

Statewide Brofile 2014



The new state of business





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EXECUTIVE SUMMARY

New South Wales is a vibrant, dynamic and thriving state, attracting people, investment, business and jobs. Home to a diverse population of 7.4 million people, the state is poised for a new era of growth.

NSW 2021: A Plan to make NSW Number One is the NSW Government's plan to promote and support growth in the state. Population and economic growth give us opportunities to build better infrastructure and services, safe and liveable local communities, and a healthy and resilient environment.

By 2031, the population of NSW will increase by two million people to reach 9.2 million. All of the State's regions will change – some more than others. We need to support this growth in a sustainable way, and increase the number of homes and jobs available.

The NSW Government is delivering a new planning system that places greater emphasis on strategic planning, underpinned by up-to-date evidence and more extensive and meaningful community and stakeholder engagement.

The NSW Statewide Profile describes the factors shaping growth and change in communities throughout NSW and provides a snapshot of NSW's economy, natural environment and resources, infrastructure and communities. It examines the data, trends, opportunities and challenges that are shaping our current patterns of settlement in the state's regions, cities and towns. It also examines the opportunities and challenges facing different parts of the state and how a new approach to regional planning can achieve the vision identified by the community for each area.

The NSW Statewide Profile also sets out 10 new regional boundaries for regional growth planning across NSW, as well as the priorities for the regional growth planning program.

Regional Growth Plans enable the goals of NSW 2021 to be translated into policies, actions and investment decisions that benefit every region of the state. They will guide how a region can achieve sustainable growth and will be developed in partnership with communities, councils and businesses to set the long term vision and actions needed to achieve the vision.

FIGURE 1

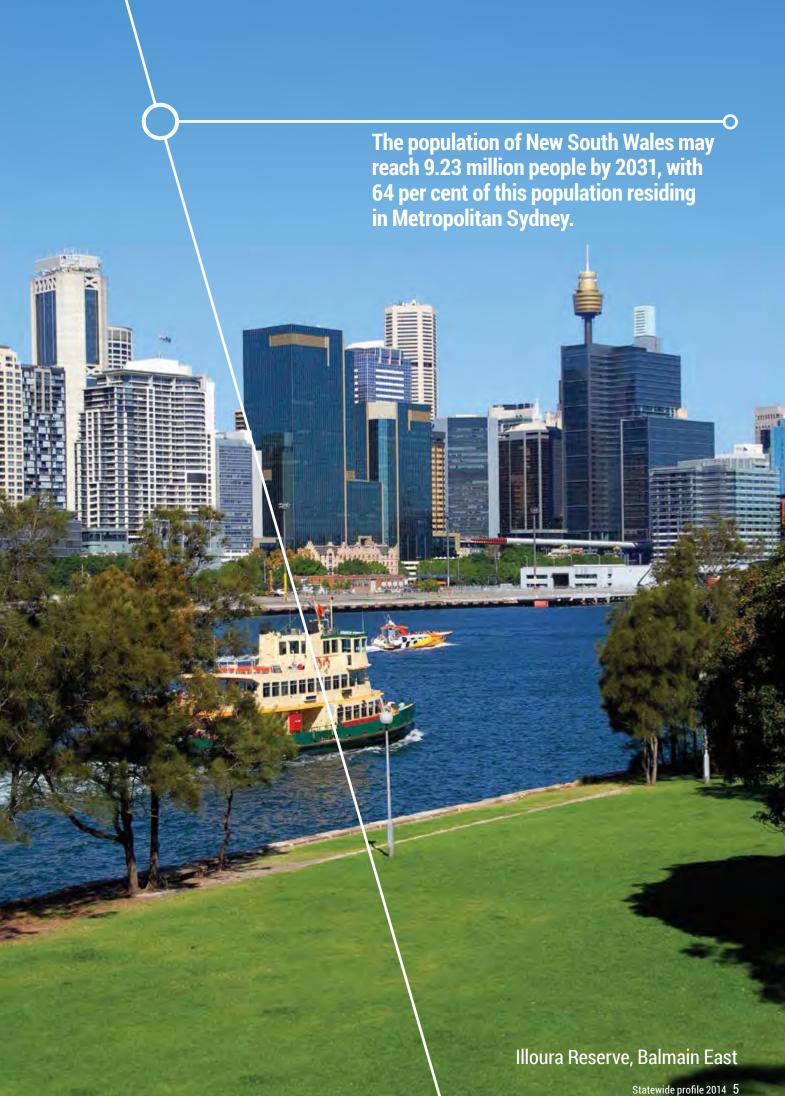
Population by State and Territory



| | Australian Population Total 22,710,350 | |
|---|---|--------|
| | June 2012 | Share |
| 1 | New South Wales | 32.1% |
| | Victoria | 24.8% |
| | Queensland | 20.1 % |
| | Western Australia | 10.7% |
| | South Australia | 7.3% |
| | Tasmania | 2.3% |
| | Australian Capital Territory | 1.7% |
| | Northern Territory | 1.0% |
| | | |

Source

Australian Bureau of Statistics, 2014, Australian Demographic Statistics, catalogue no. 3101.0



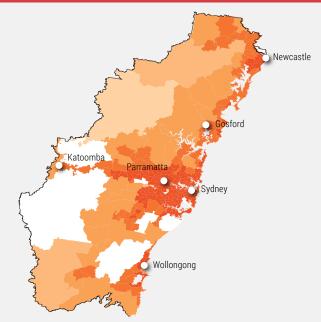


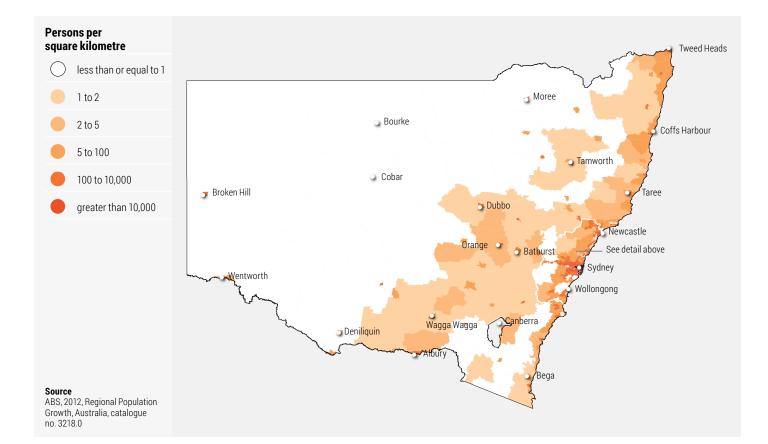
POPULATION

In the 50 years between 1961 and 2011, the population of NSW almost doubled from 3.9 million people to 7.2 million people. Some areas have grown more than others. Population growth has been greatest in Metropolitan Sydney, as well as the Central Coast, Lower Hunter and Illawarra. Together these regions make up the Greater Metropolitan Region. Population growth has also been seen in coastal areas and in larger inland centres like Albury, Orange, Wagga Wagga and Tamworth.

Figure 2 shows the current distribution of population in NSW, highlighting the concentration of people around the Greater Metropolitan Region and the coast.

FIGURE 2 Population density of NSW 2012





Population growth and change

Since 1961, annual population growth has averaged 1.2 per cent, varying from 0.5 per cent to 1.6 per cent in the last 10 years.

As Figure 3 shows, population growth patterns in NSW have mirrored overseas migration trends, which are influenced by many factors, including economic cycles and Australian Government policy.

The age profile of the NSW population has changed over the past 50 years and will continue to be a major factor driving population change in the future. Fifty years ago, three out of every 10 people were younger than 15 years and one out of every 11 people was aged 65 or older.

Despite continued growth in the overall number of children, less than one in five people are now under the age of 15. Increasing longevity and the arrival of the Baby Boomers and post-war migrants at retirement age means that one in six people are now aged 65 years or older (see Figure 4). Our population has become more culturally diverse, with one in four people living in NSW in 2011 born overseas. Our living arrangements have also changed. There are now more households without children than family households with children in them. Increasing numbers of people now live alone, largely linked to an ageing population. There has also been a move to adult children living longer at home with their parents.

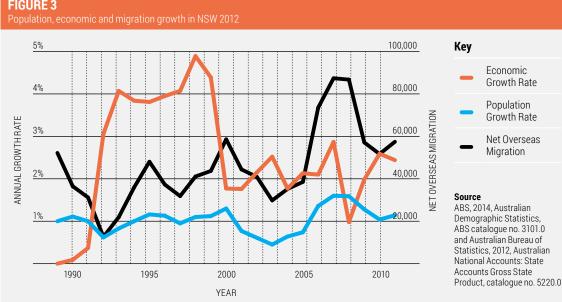
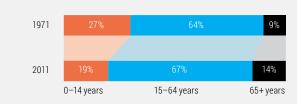


FIGURE 3

FIGURE 4

Proportion of population in summary age groups in NSW 1971–2011



Source

ABS, 2008, Australian **Historical Population** Statistics, catalogue no. 3105.0.65.001 and ABS, 2013, Population by Age and Sex, catalogue no. 3235.0

TABLE 1

Top 10 local growth areas in NSW 2012-13

| NSW wide | | | | | | |
|----------|--------------------------------|-------|--|--|--|--|
| 1 | Parklea–Kellyville Ridge | 3,404 | | | | |
| 2 | Parramatta-Rosehill | 1,575 | | | | |
| 3 | Concord West–North Strathfield | 1,295 | | | | |
| 4 | Homebush Bay-Silverwater | 1,205 | | | | |
| 5 | Kensington-Kingsford | 1,203 | | | | |
| 6 | Waterloo-Beaconsfield | 1,098 | | | | |
| 7 | Lidcombe-Regents Park | 1062 | | | | |
| 8 | St Marys-Colyton | 958 | | | | |
| 9 | North Parramatta | 915 | | | | |
| 9 | Hoxton Park–Horningsea Park | 915 | | | | |

Note Local areas are defined using SA2 boundaries from the Australian Bureau of Statistics' 2011 Australian Statistical Geographical Standard (Catalogue No. 1270.0).

Source ABS, Regional Population Growth, Australia, 2012 (Catalogue No. 3218.0)

TABLE 2

Population growth in NSW Regions 2012-13

| NSW regions | | | | | |
|-------------|--------------------------------|-----|---|--|--|
| 1 | Maitland (Western suburbs) | 721 | Ş | | |
| 2 | Cessnock | 570 | | | |
| 3 | Wollongong | 528 | | | |
| 4 | Shellharbour-Flinders | 507 | | | |
| 5 | Bathurst | 483 | | | |
| 6 | Orange (Northern suburbs) | 465 | | | |
| 7 | Edgeworth-Cameron Park | 407 | | | |
| 8 | Tweed Heads (Southern suburbs) | 405 | | | |
| 9 | Warnervale-Wadalba | 337 | | | |
| 10 | Byron Bay | 327 | | | |
| | | | | | |

Source ABS, Regional Population Growth, Australia, 2012, Catalogue No. 3218.0

Recent population growth

In 2011–12, the population of NSW grew by more than 87,000.

The population in metropolitan areas, coastal regions and large inland regional cities increased, while other inland areas had stable populations or declines (Tables 1 and 2). In the year ended 30 June 2012, the population of Metropolitan Sydney grew by 61,100 or 1.4 per cent, while the population of regional NSW grew by 21,500 or 0.7 per cent. These recent patterns continue long term trends of higher growth for large urban centres (metropolitan and regional).

Small pockets of strong growth were evident within each region. Of the top 10 areas of growth, nine were in Metropolitan Sydney (Table 1). Of the top 10 local growth areas in regional NSW, six were in the Greater Metropolitan Region and three were in the Lower Hunter.

Changes in population size as well as changes in age composition are important factors in planning for the right locations for new urban development or redevelopment and the provision of infrastructure and employment to ensure sustainable growth.

