

ATTACHMENT B

**VOLUME 2:
LIVEABLE GREEN NETWORK – NETWORK
DEVELOPMENT AND ASSESSMENT (WITH
PROPOSED AMENDMENTS)**

The Liveable Green Network

Volume 2

Network Development and Assessment

City Strategy and Design
City Design

May 2011

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INTRODUCTION

Volume 2 provides the background network analysis mapping and assessments carried to develop the Liveable Green Network Masterplan. **Recommendations** for improving the amenity of the city wide components are also detailed in **Section 5.0**.

2.0 NETWORK DEVELOPMENT METHODOLOGY

Development of the Liveable Green Network has involved the following steps:

		Section
	Develop overall Liveable Green Network Objectives	Volume 1 section 1.2
	Assessment of the Sydney 2030 Liveable Green Network Proposal to determine merits of proposed routes;	Volume 2 Section 3.2.6
	Review previous studies and background research that relate to pedestrian and cycle planning for the City of Sydney;	Volume 3 Section 2.1
	Undertake analysis and assessment mapping at City Centre, City Wide and Village Centre levels to determine opportunities and constraints;	Volume 2 section 4
	Development of Route Alignment Principles as a means to assess merits of potential routes;	Volume 1 Section 4 Volume 2 Section 5.2
	Undertake City wide Route Assessments based on Route Alignment Principles that identifies priorities for upgrade and improvements.	Volume 2 Section 5.3
	Development of Networks and route hierarchy mapping based on Sydney 2030 Village Centres .	Volume 2
	Develop City Pedestrian Network master plan .	Volume 1 Section 6.2.3
	Overlay Pedestrian Network Plan and City Bicycle Network Master plan to create a Liveable Green Network city wide network master plan that depicts where pedestrian / cycle routes are aligned or diverge across the Local Government Area.	Volume 1 Section 6.3.5
	Develop Design toolbox of components and materials that will be used to develop the LGN routes.	Volume 1 Section 8

3.0 NETWORK ASSESSMENT MAPPING

3.1 City Centre

In 2007 **Gehl Architects** undertook an extensive assessment and analysis of the city centre pedestrian and public domain environment as part of their **Public Spaces Public Life Sydney 2007** report.

Key findings for the City Centre pedestrian network include:

1. Traffic congestion /pollution;
2. Excessive delays at pedestrian lights;
3. Pedestrian islands- capture zones;
4. High speed traffic;
5. Uninviting laneways;
6. General low pedestrian priority;
7. Street clutter;
8. Crowded footpaths;
9. Crowded crossings;
10. Poor footpath amenity in some instances;
11. Uninteresting streetscapes;
12. Missing links in the pedestrian network;

Mapping carried out as part of this assessment include the following:

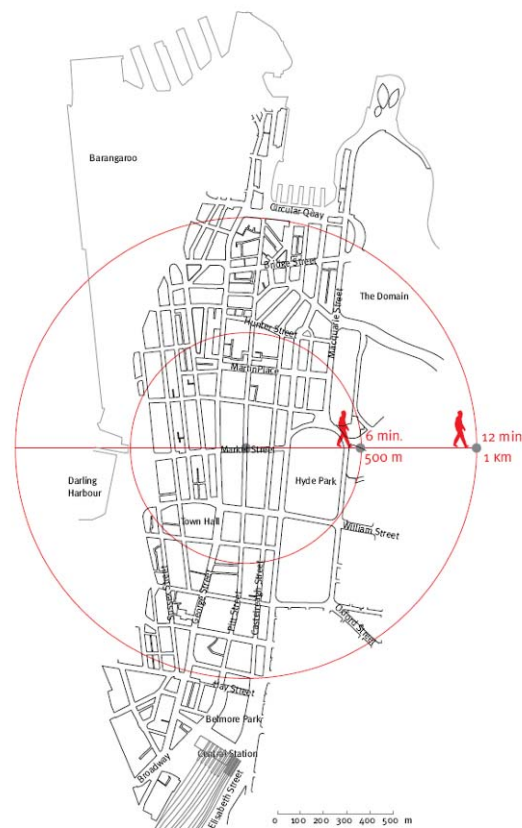
The “walkable” City Centre

The City Centre is **compact and walkable** in an east–west direction.

The illustration to the right pinpoints how easily accessible destinations are by foot within City Centre.

The illustration shows that just 12 minutes of walking can bring you to central locations and as such walking is a realistic mode of transportation.

Most city centres have a size of approximately 1 km² as one kilometre is considered a reasonable walking distance when using the city facilities.

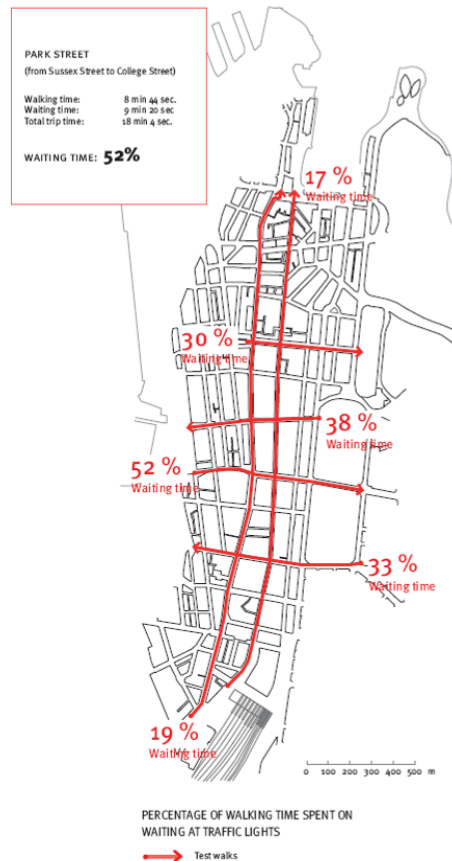


Pedestrian Waiting Times

Traffic signals in the City Centre are focussed primarily on the efficient flow of through traffic, and other modes (pedestrians, cyclists and public transport) are often unnecessarily delayed.

Test walks carried out show a general delay of 30-50 % in the east/ west streets and approx. a 20% delay in the north/ south streets.

A similar survey carried out in Adelaide 2002 showed an average delay of approx. 16%.

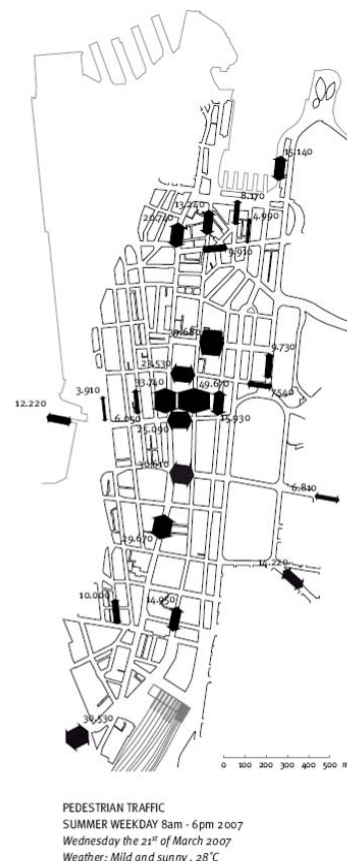


Pedestrian Traffic

The general walking pattern shows that the highest concentrations of pedestrians are to be found in the retail core; **Pitt Street Mall, George Street (between Market Street and King Street),**

Other concentrations of pedestrian volumes are found in **Martin Place, Park Street**, the southern part of George Street and in Broadway, where the students are and where there is commuter traffic to and from Central Station.

In the northern part of the City Centre George Street and **Circular Quay** are the busiest closely followed by Pitt Street.



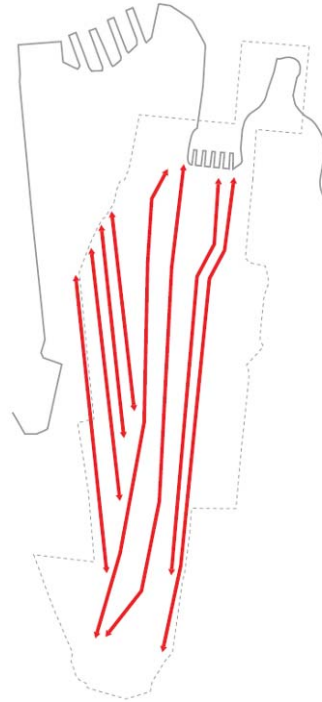
Lack of Street Hierarchy

The roles of City Centre streets are largely **undifferentiated**, all playing a role as **vehicular traffic corridors**, service roads and parking locations

Pitt Street Mall, which is pedestrianised, is different and it does provide a focus for retail life in the central part of the city.

Consequently of the **streets look very alike** and the distinction between them is weak which makes general orientation difficult.

Noisy traffic also impacts on the amenity of the City Centre as a place for walking, resting and enjoying other activities.



a lack of street hierarchy

Topography/ Views

In the northern part of the City Centre where the most steep streets run **east/west**.

All the north /south bound streets are primarily unaffected by any grades decreasing problems created by topography.

The topography strengthens an image of a **strong landscape setting** with a distinct profile offering significant characteristics to the city.

The topography also offers views to the **Harbour Bridge** and the **Harbour** through a selected number of streets.

These views are important in terms of understanding distances, creating a sense of place and in significantly characterising the individual streets.

Some of these views are however blocked by the Western Distributor or by the Cahill Expressway.



Public Spaces

Gehl Architects note that public spaces are scattered and the links in between are weak. There are few dedicated routes for promenading and no dedicated walking links between the various public spaces.

The Gehl Architects report has identified additional areas of attention, in particular the need for a public space improvement strategy which would better characterise types of streets and squares and ensure they offer a variety of settings and activities



OPEN SPACES

- Public pedestrianised streets and squares
- Private plazas
- Public parks

Footpath Interruption

A clear sign of low pedestrian priority is the many minor side streets and delivery lanes which **interrupt footpaths** in all streets. This habit is unfortunate as it forces pedestrians to walk up and down different levels, which is an obstacle for the elderly, people with children and people with disabilities.



Footpath interruptions disturb a comfortable walking environment.
Kent Street



UNNECESSARY FOOTPATH INTERRUPTIONS IN THE CITY CENTRE 231 unnecessary footpath interruptions

- Unnecessary footpath interruption - (Change in level or material)
- Vehicle entrance to building across footpath - (No change in level or material)

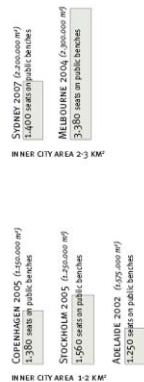
Public Seating

Public seating is only accommodated on streets with sufficient footpath width and public spaces. The majority of seating is located at the northern end of the City.



There is a lack of public seating along all the streets in the City Centre, Drury Street

COMPARISON:
Number of public benches



SEATS ON PUBLIC BENCHES IN THE CITY CENTRE
1,400 seats on public benches in the City Centre

- 1-4 seats
- 5-14 seats
- 15-29 seats
- 30-49 seats
- 50+ seats

Footpath Condition

The current upgraded **granite paving** covers somewhat half of the City Centre but is envisioned to encompass all of it with time.

This will be achieved through a staged capital works program funding and public domain contribution works arising from the development process and as such it is a gradual process



Street Trees

The distribution of street trees is limited in some locations by narrow footpaths/ overhead awnings, and underground services. In some location poor microclimate – shade and wind affect the successful establishment of street trees.



Street Frontage

The streets where active street frontages dominate include the area around **Pitt Street Mall / Pitt Street**, Dixon Street/ Haymarket area, and George Street, but only in sporadic spread.



Evening Activities

The number of **evening activities** and their location are important factors for the vitality of the city and the perception of safety.

If there are few activities or if the evening activities are very concentrated the visitor gets the impression of a deserted city and avoids going there in the evening

Most of the City Centre is relatively quiet in the evenings, with the main entertainment and night activity areas confined to a small area of the city with the main activities as bars, clubs, cinemas, restaurants and retail.

