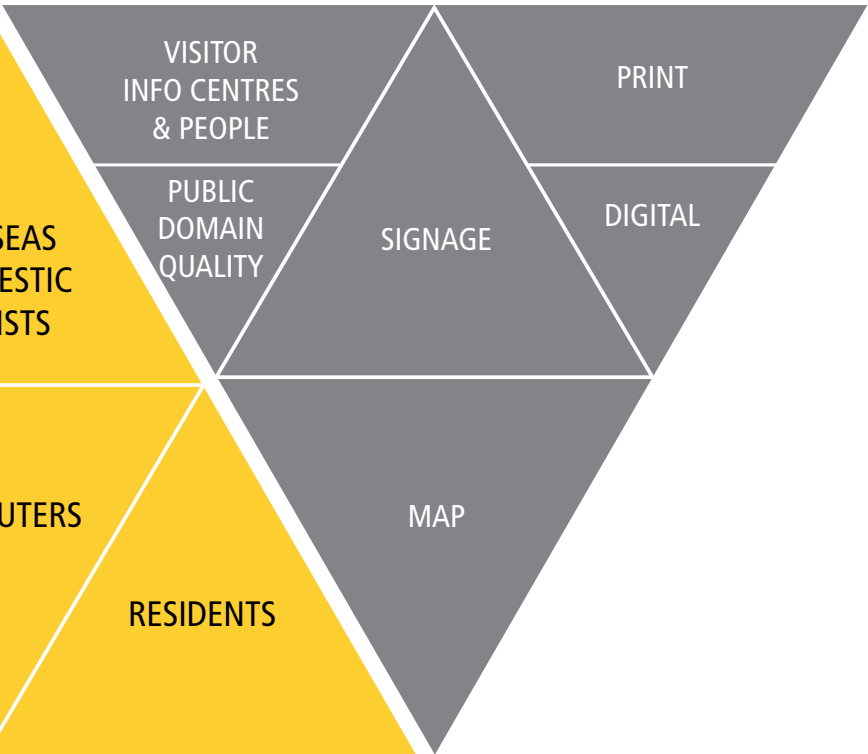
2.2 Strategic Directions



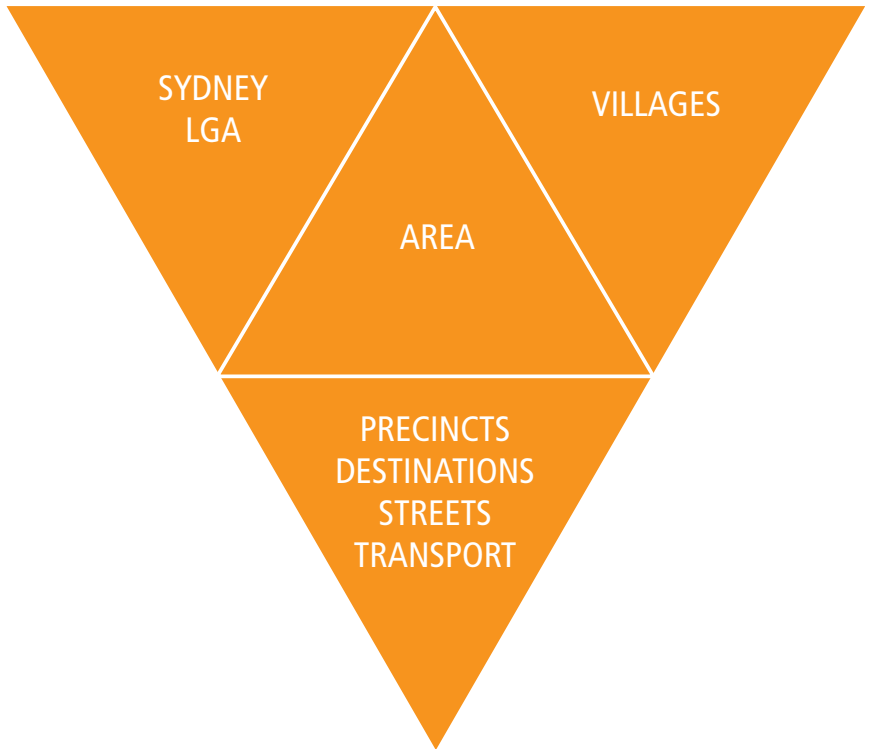
2.1 Users



2.4 Wayfinding System Components



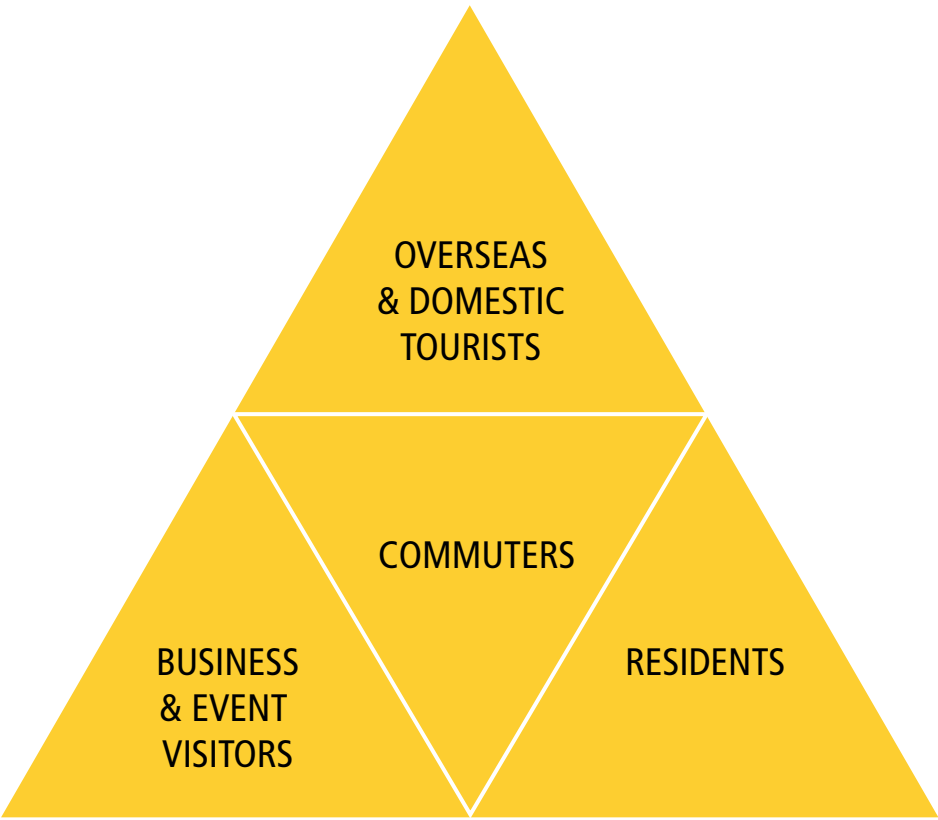
2.3 Environment  
Place Hierarchy



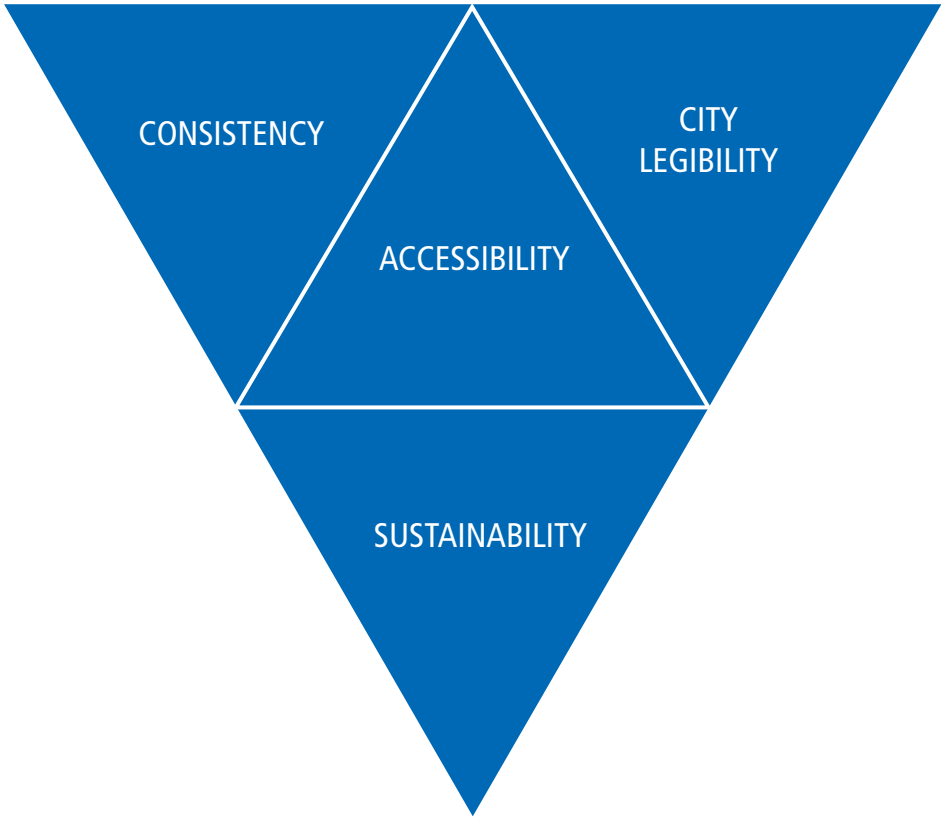
2.1 Users

Legible Sydney is for all travellers, it is inclusive and spans the entire LGA. Whether a user has prior knowledge of an area or not, the system is a support for orientation and travel and reaching a destination. The system allows for different abilities of wayfinding processing, such as cognitive mapping and point-to-point navigation.

The system is part of the legible layer of the city, a consistent network of visible information which keeps visitors assured of their location and proximity to destinations.







Consistency



Accessibility



Sustainability



City Legibility

## 2.2 Strategic Directions – Consistency

### Principles

#### Consistent Design Language

Consistent design of the signage elements creates references for pedestrians not unlike street signs for vehicular traffic.

In this context the sign elements appear as part of a system in terms of visual language and nomenclature.

#### Sign elements familiarity

The sign elements are identifiable by the modular character of the system and its parts, by colour, proportions, graphics and features.

