Regional Development Australia Brisbane

Regional Roadmap

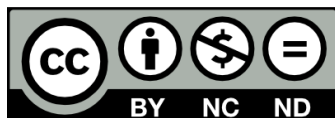## 2010 — 2011
Volume 2 | Appendices

Regional Development Australia
BRISBANE

An Australian Government Initiative | Queensland Government

RDA Brisbane Regional Roadmap 2010 – 2011
Volume 2 | Appendices
This document is the second of two volumes

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Appendix 1
Key Concepts

The Regional Roadmap draws on several foundational ideas and concepts that are extrapolated here. As the Regional Roadmap is a living document, it is acknowledged that many of these definitions are contested and that, for the purposes of currency, will need to be regularly assessed to test their validity in changing circumstances.

A1.1 Regional Development

The Department of Infrastructure, Transport, Regional Development and Local Government (DITRDLG) advises that regional growth strategies help guide decisions on growth, change and development in regions and form a foundation for economic and community development, enhancing regional competitiveness by supporting (employment- and wealth-generating) economic activities in regions.

Regional development is typically measured in terms of productivity, jobs and income but it also includes improvements in human development, education, health and environmental sustainability. The OECD (2009) proposes that regional development requires more effective use of public resources and significantly better policy outcomes. This involves measures to increase the competitiveness of all regions. With reference to OECD findings, DITRDLG proposes that integrated regional development plans and strategies incorporating the following policy initiatives are most likely to be successful. This means:

- Investing in infrastructure (in tandem with human capital and innovation initiatives; soft infrastructure)
- Investing in people and providing jobs (enhancing educational outcomes; skills development; tertiary education)
- Promoting innovative regions (supporting competitiveness of local firms, clustering and cooperation)
- Higher education institutions helping to foster regional innovation (responding to regional needs, collaboration and interaction)
- Focusing on internal assets rather than external investments and transfers.

The OECD also places a caveat on infrastructure investment, stating that:

> In an economic crisis, the temptation to invest heavily in hard infrastructure is strong. Indeed, investing in public infrastructure is a key policy response to economic recession. But evidence from OECD countries suggests that a more integrated approach will have a better impact on growth. Many countries are now reviewing their approaches to regional investment with the aim of giving higher priority to "soft" infrastructure, particularly by developing human capital and supporting innovation. This implies that regional policies could play an important role in shaping growth and economic recovery. (OECD, 2009)

The 2007–08 State of the Regions report (cited in Infrastructure Australia, 2010) utilises cross-sectional data across defined regions compiled over a decade to demonstrate the following propositions about economic development:

- High-income economies, apart from those with a unique and extensive natural resource base, now depend on sustained innovation as the core driver of long term economic growth.
- The capacity to innovate depends on knowledge and networks at a regional level.
- There is a good correlation between the economic success of a region measured by non-mining gross regional product per person employed and patent activity, and similarly between high-tech business start-ups and patents per capita.
- Regions with high productivity have high household incomes and low unemployment rates.
- Low productivity regions are rapidly ageing in population, while high productivity regions are ageing relatively slowly.
- Successful knowledge-based regions have a high concentration of highly skilled knowledge workers, who tend to migrate to regions with scale and diversity of social and community infrastructure and cultural and lifestyle choices.
- Regional centres that have contributed strongly to the improved economic performance of a rural regional group have had high employment growth relative to population growth.

A1.2 Sustainable Regional Development

Drawing on the concept of sustainable development (provided by the Brundtland Commission), sustainable regional development refers to a pattern of resource use and access to resources that aims to meet human needs in the present without compromising the ability to meet the needs of future generations. with the Brundtland Commission Report emphasised the interlinkages between economic development, environmental degradation, and population pressure and this has been generally interpreted to mean that sustainable development addresses *integrated* economic, equity and ecological objectives and is strongly associated with 'the triple bottom line' (see A1.3).

The figure below illustrates a generally accepted image of sustainability, which is situated at the confluence of society (equity), environment and economy.
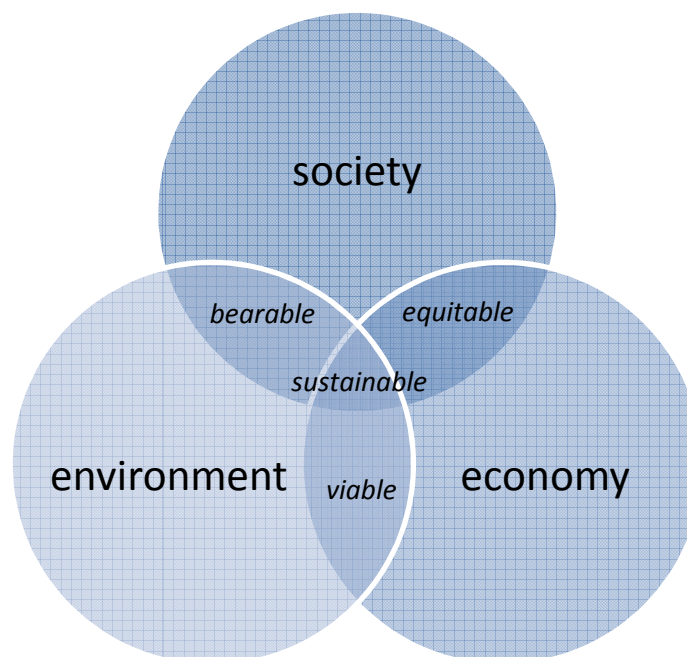
Consequently, sustainable regional development involves making decisions that consider the long term future of the economy, ecology and equity of all communities. This means making integrative decisions about prosperity and growth in relation to the impacts of those decisions on social, economic and environmental performance. For example, Serres, Murtin and Nicoletti (2010) propose a model of 'green growth' and identify that governments globally addressed the global financial crisis through an adaptive strategy of 'greening the recovery' involving initiatives that also addressed developing human capital and social capital. The *OECD's Interim Report of the Green Growth Strategy: Implementing our commitment for a sustainable future* proposes that

> green growth is gaining support as a way to pursue economic growth and development, while preventing environmental degradation, biodiversity loss and unsustainable natural resource use. It builds on existing sustainable development initiatives in many countries and aims at identifying cleaner sources of growth, including seizing the opportunities to develop new green industries, jobs and technologies, while also managing the structural changes associated with the transition to a greener economy. Managing the employment and other distribution effects of change in more traditional sectors will also need to go hand in hand with exploiting new opportunities. New indicators and data will be needed to measure progress towards green growth, including to reflect environmental quality, natural resource scarcity and quality-of-life beyond material wellbeing. (OECD, 2010)

While there is a general consensus among policy makers about the Brundtland definition, the concept of sustainability is continuing to emerge and being contested. For example, Brown (2003) proposes that there is growing acknowledgement that sustainability involves combined social and environmental change; not a revolution, but not business as usual. It is essentially integrative, considering lives, livelihoods and landscapes as one interactive system and involving intersectoral collaboration and consultation.

A1.3 Triple Bottom Line

A triple bottom line framework, as an integrative model, can support an approach to regional development that is grounded in sustainability. Triple Bottom Line refers to a method of performance assessment, accounting and decision making with regard for sustainability across social, economic and environmental impacts and implications. One example of this is the Global Reporting Initiative which is being adopted by companies globally to measure triple bottom line performance.

According to Sugget and Goodsire (2002) in adopting a triple bottom line approach, organisations are ordinarily:

- accepting accountability and being transparent - probably the most powerful ideas embodied in the triple bottom line and fundamental to good governance
- integrated planning and operations where a company's contributions to economic prosperity, environmental quality and social well-being are reflected in strategic planning and management systems
- a commitment to stakeholder engagement
- multi-dimensional measurement and reporting.

The triple bottom line, as a performance measurement tool, provides an organisation with a means for developing a picture of what sustainability looks like for its operations, products and services as well as considering the impacts of its decisions and operations.

A1.4 City-Regions

Regional development for Brisbane presents significant complexity due to its multimodality (see A1.5). City-regions generally refer to areas that extend beyond local government areas as "enlarged territories from which core urban areas draw people for work and services". The OECD Report on *Competitive Cities in the Global Economy* found that most metro-regions in the OECD have a higher per capita GDP, higher productivity and faster growth rates than their national average. (OECD, 2006)

Through research into city-regions in the UK, Robson, Barr, Lymperopoulou, Rees and Coombes (2006) observe that "serious interest in city regions has grown as the 'reach' of core cities has expanded, making their formal boundaries increasingly outdated, and because of the recognition that the functional nature of city regions makes them increasingly appropriate for a range of strategic issues." They further propose that:

> City-Regions are essentially functional definitions of the economic but also of the social 'reach' of cities. The aim in defining them is therefore to identify the boundaries of those areas in which a majority of the population see the core city as 'their' place – in which they may work, shop for certain types of goods, visit for entertainment and leisure pursuits, and with which they identify. As with any such geometry, there is bound to be fuzziness and overlap at the boundaries of many City-Regions; and the degree of self-containment is likely to vary for different kinds of activity – whether for commuting to work, shopping, leisure, or whatever.

Brisbane is a city enmeshed in the conurbation of South East Queensland and plays a vital role in this region. Definitions of city-regions can be extrapolated from labour market, housing market, economic activity, service district and administrative boundaries. For example, it is known that Brisbane's labour market is drawn from a wider geographic area than the Local Government Area. Planning is also undertaken at a South East Queensland regional level in which Brisbane plays a central economic, social and cultural role.

A1.5 Multimodality

RDA Brisbane's region maps across the Local Government Area of Brisbane, which is one of Australia's major cities. As the capital city of Queensland, Brisbane serves a range of roles relevant to state function, capital city function and supporting its residential communities. The city centre, in particular, fulfils a range of functions associated with the provision of infrastructure, social and cultural life, education and economic activity. Brisbane is a major employment centre for those resident in the surrounding Local Government Area and adjoining jurisdictions.

The State Government and Brisbane City Council are directing efforts to position Brisbane as Australia's new world city. Research by the Globalization and World Cities (GaWC) Research Network indicates that Brisbane is showing signs of world city activity (Beaverstock, Smith, & Taylor). Generally, this means Brisbane is gaining traction as a strategic site for the operation of the world economy and its transnational labour market.

The multimodality of the city can be understood in a way that responds to a sequential or hierarchical series of needs and expectations. These are summarised as follows:

Neighbourhoods	Local amenity centres meeting a range of economic, community, social and cultural needs of local residents.
Districts	Brisbane's planning also reveals a hierarchy of activity centres or nodes within the urban footprint that situates more intense economic, political and social activity at a district or sub-regional level. This includes district level social infrastructure.
State Capital	As the State Capital, Brisbane plays a social, cultural, political and ceremonial role. The State's capital is also symbolic. It is the locus of organisations, institutions and activities that support the whole state. This includes peak bodies, head offices and key sites for trade and recreation.
World City	A world city is understood to be an important node in the global economic system. Brisbane is emerging as a world city in global rankings and indexes (see Appendix 7). World cities provide 'world class' community, social and cultural amenities that are actively managed. This includes facilities and opportunities that attract international talent to employment as well as political and economic facilities of global significance or standards.

A1.6 Social Inclusion

All levels of government have undertaken significant policy work in the area of 'social inclusion' and the Federal Government has championed a social inclusion agenda. The Australian Federal Government has offered a vision of a socially inclusive society as one in which all Australians feel valued and have the opportunity to participate fully in social life. Achieving this vision means that all Australians will have the resources, opportunities and capability to:

- *Learn* by *participating* in education and training
- *Work* by *participating* in employment, in voluntary work and in family and caring
- *Engage* by *connecting* with people and using their local community's resources
- *Have a voice* so that they can *influence* decisions that affect them.

Social inclusion means people must be given the opportunity to:

- Secure a job
- Access services
- Connect with family, friends, work, personal interests and local community
- Deal with personal crisis
- Have their voice heard.

The Federal Government's Social Inclusion Agenda is summarised in Appendix 4.

A1.7 Innovation

Innovation is defined by the Business Dictionary as involving:

deliberate application of information, imagination, and initiative in deriving greater or different value from resources, and encompasses all processes by which new ideas are generated and converted into useful products. In business, innovation results often from the application of a scientific or technical idea in decreasing the gap between the needs or expectations of the customers and the performance of a firm's products. In a social context, innovation is equally important in devising new collaborative methods such as alliance creation, joint venturing,

flexible working hours, and in creating buyers' purchasing power through methods such as hire purchase.

Innovations are divided into two broad categories:

1. *Evolutionary innovations* are brought about by numerous incremental advances in technology or processes and are of two types:
    a. Continuous evolutionary innovations result in an alteration in product characteristics instead of in a new product, and do not require any user learning or changes in his or her routine, examples are multi-blade shaving razor, fluoride toothpaste, and laptop computer
    b. Dynamic continuous evolutionary innovations require some user learning but do not disrupt his or her routine, examples are fax machines, instant photography, and handheld computers.
2. *Revolutionary innovations* (called also discontinuous innovations) require a good deal of user learning, often disrupt his or her routine, and may even require new behaviour patterns. Examples are photocopier (xerography) machines, personal computers, and internet. Innovation is synonymous with risk-taking and firms which introduce revolutionary products or technologies take on the greatest risk because they have to create new markets.

The Federal Government stresses the need for innovation as a 'way of life', stating that "innovation is the key to making Australia more productive and more competitive. It is the key to answering the challenge of climate change, the challenge of national security, the age-old challenges of disease and want. It is the key to creating a future that is better than the past." (Australian Government, 2006, p. 1) To be competitive in the global innovation economy, regions must be the wellsprings of ideas that drive innovation in the marketplace.

The Federal Government's Innovation Priorities (Australian Government, 2006, p. 4), as articulated in the Innovation Agenda are:

> *Priority 1:* Public research funding supports high quality research that addresses national challenges and opens up new opportunities.
> *Priority 2:* Australia has a strong base of skilled researchers to support the national research effort in both the public and private sectors.
> *Priority 3:* The innovation system fosters industries of the future, securing value from the commercialisation of Australian research and development.
> *Priority 4:* More effective dissemination of new technologies, processes, and ideas increases innovation across the economy, with a particular focus on small and medium-sized enterprises.
> *Priority 5:* The innovation system encourages a culture of collaboration within the research sector and between researchers and industry.
> *Priority 6:* Australian researchers and businesses are involved in more international collaborations on research and development.
> *Priority 7:* The public and community sectors work with others in the innovation system to improve policy development and service delivery.

A Collaborative Economics report for The Bay Area Council Economic Institute (USA) observes that "an innovative economy is at the core of regional vitality and quality of life. Without an innovative economy, any gains in social inclusion, livable community, and collaborative governance are short-lived. An innovative economy is the engine that produces economic opportunity and community

revenues that make possible career mobility, investment in educational systems, development of community infrastructure and amenities, investments in environmental preservation, and other critical assets for regional vitality and quality of life." (2008, p. 9) The report also cites the Pew Center which identified the following major ingredients for innovation:

- *Expertise*—New discoveries, new knowledge, and new insights come from all people who are given the resources necessary for success.
- *Interaction*—Face-to-face is still very important for the exchange of ideas and synergy that creates new business models, marketing plans, or products.
- *Diversity*—Ideas will only get better when they are openly discussed and considered by a mix of people with a variety of research fields, backgrounds, approaches, and mindsets.
- *Application*—Ideas are useless unless used. The true proof of their value is in commercialization. (Collaborative Economics, 2008, p. 11)

Regional innovation, according to the report, is the product of economic, social, environmental, and other place-based factors. It requires innovative companies, but also talent with education, skills, and creativity, and liveable communities that provide a quality environment, one that is attractive and supportive for people and commerce. It also requires effective regional governance -the ability of public and private entities to work together across boundaries to strengthen economic, social, and environmental assets that are the key to regional vitality and quality of life.

A1.8 Megatrends

Local and regional issues cannot be separated from national and global issues. Ecological, social and economic systems are inherently connected. The CSIRO released a report identifying five interrelated megatrends, which were identified through a global foresight project, arguing that these may redefine how people live in the future (Hajkowicz & Moody, 2010). In summary, the five megatrends are:

1. *More from less*. This relates to the world's depleting natural resources and increasing demand for those resources through economic and population growth. Coming decades will see a focus on resource use efficiency.
2. *A personal touch*. Growth of services sector of western economies is being followed by a second wave of innovation aimed at tailoring and targeting services.
3. *Divergent demographics*. The populations of OECD countries are ageing and experiencing lifestyle and diet related health problems. At the same time there are high fertility rates and problems of not enough food for millions in poor countries.
4. *On the move*. People are changing jobs and careers more often, moving house more often, community further to work and travelling around the world more often.
5. *iWorld*. Everything in the natural world will have a digital counterpart. Computing power and memory storage are improving rapidly. Many more devices are getting connected to the internet.

Supporting trends were also identified in this report and these include:

- *Ageing population* with 27 per cent of the Australian population forecast to be over 65 years by 2051
- *Obesity and overweight* with projections estimating that the number of obese Australians will increase to 73 per cent

- *Food security threats* to poorer countries with world food demand forecast to be 75 per cent greater than current demand.[1]
- *Increases in the costs of plant nutrients for food production*. Australia is vulnerable to this as most soils are naturally low in phosphorous. Nitrogen fertiliser production is energy intensive.
- Increasing rates of healthcare expenditure and increased demand on *diversified health services*. Expenditure on health care is assuming a rising share of GDP.
- Shift to *non-communicable diseases and accidents as the leading cause of death*. This refers to traffic accidents, smoking and lifestyle induce disease and death.
- A *new middle class* emerging in rapidly growing economies such as India and China resulting in increasing and this is leading growing purchasing power and consumption in these countries. This will not just relate to consumer goods but also to food, particularly protein.
- *Increasing rates of health literacy* meaning the ability to access and use health related information related to food and pharmaceutical products.

The report also identifies eight megashocks which have been distilled from work undertaken by the World Economic Forum. The following eight megashocks have particularly relevance for Australia:

1. *Asset price collapse*. The rise in Australian household debt over the past 30 years coupled with Australian superannuation assets (as the second largest asset) means Australian lifestyles and the economy are sensitive to national and global asset prices.
2. *Slowing Chinese economy*. China is Australia's largest trading partner and any major changes to the Chinese economy will impact on most sectors of the Australian economy
3. *Oil and gas price spikes*. The oil price determines a vast number of production and consumption decisions in the world economy. Movements in oil price are closely correlated with other goods and services, notable world food prices
4. *Extreme climate change* related weather including droughts, cyclones and flooding. Australian has also experienced severe bush fires. Australia experiences particular vulnerabilities as a dry continent with settlement concentrated in coastal areas.
5. *Pandemic*. This would result in significant loss of life and impact on industries, such as tourism. A severe scenario costs 142.2 million lives and US$4.4 trillion of global GDP.
6. *Biodiversity loss*. There has been a rapid loss of biodiversity in Australia since European settlement and many species and habitats are at risk.
7. *Terrorism*. In the current geo-political climate terrorism remains a risk. The national loss of income by 2003 following 9/11 is estimated at 5 per cent of GDP.
8. *Nanotechnology risks*. While nanotechnology offers many breakthrough innovations in the realm of health and manufacturing, there remains uncertainty about the long term impact of nanomaterials in terms of human and environmental health.

While these megatrends, trends and megashocks are global in scale, they have been assessed as having particular and potential resonance for Australia by the CSIRO. Such considerations inform the development of local and regional strategies in this document so as to develop strategies that imbue resilience and robustness.

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[1] It is also worth noting that poorer regions in rich countries may experience problems with food security and access to nutritious food. In parts of the USA and Canada, for example, food deserts are common in low income areas in urban and non-urban contexts. Nutrition in remote Australian communities has been referred to as a food security issue.

Appendix 2
Overview of the Region

A2.1 Geography

RDA Brisbane's region is comprised of the entire Brisbane Local Government Area (LGA) which is governed by Brisbane City Council. The 189 suburbs of the municipality of Brisbane are divided into 26 wards.

As the capital of Queensland, Brisbane is the commercial and administration centre of the South East Queensland region and the focus of major regional, national and international transport routes. According to the Australian Bureau of Statistics (ABS), the LGA covers a land area of 1326.8 square kilometres[2] around the Brisbane River on the coastal plain between the Great Dividing Range to Moreton Bay and includes Moreton Island.
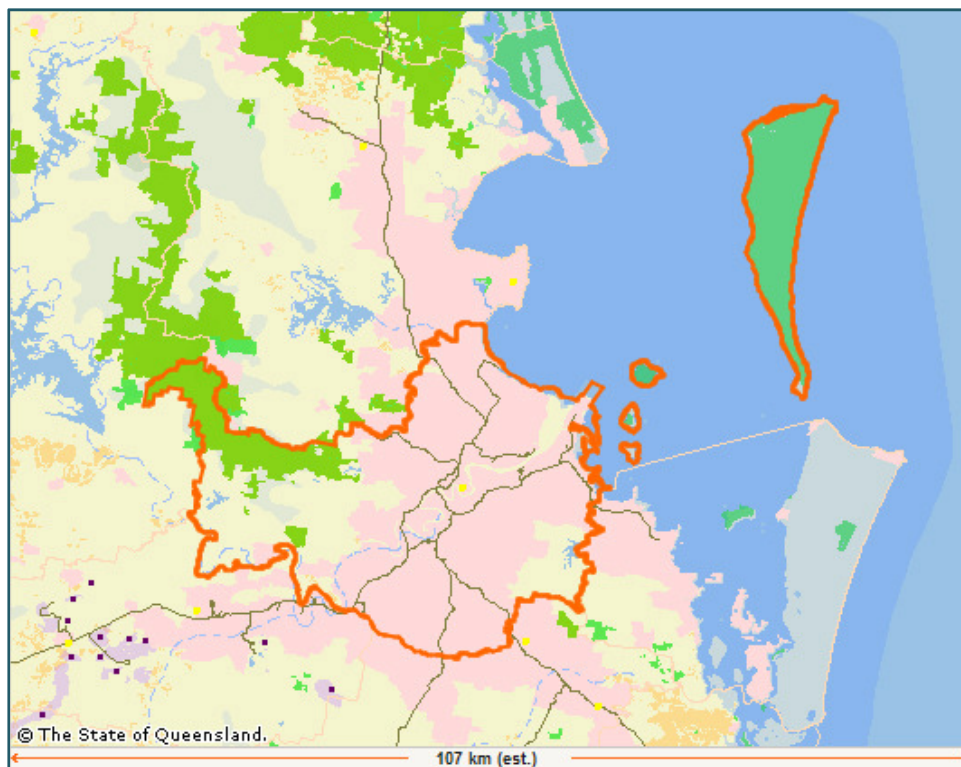
Brisbane Local Government Area. Source: Information Queensland

The *Draft Brisbane CityShape 2026* describes Brisbane as follows:

> The Central Business District (CBD) lies just 27 kilometres from the mouth of Brisbane River where it meets Moreton Bay. Hugging the curves of a snaking river that has contributed so much to its development and character, Brisbane enjoys warm, sunny weather that rivals world-class holiday destinations. Statistically, Brisbane has more sunny days than Florida and warmer winter days than the Bahamas.