The activity is highly concentrated on **George Street** and spills out onto the side streets, especially side streets down towards **Chinatown**.



EVENING ACTIVITIES IN THE CITY CENTRE
 RECORDED AT 11 PM ON A SUMMER WEEKDAY
 ● Eateries - restaurants, cafes & pubs ★ Entertainment - theatres, cinemas, clubs
 ■ Retail - shops, kiosks, stalls △ Accommodation - hotels, apartments
 ○ 24 hour convenience stores

3.2 Citywide/ Village Centre Assessment and Analysis

The development and assessment of the proposed **Citywide** Liveable Green Network master plan involved the process of overlaying with the following map information so as to develop and test the merits of the proposal

3.2.1 Destinations and Attractors

Mapping and assessing destinations for a pedestrian/ cycle network is an important step in laying out a system that not only provides a means of travel for non-motorized users, but takes these travellers to they live, work, shop, recreate or access local services.

The **City Centre** as a focus of employment, services, entertainment, and education is the most important destination for both City residents and the Sydney Metropolitan Region.

Apart from treating the City Centre as major destination in it own right, major categories of destination types distributed across the City include:

- Population and Employment Concentrations/ Densities
- Village Centres;
- Commercial/Employment concentrations;
- Retail/ Shops;
- Schools and Education;
- Parks and Recreation Facilities;
- Cultural and Community Facilities;
- Public Transport nodes and corridors;

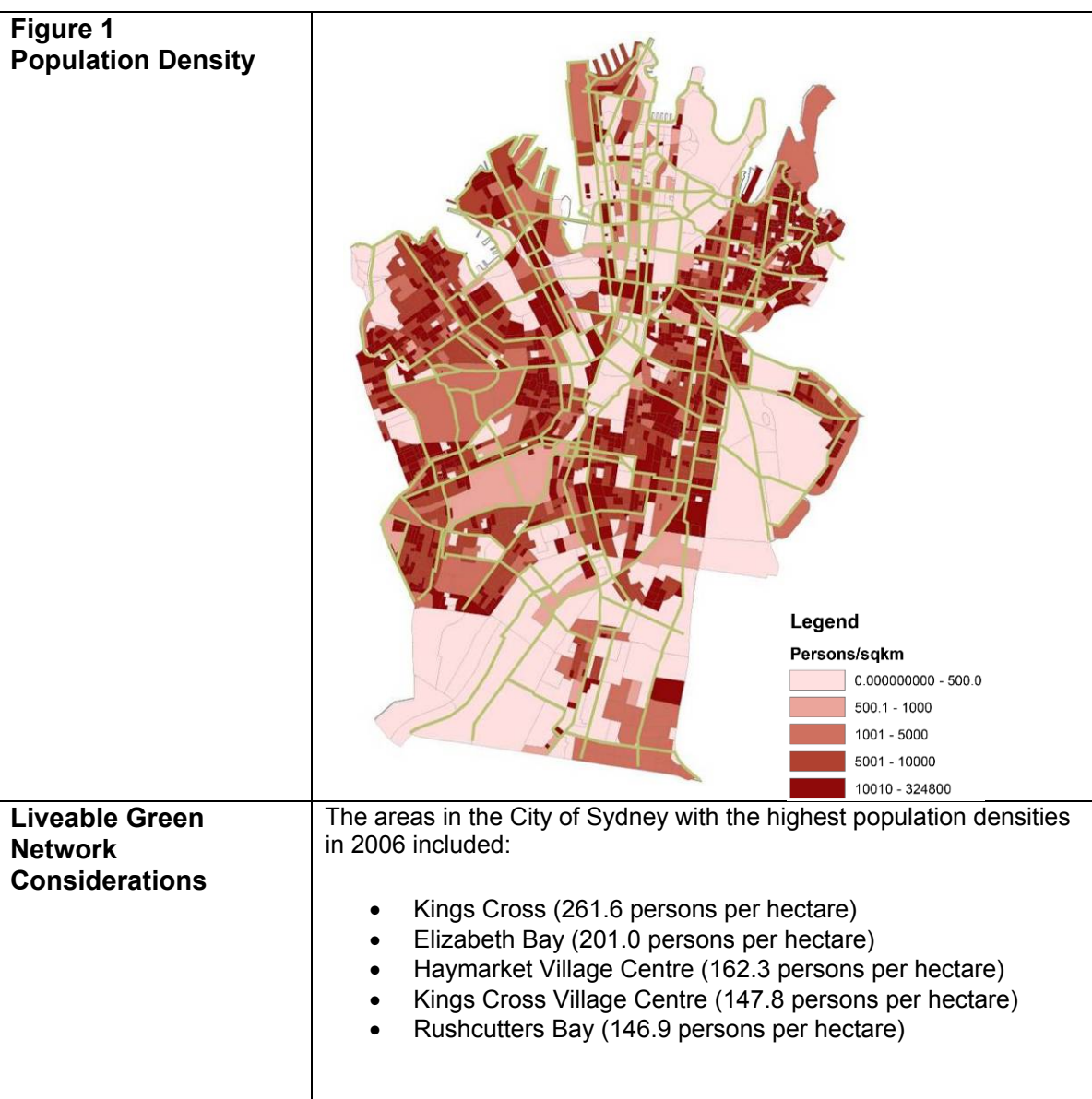
These are mapped and overlaid with the proposed Liveable Green Network masterplan in Figures 1 to 13.

Apart from Southern Industrial area the City area consists of mixed land use precincts and higher densities which have good access to destinations including shops, schools, public transport and other facilities.

The City contains major destinations and attractors including the City Centre, major universities, hospitals, cultural and entertainment precincts. The availability of these facilities and activities at a short distance of people's homes mean that over 70% of trips by City residents are less than 5km in length. (Traditionally viewed as lengths ideal for walking and cycling)

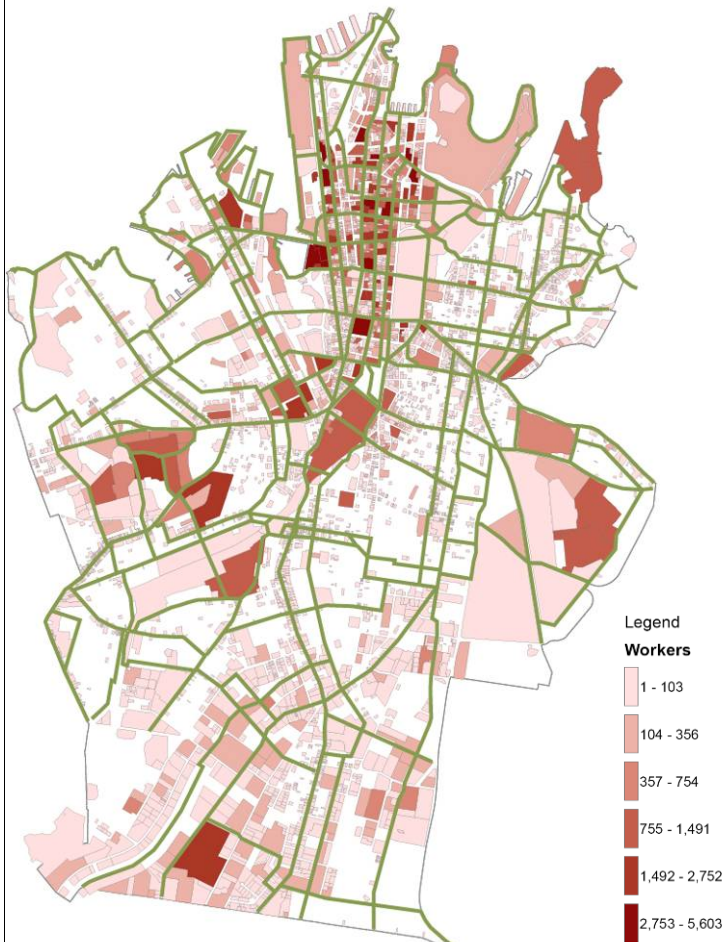
Population Density

In the City of Sydney, the population density in 2006 was 67.5 persons per hectare. This figure was higher compared to the Sydney Statistical Division, which had a population density of 3.42 persons per hectare, (the Sydney Statistical Division however, does include very large areas of non-residential land).



Employment Density

Figure 2
Employment Density



**Liveable Green
Network
Considerations**

The most concentrated areas of employment include the City Centre, Sydney University/ PA Hospital, Pyrmont point, Ultimo educational precinct, ATP site and in the Southern Industrial area and north Rosebery particularly South Sydney Corporate Park.

Public Transport Networks and Nodes

Figure 3 shows the distribution of various public transport networks and nodes overlayed with the citywide Liveable Green Network master plan. Public transport is an attractor and destination for pedestrian activity so it is critical that the Liveable Green Network routes provide convenient and comfortable connections.

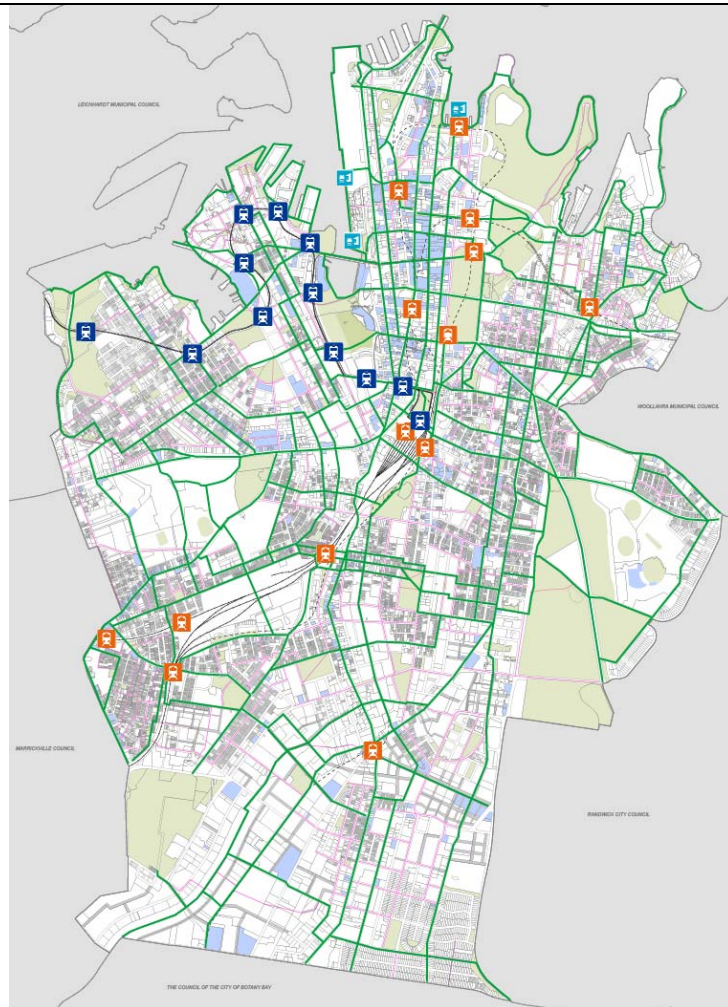
Public transport modes that

- Bus Network;
- Rail Network;
- Light Rail;
- Ferries;
- Monorail;
- Sydney Metro.