The forces behind population growth

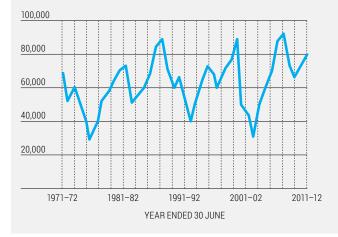
Population growth in NSW (see Figures 5 and 6) is driven by natural increase (births minus deaths) and net migration (mainly from overseas to NSW and from NSW to other parts of Australia). In the past about 70 per cent of the state's annual population growth has been due to natural increase. In recent years there have been high numbers of births because the average number of births born to mothers has gone up, and the population of women of childbearing age has increased. Despite declines in mortality rates, the number of deaths in NSW has also increased as the size of the population grows. Population ageing has also seen an increase in deaths as more people reach very old ages. Different age profiles throughout the state mean in some areas, the number of births and deaths are the same, while in other areas deaths outnumber births contributing to natural decline.

Migration is also an important factor driving NSW population growth and changing distribution and composition. While NSW gains large numbers of new residents from overseas, this is offset by people moving interstate. This is a longstanding and continuing pattern (see Figure 7).

Migration is age-specific—youth or young adults dominate overseas migrants or people moving in from and to other parts of Australia. There are also notable movements within NSW around retirement age and outflows of young adults from regional NSW to Sydney and other large cities. The age of migrants affects the age composition of the areas they move from and to. Because migrants tend to be young, they also contribute to natural increase as they establish families.

Migration affects the age profiles of populations throughout NSW causing variation from region to region. In 2011, some metropolitan areas, such as Auburn, Blacktown and Sydney City had relatively young populations. Overseas migrants tend to live in Sydney, and youth from regional areas are attracted to Sydney in search of jobs, further education or a lifestyle change. Students who live away from home also help shape population and growth and change.

FIGURE 5



Source ABS, various years, Estimated Resident Population, from Australian Demographic Statistics catalogue no. 3101.0

FIGURE 6 Components of population change in NSW 1971–72 to 2011–12

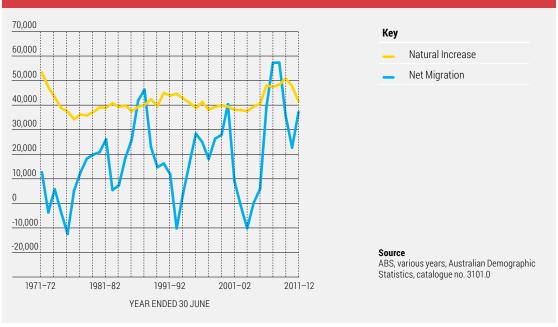
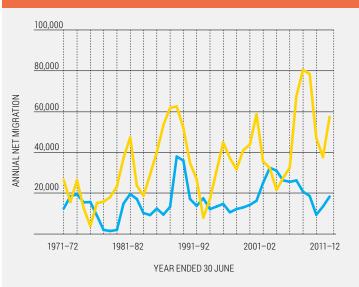


FIGURE 7



Кеу

Net Overseas Migration

Net Interstate Migration

Source ABS, Various years, Migration Australia, Catalogue no. 3412.0.

Projected population growth

The state's population is projected to reach 9.2 million people by 2031 (see Figure 8), with 64 per cent of this population (5.9 million), residing in Metropolitan Sydney (Figure 9). Population growth is projected to be larger in places near Metropolitan Sydney, such as the Central Coast, Wollongong, Newcastle and Port Stephens, coastal areas such as Tweed Heads and Port Macquarie, areas to the north and east of Canberra and the ACT, and regional centres such as Tamworth, Bathurst and Wagga Wagga. Projected population change across NSW is shown in Figure 10 and projected rates of population change is shown in Figure 11.

The projections take account of migration movements in and out of regions throughout NSW and the impact of current age structures in different areas. Figures 10 and 11 show that long-standing patterns of population change are likely to continue.

Population distribution and internal migration

Population growth is not uniform across NSW with two trends evident. The first is the faster growth of populations in urban areas of NSW. This urbanisation mirrors what has been happening throughout Australia since the beginning of the 20th century. At Federation, Sydney's population was one-third of the state's population. A century later, this had increased to 59 per cent.

The second trend is the increasing concentration of population growth in particular regional centres. While the overall population of regional NSW is increasing, some areas have had faster population growth, others have stable populations and some are experiencing a decline in population. The reasons for this are complex, and include past regional settlement patterns; globalisation and the changing economic structures of the agricultural sector; the centralisation of government administration and service delivery in larger regional centres; the attraction of particular areas for retirement and tourism; and the commuting distance to metropolitan areas.

Many larger regional centres have had faster growth than the smaller communities in surrounding regions

including Tamworth, Dubbo, Orange, Wagga Wagga and Albury. These cities are proving to be popular places to live, work and invest and can expect continued growth from higher levels of in-migration and continued growth from natural increase.

Migration, particularly linked with other parts of Australia, is the biggest driver of population change in regional areas of NSW. People move to regional centres from surrounding areas, young people move to the cities, workers and their families move to regional centres, and retirees move to popular areas on the coast, along the Murray River, and in locations within easy commuting distance of metropolitan areas.

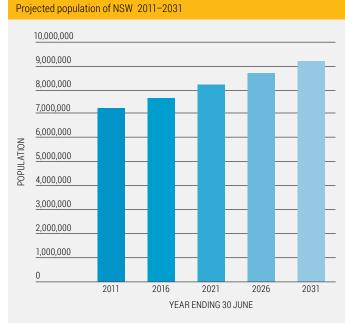
Our ageing population

Population ageing is a factor across all of NSW. It has different causes across the state. In some places, it is due to older people moving to an area once they have retired. The proportion of older people in an area can be magnified when young people leave. In regional NSW out-migration of young people can lead to natural decline (more deaths than births). A shrinking middle-age group is also increasingly supporting larger numbers of children and older people. An ageing population has implications for services, housing and infrastructure.

The different age structures across NSW will also lead to different demographic futures. The oldest populations will be in regional areas, such as Great Lakes, Eurobodalla and Gloucester, where the median age will be at least 50 years, as many younger people leave and retirees move in. While populations will age right across the state, areas in the North Coast and Murray-Murrumbidgee regions like Nambucca, Murray Shire and Corowa are expected to have the greatest proportion of residents (at least one in three) aged 65 or older. (see Figure 12).

The populations in the Greater Metropolitan Region will continue to be relatively younger than those in regional areas, and there will need to be additional housing, infrastructure, services and jobs for a growing population. However, given the size of the Sydney population, the number of older people will increase as well.

FIGURE 8



KEY

1981

2011

Source 2014 final NSW state and local government area population projections.

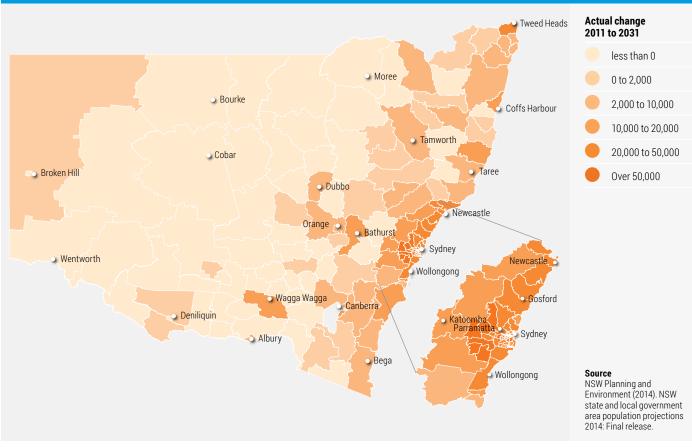
FIGURE 9 Population distribution in NSW 1981-2011

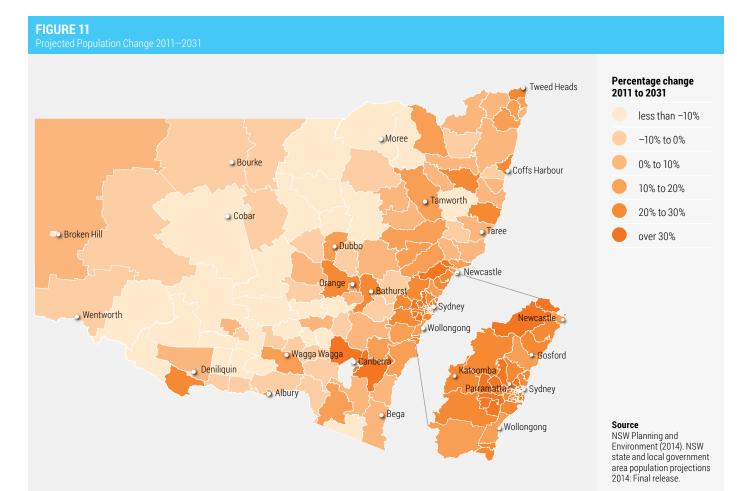


Sources Data sourced from final rebased ERPs of NSW LGAs (released by ABS in August 2013) and Historic ERPs of NSW SLAs from 1981. Data has been adjusted accordingly to take into account boundary and name changes.

FIGURE 10

Projected Population Change 2011–2031





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Planning for the future

Population growth and age composition is distributed differently across NSW, and presents different opportunities and challenges for communities across the state.

Regional Growth Plans will consider the population trends forecast for NSW. Metropolitan areas face high growth and have young populations linked to education and employment, and global connections arising from overseas migration. Population ageing across the state, and particularly in regional areas of NSW, is linked to increasing employment opportunities in aged care related sectors. Smaller working age populations require sound planning to ensure service and infrastructure needs are met.

These new plans need to:

- examine the factors that influence population change in that region, such as overseas migration and out-migration of younger people
- develop options to influence population growth and change in a positive way, such as making places more attractive to live and work in
- address the nature and extent of population change, particularly the ageing population, and how this drives demand for housing, employment, infrastructure and services
- consider broader population trends in other regions in NSW and nationally, and recognise the different patterns of growth and migration within each region to support population increases in the areas where people want to live and which can sustainably support them.

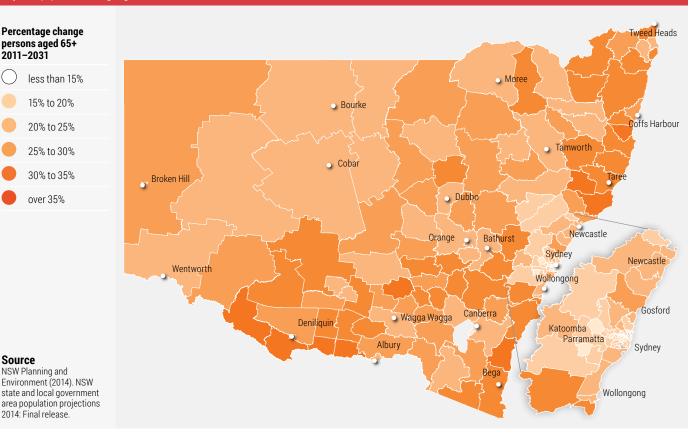


FIGURE 12 Projected population change aged 65+ 2011–2031

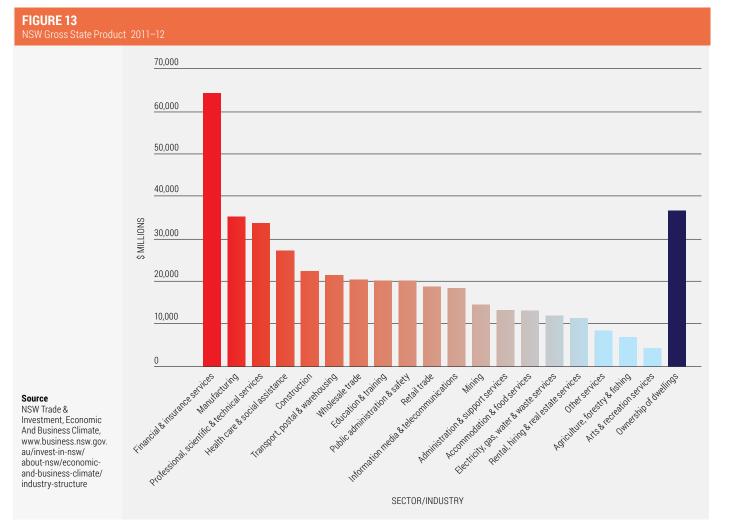


THE ECONOMY

Economic changes over two centuries have shaped the pattern of development across every region of NSW, with early important industries such as agriculture, mining and forestry shaping the pattern of settlement.