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[2] This is a slightly smaller area than reported in Brisbane City Council planning studies.

Brisbane also has the highest level of biodiversity of any Australian capital city, supporting large numbers of ecosystems and plant and animal species. The residents of Brisbane place great value on the natural environment. For many, its preservation is seen as the way to protect Brisbane's character and livability. (Brisbane City Council, 2006)

Aerial view of Brisbane. *Author: Greg O'Beirne*[3]

Moreton Island is a major natural asset within the regional boundary of the RDA. Moreton Island lies 58 kilometres north-east of Brisbane and is one of several large sand islands in Moreton Bay. The island is 95 per cent National Park with four small settlements (including a resort) on the western side of the island.

The topography of Brisbane undulates with significant rises such as Mt Coot-tha and Enoggera Hill, which are spurs of the Herbert Taylor Range. Other prominent rises are Mount Gravatt, Toohey Mountain and Mount Petrie. The lower rises of Highgate Hill, Mount Ommaney, Stephens Mountain and Whites Hill are also features of the city.

A2.2 South East Queensland

Brisbane is the major node in South East Queensland and much planning undertaken by the State Government addresses the South East regional context. South East Queensland is currently home to almost three million people. Comprising 11 local government areas and around 23,000 square kilometres, the region stretches 240 kilometres from Noosa in the north to Coolangatta in the south,

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[3] Made available through Wikipedia under a GFDL licence

and 140 kilometres west out to Toowoomba. Brisbane is bordered by the LGAs of Moreton Bay, Somerset, Ipswich, Logan and Redland; the South East Region also includes Sunshine Coast, Gold Coast, Scenic Rim and Lockyer Valley. RDAs have been formed for the following regions: Sunshine Coast, Moreton Bay, Brisbane, Logan and Redlands, and Ipswich and West Moreton.

The *South East Queensland Regional Plan 2009-2031* is the statutory planning instrument for the entire region. It promotes a vision for SEQ as

> a region of interconnected communities, with excellent accessibility and an extensive and efficient public transport system that contributes to reducing greenhouse gas emissions. At its heart is Brisbane, state capital and subtropical world city. Surrounding the capital are several large urban areas separated by open space, and many small- to medium-sized towns and villages, each with its own character and identity. It is a region characterised by choice and diversity, with mountain ranges and hinterlands, Moreton Bay and islands, extensive beaches, wetlands, parks, bush and farmlands supporting a rich biodiversity.

> SEQ is well managed with a sustainable quality of life based on a unique landscape, quality built form and diverse cultures, acknowledgement and respect of the significance of Aboriginal heritage prior to and since European occupation. It has a progressive and well-informed community and enjoys international recognition for leadership in fostering sustainable regional equality and prosperity.

The regional vision for SEQ is a future that is sustainable, affordable, prosperous, liveable and resilient to climate change, where:

- communities are safe, healthy, accessible and inclusive
- there are diverse employment opportunities and quality infrastructure and services, including education and health
- urban and rural areas are mutually supportive and collaborative in creating wealth for the community
- development is sustainable and well designed, and where the subtropical character of the region is recognised and reinforced
- ecological and culturally significant landscapes are valued, celebrated, protected and enhanced
- the community has access to a range of quality, open space, recreational opportunities.
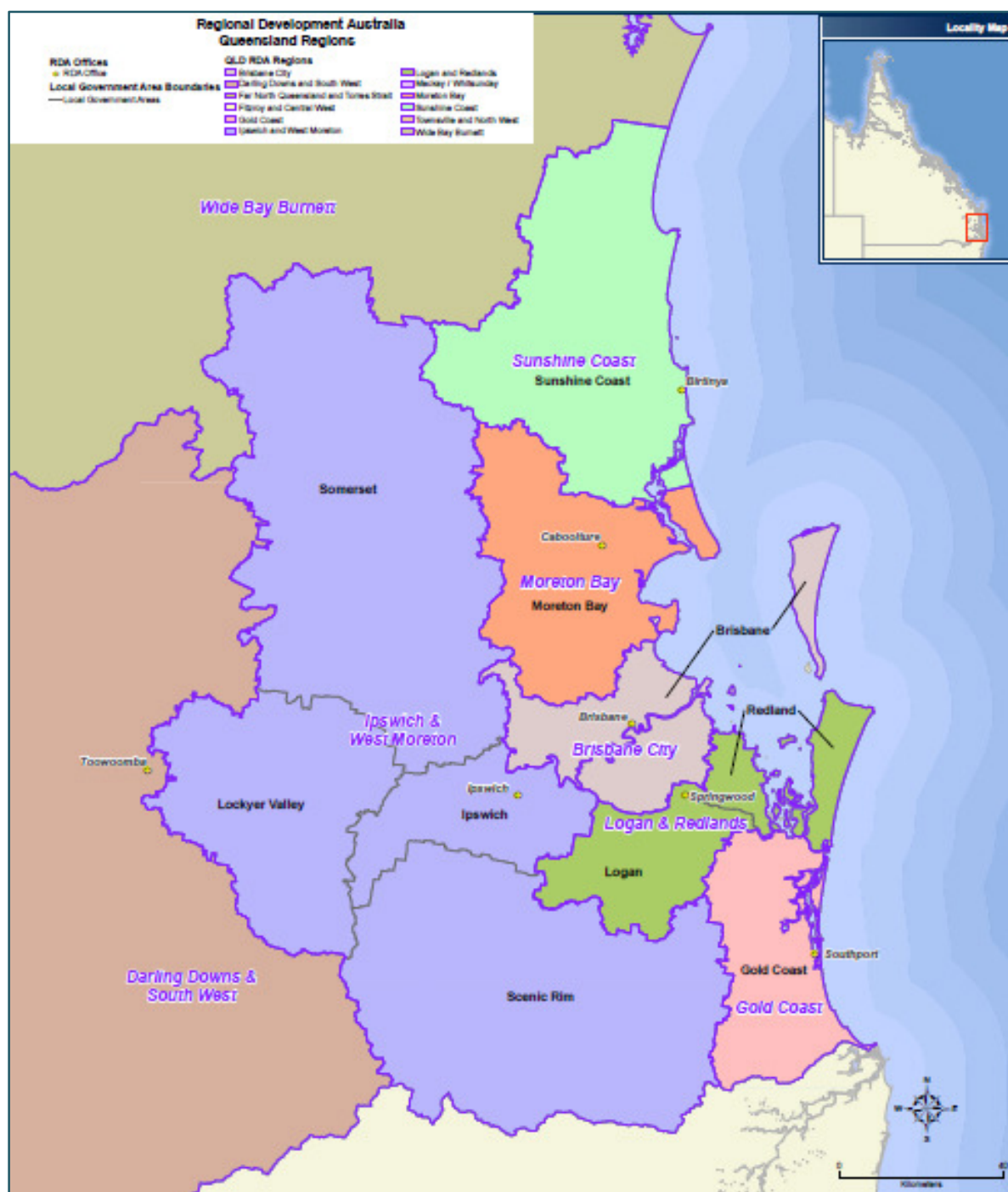
Map of Regional Development Australia catchments in South East Queensland.

The regional context is significant because Brisbane is proximate to LGAs that are among the top ten LGAs experiencing or projected to experience the fastest levels of population growth – Ipswich, Sunshine Coast, Gold Coast and Moreton Bay.

A2.3 Climate & Environmental Management

Brisbane enjoys a sub-tropical climate which generally means comfortable living conditions characterised by hot rainy summers and mild, dry winters. However, there can be extremes of heat and humidity in summer and severe storms.

The Australian Conservation Foundation has developed a Sustainable Cities Index in which Brisbane ranked 3rd of Australian cities in 2010 (behind Darwin and the Sunshine Coast). The results are listed below indicating a range of environmental strengths and weaknesses in environmental performance:

Criteria	Score
Air Quality	8/20
Ecological Footprint	17/20
Green Building	2/20
Water	4/20
Biodiversity	4/20
Climate Change Resilience	13/20

Note: The cities were ranked in order of comparative performance from 1 (most sustainable) to 20 (least sustainable) across each indicator, with the total score determining the most and least sustainable cities for 2010.

This indicates that Brisbane has environmental issues to address particularly in relation to air quality, climate change resilience and ecological footprint (with the average impact from consumption being 6.87 hectares/person/year). Greenhouse gas emissions are a problem for cities, which produce significantly higher carbon pollution than other types of settlements. The Draft SEQ Climate Change Management Plan identifies the sources of SEQ's greenhouse gas emissions as follows:
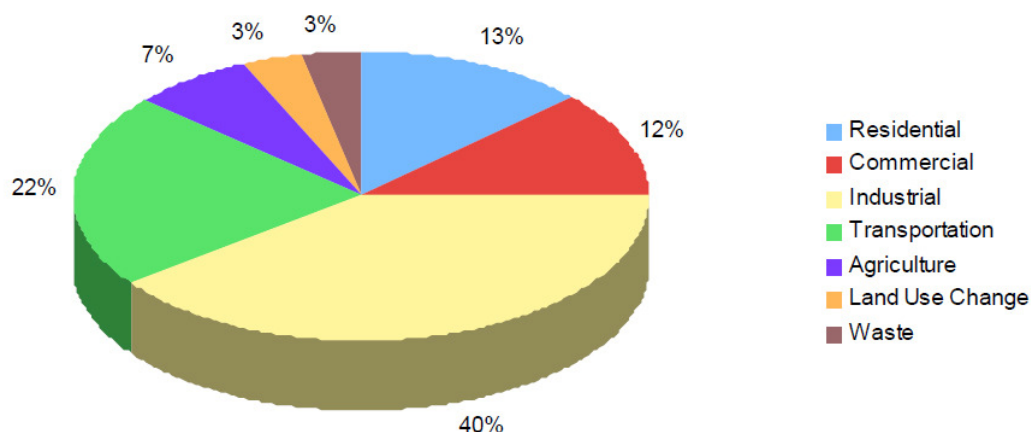
Greenhouse gas emissions in SEQ by sector. *Source: Draft SEQ Climate Change Management Plan*
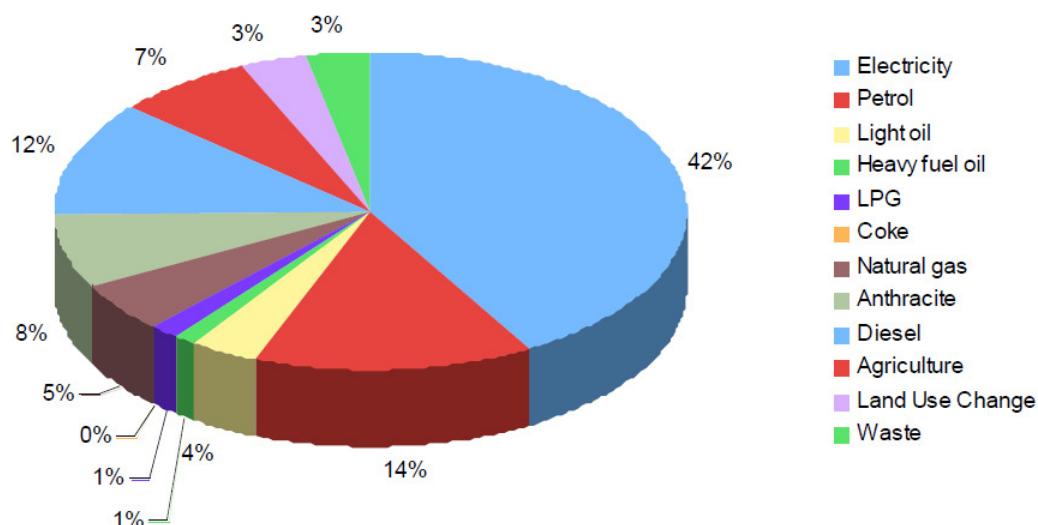
Greenhouse gas emissions in SEQ by source. *Source: Draft SEQ Climate Change Management Plan*

These graphs indicate that the highest regional greenhouse gas emissions come from industry (40 per cent) followed by transport (22 per cent) and as a result of electricity generation (42 per cent) and the use of petroleum based products (petrol, diesel and heavy fuel combined is 29 per cent) which are the greatest source of regional emissions. Population and economic growth is also resulting in increases in energy demand which will be exacerbated by changes in temperature. All levels of government promote greenhouse/carbon pollution reduction targets, as follows:

Federal Government	▪ 60 per cent of 2000 levels by 2050. ▪ An unconditional 5 per cent reduction in carbon pollution below 2000 levels by 2020, which represents a cut of around 27 per cent on a per capita basis ▪ Other commitments are conditional on the development of a global carbon agreement
State Government	▪ Cut by one-third Queenslanders' carbon footprint with reduced car and electricity use by 2020
Brisbane City Council	▪ Reduce greenhouse gas emissions by 50 per cent by 2026

There are significant waterway networks and bush corridors throughout the city as well as National Parks/State Forest (e.g. D'Aguilar National Park) and Marine Parks (e.g. Moreton Bay Marine Park). As ecosystem remnants these areas continue to support biodiversity. However, The Ecosystem Health Monitoring Program (EHMP), which produces an annual Ecosystem Health Report Card, has found that waterways in South East Queensland

> received ... the highest rainfall in the last decade. While the freshwater streams showed improvements in biological indicators (macroinvertebrates and fish), reflecting the positive influence of more flows, there were declines in nutrient processing due to the high nutrient and sediment loads (diffuse source pollution) entering the waterways. The receiving waters of the estuaries and Moreton Bay took the impact of this diffuse source pollution and showed significant declines in ecosystem health with the overall health of Moreton Bay declining from B- (in 2008) to D (in 2009).

The Report also concludes that there is a need to further understand the resilience of the waterways and Moreton Bay in the face of extreme weather events and climate variability. Such weather events can result in severe losses for communities, ecosystems and economies. Changes in weather can have specific impacts on human and animal health, agriculture, biodiversity and liveability.

Areas of natural significance in Brisbane include Boondall Wetlands, Anstead Bushland Reserve, Tinchi Tamba Wetlands, Fort Lytton National Park, St Helena Island, Moreton Island National Park and Recreation Area and Moreton Bay Marine Park.

Climate change is having an impact on Brisbane's weather and the State Government has prepared a *Draft South East Queensland Climate Change Management Plan* which emphasises mitigation and adaptation. The region has an average daily temperature range of 14.9^{o}C to 25.0^{o}C and on average Brisbane LGA receives approximately 1,123 mm of rainfall each year. The Bureau of Meteorology and CSIRO (2010) report that the mean temperature in Australia has increased by about 0.7°C.[4] While the long term trend is temperature increase, there is substantial year to year variability of approximately plus/minus 0.5 °C. The following map indicates the changes in mean temperature

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[4] On 11 May 2010 the Minister for Environment Protection, Heritage and the Arts announced an initiative to address the environmental information needs of the nation. The *National Plan for Environmental Information* is the first step on a long term commitment to reform Australia's environmental information base. http://www.bom.gov.au/inside/eiab/NPEI.shtml

over approximately three decades and shows an average increase of 0.1-0.15°C in and around Brisbane.
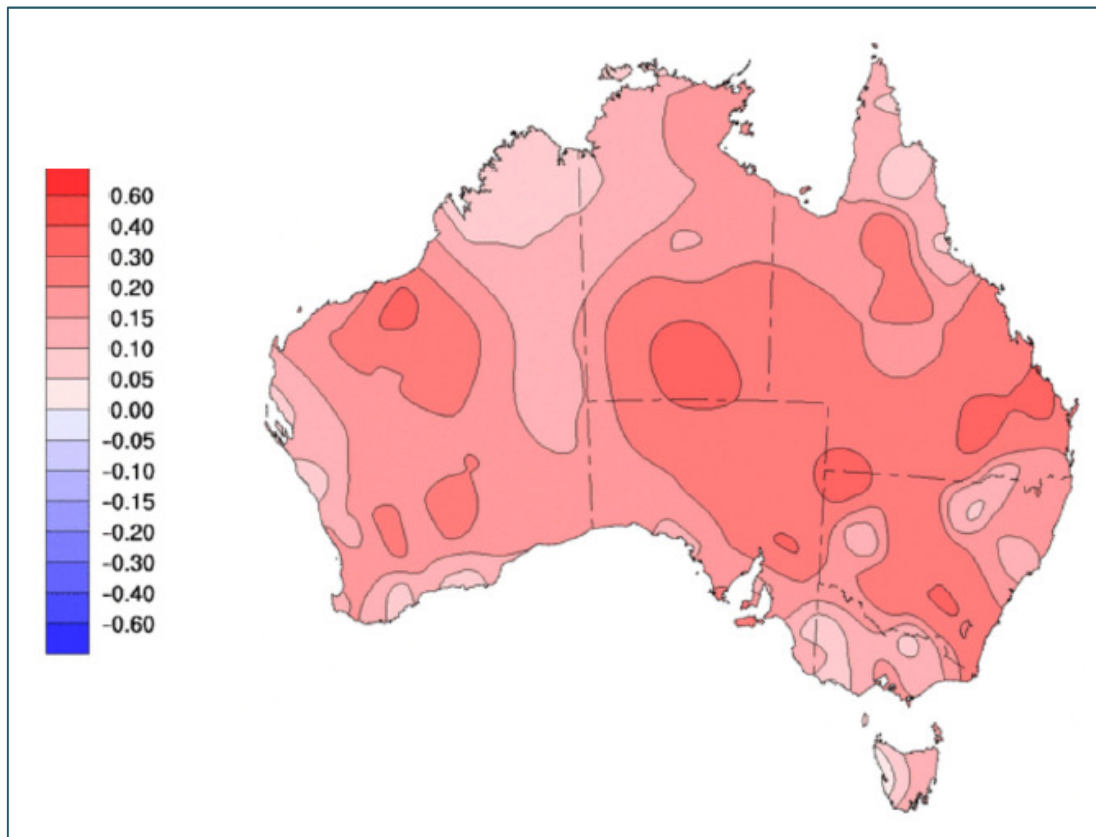
Trend in mean temperature, 1960 to 2009 (°C). Source: Bureau of Meteorology/CSIRO

As a major city, there are also potential issues with thermal mass in more concentrated areas of the city, often referred to as 'heat islands'. This refers to the phenomenon of areas of the city, often inner urban and industrial areas, having consistently higher temperatures than surrounding areas due to greater thermal mass (see image below). The Landsat-7 satellite thermal map below shows that the warmest areas in Brisbane in 1999 (shown in red) were the airport, industrial and dense commercial areas (e.g. South Brisbane and Fortitude Valley). Loh and Stav (2008) found that these areas are over 2°C warmer than the average temperature and that the CBD is 1-2°C warmer while the Brisbane river area and the botanical gardens are up to 3°C cooler than the average. Consistently higher temperatures in a city like Brisbane that can experience heat extremes can have impacts on human and animal health and biodiversity as well as energy demand.
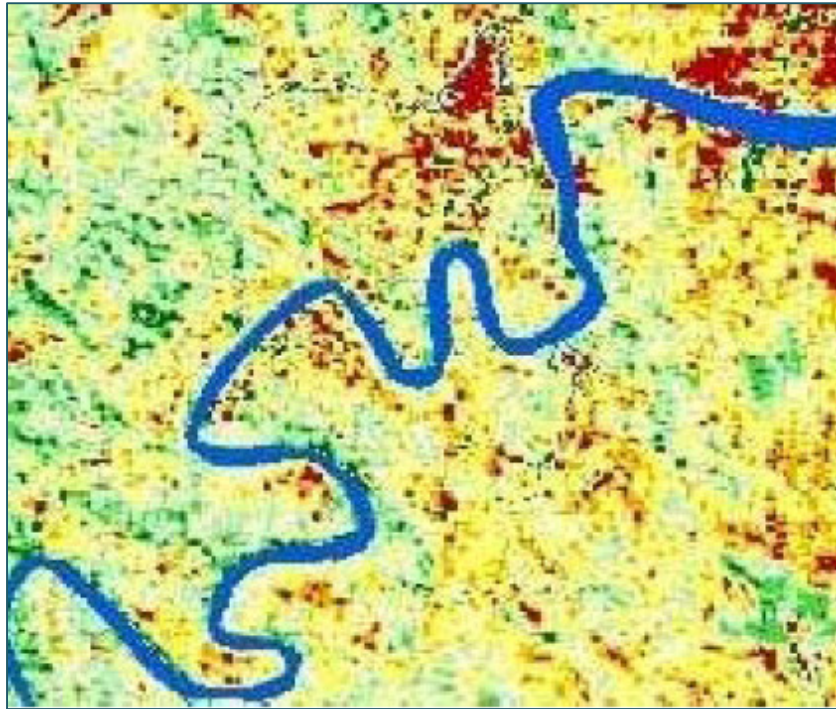
Landsat Urban Heat Imaging of Brisbane, 1999. Source: Loh & Stav, 2008