(a) Rail, Light Rail and Ferry

Figure 3

Rail, Light Rail and Ferry



Train Station



Light Rail Station



Ferry

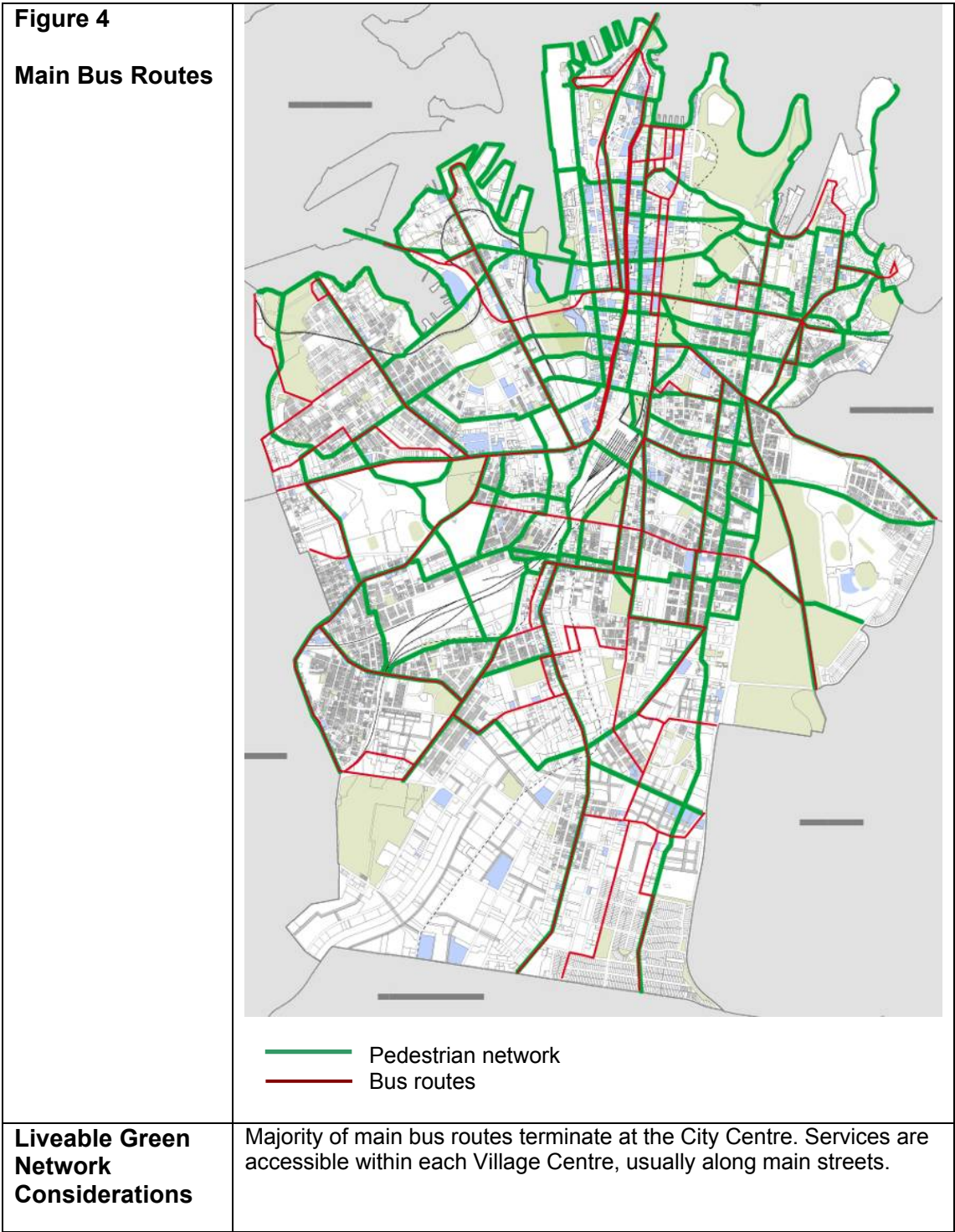
Liveable Green Network Considerations

Railway Stations are located within the City Centre at Circular Quay, Wynyard, Town Hall, St James, Museum, Central, and the Village Centres of Redfern, Newtown, Erskineville, Kings Cross, and Green Square.

Main **Ferry** locations are Circular Quay, Darling Harbour and future stop at Barangaroo.

Metro Light Rail runs from Central Station through Chinatown and Darling Harbour to the Star City Casino, the Sydney Fish Markets and Wentworth Park. Proposed extension of light rail could provide access to Barangaroo, Walsh Bay and along George Street.

(b) Main Bus Corridors



Village Centres

Connecting the Village Centres is an important aim of the Liveable Green Network. Figure XX shows the Villages Centres identified in Sydney 2030 overlaid with the Citywide Network masterplan.



Shops/ Retail

Figure 6

Shops/ Retail



Liveable Green Network Considerations

Main focus of shops and retail are the City Centre and the Village Centre main streets of Crown Street, Oxford Street, Glebe Point Road, Harris Street, King Street/ Erskineville Road, Redfern Street/ Regent Street, and Darlinghurst Road/ Macleay Street. Local shopping strips at Erskineville, Forest Lodge, Darlington, Beaconsfield, and Waterloo are also destinations for nearby residents and workers.

Educational Institutions

Figure 7

Educational Institutions

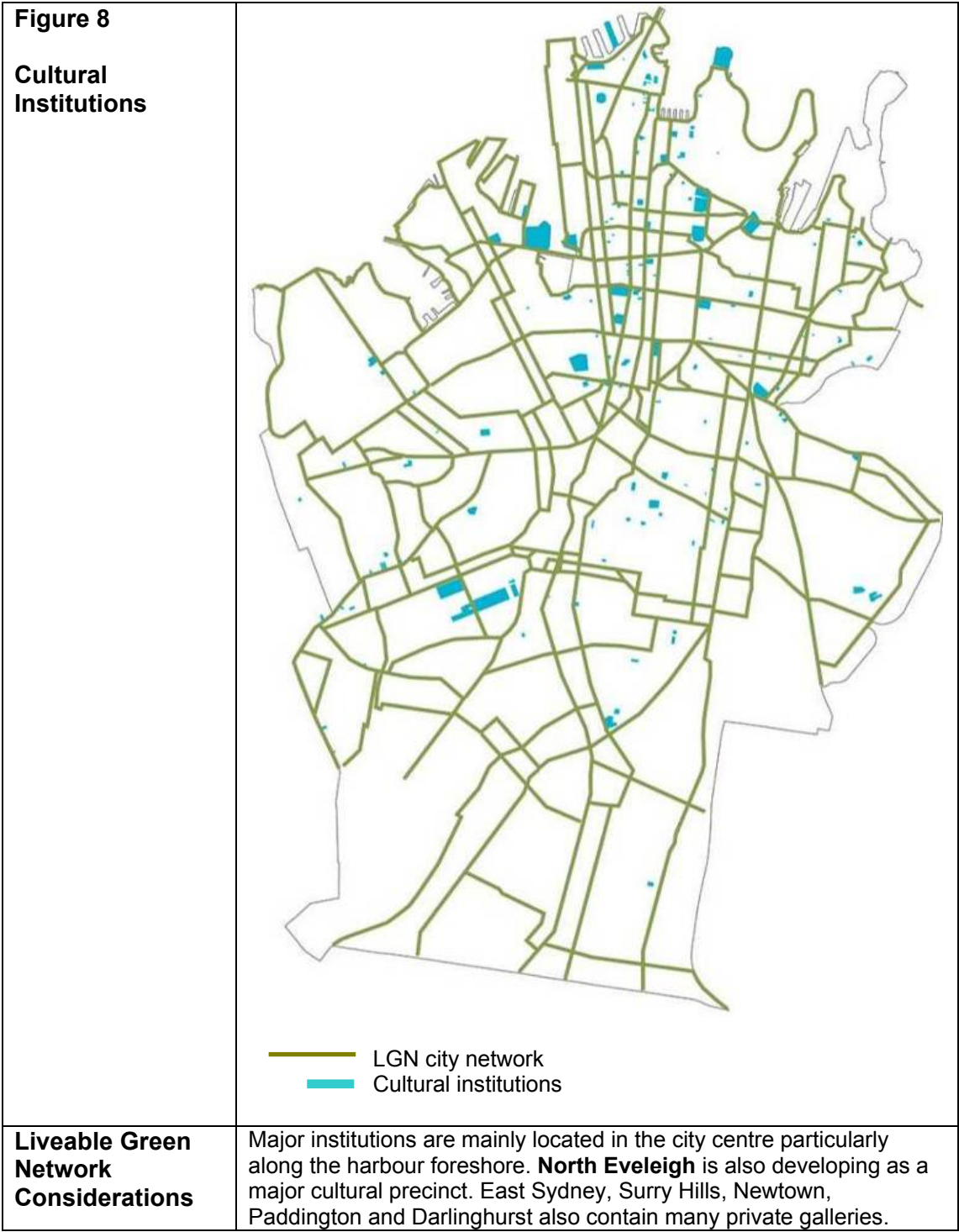


Liveable Green Network Considerations

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.

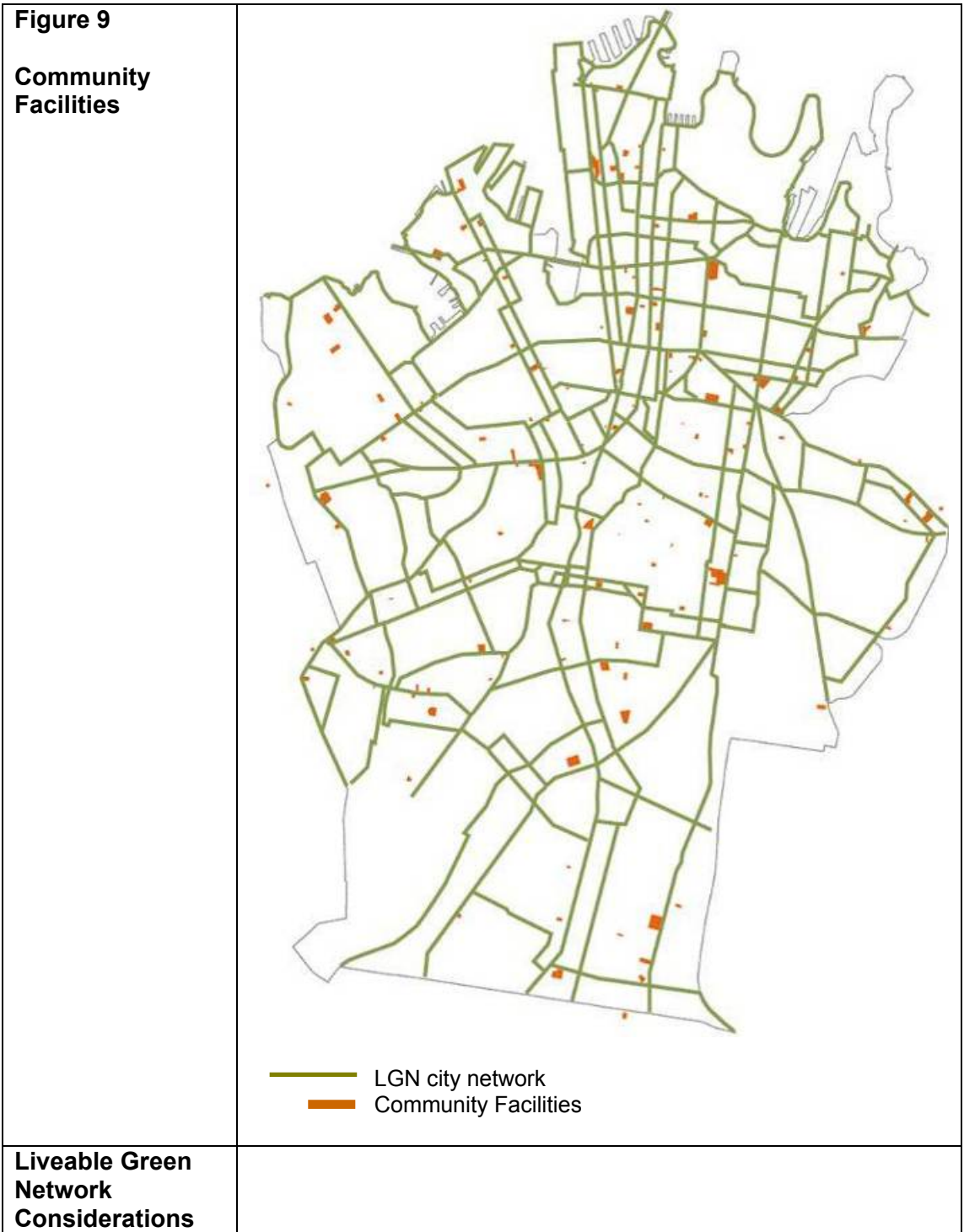
Cultural Institutions

Cultural facilities include the museums, galleries, and theatres.