#### Modularity approach

The modularity approach is required to allow for a multitude of applications, based on the need to find a balance between wayfinding needs interfaced with the site condition. For example it is paramount that the location of a sign is evaluated primarily for wayfinding purpose and therefore the sign must be within the expected cone of vision for a person travelling on the route which the sign is intended for.

#### Primary character

The primary character of the system is the main colour, a Sydney specific colour that forms part of the Sydney street furniture language, and one which is suitable as a background contrast for graphics. The overall appearance may not be as conspicuous as the typical public transport marker but it features a colour element which identifies the family of pedestrian signs.

#### Modules form part of the system

Modules are created for practical reasons to make updates feasible but also for use in different applications. Through the overall consistent design, finish, graphics and consistent use of features, the modules form a recognisable part of the system.



Consistency is essential in creating a connected system identity and reinforcing a whole journey approach.



### Accessible and Easy to Understand

The wayfinding system must be as inclusive as possible by providing information in formats accessible to mobility impaired, blind, and low vision users.

## Principles

### Comprehendable

The information content on signs will be logically and clearly structured presenting the information so that it can be recognised, read, understood and compared also in the shortest time possible.

### Pre-Journey Planning

Pre-journey planning is an important part of a inclusive wayfinding system. The map base being developed for this project will provide a starting point for the City to create and maintain effective and consistent web, smart phone “app” and print based planning tools. Additionally to these tools, the City of Sydney will further develop a separate accessible map.



## Principles of Universal Design

### Use of Logos and International Symbols

The language in plain English will be supported with internationally recognisable pictograms. The system will also adopt the standard transport pictograms used by TfNSW.

### Signage Design

The system will be cognisant of current legislation on access and legibility. The design will incorporate principles regarding ergonomics such as viewing distances and lettering size, and placement of information on signs.

Provision for Braille/tactile should be included on pylon sign to provide information on location and orientation.

### Visible and Recognisable

The signage system will be visible and recognisable due to a coherent sign family, consistent placement, and a Sydney specific civic visual language.

### Typeface

Information content will be presented in a highly legible typeface subject to evaluation. It is proposed to use a typeface with a solid track record in signage systems. The typeface will be against a background with a minimum of 30% luminance contrast.

### Languages

For a city wide signage system which has to display a range of information in the expected sequence only one language can be displayed. Other languages can be provided using mobile and digital technology, guides, printed material and visitor information centres.

### Signage Placement

Signs will be placed primarily at decision points and along the routes as reassurance. Signs at destinations will be coordinated with stakeholders, such as transport hubs and precincts. Destination such parks or community centres which belong to the City will be identified with a compatible system.

The placement of signs considers primary and secondary pedestrian flow and primary and secondary sign elements. Signs must always face the traffic so they can be recognised from a distance.

### Ease of Orientation

Orientation is a critical component for visitors to feel comfortable walking through the city. Orientation is enhanced by placing signs consistently along the north-south and consistently along the east-west routes of the liveable green network of the City of Sydney.

Each sign features a location reference at the top of the sign, maps are “heads-up”, consistent with best practice.

Overview maps feature large-scale destination names on all four edges of the map. This will assist in the understanding of the layout of the city.

### Use of Multi Media

Wayfinding information is not limited to signage and can be delivered by additional tools to allow for different needs.

These will include:

- Digital;
- Web;
- Print;
- People;
- Signs.

### Communications & Marketing

A comprehensive information campaign is required to inform residents, commuters, visitors and tourists of the system. Residents and commuters will be informed through printed and online newsletters about the upcoming system and prior to and during rollout of signs to areas and routes.

A short pilot route will be identified in the study areas to test the various sign types. The City of Sydney will conduct the test and evaluate responses by the users for further refinement of the system.

Visitors and tourists will be made aware of the system through tourist information offices and printed material.

### Training

The City of Sydney will conduct training for visitor information staff and call centre operators so they are fully aware of the system and can respond precisely to questions.

## 2.2 Strategic Directions – Sustainability

### Principles

#### Quality and Life cycle

The sign system must be viewed as an investment to a long-term objective. A balance has to be achieved to:

- address the needs for frequent updates of information to keep the system relevant for users;
- maintain the appearance of signs to a high level and repair damage;
- maximise the lifespan of the system.

Sign components which are more exposed to potential damage, such as the lower parts and the sides form a permanent protective frame, while modular graphic panels are more frequently replaced due to updates and potential graffiti and vandalism.

#### Cost-effectiveness and updates

Cost savings for the system can be achieved through a specific method of fabrication, assembly, installation and fixing.

The rollout programs will need to be significant enough in size to be feasible.

The city must establish a register of all signs from the start so that updates and maintenance programs can be undertaken with minimal logistic requirements.



A sustainable wayfinding system is planned for the long term, cost effective and easily updatable requiring minimum maintenance.





Public domain improvements such as streetscape upgrades, public art, public space design, public domain furniture and landscape treatments will:

- Create a sense of place;
- Reconnect places;
- Reinforce character, identity and visitor navigation;
- Improve connections between neighbourhoods;
- Enhance linkages between destinations;
- Strengthen city legibility;
- Support intuitive wayfinding;
- Provide elements that form a strong mental image for people, contributing to the formation of a “mental map” of the city.

#### Principles

- Reduce clutter to strengthen views and vistas;
- Consistent use of materials / furniture;
- Create distinctive places;
- Reinforce city structure;
- Public art;

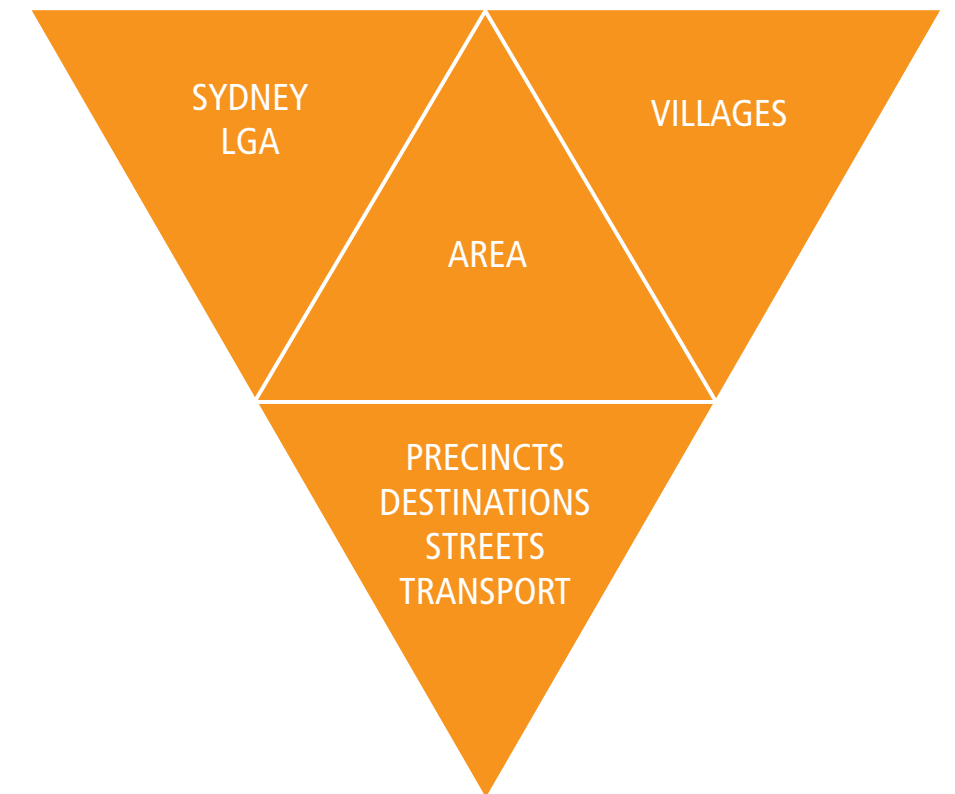
Use of public art to create distinctive landmarks which assist in navigation around the city as well as reinforce selected routes.

## 2.3 Environment – Place Hierarchy

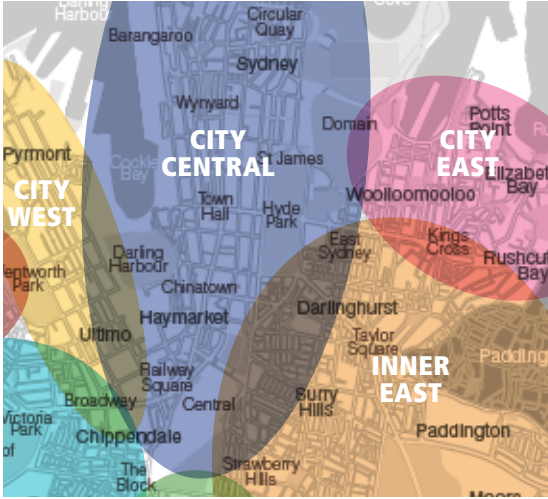
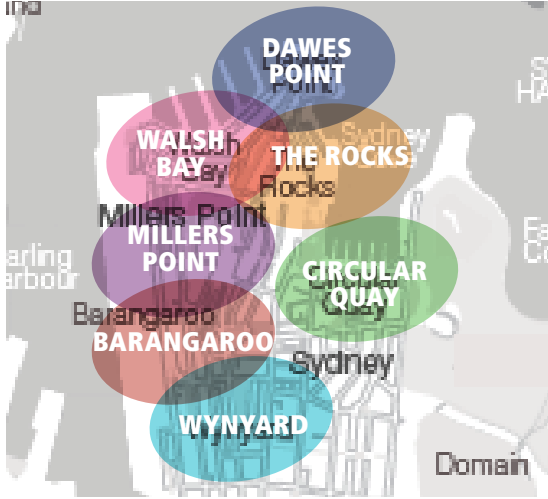

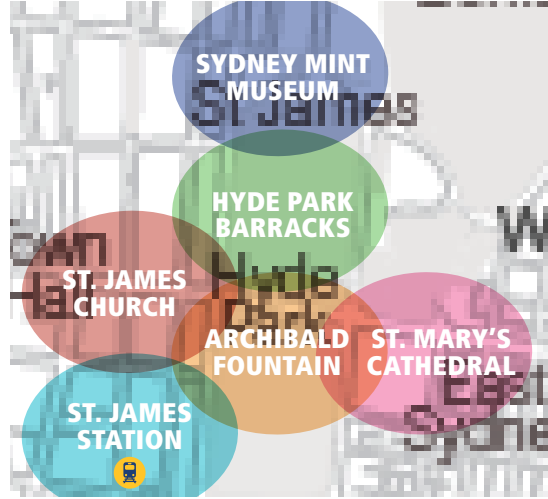
Place naming is critical for a wayfinding system, which shares an environment with other signage programs, with websites, downloadable applications, printed maps and guides. The convention for place naming must be based on a coordinated effort between City of Sydney and stakeholders. Place names are ordered according to scale from the macro to the micro level.