Long-term changes in these industries have led to growth in some towns and regions, and a decreasing population in others. Across regional NSW, many larger cities and towns that first emerged as centres for trade have diversified their economies with manufacturing and service industries like tourism, healthcare and education. Businesses and governments invest where there is a workforce or customers available, so towns and cities that are increasing in size tend to grow even further. As the NSW economy industrialised and globalised, Sydney consolidated its place at the centre of the state's economy and as Australia's premier global city.

The NSW Government has prepared an Economic Development Framework, which aims to guide the growth of the NSW economy and make the most of the opportunities presented by economic growth in Asia. The Economic Development Framework is closely linked to the Industry Action Plans for key sectors of the NSW economy.



The NSW economy today

NSW has the largest and most diverse economy of any state in Australia and contributes about 32 per cent of the country's Gross Domestic Product (GDP).¹ Services comprise almost 80 per cent of NSW's industrial output, highlighting the strength of the state's knowledge-based business services, information and communication technology, and creative industries.²

The NSW economy is projected to grow by an average annual rate of 2.6 per cent per annum to 2031, from \$420 billion to \$731 billion, which represents total growth of over 70 per cent.³ The state's top five exports are coal, travel and education services, non-ferrous metals, professional consulting services and medicinal and pharmaceutical products.⁴

The largest employer by industry in NSW – health care and social assistance – has seen significant growth over recent decades. Retail trade is the second-largest employer in NSW, with manufacturing employing the third highest proportion of people, and education and training fourth.

Health care, retail trade, and education and training are all industries that rely on population increases to support their growth. Therefore, areas with higher population growth will attract investment in health care and education infrastructure, and new retail development.

Manufacturing has traditionally been linked to areas with large supplies of labour, such as western Sydney, and areas with natural resources and ports to move raw materials and finished products, such as Newcastle and Wollongong. In the future, structural changes in manufacturing will see a shift towards high-value, high-tech production. This is likely to be in areas with existing manufacturing industries that are well connected to a highly skilled workforce and resources and facilities for research and innovation.

Professional, scientific and technical services is the fifth-largest employer in NSW. This industry is concentrated in Sydney, and is more likely to grow in Sydney and Newcastle, which have larger concentrations of businesses and a workforce with skills to match the needs of these businesses. Growth in professional, scientific and technical services in Canberra also impacts in areas of NSW close to the ACT.



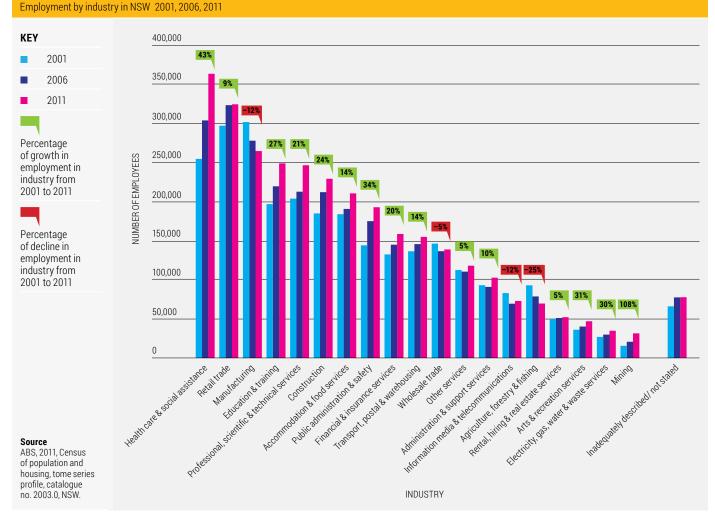


FIGURE 15

The unemployment rate in NSW 2013

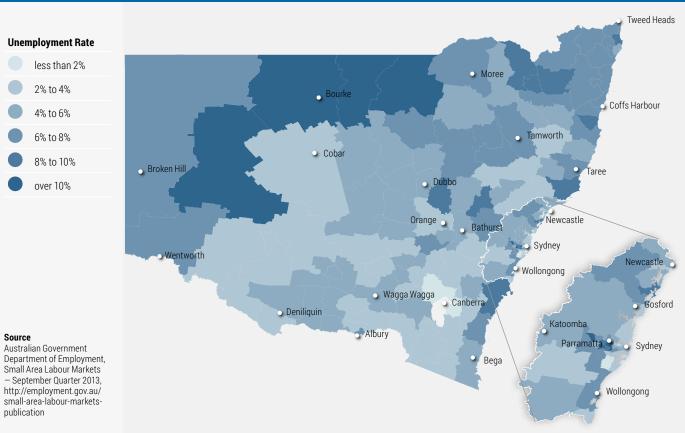


FIGURE 16 The labour force participation rate



Eveleigh Farmers Markets at Carriageworks, Eveleigh

NSW's assets and strengths

Sydney is the centre of economic activity in NSW and one of the strongest financial and business hubs for the Asia-Pacific region. Sydney alone contributes more than one-fifth of Australia's GDP.

NSW has a competitive advantage in population driven sectors of the economy, such as health care and social assistance, education and training and construction; as well as the finance and professional services sectors. Prospects for strong growth have been also been identified in a number of industries, such as creative services, defence and aerospace, and green energy.⁵ Building approvals are a good indicator of future economic growth over the short term and NSW has seen an upturn in construction and building approvals in recent years. Although much of this activity is concentrated in Sydney, building approvals have also been at relatively high levels in the Maitland, Bathurst, Orange and Shellharbour areas.⁶

Agriculture, mineral and energy resources, forestry and fishing are important industries that form the basis of the economy in many rural and regional areas. Agriculture in NSW is of global significance in terms of food security and export markets. While there has been a decline in employment in agriculture between 2006 and 2011, agriculture will remain an important economic driver for regional communities in NSW, and will continue to be important as global demand for agricultural commodities increases. Food security is also an issue that needs to be considered in regional planning. The State's ability to export to international markets can be affected by climate variability, the terms of trade between countries, trade agreements, and the relative value of the Australian dollar. Shifts in the exchange rate of the Australian dollar result in major shifts in the competitiveness of businesses in NSW and across the country.

In addition to food security, energy security is of domestic and global significance. The NSW International Engagement Strategy notes ongoing demand for both energy and food exports from the State's top 10 priority markets.⁷ Mineral resources also deliver around \$1.7 billion in additional royalties to the NSW Government, which is re-invested in essential infrastructure and services. The State's ability to support these industries will be critical to a strong and sustainable economy.

Economic trends for NSW

Globalisation, changes for manufacturing and movement to knowledge-based industries.

The state contributes the largest state share of national output in manufacturing (33 per cent). NSW has particular strengths in food product manufacturing, fabricated metal product manufacturing, machinery and equipment manufacturing, and printing.[®] The intensifying competition from emerging economies like China and India is affecting manufacturing in NSW. The NSW Government has developed an Industry Action Plan for manufacturing to build on these strengths and ensure NSW remains globally competitive. The Regional Growth Plans will need to support the Industry Action Plan to help create opportunities for manufacturing to access the right land, energy supplies, infrastructure and supply chains, as well as improving access to higher skills and innovation.

In 2011-12, financial and insurance services, health care and social assistance, mining, and professional, scientific and technical services made the strongest industry contributions to the state's economic growth. The NSW Government has prepared an Industry Action Plan for professional services, which will help build on NSW and Sydney's standing as a globally recognised centre for professional services and improve local industry competitiveness and capacity for innovation. The growth of these and other knowledge-based industries relies on attracting and rewarding the best talent. This requires building world-class cities and regions that people from around the world will want to call home. Regional Growth Plans have an important role to play in creating these world-class cities and regions.

Global demand for resources

Global demand for energy and mineral resources has had major structural effects on the Australian economy over the last decade. The Upper Hunter Region is the centre for coal mining in NSW, and towns like Singleton, Muswellbrook and Scone have seen strong employment and population growth in recent years. Coal mining has also expanded in the New England North West and Central West & Orana regions, affecting towns like Gunnedah, Narrabri, Lithgow and Mudgee. As long as mining-support industries thrive, there will be potential for continuing economic growth in major regional centres such as Maitland, Tamworth, Dubbo and Orange, which are located close to mining regions.

Rising energy costs

Historically, NSW has benefited from cheap and abundant supplies of energy, which has helped provide our economy with a competitive advantage. Changes to the price of energy may create challenges for regions with more energy-intensive industries like manufacturing. However regions with the potential to develop renewable energy resources will benefit from this trend, as will industries that research and manufacture renewable energy and energy-efficient products and systems.

Affordable, secure energy supplies will require a mix of energy sources and this requires a commitment to responsibly develop all available sources of energy in NSW.

Digital economy

The emergence of the digital economy has had wide-ranging effects on NSW. Research and education will be important to develop the required skills and innovation capability of the digital economy, and cities with universities have a comparative advantage in this regard. The internet has created a newly competitive retail market, forcing our retail industry to undergo radical changes. Improved accessibility means that areas once considered too remote from clients, suppliers or customers can now be connected globally. Locations along the north and south coasts of NSW that have high amenity would allow highly mobile professionals to conduct more of their business online. The NSW Government has developed Industry Action Plans for both the digital economy and international education and research. The Regional Growth Plans will need to support these two industry action plans to create opportunities to make the most of changes resulting from the growth of the digital economy.

Demographic changes & the economy

A growing and ageing population presents in NSW will require health and aged care, adequate housing types and infrastructure. There will also be economic costs and effects on the state's productivity. The ageing population can also create new markets and employment opportunities in areas such as tourism and healthcare.

Regional areas will have to match the demand for healthcare and social assistance jobs with the available workforce. The impact on services will be particularly felt in regions such as the Far West, Murray-Murrumbidgee and Central West & Orana that are experiencing low population growth, out-migration of young people and a shrinking workforce.

Workforce trends for NSW

Employment

In NSW, employment has grown by over 109,000 since March 2011, while unemployment has dropped from 7.2 per cent in 2001 to 5.4 per cent in April 2014. In the past year, the NSW economy has performed strongly relative to other states and territories. NSW saw less of an impact of the 2008–09 Global Financial Crisis than many other developed economies around the world, party as a result the diversity of the economic base and demand for key resources like coal from international markets.

Despite these gains, relatively high unemployment rates persist in several areas of NSW. The rate of unemployment provides a guide to how the economy is expected to perform in the future. Relatively high unemployment rates are particularly widespread in the North Coast, Illawarra, Far West and in Western Sydney. Pockets of high unemployment are also found in other regions including the Central Coast, New England – North West and Central West & Orana. Figure 15 shows how unemployment rates vary across NSW.

Participation rates

Workforce participation rates in NSW have changed over the last few decades, with an increase in the number of people employed part-time (up 24 per cent between 2006 and 2011). Participation rates are influenced by changing fertility rates, with new mothers leaving and re-entering the workforce. Figure 16 shows how the participation rate varies across NSW, with the areas with the highest participation rates around major cities and centres such as Wollongong, Newcastle, Canberra, Bathurst, Dubbo, Wagga Wagga and Tamworth.

Planning for the future

It is important that economic opportunities for each region are maximised. Regional Growth Plans will play an important role in helping businesses find the right places for investment. The plans will:

- recognise wider factors and structural changes that are driving economic growth and change—such as globalisation and the growth of the digital economy—as well as local factors, such as access to land and infrastructure. This is particularly important for the Illawarra region, where the economic structure is moving away from manufacturing
- build on the competitive advantages and strengths of each region, including the benefits from investment in infrastructure, education and training. For example, the Far North Coast is connected to economic opportunities in south-east Queensland, and the Alpine and Capital Region is connected to opportunities in Canberra
- support economic growth by creating more liveable centres that attract workers and business investment. For example, investing in urban renewal and transport infrastructure in Newcastle's Central Business District could encourage more people and businesses to move to the city
- set employment targets to address high unemployment and low participation rates in regional areas, particularly in North Coast, Illawarra, Far West and Western Sydney.