Community Facilities

City of Sydney community facilities range from Libraries and community centres, child care centres, youth facilities, senior citizens centres and indoor recreation facilities.



Park and Recreation Facilities

Parks and recreation facilities are major attractors for local residents for exercise and rest and as a means of providing convenient through site routes to other destinations.

Figure 10**Park and Recreation Facilities****Liveable Green Network Considerations**

Distribution of the open space and recreation facility network is variable across the local government area however within each Village Centre there is at least one major park that offers a range of recreation opportunities.

Parks that are major attractors from a wide catchment include **Centennial Parklands** which includes Moore Park, Sydney Park, Glebe Foreshore Parklands, Hyde Park, Rushcutters Bay Park, and Royal Botanic Gardens/ Domain. Harbour foreshore parks such as **Pirrama Park** at Pyrmont also draw a wide catchment given its location, and facilities such as unique playground, kiosk/ toilets etc.

Parks that provide major playgrounds and kiosk facilities such as Sydney Park and Pirrama Park attract wider visitation.

Recreation facilities such as the City's aquatic centre and recreation centre are also significant attractors.

3.2.2 Facilities

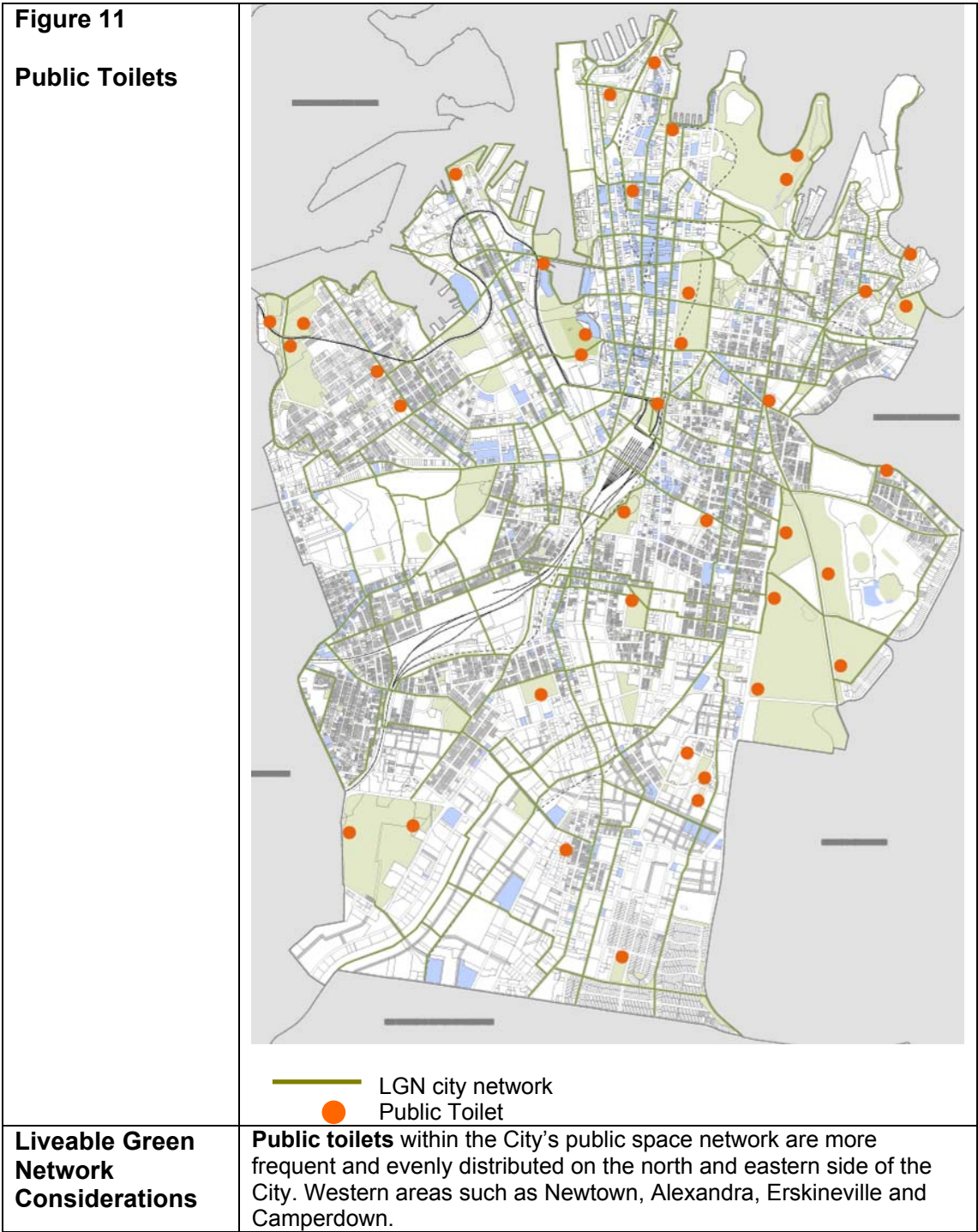
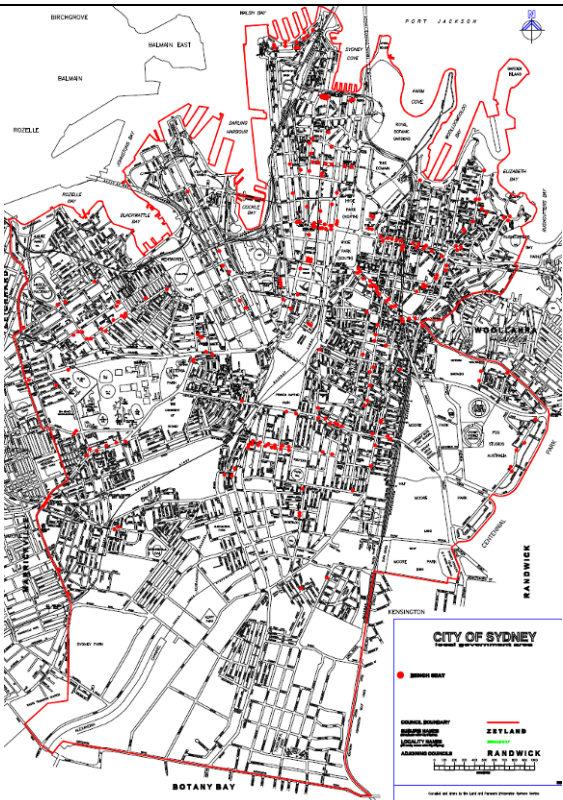


Figure 12
Public Seats



● Public Seats

Figure 13
Bubblers



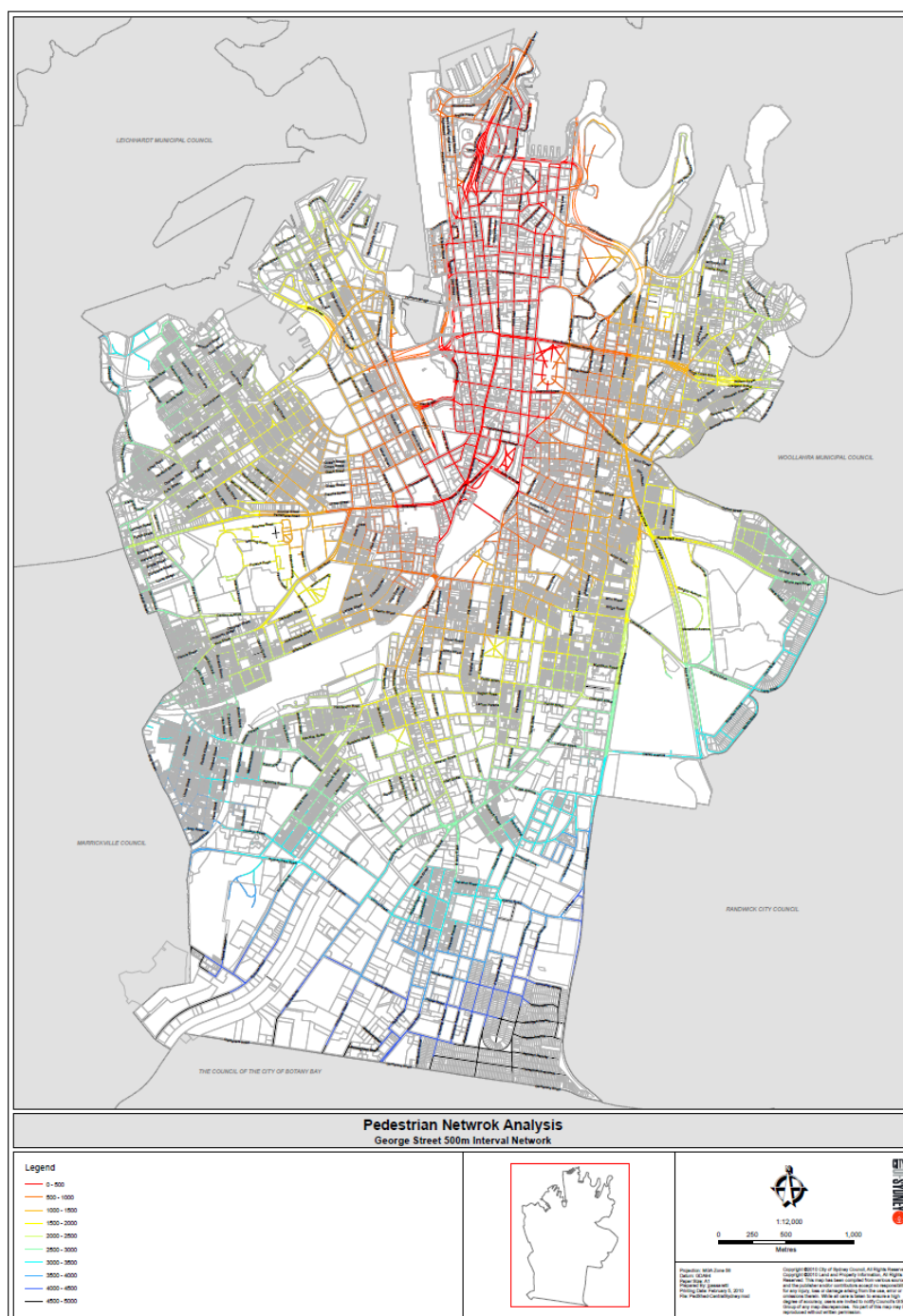
★ Bubblers

3.3 Distances to City Centre

Figure 14 is a pedestrian shed analysis map that depicts distances from all areas of the Local Government Area to George Street in the City Centre.

The furthest localities from the city centre are the southern areas of Rosebery and Alexandra at around 5 – 6km. This equates to around a 1 hour walk which is a reasonable combined exercise / commuter walk if a connected network is provided.

There is already existing high walking mode share Almost half of all trips by residents to the city centre are made by walking and cycling with 92% of these trips less than 2km are made by walking/ cycling however this drops to 25%for trips 2-5km .This provides the potential to increase the proportion for these longer trips by providing safe and connected networks.



