



Our vision is for a world-class transport system for the City, which supports a strong and growing economy, a more sustainable environment and a diverse and connected community.

This means improving the experience of residents, workers and visitors who between them make over a million trips daily to, from and within the City.

To do this we will provide more sustainable travel options by:

- Giving more priority to pedestrians and providing safer and more enticing streets to walk in
- Enhancing the environment for bicycle use through safe and accessible bike paths and routes
- Managing the volume of cars using our streets while maintaining access for commercial and delivery vehicles
- Transforming George Street into a pedestrian, retail and light rail boulevard, linked to major public squares at Circular Quay, Town Hall and Central and a network of vibrant laneways
- Creating exciting new urban spaces at Town Hall Square and the Central Station precinct, enhancing the City's appeal for both residents and visitors
- Working with the State Government to increase the convenience and capacity of the public transport system.

The City of Sydney faces a number of key inter-related transport challenges over the next twenty years.



When we developed Sustainable Sydney 2030 – our long term plan for the City - people said they wanted Sydney to be green, global and connected. Transport was a key concern.

It is one of the major issues facing our city – and the problem is rapidly becoming worse.

Congestion is crippling our city and it's not going to get any better unless we radically rethink the way our city works and how people move around. Business as usual is not an option - we need to be bold and decisive.

All levels of government must work together to develop new transport options if Sydney is to maintain and build on its global city status and compete effectively with other cities in the Asia-Pacific region such as Singapore and Shanghai.

Research shows the only effective way to deal with congestion is to give people choices. To make it safe, affordable and practical for them to choose different transport options.

The options are many – faster and more reliable heavy rail in the areas that need it, bus lanes that encourage movement, quick and convenient light rail, a safe bike network and more attractive walking routes. And for those who have no choice but to drive, more options means less congestion and wasted time.

If we do not take action now congestion in our growing city will get worse.

Between 2006 and 2036 the population of the City is expected to grow by 100,000 people to a total of 280,000 – a 60 per cent increase and employment will grow by 110,000 to a total of 570,000 – a 31 per cent increase.

Our goal is to improve the experience of residents, workers and visitors who between them make over a million trips daily to/ from and within the City and to accommodate future growth.

This strategy outlines how we plan to do that. It contains short tem (2011 – 2015), medium term (2015 – 2025) and long term (post 2025) objectives and actions.

Of the short term priorities, the transformation of George Street and introduction of light rail is the most critical to addressing transport in Sydney along with further improvements for pedestrians and cyclists. Medium term priorities include upgrades to key interchanges, improved pedestrian, light rail and ferry connections to Barangaroo, light rail links to Green Square and the south east and a second harbour heavy rail crossing.

This is an ambitious plan and one that the City is investing significant financial and staff resources, but we can not do it alone. Old ways of doing things such as just adding more buses or building more motorways are not enough to save Sydney from congestion.

Most of the solutions rely on a forward thinking and innovative State Government – we hope this Government and Transport Minister rise to the challenge and work in partnership with us on a new vision and concentre plan of action.

Clour Mosse.

CLOVER MOORE MP, Lord Mayor





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## **KEY ACTIONS**

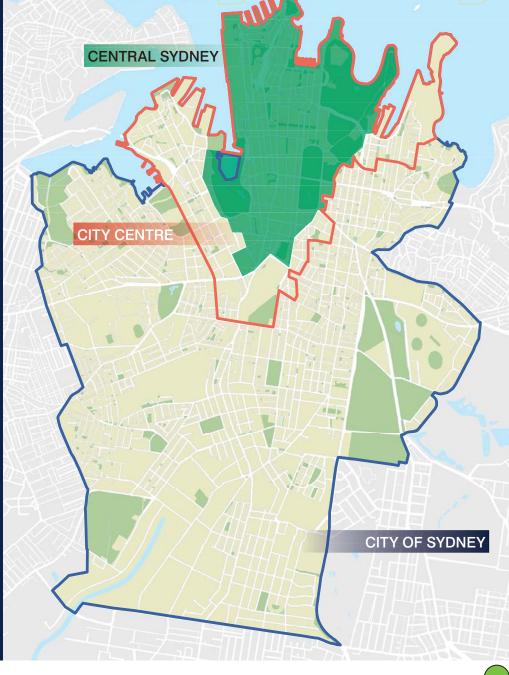
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A number of different areas are described in this report.

Unless it is otherwise clear from the context:

- Sydney refers to the Sydney Metropolitan Area (The Australian Bureau of Statistics refers to this as the Sydney Statistical Division)
- City refers to the City of Sydney Local Government Area
- Central Sydney refers to the area bounded by the Harbour, Hyde Park and the Domain, Central Station and Darling Harbour
- City Centre refers to a slightly larger area including Pyrmont-Ultimo and parts of Woolloomooloo and Potts Point.





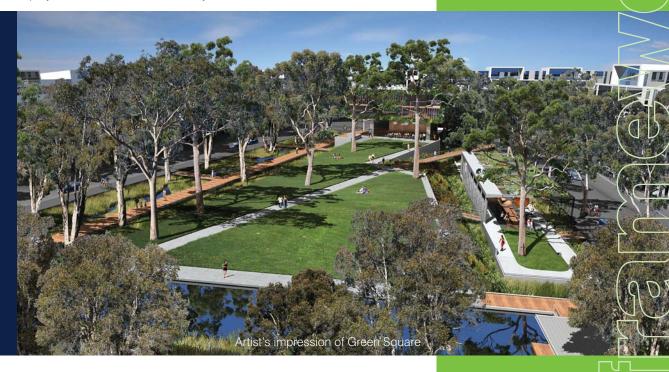


# introduction

The City of Sydney is the heart of Australia's world city, it accounts for 25 per cent of the Gross State Product and for 8 per cent of the country's economic activity. It is home to more than 180,000 residents, nearly 400,000 jobs¹ and leading commercial, educational, cultural and tourist facilities. The City's future is closely linked to the economy of the nation. However, the City of Sydney is increasingly affected by bus, traffic and pedestrian congestion.

It is 30 years since the last major upgrade was made to rail lines through the City when the Eastern Suburbs line was built. Our rail system is reaching its capacity and trains are slower now than they were a decade ago. While more buses have been added, journey times are increasing with more congestion on our streets and lengthy delays at major pinch points. Pedestrians are crowded onto narrow footpaths and there are still relatively few safe connections on which to ride a bike.

Building more roads to the City is not a solution, as it will only encourage more people to drive, adding to congestion on other streets. The Bureau of Transport and Regional Economics estimated that road congestion costs businesses and residents across the region \$A3.7 billion in 2006 and that this is projected to rise to \$A7.8 billion by 2020<sup>2</sup>.



The Sydney Metropolitan Area is growing with the population set to reach 6 million by 2036³, an increase of 40 per cent from 2006. The population of the City of Sydney is set to grow by 60 per cent over that same period, the second fastest rate of any part of Sydney. This growth is underway with major developments starting at Central Park, Green Square and Barangaroo.

Sixty percent of the City's employed residents also work in the City, and they mostly walk, cycle or use public transport to get there<sup>4</sup>. Three quarters of all people working in Central Sydney use public transport to get to work, and this share is rising<sup>5</sup>. Hence adding more residents and jobs in the City is sensible from a sustainability perspective as it minimises the amount of additional car commuting.

However, the City Centre is compact and dense when compared with many other world cities. Managing this population and job growth in such a small footprint with limited road space presents major challenges.

We therefore need to further encourage the shift to public transport, walking and cycling which is now underway and to make the City a more vibrant and attractive place, while still meeting the commercial and delivery needs of business. Efficient transport is crucial to the economy of Sydney. If we do not take action now, congestion and amenity will get worse.

The City will no longer be able to function effectively as the core of Australia's leading city and investment, employment and other opportunities are likely to move to other cities.

The Transport Strategy and Action Plan has been developed by the City of Sydney as a framework for action by the Council and Government to improve transport and access to better connect our City. When the City developed Sustainable Sydney 2030<sup>6</sup>, people said they wanted the City to be "green, global and connected". Transport was a key concern. Sustainable Sydney 2030 set out a vision for the City, which included a major emphasis on transport and access. It established key objectives, identified targets and developed ideas about how the City should move forward.



**Location Specific Action Plan Connecting the City Mode Specific Action Plans** Challenges **Draft Local** and Trends Walking **Major Precinct Objectives Traffic** Management **Transport Plan** and Targets **Major Precinct Transport Plan Key Action Major Precinct** Areas **Parking** Transport Plan **Major Precinct Vehicle Fleets** Transport Plan Released **Public Transport** This Report To be completed **Community Transport** 

This Strategy builds on Sustainable Sydney 2030 targets, but includes additional targets and actions to meet existing and emerging challenges and trends.

The Strategy will guide actions by the City and will help to develop coordinated responses with the State Government. It builds on already released plans and policies and provides a framework for future policies and action plans, covering particular areas of the city or particular types of transport.





### **OBJECTIVES ACTIONS AND TARGETS**

The City's key transport and access objectives are:

- Integration Integrate transport with land use development; State, Federal and City targets and projects in partnerships and joint ventures; and local needs within broader transport networks
- Efficiency and Amenity Improve efficiency and amenity in the City, particularly the City Centre
- Capacity Provide capacity to accommodate growth
- Access Enhance access for all
- Health and Safety Improve health and safety
- Environment Reduce transport energy use and greenhouse emissions.

Eighteen targets have been developed to allow progress towards these objectives to be measured, and options for achieving the objectives to be assessed. Fourteen are new targets while four draw on the targets established in Sustainable Sydney 2030.



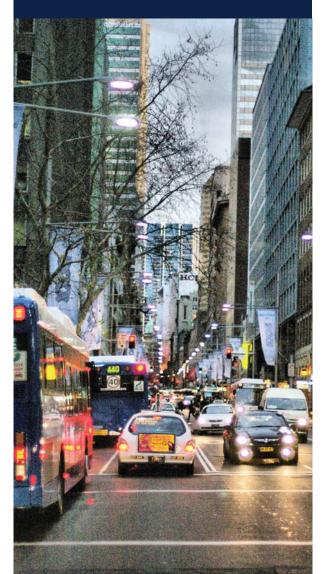
### **CURRENT TRAVEL PATTERNS**

The City of Sydney has an estimated 185,000 residents in 2011 who make approximately 700,000 trips on an average weekday<sup>7</sup>. Most are able to rely on walking, cycling and public transport much more than the average Sydney resident – 49 per cent of resident trips are by walking, 15 per cent by train and bus, while only 30 per cent are by car.