Rainfall has also changed nationally over the same period with some areas of the country having experienced the driest weather on record. The Bureau of Meteorology and CSIRO found that while total rainfall on the Australian continent has been relatively stable, the geographic distribution of rainfall has changed significantly over the past 50 years. Rainfall decreased in Brisbane and the surrounding South East Queensland, during the same period and the map following illustrates the changes in average annual rainfall. Brisbane is shown as having experienced an average reduction in rainfall of 50mm per decade over approximately three decades.
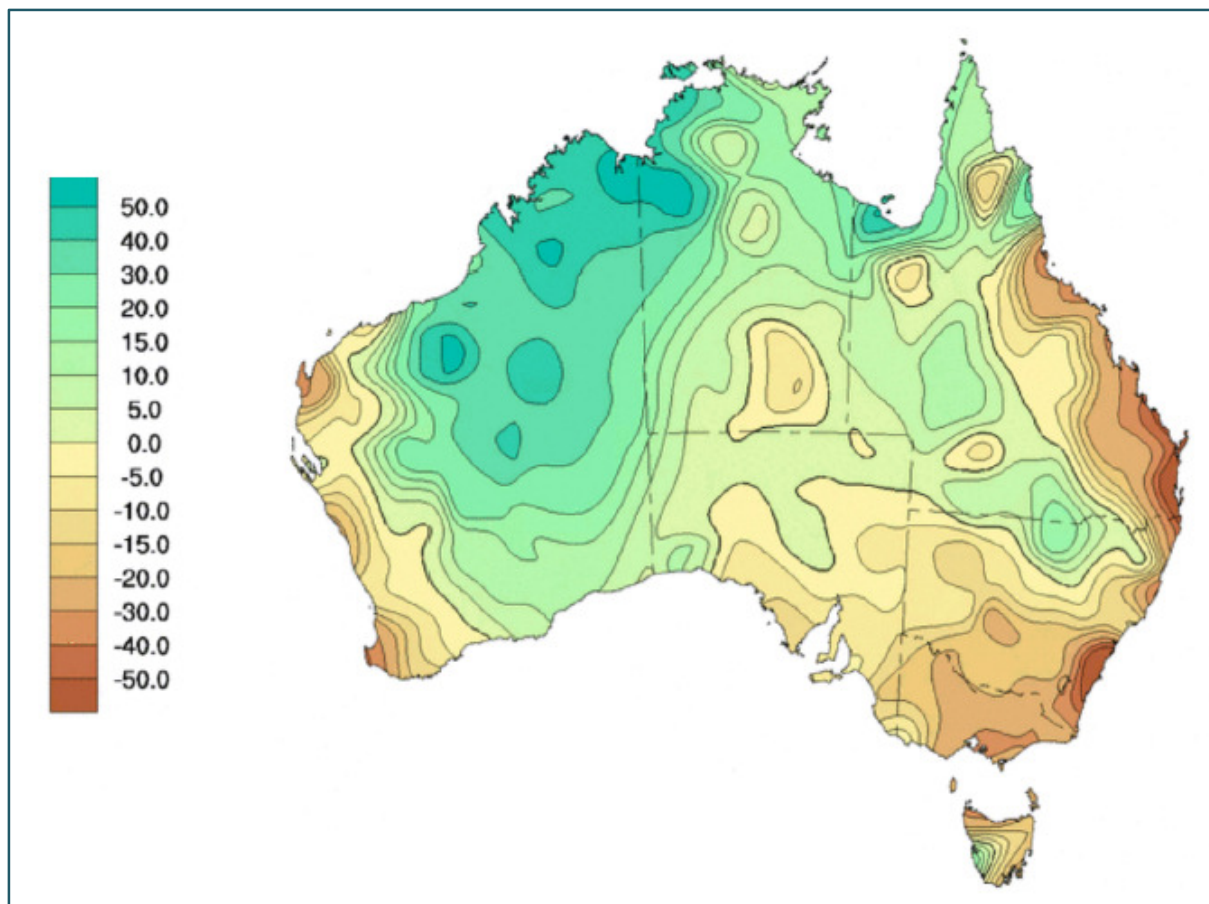
Trend in annual rainfall 1960-2009 (mm per decade). Source: Bureau of Meteorology/CSIRO

The *Draft SEQ Climate Change Management Plan* states that climate projections for South East Queensland are likely to occur over the next 100 years:

- increased inundation as a result of more intense weather systems, associated storm surges and higher mean sea level
- reduced water availability for cities, industries, agriculture and natural ecosystems
- an expected increase in high temperatures and the number of days over 35 °C, potentially affecting human health and peak energy demand. (Department of Planning and Infrastructure, July 2009, p. 9)

Drawing on findings from the Fourth Assessment Report of the Intergovernmental Panel on Climate Change released in 2007, the *Draft SEQ Climate Change Management Plan* also states that SEQ has been identified as one of six 'hot spots' in Australia. This is due to "potentially significant losses to the built environment as a result of rising sea levels, storm surges and flooding. This finding has implications for land use planning decisions and design criteria relating to buildings, transport, telecommunications, energy and water" including overall sea level rises (Department of Planning and Infrastructure, July 2009, p. 9).

Some areas of Brisbane are susceptible to flooding and the city's flood profile has changed due to variable weather patterns. Over the past 100 years Brisbane has experienced more than 25 flood events. For many areas in Australia, including Brisbane, a 50cm sea-level rise would result in the present one-in-a-hundred-year event becoming an annual or more frequent event by the end of the 21st century (Infrastructure Australia, 2010).

A2.4 Urban Structure

The urban footprint of Brisbane City covers approximately 635km^2 of the LGA. The map below shows the urban footprint in pink for the greater Brisbane region.

Most major transport routes between outlying suburbs and the CBD converge in the city. However, as the map below reveals, the pattern of the major transport routes falls predominantly in a radial north-south formation and this has implications for economic geography, land use and spatial planning of the LGA including the patterns of urban renewal, employment, population density, social diversity and disadvantage.

While not formally adopted as policy, the *Draft Brisbane CityShape 2026* proposes a pattern for growth based on multiple activity centres with growth planned along major corridors. This is based on a hierarchy of activity centres which will result in a Primary Activity Centre (CBD) and several Principal and Major Activity Centres established or reinforced including Chermside, Indooroopilly, Mt Gravatt, Toombul, Brookfield and Carindale as well as a reinforcement of major corridors. Even though *CityShape* is not Council policy, it was developed through extensive consultation including Neighbourhood Planning and is strongly aligned to the South East Queensland Regional Plan 2009 – 2031, which affirms the Major Activity Centres. Brisbane's City Plan is currently under review and elements and principles of *CityShape* will be incorporated into the revised City Plan which is due for release in 2012.

The Brisbane central business district (CBD) lies in a bend of the Brisbane River. The CBD covers 2.2 square kilometres and is walkable. The inner city, in particular, has undergone redevelopment and renewal activity in response to economic and population pressures.

Urban Footprint, Land Use and Activity Centres. *Source: South East Queensland Regional Plan 2009- 2031*

A2.5 People

This demographic study draws on data from the Australian Bureau of Statistics (ABS) for the Brisbane Local Government Area.[5] The LGA is comprised of 159 Statistical Local Areas (SLAs) for the purposes of ABS data collection. Unless otherwise stated data for *place of usual residence* has been referenced. ABS Time Series data is based on *place of enumeration*. Population projections are drawn from the Planning Information Forecast Unit (PIFU) of the Queensland Treasury's Office of Economic and Statistical Research (OESR). This demographic analysis draws on a range of existing documents and several of these refer to the Brisbane Statistical Division (SD). The differences between the LGA and SD are noted in the table below:

	LGA	SD
Population as at 2006 Census	956,128 persons	1,763,131 persons
Land Area	1326.8 square kilometres	5904.8 square kilometres
LGA	Brisbane	Brisbane, Moreton Bay, Ipswich, Logan and Redland
Map		

The SD includes growth areas such as Logan and Ipswich and it is understood that populations from these areas may be travelling to Brisbane for employment or other reasons, placing pressure on infrastructure systems, facilities and services within Brisbane LGA.

At the 2006 Census, the population of Brisbane was 956,128 persons. Current estimates place the population over 1 million and the city is the third most populous in Australia.

A2.5.1 Population Growth Trends

The ABS (2010) estimates that the LGA of Brisbane experienced the largest growth of all LGAs with an estimated increase of 155,809 persons from 2001 to June 2009. The percentage change between 2004 and June 2009 is estimated to be 1.9 per cent and in the year to June 2009 is estimated to be 2.1 per cent (21,161 persons). In the state ranking of fastest growth, Brisbane is ranked 22nd.

In a population growth study undertaken by the Department of Planning and Infrastructure , population trends revealed that while Brisbane is experiencing significant population growth expressed as absolute change, this growth is not regarded as rapid growth. Surrounding SLAs of Ipswich, Moreton Bay and Sunshine Coast are experiencing more rapid population growth. (July 2009, pp. 24-25) The report found that the most significant source of population growth in South East Queensland is positive net gains from migration from either overseas, interstate or within Queensland. Further, Brisbane recorded the largest increase (17,400 persons) of any Australian LGA in the 12 months to 30 June 2008. This increase was below the average for the previous seven years

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[5] Other statistical analyses for Brisbane often refer to the Brisbane Statistical Division, which includes portions of neighbouring LGAs. The Brisbane Statistical Division is comprised of a land area of 5904.8 square kilometres. Because the RDA study area maps onto the Brisbane LGA, statistics using this frame are referenced. However, it is understood that Brisbane's significance extends beyond the LGA boundaries.

(18,700 persons). This growth in the year to 30 June 2008 represented an annual growth rate of 1.7 per cent, equivalent to the median growth rate of all Queensland LGAs with populations greater than 2,000.

In the year to June 2009 (Australian Bureau of Statistics, 2010), almost 95 per cent of SLAs in Brisbane LGA experienced an increase in population and the SLAs that experienced the largest growth were Wakerley and Calamvale, which both increased by 860 people (14.7 per cent and 7.2 per cent respectively). Parkinson-Drewvale had the third-largest growth with a population increase of 800 people (5.7 per cent). The three fastest growing SLAs in Brisbane were Pallara-Heathwood-Larapinta, which grew by 19.4 per cent (440 people), Wakerley, which grew by 14.7 per cent (860) and Moggill, which grew by 13.2 per cent (360).

A2.5.2 Population Density

A 2007 study ranked cities with the largest land area and their surrounding urban areas by population density (expressed as people per square kilometre). Brisbane was ranked 167th out of 250 large cities globally with an average density of 950 people per square kilometre. The population was expressed as 1,508,000 people occupying 1,603 square kilometres. Brisbane's population density, according to this study, is lower than Sydney, Melbourne, Adelaide, Perth and Gold Coast.[6] (City Mayors, 2007)

The following map shows population density per SLA – expressed as number of people per square kilometre – based on the 2006 Census. This map demonstrates that density is not uniform across the city and that populations tend to be more concentrated in SLAs in or proximate to the CBD, inner city and along major transport corridors. Population density is often strongly correlated to a number of factors including housing density, type of dwelling and household size or type.
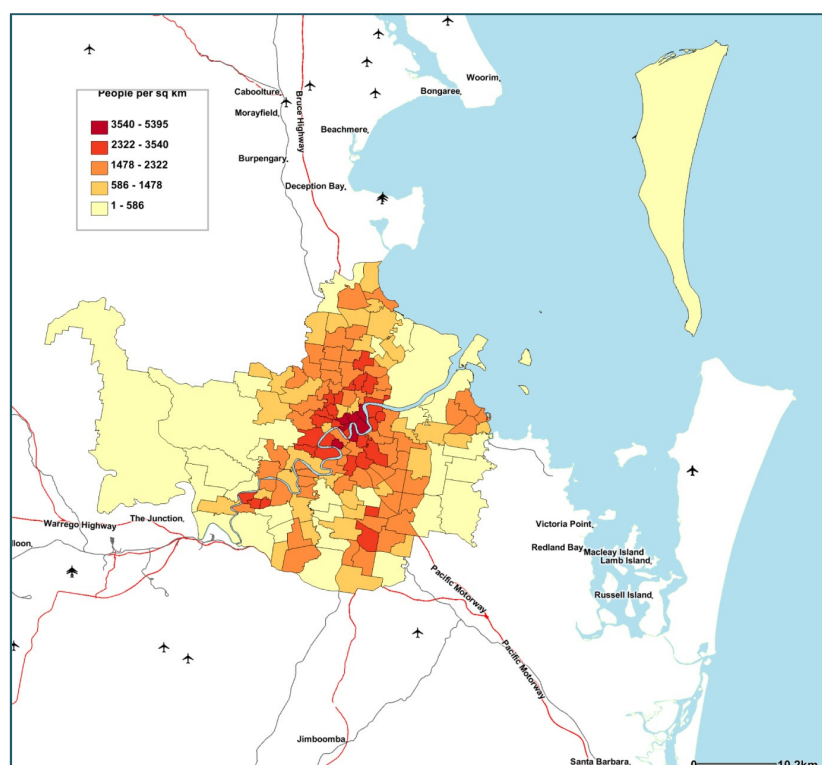
Population Density per SLA expressed as number of people per square kilometre. *Source: ABS Map Stats*

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[6] The data used in this study does not correlate with accepted population and land area measurements.

The impact of expanding low-density residential development includes greater separation between residential areas and locations of employment, greater use of cars for mobility, higher costs of transport and vulnerability to oil price rises, and a loss of productive agricultural land or habitat. (Infrastructure Australia, 2010)

A2.5.3 Age

The total Brisbane LGA population was comprised of 467,343 males (48.88 per cent) and 488,785 females (51.12 per cent). The age breakdown of the population as percentage of the total region population is presented below. The largest age brackets are presently of working age.

Age Groups as Percentage of Population
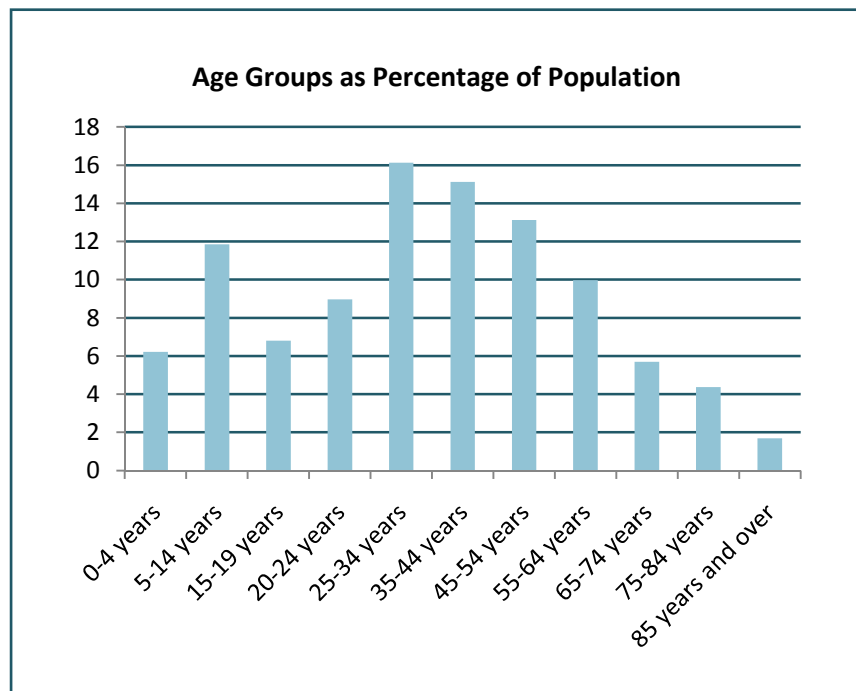
The median age of the Brisbane population from 1996 to 2006 is gradually rising indicating an aging population and, potentially, longer life spans.
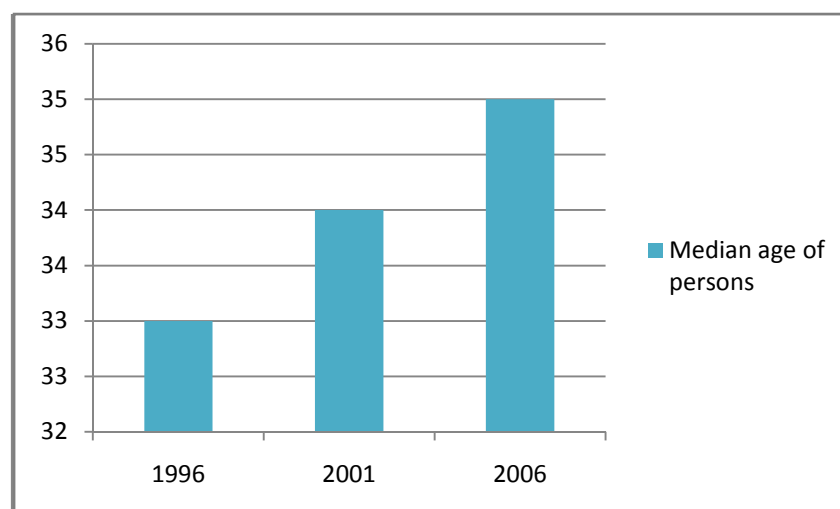
A2.5.4 Aboriginal and Torres Strait Islander People

Aboriginal and Torres Strait Islander people represent 1.35 per cent (12,938 persons) of Brisbane's population and the specific cultural backgrounds are extrapolated in the table below.

	Number	Per cent of Total Aboriginal & Torres Strait Islander Population	Per cent of Total Brisbane LGA Population
Aboriginal	10,918	84.38%	1.14%
Torres Strait Islander	1,246	9.63%	0.13%
Both Aboriginal and Torres Strait Islander	774	5.98%	0.08%
Total	**12,938**		**1.35%**

The Aboriginal and Torres Strait Islander population is not uniformly resident in the city and there are population concentrations in some SLAs in the Brisbane LGA. There is also a correlation between SLAs featuring concentrations of Aboriginal and Torres Strait Islander populations and those SLAs identified as disadvantaged by SEIFA.
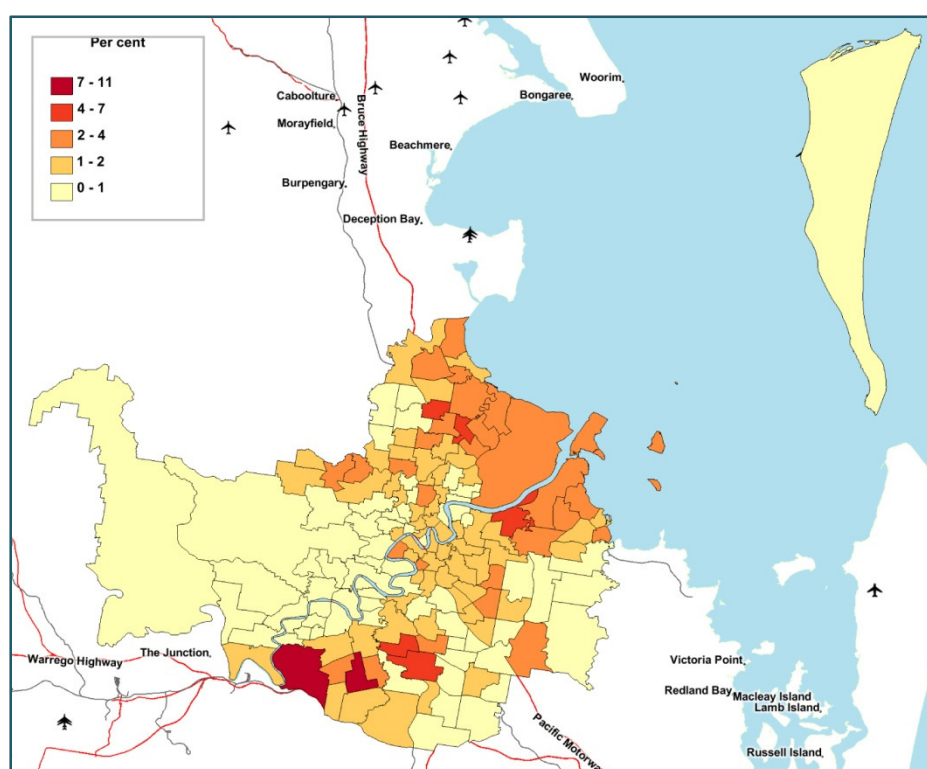
Aboriginal and Torres Strait Islander People as percentage of total population. Source: ABS Map Stats

Over the past decade the population of Aboriginal and Torres Strait Islander people has increased as a percentage of the total population and remained static from 2001 to 2006.
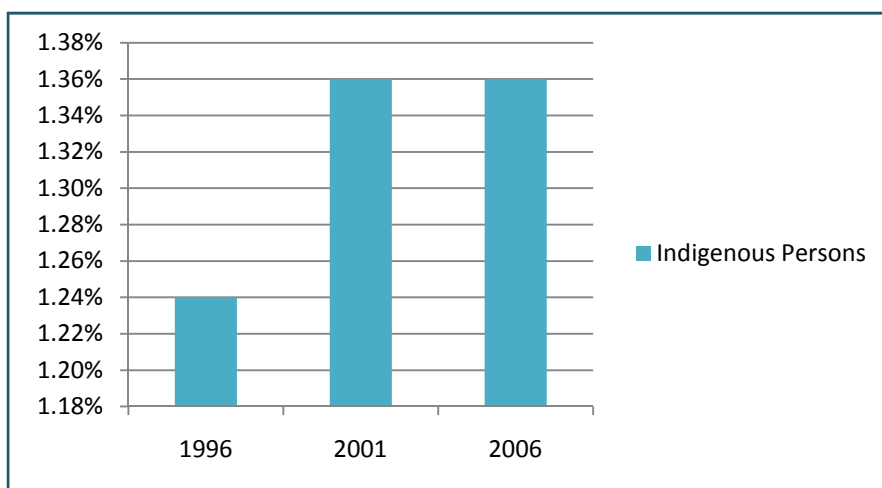
The ABS also provides more details information about Aboriginal and Torres Strait Islander persons including statistical representations of income and workforce participation. The Federal Government's Closing the Gap program (a joint agreement between Federal and State Governments) will also address issues facing urban Aboriginal and Torres Strait Islander people.