- **City Central**  
 City Centre, Haymarket, Chinatown, Millers Point, Dawes Point, The Rocks, Walsh Bay, Circular Quay, Darling Harbour.
- **City East**  
 Woolloomooloo, Potts Point, Elizabeth Bay, Rushcutters Bay, Kings Cross.
- **Inner East**  
 Darlinghurst, Surry Hills, Redfern East, Moore Park, Centennial Park, Paddington
- **Inner South**  
 Redfern, Waterloo, Eveleigh.
- **City South**  
 Alexandria, Zetland, Beaconsfield, Green Square, Rosebery, St Peters.
- **Inner West**  
 Camperdown, Chippendale, Darlington, Erskineville, University of Sydney, Newtown.
- **North West**  
 Glebe, Forest Lodge, Annandale – East of the Crescent
- **City West**  
 Pyrmont, Ultimo, Broadway

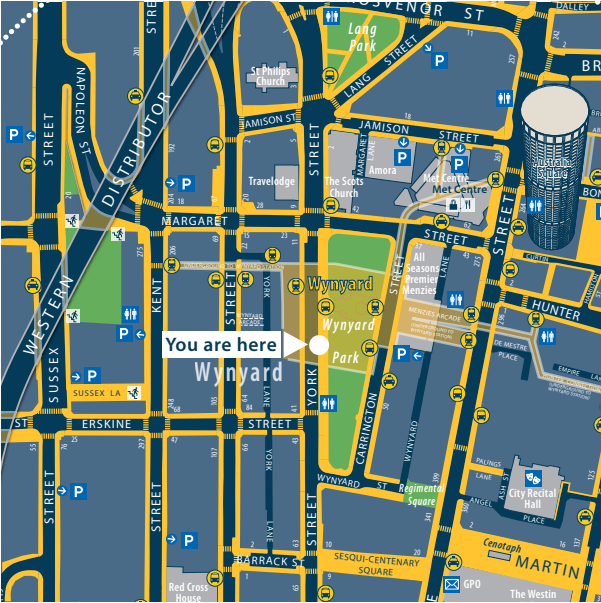




1. LGA	2. Areas	3. Suburbs, Precincts & Villages	4. Neighbourhoods	5. Destinations & Transport Hubs
City of Sydney LGA.	Names of Areas within the LGA such as City Central, City East etc.	Names of suburbs such as Chinatown, Millers Point etc. Precincts such as Darling Harbour and future Barangaroo fall into this category. Villages such as Oxford Street, Millers Point etc. A village may be a suburb but it is also a street.	Names of destinations such as parks, squares, lanes, streets.	Names of destinations such as parks, buildings, structures.
Not named.	<div>Named on:</div> <ul style="list-style-type: none"><li>overview map.</li></ul>	<div>Named on:</div> <ul style="list-style-type: none"><li>overview map;</li><li>detail map;</li><li>pylon sign;</li><li>blade sign;</li><li>fingersign.</li></ul>	<div>Named on:</div> <ul style="list-style-type: none"><li>overview map;</li><li>detail map;</li><li>pylon sign;</li><li>blade sign;</li><li>fingersign;</li><li>destination marker.</li></ul>	<div>Named on:</div> <ul style="list-style-type: none"><li>overview map;</li><li>detail map;</li><li>pylon sign;</li><li>blade sign;</li><li>fingersign;</li><li>destination marker.</li></ul>
				
Sydney LGA	Areas	Suburbs, Precincts & Villages	Neighbourhoods	Destinations

2.4 Wayfinding System Components

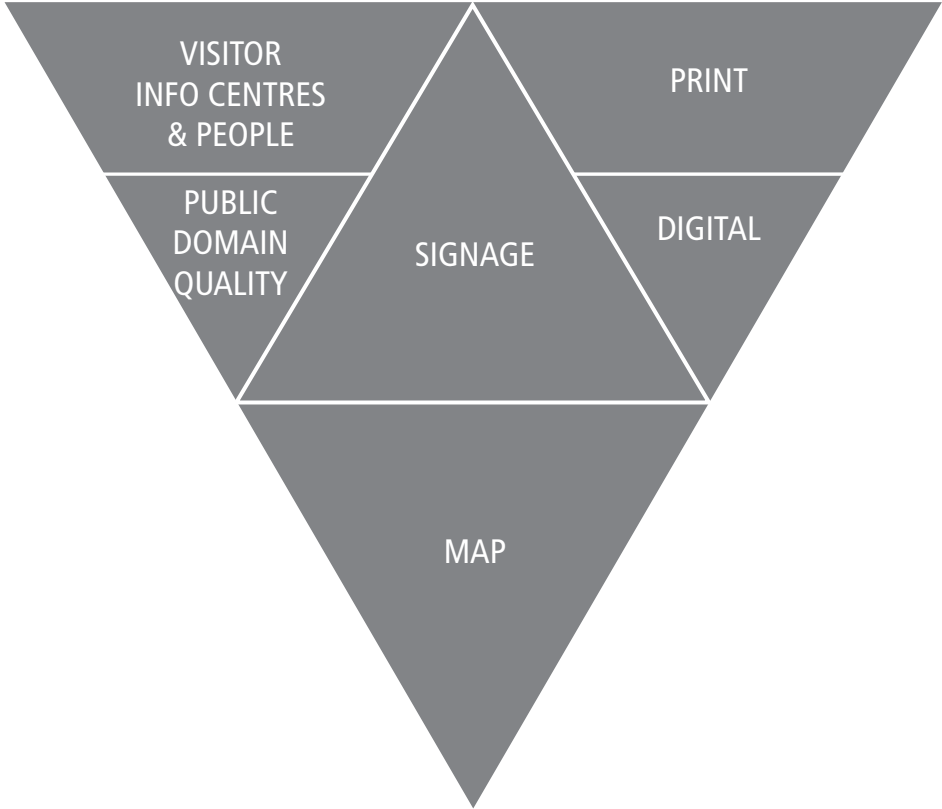
Map



Digital



Printed



People



Public Domain Quality



Signage





## 2.4 Wayfinding System Components – Fitting Into People’s Journeys

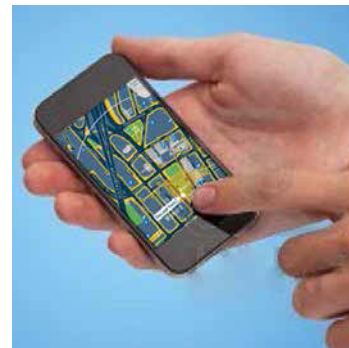
### Pre-journey planning

- Web Based Planning
- Print Based Planning



### Personal tools

- Printed map
- Guide with map
- Mobile Phone Application

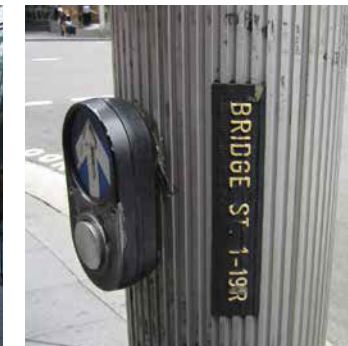


### Transport network

- Maps
- Directional Information



### On-street



The sign system is part of an overall system for its users. The system assists with pre-journey planning with a dedicated website. Personal tools may be used such as printed maps, guides and mobile phone applications.

On street the system is visible through its physical applications. Maps and directional information interface with transport hubs, on-street transport facilities (such as bus stops), City of Sydney on-street facilities such as twin phone booths (where only one phone is installed) and tourist information kiosks (on the external side of doors, after closing time).



2.4 Wayfinding System Components – Existing Elements & Planning Tools

Interface with Wayfinding Systems by Other Authorities

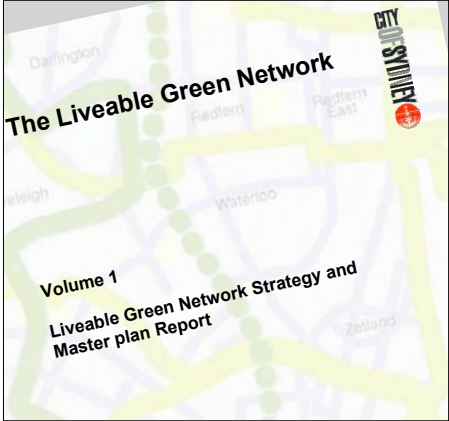


Use of Legibility Cues

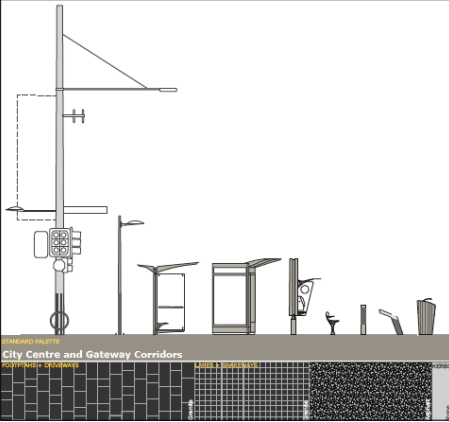
- Public Art
- Landmarks



Interface with Other State Government and City of Sydney Strategies



Coordination with existing City of Sydney Signage Systems and Materials/Colour Palette