^{1.} BIS Shrapnel, 2013, State Economic and Industry Prospects, New South Wales 2013-2023, May 2012.

NSW Government, www.business.nsw.gov.au/invest-in-nsw/about-nsw, ABS Cat. No. 5220.0, State Accounts, 2011–12.

^{3.} Infrastructure NSW, 2012, First Things First: The State Infrastructure Strategy 2012–2032, pp.35–36.

^{4.} Infrastructure NSW, 2012, Deloitte Access Economics NSW Economy in 2031–32, March 2012.

^{5.} NSW Trade & Investment, Invest in NSW, www.business.nsw.gov.au/invest-in-nsw/about-nsw.

^{6.} Australian Bureau of Statistics. Building approvals, Australia, July 2013. Catalogue No. 8731.0

^{7.} NSW Government, 2013, NSW International Engagement Strategy. http://www.business.nsw.gov.au/ doing-business-in-nsw/international-engagement-strategy.

^{8.} NSW Trade & Investment, Invest in NSW, www.business.nsw.gov.au/invest-in-nsw/about-nsw.

Future economic and population growth will put pressure on the environment, yet a healthy, resilient and properly functioning environment is the foundation of economic growth, prosperous communities and personal wellbeing.



THE NATURAL ENVIRONMENT

A healthy, properly functioning natural environment is the foundation of sustained economic growth and prospering communities. It is also the foundation for our personal health and wellbeing.

Environmental assets, including features related biodiversity, waters, wetlands, coasts, land and soil, and heritage can be catalysts for population growth and change. This is often referred to as the sea change or tree change effect, where people are attracted to live in a particular location because of its natural environment.

We face a number of environmental challenges in NSW relating to biodiversity, air quality, water resources, natural hazards and climate change. Population growth and urbanisation contribute to these challenges.⁹ For example, in densely populated areas, waste products - such as solid waste, sewage, hazardous waste and atmospheric emissions - place increased stress on the ecosystem. Planning responsibly for this growth carefully can minimise these impacts.10

The NSW reserve system

The cornerstone of the state's conservation effort is the NSW reserve system. New South Wales has over 865 national parks and reserves, protecting landscapes from rainforests and rugged bush to marine wonderlands and outback deserts. These areas play a critical role in protecting biodiversity as well as natural and cultural heritage. Reserves cover almost 7.1 million hectares (8.8 per cent of NSW) and the reserve system has grown by 380,247 hectares (an increase of 5.7 per cent) since 2009.

Twelve aquatic reserves conserve marine biodiversity and provide representative samples of marine life and habitat.

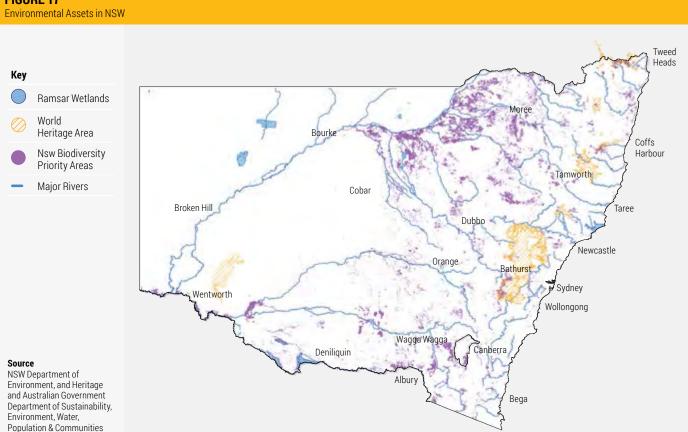


FIGURE 17

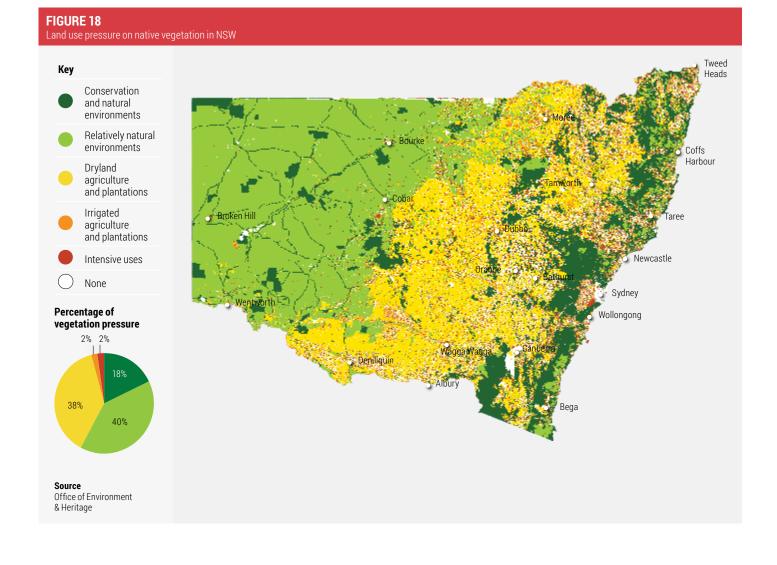
Marine – protected areas cover 345,100 hectares (about 34 per cent) of NSW waters. Around 7 per cent of inland wetlands and 19 per cent of coastal wetlands are protected within the terrestrial reserve system.

The reserve system is increasingly being supplemented by conservation measures on private land. Conservation programs in NSW, such as 'biobanking', are helping protect important areas of biodiversity where they may be threatened by growth and industry.

Biobanking has been used in many coastal areas of NSW as well as inland mining regions such as the Liverpool Plains. Regional Growth Plans will play an important role in nominating priority areas for biodiversity conservation measures.

Biodiversity

Biodiversity is the diversity of all life on earth and includes all plants, animals and micro-organisms. Biodiversity is vital in supporting human life on earth and provides many benefits, including clean air and water and fertile soils. NSW has a rich biodiversity, much of which is recognised as being internationally significant. The Border Ranges of Northern NSW is the most biologically diverse area in the State and includes subtropical rainforest, wet sclerophyll forest, mountain headlands, rocky outcrops and transition zones between forests. The Brigalow Belt, located in inland northern NSW, is another important area for biodiversity. It has large tracts of eucalypt woodlands and is a stronghold for endemic invertebrates. These two locations have been identified on the list of fifteen national biodiversity hotspots."



Habitat destruction, including clearing of native vegetation, is one of the greatest threats to biodiversity in NSW. It places significant pressure on native fauna and threatened species. The amount of clearing has stabilised over the past six years,12 however the impact of past clearing, which has been greatest in areas of urban development on the coastal plain and the wheat-sheep belt of central NSW,13 although land clearing associated with agriculture as decreased significantly in the last six to eight years. Although, much of the State's vegetation is relatively natural or set aside for conservation, over 40 per cent of remaining native vegetation us under pressure from agriculture and modification resulting from residential settlements, commercial and industrial uses (see Figure 18).

Clearing, most of which occurs in coastal regions and is associated with urban development and forestry, has stabilised over the past six years, though Western Sydney, the Upper Hunter, areas to the north of the ACT, and other high population growth areas continue to face pressure from clearing. At the same time, the condition of most remaining vegetation has deteriorated. Only nine per cent of vegetation in NSW is considered to be in near natural condition – this being protected within the reserve system.

Water environments

Water for the environment is crucial to healthy ecosystems in our rivers, coastal and marine waters as wells on land. Maintaining and improving the health of rivers, while managing water for towns, cities, industrial and agricultural users, is an environmental challenge facing NSW and other parts of the country.

The overall health of marine waters and ecosystems is considered to be good. The health of many coastal and inland rivers is likely to have improved in recent years following the breaking of a prolonged drought. Many river systems in NSW, including most inland rivers, are under pressure. The extent to which water resources are used has major effects on the condition of rivers. Areas where the flow regime has changed the most (where river regulation and water use are highest) generally show the greatest signs of ecosystem stress. For example, over allocation of water for irrigation in the past has had a negative effect on the health of the Murray River, while population growth and changing land-use activities have had negative effects on the Hawkesbury-Nepean River's health. This has occurred through increased runoff from agricultural, horticultural and urban land uses, and discharges from services such as sewage treatment plants.¹⁴

Across NSW, a number of programs are in place to improve the health of rivers and return water to the environment. Water has already been returned to the environment in many areas, enabling successful bird breeding and watering of highly stressed river red gum communities.¹⁵ Inland NSW makes up a large part of the Murray-Darling Basin and most inland valleys will see a substantial increase in the amount of water allocated to environmental flows, as well as other water management projects and initiatives implemented under the Murray-Darling Basin Plan.

Groundwater is a significant resource in many areas of NSW, supporting healthy ecosystems on land and in waterways. Demand for groundwater has eased significantly in recent years (as more surface water has become available following the widespread rains) and extraction in some aquifers is now being managed at sustainable levels under water-sharing plans. Regional Growth Plans will be vital to managing risks to groundwater resources and ensuring the quantity and quality of water recharging our aquifers is not reduced by inappropriate development. Estuaries and coastal catchments are coming under increasing pressure from coastal development, and their condition varies, from near-pristine to highly disturbed. Many of the pressures are associated with population growth along the coast, and the land clearing and development that it entails. These pressures will continue along the NSW coast in the future, especially in the areas where most growth is likely to occur.

However, population growth and urbanisation increase pollution and disturb native habitats. Marine waters and ecosystems adjacent to urban and industrial areas are more susceptible to the effects of pollution from urban runoff, stormwater and sewage discharge.

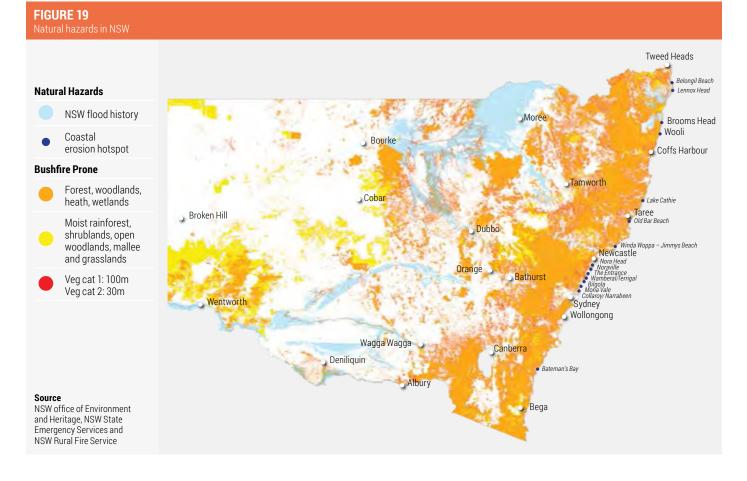
Air quality

NSW consistently complies with national air quality standards for four of the six major criteria of air pollutants: carbon monoxide, nitrogen dioxide, sulphur dioxide and lead. However in some locations, problems with air quality can occur from time to time.

The most important human-related causes of air pollution are motor vehicle use, industrial activity and some domestic and commercial activities such as smoke from wood heaters. In the Greater Metropolitan

Region (Metropolitan Sydney, the Illawarra, Central Coast and Lower Hunter), which is home to over 70 per cent of the NSW population, problems persist with photochemical smog and particle pollution (brown haze) mostly from industrial sources. Particle pollution can also be a problem in regional areas such as Albury, Bathurst, Tamworth, Wagga Wagga and in the Upper Hunter, and is caused by a range of natural events and human activities including bushfires, dust storms, construction and industrial activities, wood heaters and agricultural activities such as stubble burning. During winter, wood heaters can produce up to seven times as much particle pollution as cars. In colder climates, such as in Armidale, it has been suggested that wood heaters can contribute over 85% of winter particulate pollution.¹⁶

The increasing population density in urban and regional centres and the growth in incomes and spending on private transport are affecting outdoor air quality. This will require further action on transport, commercial, industrial and domestic emissions. Increased development in western and south-western Sydney also has the potential to expose more people to elevated ozone concentrations as the city's meteorology and topography mean these areas are more affected by ozone pollution than coastal regions.