A2.5.5 Overseas Born

Approximately 25 per cent of Brisbane's population (229,174 persons) was born overseas, with 14.33 per cent speaking a language other than English at home. People born overseas cite 34 countries of birth and most commonly born in England (3.9 per cent), New Zealand (3.6 per cent), China (1 per cent), Viet Nam (1 per cent) and South Africa (0.8 per cent).

The geographic distribution of people born overseas across the city is not uniform. Some SLAs in the southern outer areas and inner city indicate overseas born populations of up to 58 per cent.
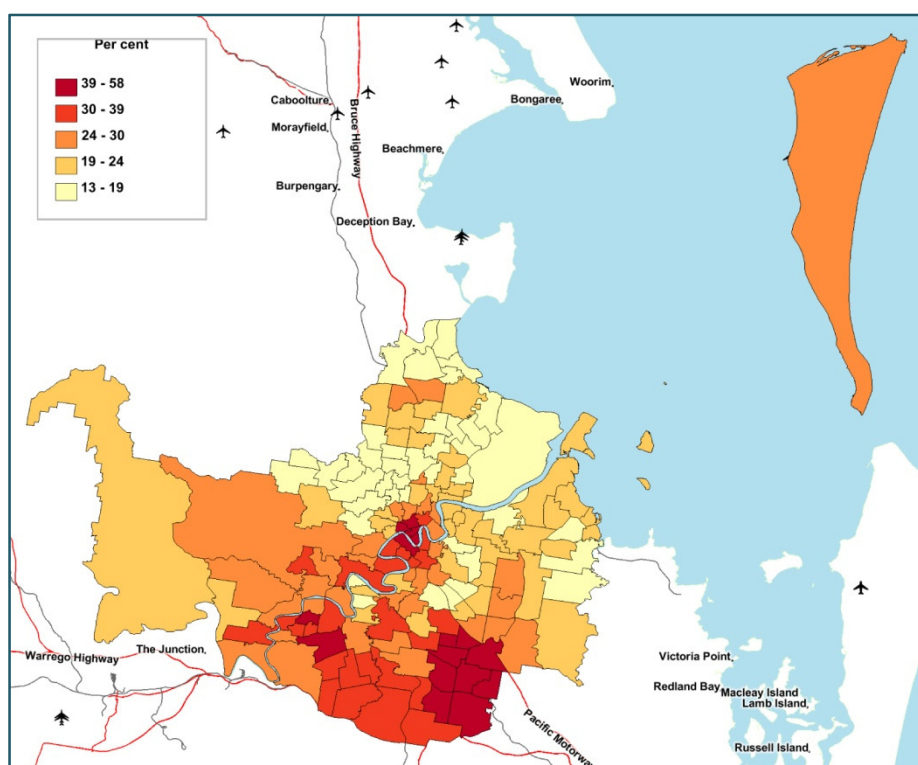
Overseas born people as percentage of total population. Source: ABS Map Stats

Approximately 20 per cent of Brisbane's population speaks a language other than English at home with the most common languages spoken being Mandarin (1.9 per cent), Cantonese (1.4 per cent), Vietnamese (1.4 per cent), Italian (0.9 per cent) and Greek (0.7 per cent).

Since 1996, the Australian born population has been decreasing as a proportion of the population while the overseas born population has been increasing. The chart below illustrates these changes (excluding international visitors) and provides an indication of the changing migrant composition of the city's population.
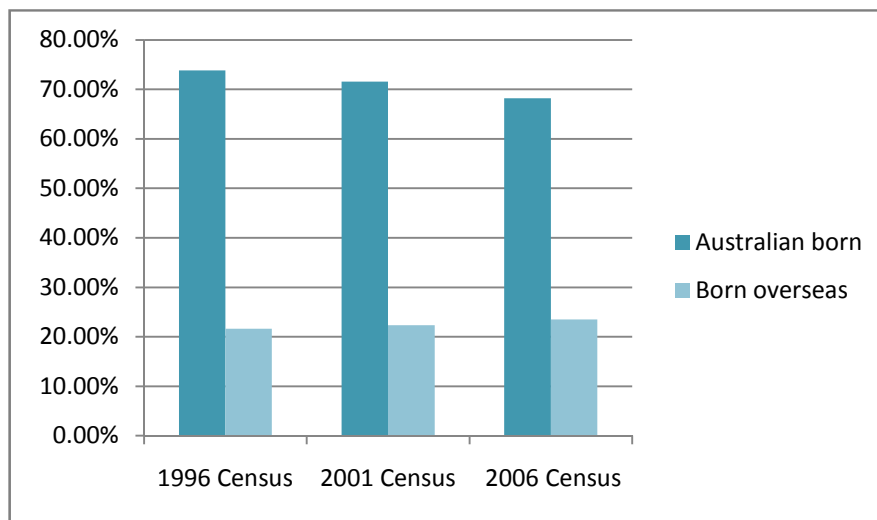
Additionally, a growing percentage of the population speaks a language other than English at home as the graph below illustrates.
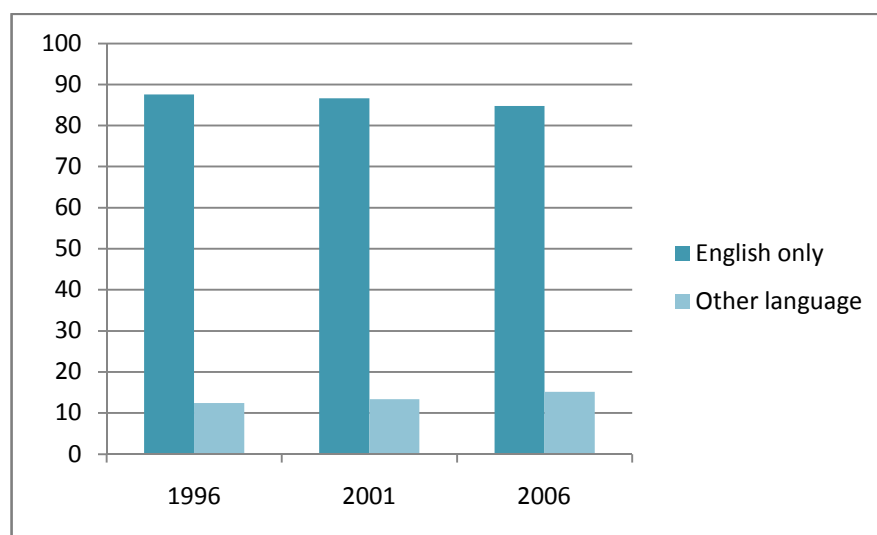
Linguistic diversity and country of origin are indications that Brisbane is increasingly a destination of choice for migrants. Larger overseas born populations, as a percentage of total population, are indicative of Australia's global cities (Sydney and Melbourne) as indicated in the graph below. In the graphs below, Brisbane ranks as a large city.
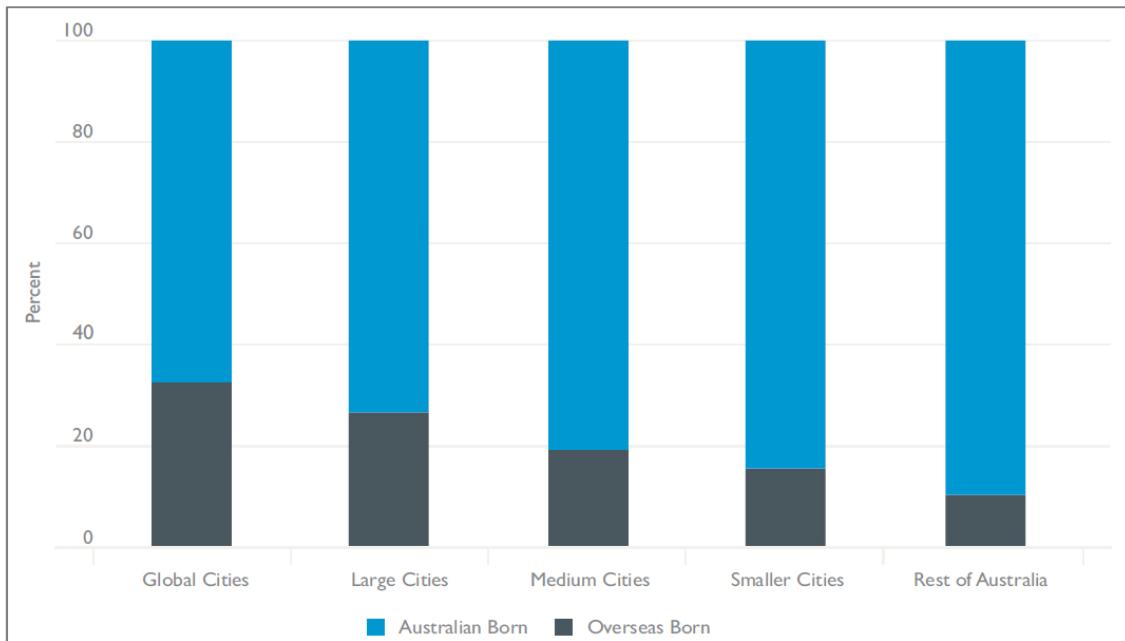
Overseas-born population in major cities, 2006. Source: ABS 2006 cited in The State of Australian Cities 2010, Major Cities Unit

This pattern is also reflected in figures for languages spoken at home. In Australia's global cities, there are significant higher numbers of people who speak languages other than English at home compared to those in large cities. This indicates that those migrating to Australia's global cities are more likely to be of culturally and linguistically diverse backgrounds than those settling in the large cities like Brisbane.
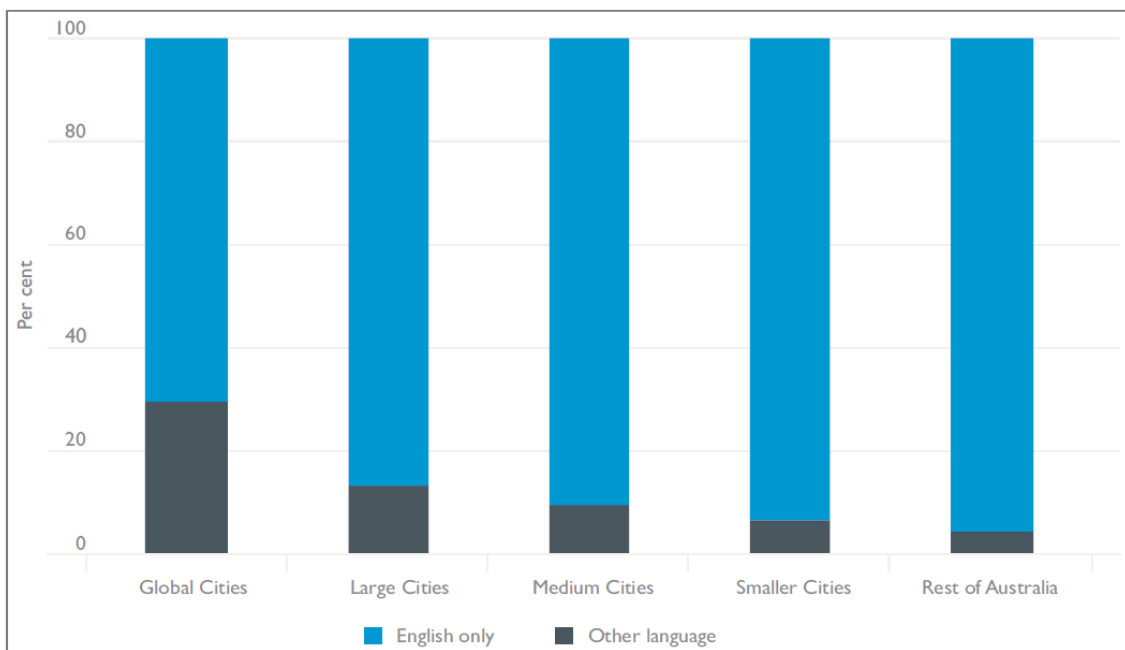
Languages spoken at home in major cities, 2006. Source: ABS 2006 cited in The State of Australian Cities 2010, Major Cities Unit

A2.5.6 Disability

Across Australia some form of disability affects one in five people. According to the ABS, "in the context of health experience, disability may refer to impairments, activity limitations and participation restrictions. It denotes the negative aspects of the interaction between an individual (with a health condition) and that individual's contextual factors (environmental and personal factors)." (Australian Bureau of Statistics, 2010) In Brisbane those who are in need of assistance with a profound or severe disability account for 3.4 per cent of the total population (32,986 persons).
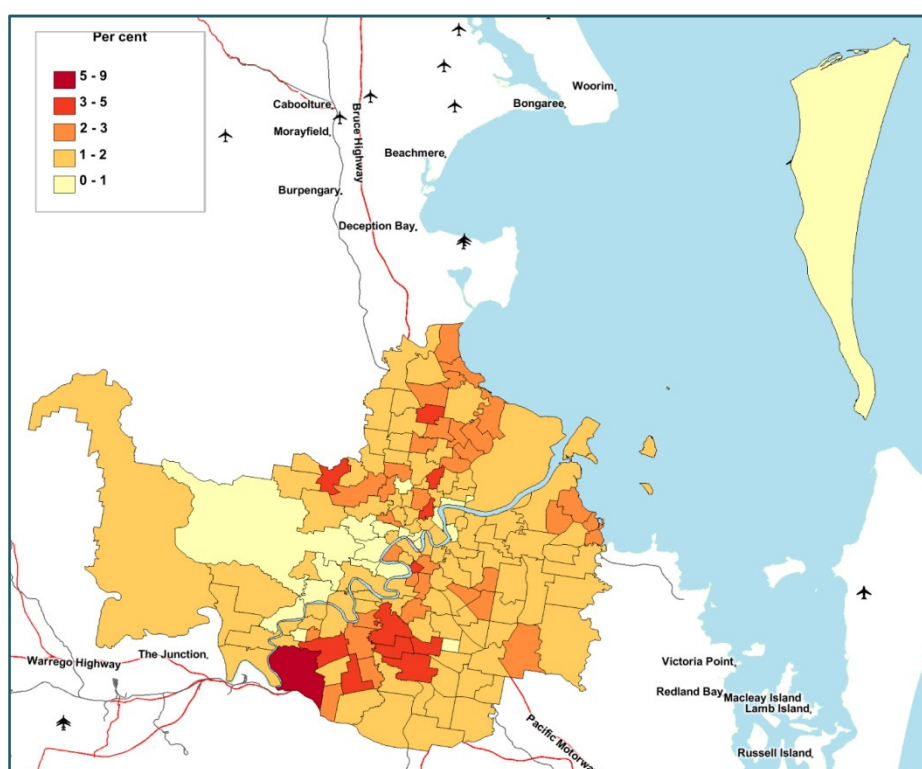
People aged 0-64 who need assistance expressed as percentage of people aged 0-64 years.
Source: ABS Map Stats

The 2009 report, *The geography of disability and economic disadvantage in Australian capital cities*, produced by the Australian Institute of Health and Welfare (AIHW) reveals that there is a correlation between disadvantage and disability. Drawing on 2006 Census data for severe disabilities among people aged 0-64 years, the report found that:

- Severe disability was more common in areas whose residents had relatively few economic resources than areas whose residents had more.
- 3.1 per cent of people living in the most disadvantaged fifth (quintile) of local areas within Australian capital cities had severe disability, compared to 1.3 per cent in the most advantaged fifth

In correlating census data, the report found a strong relationship between an SLA's rank on the SEIFA Index of Economic Resources[7] and its rank in terms of severe disability rates. That is, the most disadvantaged SLAs within Brisbane tend to have the highest rates of severe disability. The report found the following in the Brisbane LGA (Australian Institute of Health and Welfare 2009, 9):

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[7] This index, as one of the SEIFA indexes, focuses on financial aspects of advantage and disadvantage, using Census variables relating to residents' incomes, housing expenditure and assets.

- 2.3 per cent of people living in Brisbane aged 0–64 years had severe disability
  - ranging from 0.6 per cent in the Inner City to 9.0 per cent in Wacol
  - people living in Wacol were almost four times as likely to have severe disability as the Brisbane average. This SLA includes a large psychiatric hospital. Excluding Wacol from the analysis has only a marginal effect on the rate of severe disability in the most disadvantaged quintile and the strength of the social gradient in Brisbane
  - after Wacol, the SLA with the second highest percentage of people with severe disability was Redland (not in the Brisbane LGA). However, in Brisbane LGA, Inala also features high incidence of severe disability (greater than 4 per cent)
- People living in the most disadvantaged quintile of Brisbane were 2.4 times as likely to have severe disability (3.5 per cent) as those in the most advantaged quintile (1.5 per cent)
- The social gradient of disability in Brisbane is strong meaning that severe disability has a strong relation with economic resources. However, this data does not sufficiently define a causal link.

These findings indicate that disability is strongly represented in disadvantaged areas and that where disadvantage is pooling in outer suburban areas, there is a greater likelihood of higher numbers of disabled people. Because of the dimensions of disadvantage, people with disability may be vulnerable to social exclusion (and/or isolation), poverty and deprivation.

A2.5.7 Family Characteristics

The 2006 Census records that there were 244,767 families in Brisbane LGA. This includes: couple families with children (44.1 per cent), couple families without children (37.8 per cent), one parent families (15.3 per cent) and other types of families (2.8 per cent).

The distribution of family types often aligns to dwelling type and density and, as the maps following demonstrate, families with children are not strongly represented in inner city areas. Also, couples without children are not strongly represented in suburban areas. There are concentrations (up to 26 per cent) of one parent families in known areas of disadvantage.
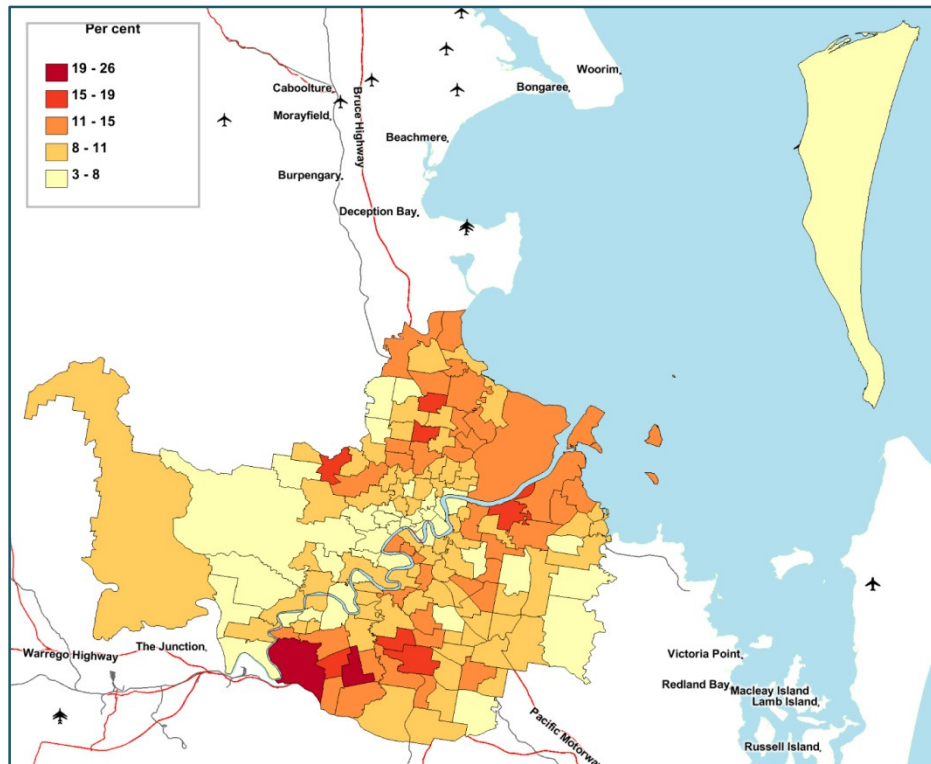
One parent families with dependent children as a percentage of all families. *Source: ABS Map Stats*
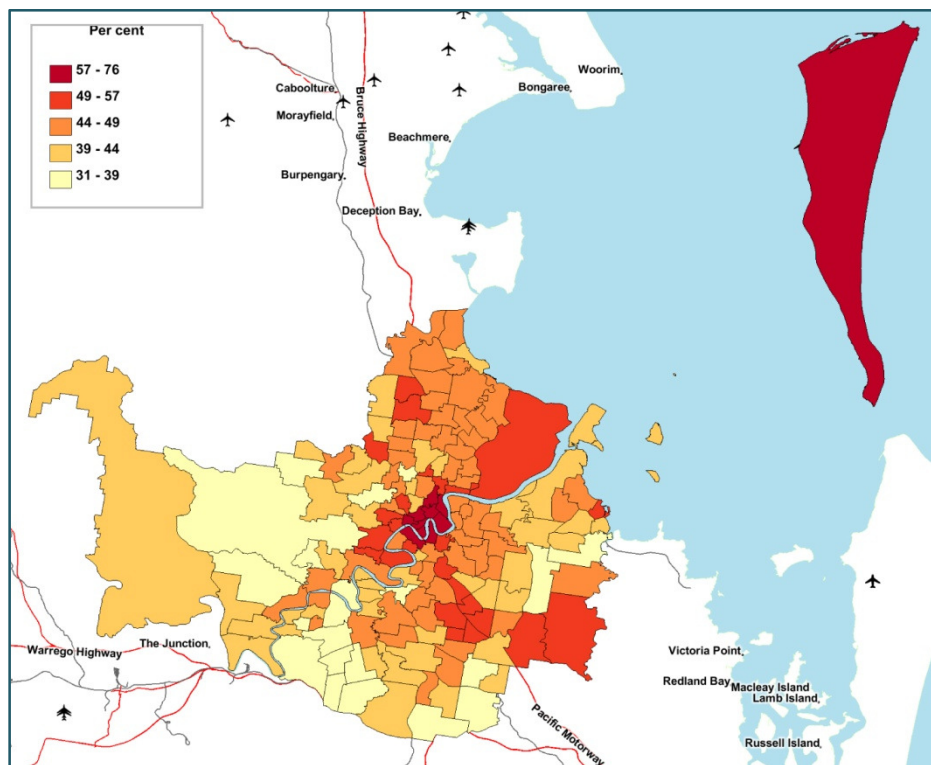
Couples with no dependent children as a percentage of all families. *Source: ABS Map Stats*
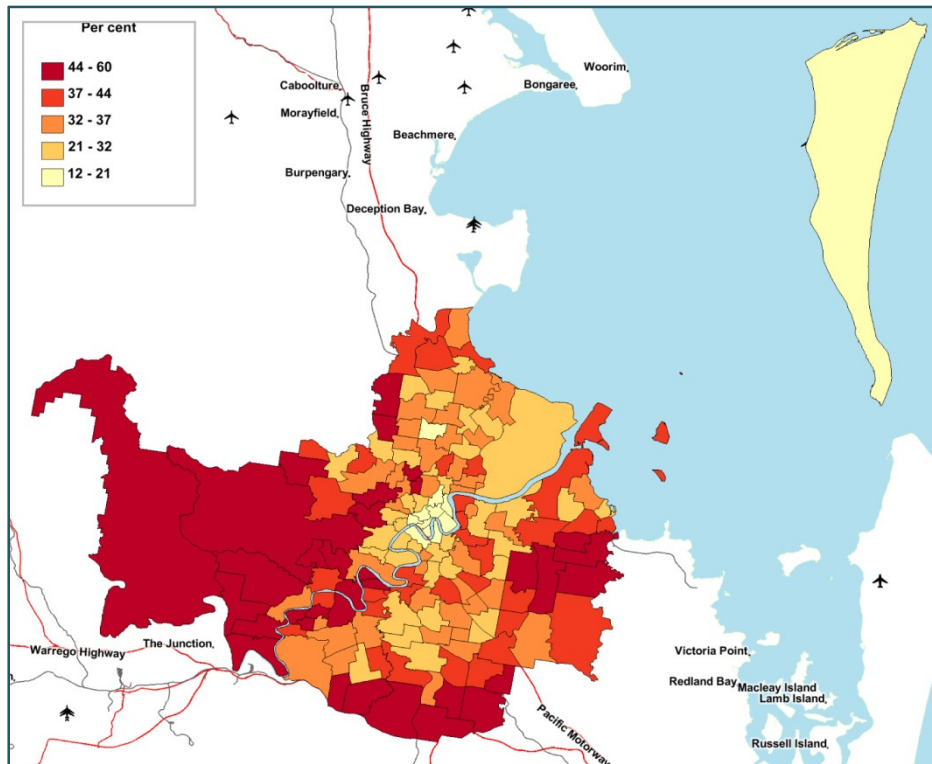
Couples with Dependent Children as a percentage of all families. *Source: ABS Map Stats*