Interface with Public Transport Wayfinding System

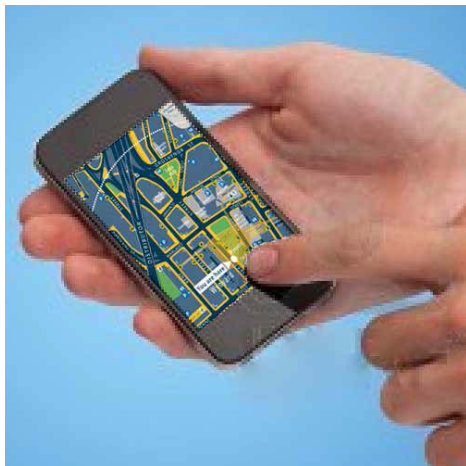
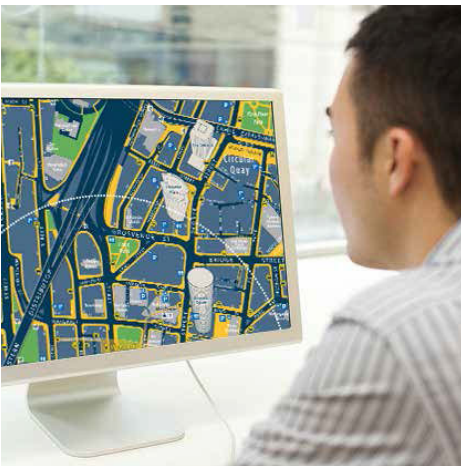
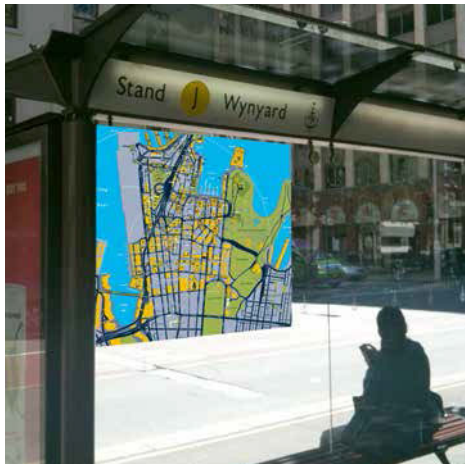


Clutter Reduction





2.4 Wayfinding System Components – Mapping



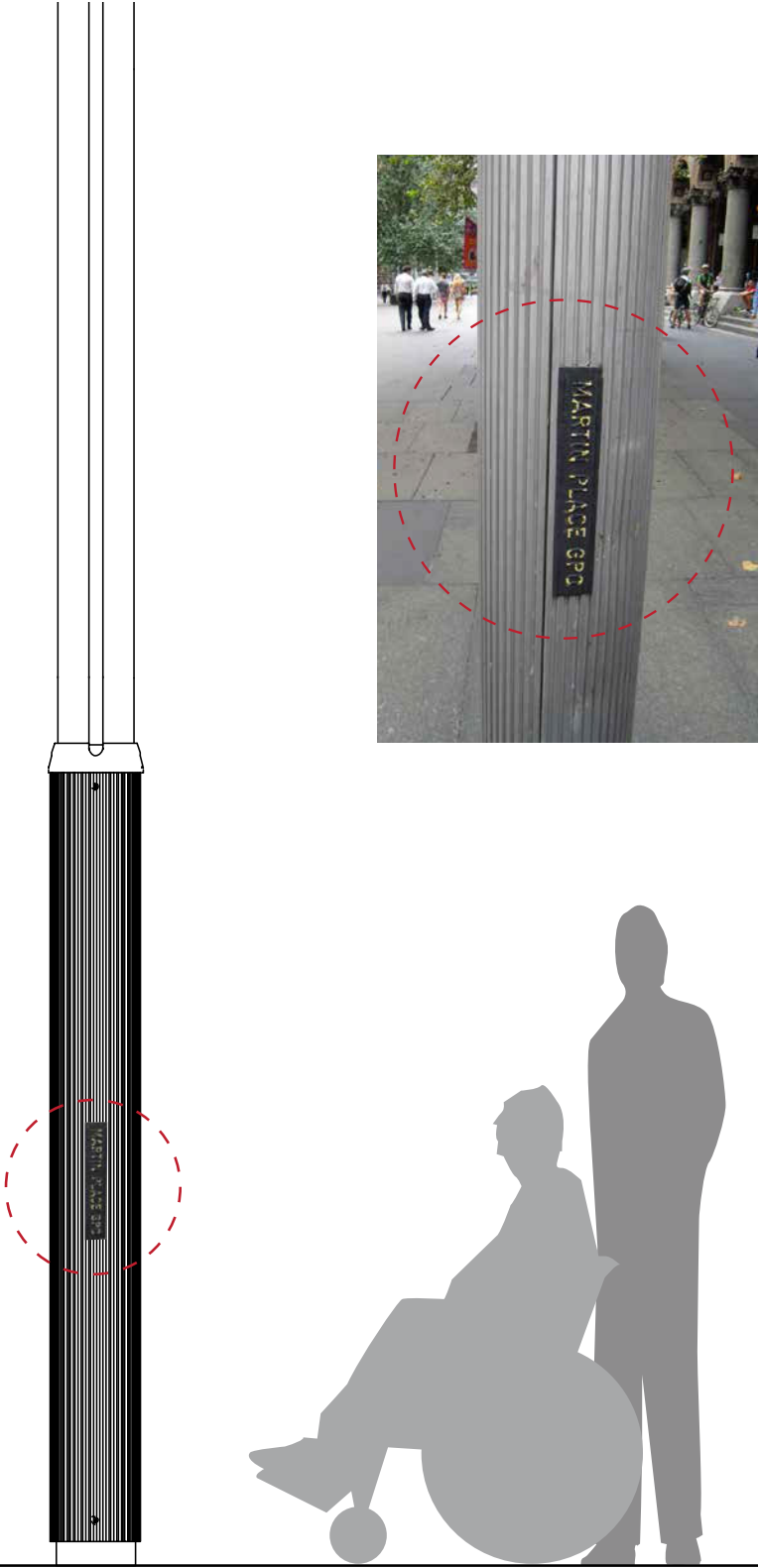
Legible Sydney Map

The mapping graphics will be a legible graphic interpretation of the city, featuring all relevant elements and walking circles indicating the average time it takes to walk the distance from the centre of the circle to its circumference.

The pedestrian map of the city will be available in other media such as guides, leaflet, posters, on-line sources and new technologies.



2.4 Wayfinding System Components – Current Family of Sign Elements



## 2.4 Wayfinding System Components – Proposed Family of Sign Elements

The Legible Sydney signage family comprises 5 sign types. The pylons and dedicated displays feature an overview map and a detail map.

### 1. Pylons – freestanding and surface mounted

The Pylon is used at arrival points near transport hubs, at important nodes, decision points, public places and major destinations. It provides a map with information covering a wide area. The map features a walking circle indicating walking times to nearby attractions and areas. The pylon features information including phone numbers, websites, QR Code, and NFC as well as Braille/tactile contact number and location reference.

Footpath/circulation paths are not obstructed by the signs.

### 2. Flagsigns

The flagsigns are fixed to smart poles and common poles.

They reassure routes with place reference, directions similar/same as displayed on pylons. The flagsigns are posted secondary to the pylon and where pylons are not suitable.

### 3. Fingersigns

Fingersigns are fixed to smart poles, common poles and dedicated poles.

They apply where legibility from a distance is required, and where routes departing from decision points are few.

### 4. Maps

Maps are typically installed to freestanding and wall-mounted pylons.

Maps can also be displayed individually to entries/exits to transport hubs, significant destinations, transport structures such as bus stops, City of Sydney structures such as phone booths, tourist information bureaus and kiosks.

Where space is limited only the detail map will feature.

### 5. Destination marker

A destination marker to a significant park, civic building or place signals the arrival at a destination. It features the name of the destination and relevant interchangeable information. Additionally the marker can feature interpretation about the place (history, flora fauna etc, depending on the destination). The graphics and displays feature on both sides of the marker.

### 6. Interpretation Marker

The interpretation marker identifies a site, a place or a journey. It can be a stand alone marker or in proximity with a wayfinding pylon. The graphics and displays feature on both sides of the marker.

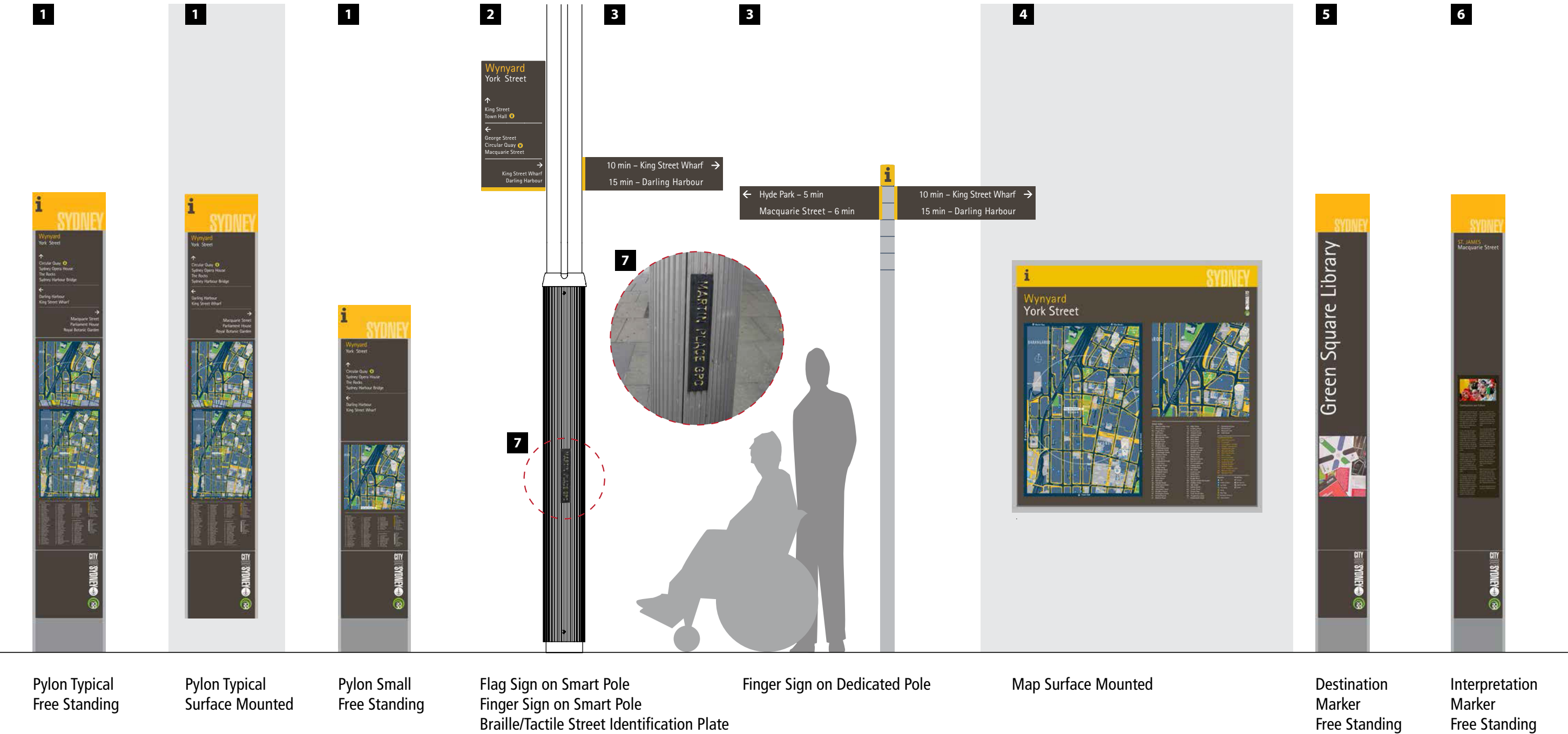
### 7. Braille And Tactile Street Identification Plate System On Smart Poles (2000)