However, the City's streets also cater for workers or visitors from across Sydney and beyond who travel to work or to other attractions in the City, or who travel through the City to other destinations.

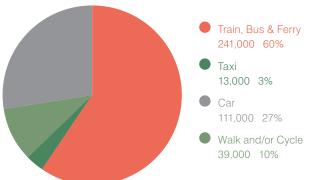
Overall travel patterns across the City vary significantly, both geographically and by time of day, reflecting the wide variety of trip purposes<sup>8</sup>. The biggest concentration of trips is in Central Sydney.

An estimated 185,000 residents make approximately 700,000 trips on any average weekday.

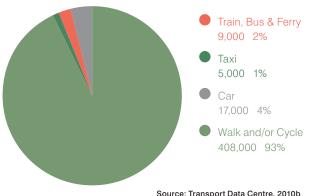


All-day travel to and within Central Sydney by Sydney Residents, 2008

### Weekday Trips to Central Sydney



### Weekday Trips within Central Sydney

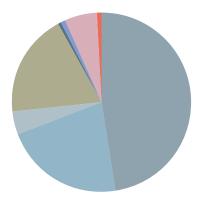


On a typical weekday there are around 400,000 trips both to and from Central Sydney by residents of the Sydney Region, with public transport accounting for 60 per cent of trips. Each public transport trip generates a pedestrian trip within the city.

There are also around 440,000 trips purely within Central Sydney by Sydney residents, with walking accounting for 93 per cent of these internal trips. When trips by visitors to Sydney are added, there are an estimated one million walking trips within Central Sydney on a weekday.

Journeys to work in Central Sydney rely heavily on public transport, with nearly three quarters of the trips made in 2006 by train, bus ferry, light rail and taxi. Less than 20 per cent were by car.

### Journeys to Work in Central Sydney, 2006



- Train 99,890 47%
- Bus45,664 21%
- Ferry, Light Rail, Other 8,541 4.1%
- Private Car (including truck) 39,242 18.7%
- Motorbike / Scooter 1,155 0.5%
- Taxi 1,847 0.9%
- Walk only

12,129 5.8%

Bike only 1,631 0.8%

Note: excludes those who did not travel to work that day or who did not specify their mode of travel. Source: Bureau of Transport Statistics

### **KEY CHALLENGES**

### Maintaining Sydney's economy

The City of Sydney area contributes 25 per cent of Gross State Product and 8 per cent of the Australian economy<sup>9</sup>. It is Australia's dominant financial centre, with a highly skilled workforce in business services, media and communications, information technology and the creative industries. It is home to approximately six in 10 of all Asia- Pacific regional headquarters located in Australia and is Australia's prime international tourist destination with seven of the 10 most popular tourist attractions<sup>10</sup>.

Sydney typically ranks in the top 10 world cities in terms of quality of life. However while Sydney continues to rank highly in areas such as environmental attributes, cultural diversity and global connectivity, it tends to fall down on comparative measures of accessibility and transport infrastructure.

While Sydney has built an extensive motorway network in the last two decades, including the M2, M4, M5 and M7, Harbour Tunnel, Cross City Tunnel and Lane Cove Tunnel, its public transport investment has not kept pace.



The use of public transport and cycling for getting to work in the City has grown strongly over the last five years.

### Metropolitan Sydney as a percent of Australia

20%

Population

25%

Gross Domestic Product

28%

Arts and Computing Professionals

32%

Business, Human Resources and Marketing Managers

60%

Asia-Pacific Headquarters

70%

Property and Business Services Offices

75%

Information and Communications Regional Headquarters

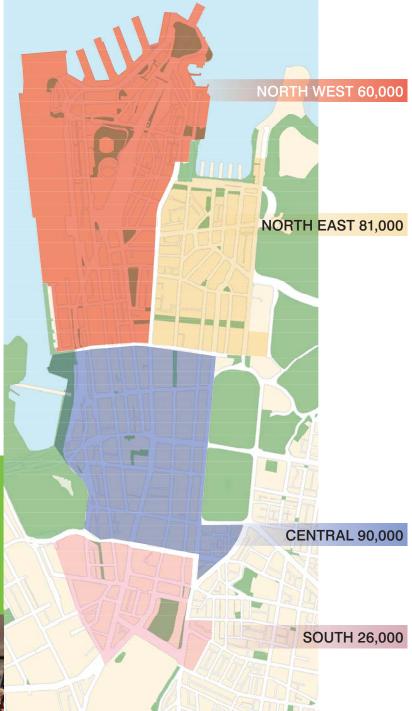
### Sydney's Public Transport System

Sydney has a large suburban rail system with some 300 stations and it carries nearly a million people every weekday.

However, Sydney's heavy rail system is close to capacity, particularly key city stations such as Town Hall and Wynyard. The City's relatively narrow streets are crowded with cars, buses, cyclists and pedestrians. Bus congestion is worsening, especially in George Street, York Street and Elizabeth Street and footpaths in Central Sydney are crowded with one million pedestrian trips on a typical weekday. Addressing constraints on our public transport is clearly essential.

### Future growth and pressures

Sydney as a whole and the City of Sydney face challenges in accommodating appropriate economic growth while also improving environmental outcomes. Between 2006 and 2036, the population in the City is expected to grow by 100,000 people or an increase of 60 per cent, the second fastest growth rate of any subregion of the metropolitan area<sup>11</sup>.





The challenge is to accommodating appropriate economic growth while also improving environmental outcomes.

Employment in the city is expected to grow by 110,000 jobs or by 31 per cent over the same period. Growth in employment will be fastest in the north-west part of Central Sydney as a result of the Barangaroo development as well as south of Central Sydney in the Green Square Development Area<sup>12</sup>.

The City's road space is limited. Catering for increasing demand by shifting to the most space-efficient modes is vital for the City's future.







### Meeting the needs of an ageing society

There will be significant demographic shifts as the population ages. The number of people aged 60 and over will triple by 2036, and the number over 70 will quadruple. There will also be substantial increases in the number of people in all other age groups, including older age workers (40 – 60), while the number of children under 10 will double  $^{13}$ . Making transport more easily accessible is therefore crucial.

### Reducing greenhouse gas emissions and oil use

There is a growing awareness of the need for all cities to address climate change and energy security. Australians now have the highest greenhouse gas emissions per capita of any major country<sup>14</sup>. While Sydney actually has a slightly lower per capita energy use and greenhouse gas emissions for transport than other Australian cities, it is nevertheless high by world standards. Reducing greenhouse gas emissions from transport is a key priority.





### **NSW 2021 Transport Targets**

- Reduce road fatalities to 4.3 per 100,000 population by 2016
- Improve customer satisfaction with transport services
- Increase real-time travel information for customers
- Increase the share of commuter trips by public transport to Sydney CBD in peak hours to 80 per cent by 2016
- More than double the mode share of bicycle trips made in the Greater Sydney region, at a local and district level, by 2016
- Increase the mode share of walking tips made in the Greater Sydney region, at a local and district level, to 25 per cent by 2016
- Consistently meet transport reliability targets (92 per cent on time for trains, 95 per cent for buses, 98.5 per cent for ferries)
- Improve the efficiency of the road network during peak times on Sydney's road corridors
- Minimise public transport waiting times for customers.

Responding to changing demographics and reducing emissions are key priorities.

### Improving health and safety

There is growing concern at the health and economic impacts of obesity, air pollution, and road crashes, all of which relate to high levels of car usage. For example:

- Sedentary lifestyles and lack of exercise contribute to obesity and are reinforced by car-dependent cities<sup>15</sup>
- There are over one million pedestrian trips daily in Central Sydney, and air pollution, mostly from motor vehicles and especially from diesel engines, is a major concern
- In 2009 there were some 990 road vehicle crashes in the City of Sydney, involving 313 pedestrians, 126 bicycle users and 240 motorcyclists¹6.

Encouraging more walking and cycling, and improving safety for these vulnerable road users in particular, is a key goal.

### **EMERGING TRENDS**

Despite the major challenges facing the City, there are also some emerging trends that are encouraging.

### Public and sustainable transport is growing

Car use across Metropolitan Sydney has been growing more slowly than population since 2001, while public and sustainable transport has been growing significantly faster<sup>17</sup>. There has also been a shift to cycling. Between 2003 and 2010, the number of bike riders on four major routes to the City has increased two-and-a-half times, while the number of cyclists measured at 100 locations across the City has grown by a further at least 50 per cent in the last year<sup>18</sup>.



### Average Annual Percentage Growth, Metropolitan Sydney, 2001/2 to 2008/9

0.9%
Population
0.8%
Total Travel

0.6%

Car Driver

0.7%

Car Passenger

2.0%

1 4%

Bus

1.9%

Walk Only

2.7%

Other - Includes bicycle, motorcycle, light rail, taxi, ferry

Source: Transport Data Centre, 2010, p4.

An integrated land use and transport policy framework will help the City achieve its vision.

### Action to address transport problems

Sustainable Sydney 2030 identified a need for an Integrated Land Use – Transport policy framework for the City to help achieve its vision for the City of Sydney as a green, global and connected city. It included a number of targets as well as a number of major moves to take the City in this direction .

The State Government has released its NSW 2021: A Plan to make NSW Number One (2011)<sup>19</sup> with similar targets to the City for active and public transport growth. It is now focused on extending the heavy rail network (South-West and North-West rail links) and providing additional rail capacity through Central Sydney and across the Harbour. It has also announced the extension of light rail through Central Sydney and is developing a City Centre Access Plan covering all forms of transport for the business centre. The State is also working with the City to improve walking and bus travel time through Central Sydney.

The Federal Government has released policies on cities and urban transport<sup>20</sup>, a discussion paper on a National Land Freight Strategy<sup>21</sup> (Infrastructure Australia, 2011), and policies on airports and air travel.





Sustainable Sydney 2030 included four major moves to help make the City green, global and connected:

### Move No 1

Transforming Central Sydney to make it more lively, people-friendly and re-connected to the Harbour.

### Move No 2

An Integrated Inner Sydney Transport Network, including new sustainable transport connecting Inner Sydney, Central Sydney and the City's villages.