The composition of families, expressed in the chart below as a percentage of all families, has changed over a decade with growing proportion of couples with no children and decreasing proportion of couples with children. 'Other family' formations and one parent families have seen fluctuations but are not demonstrating notable changes as a percentage family types.
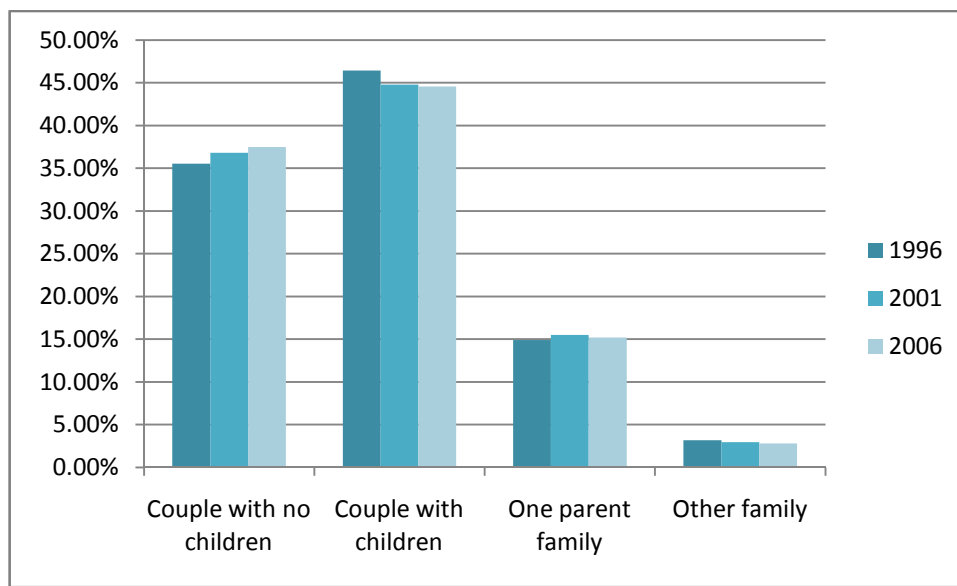
A2.5.8 Population Movements

The following graph provides an indication of population movements with consistent population movements since 1996 expressed as percentage of the population (excluding international visitors). While a significant percentage remained at the same address for more than a year, there is a significant percentage who moved in the five years prior to the census (the figure is consistently over 40 per cent). The megatrends presented at the beginning of this document point to increasing mobility and this is an indication that a significant proportion of the population is moving.
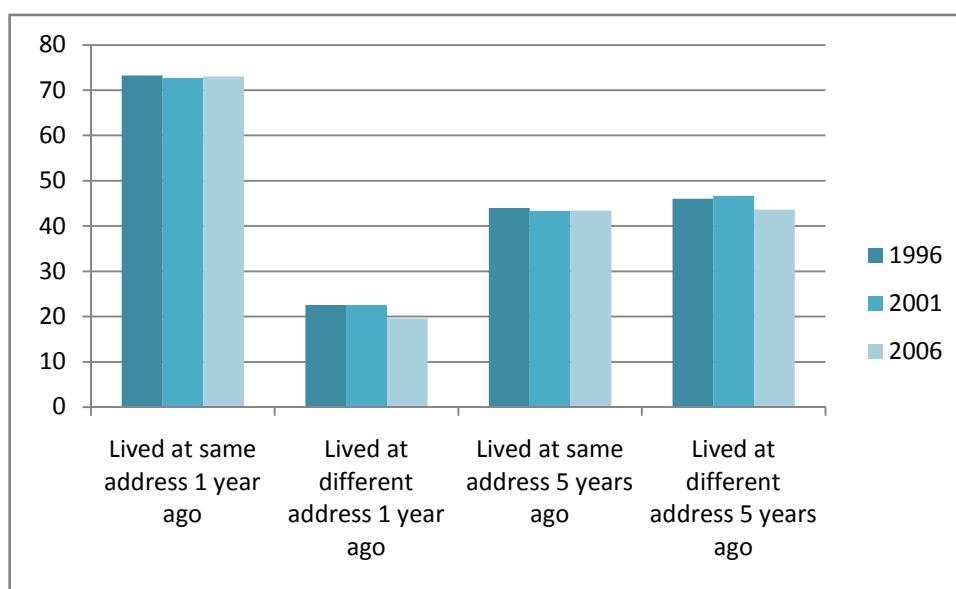
The following maps also provide an indication of population movements per SLA. This maps shows that populations in the CBD and inner city are less settled. These areas are characterised by high numbers of apartments, hotels and student accommodation.

The following map shows people living at the same address five years ago as a percentage of the population aged 5 years and over. Inner city populations appear to be more mobile and this map indicates a high level of movement in the population, particularly in the CBD and inner city as well as areas proximate to university campuses, which is characterised by student populations and households with few children. The five year map shows a more mobile population.
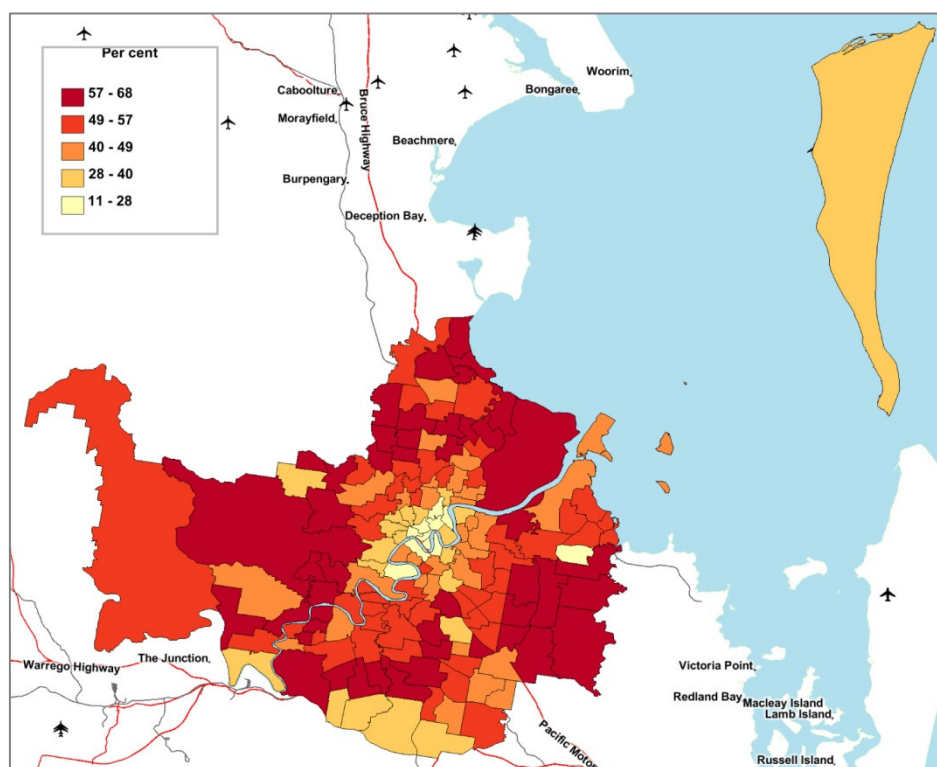
People living at same address five years ago as a percentage of the population aged 1 year and over.
Source: ABS Map Stats

A2.5.9 Income

Changes since 1996 to median individual, household and family incomes are presented in the table below. This indicates that incomes are increasing.

	1996	2001	2006
Median individual income ($/weekly)	$321	$416	$556
Median family income ($/weekly)	$826	$1,068	$1,403
Median household income ($/weekly)	$673	$870	$1,157

The graph below indicates that those households with negative or nil income have generally increased since 1996, while other low income groups ($1-$249) have decreased overall. However, there is a general trend of increasing household incomes.
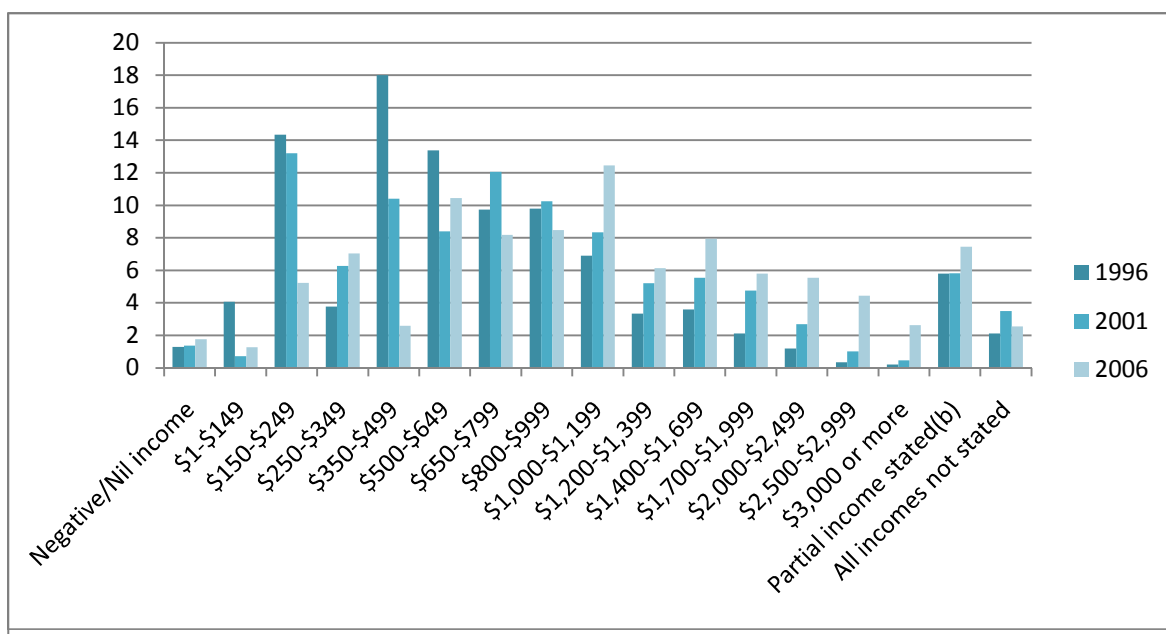
The following graph shows personal incomes at the 2006 Census expressed as a percentage of people aged 15 years and over. The graph, while generally following a bell curve, shows an apparently disproportionate percentage of those with nil or negative income and those with incomes in the $1000-$1299 and $2000 or more per week ranges.
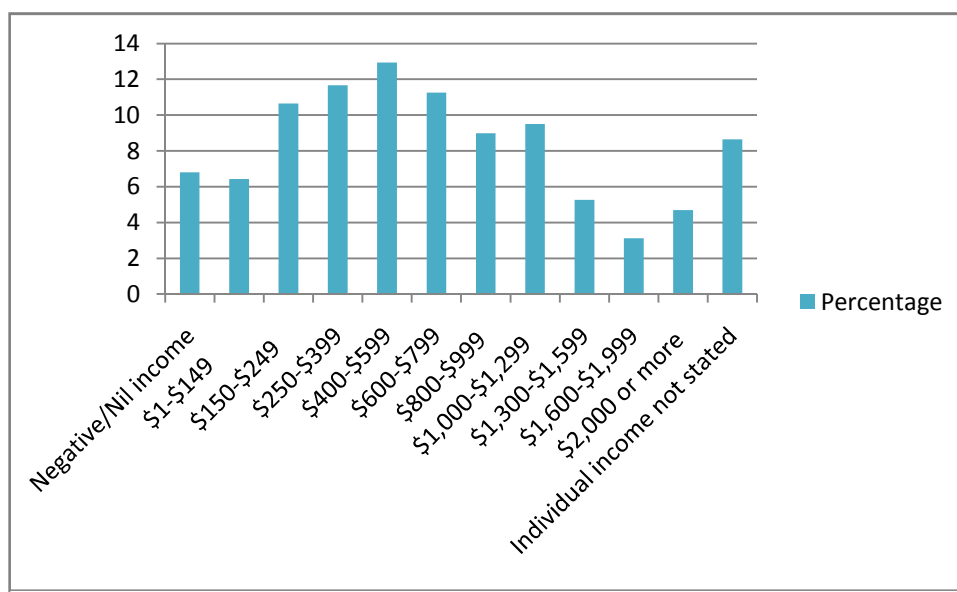
The following maps depict the geographic distribution of households with high and low weekly incomes of $2,500 and $500 respectively. Low income households tend to spread along the north to south corridor and transport routes with the high income households spreading in an east to west formation, along the river and into the western suburbs. In Brisbane's western SLAs, there is a higher incidence of higher income households (up to 46 per cent) with a higher incidence of low income households in the outer northern and southern SLAs.
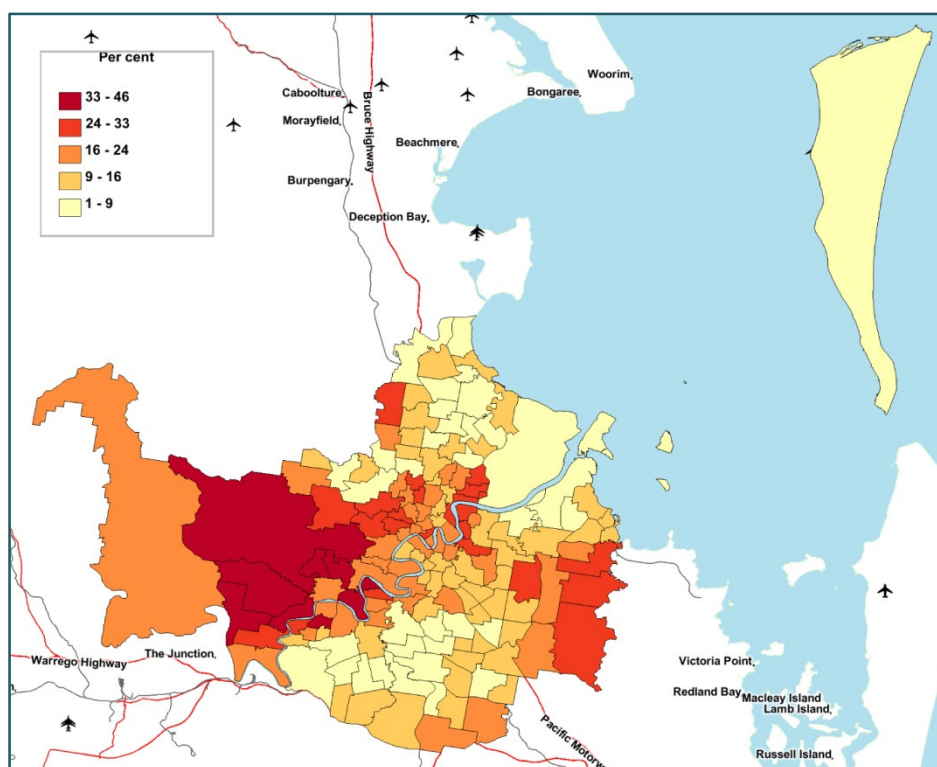
High income households with a gross weekly income of $2500 or more expressed as a percentage of households.
Source: ABS Map Stats
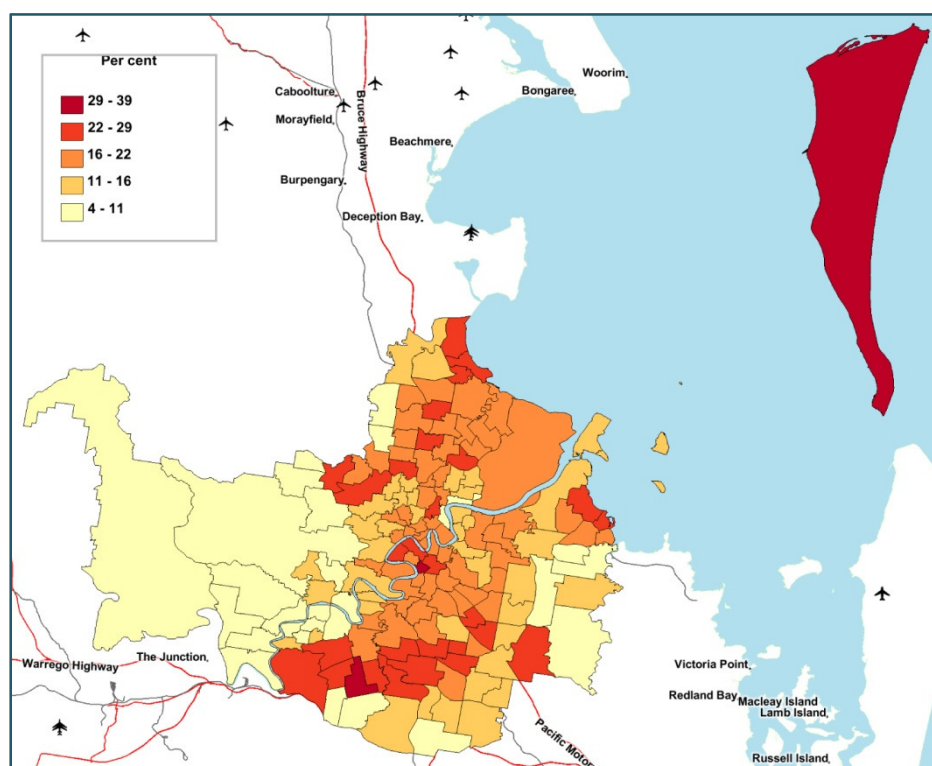
Low income households with a gross weekly income of $500 or less expressed as a percentage of households.
Source: ABS Map Stats

The issue of housing affordability is a national one, with Australia's and Brisbane's affordability reducing rapidly. According to Australian Housing and Urban Research Institute (AHURI), housing affordability relates to a person's ability to pay for their housing. It is complex issue, impacted by the local housing and labour markets as well as larger economic, environmental and social forces. When

people struggle to meet the cost of housing, researchers describe it as *housing affordability stress*. Measures of housing affordability stress are contested. However, in Australia, a percentage of income spent on housing costs is generally used to estimate the number of households affected. In common use is a *30/40 rule*, meaning those spending more than 30 per cent of their income on housing, while earning in the bottom 40 per cent of the income range. (AHURI)

The map below shows households that are spending more than 30 per cent of their gross household income on housing, expressed as a percentage of all households. It shows that the CBD and inner city have the highest percentage of households spending more than 30 per cent of their gross household income on housing, while comparatively fewer outer suburb households are experiencing housing affordability issues. This is significant because of the geographic spread of low incomes and disadvantage in the LGA. According to AHURI, housing affordability stress is particularly acute for private renters, single-person households under the age of 65 and low-income home purchasers.
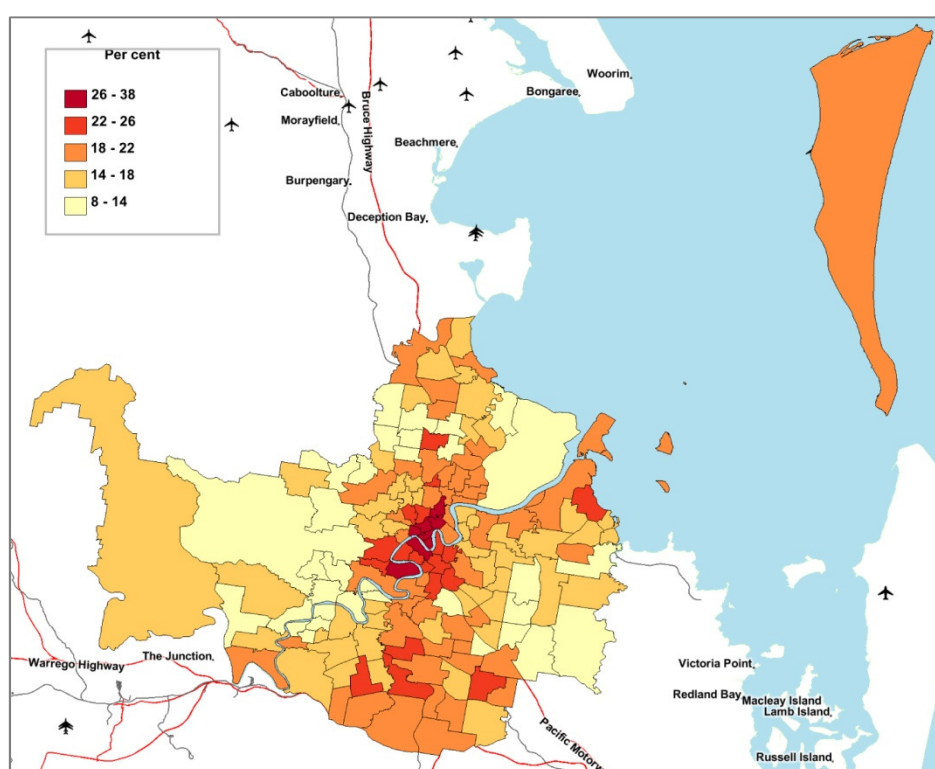
Households with housing costs of 30% or more of gross income, expressed as a percentage of all housing.
Source: ABS Map Stats

A2.5.10   Internet Use

Home-based access to the internet is widespread in Brisbane with 74.7 per cent of occupied dwellings having an internet connection. The types of internet connections are broadband (53.48 per cent), dial up (20.64 per cent) and other (0.6 per cent).