Natural hazards

NSW experiences a range of natural hazards including bushfires, severe storms and floods. These events cause great financial hardship for individuals and communities, and can sometimes result in loss of life. As our population grows, there is potential for more people, buildings and infrastructure assets to be exposed to natural hazards. While some of the impacts of natural hazards can be mitigated, risks cannot be completely eliminated.

According to the National Disaster Resilience Framework, the single most effective method to reduce the risk of natural disasters in the medium to long term is to consider current and future disaster risk in urban and regional planning.¹⁷

Many settlements are located in flood-prone river catchments, with tens of thousands of properties located within a floodplain. A significant portion of these are in the Hawkesbury Nepean Valley in Sydney. NSW has targeted this area for infrastructure investment and is reviewing flood risk management arrangements. NSW 2021 prioritises the creation of a NSW Flood Studies Database as a statewide strategic overview of flood risk. More than 100,000 buildings are at risk of flooding in NSW. The average cost of flooding in coastal NSW and inland urban centres is around \$200 million a year.¹⁸

Coastal NSW is particularly susceptible to natural hazards. The large population and demand for further growth in these areas increases the risk. Coastal erosion is a significant natural hazard in several highly populated locations along the NSW coast, such as Belongil Beach, Lennox Head, Wamberal, Narrabeen and Batemans Bay.

Northern parts of NSW, especially the coastal areas, are most at risk of cyclones. Many coastal areas and upland areas are also susceptible to landslides.

Some areas are deemed 'bushfire prone'. The extensive urban-bushland interface means that 275,000 properties are located within 130 metres of bushland in Greater Sydney alone.¹⁹

Extreme temperatures can lead to illness and loss of life, and increase the cost of transport, agriculture, energy and infrastructure. Heatwaves are becoming more common and are a significant cause of mortality.²⁰ The 2011 heatwave in Sydney resulted in 96 deaths, which had a substantial impact on the healthcare system. Inland areas and areas out of reach of cooling coastal breezes, such as Western Sydney, are more vulnerable to extreme heatwaves than coastal locations.

Other natural hazards include seismic activity (including earthquakes), which affects certain areas of the state.

Planning for the future

Future economic and population growth will put pressure on the environment, yet a healthy, resilient and properly functioning environment is the foundation of economic growth, prosperous communities and personal wellbeing.

There is already an understanding of where the growth and urbanisation pressures are in NSW, and that there is a correlation with the pressure on the natural environment. The Regional Growth Plans will address biodiversity loss, water degradation, atmospheric pollution, natural hazards and the changing climate.

The extent to which the natural environment can remain resilient in the face of growth and urbanisation will vary across NSW. We need to assess and understand the implications of potential growth and urbanisation regardless of scale and intensity—to avoid serious environmental effects. Regional Growth Plans will:

- focus on improving evidence related to environmental values and risks
- identify regionally significant environmental values and places, and those that are under pressure, such as coastal wetlands
- ensure that effects on the environment including cumulative impacts—are understood and integral to decision making
- ensure that the impacts of natural hazards and the changing climate are understood and integral to decision making, for example, rising sea levels on the Central Coast and Lower Hunter estuaries, and coastal erosion on the North Coast
- identify regional environmental investment priorities, including areas for protection, green corridors, waste management and flood risk management infrastructure
- help coordinate efforts across government, business and community to ensure environmental outcomes are optimised at least cost to those bodies.

The changing climate

NSW is expected to become hotter, with the greatest increases in temperature expected to occur in the north and west of the state. North-eastern NSW is likely to experience a slight increase in summer rainfall, while the south-western regions are likely to see a decline in winter rainfall. Many parts of the state will experience a shift from winter-dominated to summer-dominated rainfall.²¹ The type, frequency and intensity of natural hazards are expected to change.

Sea levels are expected to rise, increasing coastal erosion and flooding that will affect beaches and estuaries. Inland waterways and the industries that depend on water will be affected by changed rainfall patterns and increased evaporation, particularly in the south-west of the state. Higher temperatures, extreme weather events, fire and erosion could change entire ecosystems, accelerate species loss, alter farming practices, and affect human settlements and health. Different parts of NSW will experience different changes in climate and will require different responses. Not all of these changes will be negativefor example, changes in climate could create new agricultural opportunities. The NSW Climate Impact Profile provides specific regional climate information.²² With 59 per cent of the NSW population living in the coast city of Sydney and a further 20 per cent living in the non-metropolitan coastal strip, rising sea levels are likely to have an effect on human settlements.

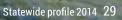
Over the longer term, projected changes in rainfall due to climate change are expected to create risks for water availability. A pattern of more severe droughts and intense rainfall events would increase the risk of severe flooding when rain does occur. In northern NSW, which is dominated by summer rainfall and runoff, our projections indicate a slight increase in mean annual runoff. In the southern regions of the state, which currently experience winter-dominated rainfall and runoff, our projections indicate moderate to significant decreases in mean annual runoff.²³

- State of the Environment reporting and state of the catchment reporting identify trends and pressures that indicate this.
- 10. NSW Environmental Protection Authority, 2012. NSW State of the Environment– People and the Environment.
- 11. http://www.environment.gov.au/topics/biodiversity/biodiversity-conservation/ biodiversity-hotspots/national-biodiversity-hotspots
- 12. NSW Environmental Protection Authority, 2012, NSW State of the Environment 2012
- 13. NSW and Environment Protection Authority, 2012.
- 14. Hawkesbury Nepean Catchment Management Authority, 2007, Hawkesbury Nepean Action Plan.
- 15. Environment Protection Agency, 2012, NSW State of the Environment.
- 16. http://www.environment.nsw.gov.au/resources/air/WoodsmokeControlReport.pdf
- 17. Australian Government, Attorney-General's Department, 2011, Natural Disaster Resilience Framework, www.em.gov.au/Publications/Program%20publications/ Pages/NationalDisasterResilienceFramework.aspx.

- 18. www.environment.nsw.gov.au/floodplains/FloodRiskNSW.htm
- 19. Chen, K, 2005, Counting Bushfire—Prone Addresses in the Greater Sydney Region, Risk Frontiers—Natural Hazards Research Centre, Macquarie University, Sydney.
- NSW Ministry for Police and Emergency Services, 2012. Government, you and what to do-a guide to natural disasters in NSW.
- 21. Climate Change Impacts in NSW, www.environment.nsw.gov.au/climatechange/ impacts.htm.
- NSW Department of Environment, Climate Change & Water NSW Climate Impact Profile, www.environment.nsw.gov.au/climateChange/impactprofile.htm.
- NSW EPA, State of the Environment Report 2012: www.epa.nsw.gov.au/soe/ soe2012/chapter4/chp_4.1.htm#4.1.42.

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Regional Growth Plans will play a critical role in how natural resources are managed to ensure the prosperity and productivity of the NSW economy, as well as the health of local communities and the environment.

Wheat field, Narrabri

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NATURAL RESOURCES

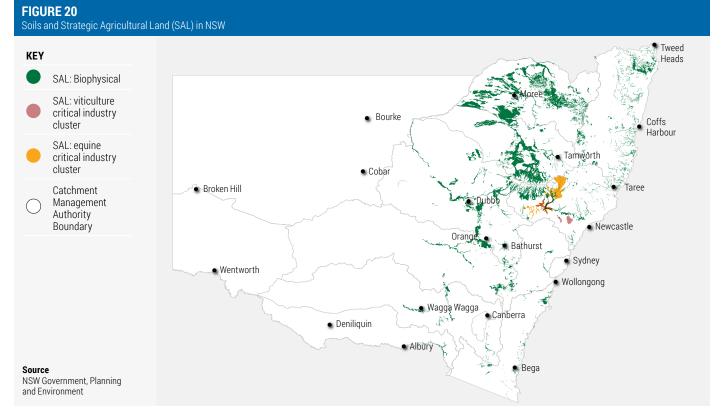
NSW is abundant in natural resources that have shaped patterns of settlement over the last 200 years. Over the coming decades, the way we manage and use these natural resources will continue to shape patterns of growth and change, particularly in regional NSW where the economy is more strongly focused on industries like mining and agriculture and, to a lesser degree, tourism.

Soils

Stable, healthy and productive landscapes and soils are essential for producing most of our food, maintaining environmental function, managing water quality, sustaining primary industries and supporting rural and urban communities.

Figure 20 shows the areas of NSW that have been mapped as strategic agricultural land (SAL), at a statewide scale. This land is highly productive and has unique natural characteristics such as soil quality and reliable water access. SAL has also been mapped based on the locations of important critical industry clusters such as wine making (viticulture cluster) and horse breeding (equine cluster). A significant cluster of strategic agricultural land based on the biophysical qualities of the soil, lies in the Liverpool Plains and Gunnedah Basin. There are other prominent areas of proposed biophysical strategic agricultural land in the Central West around Orange, in the Northern Rivers around Casino, Lismore and Alstonville and in the Orana around Dubbo and Wellington.

Many smaller areas of NSW have high-quality soil resources that support high value horticulture and other agriculture. Slope, soil depth, drainage, water holding capacity, soil type and soil structure are among the factors that identify these valuable soil resources. Regional-scale planning needs to recognise areas of highly valuable soils and protect them from development that might limit their potential to support productive agriculture.



Water

Water for agriculture

The availability of water for agriculture has shaped patterns of growth across NSW. In many parts of inland NSW, where rainfall is lower and less reliable than coastal areas, water from inland rivers and aquifers is vitally important. Water is managed to support towns, cities, agriculture and industries.

NSW also has a number of major irrigation districts, which have received significant investments in dams, weirs, canals and water delivery systems to provide a reliable source of water. In the Namoi and Orana regions, irrigation agriculture along rivers such as the Macquarie, Namoi, Gwydir and McIntyre supports a strong cotton industry, as well as towns like Narrabri, Wee Waa and Warren. In the Murray and Murrumbidgee regions, the irrigation districts support important centres like Griffith, Leeton and Deniliquin. The Murrumbidgee is Australia's major rice-growing district, and the Murray and Murrumbidgee regions are also important for crops such as grapes, vegetables and citrus fruit.

Water trading in the Murray-Darling Basin — where water is bought and sold along a river system — has helped lessen the effects of drought and deliver water to farms, towns and the environment when it is most needed. Water trading can help irrigation agriculture become more productive and efficient. It also has the potential to see established irrigation districts decline, if water is sold out of that district.

Strategic planning can play an important role in managing the changing land-use pressures in irrigation districts, and prioritising investment in water supply infrastructure and water efficiency measures, so that whole communities can share the potential benefits.

Water for the environment

In many rivers and aquifers of inland NSW, water is managed in cooperation with the Australian, Queensland, Victoria, South Australia and the ACT Governments. The Murray-Darling Basin Plan is being rolled out over several years to limit water use to an environmentally sustainable level. The result will be a significant increase in water for rivers and the environment, and a decrease in the amount of water that can be diverted from rivers for agriculture. In NSW, the biggest reductions in water that can be diverted from rivers will be in the Murray and Murrumbidgee regions.

Water for towns and cities

Areas with higher capacity and more reliable water storages may have the potential to accommodate growth. However, areas with limited or unreliable water supplies will have limited potential for growth, or may need to look for innovative water supply options to support growth. In the relatively dry years between 2000 and 2010, towns such as Goulburn and Orange faced concerns about the capacity and reliability of water supplies.

Goulburn's water supply is now reliable, and future regional-scale planning can help address issues relating to growth, water supply infrastructure, priorities for water sharing and efficient water use in other towns and cities. In a state that is prone to droughts, the water supply picture can change substantially over time. This will become particularly important in areas of relatively high growth that are susceptible to drought, such as the Hunter region.

In some parts of NSW, drinking water catchments contain towns and cities, farmland and other rural industries. Regional Growth Plans will play an important role in managing the scale and intensity of development so that the quality of drinking water remains high.

