

3.0 Global Sydney

Key points

Sydney is one of the select cities that directly influence global business and culture and is in turn directly influenced by global trends. This 'global city' status brings both opportunities and threats that have implications for the whole State, because history suggests that when Sydney succeeds, NSW succeeds.

Global Sydney's economy is clustered in a corridor that extends from the CBD north to Macquarie Park and south to Sydney Airport. This area is home to many high value service industries such as finance, insurance, technology, health, education and tourism. It generates over 41 percent of NSW's total economic output.

Global Sydney's businesses reach outwards to interstate and overseas markets, and this has allowed Sydney to 'punch above its weight' on the world stage for many years. But Sydney's future economic success is not assured. Service industries rely on access to a talented and creative workforce. If these people choose to live in other cities, business activity will follow them.

Over the last decade, other cities, both in Australia and internationally, have made great advances in their liveability and attractiveness for business. Meanwhile Sydney has 'rested on its laurels'.

Global Sydney now needs to take positive steps to renew its claim as location of choice for the business owners and knowledge workers who can drive economic growth. While natural advantages of lifestyle and climate will remain important attractors, infrastructure has a critical role to play.

Infrastructure NSW has identified three infrastructure priorities that can make Sydney number one for global business:

- improving connectivity through better public transport and more housing close to the CBD
- creating an attractive urban environment that supports knowledge-based businesses and the visitor economy
- providing efficient transport links to our international gateways – Sydney Airport and Port Botany.

3.1 Introduction

This section is the first of two relating to Sydney that considers the city's infrastructure needs in a spatial context. This section deals with the areas of central Sydney that drive the city's global economy. The next section deals with Greater Sydney, where the majority of NSW residents live and work.

Global Sydney comprises the inner urban communities of the City of Sydney, the Eastern Suburbs, the Inner West and the Lower North Shore. Global Sydney contains Australia's most valuable and concentrated economic and cultural corridor, along with some of the country's highest density residential suburbs.

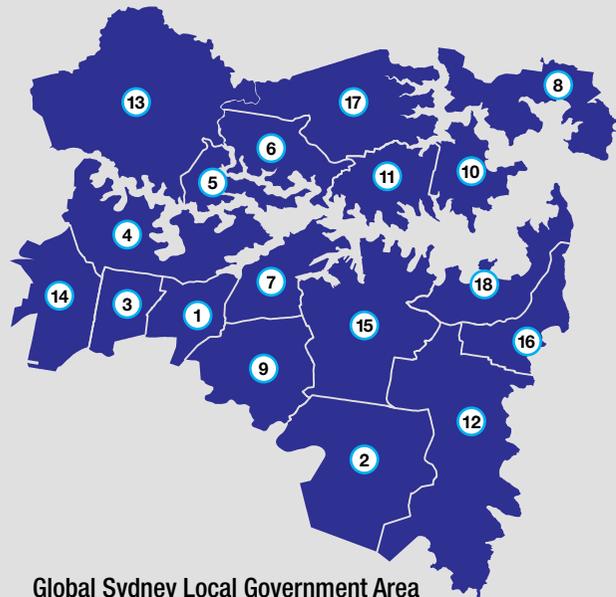
The local Government areas (LGAs) that make up the Global Sydney area (shown in figure 3.1) are: City of Sydney, Waverley, Willoughby, Woollahra, Ashfield, Burwood, Canada Bay, Ryde, Strathfield, Hunters Hill, Lane Cove, Leichhardt, Manly, Marrickville, Mosman, North Sydney and Randwick.

The economic and demographic projections for Global Sydney show¹:

- The population is expected to grow around 1.3 per cent per annum, or by 400,000 people, to more than 1.7 million people.
- GSP is forecast to grow by 2.8 percent per annum. Global Sydney's share of the State's economy in 2031 will be largely unchanged.
- The number of jobs in Global Sydney is forecast to grow by around 200,000 to 1.2 million in 2031.

¹ Deloitte Access Economics 2012, Infrastructure and the NSW Economy.