Home-based internet access is not uniform across the city with some SLAs recording up to 91 per cent and others recording 40 to 55 percent or less of households having an internet connection. This may be seen as evidence of an emerging 'digital divide' in the city.
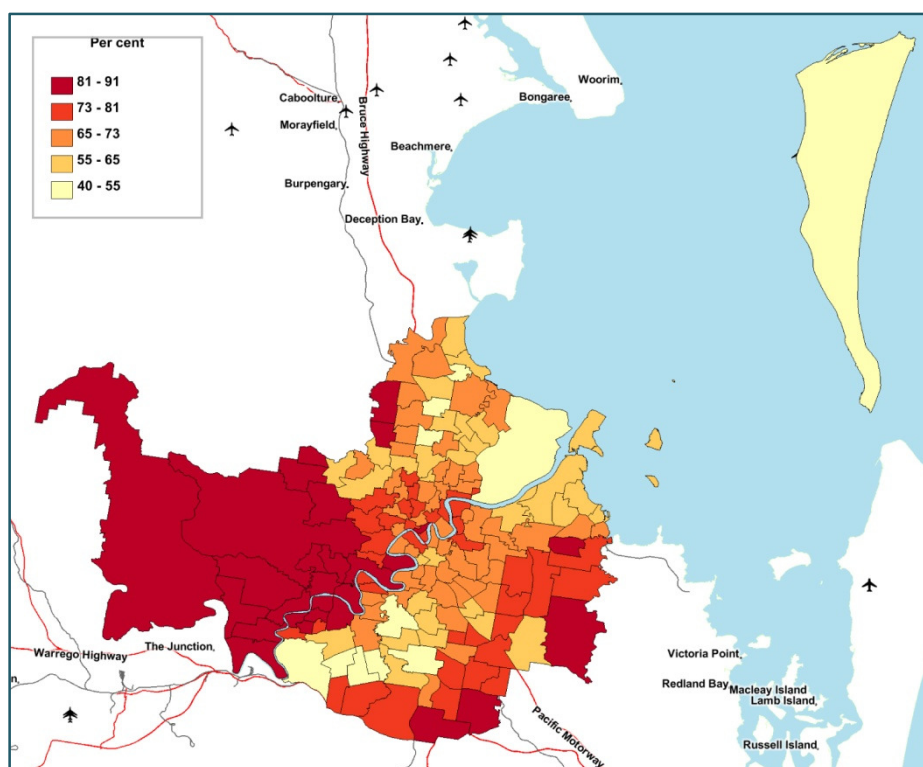
Dwellings with any type of Internet Access as a percentage of all occupied private dwellings
(based on Location on Census Night). Source: ABS Map Stats

A2.5.11   Unpaid Volunteer Work

Volunteerism is a measure of social capital and is regarded as an indication of social ties and bonds. According to the ABS, social capital is a measure of the connectedness and functionality of communities. It grows through the social networks we build and the network transactions we take part in (such as providing support or sharing knowledge). While volunteering itself is considered a strong indicator of social capital, the ABS found that volunteers are also involved in other transactions which build social capital. In 2006, volunteers, regardless of the frequency of their volunteering, were more likely than non-volunteers to donate money, attend a community event or provide unpaid assistance to someone outside their household. (ABS, 2009)

In Brisbane, 18.7 per cent of individuals aged over 15 (146,423 persons) have performed unpaid voluntary work. Volunteer activity is more prevalent in the more affluent western suburbs and less prevalent in some lower income areas in the southern and northern suburbs. The level of volunteerism may be indicative of issues associated with social service and infrastructure provision i.e. people in communities volunteer to meet local deficits and needs.
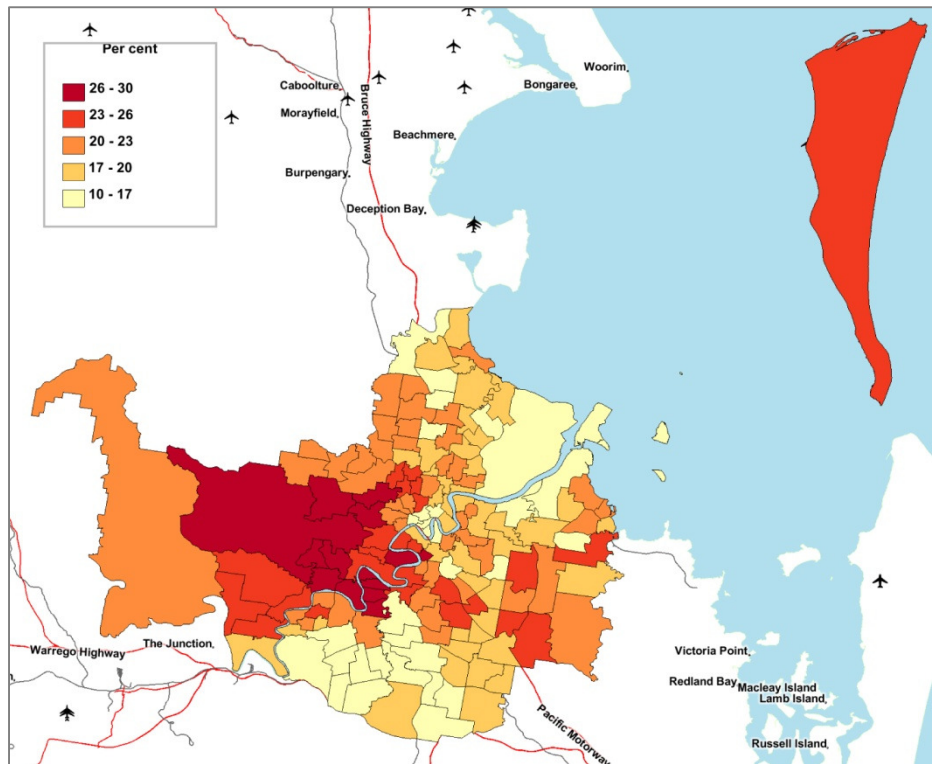
People who undertook unpaid voluntary work, as a percentage of people aged 15 years and over.
Source: ABS Map Stats

A2.5.12   Unpaid Childcare

The following map presents the geographic spread of people who have undertaken unpaid childcare as a percentage of people aged over 15 years. The highest rates of 38-49 per cent of people who have provided unpaid childcare generally fall in outer suburban areas on the western and southern edges of the LGA. Comparatively few (10-18 per cent) have provided unpaid childcare in the inner city areas. Other figures and maps have indicated that there are significantly fewer households with children in the inner city. That is, demand for childcare among social networks in the inner city may not be as high. The provision of unpaid childcare can be an indication of strong social and family ties as well as an indication that market supply for childcare is not meeting demand or need in a locational or affordable way. Recent media reports highlighted concerns about the impact of rising childcare fees and childcare affordability could emerge as an obstacle to workforce participation.
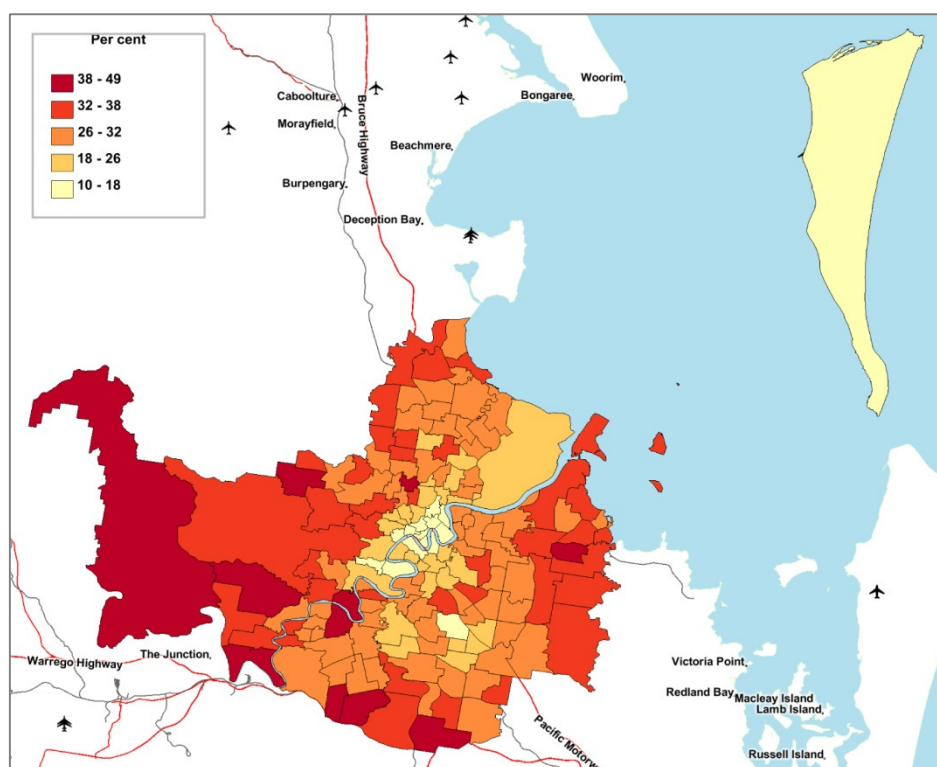
People who undertook unpaid childcare, expressed as a percentage of the population over 15 years.
Source: ABA Map Stats

A2.5.13 Social Disadvantage

Social disadvantage takes a variety of forms and the 'dimensions of disadvantage' include:

- Poverty – people with an income so low as to prohibit an acceptable standard of living (as defined for their locality)
- Deprivation – a lack of resources preventing people from accessing goods, services and activities considered to be essential for that community
- Exclusion – people cannot or do not participate in key activities (in their society) (Saunders, Naidoo, & Griffiths, November 2007)

Disadvantage is complex and some people or groups can be vulnerable to or 'at risk of' multiple forms of disadvantage. This includes people who are aged, mentally ill, disabled, Aboriginal, Torres Strait Islander, non-English speaking, and others.

This report draws on two key sources to consider disadvantage and vulnerability to disadvantage in Brisbane to provide an overview of the geography of disadvantage in Brisbane. These two sources are:

- **SEIFA index of Relative Socio-Economic Disadvantage (IRSD)** (Australian Bureau of Statistics, 2009)
  SEIFA is a suite of four summary measures that were created from Census information. The indexes can be used to explore different aspect of socio-economic conditions by geographic areas. For each index, every geographic area in Australia is given a SEIFA number which shows how disadvantaged that area is compared with other areas in Australia. The IRSD is one of the four summary measures and this broadly measures relative disadvantage using a set of 17 variables including low income earners, relatively lower educational attainment

and high unemployment. The index is constructed as deciles where each decile represents 10 per cent of the population and the index situates each locality in relation to others nationally. That is, decile 1 represents the lowest scoring 10 percent of areas experiencing the highest relative disadvantage and decile 10 represents the highest 10 per cent of areas experiencing the lowest degree of relative disadvantage. A finer grain is achievable by examining Census Collection Districts (and this can demonstrate that SLAs in higher deciles can contain areas in lower deciles).

▪ **VAMPIRE (Vulnerability Assessment for Mortgage, Petroleum and Inflation Risks and Expenses) Index**
Created by researchers in the Urban Research Program at Griffith University, this index measures the extent of household exposure to the impacts of higher fuel prices and mortgage interest rates.

The following map provides an overview of **SEIFA IRSD** in terms of relative disadvantage, ranked in Queensland. The map reveals pockets and concentrations of disadvantage along the major transport routes, with particular concentrations on the outer edges of the city proximate to industrial and institutional areas (e.g. Wacol) in both the north and south. This includes areas proximate to the Trade Coast, Port and Airport.
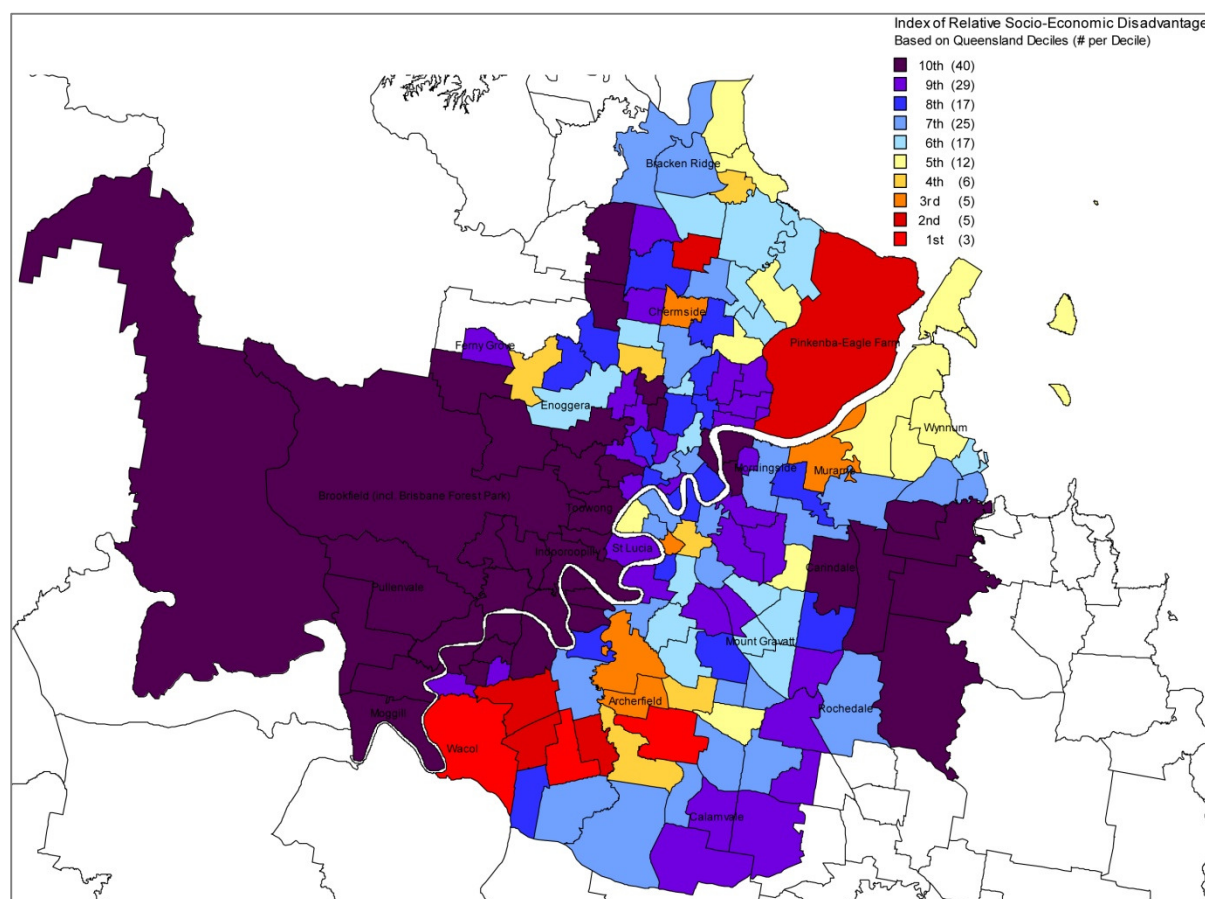
SEIFA IRSD – SLAs in Brisbane LGA (excluding Moreton Island), Queensland Ranking.
Data Source: ABS. Map Source: BCC.

At the 2006 Census, 7.2 per cent of the population were in the most disadvantaged quintile (comprised of the deciles 1 and 2 indicating most disadvantage) and 39 per cent of the population were in the least disadvantaged quintile (comprised of deciles 9 and 10 indicating least disadvantage). Of the 159 SLAs, 31 fall in the deciles 1 to 5 and 69 fall in deciles 9 and 10.

Another consideration of disadvantage is reflected in the **VAMPIRE (Vulnerability Assessment for Mortgage, Petroleum and Inflation Risks and Expenses) Index** which identifies the relative degree of socio-economic stress in metropolitan areas including Brisbane. (Dodson & Sipe, August 2008) There is an overall national trend of the vulnerability gap widening. Several areas in Brisbane and surrounds are experiencing very high vulnerability. However, of the Australian cities Brisbane performed best, with the areas in which oil/mortgage vulnerability increased almost exactly offset by areas in which vulnerability declined. Brisbane also experienced a large increase in public transport patronage, growing an average of 9.7 per cent each year between 2004 and 2007. In April 2008, 1800 bus services were forced to abandon passengers at stops due to overcrowding.

The following maps, produced by Dodson and Sipe, show distribution of mortgage, petroleum and inflation vulnerability across the greater Brisbane region. The maps also reveal that in areas of predominantly low vulnerability, such as inner Brisbane, high vulnerability exists. Generally, there is a correlation between vulnerability and distance from the CBD.
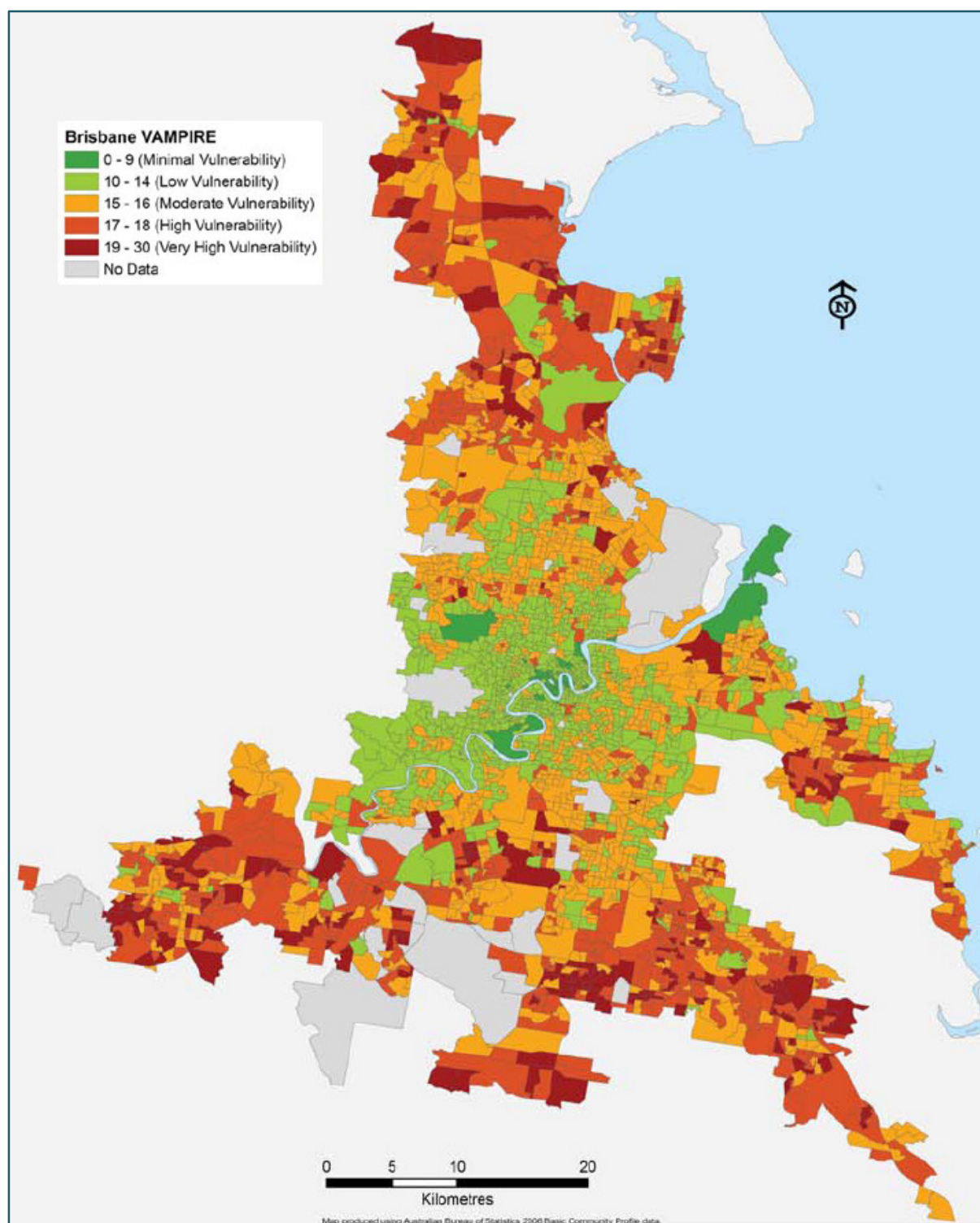
Oil and mortgage vulnerability in Greater Brisbane, 2006.
Source: Dodson & Sipe, August 2008. Map produced by Urban Research Program, Griffith University
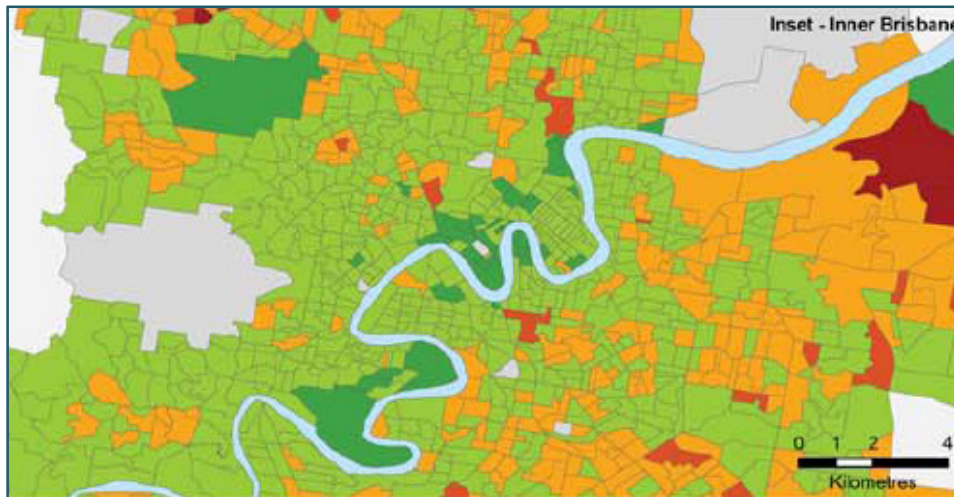
Oil and mortgage vulnerability in Inner Brisbane, 2006.
Source: Dodson & Sipe, August 2008. Map Source: Urban Research Program, Griffith University

The following table demonstrates how disadvantage manifests in several SEQ SLAs which fall in the lower deciles of SEIFA, using Greater Brisbane as a comparata.[8] Social disadvantage is a factor in labour market disadvantage.