Minerals and extractive resources

Figure 21 shows a cluster of metallic mineral resources in the Central West and Far West regions around Orange, Parkes and Cobar. Broken Hill, in the Far West, is famous for its mineral wealth and mining history. The map also shows a cluster of major industrial minerals, such as mineral sands and gypsum, in the far south west of NSW around Balranald and Wentworth.

In looking at the potential for new or expanded mineral or gas activities in the region, it is important that the potential economic benefits are considered against the cost and benefits of other potential development opportunities and the corresponding environment and social impacts of all options. This is particularly important when dealing with smaller communities, which may lack the infrastructure and services to support rapid growth.

Figure 22 shows a concentration of quarries around Sydney that produce construction materials. The location of these natural resources close to the Sydney market where they will be used is critically important. It adds to the pressure on peri-urban landscapes at the edge of major cities like Sydney, Canberra, Newcastle and Wollongong, where construction materials are in greatest demand.

FIGURE 21

Metallic and Industrial Mines in NSW

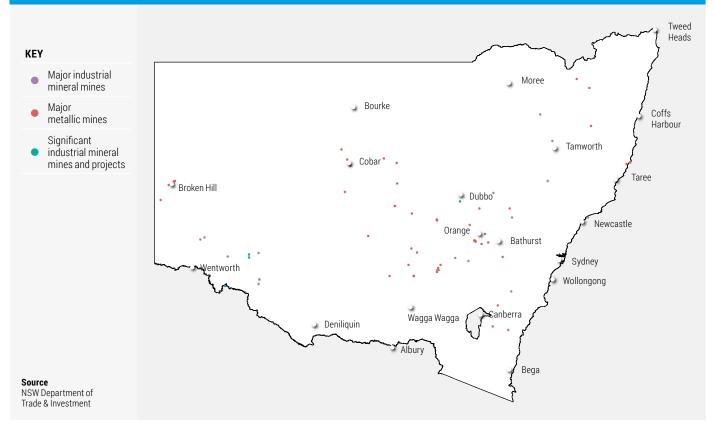
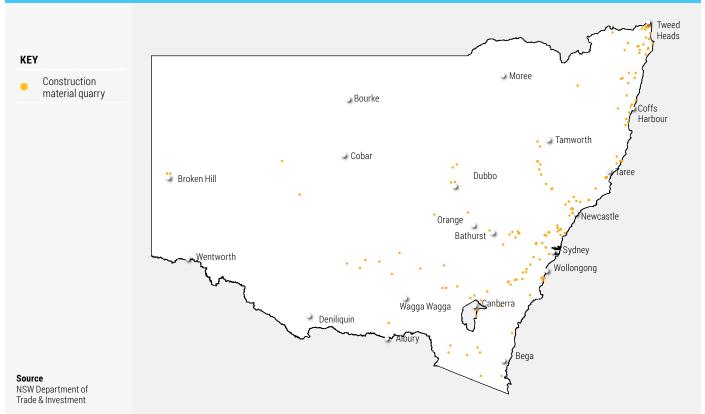


FIGURE 22

Construction Materials in NSW



Energy resources

Coal and coal seam gas

Coal is NSW's number one commodity export and supplies 85.6 per cent of NSW's electricity needs.²⁴ Figure 23 shows the major coal basins of NSW, as well as coal mine areas and coal seam gas wells. These are concentrated primarily in the Lower Hunter around Newcastle and Lake Macquarie, the Upper Hunter around Singleton and Muswellbrook, the Gunnedah Basin, and the Illawarra Region around Wollongong. Coal mining has expanded in the last 10 years, based on strong demand from export markets and higher coal prices.

The expansion of coal and coal seam gas projects can bring great prosperity, especially when mining operations source workers, goods and services from local communities. However, these major projects can also place pressure on other industries seeking access to land, water and workers. The Strategic Regional Land Use Plans for the New England North West and the Upper Hunter address the competition between mining and agriculture in these regions to ensure sustainable outcomes, and provide a policy framework for other strategic plans. Investment by the coal and coal seam gas industry has created a demand for more workers and demand for more housing. In some communities, demand for housing has exceeded supply, prompting some businesses and communities to explore short-term accommodation or camp-style villages to house the mining-related workforce such as in Narrabri and Muswellbrook.

The export of coal from NSW to the Asia-Pacific region has created the need for infrastructure chains that link mines to rail and road corridors and ports. The location of coal resources has driven investment in transport infrastructure, including the ports of Newcastle and Port Kembla, which in turn has lead to further growth and development opportunities. At the same time, there can be competition for access to other infrastructure—such as roads and rail—between mining companies and agriculture and private users.

Regions close to these coal resources will need careful planning with input from the local community to ensure the effects of mines across the region are well managed, and investment in infrastructure is prioritised so it is delivered and used efficiently.

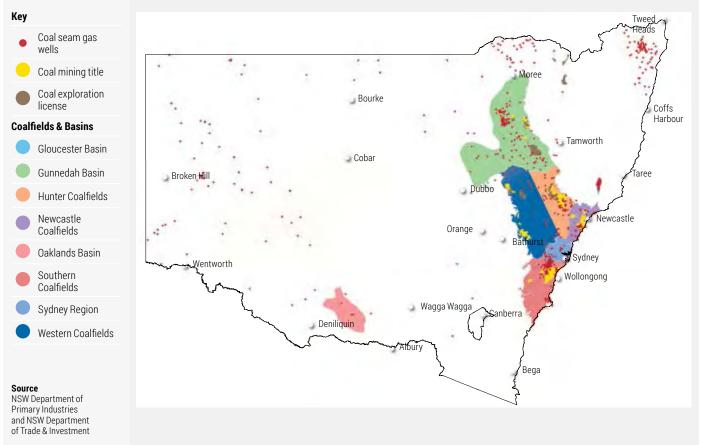


FIGURE 23 Coal and Coal Seam Gas fields in NSW

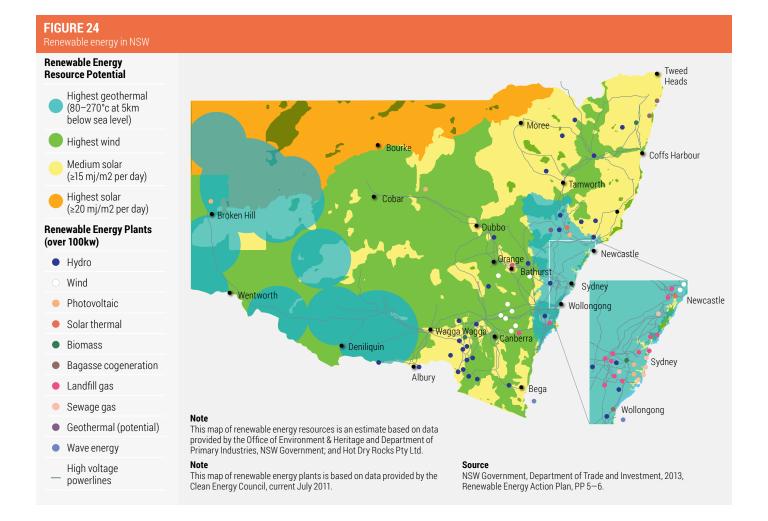
Renewable energy

New South Wales has a range of renewable energy resources. Figure 24 shows the location of several renewable energy resources, as well as the location of larger renewable energy plants.

A cluster of hydro-electric power installations is located in the southern ranges, to the west of the Snowy Mountains and the Great Dividing Range. Hydro energy has been providing a significant proportion of the state's renewable energy since the Snowy Mountains Scheme was completed.

NSW has large areas with high potential for wind energy, including a strong cluster of wind energy installations in the southern inland districts between Queanbeyan and Crookwell. The far north-west of the state, close to areas like Moree and Bourke, has the highest potential for solar energy. Places with the highest potential for geothermal energy production are concentrated around the Hunter Valley, Central Coast, Sydney and the Illawarra region, and the southern and western Murray and Murrumbidgee Valleys around towns such as Hay and the far western districts around Broken Hill.

The NSW Government aims to increase the use of renewable energy to 20 per cent of all energy by 2020. In 2011, only 6 per cent of NSW's energy was from renewable sources. This means that strategic planning for regions must promote opportunities for greater production of wind, solar, geothermal and other forms of renewable energy, in consultation with local communities.



Oceans and estuaries

NSW has just over 2,000 kilometres of coastline. The state's coastal waters and estuaries are an important natural resource for tourism, recreation and commercial fishing. Fishing is an important industry in many coastal and river communities, including Ballina, Iluka, Newcastle, Nowra and Eden.

Landscapes

From the Snowy Mountains and Sydney Harbour, to the coastal lakes of the South Coast and the surfing beaches of the North Coast, scenic landscapes are vital to tourism. These landscapes need to be protected from inappropriate forms of development and natural hazards such as bushfires, coastal storms and climate change.

Regional planning will recognise and support the role landscapes play in supporting healthy and vibrant communities and providing a stimulus for tourism and economic benefits.

Regional Growth Plans will also make sure the state's productive landscapes and soils are managed sustainably, and are not threatened by unplanned or poorly conceived or executed development.

Planning for the future

Regional Growth Plans will play a critical role in how natural resources are managed to ensure the prosperity and productivity of the NSW economy, as well as the health of local communities and the environment.

Regional Growth Plans take a long-term, whole-of-region view and balance the needs of different industries, communities and interests. They are the most effective way to plan and ensure the effects of natural resource use are understood and integral to decision making.

They will include plans for:

- coal and coal seam gas resources in areas like the Upper Hunter, consistent with the strategic regional land use policy
- infrastructure, including pipelines and new corridors, to support the safe and reliable delivery of energy to households and businesses
- wind energy projects in the Alpine and Capital region
- the use of water and agricultural land in New England, and the Murray, Murrumbidgee and Riverina regions.
- the sustainable use and management of natural resources also relies on having the right infrastructure in place to develop and transport resources efficiently and manage environmental effects. Regional Growth Plans will identify and prioritise future infrastructure needs and protect investment in existing infrastructure so they remain productive.

^{24.} NSW Treasury, 2013. NSW Budget 2013–14 Budget Paper 4–Infrastructure Statement. http://www.budget.nsw.gov.au/__data/assets/pdf_file/0018/25236/ BP4_Infrastructure_Statement_2013-14_



INFRASTRUCTURE

Infrastructure investment and population growth and settlement are inextricably linked. Investment logically flows to areas where populations are increasing and there is demand for roads, public transport, water and electricity, schools and medical facilities.

Infrastructure can also encourage population growth as it allows people to find jobs and improve their prosperity, and enables goods and services to be accessed locally and globally. Sound investment in infrastructure is vital for a healthy and productive economy.

Infrastructure assets

NSW has significant infrastructure assets that help support a productive economy, a safe and healthy environment and a cohesive society. A complex and interconnected series of infrastructure networks and facilities enable the delivery of services to regions, cities and towns around the State. The NSW Government has infrastructure assets valued at around \$263 billion in 2013.²⁶ This includes roads and railways, electricity transmission and water supply networks, as well as hospitals, schools, TAFE colleges, court houses and prisons.

This is complemented by other infrastructure assets owned and provided by the Australian Government, local government or the private sector. These include broadband and mobile telecommunications networks, ports, airports and local roads as well as hospitals, universities and schools.



FIGURE 25 Infrastructure in NSW

Infrastructure is fundamental to supporting growth, productivity and living standards. Infrastructure must be available when required, be delivered efficiently and be fit for purpose.

0-

Pacific Highway, Karuah

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Key challenges

The NSW Government's planning reforms will provide better infrastructure planning and delivery, which is critical to fulfilling the vision of NSW 2021. This means the planning and delivery of infrastructure will be in tandem with population growth and change, providing the right capacity in the right places at the right time. It also means aligning infrastructure spending with goals such as driving economic growth in regional areas.

Infrastructure is vital to encourage population and economic growth in priority areas, and to support the ability of people and goods to move between regions. Population growth will make this more important in some places. Another key challenge is meeting expected growth in freight movements in NSW and across Australia. It is also important to ensure infrastructure investment provides the greatest possible range of benefits for the community. Sound planning and investment can often solve multiple problems at once and create new opportunities for economic growth.