### Move No 3

A Liveable Green Network of continuous green corridors integrated with liveable streets and dedicated pedestrian and cycleway networks.

### Move No 4

Centres as a focus for the City's village community and transport.



# focus

We are working to ease congestion with bike networks, better quality walking routes and encouragement of car share schemes.

A major start has been made on the 200 kilometre bike network, with 10 kilometres of the 55 kilometres of separated cycleway already completed, providing short trip options for people living close to the city centre. Where the cycleways complete a network connection cycling has doubled and tripled as a result.

The construction of the Liveable Green Network has commenced and a program to upgrade many of the city's laneways is underway. Village-to-village community transport services now connect more people and places. Like the State, we are committed to increasing the public transport share of work trips to central Sydney to 80 per cent, and to ensure that half of all the trips taken within the city are by walking and 10 per cent by cycling.

The City and the State Government are working closely together on a number of major initiatives including re-organising bus routes, introducing a 40 kilometres per hour speed zone throughout Central Sydney, creating new pedestrian and shared street zones in Chinatown and changing traffic signals to reduce waiting times for pedestrians.

We are working with the State Government and hope to transform George Street into a world class light rail and pedestrian boulevard that will redistribute pedestrian activity and enable major improvements to bus services by reducing the number of buses that have to travel through the city at the most congested times.

Bold changes are needed to ensure Sydney's liveability and global competitiveness long into the future with new policies and improved infrastructure. This Transport Strategy and Action Plan outlines why changes to our travel patterns are needed, and how they can be achieved through a combination of appropriate investment strategies and policy initiatives.

This strategy builds on the objectives in Sustainable Sydney 2030 and draws on other key reports and strategies from the State Government, competitor cities and from other City research.

The key objectives which emerge from this analysis are to:

- Integrate transport and land use
- Improve efficiency and amenity of the City, particularly in the City Centre
- Provide capacity to accommodate growth
- Enhance access for all, especially those with a mobility disability
- Improve health and safety
- Reduce transport energy use and greenhouse emissions.



Green Global Connected

### **SUSTAINABLE SYDNEY 2030**

State Plan Metropolitan Strategy **Independent Inquiry Competitor Cities** 

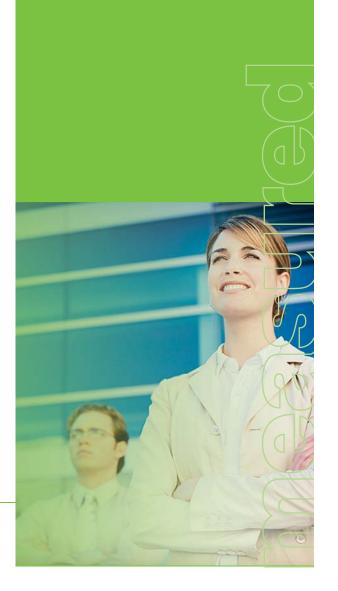
### OTHER KEY REPORTS

**Capacity Limits Growth Pressures Ageing Society** Climate Change and Peak Oil Health and Safety Maintaining Sydney's Economy

### **KEY CHALLENGES**

**Travel Behaviour Public Attitudes Policy Responses** 

**EMERGING TRENDS** 



**Integrate Transport and Land Use Improve Efficiency and Amenity Provide Capacity Enhance Access** Improve Health and Safety Reduce Energy and C0<sub>2</sub> Emissions

**KEY OBJECTIVES** 



Targets have been established to allow progress towards objectives to be measured, and options for achieving the objectives to be assessed. They draw on the targets in Sustainable Sydney 2030, the targets in the State Government's NSW State Plan as well as targets from other relevant organisations.

The targets proposed are set out in the table opposite together with proposed target dates, the data / measurement source to be used, the targets from Sustainable Sydney 2030 and new/enhanced targets.



Artist's impression of light rail on George Street

### Planned Percentage change in work trips to Central Sydney 2011-36

+35%

**Public Transport** 

+50%

+200%

Cycling

-33%

+33%

Delivery

Source: City of Sydney estimates.

Objective	Target	Target Date	Measure / Data Source	City Responsibility	Туре
Integration	All major land-use developments to have approved and funded integrated sustainable transport plans	2015	Relevant DCPs	Joint	New
	All major transport developments to have integrated value capture and land use plans	2015	Relevant EISs	Joint	New
	Five percent reduction in average timetabled travel times by public transport to the City in peak hours	2020	CoS Estimates and BTS Data	Support	New
	Reduce average pedestrian delays at 20 most important Central Sydney intersections by 10%	2015	CoS Estimates	Primary	New
Efficiency	Improve on-street public transport speed within Central Sydney by 10%	2015	CoS Estimates	Joint	New
	On-street and off-street loading for commercial vehicles does not exceed 85% capacity	Ongoing	CoS Parking Survey	Primary	New
	Reduce container truck movements through the City by 20%	2030	CoS Commercial Vehicle Survey	Support	New
Amenity	Creation of at least five kilometres of additional high quality pedestrianised streets and laneways in the City	2030	City GIS Database	Primary	New
	Reduction in the number of kms travelled by buses in the City Centre by 20% by 2015, and 30% by 2020	2015, 2020	CoS Bus Route Analysis	Support	New
Capacity	Provide sufficient public transport capacity to support employment and population targets: Eight percent increase by 2015 compared with 201135% increase by 2030 compared with 2011	2015	CoS estimates of rail, bus, light rail and ferry peak capacity to Central Sydney	Support	New
	80% of Central Sydney work trips by public transport, 10% by walk/cycle, 10% by car/taxi/motorbike	2030	Journey to Work Data (BTS)	Support	SS2030
Access and Equity	90% of City residents to be within a 10 minute walk of key community facilities	2030	CoS LUTI Maps	Primary	SS2030
	90% of City residents to be within a three minute walk of Liveable Green Network	2030	CoS LUTI Maps	Primary	SS2030
	All public transport to be fully accessible and meet the needs of people with a mobility disability	2030	DOT Stop Database	Support	New
Health and Safety	50% reduction in traffic-related deaths and injuries in the City	2030	RTA Accident Data	Joint	New
	10% of local trips in the City by bike and 50% by walking	2030	HTS Data (BTS)	Primary	SS2030
Environment	All trains and light rail to use 100% green renewable power or tri-generation power	2030	Railcorp; Light Rail Operator	Support	New
Environment	All City fleets and 20% of all private cars in the City to be low emission vehicles	2030	CoS Fleet Database; RTA Registration Data	Support	New



### **KEY ACTION 1 - TRANSFORMING GEORGE STREET**

### A Major New Boulevard for Sydney

**Key Actions** 

The City has allocated up to \$180 million and work closely with the State Government with the aim of transforming George Street as the City's main street. The City's contribution will include public domain and streetscape works and the total project will involve:

■ Extending light rail from Central to Circular Quay to act as an inner city distributor and the base for future light rail extensions to Randwick, Green Square and to the inner west

 Creating a major new pedestrian boulevard between Bathurst Street and Hunter Street

 Reducing traffic and widening footpaths in George Street south of Bathurst Street and north of Hunter Street

Upgrading the public domain in George Street and associated laneways

Relocating buses from George Street and streamlining bus services to improve legibility and convenience for the travelling public, enhance efficiency for bus operators and improve amenity for the million pedestrians who use the City Centre each day

Enhancing east-west traffic, taxi and pedestrian connections across George Street to integrate the new boulevard into the Central Sydney road hierarchy.





The City's vision for George Street is for a space for pedestrians and commerce, linking Circular Quay, Town Hall and Central, and incorporating a convenient, quiet and pollution free light rail system to provide for internal north-south movement. Other north - south traffic in the central section between Bathurst Street and Hunter Street would be restricted to those vehicles requiring access to the few remaining car parks, loading docks or hotels. Traffic in the remaining sections of George Street would be relocated and footpaths widened.

East-west traffic movement across George Street would continue to be permitted, but turning movements into and out of George Street, particularly in the central section, would be reduced, allowing shorter cycle times at intersections, improved bus priority and less delay for pedestrians.

of the city.

Providing a space for pedestrians in city centres in conjunction with light rail has been widely adopted overseas and nationally. Light rail is highly compatible with pedestrians because of its low noise, electric power, clearly identified routes and convenient loading and unloading.

### **George Street**

George Street will be transformed into a pedestrian and transport boulevard. It will have a unique identity and will feature distinct paving, lighting and artworks. This transformation will help revitalise Sydney's heart and will also facilitate the development in future of a major square opposite Town Hall, between George Street and Pitt Street, to create a civic focus for the City. This will create a high quality connected pedestrian environment in the retail, business and civic core of the city.



### Public Art, Signage and Way Finding

The City will allocate resources to permanent and temporary works of art for George Street and associated areas.

### Laneways

The City has already committed to upgrading nine Central Sydney laneways. In addition to this, we will spend \$16.2 million upgrading a further 14 laneways.

### **Alfred Street**

Alfred Street is the gateway to Circular Quay and the Rocks. It will be the interface between the light rail and many other forms of transport.

### **Regimental Square**

Regimental Square will be refurbished to improve the setting of the war memorial and improve access to this space.

### Sesquicentenary Square

This square will be upgraded to highlight its connection from York St through to Martin Place.

### **Town Hall Square**

The City will finalise a concept approach to enhance this area in the event that the NSW Government improves the heavy rail infrastructure in this precinct. (Shown - Artist's impression of area near Town Hall)

### **Sydney Square**

The City will be upgrading the square to create a vibrant and comfortable area between the Town Hall and St Andrew's Cathedral.

### **Rawson Place**

Rawson Place will be redesigned to accommodate light rail stations and as an interchange with heavy rail and buses.

### **Railway Square**

Following on from Sustainable Sydney 2030 work, we will continue to work towards a masterplan for the busy interchange areas on the western forecourt of Central Station.





The transformation of George Street will deliver greater people movement, transport efficiency and effectiveness.