Ideally, a Braille and tactile identification plate will be placed:

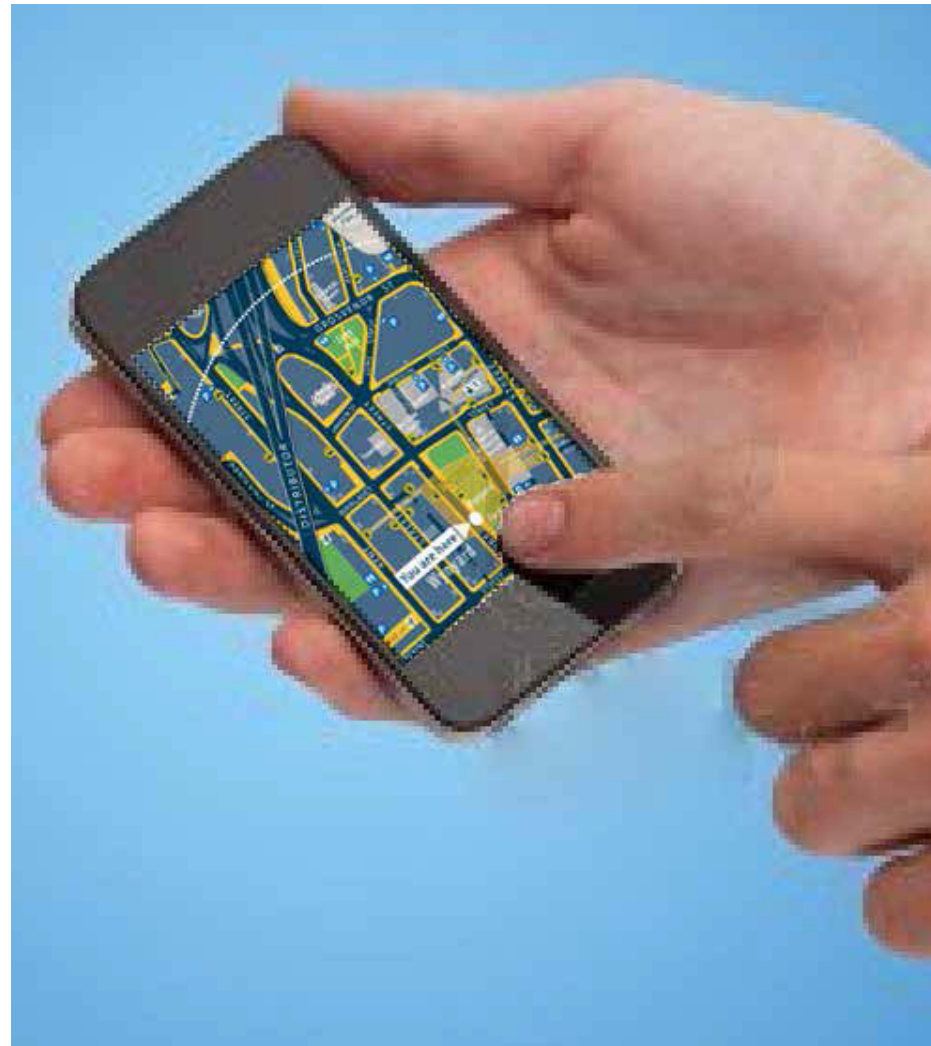
- at predictable points on a path of travel;
- within arms length of a kerb ramp crossing;
- used in combination with audio tactile signal.



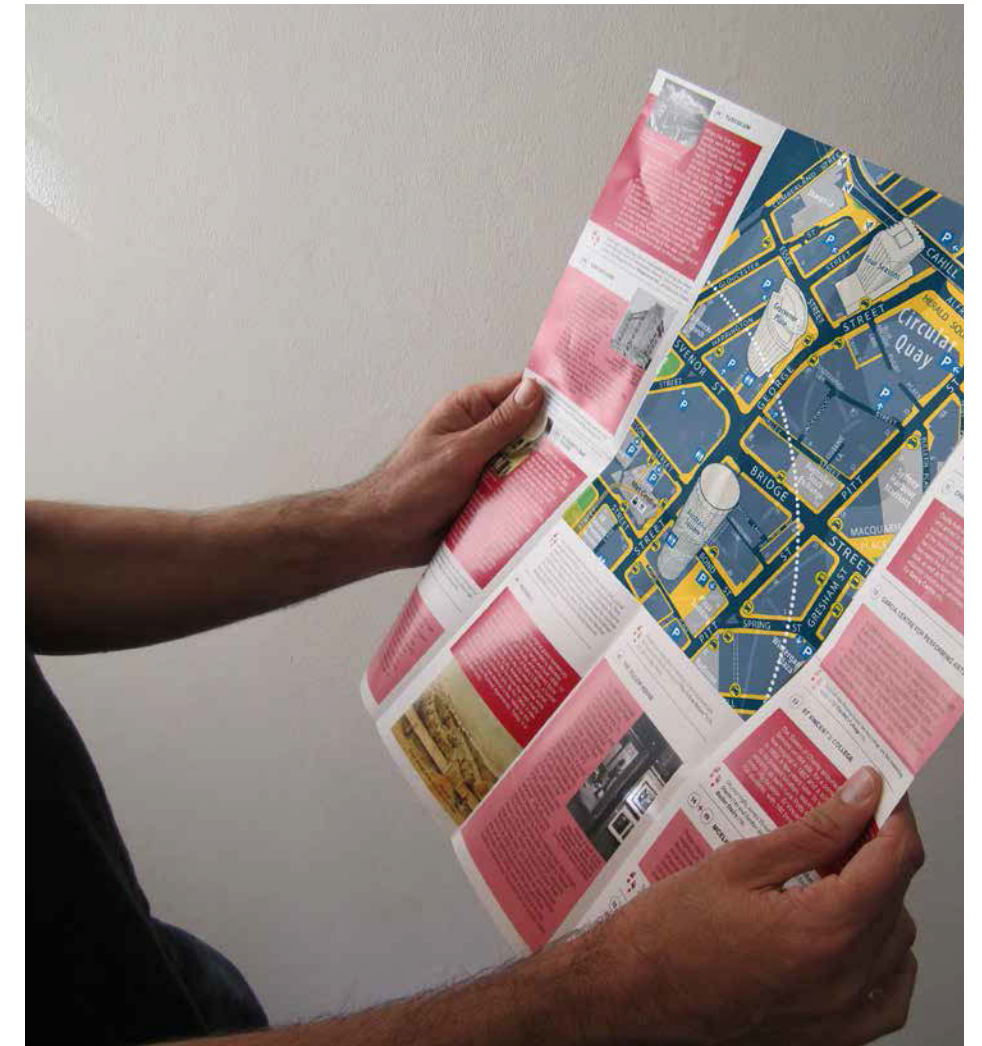
2.4 Wayfinding System Components – Proposed Family of Sign Elements







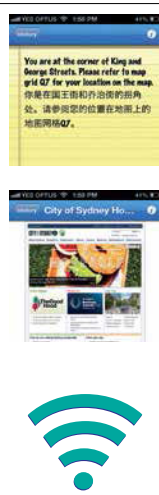

Pre-journey planning and en route navigation is an important part of a successful wayfinding system. The map base being developed for this project will provide a starting point for the City to create and maintain effective and consistent web, smart phone “app” and print based planning tools.







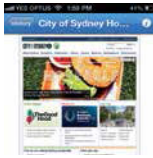



Printed material is essential for pre-journey planning and en route navigation. Many people are not comfortable or are not in a position to use online and smart phone applications. The printed material should make use of the Legible Sydney map style to for consistency and familiarisation.

2.4 Wayfinding System Components – Digital Media

There are a range of digital media applications that are currently available to deliver wayfinding information. The design development stage will scope the most appropriate and effective technologies to be included in the wayfinding system.