Figure 3.1 Global Sydney by Local Government Area



Global Sydney Local Government Area

- | | |
|-----------------|-----------------|
| 1 Ashfield | 10 Mosman |
| 2 Botany Bay | 11 North Sydney |
| 3 Burwood | 12 Randwick |
| 4 Canada Bay | 13 Ryde |
| 5 Hunter's Hill | 14 Strathfield |
| 6 Lane Cove | 15 Sydney |
| 7 Leichhardt | 16 Waverley |
| 8 Manly | 17 Willoughby |
| 9 Murrumbidgee | 18 Woollahra |

Source: Department of Planning and Infrastructure.

3.2 Global Sydney today

3.2.1. Australia's Global City

Sydney is frequently described as 'Australia's global city'. Despite a location distant from the world's major trade flows and population centres, Sydney's economy is the 16th largest city economy in the world, ahead of major cities such as Singapore, Shanghai and Hong Kong².

'Global city' status refers to a matrix of economic and cultural influences, engagement with international trade and finance, and attractiveness to globally-mobile workers and visitors.

Global Sydney contains a density of economic activity more concentrated than the wider metropolitan area as a whole and other Australian cities. Global Sydney generates 41 percent of NSW GSP³, is home to most of Sydney's museums, universities and tourist attractions, and is the State's front door to the world.

Sydney is fortunate to possess one of the world's most valuable 'city brands'. The natural beauty of the harbour, the Opera House, the Sydney Harbour Bridge, the beaches and the climate have all combined to create a unique proposition that is recognised and admired worldwide.

Sydney's city brand has made a major contribution to economic growth. Success has been based on applying skilled human capital to a range of service industries that collectively make up the 'knowledge economy'. Half of Australia's globally competitive service sector jobs are based in Sydney, primarily within Global Sydney⁴.

² McKinsey Global Institute 2010, Cityscope Database.

³ Deloitte Access Economics 2012, Infrastructure and the NSW Economy.

⁴ SGS Economic & Planning 2012, Mine or Mind.

Sydney has been extremely successful in attracting talented workers from across the globe and as a result is a diverse, multicultural city. Almost 40 percent of the employees in the City of Sydney⁵ were born overseas, compared with 30 percent across Australia as a whole⁶.

While this is the sort of statistic that propels Sydney up the league charts of global cities, it also highlights a key risk – when location is a matter of choice rather than birth, the host city must maintain its competitiveness if it is to retain its dynamism.

⁵ City of Sydney 2011, Sydney at a Glance.

⁶ Australian Bureau of Statistics, 2011 Census.

What is a Global City?

The 'global city' concept refers to those metropolises that have the greatest social and economic impact on the world. These cities are characterised by their political and cultural influence, role in world trade and global financial flows, and their attractiveness to tourists and globally mobile employees.

Global cities are highly connected to the rest of the world and are attractive to people in the high value and strongly influential knowledge-based industries. Global cities typically have a strong presence in the research and development space and place a premium on liveability, environment and accessibility.

Global cities develop where a combination of these factors work together in unison to make a uniquely attractive mix.

Sydney generally scores highly in many rankings of global cities. For example, the Globalisation and World Cities Research Network⁷, which looked at the

connectivity of cities and their role in the 'knowledge-economy', has classified Sydney as an Alpha + city, ranking it in the top ten of global cities, comparable to Paris, Tokyo, Singapore and Hong Kong.

In both 2007 and 2008 Sydney was rated the top city brand in the world by the Anholt-GfK Roper City Brand Index⁸, ahead of Paris, London, New York, Rome and Barcelona. It has subsequently fallen to third place, and liveability surveys now consistently place Melbourne ahead of Sydney.

Of greater concern is Sydney's poor recent economic performance. Over the last decade Sydney's growth underperformed relative to the rest of Australia⁹. This finding is supported by a recent literature review of global city surveys conducted by the Sydney Business Chamber which noted that Sydney scored badly on the quality of its public infrastructure, particularly its transport networks.

3.2.2 The Economy of Global Sydney

Global Sydney's economy is disproportionate to its relatively small geographic size. This high density economic cluster, unique in Australia, is central to the success of both the State and nation.