### Significant Changes to Bus Routes in the City

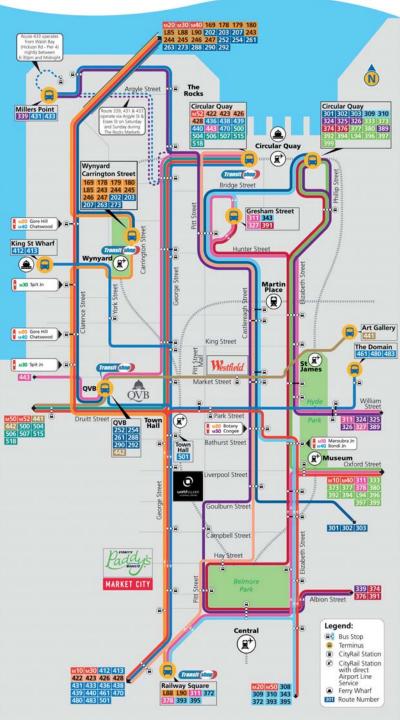
The transformation of George Street will require some significant changes to bus routes in the city. This will provide an opportunity to streamline the current system. Some re-organisation of traffic will also be required.

Buses serve a vital role in Sydney's transport system, for example catering for 21 per cent of work trips to Central Sydney in 2006<sup>22</sup>. The main focus on expanding public transport in the City has been on buses in recent years; however the bus system is now overly complex with 192 different routes serving the city centre

Although car traffic in Sydney City has remained broadly static for the last decade, there are now over 6,000 buses arriving in the City Centre each weekday, and the volumes of buses are anticipated to continue to further increase over the next few years. This will place major strain on the city and lead to further congestion, inefficiency and amenity impacts<sup>23</sup>.

The current situation arises both from relying on buses on some routes which would be better served by other forms of transport (such as heavy rail or light rail) and on trying to run most buses through the City to a far-side terminus. For example most of the buses from the south, south-west, south-east, east and west run all the way up to Circular Quay.

The transformation of George Street is the key to addressing this, by relocating buses from George Street, and redesigning bus routes for greater efficiency and effectiveness. This will involve more through routing of buses, especially east-west, and reducing the number of buses driving all the way through the City to Circular Quay.



Buses serve a vital role in Sydney's transport system, but the current system is complex with 192 separate routes converging on the City Centre. Major changes are needed.

From	Entry Point	Bus Vol / Hour			Change	
		% of Total	Current (2011)	Potential (2015)	%	
North	Harbour Bridge	34%	371	400	8%	
West	Western Distributor	10%	113	120	6%	
South-West	Broadway	18%	195	210	8%	
South	Chalmers Street	7%	72	80	11%	
East	William Street	6%	64	70	9%	
South-East	Foveaux / Campbell Street	8%	93	100	8%	
	Oxford Street	12%	126	130	3%	
	E Distributor / Cahill Expressway	5%	54	60	11%	
	Total (South-East)	25%	273	290	6%	
TOTAL		100%	1088	1170	8%	

Source: Bus timetables plus bus counts by City of Sydney (current) and CoS estimates (2015)



The proposed changes will help stimulate retail activity and tourism by making movement quicker and easier and by reducing noise and emissions.

### Benefits for People and for the City

- People will be able to use the light rail for internal trips within the city, to travel to Darling Harbour and the Inner West, and to link up with heavy rail, ferry and bus services
- If the State proceeds with its proposed extensions to the eastern suburbs and to the University of Sydney it will open up quick and convenient access to educational, medical and sporting opportunities
- Trams will operate every two to three minutes so waiting times will be very short with reliable travel times of 15-17 minutes for the 2.5km George Street spine
- Platforms for boarding trams will be level with the floor of the vehicles, allowing easy access
- The proposed changes will help stimulate retail activity and tourism, make moving between businesses quicker and easier and will create new space in the heart of the city for people to enjoy24
- It will usher in a new regime of integrated public transport and create the equivalent of three new Pitt Street Malls in terms of high quality pedestrian space in the heart of the City.



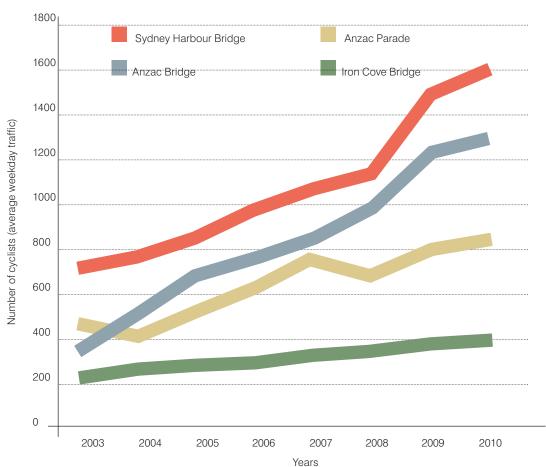
### **ENCOURAGING WALKING AND CYCLING**

### **Key Actions**

- The City will continue to implement its Liveable Green Network (see diagram page 21) to enhance pedestrian access throughout the city and to encourage walking, especially for shorter trips and trips to local amenities.
- The City will work with the State Government to introduce measures to improve pedestrian safety and priority, including a 40 kilometres per hour speed limit throughout the City Centre, changes to traffic light timings and wider footpaths.
- The City will develop a road safety management plan in conjunction with the State Government and other stakeholders, covering walking, cycling and other modes.
- The City will implement its Cycle Strategy and Action Plan, which delivers 200 kilometres of bike network, together with programs to encourage cycling as the most sustainable and healthy form of travel for medium length (2-10 kilometre) trips. It will also examine the feasibility of a public bike hire scheme similar to those operated overseas and in other Australian cities.
- The City will lead the implementation of the Inner Sydney Regional Bike Network and will seek funding from State and Federal sources to enable the other 14 Councils to deliver a regional, connected network.



### Longer term trends in cycling on key routes to the City





### Meeting the Needs of Pedestrians and Bicycle Riders

On a typical weekday there are more than one million walking trips made in Central Sydney, while pedestrians account for 93 per cent of internal trips<sup>25</sup>.

Footpaths on key streets in the city are often crowded with commuters and shoppers in the morning, lunchtime and evening peaks.

Cycling in Australia has been until recently a relatively minor form of transport, particularly compared to other countries. Things are changing. In Sydney, the number of bike riders measured on key routes approaching the city has increased by two and a half times between 2003 and 2010, and the growth is accelerating.

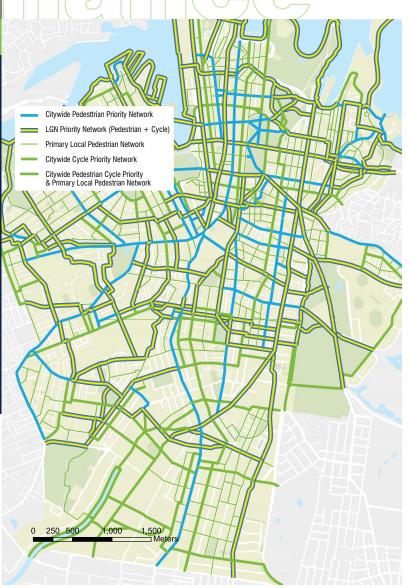
In the last 12 months, the number of cyclists riding in the morning into Central Sydney grew by 60 per cent. This reflects the significant improvement in the provision of safer places for people to ride, with the completion of the first of the City's separated cycleway projects where the number of bicycle riders has in some cases doubled or tripled.

The total number of people walking or cycling to work in Central Sydney per day is expected to double between 2006 and 2036, from around 14,000 to an estimated 27,000, and to equal the number commuting by car.

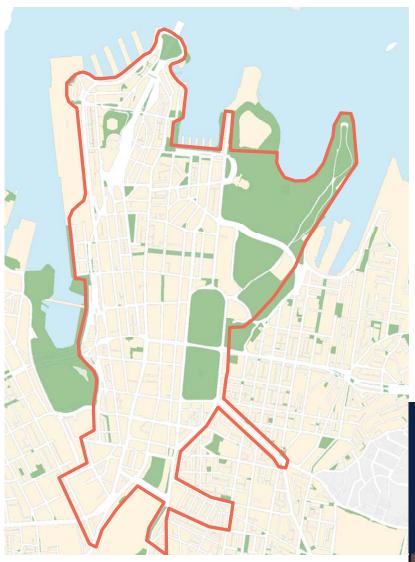
### **Liveable Green Network**

The City has committed to delivering a 'Liveable Green Network' of high quality, safe and pleasant pedestrian connections throughout the Local Government Area. This involves upgrading and widening footpaths, improving lighting and landscaping and improving connectivity. Major projects already completed include the harbour foreshore walk along Blackwattle Bay, upgrades in Glebe Point Road, Redfern Street and other village centres, creation of shared spaces and upgrades to laneways.

The City will implement a network that will enhance walking and cycling.



Liveable Green Network





Safer places to walk, safer places to cycle.

### **Safety and Priority for Pedestrians**

Trend data suggest the number of motorists and pedestrians affected by road crashes in the City has been falling, but the number of bicycle riders involved in crashes is not declining<sup>26</sup>. The need for safer places to walk and cycle will become even more important in future. It also suggests that cycling is increasing faster than awareness of cyclists by drivers, and that cyclists themselves have yet to adapt their behaviour to the congested city streets.

A range of additional measures are proposed to improve pedestrian priority at intersections, including shorter cycle timings to encourage pedestrians to cross with the lights.



### **Cycle Strategy and Action Plan**

The City adopted its Cycle Strategy and Action Plan in 2007, setting out a plan for 200 kilometres of cycleways, of which 55 kilometres would be separated from other traffic, as well as a number of measures to encourage cycling, including the provision of parking and end-of-trip facilities. Since then the first components of the separated cycleway strategy have been completed, including:

- ☐ The Bridge-to-Bridge route, including Union Street, King Street and Kent Street
- The Bourke Road/Bourke Street route between Woolloomooloo and Mascot
- ☐ College Street between Liverpool Street and Macquarie Street.
- Bourke Street, from Woolloomooloo to Waterloo.
- Bourke Road, from Green Square to Mascot.

Upgrading and widening footpaths, improving lighting and landscaping and improving connectivity.



### Planned Regional Bike Network



Note: Routes comprise a mix of separate cycleways, bikelanes, shared paths and mixed traffic

The City is examining the introduction of a public bicycle hire system similar to those in other cities around the world, covering key areas of Central Sydney through to the University of Sydney by 2017, with potential expansion to other areas in subsequent years.

The city is however ensuring that two key pre-conditions are met before such a scheme is introduced:

- Completion of a network of safe cycleways
- Resolving the issue of the need for adults to wear a helmet in areas where low speed limits and safe cycling routes exist.