Media	Function		Pre-Trip	Real time	Additional Information and examples
QR Codes	<p>A 2D barcode system able to provide short form information or a web link to internet enabled devices via an onboard camera.</p> <p>QR codes can also be customised to incorporate corporate logos which may be an additional revenue generating tool for Council.</p> <p>Examples include:</p> <ul style="list-style-type: none"><li>• QR Codes</li><li>• Microsoft Tag</li></ul>		<p>Text in different languages</p> <p>Web Links (Video, Audio, Text, Maps, Route information, Transport Information)</p> <p>WiFi 3G/4G</p>	<ul style="list-style-type: none"><li>•</li></ul>	<p><a href="http://www.en.wikipedia.org/wiki/QR_code">www.en.wikipedia.org/wiki/QR_code</a></p> <p><a href="http://www.tag.microsoft.com/home.aspx">www.tag.microsoft.com/home.aspx</a></p>
Near Field Communication or NFC Chip	<p>Provides short form information and web links to NFC enabled devices.</p>		<p>Text in different languages</p> <p>Web Links (Video, Audio, Text, Maps, Route information, Transport Information)</p> <p>WiFi 3G/4G</p>	<ul style="list-style-type: none"><li>•</li></ul>	<p><a href="http://www.nfc-forum.org/resources/faqs#howwork">http://www.nfc-forum.org/resources/faqs#howwork</a></p> <p><a href="http://www.tapit.com.au/tapit-work">www.tapit.com.au/tapit-work</a></p>

## 2.4 Wayfinding System Components – Digital Media

Media	Function			Pre-Trip	Real time	Additional Information and examples
Navigation Apps	Provide access to downloadable and real-time maps, destination information, routes and links to 3rd party content. Examples include <ul style="list-style-type: none"> <li>• oMaps</li> <li>• Sydway Walk</li> <li>• City Maps to Go</li> <li>• Art &amp; About</li> <li>• Sydney Guide.</li> </ul>	  	Mapping Real Time Mapping Off-line Location Route Planning Transport Information Destination Information Web Links (Video, Audio, Text, Maps) Off-line content 3G/4G WiFi	•	•	<a href="http://www.itunes.apple.com/us/genre/ios-navigation/id6010?mt=8">www.itunes.apple.com/us/genre/ios-navigation/id6010?mt=8</a> <a href="http://www.google.com/mobile/navigation/">www.google.com/mobile/navigation/</a> <a href="http://www.play.google.com/store/search?q=navigation+app&amp;c=apps">www.play.google.com/store/search?q=navigation+app&amp;c=apps</a> <a href="http://www.windowsphone.com/en-us/store/search?q=navigation&amp;x=0&amp;y=0">www.windowsphone.com/en-us/store/search?q=navigation&amp;x=0&amp;y=0</a>
Web Mapping	Both desktop and mobile internet based mapping services providing access to downloadable and real-time maps, destination information, routes and links to 3rd party content. Examples include <ul style="list-style-type: none"> <li>• Google Maps</li> <li>• Whereis</li> <li>• Apple Maps</li> <li>• Open Streetmap</li> </ul>	  	Mapping Real Time Mapping Off-line Location Route Planning Transport Information Destination Information Web Links (Video, Audio, Text, Maps, Route information) 3G/4G WiFi DSL	•	•	<a href="http://www.maps.google.com">www.maps.google.com</a> <a href="http://www.whereis.com">www.whereis.com</a> <a href="http://www.apple.com/ios/maps/">www.apple.com/ios/maps/</a>
GPS devices	Mobile mapping and navigation aids linked with GPS positioning satellites. Examples include <ul style="list-style-type: none"> <li>• Garmin</li> <li>• TomTom navigation systems</li> <li>• Humanware mobility aids</li> </ul>	 	Mapping Real Time Mapping Off-line Route Planning Traffic Information Weather Information Destination Information 3G/4G WiFi DSL	•	•	<a href="http://www.garmin.com/au/">http://www.garmin.com/au/</a> <a href="http://www.tomtom.com/en_au/">http://www.tomtom.com/en_au/</a> <a href="http://www.humanware.com/en-australia/products/blindness/talking_gps/trekker_breeze/_details/id_101/trekker_breeze_handheld_talking_gps.html">http://www.humanware.com/en-australia/products/blindness/talking_gps/trekker_breeze/_details/id_101/trekker_breeze_handheld_talking_gps.html</a>



## 2.4 Wayfinding System Components – Visitor Information Centres & People



### People

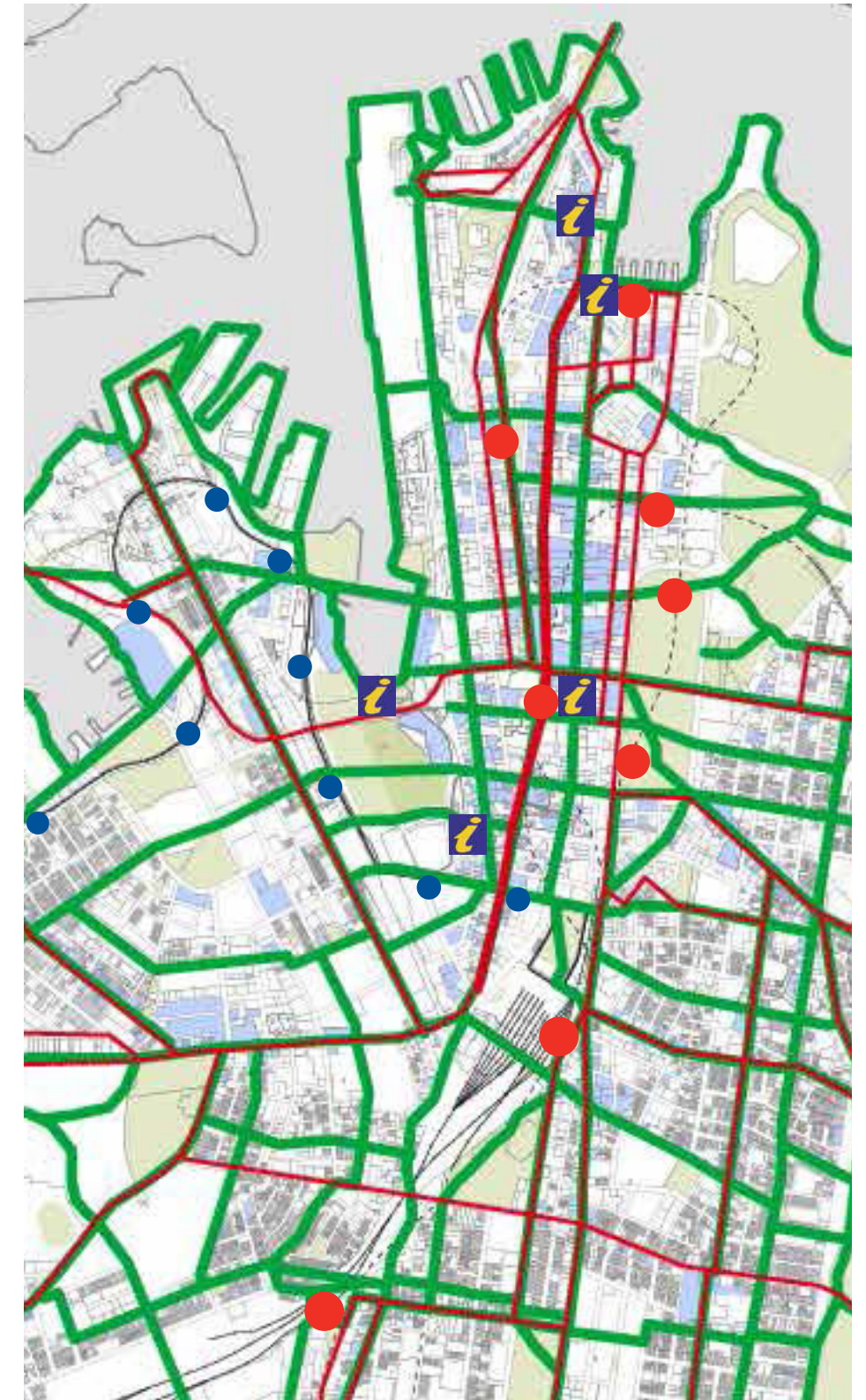
Precinct ambassadors will provide information and referrals in busy city locations. This will help people enjoy what was on offer in the city centre and provide guidance, potentially in more than one language.

Shown are precinct ambassadors in Melbourne.



### Visitor information centres

There are three visitor information centres run by the City of Sydney in Town Hall, Haymarket and Circular Quay. These provide face to face tourist information as well as printed maps and guides. More visitor information centres should be placed throughout the city, located at major attractions and transport hubs.





## 2.4 Wayfinding System Components – Public Domain Quality

### George Street Transformation

Light rail, laneways, retail and night time activity will revitalise what will become a pedestrianised George Street, and legible main street for Sydney.

### Liveable Green Network

The network will improve connections between neighbourhoods, enhance linkages between destinations to improve navigation.

### Public Domain Codes

- Sydney Streets Design Code
- Sydney Street Signage Code
- Sydney Lights Design Code
- Public Domain Furniture Palette

### Public Space Design

Public domain improvements will strengthen city legibility, support intuitive wayfinding and provide elements that form a strong mental image for people, contributing to the formation of a “mental map” of the city.

### Public Art

Public art will create landmarks and reinforce city nodes, paths and edges.





## 3.0 Design Development – Mapping Features

### Key Mapping Features

The features comprise all elements that a typical map would provide but with more details. The map features colours that are clearly distinct from each other and work well in an exterior environment. An extensive key provides a list of street names, key destinations and pictograms with reference to the grid.

### Maps will be displayed in two scales

Map displays typically feature two maps. An overview map based on the LGA base map and a detail map of the immediate area.

#### Overview map

The overview map is a 2D map with the same colours as shown on the detail map. Important buildings and destinations are shown across an approximately 10 – 15 minute walking radius.

#### Detail map

Details include 3D views of important buildings and structures, details related to transport, access (stairs, lifts, pedestrian crossings etc), entertainment, recreation, food, retail and so on. Graphic prominence is given to pedestrian areas (footpath and public domain) on the map.

#### Orientation of map

Maps are orientated to align with the physical environment ahead. The maps may face north, south, west or east.

#### Destinations and Attractions

Major destinations and attractions such as public transport connections and interchange zones.

### 3D Buildings

Illustrations of key buildings to help with orientation. This provides a graphic representation of key landmarks and make the maps more intuitive.

### Pictograms

Use of internationally recognised pictograms and TfNSW public transport services pictograms.

### Typography

Typeface is primarily based on legibility criteria.