Global Sydney employs over 1 million people¹⁰. Geographically, Global Sydney contains the economic and cultural corridor that runs from Macquarie Park through North Sydney and the Sydney CBD to the Port and Airport Precinct as shown in Figure 3.2.

This is where many of the industries that contribute to Sydney's global significance – finance, technology, higher education, health and other service areas where knowledge and expertise create value – are located.

At Macquarie Park there is a high concentration of IT and pharmaceutical sector leaders, as well as Macquarie University.

The Sydney CBD and North Sydney area is the hub of the banking, financial services, insurance, funds management and superannuation industries in Australia. The industries concentrated here have propelled Sydney into the top ranks of cities with global influence.

Meanwhile the Airport and Port precinct represents the gateway for both international passengers in and out of Australia and a key import and export hub, (including from Regional NSW), that powers the economy.

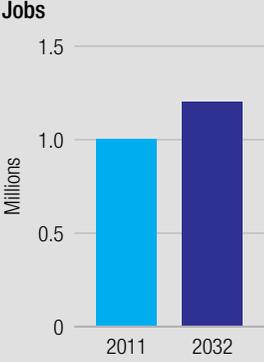
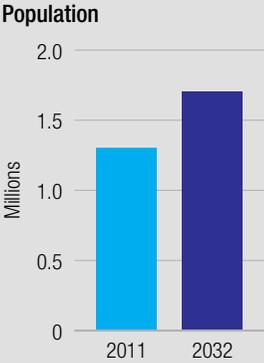
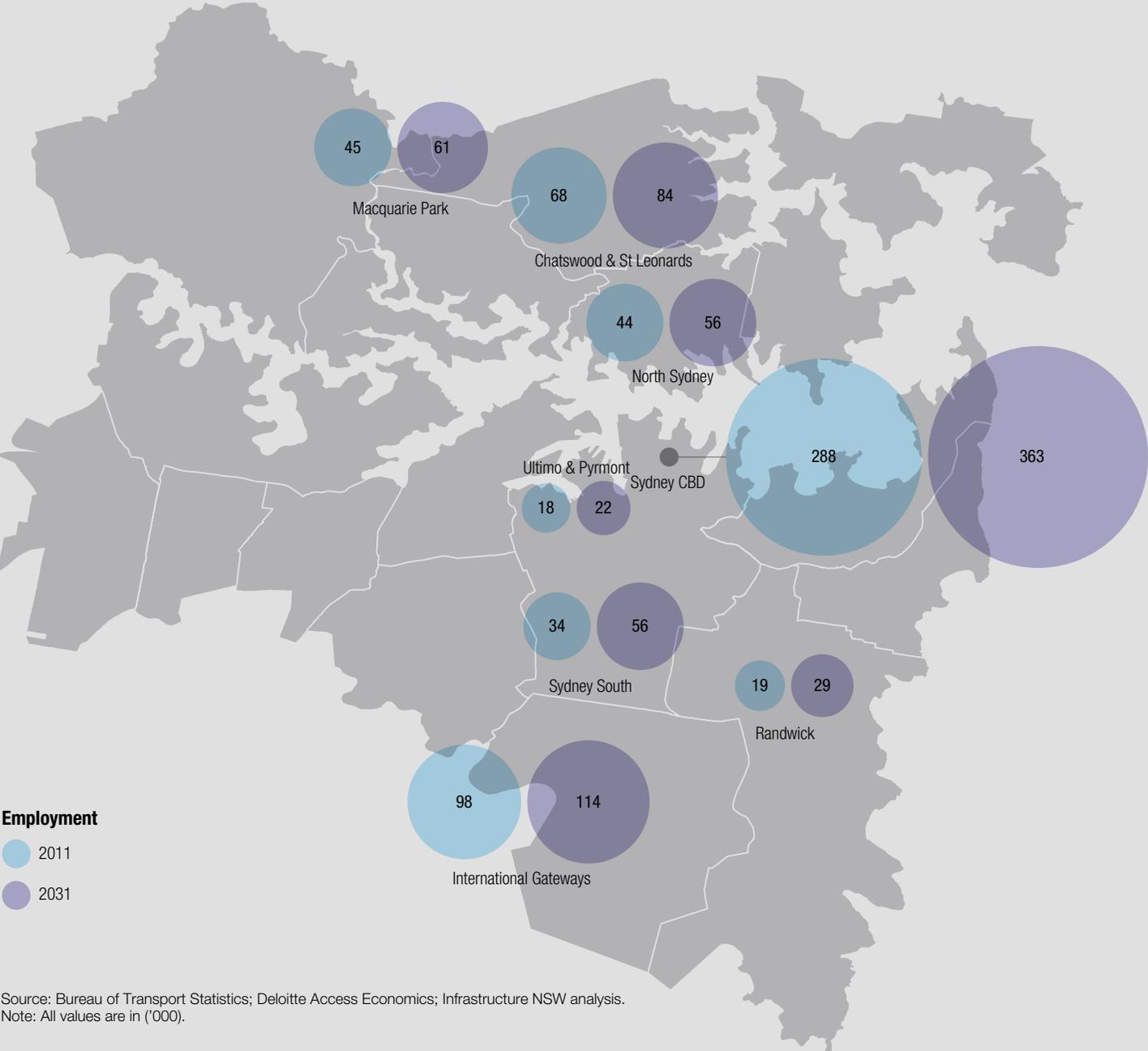
⁷ Globalisation and World Cities Research Network 2010, The World According to GawC.