Indicator	Richlands/ Inala/ Durack SLAs	Woodridge / Kingston SLAs	Redland (S) Balance SLA	Caboolture (S) – Central SLA	Greater Brisbane
Unemployment Rate	17.6%	21.0%	17.5%	10.6%	5.1%
Indigenous % of population	6.0%	5.5%	7.4%	3.4%	1.8%
% of families with children where no parent is working	43.6%	41.3%	41.9%	28.4%	17.7%
% of population aged 15-64 who have not completed Year 10	22.1%	19.2%	17.9%	17.3%	9.0%
% of population aged 15-64 on a Centrelink allowance	37.6%	40.1%	45.0%	30.6%	16.5%
% of yr 9 Govt School Students below min standard for Reading	32%	40%	n/a	17%	9% (QLD)

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[8] Data compiled by DEEWR drawing on data from Unemployment Rates - DEEWR Small Area Labour Markets, March 2010 (Smoothed Estimates); Centrelink - DEEWR Administrative data, March 2010 and ABS Estimated Resident Population, June 2008; Other - ABS 2006 Census of Population and Housing, MySchool Website

% of yr 9 Govt School Students below min standard for numeracy	20%	21%	n/a	7%	5% (QLD)

A2.5.14   Population Forecasts

Population forecasts have been sourced from PIFU and Department of Infrastructure and Planning. The State Government's response to the Population Growth Management Summit states average annual population growth for the entire state is forecast to decline to 2031. (Department of the Premier and Cabinet, 2010) In South East Queensland, Brisbane (SD) has experienced the largest population growth and attracted the largest amount of growth from 1981 to 2006 (733,000 people). (Department of Infrastructure and Planning, December 2008) Population growth in the SD is projected to grow as follows:

	Year ending 30 June 1981	Year ending 30 June 2006	Year ending 30 June 2031
Brisbane (SD)	1,124,828	1,857,813	2,793,164

Source: ABS Cat No 3218.0, 2008 edition Queensland Government population projections (medium series) and PIFU estimates and calculations.

The Brisbane LGA, with the largest population and highest number of jobs, is projected to record the largest amount of population growth of any LGA in Queensland over the decade to 2011. Brisbane City is projected to grow by a total of 174,000 people over the 10 years to 2011, significantly higher than the increase of 128,000 people in the previous decade. Population growth is also projected to be larger in the 10 years to 2011 than over the previous 10 years for Gold Coast City (155,000 and 132,000 people respectively), ranked at number two in the region.

Average annual population change and SEQ share of change in Brisbane LGA is presented in the following table:

	10 years to 1991		10 years to 2001		10 years to 2011		10 years to 2021		10 years to 2031	
	No	%	No	%	No	%	No	%	No	%
Brisbane LGA	3,561	8	12,756	24.2	17,365	26.6	11,532	17.7	3,492	6.2

Forecast population trends specific to South East Queensland that can potentially impact on Brisbane include:

- *Within 25 years SEQ will have a larger population than Queensland in 2006*
  Up to 18 per cent more growth is projected in South East Queensland for the next quarter century (1.5 million people) than in the last (1.3 million). As a result, by 2031 South East Queensland will have a population of 4.2 million, which will be larger than Queensland's population in 2006 (4.1 million).
- *The population to concentrate in SEQ although at a slower pace*
  By 2031 South East Queensland, with a population of 4.2 million, will be home to more than two out of three Queenslanders (67.6 per cent)
- *Ageing to change the face of our communities*
  South East Queensland will see an increase of more than half a million (527,000) people aged 65 years or older. They will account for 20 out of every 100 people in the region within

the next 25 years. Over one-third of all growth across South East Queensland will be in people aged 65 years or older. While Brisbane will not experience the highest growth in aged people, Brisbane SD is expected to have rapidly increasing numbers of older people.

A2.6 Education

The following graph illustrates percentage of total population engaged in education. The graph shows that as a percentage of total population, there is declining participation in higher and further education. However, because of the high percentage of people who did not specify the type of educational institution in 2006, the result is not entirely clear. Decreasing education participation, as a percentage of total population, may be an indication of an ageing population, general age demographics and changes in workforce or employment structure.
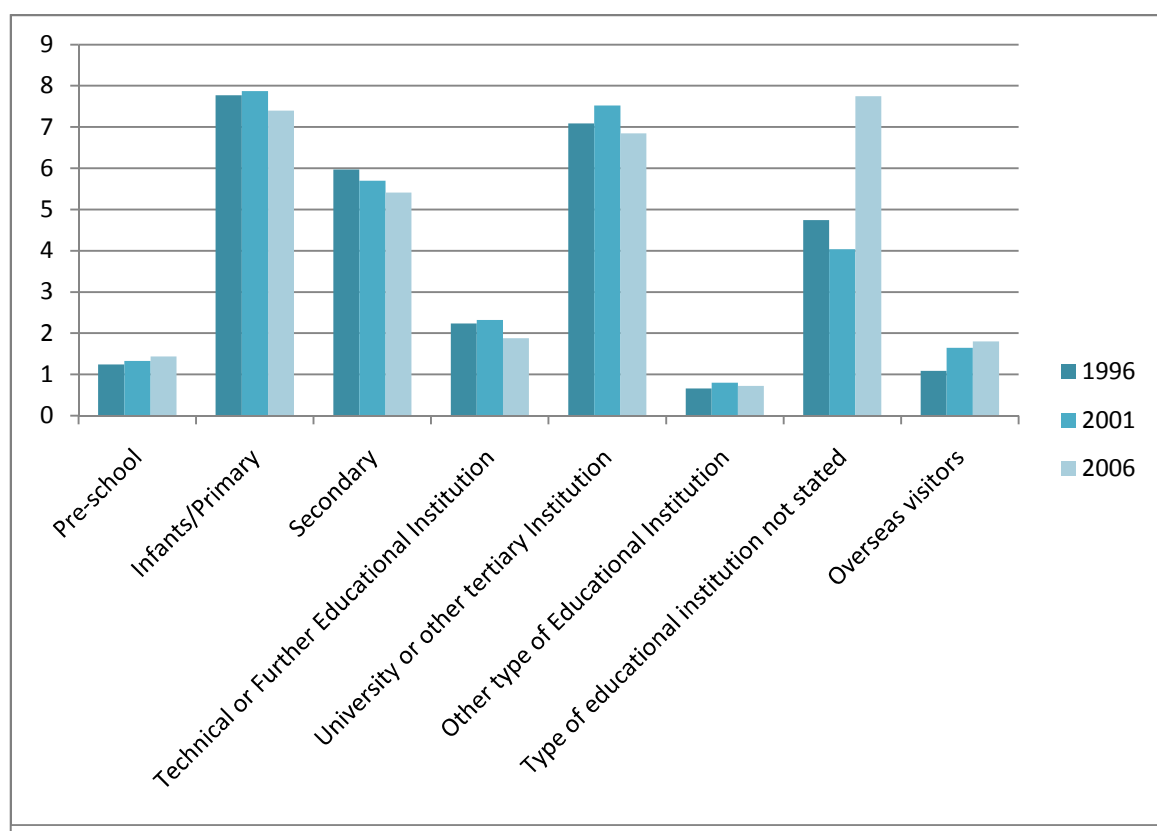
In absolute numbers, there is generally increasing participation in education from pre-school to secondary school as indicated in the following graph. Higher education including TAFE and University is not increasing. In 2006, the large number of those who have not specified their institution type has skewed the results, making it difficult to assess the changing in this series.
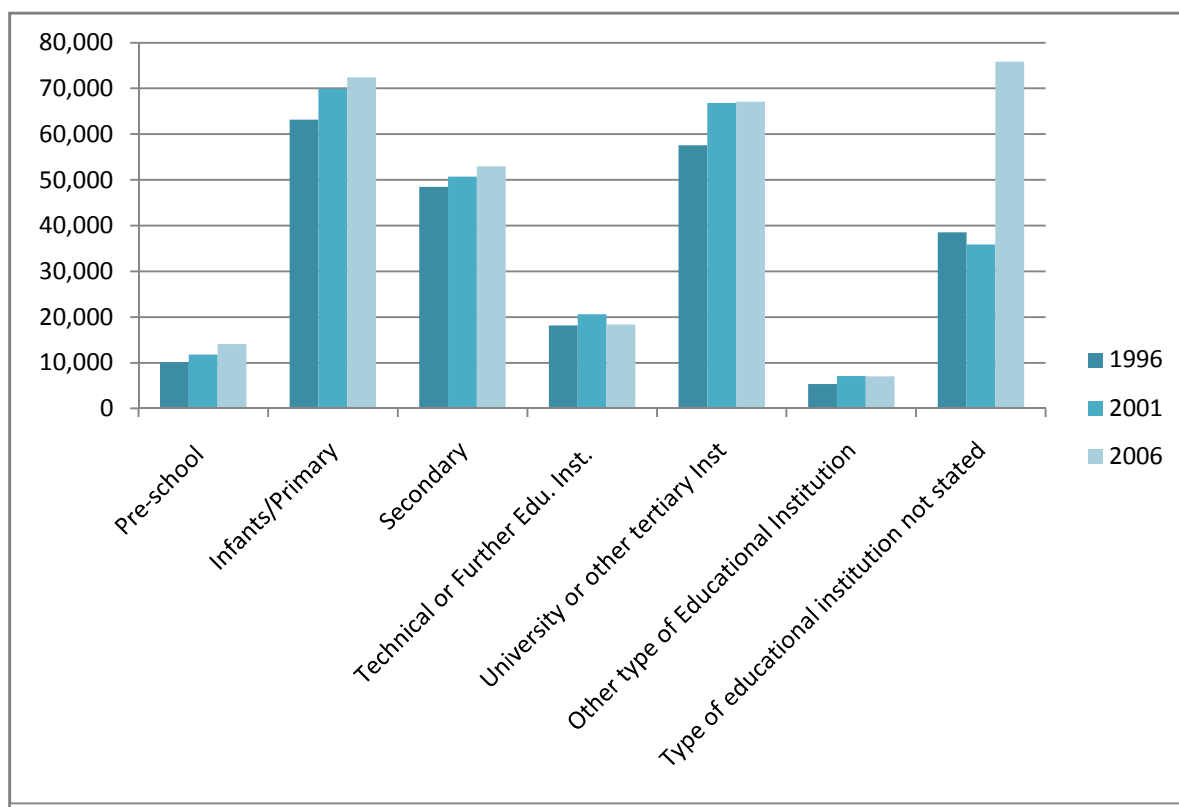
The time series shows that in general persons aged 15 years and over who hold a non-secondary school qualification has increased since 1996 in all areas of education indicating a growing engagement with education, particularly tertiary education.
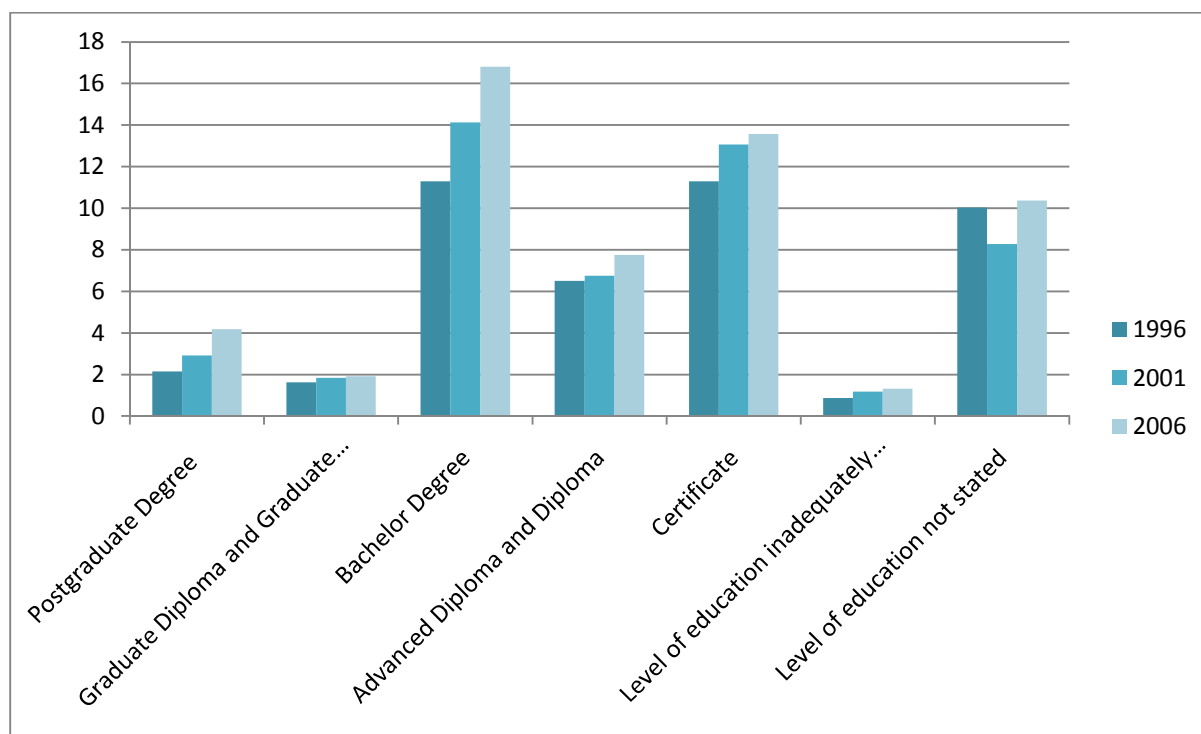
According to a PIFU report, in the 12 months ending 31 December 2008, 59.5 per cent of students attending a school in Brisbane attended a government school and 40.5 per cent attended a non-government school. (Office of Economic and Statistical Research, 2010, p. 2)

Additionally a significant proportion of the labour force does not hold post-school qualifications with 35.8 per cent of the labour force without post-school qualifications and 48.8 per cent of 15 to 24 year olds do not post-school qualifications.

The geographic distribution of those attending tertiary education institutions in 2006 is illustrated in the map below as a percentage of people aged 15 years and over. The map shows higher percentages in the inner city and also in areas proximate to tertiary institutions at St Lucia and Nathan. In southern and northern outer suburban areas, tertiary education participation is less than 9 per cent. At this time, QUT's Carseldine campus was still operational and, unlike university campuses in other areas, this is not reflected in the surrounding population, of which less than 9 per cent were participating in tertiary education.
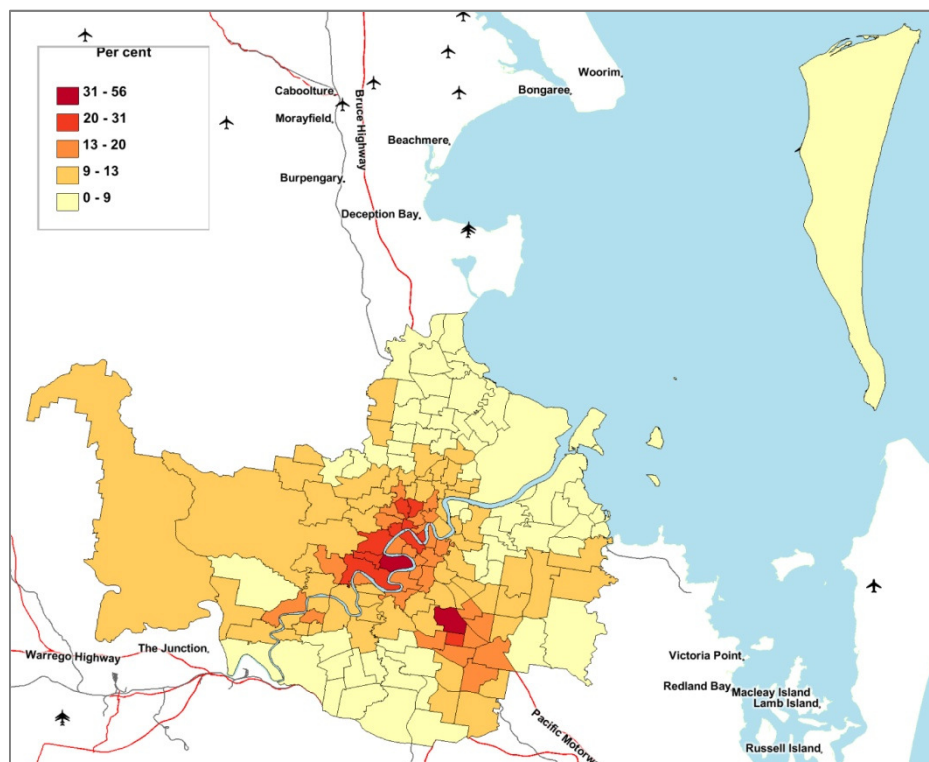
People attending tertiary institutions as a percentage of people aged 15 years and older. Source: ABS

The following map indicates the geographic distribution of people in the workforce with tertiary qualifications, with some SLAs registering up to 53 per cent of tertiary qualified people. The greatest concentrations are proximate to the CBD and inner city, stretching into the northern suburbs. In the outer northern and southern suburbs there are significantly low percentages of the workforce with tertiary qualifications. Again some of these areas are low income areas indicating that low income communities are less likely to obtain tertiary qualifications. However, participation to education is fundamental for social mobility and social inclusion.
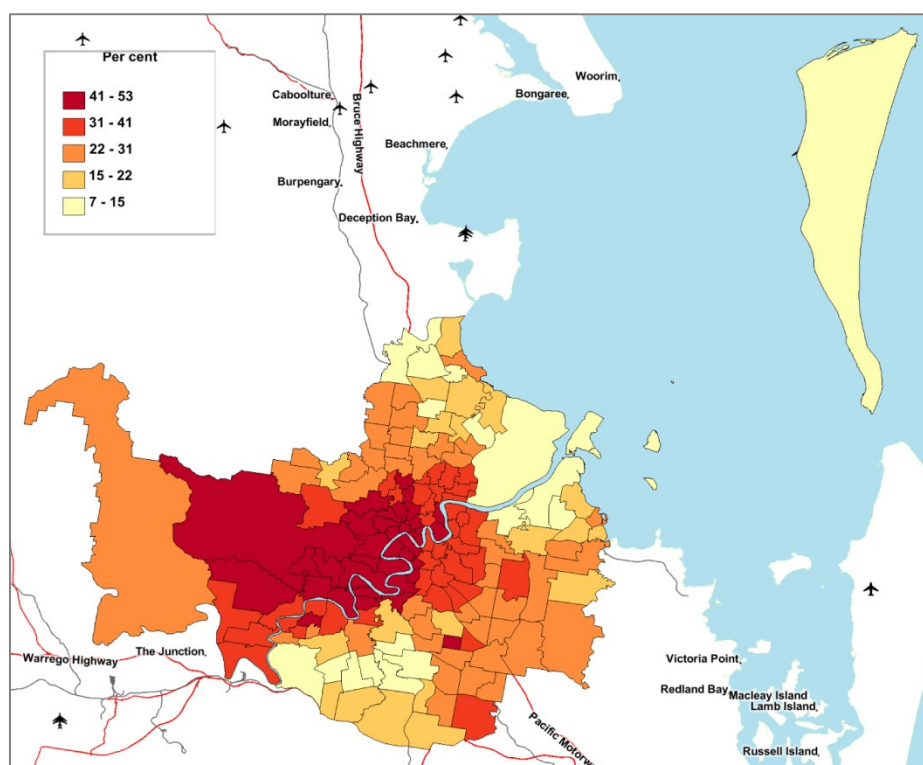
People in the labour force with University qualifications as percentage of labour force. Source: ABS 2006