Creating fairer, more transparent and efficient ways to fund infrastructure – as proposed as part of the planning reforms – is key to addressing these issues. NSW will overhaul existing arrangements for funding regional and local infrastructure, establish new rules for infrastructure charges and open up opportunities for competition.

We need to understand the state's infrastructure requirements in the medium and long-term future, so we can identify and protect infrastructure corridors and strategic sites to meet future needs. This requires a clear understanding of population and economic trends and how these will shape towns, cities and regions over the coming decades.

FIGURE 26

Future infrastructure demands (percentage growth)

KEY

Source

Projections.

Infrastructure NSW, State

2012-2032 Oct 2012 Page 8,

and 2014 NSW Population,

Household and Dwelling

Infrastructure Strategy

- TEU Twenty-foot equivalent unit
- Twh Terawatt hour
- mt Million tonnes





Sydney Airport

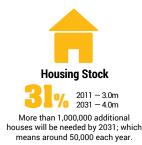
98% 2010 – 40m 2029 – 79m An extra 39 million passenger trips are expected to and from Sydney Airport by 2029.



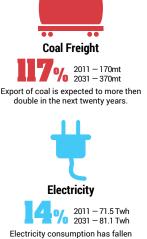
2011 – 20,000 2031 – 25,500 An extra 5,500 hospital beds may be needed by 2031-32.



2031 – 7m TEU Freight demand grows at a multiple of 1.5 to 2 times GSP and an extra five million TEUs are expected in 2031–32.



Train Trips 37% 2011 – 0.8m 37% 2031 – 1.1m An extra 326,000 train trips each day are expected in 2031 – 32, including the new South West and North West Services.



Electricity consumption has fallen since 2009 and is only expected to increase by 14% in 20 years. Across regional NSW, a number of road and rail corridors (see Figure 25) have strategic value in supporting economic development and population and employment growth. Keeping these corridors open and moving people and freight efficiently will strengthen the regional and metropolitan economies.

State Infrastructure Strategy

The NSW Government's State Infrastructure Strategy (SIS) highlights the need to focus on the quality of infrastructure delivered across the state. The SIS provides a 20-year strategic framework for infrastructure, comprising recommendations for investment in specific major projects, and wider policy and market reforms to improve how infrastructure is planned, procured and delivered. The strategy places particular emphasis on the need for reforms that introduce competition, increase private sector involvement and offer opportunities for innovation and greater efficiency. Figure 26 shows some of the infrastructure challenges facing NSW over the coming decades.

The SIS recommends refreshing the way infrastructure is planned in NSW, focusing on:

- a 'first things first' approach to prioritise projects and policies that maximise economic
- and social benefits for all of NSW
- investing so that NSW's strengths are supported as a first priority
- maximising the use of existing assets wherever possible before investing in new projects
- ensuring projects of all scale a re done well.

In the immediate future, the SIS is being implemented through a five-year State Infrastructure Plan, commencing with the 2013–14 Budget. Given the limitations on available public funding, it requires prioritising and leveraging private capital and expertise wherever possible, particularly through Public-Private Partnerships (PPPs). The Government is also using the capital invested in existing infrastructure assets to help pay for more infrastructure.

Planning for the future

Planning for the future Infrastructure is fundamental to supporting growth, productivity and living standards. Infrastructure must be available when required, be delivered efficiently and be fit for purpose. Regional Growth Plans will:

- integrate land use and infrastructure planning decisions
- identify the location of existing or potential transformative infrastructure at a regional scale, including approved transport corridors and public priority infrastructure
- identify broad transport and essential utility corridors.

Restart NSW

In June 2011, the NSW Government established Restart NSW, to fund a range of high priority future infrastructure projects in NSW. The objective of Restart NSW is to improve the economic growth and productivity of the State by funding essential infrastructure, including:

public transport

roads

infrastructure that may improve the competitiveness of the State

local infrastructure in regional areas that are affected my mining operations

health facilities workplaces for frontline government staff

A number of specific infrastructure funding programs have been established to target regional development. For example, the \$100 million Restart NSW Illawarra Infrastructure Fund has been established to help fund priority infrastructure projects in the region. The Illawarra Infrastructure Fund has been set up using funds from the long-term lease of Port Kembla.



COMMUNITIES

Most of the population of NSW lives in urban settlements. Altogether, the state has over 500 urban centres with populations greater than 200 people. Around one-third of these have fewer than 500 people²⁶ but more than 73 per cent of the NSW population lives in major cities.

Outside Sydney, the largest urban centres are Newcastle, the Central Coast and Wollongong, with each having more than 250,000 people. Maitland and Tweed Heads have populations of between 50,000 and 100,000 people. Other large urban centres, with between 20,000 and 50,000 people, include Albury, Armidale, Bathurst, Cessnock, Coffs Harbour, Dubbo, Goulburn, Lismore, Nowra-Bomaderry, Orange, Port Macquarie, Queanbeyan, Tamworth and Wagga Wagga. Each of these centres support a larger population in the surrounding towns and rural areas. Albury, Queanbeyan and Tweed Heads each form part of a larger cross-border community with Wodonga, Canberra and the Gold Coast respectively.

Hospital peer groups in regional NSW

| Peer group A examples | Gosford John Hunter Wollongong | Peer group C1 examples | Armidale Bathurst Bega | Peer group C2 examples | Ballina Casino Cessnock |
|--------------------------|---|---------------------------|---|---------------------------|--|
| Peer group B examples | Albury Dubbo Lismore Maitland Orange Port Macquarie Shoalhaven Tamworth Wyong | | Bowral Broken Hill Griffith Goulburn Murwillumbah Shellharbour | | Cooma Deniliquin Forbes Gunnedah Inverell Kempsey Lithgow Mudgee Singleton |

Source

NSW Health www.health.nsw.gov.au/hospitals/peer_groups.asp

TABLE 4

Hierarchy of retail centres in NSW

| First order | Second order | Third order | Fourth order | Fifth order | Sixth order |
|-------------|--|--|---|---|---|
| example | examples | examples | examples | examples | examples |
| Sydney | Newcastle Tweed Heads Wollongong | Albury Coffs Harbour Wagga Wagga | Bathurst Lismore Orange Port Macquarie Tamworth | Armidale Ballina Goulburn Griffith Nowra Parkes Taree | Broken Hill Grafton Inverell Kempsey Moree Ulladulla |

Source

Based on National Institute of Economics and Industry Research, 2013, NSW Local Government Areas: Similarities and Differences, P115, published by the Independent Local Government Review Panel.

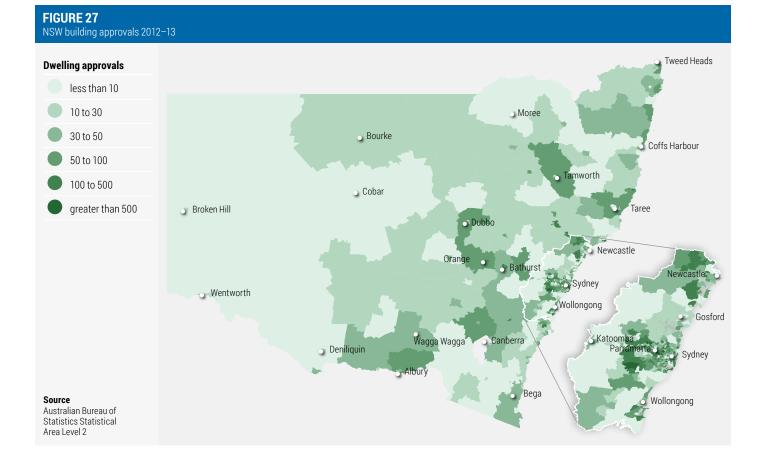
Service provision

Larger regional towns and cities act like capital cities for their region. Migration patterns within each region show strong connections between these regional capitals and surrounding areas.

Economic activity in each region is often dominated by the economy of the regional capital and largest urban settlements. Larger urban centres tend to have more diversified and resilient economies that can help sustain regional activity during fluctuations caused by factors such changing commodity prices and periods of drought.²⁷ Economies of scale and scope mean that most larger regional centres are hubs for services such as TAFE and higher education, hospital care, public administration and transport, particularly by air. Table 3 shows regional hospitals as peer groups (hospitals of a similar size and offering similar services) to describe a hierarchy of hospital service provision for the state. Major regional centres also provide commercial and retail services to many other towns and villages in their respective regions. In regional NSW, business and professional services such as legal advice or financial planning are concentrated in the larger cities and towns. The same is true for retail. Many smaller towns have less retail activity and employment below than the State average, as people often travel to the next larger town or city to do their shopping. Table 4 describes the hierarchy of retail centres in NSW.

Urban settlement and form

Transport is an important influence on urban form. In NSW in 2011, around 63 per cent of working age people use their car as the sole means of transport to work, either as the driver or passenger. Trains and buses also play an important role in Sydney, Newcastle and Wollongong. This has shaped the structure and urban form of these cities, as until the advent of widespread car use, commercial and residential development was along public transport routes.



Outside the major cities, public transport has played a smaller role in shaping urban form as smaller cities and towns often lack the size and population density that makes public transport a viable alternative to private vehicle transport. The lack of public transport infrastructure, dispersed locations of employment and the higher proportion of work from home on rural properties are also factors. Many regional centres have been shaped by their locations on major transport routes, historically water-based, as well as rail and road.

Housing type

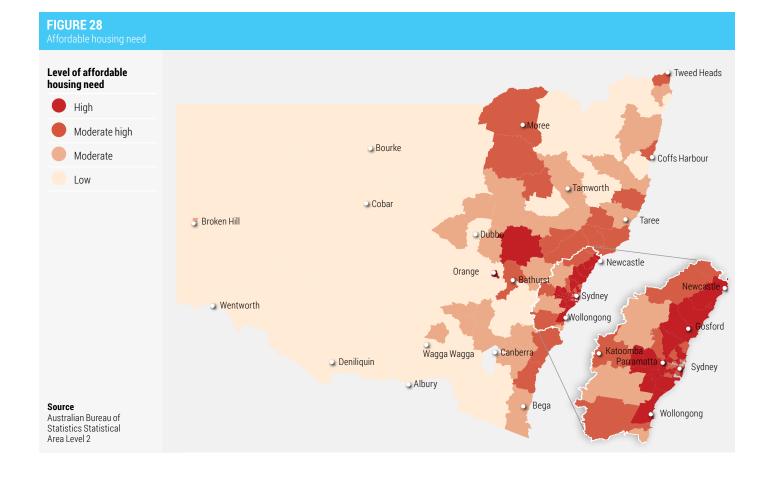
The majority of housing in the state (over 60 per cent) is detached houses, and 76 per cent of the population lives in this type of dwelling. Over recent years, two important shifts in housing in NSW have occurred – an increase in the proportion of higher density dwellings (flats, terraces, townhouses and semi-detached houses), and a change in tenure type from full ownership to mortgaged properties.

Higher density dwellings

Almost 90 per cent of the total stock of higher density dwellings is located in the major cities.

The remainder is mostly in inner regional NSW. Only Sydney, Tweed Valley and Wollongong have more than 25 per cent of their total dwelling stock as flats or semi-detached dwellings. Of the 46 areas in NSW outside of Sydney, 29 have more than 10 per cent of their total dwelling stock as higher density housing. This includes the major cities—such as Gosford, Newcastle and Wollongong—and regional cities, such as Dubbo, Armidale, Tamworth, Wagga Wagga and Bathurst. Coastal cities, such as Coffs Harbour, Port Macquarie and Tweed Heads also have higher proportions of higher density housing.

The proportion of detached houses has fallen across NSW from around 72 per cent in 2001 to around 70 per cent in 2011. This shift has been experienced in Sydney but is not evenly spread across NSW. Larger regional cities and coastal cities and towns have



Each community has its specific needs, housing markets and identity. Regional Growth Plans will play a role in understanding and addressing these needs and connecting people in their local communities, region and across the state.