⁸ Anholt-GfK Roper, City Brand Index; 2007, 2008 and 2011.

⁹ SGS Economic & Planning 2011, Australia Cities Accounts.

¹⁰ Deloitte Access Economics 2012, Infrastructure and the NSW Economy.

Figure 3.2 Employment in key Global Sydney centres



Source: Bureau of Transport Statistics; Deloitte Access Economics; Infrastructure NSW analysis.
 Note: All values are in ('000).

3.2.3 Education, Healthcare, Tourism and Culture

Sydney's social infrastructure has historically been a strong feature in the city's favour, supporting its economic growth. Global Sydney is the centre of higher education, healthcare, the visitor economy and the city's cultural life.

Four of NSW's universities are located in Global Sydney: University of Sydney, UNSW, UTS and Macquarie University. Universities stimulate a large amount of knowledge-based activity. Travel services – mainly overseas education – is one of NSW's largest export industries, generating overseas earnings of \$12 billion in 2009, a quarter of all NSW's exports¹¹.

Three of NSW's leading hospitals are located in Global Sydney: Royal North Shore, Prince of Wales and Royal Prince Alfred. Each generates a diverse range of healthcare-related activities.

Many of the world-class cultural and tourism attractions that drive the \$20 billion visitor economy¹², including the Opera House, Sydney Harbour and the city's galleries, theatres and museums, are also in Global Sydney. This represents one third of Australia's international tourism earnings.

3.2.4 Living in Global Sydney

1.3 million people¹³ (17 percent of NSW residents), live in Global Sydney in some of the highest density, oldest suburbs of Australia.

¹¹ NSW Trade and Investment 2011.

¹² NSW Visitor Economy Taskforce 2012, Final Report.

¹³ Deloitte Access Economics 2011, Infrastructure and the NSW Economy.

The natural and man-made attractions of Global Sydney help the city to score highly in international quality of life surveys. The Economist Intelligence Unit, ranked Sydney as the seventh most liveable city on the planet. Sydney should not rest on its laurels however as Melbourne was ranked first in the same survey¹⁴.

Where and how people live and work in Global Sydney has implications for the city's infrastructure needs. For example, a much higher percentage of Global Sydney residents travel to work by public transport than Greater Sydney's residents.

3.2.5 Sydney's International Gateways

Global Sydney is home to two of Australia's most economically important air and sea gateways. Sydney Airport is Australia's largest airport with more than 45 percent of international passenger traffic¹⁵. Port Botany is Australia's second busiest container port and handles more than \$60 billion of trade¹⁶.

This focus of activity is unusual for a major city. Infrastructure NSW has been unable to identify comparable cities that co-locate their international gateways in such close proximity and so near to their primary commercial area.