3.3.1 Mode Share Characteristics

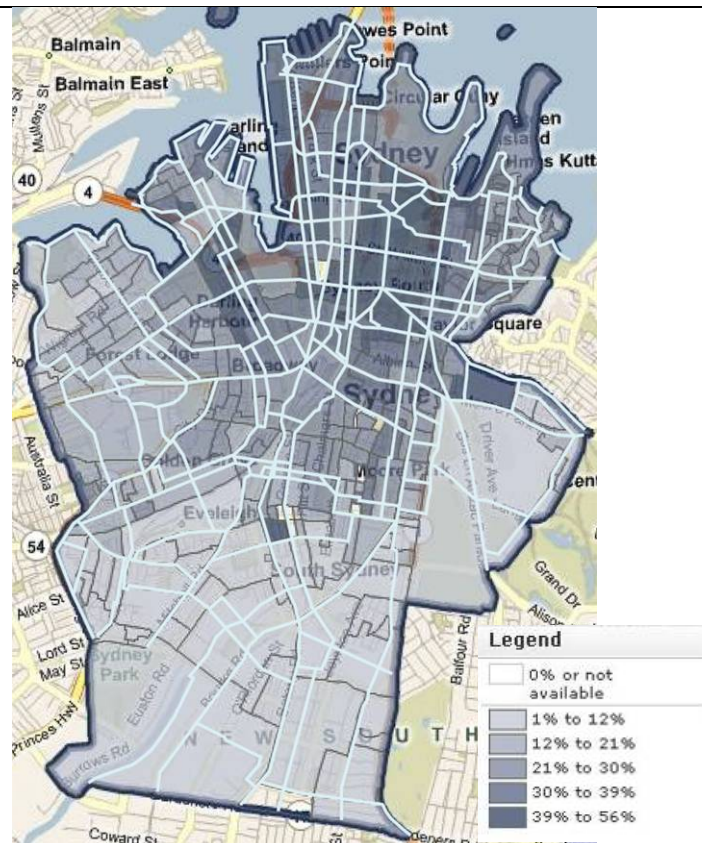
Although the City of Sydney LGA has a high pedestrian / cycle modal and public transport share the distribution of pedestrian, cycle and public transport use varies considerably. The following maps indicate the distribution of these modal share characteristics across the Local Government Area.

Walk to Work

Figure 15

Walk To Work

In 2006, 24.3% of the City of Sydney's employed population walked to work, compared to 4.2% in the Sydney Statistical Division.



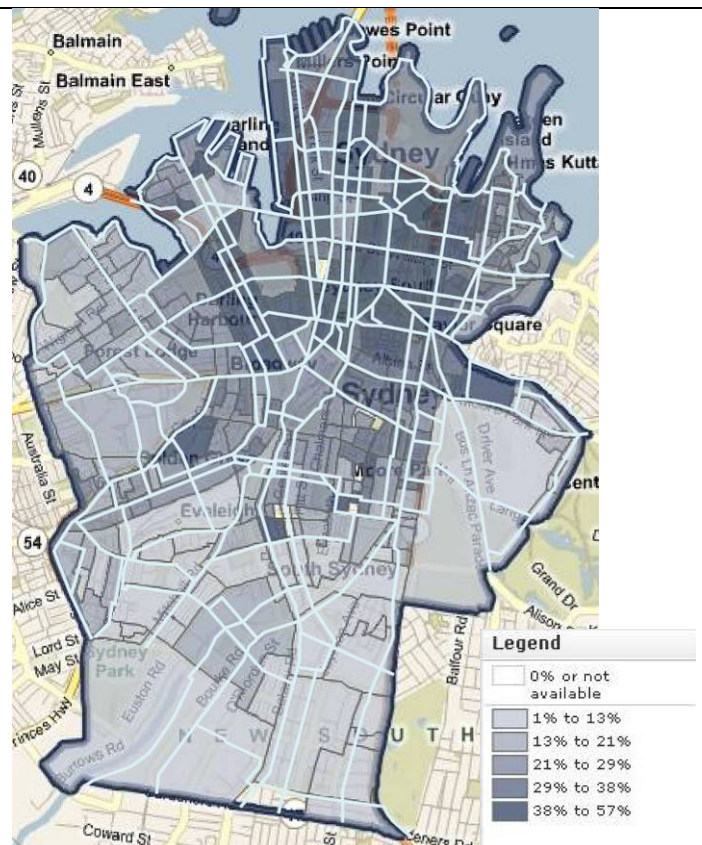
Liveable Green Network Considerations:

While the City of Sydney had a relatively higher proportion of people who walked to work, this varied across the City. Proportions ranged from a low of 4.2% in Sydney Statistical Division to a high of 42.2% in Woolloomooloo. The five areas with the highest percentages were:

- Woolloomooloo (42.2%)
- Sydney (40.6%)
- Haymarket Village Centre (39.6%)
- Harbour Village Centre (38.4%)
- Haymarket (36.5%)

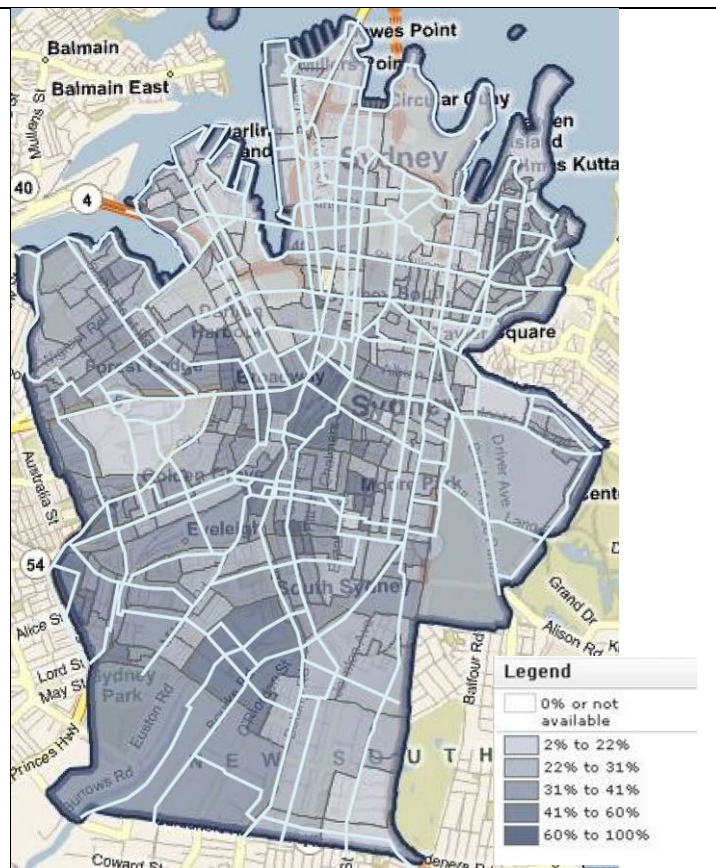
Walk and Cycle to Work**Figure 16**
Walk and Cycle to Work

In 2006, 26.0% of the City of Sydney's employed population travelled to work by bicycle or walk compared to 4.8% in the Sydney Statistical Division.

**Liveable Green Network Considerations:**

While the City of Sydney had a relatively higher proportion of persons who cycled or walked to work, this varied across the City. Proportions ranged from a low of 4.8% in Sydney Statistical Division to a high of 43.1% in Woolloomooloo. The five areas with the highest percentages were:

- Woolloomooloo (43.1%)
- Sydney (40.8%)
- Haymarket Village Centre (39.6%)
- Harbour Village Centre (38.8%)
- Harris Street Village Centre (37.0%)

Public Transport**Figure 17**
Public Transport**Liveable Green Network Considerations:**

While the City of Sydney had a relatively higher proportion of persons who travelled to work by public transport, it is important to note that this varied across the City. Proportions ranged from a low of 17.2% in Woolloomooloo to a high of 38.9% in Kings Cross. The five areas with the highest percentages were:

- Kings Cross (38.9%)
- Erskineville - Eveleigh (37.7%)
- Newtown (37.5%)
- Chippendale (37.3%)
- Redfern Street Village Centre (35.2%)

In the Sydney metropolitan area around 78% people travel to the City Centre for work by public transport.

3.4 Topography and Gradients

Topography

Figure 18

Topography



Liveable Green Network Considerations

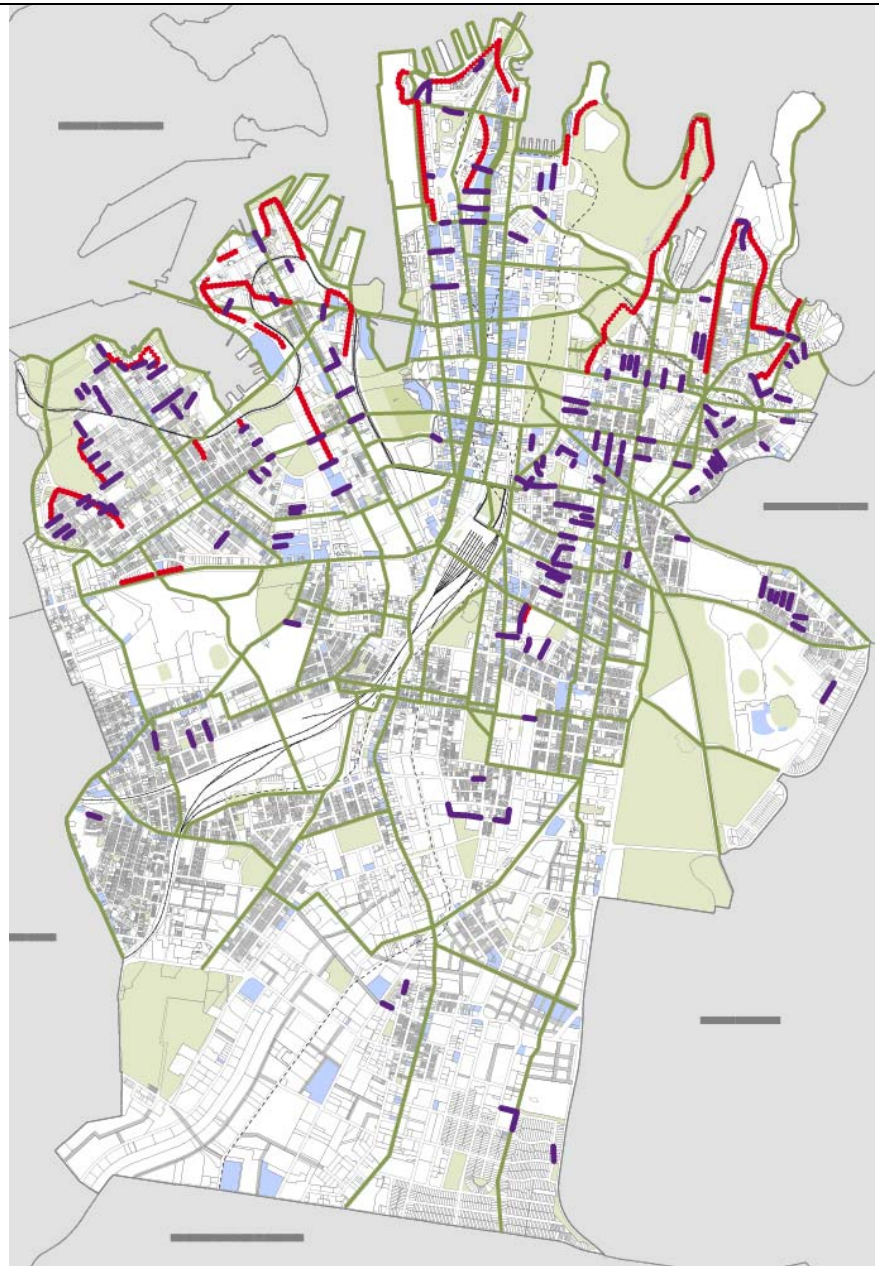
The topography of the City of Sydney is mostly undulating. The northern section includes Hawkesbury Sandstone peninsulas that sandstone escarpments to the Botany sands undulating hills and former swampland in the southern section. Topographic features include ridgelines along Oxford Street, King Street, Glebe Point Road, Darlinghurst Road and Crown Street, natural amphitheatres such as at Woolloomooloo, hill tops such as Mt Carmel and the Harbour Foreshore.