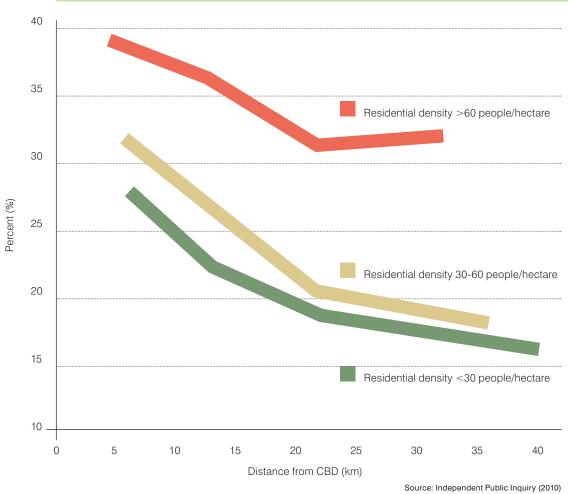


### **CONNECTING BARANGAROO AND GREEN SQUARE**

### **Key Actions**

- The City will work with the State Government to enhance pedestrian, cycling and public transport connections to Barangaroo and adjacent areas. These include the Wynyard Walk and other pedestrian and cycling links, light rail connections and improved ferry services.
- The City will work with the State and Federal Governments to protect the corridor for the future provision of a light rail link from the City to Green Square and to provide improved cycling and cross-regional bus links to the area.

### Proportion of Journeys to work by public transport in Metropolitan Sydney



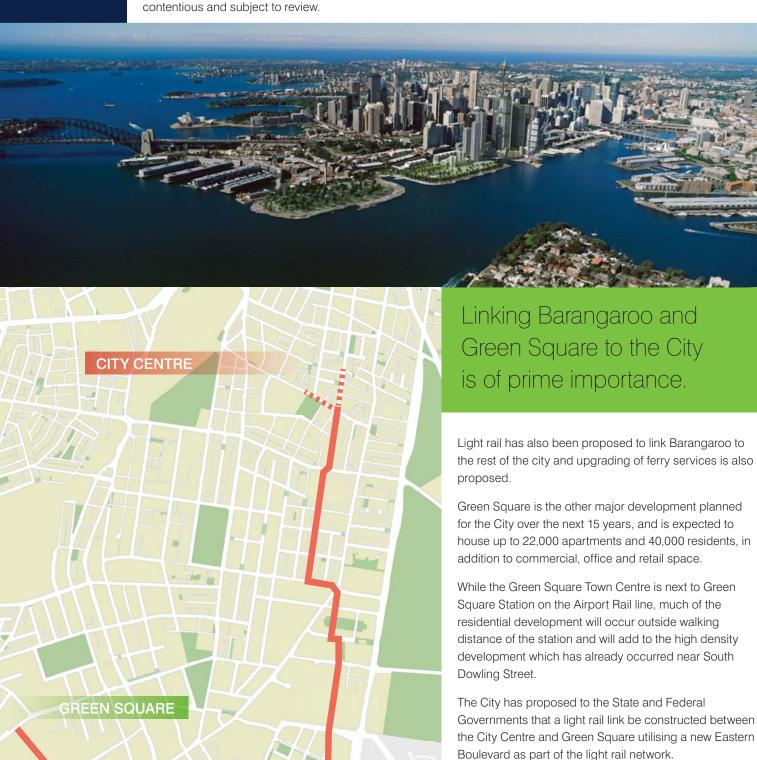
People who live closer to Central Sydney and in higher density areas use less energy and produce less greenhouse gas emissions from transport, reflecting their greater use of walking, cycling and public transport as well as their ability to make shorter trips. This suggests that increased development in the city is good for Sydney as a whole, but the challenge is to also provide appropriate transport and parking controls<sup>27</sup>.

The two largest developments in the City are Barangaroo and Green Square.

The Barangaroo area is the largest remaining undeveloped site in the City Centre and represents a prime opportunity for Sydney to accommodate future employment and residential growth. However the site is disconnected from the rest of Central Sydney, separated by sandstone cliffs and hilly topography, while the current planned links to the public transport system are inadequate.

It is likely that Barangaroo will include space for up to 23,000 additional workers, at least 2,500 residents and retail/hotel facilities, with considerable use of the waterfront, parklands and other facilities by visitors.

Several key opportunities exist to provide better connections to the site. The Wynyard Walk will provide a high capacity pedestrian tunnel from Wynyard Station to the southern corner of the site. This link is currently being designed, in conjunction with potential changes to the pedestrian link between Wynyard and George Street. When completed this is expected to provide the main link for commuters to the site who will mostly arrive by train or bus to Wynyard Station. Whether Wynyard Station can support the additional demand once Barangaroo is fully developed is contentious and subject to review.







The absolute priority is to first secure the corridor

Map of Green Square light rail line

Indicative route

within Green Square to prevent development cutting off the route, which will be essential for buses, cars, service vehicles, cycling and potential future light rail. The City has procured almost all of the land along the corridor in an effort to secure access, but requires statutory protection and assistance with a two remaining Government sites.





### **EXCITING NEW URBAN SPACES**

### **Key Actions**

- The City will work with the State Government to develop Town Hall Square after 2021 as a major public space and high quality interchange between current and future rail, bus and light rail services.
- The City will explore opportunities with the State Government for a comprehensive redevelopment of Central Station and its surrounding areas to provide a world class gateway for the City, accommodating a new heavy rail line and future high speed rail station, light rail connections to the City Centre and Green Square, upgrading of Belmore Park and Railway Square, better pedestrian and cycling links, and key development opportunities.
- The City proposes that the State Government examine the options for a new rail station at Waterloo on the Green Square line, to provide improved access to the Redfern-Waterloo Development and to the Australian Technology Park at Redfern.

There is enormous potential to create exciting new urban spaces enhancing the city's appeal for both residents, workers and tourists.

### **Town Hall Square**

The City has plans for the development of a major city square opposite Town Hall between George Street and Pitt Street to create a civic heart for Sydney. It will complement other major public open spaces at Circular Quay, Belmore Park, Hyde Park and Darling Harbour.

### **Central Station Precinct**

Sydney's Central Station is a key gateway to the city, accommodating a large number of intercity and long distance passengers as well as high volumes of commuters. The main station building is a grand structure, and the surrounding areas including Belmore Park and Railway Square have great potential to create a world-class gateway to the city.

Below: Artist's impression of Town Hall Square



The City of Sydney is at the forefront of a new way of thinking when developments are instigated.

### A NEW WAY OF THINKING ABOUT DEVELOPMENT

### **Key Actions**

■ The City will work with the State Government to develop a Sustainable Transport Guarantee. This will ensure that, as a condition of development consent, future major developments are provided at an early stage with enhanced walking, cycling and public transport access, and that parking policies will be designed to minimise growth in private vehicle use.

In recent decades Sydney has seen major urban development but without upgrades to public transport as people move into the newly developed areas. This has occurred in new release areas such as the North-West and South-West Growth Centres and in major redevelopment areas such as Olympic Park-Rhodes and sites along the Parramatta River. While other services including water, sewer and power are guaranteed as part of any new development, public transport often seriously lags development.

A new way of thinking about development is required, in which upgrades and extensions to public transport are considered equally essential to other services, and are provided in a timely manner. It is proposed that a new "Sustainable Transport Guarantee" policy is developed by the City and the State Government, under which no major greenfields or brownfields development can be approved unless an integrated Sustainable Transport Plan is approved and funded.





### MANAGING STREETS

### **Key Actions**

■ The City will further develop its Street Hierarchy to allocate priorities for access requirements on particular streets, including private cars, commercial vehicles, taxis, buses and light rail, cyclists and pedestrians.



- Northern Shore/North West
- Victoria Road
- Parramatta Road
- South/South West
- Eastern Suburbs
- Northern Beaches





Key arterial roads have high traffic volumes - the Western distributor has around 128,000 vehicles per day, Parramatta Road near the University of Sydney has 60,000 vehicles per day, and Anzac Parade near Moore Park has around 47,000 vehicles per day. There is also a substantial amount of through traffic which bypasses Central Sydney using the Western and Eastern Distributors, the Cahill Expressway, the Harbour Bridge, the Harbour Tunnel and the Cross City Tunnel<sup>28</sup>.

Source: NSW Transport Data Centre, 2008

While some roads have experienced increasing traffic, in particular the Western Distributor, volumes on major arterial roads are levelling off, while overall traffic volumes measured across the City of Sydney have been static or falling since 1999. This reflects the shift to walking, cycling and public transport, which has allowed the population to increase without an increase in traffic. The City aims to increase priority for the more space efficient and sustainable forms of transport (walking, cycling and public transport) and to maintain access for commercial and delivery vehicles to further re-inforce these trends.



### Streets and Places as Links

While streets act as key arteries for a city, linking people and activities, they can also act as places. Sydney has not made the most of its streets and laneways.

A Street Hierarchy has been developed to help guide future management of road-space in Central Sydney, and to link with appropriate urban design treatments. This will later be extended to cover the whole City. It establishes the relevant priorities for different users in different parts of the city and the road network, based on the neighbouring land uses, volumes of traffic and opportunities for different forms of transport to work together.

### **Key Actions**

- Pedestrians will be given high priority in parks, squares, pedestrianised streets and laneways
- Bike riders will have a network of separated cycleways as well as shared zones or paths
- Public transport will be given high priority on key access routes to and within the City
- Cars and commercial vehicles will have high priority on bypass routes and will have access to a wide variety of other streets including secondary routes, minor roads and shared zones.

There will be more detailed discussion of the options with the State Government and other stakeholders and the implementation will need to be staged over time.



### **Key Actions**

- The City will work closely with the State Government to examine the complex travel patterns to the southern corridor, including freight movement to the Port and Airport that travel through the city area, and identify the freight and passenger upgrades needed to maintain the key economic functions of this area.
- The City will work with the logistics, retail, hotel, construction and other stakeholders to develop a Commercial Vehicle Management Strategy to maintain access for commercial and delivery vehicles to the city and to explore options for reducing impacts on peak hour congestion and improve reliability of delivery times.

The City's transport systems, and in particular the road network, also have to handle a significant volume of freight and light commercial movements. Sydney is Australia's congestion capital with avoidable social costs of eight cents per vehicle-kilometre in 2005 estimated to have increased to nearly 13 cents per kilometre by 2010. Much of this falls on commercial vehicles and the movement of freight<sup>29</sup>.