Some vital statistics:

- Sydney Airport handles more than 100,000 airline passengers each day, or 40 million passengers a year, supported by some 16,000 airport workers and tens of thousands of 'meeters and greeters'.

¹⁴ Economist Intelligence Unit 2012, Global Liveability Report.

¹⁵ Sydney Airport Corporation 2009, Sydney Airport Master Plan.

¹⁶ NSW Treasury, 2012-13 Budget Paper 4.

- Port Botany moves around 5,000 containers on average every day, or around two million per annum. The vast majority arrive and depart by road¹⁷.

These infrastructure facilities are extremely important to NSW, connecting primary producers and businesses (both small and large) across the State's regions with global markets.

Australia is a long way from its global trading partners. Efficient international gateways are essential to support the competitiveness of NSW's goods and services exports, to attract international investment and highly skilled knowledge workers and to get imports to consumers cost effectively.

3.3 Global Sydney: the next 20 years

3.3.1 Global Sydney's role in the NSW economy

As this section has shown, Sydney plays a key role in the success of both NSW, and more broadly, Australia.

The conclusion that must be drawn is that the success of Global Sydney, as the flag carrier for the State economy, needs to be supported and sustained in the interests of all. Investing in Global Sydney's economic infrastructure is therefore a priority for the whole of NSW.

This does not mean that the infrastructure needs of the rest of the State should be ignored. It does, however, mean that some hard choices must be made. Investing in Global Sydney will result in benefits across NSW. For example, while investing in connecting infrastructure to Sydney's International Gateways could be seen by some

¹⁷ Sydney Ports Corporation 2011.

as a Sydney-centric proposition, it will benefit regional businesses and exporters and importers.

This leads to the question of whether infrastructure investment can create the high levels of economic activity seen in Global Sydney in other parts of the State. The qualities that created Global Sydney are a

reflection of a mixture of geographic, historical, social and economic factors that are very hard to duplicate. Global Sydney is the result of what is known as 'agglomeration benefits', where clusters of industry build up because of proximity and connections as discussed below.

Infrastructure NSW's expectation is that the employment centres of Global Sydney will remain the State's principal centre of economic agglomeration over the next 20 years. The analysis prepared for Infrastructure NSW by Deloitte Access Economics forecasts that around 200,000 additional jobs will be created in Global Sydney by 2031, leaving the region's share of Sydney's total jobs market unchanged from today²⁰.

As a further indicator, BIS Shrapnel has forecast that over 90 percent of new office-based employment in Sydney over the next decade will be located in Global Sydney²¹. Barangaroo alone is forecast to accommodate 23,000 jobs. This is bigger than any centre in Greater Sydney, with the exception of Parramatta.

Global Sydney's population is forecast to grow rapidly also. By 2031, the population of the region will have grown by 400,000 to 1.7 million people²². By comparison, between 1991 and 2011, the population of Global Sydney grew by 250,000.

The infrastructure investment challenges that arise from these findings is that significant energy needs to be directed into ensuring Global Sydney is highly accessible, maintains its attractive lifestyle and remains open to the world.

The continuing importance of Global Sydney does not preclude the development of secondary and supplementary business centres within Greater Sydney. The evidence from other global cities, like London and

Economies of agglomeration: why do some places succeed over others?

Why do people and jobs cluster in particular areas within a city rather than being more evenly dispersed?

Cities form because they enable collaboration. Close proximity lowers the cost of exchanging goods and ideas. As Edward Glaeser puts it, cities "enable us to work and play together, and their success depends on the demand for physical connection"¹⁸.

Urban scale also spreads fixed costs and so enables activities that are unviable at lower densities. Cities support greater labour specialisation as individuals can move more easily between jobs. The reason why people and firms accept the higher costs of being in a city is that there are productivity and social advantages that outweigh these costs.

These benefits (the economies of scale and the network effects) that cities provide are known as 'economies of agglomeration'.

Agglomeration effects are true at the local as well as the metropolitan level. This is why certain sectors (for example financial services in the CBD) cluster closely together, even though this leads to them paying higher land, labour and transport costs.