### Walk distance / time information

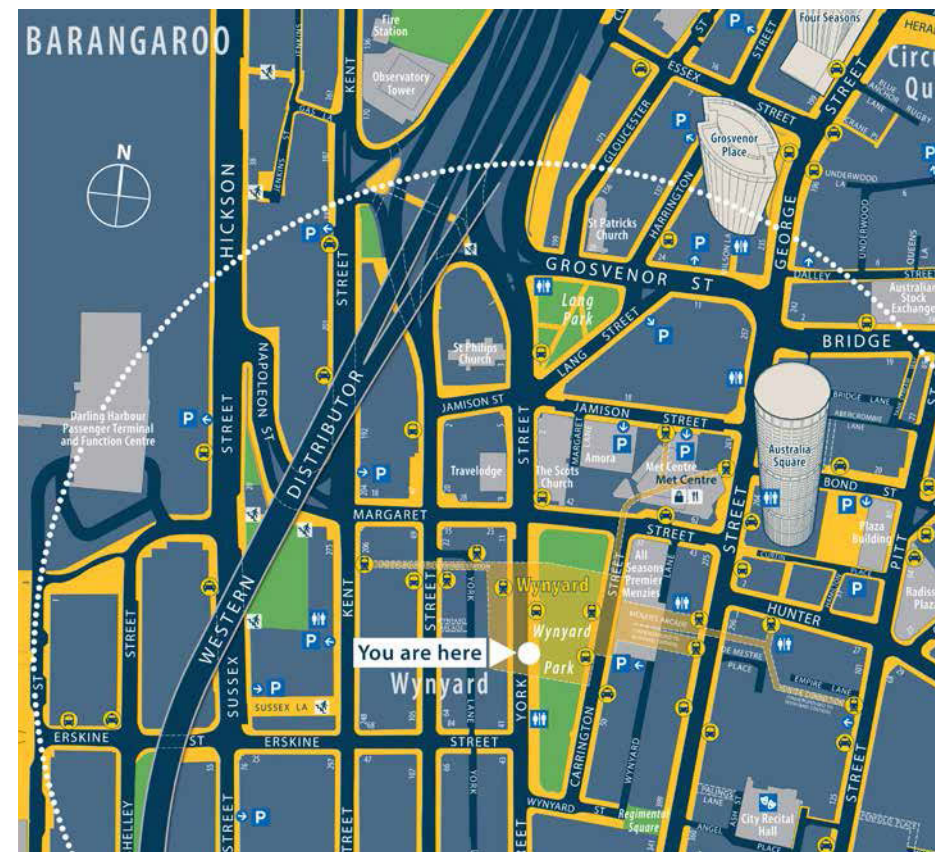
Maps feature a circle that represents an averaged walking radius measured in minutes.

### Maintenance and Update

Map design to allow for updates to show new developments. The map must be current to remain relevant.

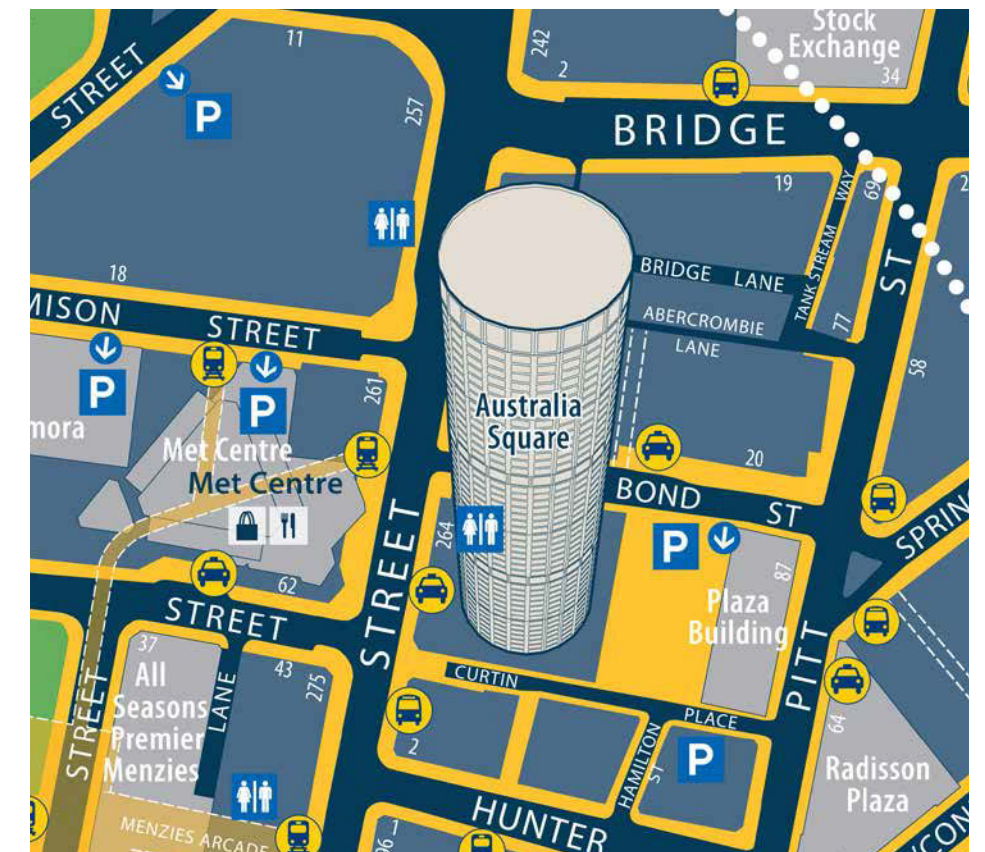
### Map Testing

Undertake suitable trials to test comprehension by users of different abilities, cultural and language background.



#### Overview Map

The overview map is a 2D map with the same colours as shown on the detail map. Important buildings and destinations are shown across an approximately 10 – 15 minute walking radius.



#### Detail Map

Details include 3D views of important buildings and structures, details related to transport, access (stairs, lifts etc), entertainment, recreation, food, retail and so on.



### Design

The design of a sign system is guided by the following key elements:

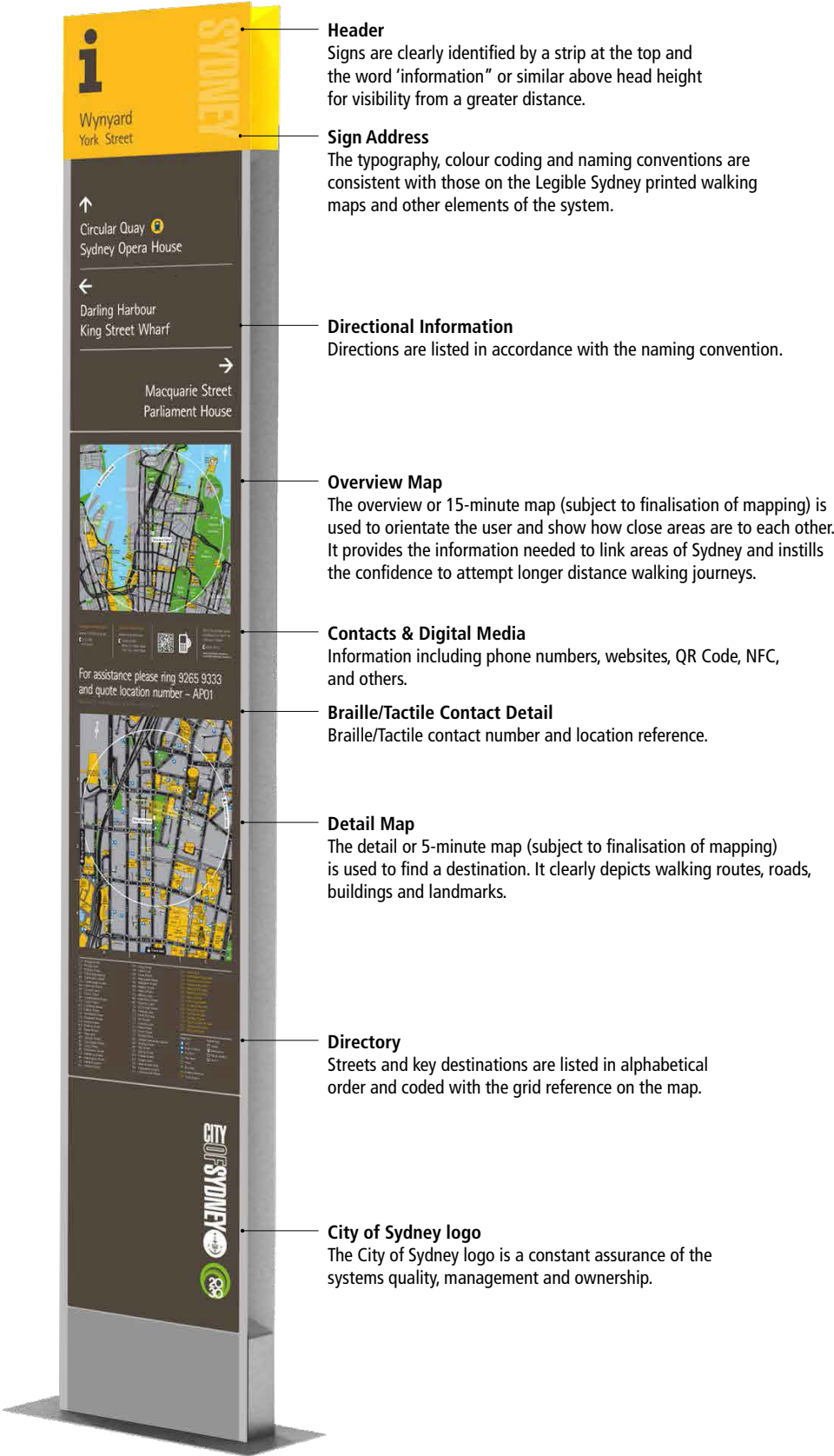
- A complete program of sign types to suit different site conditions and wayfinding needs.
- Allows for maximum application of a minimum of component parts.
- Allows for efficient fixing to existing infrastructure on ground, to surfaces, to smartpoles etc.
- Consistency in materials, finishes and graphic application.
- Strong and durable components to minimise impact from vandalism and accidental impact.
- Cost efficient system of modular components to reduce cost for replacements and updates.
- Provision of a broad spectrum of information on pylons and consistent information on reassurance signs.
- Clear visual identifier for all sign types to provide clear reference to the system.
- A clear Sydney identity through design, finishes and colours.
- Requires only basic maintenance.
- Allows for cognitive mapping and point to point navigation abilities.