The City is seeking to balance the needs of the freight industry with other needs. Key principles of this balanced approach are:

- To shift heavy road freight to rail where practicable, especially container movement from Port Botany
- To provide priority for freight and commercial vehicles over other traffic where possible, through appropriate management of road space and parking
- To segregate public transport routes from heavy freight routes wherever possible enabling both freight and public transport to be given priority but on separate routes
- To limit residential development along key freight corridors.







### PARKING POLICY

### **Key Actions**

The City will develop a comprehensive parking policy to help achieve its overall objectives. In particular it will:

- Balance competing demands for the limited road space by continuing to provide priority for on-street parking to service/delivery vehicles, taxis and for people with a disability.
- Further develop the parking policies included in the draft Local Environmental Plan over time, to limit parking in areas with high access to public transport and services
- Encourage the State Government to adopt a metropolitan parking policy and to develop the parking space levy to be more flexible and reduce the volume of private car commuters to Central Sydney
- Encourage commercial car park owners and managers to make their car parks more sustainable, for example by reducing access in the morning peak period or converting some spaces to bicycle parking and end-of-trip facilities such as showers, electric vehicle recharging points and storage / logistics facilities
- Review potential for four-hour parking in the evenings where it can support retail, cinema, theatre and dining.

The number of vehicles registered in the City is growing.

The city as a whole has a total of 160,000 parking spaces, or about 1.75 spaces for every vehicle registered. This compares with the Sydney average of over three parking spaces per vehicle.

Although there are more spaces overall than registered vehicles, many people from outside the City drive into the City for work, business, social, entertainment or other purposes.

Parking is very tight in much of the local government area and there is constant tension between residential parking needs and business parking needs.



Sydney is Australia's congestion capital with avoidable social costs.

The City will explore options for encouraging greener vehicles through a range of measures including experimenting with electric and low emission vehicles.

### **CAR SHARING**

### **Key Actions**

The City will continue to support car share as it provides an additional option for people to reduce their ownership and use of private automobiles, in conjunction with greater use of walking, cycling and public transport.

Car sharing has grown rapidly and there were over 7,700 car share members in the City of Sydney at the end of 2011. One car share vehicle car replace the need for up to seven private cars, as people only use car share when it makes sense to drive, relying on walking, cycling and public transport for many of their trips.

The City has a target of 10 per cent of households having at least one member of a car share organisation by 2016.



# MANAGING VEHICLE FLEETS TO INCREASE SUSTAINABILITY

### **Key Actions**

■ The City will continue its organisation's Fleet Management Strategy 2011/13 with a target of reducing greenhouse gas emissions from its fleet by 20 per cent by 2014.

The City has taken a number of measures over recent years to reduce the carbon footprint of its fleet, which was 3,000 tonnes in 2010. These include:

- Replacing 125 regular cars leased to individual staff with 40 hybrid electric cars operated on a pooled basis.
- Rationalising the fleet of trucks and other vehicles, with the total fleet falling from 600 vehicles to 450 vehicles.
- Introducing hybrid diesel-electric trucks which have up to 39 per cent less emissions than regular diesel powered vehicles.
- Switching to sustainable biodiesel, which saves up to 18 per cent emissions compared with conventional diesel fuel.
- Introducing two of the first fully-electric cars in Australia, which are recharged from solar panels on the Town Hall.
- Introducing a bike fleet for use by staff.

Further initiatives include introduction of driver training, which has shown savings of up to four percent in fuel consumption, expanding the full-electric vehicle fleet, and introducing electric recharging points in City-owned parking stations and carparks.

The City will examine options to reduce greenhouse gas and other emissions from other vehicle fleets operating in the City.

Trains and buses are already three times more energy efficient than cars. However their greenhouse gas emissions could be further reduced by switching to green power or tri-generation power for trains and trams, or to hybrid or electric buses. For example some cities such as Calgary already operate their light rail vehicles on renewable energy while Adelaide has been testing an electric bus, recharged from greenpower. The City will encourage the State Government to examine options in this area with the aim of reducing overall emissions from public transport in Sydney.

The City will also examine ways to encourage owners of vehicle fleets to adopt some of the measures already successfully adopted by the City in its Fleet Management Strategy 2011/13.





### IMPROVING CONVENIENCE AND CONNECTIONS

### **Key Actions**

The City will encourage the State Government to improve the convenience of public transport by:

- Introducing fully integrated fares and smart card ticketing covering all modes, including light rail, with no extra fare paid when transferring between services
- Exploring the possibility of a free transit zone for travel in the City Centre
- Reducing travel times by speeding up the rail timetable, increasing bus priority measures, increasing the frequency of services and reducing boarding times
- Extending early morning, late night and weekend services to enable people to stay later in the City, thus reducing peak loads and enhancing the city economy
- Improving wayfinding and information to make it easier to use the system, especially for tourists and occasional users.

The City will work with the State Government to promote the upgrade of key interchanges in Central Sydney, including Circular Quay, Wynyard, Town Hall and Central, as well as in the rest of the Local Government Area, to facilitate connections, enable people to travel to multiple destinations more easily and convert interchange from a chore to an opportunity.

Integrated fares and ticketing are crucial to making journeys by public transport as seamless and convenient as possible.

The overall fare and ticketing regime in Sydney remains complex. Most other world cities now have both integrated fares and smart card ticketing systems. These initiatives make public transport considerably more convenient, easier to understand and engage with and encourage a shift from private cars.

Transport systems need to be easy to navigate through with clear information on travel.



### REDUCING TRAVEL TIMES AND IMPROVING OFF-PEAK SERVICES

Travel time for public transport includes the time spent travelling in the vehicle, waiting times to board the vehicle or to transfer to another service and the time spent walking or otherwise accessing public transport at both ends of the trip.

All components of travel time are important. Reliability of travel time is also very important. While Sydney has Australia's biggest urban rail system it also has the slowest. Our trains are slower than they used to be and slower than trains in other cities in our region<sup>31</sup>.

Bus (and light rail) services also need to be speeded up. This requires greater use of priority measures, especially dedicated bus and light rail lanes to protect public transport from the effects of congestion. The City will work with the State Government to introduce such lanes, particularly on major access routes to the city, taking into account impacts of such measures on amenity and local economy.



### **Improving Information**

Cities and their transport systems should be easy to navigate and understand. A key to this is the approach adopted to information and wayfinding, including maps, timetables, real-time information, signage and symbols.

The City will work with the State Government to develop a simple, legible and easy to understand system of information and wayfinding to make it easier for residents and visitors alike to navigate around the city and its transport systems.

### **Better Interchanges**

Significant improvements have been made in recent years to many of Sydney's key interchanges, where people can change to other forms of public transport, including Parramatta, Chatswood, Liverpool, Blacktown and Bondi Junction. However, relatively little has been done to upgrade key interchanges in the Central Sydney, such as Circular Quay, Town Hall, Wynyard and Central.

The City will work with the State Government and other stakeholders to promote high quality seamless interchange opportunities at these and other locations.

The City will seek to have a joint working group with the State to develop options to improve the city experience when using public transport.



# PUBLIC TRANSPORT CAPACITY FOR A GROWING CITY

### **Key Actions**

The City will work with the State Government to:

- Increase overall public transport capacity to Central Sydney to maintain the economic viability of Australia's global city
- Support the expansion of public transport generally across Sydney including cross-regional services and those serving other centres.

The number of public transport commuters to Central Sydney is expected to increase by 35 per cent between 2011 and 2036<sup>33</sup>. However our rail and bus systems to and through Central Sydney are close to capacity. The scale of developments anticipated in the City, coupled with existing congestion, means that key capacity thresholds are being approached. Significant upgrades to public transport will be required.

The fastest increases in travel demand to the City are expected on key corridors connecting it to the parts of Sydney with the highest population growth. These include the North – Western and South-Western suburbs as well as the southern part of the City itself, particularly around Green Square<sup>32</sup>.





### HEAVY RAIL CAPACITY AND EXPANSION OPTIONS

### **Key Actions**

The City will work with the State Government as a priority to help choose the best alignment and to have completed within ten years the next heavy rail line through the City and across the Harbour.

This line is essential to the City's future and will:

- Relieve the capacity constraints on Town Hall and Wynyard stations
- Enhance the overall capacity of the rail network by around 50 per cent
- Accommodate increased demand, particularly from the north-west and south-western suburbs and Central Coast, as well as potential high speed rail services
- Reduce pressure on the Main Western Line
- Enable services to be accelerated
- Provide redevelopment opportunities around stations.

Sydney's rail system is likely to be at capacity by around 2020/22. There have been various proposals for enhancing the heavy rail network, including:

- Converting part or all of the system to single deck metro style trains
- Building entirely new metro lines
- Building another line through Central Sydney and across the Harbour.

Given the existing investment in the heavy rail system, the main priorities should be to extend the existing system and to strengthen its capacity through the City so as to take full advantage of the total network.



The immediate priorities in terms of heavy rail / metro systems are to extend the network to the high growth outer suburbs in the north-west and south-west; to add capacity to the network across the Harbour and through Central Sydney, and to link Parramatta to Epping and the "Global Arc".

### **High Speed Rail**

High-speed rail is developing very rapidly around the world and the Australian government has recently completed Phase One of a major study into a high-speed rail system for the East Coast. Sydney is clearly at the centre of demand for any high-speed rail network in Australia.

Any route through Sydney should connect with the City Centre and the Global Arc, which have 500,000 jobs and the main tourist attractions in the country, and with Sydney Airport, Australia's premium international and national airport.

### **Rail Alignment Options through the City**

Given that a new rail link through the City and across the Harbour is needed, and that it needs to accommodate both the current double deck trains as well as potential high-speed trains, an issue arises as to the optimal alignment.

There is an urgent need to finalise the best alignment in conjunction with an operating plan that takes into account the need to accelerate rail services as well as enhance capacity across the network, to relieve the current pressure on Town Hall and Wynyard stations and accommodate potential high-speed trains.





# **ENHANCING BUS SERVICES**

#### **Key Actions**

- The City will work with the State Government to encourage greater provision of cross-regional bus services, for example east-west services south of Central Sydney, to service growing employment areas and to reduce pressure on radial services
- The City will assist the State Government in designing improved bus priority measures, particularly in key routes approaching Central Sydney (such as Oxford Street and Parramatta Road) and on those streets in the City Centre, which will remain major bus routes (such as Park Street and Elizabeth Street) for the foreseeable future
- The City will expand its village and community bus services to provide improved access for local residents, particularly the elderly or those with a disability
- The City will encourage the State Government to increase frequencies of evening and late night bus services, particularly metrobuses
- The City will examine options for night shuttle bus services to connect precincts.