The benefits of physical connection – the invaluable face-to-face meetings and chance encounters close proximity enables – are diminished by distance, even within a metropolitan area.

The productivity benefits of agglomeration vary by industry. They are highest in the financial services, professional services, cultural and scientific sectors¹⁹ – industries in which Global Sydney specialises.

¹⁸ Glaeser, E 2011, The Triumph of the City.

¹⁹ SGS Economics & Planning 2011, Agglomeration and Labour Productivity in Australian Cities.

²⁰ Deloitte Access Economics 2012, Infrastructure and the NSW Economy.

²¹ BIS Shrapnel 2011, Forecasting the Distribution of Dedicated Office Employment in Sydney, Final Report for NSW Treasury.

²² Deloitte Access Economics 2012, Infrastructure and the NSW Economy.

Paris shows that supplementary business centres play a crucial role as well. This issue is discussed in more detail in Section 4 dealing with Greater Sydney.

3.3.2 The Growth Challenge at Sydney's Gateways

A special challenge within Global Sydney relates to Sydney's gateways. Both Sydney Airport and Port Botany expect rapid growth in demand faster than the economy as a whole and faster than other areas of Global Sydney.

Passenger volumes at Sydney Airport are set to more than double from present levels over the next 20 years to over 80 million passengers in 2031, increasing from around 40 million in 2010²³.

Sydney Ports forecasts container trade through Port Botany to nearly quadruple by 2031, reaching seven million containers, increasing from two million containers in 2011²⁴.

This growth will place significant demands on the already heavily utilised land and infrastructure around Sydney's Gateways. This means that addressing these significant demands must be a priority in the State Infrastructure Strategy. Staying open for international business is an intrinsic objective if NSW is to be number one again.

²³ Steering Committee 2012, Joint Study on Aviation Capacity for the Sydney Region, Department of Infrastructure and Transport.

²⁴ Sydney Ports Corporation 2011.

3.4 Infrastructure priorities for Global Sydney

3.4.1 Growing the economy

Infrastructure NSW has determined that infrastructure that supports and sustains the continued growth of the economy of the CBD and other Global Sydney centres is one of the State's highest priorities.

As a result the following critical infrastructure needs in support of this strategic goal are:

- improving public transport access to and through the CBD and adjoining centres
- increase the number of people living in areas accessible to Global Sydney
- providing an attractive urban environment conducive for knowledge-based business and the visitor economy.

These are considered in further detail below.

Public transport and congestion in Global Sydney

Every weekday, the population of Sydney's CBD grows from its 50,000 permanent residents to around half a million people.

Almost 75 percent of commuter journeys to the CBD are by public transport – compared to only 24 percent of all work journeys in Sydney. Limitations on parking in the CBD means that public transport needs will increase as employment in the CBD grows over the next twenty years.

The commuter task is primarily handled by trains and buses – 44 percent and 28 percent respectively. Ferries transport around four percent of workers to the CBD²⁵.

The rail system is often congested and services can be slow and unreliable. High demands placed on particular stations magnify the challenges, for example Wynyard alone carries 110,000 passengers each weekday.

There is no debate about the need to solve these problems. The question is how far the solution is to be found through a process of incremental reform or through major investment in new fixed infrastructure. These issues are discussed in more detail in Section 8.

Buses primarily provide access from the inner suburbs, with passenger flows into the CBD concentrated on a small number of major corridors. The primary issue with buses is congestion in the CBD. Buses cannot get through crowded CBD road space at peak hours. An infrastructure strategy for this issue is set out in Section 7.

On some bus corridors, forecast growth in demand indicates infrastructure investment is needed to ensure reliable access to the CBD and other centres in Global Sydney. Potential options for improving passenger flows on key public transport corridors such as Anzac Parade and from the Northern Beaches are also discussed in Section 7.

²⁵ All transport data from the NSW Bureau of Transport Statistics.

Housing and Infrastructure

Land use is inextricably linked to infrastructure provision. Planning strategies for new development directly impact the efficiency with which the State's existing stock of infrastructure is used and create the need for new utility and transport infrastructure.