Gradients

Street gradients that are steeper than 1:14 (7%) and topographic constraints to comfortable access such as escarpments are indicated on the map below.

Figure 19

Gradients



- Pedestrian network
- Gradient > 12%
- Escarpments

Liveable Green Network Considerations

Overall the City consists of fairly level to moderate gradients making conducive to walking and cycling.

However steep gradients concentrated on street intersecting with the major ridgelines are



Concentrated in the following areas:

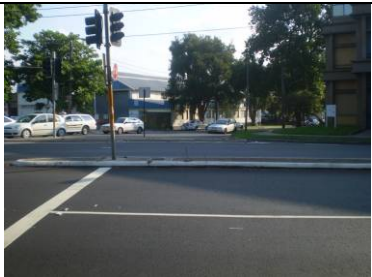


	<ul style="list-style-type: none"> • Surry Hills on streets intersecting the western side of Riley Streets, • City Centre west side of George Street to western water edge. • Paddington • East Sydney Crown, Riley and Palmer Streets north of Oxford Street • W'Loo Intersecting streets north of William Street, sandstone escarpments along McElhone Street and Domain. • Glebe streets east of Glebe Point Road • Ultimo/ Pyrmont intersecting streets west of Jones Street. • Sandstone escarpments also restrict ease of accessible and convenient access in W'Loo, Elizabeth Bay, Pyrmont and Glebe, Miller Point and Dawes Point
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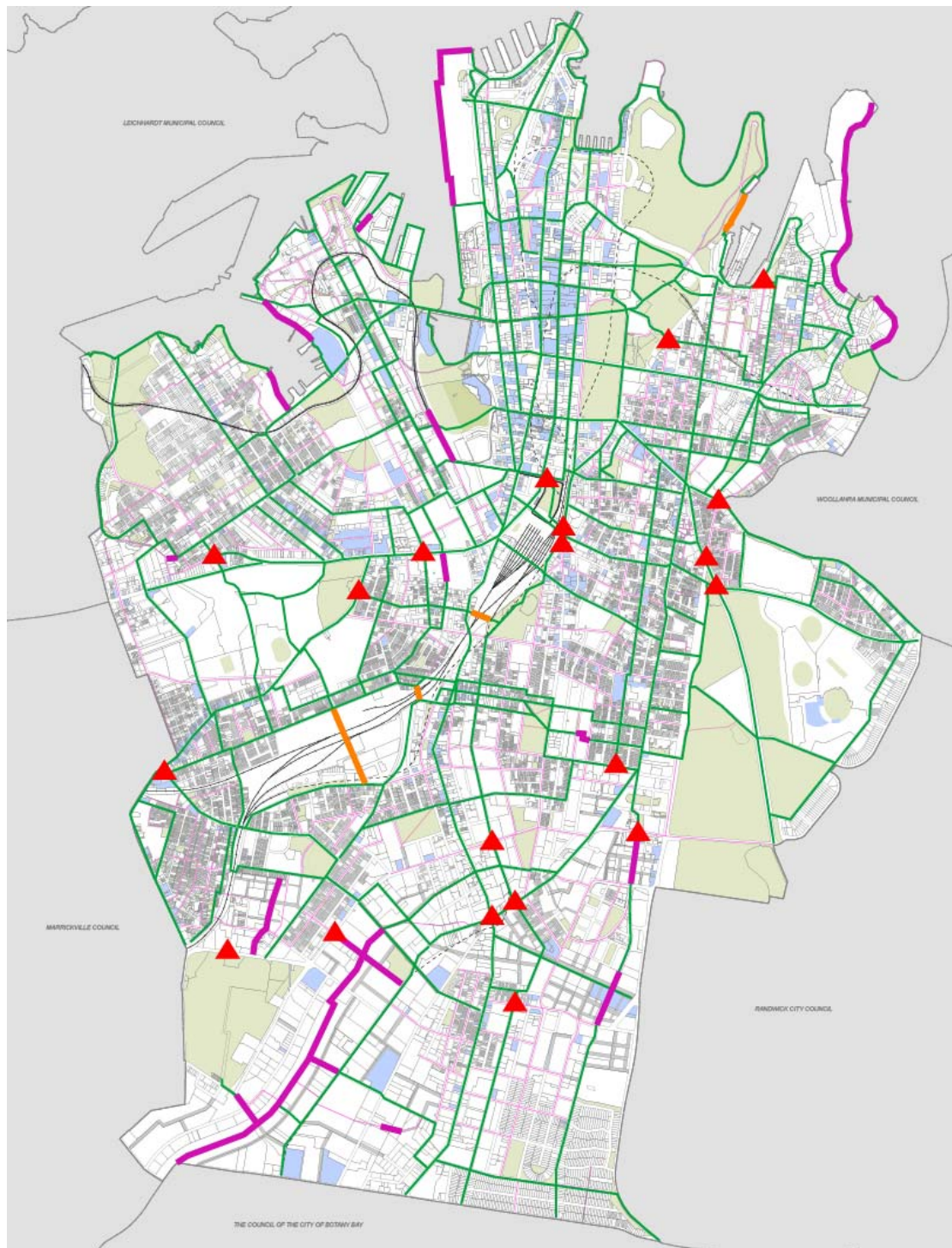
3.5 Main City Wide Network Barriers

In addition to topography and steep gradients, infrastructure and private land ownership and other public authority land management directions can be an impediment to direct and safe access to desired destinations.

Administrative barriers include restrictions on cycle access through Royal Botanic Gardens, Darling Harbour

Assessment	
Railway Corridors Pedestrian access is constrained in some locations by the railway corridors however underpasses and overpasses are provided in a number of locations to provide continued pedestrian network.	 <p>Devonshire Tunnel</p>
Major Roads Pedestrian activities within the study area are also significantly restricted by major traffic routes. There are routes with high traffic volumes and limited crossing opportunities such as the Eastern Distributor and South Dowling Street, Anzac Parade Flinders Street, and Moore Park Road. Oxford Street, Cleveland Street, Pyrmont Bridge Road	 <p>Cleveland St at Moore Park</p>

<p>Intersections with poor/ lack of crossing facilities;</p>	 <p>Green Square Intersection</p>
<p>Land Tenure Urban renewal site awaiting redevelopment areas in the city currently reduce connectivity in some areas however the opportunity master plan new street pattern integrated with the existing street grid can increase permeability and access.</p> <p>Key Site include: Green Square Town Centre Lachlan Precinct (Green Square) Epsom Precinct (Green Square) Barangaroo CUB Ashmore Estate Bank Street Pyrmont Alexandra Canal;</p> <p>Harbour foreshore Glebe Secondary School Garden Island Naval Yards Elizabeth Bay private residential</p>	 <p>Alexandria Canal</p>
<p>Administrative Barriers Cycle access in some land managed by other authorities such as Royal Botanic Gardens and Darling Harbour is restricted</p>	 <p>Royal Botanic Gardens</p>



- Citywide Priority Network – Pedestrian & Cycle
- Restricted Access -
- Link Improvements requiring built infrastructure (bridges/ decks)
- ▲ Major Intersection Gaps

3.6 Assessment of Sydney 2030 Liveable Green Network Proposal

Sydney 2030 identifies 10 prime corridors (Figure 20) that forms the basis Liveable Green Network. These corridors traverse both north south east west across the LGA in an equal distribution grid across the LGA.



Assessment of these corridors has been carried out located in Volume 2 of this report.

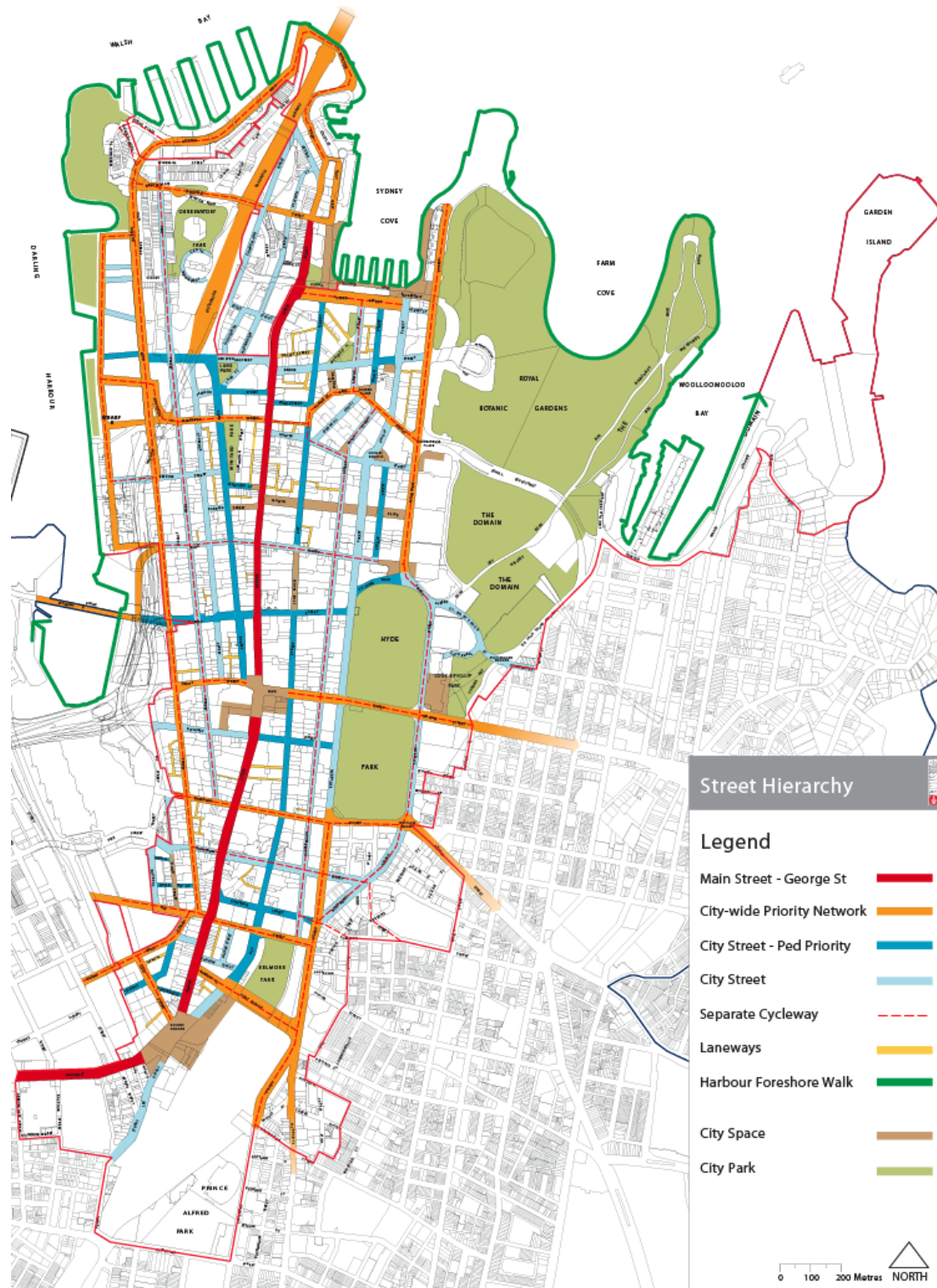
Key Assessment Findings

- Equity of distribution needs to be considered particularly the higher density areas of the city's east requires additional route choices and options;
- The City Centre is not the major focus or major destination of the network and validity as alternative transport network access to major destinations also questioned.
- No acknowledgement of different route requirements for Pedestrian and Cyclists;
- Consideration needed of equity of distribution of routes in terms of population and employment densities;
- Legibility and communication of network.



4.0 NETWORK MAPPING




4.1 City Centre Network




City Centre mapping also includes areas covered by Harbour Village and Haymarket Village Centre.