Currently the vast majority of Sydney's bus services are radial links focused on Central Sydney. However there is a growing need for more cross-suburban and boundary services, linking residents to other centres. In the inner suburbs, this includes destinations such as Bondi Junction, the Randwick health-education complex, Green Square and the Airport.

The City has estimated that streamlining bus services within Central Sydney could reduce the need for a large number of buses which are currently used inefficiently in long queues on George Street and York Street in particular, and which if re-allocated to cross regional services, could enable up to 10 new high frequency routes to be developed.

In addition to more cross-regional routes, bus services can be further improved by greater use of bus priority measures, including queue-jumps at signals, additional peak hour bus lanes and all-day bus lanes. The City will work with the State Government to facilitate such improvements.

# **Community Transport**

Community Transport plays an important role in the public transport mix by connecting people to the community who may otherwise be socially excluded, whether that is a result of mobility problems or lack of a public transport service.

The City provides a range of community transport through a dedicated service provider. Current services include Redfern - Broadway and Woolloomooloo -Redfern. The City is examining options for enhancing these services.





### **EXTENDING LIGHT RAIL**

# **Key Actions**

The City will work closely with the State Government and other local councils as well as the community to help study the feasibility of and to help design the next key extensions to light rail in Sydney after George Street. High priority options include to:

- The University of NSW and beyond
- Green Square
- Barangaroo
- Sydney University and UTS
- Inner Western-Western suburbs such as Five Dock and Balmain

Potential Light Rail Extensions to inner suburbs in Central Sydney



Sydney has a small light rail network from Central to Lilyfield, and in 2010 the State Government announced a \$500 million expansion of light rail, including an extension from Lilyfield to Dulwich Hill (currently under construction), and an extension from Central to Circular Quay and Barangaroo. The City has been working closely with the State Government on this initiative.

The State Government has recently announced the development of a Sydney Light Rail Strategic Plan which will incorporate previous studies of light rail and identify priority routes and staging for the development of a light rail system for inner Sydney.

The City will work closely with the State Government, neighbouring Councils and other stakeholders to finalise this plan and to develop such a system. The City believes that light rail could effectively handle the growth in demand on many current bus corridors.

As the lines move out of Central Sydney, they also support further residential and employment density and help reduce dependence on cars by providing a convenient, legible, highly accessible and comfortable travel option.

Light rail could effectively handle the growth in future demand from inner suburbs.



# **ENHANCING FERRIES AND TAXIES**

### **Key actions: Ferries**

The City will encourage the expansion of ferry services to Central Sydney, especially from the growing residential areas along the Parramatta River to Barangaroo.

Ferries have a key niche role in serving areas along Sydney Harbour and the Parramatta River. The population in some of these areas is growing rapidly, particularly in the Rhodes and Homebush peninsulas and around Meadowbank.

A light rail connection from George Street to the proposed ferry terminal at Barangaroo is included in the light rail network to enable people arriving by ferry to access a wider set of destinations in the City, as well as linking Barangaroo with the mid-town area.

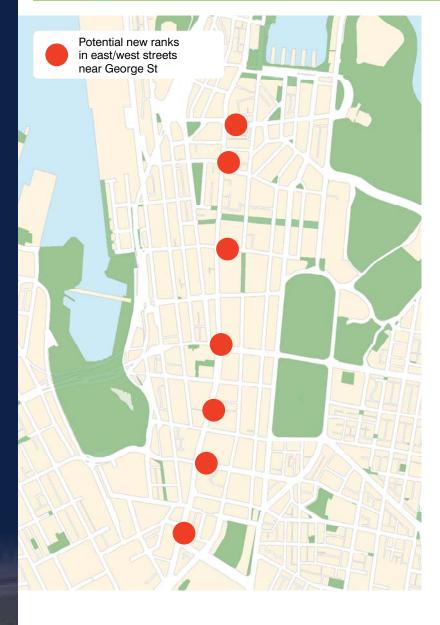
### **Key actions: Taxis**

The City will work with the State Government and the Taxi Council to:

- Create new taxi ranks adjacent to George Street in association with the Transformation of that Street
- Encourage the taxi industry to explore new options such as pre-payment of fares and automated multi hiring from busy ranks on Friday and Saturday evenings or at other peak times, to improve the efficiency of the industry and the service to customers
- Ensure that taxis can legally pick up and set down passengers across the City, especially after 11pm.

Taxis play a key role in providing access and in the evenings. The City has been working with the Taxi Industry and the State Government to provide additional set down areas in key parts of the City, as well as secure ranks near major entertainment districts.

# Potential New Taxi Ranks - George Street





### **KEY NETWORK PRIORITIES**

#### **Key Actions**

In the short term (2011-2015), the City will focus on the following key enhancements to the transport network:

- Implementing the Transforming George Street Project
- Completing the highest priority Liveable Green Network projects
- Completing the highest priority cycleway projects
- The Wynyard Walk pedestrian link to Barangaroo Pedestrian Link
- New cross-regional bus links
- Upgrades to Circular Quay, Wynyard, Town Hall and Central interchanges.

In the medium term (2015-2025), the City will work with the State Government to implement other key upgrades to transport networks, including:

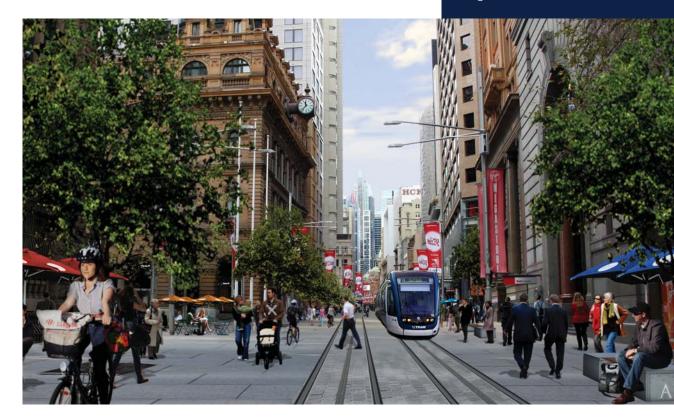
- The next rail harbour rail crossing and line through the City of Sydney
- Light Rail links to Anzac Parade, Barangaroo and Green Square
- Bus and Light Rail priority measures on Oxford / Flinders Street and Broadway/Parramatta Road
- Measures to maximise the use of the Cross City Tunnel to reduce through traffic on the surface, including a potential underground bus interchange under the proposed Town Hall Square.

In the longer term, (post 2025) the City will work with the State Government and others to implement other key transport upgrades, including:

- Other light rail extensions (e.g. to the Inner West; University of Sydney)
- Potential Metros (e.g. to the north-east, west, north-west and south-east)



Artists impression of light rail on George Street.



# **Short, Medium and Long Term Priorities**

The City's priorities in the short term (2011-2015) are to:

- Improve the speed, convenience and reliability of access to and around Central Sydney
- Encourage the recent trend to more sustainable transport options
- Reduce congestion and improve amenity.

The transformation of George Street, including making it more accessible for pedestrians, light rail, bus streamlining and associated traffic changes, is crucial along with initial upgrades to the key interchanges of Circular Quay, Wynyard, Town Hall and Central. Unless this is proceeded with quickly, Central Sydney is likely to suffer further deterioration in efficiency, with implications for the City and wider economies.



The City's priorities are to encourage the shift which is already occurring towards walking, cycling and public transport.

# **Key Network Enhancements**



Major projects including Barangaroo and Green Square are expected to be well underway by 2015. Improved pedestrian connections at Barangaroo are a high priority. After 2015, other improvements including a light rail link and ferry terminal upgrade will be required.

For Green Square, the removal of the surcharge applying to Green Square station in 2011, coupled with some additional bus services and the Bourke Street cycleway, should be able to cope with the increase in commuter and other trips from the area for the next few years. The proposed light rail link is predicted to be essential by around 2020.

The initial light rail extension in George Street in the 2011-2015 period will also allow a potential extension to the University of NSW and beyond in the 2015-2020 period. This will relieve the pressure on bus services on that corridor. The extension of light rail and addition of cross regional bus services will also require upgrades to a range of other interchanges throughout the City of Sydney.

The next harbour rail crossing and rail line through the City is required to be completed in the medium term (2015-2025) given that there is only 15 per cent spare capacity on the heavy rail system. Together with the north-west rail link, expected to be completed in the early part of this timeframe, this will relieve the pressure of bus services on the Harbour Bridge and York Street.

In the longer term (beyond 2025), a range of other network upgrades will be required, including potential metros and further light rail extensions. Further detailed analysis will be required closer to that timeframe.





# **KEY ACTIONS**

The City will continue to build long-term partnerships with all key stakeholders involved in the transport area. In particular the City will:

- Further build on the co-operation with the State Governments to facilitate joint action
- Establish an effective co-ordination mechanism, with neighbouring Councils and other key stakeholders, to further plan integrated transport initiatives
- Work with the Federal Government and State Government on key strategic issues, such as the Green Square Development Area and the investigations into a potential East Coast High Speed Rail line.

Prime responsibility for many transport matters rests with the State Government. However the City has the ability to influence transport outcomes directly by building cycleways, modifying the operation of the street network, balancing parking demand and developing community transport initiatives.



### **FUNDING AND RESOURCES**

# **Key Actions**

The City of Sydney has and will allocate significant resources to the "Connecting our City" Strategy recommendations outlined in this report. In terms of key capital works expenditures, this includes over the next four years (Financial Year 2012 to 2015):

- An estimated \$42.4 million for continuing implementation of the bike network
- An estimated \$180 million for urban design elements of the transforming Sydney strategy. This includes major upgrades to pedestrian facilities and landscaping in George Street and associated laneway upgrades to compliment the extention of light rail
- Up to an estimated \$25 million to other initiatives; development of the liveable green network; and education awareness campaigns to encourage more sustainable travel behaviour.

The City has been building partnerships to help leverage its efforts to facilitate action.



The City is working closely with the State Government for joint initiatives to improve transport and access in the City.