Land use strategies for housing are particularly critical given population growth and Global Sydney's high housing prices – both factors which challenge the quality of life.

The market evidence suggests that people are willing to live in more dense suburbs closer to the CBD²⁶, trading off space for lifestyle and access to jobs. Two-thirds of existing CBD workers live in the inner suburbs around Global Sydney, which is reflected in housing prices.

Infrastructure NSW is supportive of more intensive residential land use within Sydney based on these market and community preferences.

Urban densification requires investment to ensure infrastructure systems can cope with growth in demand.

Infrastructure NSW has considered options where investment in enabling transport infrastructure can support urban renewal and housing growth in areas readily accessible to Global Sydney. These include along the Parramatta Road corridor and in South Eastern Suburbs. These issues are discussed further in Sections 6 and 8 respectively.

The implications for social infrastructure from in-fill development are important also. School populations in Global Sydney are expected to grow by 15 percent and demand is expected to grow by 17 percent in the next ten years. This is discussed Section 14.

Urban Environment

The competitiveness of Global Sydney as an attractive place to work, live, do business and entertain requires world class transport networks, and a vibrant open city environment, conducive to working, meeting, entertaining, and for retail and cultural pursuits.

Addressing the issue is challenging. The Sydney CBD is an undulating, high-density peninsula with road space that is narrow relative to the traffic it carries and the people movements it supports.

Section 7 outlines infrastructure options aimed at addressing the road space capacity issue in the CBD and enabling the improvement in the urban environment.

Infrastructure NSW also recognises the importance of a cultural precinct to both the general amenity of the city and the visitor economy. It supports the establishment and development of the Art's Ribbon from Darling Harbour through Barangaroo to the Australian Museum. This is discussed further in Section 14.

3.4.2 Supporting the Growth of Global Sydney and its International Gateways

The other strategic priority for Global Sydney is supporting the growth of its international gateways. Infrastructure projects around this precinct are discussed in Sections 6 and 9.

Sydney benefits from their location. As 98 percent of containers never leave the metropolitan area²⁷, exports will generally be more competitive and imports cheaper through Port Botany than alternative locations. Equally, the airport is well located as a large proportion of air travellers come from or are travelling to central areas.

Both Sydney Airport and Port Botany have the capacity to accommodate most of the rapid growth in demand they face over the next 20 years.

Sydney Airport conveyed 40 percent more passengers in 2012 than in 2000 with no net increase in flight movements as plane sizes have increased²⁸.

Following completion of the Third Terminal in 2013, Sydney Ports estimates that Port Botany can handle a quadrupling of throughput to at least seven million containers per annum.

The most pressing infrastructure challenge for Sydney's gateways is to ensure efficient landside transportation, rather than developing new capacity.

Over the longer-term, supplementary airport and container port capacity will also be needed.

²⁶ NSW Treasury 2012, Submission to the NSW Planning System Review.

²⁷ Sydney Ports Corporation 2011, Logistics Review 2010/11.

²⁸ Sydney Airport Corporation 2012, Investor Update.

Roads and public transport

The roads serving Global Sydney and Sydney's international gateways are some of the most congested in Australia. The M5 East and General Holmes Drive are congested for more than 13 hours each day²⁹. The roads around Sydney Airport are also congested. Only 15 per cent of travel to and from the airport is by public transport³⁰.

In the short term, much can be done to relieve congestion through targeted pinch point investment. Greater use of public transport to Sydney Airport also needs to be targeted. Over the medium term there is no alternative to major investment to upgrade the capacity and connectivity of the motorways that support these gateways.

Freight

The vast majority of the freight task in and out of Port Botany is handled by road transport. This reflects the benefits road offers in terms of cost, reliability and flexibility.

The Government is targeting to increase the proportion of freight moved by rail from the Port.

Shifting freight onto rail has proven difficult. Major investment is underway by the Federal Government and private sector to expand the capacity of the State's rail and intermodal infrastructure on the basis that the increased volumes this infrastructure will support will make rail freight a more viable alternative.

²⁹ Infrastructure Australia.

³⁰ Sydney Airport Corporation 2009, Sydney Airport Master Plan.