4.2 City Centre Network Components

1.0	<p>George Street –“The Main Street”</p> <p>Provides a north south civic spine that will have public transport, pedestrian and cycling priority. George Street will be the “Main Street “of the network.</p> <p>George Street will link significant public spaces at Railway Square, Town Hall and Circular Quay.</p>	
2.0	<p>City Wide Priority Routes</p> <p>These are routes that part of the overall City Wide Liveable Green Network that provide pedestrian and cycle priority connections across the entire City local government area and beyond as well as access within the City Centre.</p> <p>Key streets/ routes include:</p>	
2(a)	<p>Hay Street</p> <p>East west connection that will link Ultimo, Haymarket, George Street and Surry Hills.</p> <p>Street will have light rail, pedestrian and cycle priority and have limited vehicle access .</p>	




2(b)	<p>Liverpool Street</p> <p>East west connection that will provide links to Darling Harbour and Ultimo to the west and east Sydney and Darlinghurst to the West.</p> <p>Street caters for general traffic however will include a separated cycleway facility.</p>	
2(c)	<p>Druitt/ Park/ William Street</p> <p>Park Street connects to William Street to provide direct access to “Top of the Cross”</p> <p>Street will be defined by a new public square on the corner of Park and George Street.</p> <p>To the west of George Street, Druitt Street provides access to Darling Harbour</p>	
2(d)	<p>Spring/ Bent / Margaret Streets</p> <p>Route provides an east west link across the northern section of the city centre. At Shakespeare Place pathway links through the Domain Parklands provide access to Woolloomooloo and Potts Point.</p> <p>Margaret Street and Napoleon Street will be important access streets into the Barangaroo urban renewal site on the western foreshore.</p>	

2(e)	<p>Argyle Street</p> <p>Argyle Street will provide a east west link from George Street to the Rocks, Millers Point area through to the northern section of the Barangaroo site at the proposed Headland Park</p>	
2(f)	<p>Sussex Street/ Hungry Mile</p> <p>Route will form a north south link along the western edge of the City Centre to connect Haymarket and Barangaroo areas.</p> <p>It is proposed that the route will include a light rail connection.</p>	
	<p>Macquarie Street</p> <p>Main civic street on eastern side of the city centre that provides connection from Hyde Park to East Circular Quay.</p> <p>Cycleway links to College Street provide access outside the city centre to eastern and southern districts.</p>	

3.0	<p>City Streets</p> <p>Most City Centre streets will accommodate a combination of general traffic, pedestrian and cycle use.</p> <p>Some City Streets will have additional Pedestrian Priority or Cycle Priority as outlined below:</p>
3(a)	<p>Cycle Priority</p> <p>City street that include separated cycle facilities to provide access around the City Centre as well as connections to the Citywide network.</p>
	<p>King Street</p> <p>Provide east west connection across the city centre that will intersect with cycle ways along Kent Street, Castlereagh and College Street. Pathway link along Western Distributor viaduct provides access to Pymont Bridge and western inner Sydney.</p> <p>College Street provides connections to eastern and southern districts along Oxford Street, Liverpool Street and Wentworth Ave.</p> 
	<p>Kent Street</p> <p>Cycleway link from Harbour Bridge along western side of city centre. Intersects with other cycleway links at Margaret Street, King Street, and Liverpool Street.</p> 

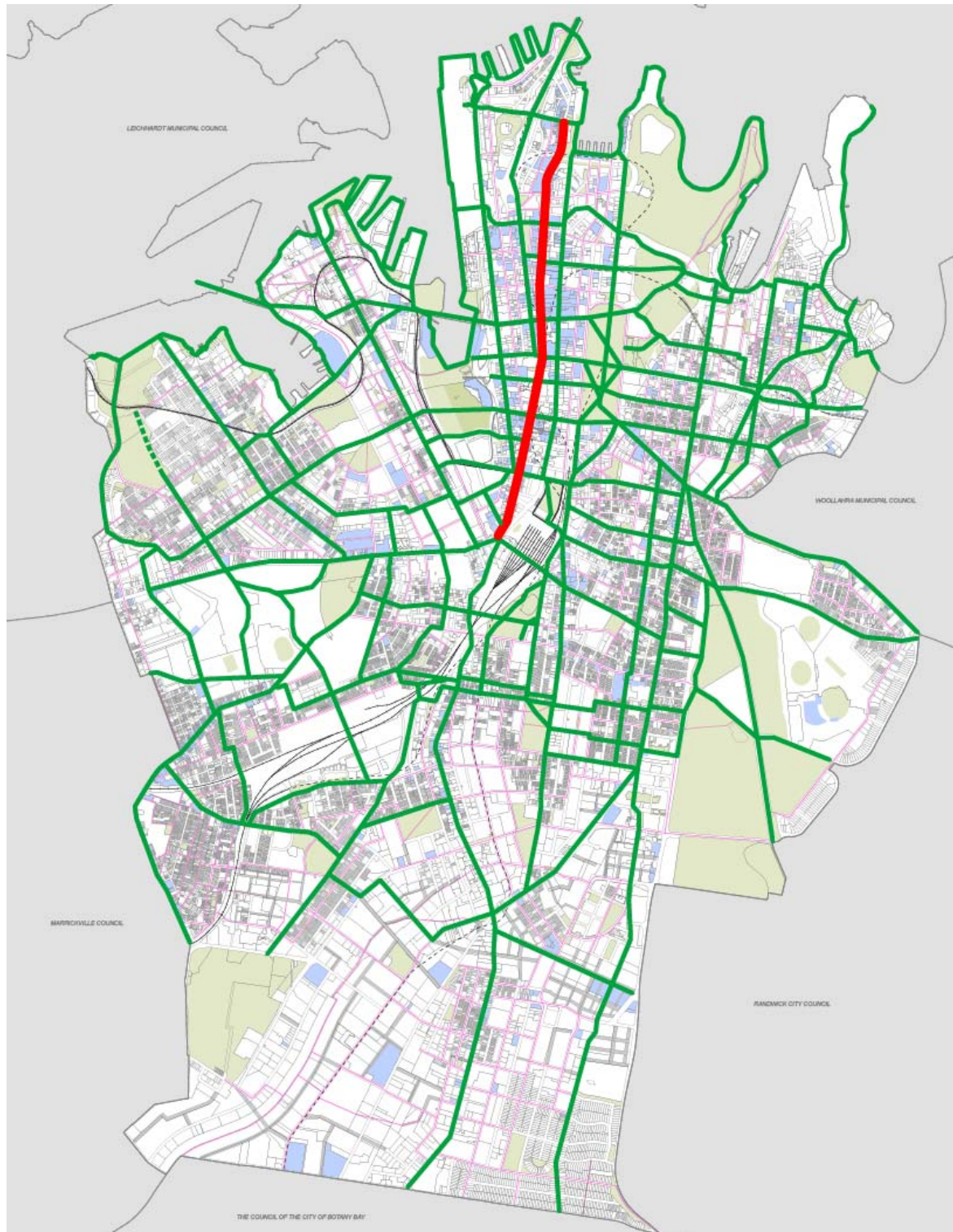
	<p>Castlereagh Street/ Loftus Street</p> <p>Castlereagh Street will provide separated cycleway link from Belmore Park to Circular Quay. To the south this route will connect to separated cycleway links along Chalmers Street that provide access to southern districts.</p>	
3(b)	<p>Pedestrian Priority</p> <p>Pitt Street</p> <p>Opportunity to create a more intimate scaled north south pedestrian priority street from Belmore Park to Circular Quay.</p> <p>Includes Pitt Street Mall and main retail heart of the city centre.</p>	
	<p>York Street</p> <p>North south link on western side of City that provides links to Wynyard Station as well as access to Barangaroo, Observatory Hill Park / North Sydney via the Kent Street Underpass</p>	

	Market Street	
	Bathurst Street	

4.0	City Spaces City Spaces and streets that are largely closed to regular traffic and provide convenient and accessible links as well as places to sit and engage in public life.
	<p>Martin Place /Barrack Street/ Regimental Square</p> <p>Pedestrian east west connection that consists of closed streets and the Barrack Street shared zone.</p> <p>Links through Sydney Eye Hospital provide access to Domain Parklands and pathways to Woolloomooloo and Potts Point.</p> 
	<p>Town Hall Square</p> <p>New city square off George Street will provide a civic heart to City Centre as well as a place for gathering, public life and access to public transport.</p> 
5.0	Laneways
	<p>Laneway networks provides opportunity for convenient cross block street links as well as destinations in their own right for small bars and other retail.</p> <p>Key city centre laneways include</p> <ul style="list-style-type: none"> • Angel Place/ Ash Street • Wilmot Street • Central Street • Bulletin Place • Albion Place • York Lane • Lees Court/ Rowe Street • Hosking/ Penfold Place 

4.3 City Wide Networks

4.3.1 City Wide Pedestrian Network



Citywide Main Pedestrian Network █

Local Pedestrian Network █

Note: Detailed planning may result in some re-alignment to route selections.