Currently Local Government has a limited role in relation to provision of public transport infrastructure, although Section 94 contributions from developers can be sought for roads, traffic signals and bus facilities.

The City will explore options to help fund improvements to public and active transport infrastructure.

Other funding options, such as sponsorships, have occurred overseas. The City will also examine such options as appropriate for specific initiatives.



Key Ac	etion	City Role	Proposed Timing
Target	s		
	Adopt Key Transport Targets	Primary	2012
Transf	orming George Street		
1.1	Extend the light rail along George Street from Central to Circular Quay in conjunction with pedestrianising George Street between Bathurst Street and Hunter Street and public domain upgrades on George Street and associated laneways	Joint	2012-2015
Encou	raging Active Transport		
2.1	Implement the Liveable Green Network	Primary	2012-2017
2.2	Introduce 40 kph speed limits and improve pedestrian priority at intersections in Central Sydney	Support	2012-2015
2.3	Develop a road safety management plan for the City	Joint	2012-2013
2.4	Complete the Cycle Strategy and Action Plan, and examine the feasibility of introducing of a Public Bike Hire Scheme	Primary	2012-2020
2.5	Work with our 14 neighbouring councils and State and Federal governments to implement the Inner Sydney Regional Bike network	Joint	2012-2020
Integra	ating Transport And Land Use		
3.1	Enhance pedestrian, cycling and public transport connections to Barangaroo	Joint	2012-2020
3.2	Accelerate the provision of a light rail link from the City to Green Square	Joint	2012-2020
3.3	Examine options for an underground bus interchange in association with the proposed Town Hall Square	Joint	2012-2013
3.4	Develop Central Station as a world class gateway to Sydney, including a new heavy rail line, potential high speed rail line and new light rail links	Joint	2012-2020
3.5	Examine the potential for a rail station at Waterloo on the Airport line between Central and Green Square	Support	2012-2013
3.6	Develop a Sustainable Transport Guarantee Policy for inclusion in future LEP and Development Controls	Joint	2012-2013
Manag	ing Streets, Parking And Vehicles		
4.1	Develop a Street Hierarchy to help allocate roadspace for particular modes on specific streets	Joint	2012-2013
4.2	Identify freight and passenger upgrades required in the southern corridor to port and airport	Joint	2012-2013
4.3	Work with logistics, retail, hotel, construction and other stakeholders to develop a Commercial Vehicle Management Plan for the City Centre	Primary	2012
4.4	Develop a comprehensive Parking Policy for the City to reduce congestion and balance competing needs	Primary	2012-2013
4.5	Continue to support Car Share	Primary	2012 +
4.6	Develop a Green Fleet Policy to encourage reduction in energy and CO <sub>2</sub> emissions in the City	Primary	2012-2013

Key Ac	etion	City Role	Proposed Timing
Enhan	cing Public Transport		
5.1	Encourage the State Government to introduce fully integrated fares and ticketing, reduce rail travel times, extend late night and weekend services and improve way-finding and information	Support	2012-2015
5.2	Upgrade Circular Quay, Town Hall and Central interchanges in conjunction with the George Street transformation project Upgrade 11 other key interchanges in the rest of the City of Sydney	Joint Support	2012-2015 2016-2025
5.3	Work with the State Government to increase overall public transport capacity to Central Sydney to maintain the economic viability of Australia's global city Support measures to enhance public transport generally in Sydney	Support Support	2012 + 2012 +
5.4	Encourage the State Government to finalise the optimal route for the next rail harbour crossing and line through the City as a priority	Support	2012-2013
5.5	Encourage the State Government to provide additional cross-regional bus services	Support	2012-2020
5.6	Work with the State Government to provide improved bus and light rail priority in key streets including Park Street, Oxford Street, Flinders Street and Broadway, in conjunction with streetscape upgrades	Joint	2013-2025
5.7	Improve effectiveness of village, community and late night shuttle bus services	Primary	2012
5.8	Work with the State Government, other Local Councils and key stakeholders to examine the feasibility of and develop detailed designs for the next key extensions to the light rail system	Joint	2012-2013
5.9	Encourage State Government to further increase ferry services	Support	2012 +
5.10	Work with State Government and Taxi Council to create new taxi ranks adjacent to George Street and to encourage the taxi industry to explore new options such as automated multi-hiring from busy ranks and to improve service standards	Support	2012-2020
Making	g It Happen		
6.1	Focus on the following key network enhancements in the short term, including: Transforming George Street Project; Completing high priority Liveable Green Network and Cycleway projects; The Wynyard Walk Link; New Cross-regional bus links; Upgrades to Circular Quay, Wynyard, Town Hall and Central interchanges. Work with the State Government to facilitate medium term (2015-2025) and long term (2025+) enhancements.	Primary	2012-2013
6.2	Continue to build long-term partnerships with the State Government and other key stakeholders to help implement transport improvements	Joint	2012 +
6.3	Allocate significant resources to the "Connecting Our City" strategy actions in this report	Primary	2012 +
6.4	Work with the State Government to explore options for enhancing the funding available for sustainable transport initiatives, including from parking and from major development.	Joint	2012 +



The meanings of some of the terms used in this report are explained below:

# **Active transport**

Walking and cycling

### **Arterial road**

A high-capacity urban road

# **Brownfields development**

Abandoned or underused industrial and commercial facilities available for re-use.

## Flag fall

The part of a public transport fare paid when someone boards a vehicle, which when added to the distance-related component, makes up the full fare.

#### **Global Arc**

The concentration of economic activity (including approximately 500,000 jobs) in an arc from the airport through the City to North Sydney, Chatswood and Macquarie Park.

#### Green power

Electricity generated from renewable sources.

# **Greenfields development**

Undeveloped land in a city or rural area

### **Gross State Product**

The value of economic activity in a State (in this case NSW).

### **Liveable Green Network**

A network of high quality walking routes connecting residents with local services

### MyZone

The new system of fares for Sydney introduced in 2010 by the State Government. It provides improved fare integration between some modes, for example rail and bus.

#### **RMS**

Department of Roads and Maritime Services

# **Tri-generation**

A system using gas-powered generators to produce electricity, hot water and cold water, and enabling significant overall improvements in energy efficiency.

## **Wynyard Walk**

A high capacity walking connection linking Wynyard with Barangaroo

- City of Sydney estimates, based on ABS population estimates and updates of 2006/7 Floorspace Employment Census.
- Bureau of Transport and Regional Economics (2007): "Estimating urban traffic and congestion cost trends in Australian cities". Working Paper No. 71. Canberra., Table 2.11
- NSW Government (2010): "Metropolitan Plan for Sydney 2036". Metroplansydney.nsw.gov.au.
- NSW Bureau of Transport Statistics (2010): "Household Travel Survey Data on Travel to and within Central Sydney" Unpublished data from the Sydney Household Travel Survey for the City of Sydney.
- NSW Bureau of Transport Statistics (2010): "2008/9 Household Travel Survey. Summary Report. 2010 Release".
- City of Sydney (2009): "Sustainable Sydney 2030: The Vision". www.sydney2030.com.au
- NSW Bureau of Transport Statistics data for City of Sydney.
- NSW Bureau of Transport Statistics (2010b): "Household Travel Survey data on travel to and within Central Sydney". Unpublished data from the Sydney Household Travel Survey for the City of Sydney.
- City of Sydney estimates based on ABS 5206.0. Australian National Accounts, March Quarter 2011, Table 6. See http://web-internal/About Sydney/ CityResearch/AtaGlance.asp
- <sup>10</sup> City of Sydney data see http://web-internal/ AboutSydney/CityResearch/GlobalSydney.asp
- NSW Government (2010): "Metropolitan Plan for Sydney". December 2010. Available at metroplansydney.nsw.gov.au.
- <sup>12</sup> City of Sydney estimates based on floorspace surveys and Bureau of Transport Statistics estimates
- <sup>13</sup> NSW Bureau of Transport Statistics (2010): "Travel Zone Population Forecasts, October 2009.-Population Household Age Sex Breakdown" www.bts.nsw.gov.au.
- <sup>14</sup> Climate Commission (2011): "The Critical Decade: Climate Science, Risks and Responsibilities". May 2011. Canberra. http://climatecommission.gov.au/wpcontent/uploads/The-Critical-Decade final low-res. pdf.
- 15 GTA Consultants (2011): "Walking for travel and recreation in NSW: What the data tells us". Report for the Premier's Council on Active Living (PCAL). January 2011. Available at http://www.pcal.nsw. gov.au/draft\_nsw\_walking\_strategy. Last viewed 28 February, 2011.

- Roads and Maritime Services.
- NSW Bureau of Transport Statistics (2010): "2008/9 Household Travel Survey. Summary Report. 2010 Release".
- RMS and City of Sydney cycle count data.
- NSW Government (2011): "NSW 2021: A Plan to make NSW Number One". www.2021.nsw.gov.au.
- Major Cities Unit and Infrastructure Australia (2010): "State of Australian Cities 2010".
- Infrastructure Australia (2011): "National Land Freight Strategy: Discussion paper". February 2011.
- NSW Bureau of Transport Statistics (2010): "Household Travel Survey Data on Travel to and within Central Sydney" Unpublished data from the Sydney Household Travel Survey (Bureau of Transport Statistics) for the City of Sydney.
- City of Sydney Bus Counts and forward estimates
- City of Sydney (2011b): "Global Cities Retail Study". SGS Economics and Planning. In Preparation.
- NSW Bureau of Transport Statistics (2010): "Household Travel Survey Data on Travel to and within Central Sydney" Unpublished data from the Sydney Household Travel Survey (Bureau of Transport Statistics) for the City of Sydney.
- Roads and Maritime Services Crashlink Data.
- City of Sydney (2009): "Sustainable Sydney 2030: The Vision". www.sydney2030.com.au; Gehl, J. (2007): "Public Spaces, Public Life". Gehl Architects. Copenhagen.
- NSW RMS Traffic Counts.
- Bureau of Transport and Regional Economics (2007): "Estimating urban traffic and congestion cost trends in Australian Cities". Working Paper No. 71. Canberra.
- Independent Public Inquiry (2010): "Long Term Public Transport Plan for Sydney. Final Report". May 2010. www.transportpublicinquiry.com.au. Last viewed 28 January 2011.
- City of Sydney estimates based on forecast changes in employment and mode shares.
- City of Sydney estimates based on NSW Government 2010.