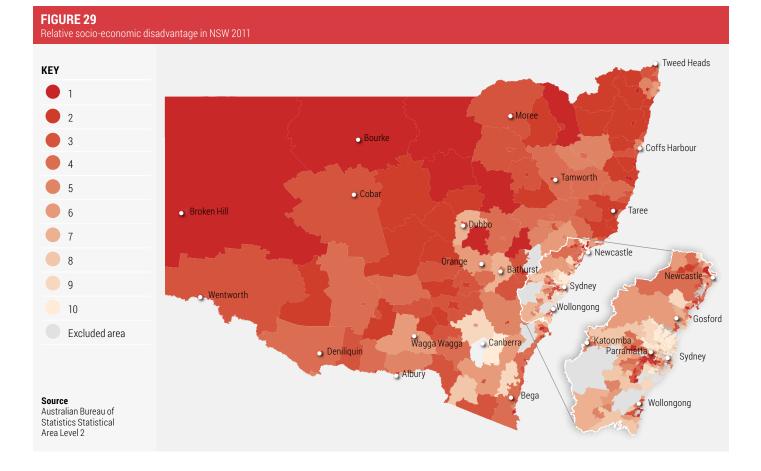
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shown decreasing proportions of separate houses while the rest of NSW has experienced little change. The 12 months to February 2013 saw an increase in the level of residential building approvals in NSW.²⁹ Most of these approvals were for separate dwellings and higher density dwellings. There was an increase in approvals for low-rise one- or two-storey units and high-rise units of four storeys or more. The level of approvals for medium-rise three-storey units was low.²⁹

Tenure type

Around one-third of dwellings in NSW are owned outright and another third are mortgaged. Sydney has a high proportion of mortgaged dwellings (around 35 per cent), which is consistent with the lower proportion of dwellings owned outright (31 per cent) in major cities. The very remote areas of the state have high proportions of dwellings being rented (41 per cent). The high proportion of mortgaged dwellings reflects declining affordability, people entering the housing market later in life and the use of homes to finance other investments. Around 30 per cent of all dwellings in NSW are rented, with social housing (housing rented from a government agency or community housing provider) making up around five per cent of all dwellings. Social housing makes up a similar proportion of Sydney's housing stock. Very remote areas of NSW have higher proportions of social housing, which makes up around 15 per cent of total dwelling stock and around 98 per cent of the total rental stock. Specific areas such as Bourke-Cobar-Coonamble and Moree-Narrabri have high levels of social housing as a proportion of total housing stock, around 11 per cent and 8 per cent, respectively.

In regional NSW, towns need short-term accommodation for seasonal activities, such as tourism and seasonal work, and 'boom' industries, such as mining. Major cities with universities also need student housing.



Aboriginal people in NSW

In 2011, there were 208,364 Aboriginal people living in NSW, which was 31 per cent of the Australian Aboriginal population. Aboriginal people make up a higher proportion of Australia's children and young people and a lower proportion of the elderly. The median age of Aboriginal people in NSW is 21, compared to 38 for the non-Aboriginal population. Fourty-four per cent of the Aboriginal population of NSW live in major cities, and only five per cent in remote or very remote locations.

The housing considerations of aboriginal people in NSW are complex. They are much less likely to own their own homes and more likely to receive government housing assistance. The average size of Aboriginal households is larger than other NSW households (3.1 persons per household compared with 2.6 for non-Indigenous people). There are also increasing proportions of Aboriginal people in need of assistance because of profound or severe disability. Aboriginal people also experience higher incidences of homelessness.

Affordability

Housing affordability relates to the ability of people to pay for their housing needs, whether they are purchasing or renting. The affordability of housing is closely linked to the level of housing supply. Boosting supply will improve overall housing affordability. There has been an improvement in the rate of housing approvals in NSW over the last few years.³⁰

'Housing stress' occurs when people find it difficult to meet the cost of housing. A measure of housing stress is the '30 only rule', where a household that pays more than 30 per cent of their after-tax income on housing costs is deemed to be in stress. Based on this rule, 28 per cent of households in Sydney are in housing stress, as are 16 per cent of households in the rest of NSW.³¹

The increasing number of people unable to purchase a home has a knock-on effect on the rental market. Increasing demand has led to higher rents, which may put pressure on people's ability to rent suitable housing. Affordability reports consistently show that NSW and Sydney are the most unaffordable housing markets in Australia. Within regional NSW, some of the most unaffordable housing is in Queanbeyan, where house prices are comparable to Sydney's.

Sydney had the highest median house price in December 2012—at \$640,000— of all the Australian capital cities.³²

NSW regional areas are also the least affordable in Australia, with high prices and low incomes leading to an affordability measure similar to Sydney's.³³

Housing affordability issues are not experienced equally across NSW (See Figure 28). Sydney is considered one of the least affordable cities in Australia, particularly for those on low to moderate incomes. Based on 2011 Bankwest analysis of the ratio of salary to house prices, 84 per cent of Sydney local government areas were unaffordable for key workers—such as police officers, teachers, nurses, fire-fighters and ambulance officers— already in or looking to live in Sydney. The analysis concludes that they are 'struggling to hop on the property ladder in Sydney'. However, 75 per cent of local government areas in regional NSW were categorised as affordable.³⁴

In Sydney, the Government is increasing the supply of housing to address affordability issues and create more opportunities for a wider range of housing choices. A number of Urban Activation Precincts have been identified, where new homes will be delivered in places with access to infrastructure, transport, services and jobs. Regional Growth Plans will play an important role in boosting housing supply and helping address housing affordability in NSW.

Social disadvantage and social inclusion

In economic terms, cities tend to be areas of greater advantage, with higher incomes and better access to services and diverse employment opportunities.

This is evident in the major cities of NSW, all of which have higher median personal, family and household incomes than regional areas.

The major cities also have higher proportions of people (around 55 per cent) who have completed Year 12 or equivalent, whereas regional NSW has between 28 per cent and 38 per cent. This is partly due to the fact that many young adults with higher levels of education migrate from regional NSW to larger cities. People in the state's major cities tend to have higher incomes and the capacity to draw on financial support when needed. The major cities have greater access to digital resources and contain a smaller proportion of the households without an internet connection (18 per cent) than those in regional NSW (as high as 37 per cent). Relative to major cities, regional areas also score poorly on socio-economic indexes, such as Socio-Economic Indexes for Areas (SEIFA). More than half of the areas with the highest levels of relative disadvantage in NSW are located outside major cities. Conversely, almost 90 per cent of the areas with the least relative disadvantage are located in major cities, in particular Sydney (see Figure 29).

In some cases, regional areas — in particular outer regional and remote areas — experience a shortage of community, social and health services. People in outer regional and remote areas often need to travel long distances to major cities for specialist health, education and community services. Regional areas show higher levels of social connectedness than major cities. Levels of trust and feelings of safety are higher. More people in communities outside major cities feel they can call on neighbours for help and provide unpaid assistance to others. In regional NSW, between 21 per cent and 26 per cent of people do volunteer work, whereas only around 15 per cent do the same in major cities (12 per cent in Sydney). Local communities in regional areas also tend to pull together in times of stress, such as natural disasters, but this can be strained in periods of prolonged hardship due to competition for services and a lack of specialist services.³⁵

Perception of crime tends to be higher in the state's major cities compared to regional areas, and people's feelings of safety and trust rank lower.³⁶



- 26. Based on the ABS ASGS classification of urban centres and localities-ABS Catalogue No. 1270.0.55.004.
- 27. Daley, J. and Lancy, A., 2011, Investing in regions: Making a difference, Grattan Institute, Melbourne. (page 3, 8–15) http://grattan.edu.au/static/files/assets/ b72b5706/086_report_regional_development.pdf
- 28. Housing Industry Association, HIA State Outlook (NSW), p.28
- 29. Housing Industry Association, HIA State Outlook (NSW), pp.28-30.
- 30. ABS, 2014, Building approvals, Australia, January 2014, Catalogue no. 8731.0.
- 31. AMP & NATSEM, 2011, The Great Australian Dream –Just a Dream? Housing affordability trends for Australia and our largest 25 cities, www.natsem.canberra. edu.au/publications/?publication=the-great-australian-dream-just-a-dream.
- 32. ABS 6416.0-House Price Indexes: Eight Capital Cities, Sep 2013, Table 7.
- 33. AMP & NATSEM, 2011, The Great Australian Dream Just a Dream? Housing affordability trends for Australia and our largest 25 cities, www.natsem.canberra. edu.au/publications/?publication=the-great-australian-dream-just-a-dream.
- Bankwest, 2011. Bankwest 3rd Key Worker Housing Affordability Report 2011, www. bankwest.com.au/media-centre/financial-indicator-series/ bankwest-3rd-key-worker-housing-affordability-report-2011-1292482379181#.
- 35. See, for example, the submission from the Local Government and Shires Association of NSW regarding the social impacts of drought.
- 36. ABS, 2012, General Social Survey: States and Territories, 2010, ABS Catalogue no: 4159.0.55.003

Planning for the future

Each community has its specific needs, housing markets and identity. Regional Growth Plans will play a role in understanding and addressing these needs and connecting people in their local communities, region and across the state. Regional Growth Plans will:

address regional housing supply issues to improve housing affordability, including addressing affordable housing for people on very low, low and moderate incomes. Housing affordability is important in regional areas where seasonal, 'sea change' and 'tree change' migration, and 'boom' activities can price local people out of the housing market if there is inadequate supply

- plan for diverse housing options that can cater for different needs over time, including appropriate affordable housing and rental accommodation for key workers in construction, health, policing and community services.
- investigate population ageing and address housing, community service and public domain design needs. The ageing of the population will occur differently throughout NSW. Older people will make up a very large proportion of the population in some regions, such as Tweed Heads, Clarence Valley and Maitland and those areas surrounding Canberra and the ACT. Regional Growth Plans will investigate ways to maintain the working age population so that communities have sufficient workers to fill jobs
- address community building in different ways across NSW. In the major cities, the challenge is to build social connections and access to opportunities, for example, through planning for social infrastructure and improved transport connections. Outside of the major cities, social connectedness is often high and the challenge can be to provide or maintain basic services
- investigate ways to attract and retain essential services, particularly in remote communities
- investigate ways that land-use planning can address disadvantage and create opportunities for Aboriginal people to become involved in the planning process, particularly in areas with greater economic and social disadvantage
- promote health and wellbeing by planning for healthy built environments and promoting safe environments.



PRIORITIES

The patterns of growth and change across NSW vary from region to region and within each region. Each Regional Growth Plan, while addressing the full range of planning challenges in a region, will need to respond to specific sets of circumstances and give greater emphasis to the most pressing issues.

However, it is clear that there are some common issues which will shape growth and change across many regions of NSW and will need addressed in Regional Growth Plans.

Priority issues

Plan for population change

Population growth and change is the starting point for strategic planning. Regional Growth Plans need to understand the opportunities and challenges associated with our growing and changing communities, especially when it comes to identifying locations where growth is occurring, and the demand for housing created by that growth. The ageing of the population is a pressing issue for strategic planning and will influence the nature of communities into the future and the infrastructure and services required.

Maximising economic growth

Strategic planning must balance social, economic and environmental issues. Economic growth and change will be a top priority issue for strategic planning. Regional Growth Plans have a role to play in securing economic opportunities, attracting investment and maximising the impacts of economic change. Regional Growth Plans will also identify locations for more jobs and economic activity, particularly in areas where businesses need to grow and in areas with high levels of unemployment.

Promote environmental assets

Each region has its own natural environmental assets and Regional Growth Plans will play an important role in setting priorities for the most valuable environmental assets and exploring opportunities to promote these assets. Regional Growth Plans will also ensure information on natural hazards is built into planning decisions, so that communities can be safe and resilient.

Building strong communities

Regional Growth Plans will also address social issues by prioritising measures to increase the supply of more affordable housing and create economic opportunities in remote and disadvantages areas. Regional Growth Plans will also highlight how the design and location of parks, community spaces and housing will consider the needs of older people and promote health, safety and wellbeing to build strong communities.

FIGURE 30



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LACE

UNIQUE LANEWAY PRECINCT, ASH STREET



Planning & Environment