4.3.2 Cycle Plan

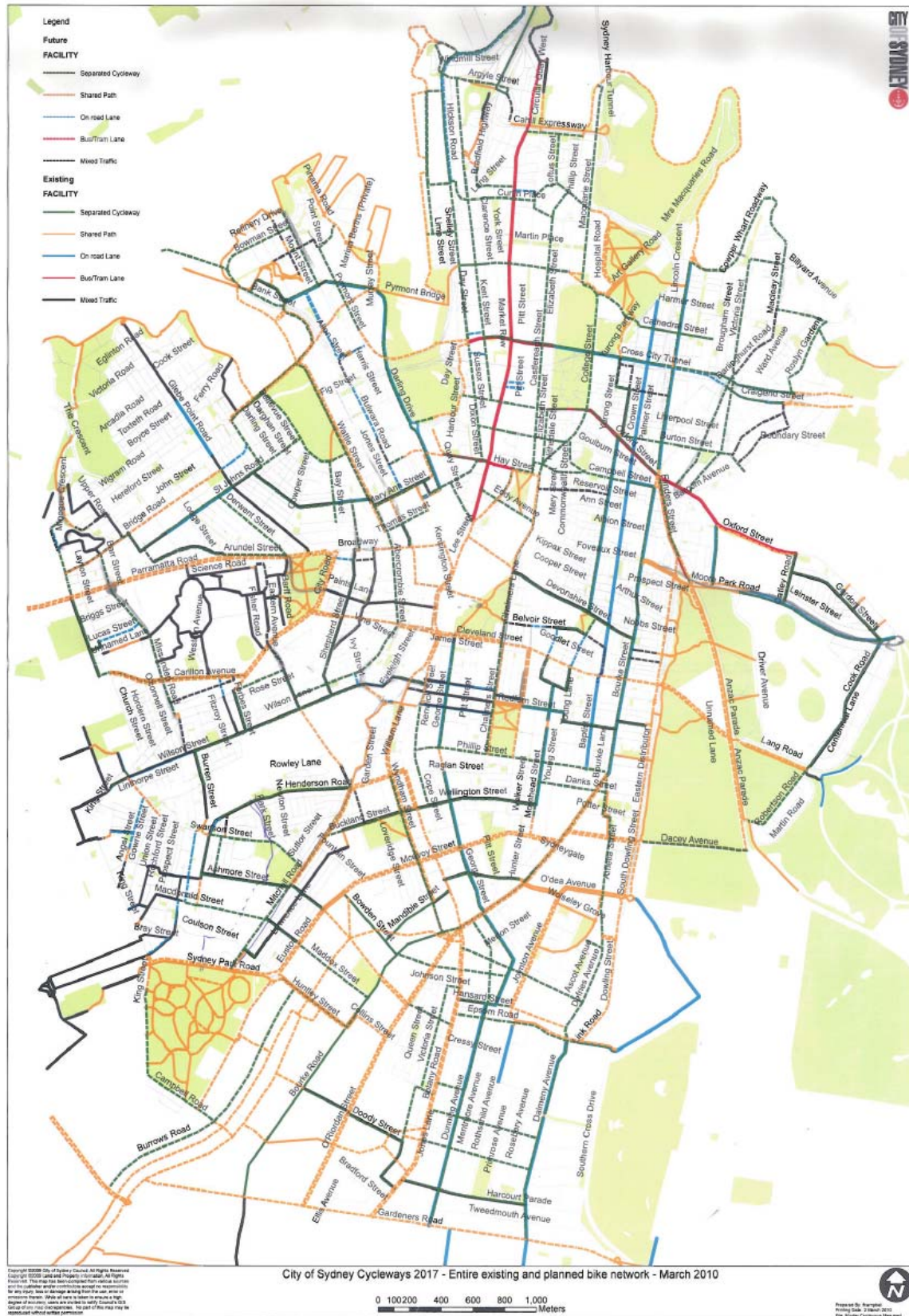


Figure 21 City of Sydney Cycle Masterplan

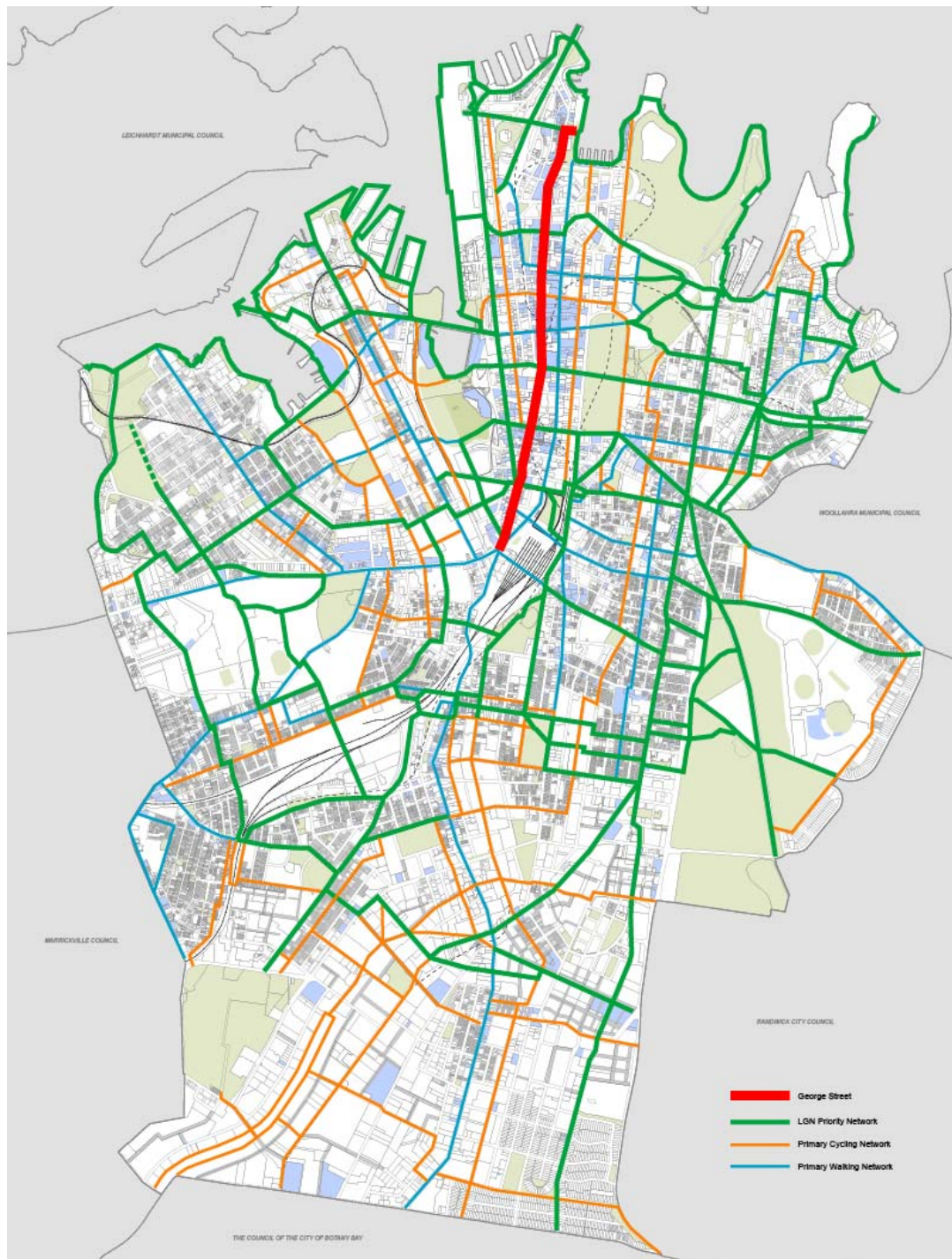


- George Street - "The Main Street"
- Separate Cycleway
- Off Street Pathway (Shared Path)
- Mixed Traffic/ On Road Traffic
- Shared Footway

Note: Detailed planning may result in some re-alignment to route selections.

Liveable Green Network – City Wide Cycle Priority Network

4.3.3 Liveable Green Network – City Wide Network












- George Street - “The Main Street”
- LGN Priority Network City Corridor – Pedestrian & Cycle
- City Wide Pedestrian Priority Street
- Citywide Cycling Priority Street


Note: Detailed planning may result in some re-alignment to route selections.

4.3.4 Index of Citywide Network Components

Index of network components are listed below:

 <p>1.0 Alexandra Canal – Green Square</p>	 <p>2.0 Rosebery – Green Square- Redfern Railway Square</p>	 <p>3.0 Rosebery – Green Square – Redfern – Surry Hills – Haymarket</p>
 <p>4.0 Rosebery – Alexandra – Sydney Park</p>	 <p>5.0 Rosebery – Green Square – East Redfern / Waterloo</p>	 <p>6.0 Alexandra – Green Square – Surry Hills- Woolloomooloo</p>
 <p>7.0 Baptist – Crown Streets</p>	 <p>8.0 Paddington / Centennial Parklands – Surry Hills and City Centre</p>	 <p>9.0 Moore Park – East Redfern – Redfern Station</p>

ATTACHMENT B

 <p>10.0 Redfern – Surry Hills- Haymarket</p>	 <p>11.0 Devonshire Street Surry Hills –Central Railway – Haymarket</p>	 <p>12.0 Surry Hills – Haymarket</p>
 <p>13.0 Central to Moore Park</p>	 <p>14.0 Oxford Street: City Centre - Paddington</p>	 <p>15.0 Rushcutters Bay – W'Lo – City Centre</p>
 <p>22.0 Glebe – Ultimo – Haymarket – City Centre</p>	 <p>23.0 Newtown – Broadway – City Centre</p>	 <p>24.0 Forest Lodge-Glebe – Ultimo- City Centre</p>

ATTACHMENT B

 <p>25.0 Glebe – Broadway – City Centre</p>	 <p>26.0 Glebe Foreshore Parklands – Sydney Park</p>	 <p>27.0 Redfern – Darlington – Chippendale – Ultimo</p>
 <p>28.0 Glebe – Sydney University – Newtown – Alexandra</p>	 <p>29.0 Sydney Park – Erskineville Alexandra – ATP site – Redfern Station</p>	 <p>30.0 Newtown – Alexandra – Green Square</p>
 <p>31.0 Harbour Foreshore</p>		

4.4 Village Centre Liveable Green Network Mapping

Note: Harbour Village and Haymarket Village Centres are included in City Centre Network Mapping located on section 4.3.

4.4.1 Crown Street Village Centre



Note: Detailed planning may result in some re-alignment to route selections.

4.4.1 Oxford Street Village Centre



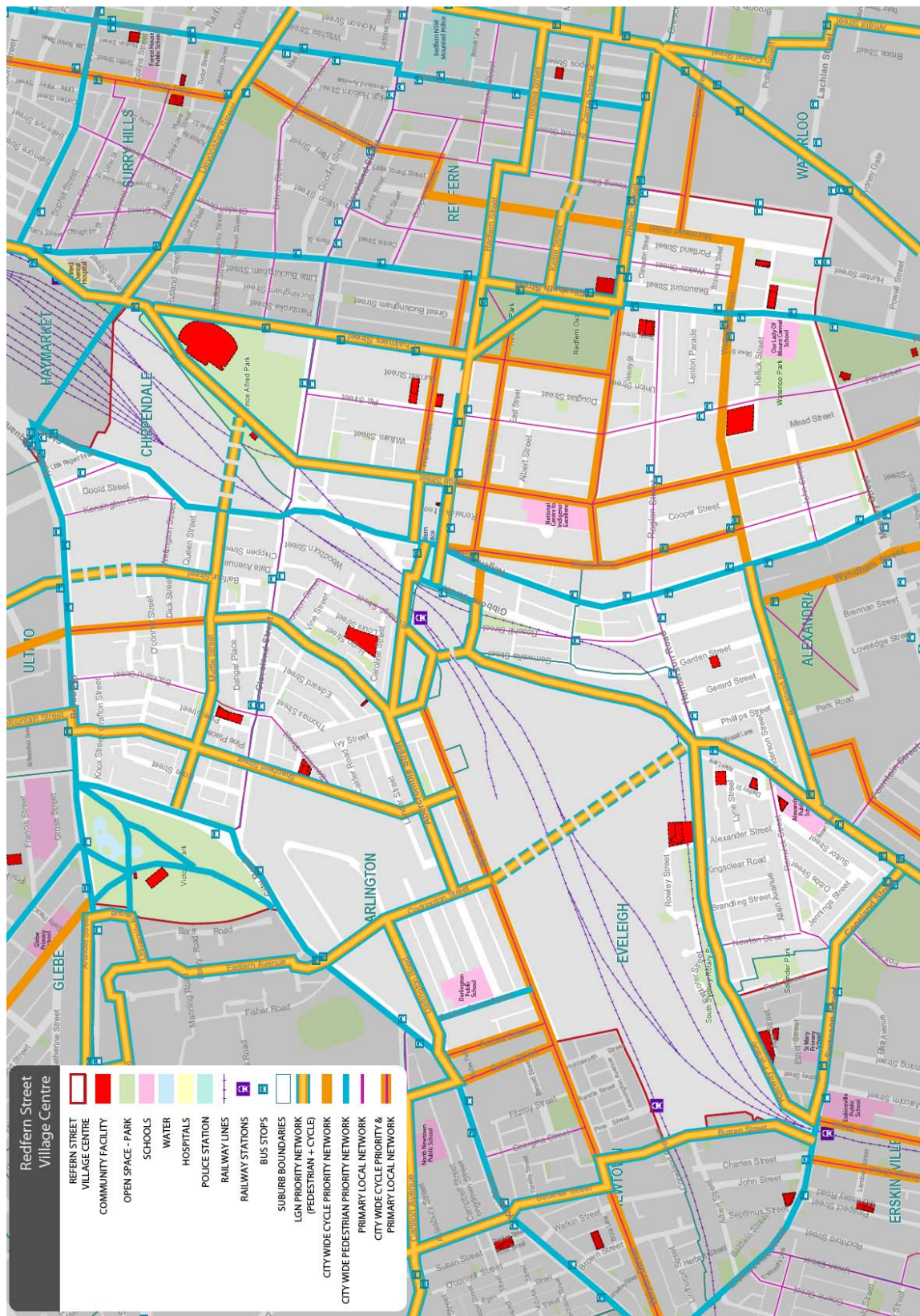
Note: Detailed planning may result in some re-alignment to route selections.

4.4.3 Kings Cross Village Centre



Note: Detailed planning may result in some re-alignment to route selections.

4.4.4 Redfern Street Village Centre



Note: Detailed planning may result in some re-alignment to route selections.