Testing with a range of people who are blind, low vision, or mobility impaired will be part of the prototyping/design development process.



3.0 Design Development – Key Sign Components

Pylon signs are clearly identified with a header in a conspicuous colour, the international information pictogram, and the SYDNEY watermark.



The dense urban environment of Sydney features many destinations. A cognitive mapping system provides complex information that is otherwise not possible with a point to point navigation sign system.

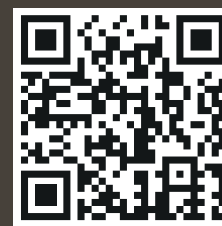
The point to point directions offer immediate orientation and reassurance along the journey.

☎ 131 500  
24 hours

## Tourist Information

www.visitnsw.com

☎ 9240 8788  
Mon-Fri 9am-9pm  
Sat-Sun 9am-5pm



The City values your  
feedback Contact us  
24hours 7days

☎ 9265 9333

[www.cityofsydney.nsw.gov.au](http://www.cityofsydney.nsw.gov.au)  
[council@cityofsydney.nsw.gov.au](mailto:council@cityofsydney.nsw.gov.au)

For assistance please ring 9265 9333  
and quote location number – AP01

**Figure 1.** The number of cases of COVID-19 by age group and sex in the United States, March 2020–June 2022. Data are presented as counts per 100,000 population. The chart shows two distinct waves of infection. The first wave, peaking in early 2020, was characterized by higher rates among older adults and males. The second wave, starting in late 2020 and continuing through 2022, showed a more pronounced increase in rates among younger populations, particularly females aged 18–44 years.

Detail of Braille/Tactile contact number and location reference.



3.0 Design Development – Colour Palette



City of Sydney “Our City, Your Brand”  
Secondary Colour – Sunshine Yellow  
PMS 1235 C  
Proposed colour for Header and key graphic elements.

City of Sydney “Public Domain Code”  
Public Domain Furniture Colour – Precious Metropolis Bronze  
PMS 438C  
Proposed colour for main body of pylon sign & background to all sign types.

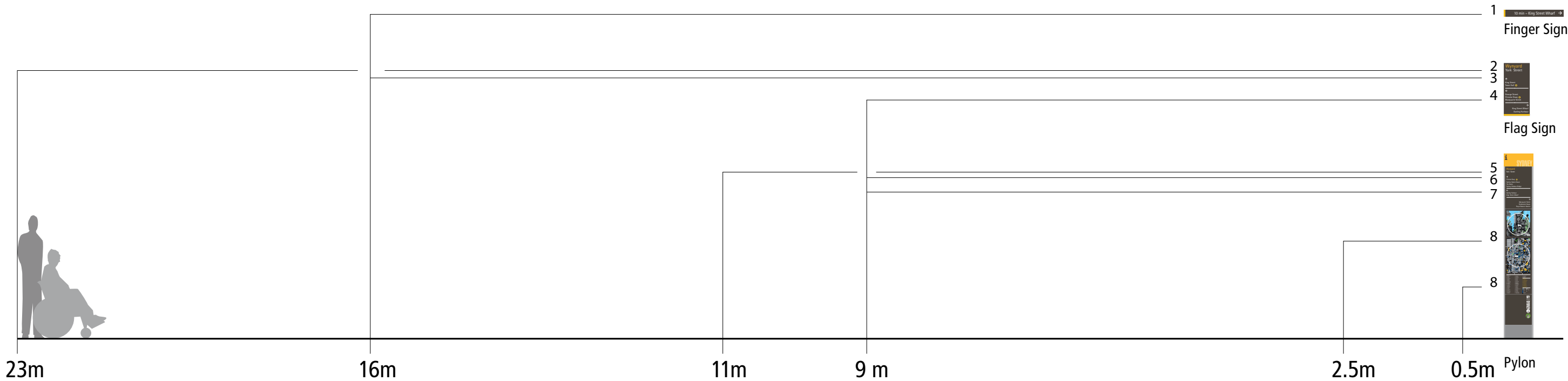
For the signage system to be successful, font style and size, pictogram style and size, colour combinations and contrasts are conceptualised, tested, developed, tested and so on until a a scheme is ready for the mock up/prototype which will be tested by the public.

This section documents testing of viewing distances under typical conditions (daytime) by persons who are not vision impaired.

The typeface specifications that were tested are described on page 45.

Item	Message Component	Signtype	Lettering Height
1	Direction	Finger Sign	40mm
2	Address – first line	Flag Sign	50mm
3	Address – second line	Flag Sign	40mm
4	Direction	Flag Sign	23mm
5	Address – first line	Pylon	27mm
6	Address – second line	Pylon	23mm
7	Direction	Pylon	23mm
8	Map & Key	Pylon	2 – 5mm

All nominated lettering is to feature 30% luminance contrast against background.

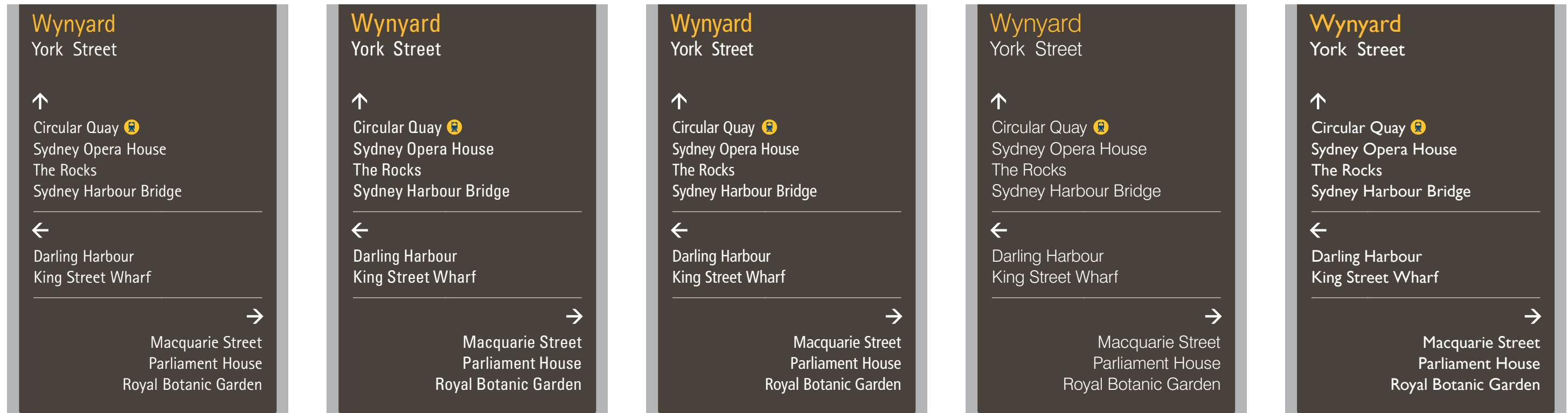




4.0 Signage Information Design – Viewing Distances



Final font selection will be confirmed at the design, testing and prototyping stage. Selection of font type will be based on the principle of readability and best practice in a public domain context. An example of typeface testing is provided below.



1.  
Rotis Sans Serif 55 Roman

2.  
Univers 57 Condensed

3.  
Frutiger Condensed

Swiss 721BT Medium  
City of Sydney – Brand Guidelines 2012  
Not Recommended

Gill Sans  
Current typeface for CoS street name signs  
Not Recommended

Circular Quay  
Circular Quay  
Circular Quay

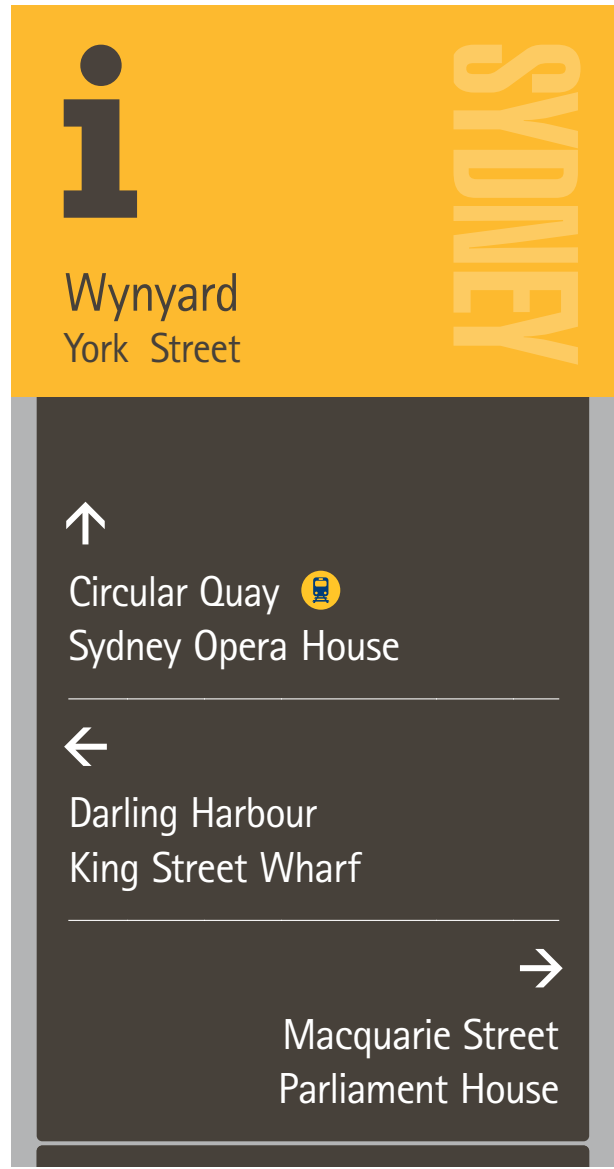
Rotis Sans Serif 55 Roman  
Univers 57 Condensed  
Frutiger Condensed



4.0 Signage Information Design – Consistent Naming Convention

Legible Sydney Naming Convention

Based on a sign at York Street, Wynyard, signface facing South.



Naming Hierarchy