Educational attainment and employment are strongly correlated and the following graph produced by DEEWR shows that those with post-school qualifications experienced higher labour force participation rates and lower unemployment rates.
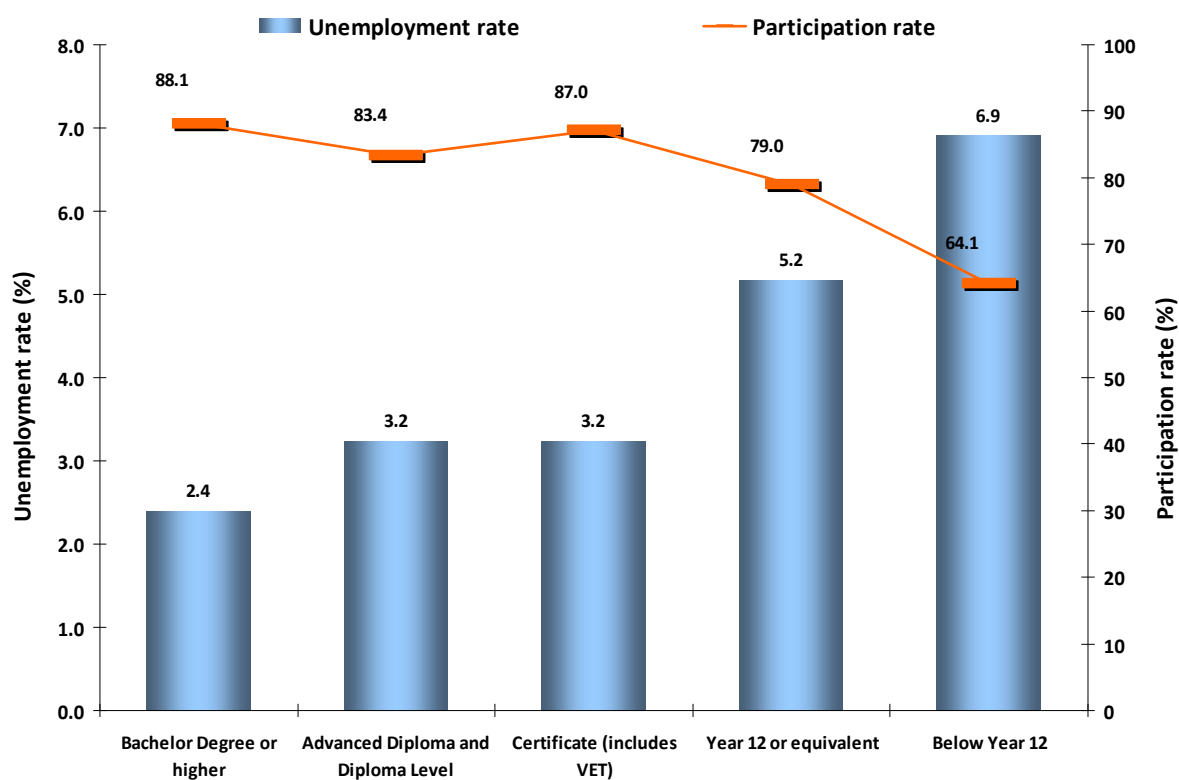
Education Attainment and Labour Market Outcomes – Brisbane (working age population). Source: DEEWR

A2.7 Employment Characteristics

From 1996 to 2006, the percentage of unemployed workers has reduced among male and female workers, with women's workforce participation lower than male workforce participation. While male workforce participation has remained static over the decade, women's workforce participation is increasing.
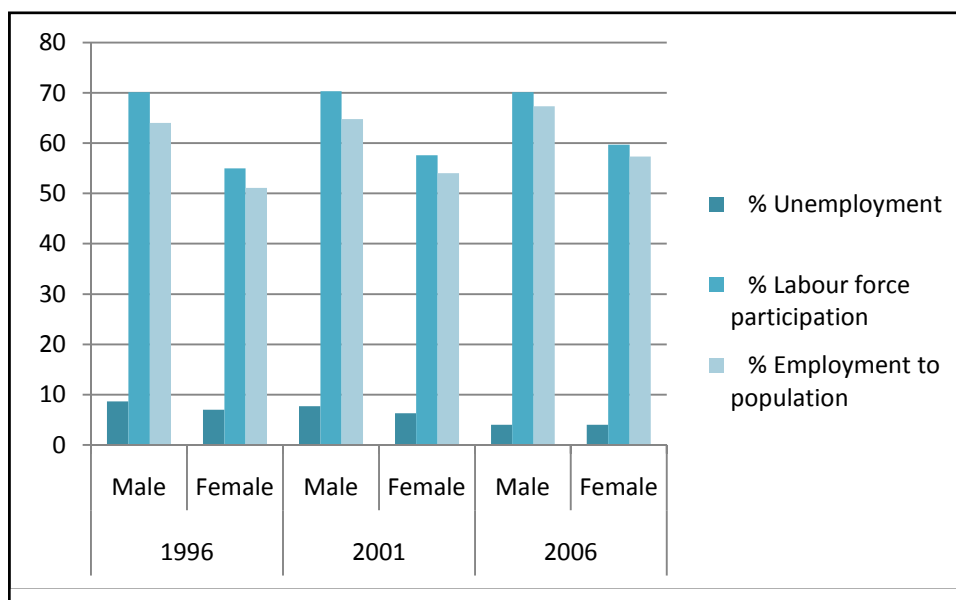
The number of unemployed persons aged 15 years and over (based on smoothed series) in the March quarter 2010 was 4.6 per cent (28,372 persons), 1 per cent lower than the overall Queensland unemployment rate.

The top five employing sectors are as follows (as a percentage of employed persons):

- Health care and social assistance (11.39 per cent)
- Retail Trade (10.38 per cent)
- Professional, scientific and technical services (9.46 per cent)
- Education and training (9.02 per cent)
- Manufacturing (8.76 per cent)

In the period from 1996 to 2006, those in the workforce worked in the following occupations, expressed as a percentage of the workforce:
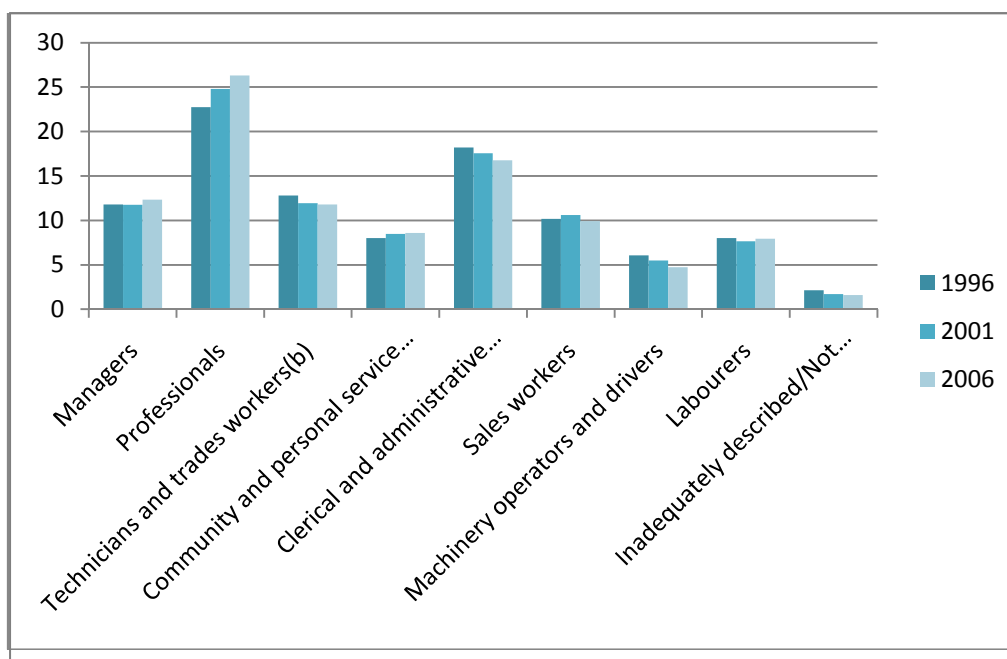
The graph shows increases in Managers and Professionals and this is consistent with the earlier finding of increasing household and personal incomes. It is also an indicator of other shifts in the structure of the economy and the labour force. There has been a gradual decline of Clerical and Administrative occupations and Machinery Operators and Drivers. [9] Some occupations – Community and Personal Services, Sales Workers and Labourer – have fluctuated but remained steady as a percentage of the workforce in the Brisbane LGA.

Presently the following industries are the main employers of these occupations:

- The retail sector employs most managers
- The education sector employs most professionals
- The construction sector employs most technicians and tradespeople
- The health care sector employs most communty and personal workers
- The retail sector employs most salespeople
- The transport sector employs most machinery operators and drivers
- The manufacturing sector employs most labourers

Skills shortages remain a problem throughout Australia. In July 2010, the findings from an Australia wide survey commissioned by Australian Industry Group and Deloitte were published. The survey, *Skills shortages: A high risk business*, which involved more than 400 companies of all sizes, found more than one-third (34.7 percent) of businesses believe there is a high to extreme risk of skills shortages negatively impacting on the operation of their businesses this year. The occupations employers have difficulty in filling were metal fitters and machinists (59.6 per cent unfilled vacancies), engineering professionals (51.7 per cent), metal casting, forging and finishing trades persons (36.7 per cent), structural steel and welding trades workers (32.9 per cent) and business administration managers (36.7 per cent). Numerous newspaper reports also point to skills shortages in a range of sectors including the housing, financial and tourism industries.

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[9] These figures are based on place of usual residence (not place of work) and these lower income professions may not be well represented in the Brisbane LGA given issues associated with affordability in the region.

According to a State Government green paper on proposed responses to the challenges of skills for jobs and growth, "beyond specific skills shortages in some industries, there are long term skills deficits in occupational categories of the labour market" and this includes addressing trades and professional services skills through education and training. The Queensland Skills Shortage list identifies skills shortages in a range of areas including trades, professions and community and service workers. (DEEWR, 2010)

DEEWR's *Survey of Employer's Recruitment Experiences in State Capital Cities* (DEEWR, 2010) examines the severity of recruitment difficulties; because the survey was first undertaken in March 2010 and comparisons cannot be drawn. The March 2010 results identify those sectors and cities most impacted by recruitment difficulties. In Brisbane:

- Fewer vacancies remained unfilled in the six months prior to the survey (4.4 per cent) than was the case for any other capital city (the all city average was 7.3 per cent).
- Fewer employers said that recruitment was difficult (34 per cent of employers who recruited) than was the case in any other capital city (the all city average was 43 per cent).
- Many employers said that recruitment difficulties had a negative impact on their business.
  - 15 per cent of all employers (whether they recruited or not) said that recruitment difficulties prevented them from meeting the market demand for their goods or services (15 per cent for all capital cities)
  - Employers in Health (19 per cent) or Manufacturing (18 per cent) were most likely to say that they could not meet demand
  - 12 per cent of employers said that recruitment difficulties prevented them from undertaking investment projects or from growing their business (13% for all capital cities)
  - Employers in Professional, Scientific and Technical services (19 per cent) were most likely to say that recruitment difficulties prevented investment or business growth.

A2.8 Industry & Economy

In 2006, KPMG's Competitive Alternatives Guide ranked Brisbane as the world's second most cost competitive location for doing business. (DEEDI, 2010) The Queensland State Accounts, tabled in Parliament on 3 August 2010, showed that the Queensland economy grew by 0.9 per cent in the March quarter, above the rest of Australia at 0.6 per cent. The Gross State Domestic Product rose 2.6 per cent in the year to March.

According to *The State of Australian Cities* (Infrastructure Australia, 2010) major cities, like Brisbane, are drivers of the national economy with links to the global economy. Many factors impact on the productivity of cities including: efficiency of infrastructure; connectivity between businesses, people, ideas, goods and services; and liveability. The report states that major cities were responsible for an estimated 84 per cent of Australia's economic growth in the 2003–2008 period and 81 per cent of the employment growth in the 2001–2006 period. During the resources boom in Australia, the major cities' share of the national economy increased. As economic entities, cities add competitive value to the businesses located within them:

> Cities can provide benefits to business through connectivity, large-scale provision of factors such as skilled and specialised labour, and the capacity to attract such labour. There is an important two-way relationship between cities and the businesses located within them. Business competes nationally and internationally, but to be able to do so effectively requires assistance from cities in the form of skilled labour, connectivity, educational, cultural and social facilities, as well as efficient linkages of centres of activity through transport, freight

systems and communications. To realise this potential, businesses in Australian cities need to be globally competitive—not merely in cost terms but also in terms of access to the benefits of innovation and skilled labour markets that cities can provide. Through agglomeration economies—that is, the benefits that result from the clustering of activities—and flow-on effects on innovation and specialisation, cities achieve a productivity premium which is considerable. This may be enhanced through strategic management of skills development and investment in amenity in cities through integration of land-use, transport and infrastructure provision. (Infrastructure Australia, 2010)

It is also acknowledged that Brisbane and the SEQ region has a strong economy compared with other areas of Australia and has also experienced significant infrastructure investment and planning in recent times.

A2.8.1 Gross Regional Product

Brisbane's Gross Regional Product grew approximately 30% between 2000-1 and 2005-6 and the city's contribution to Gross Domestic Product is 13.5%. Brisbane SD's Forecast Gross Regional Product has been estimated to be:

	2006	2011	2016	2021	2026
GRP	$66.3B	$88.0B	$107.5B	$129.6B	$150.3B
5 Year Growth	-	32.8%	22.2%	20.5%	16.0%
5 Year Change	-	$21.7B	$19.6B	$22.1B	$20.7B

Source: NIEIR 2008 (information supplied by Brisbane City Council)

NIEIR (October 2005) forecasts indicate that Brisbane Statistical Division Gross Regional Product could more than double in real terms over the 2006-2026 period to reach $150.3B (2001 dollars) in 2026. These forecasts assume infrastructure is provided to support the expansion of economic activity, in particular, maintaining travel times and costs at levels comparable to those of the early 2000s.

A2.8.2 Industry & Business

Research produced by NIEIR (commissioned by BCC) presents economic forecasts for the Brisbane Urban Footprint.[10] This study includes an analysis of the outputs of the region's major industries including the two most dominant:

▪ Business services, with nearly $12 billion of output and contributes nearly 10 per cent of all output in the region. The business services sector also has the most employees
▪ Property services, with over $11 billion of output and over 9 per cent of all output in the region.

These are followed by:

▪ Chemicals and petroleum, within the manufacturing sector
▪ General construction
▪ Ownership of dwellings (despite ownership of dwellings not actually being an industry as such, and not employing anyone, the contribution to the economy is significant).

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[10] The Brisbane Urban Footprint covers the LGAs of Brisbane, Logan, Ipswich, Redland and Moreton Bay and parts of Beaudesert and Gold Coast

NIEIR also found that total manufacturing produces over $25 billion of output and contributes nearly 21 per cent of all output in the region. The largest manufacturing sectors are chemicals and petroleum with almost $7 billion in output, and food, beverages and tobacco with over $5 billion in output. The chemicals sector produces 5.5 per cent of the region's output with 0.9 per cent of the employment, and food produces 4.4 per cent of output with 2.8 per cent of employment.

There are several major economic, industry and business centres in Brisbane including industrial precincts in the Australian TradeCoast, Wacol and Acacia Ridge, various precincts in the CBD and fringe focused on retail, professional services, health, research and innovation, and major activity centres across the city. Brisbane City Council Business Survey has found that of 80,000 businesses surveyed in Brisbane:[11]:

- 90 per cent of businesses employ up to 20 people and account for 40% of total employment
- 41 per cent of businesses export overseas
- 40 per cent of businesses were unaffected by the Global Financial Crisis (GFC)
- 84 per cent of Brisbane businesses invested in innovation within the last three years. (Brisbane City Council, 2010)

In 2006-07, there were 103,599 businesses in Brisbane LGA, 25.6 per cent of all Queensland businesses. (Office of Economic and Statistical Research, 2010) Of these businesses, 98.7 per cent were small businesses (94.7 per cent), 4,644 were medium businesses and 855 were large businesses. Brisbane City Council contained 25.4 per cent of all small business in Queensland, 29.8 per cent of all medium businesses and 31.7 per cent of all large businesses. Of those businesses 42,909 had a turnover under $100,000 and 46,386 businesses had a turnover between $100,000 and $1 million. There were 14,304 businesses with a turnover of $1 million or more (13.8 per cent). Brisbane contained 24.2 percent of all businesses in Queensland with a turnover less than $100,000 and 31.8 per cent of all businesses with a turnover of $1 million or more. (Office of Economic and Statistical Research, 2010, p. 28)

The following graph illustrates the rates of employment in each of the major industry groups. The following industries are Brisbane's top five employing industries expressed as a percentage of employed persons:

- Health care and social assistance (11.39 per cent)
- Retail Trade (10.38 per cent)
- Professional, scientific and technical services (9.46 per cent)
- Education and training (9.02 per cent)
- Manufacturing (8.76 per cent)

The graph below also shows declining or static employment in several sectors including agriculture, forestry and fishing, wholesale trade and information media and telecommunications.

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[11] The ABS identifies 160,000 businesses operating in the Brisbane LGA.
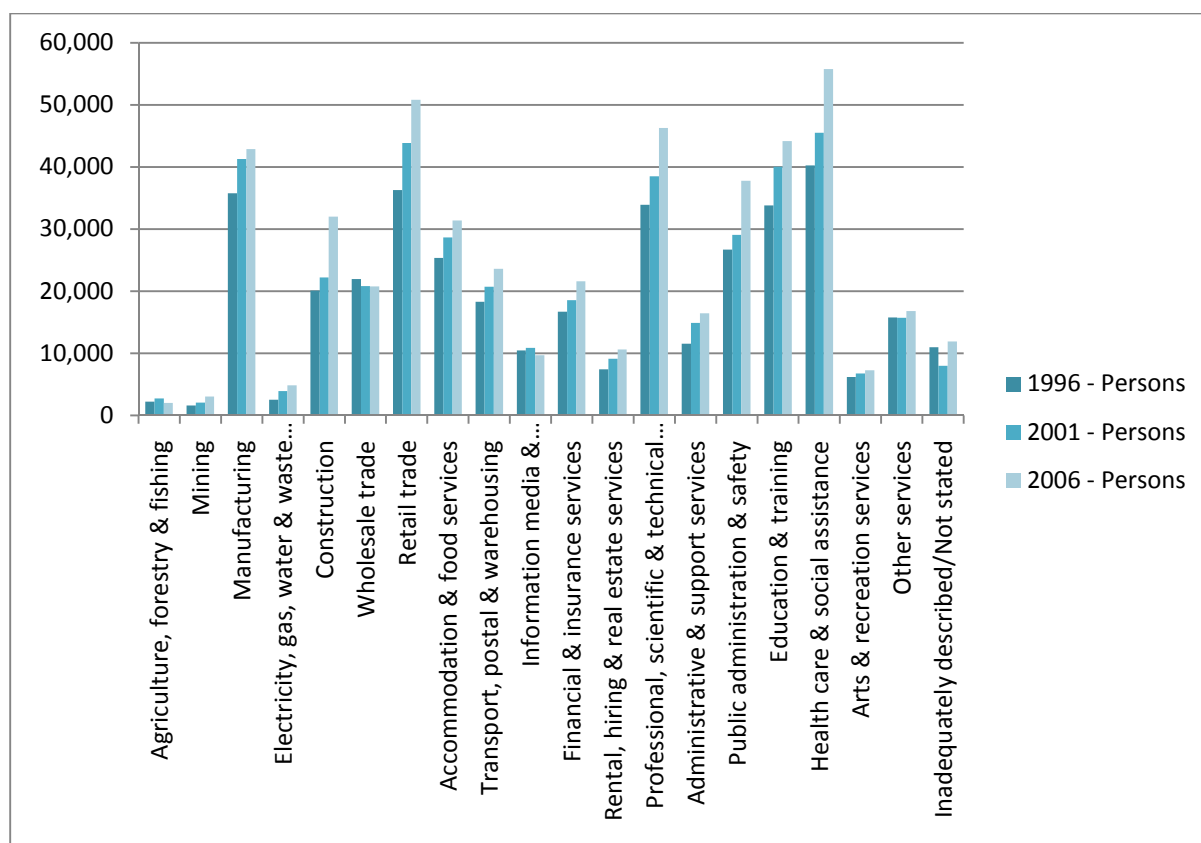
As part of the River City Blueprint investigation, it was found that there has been significant employment growth in Brisbane of 112,000 jobs, representing 60 per cent of jobs growth in the South East region. The Brisbane CBD represents a major employment activity centre for the region. (Brisbane City Council and Queensland Government, 2010, p. 53) It has also been found that much of the jobs growth is attributable to population serving industries such as retail and construction (due to population growth). Some of the key features of the CBD and surrounding inner city include:

- growth in advanced business services (technical and professional services provided to other business and high value industries, both of which are major exporters of service to other regions and other countries
- a range of precincts including educational, cultural, retail, health, legal and business/commercial services precincts
- activity node for regional and nationally prominent corporate HQs
- high concentration of financial and professional services
- Inner suburbs such as Milton, Toowong, South Brisbane and Fortitude Valley are emerging as commercial office markets including provision of spaces for smaller, creative and knowledge intensive businesses. They also serve as business incubators providing lower cost accommodation for emerging commercial enterprises.

Brisbane is demonstrating particular strengths in medical and life science research. The Queensland Institute for Medical Research, Institute for Molecular Biosciences and Queensland Brain Institute are making globally recognised contributions to science and knowledge. The Brisbane City Council *River City Blueprint Forum - Background Paper* acknowledges the changing structure of advanced economies to high value, knowledge intensive outputs created by a pool of highly skilled workers using advanced technologies:

This shift has changed the location factors for knowledge intensive businesses to seek highly connected locations which offer easy and cheap access to markets, particularly to global and regional markets. Access to a talented workforce, communications networks and efficient reliable transport are the major drivers sought by modern knowledge intensive businesses. The ability of cities and regions to attract businesses and investment, as well as the ability for local businesses to grow and develop, is linked to a wide variety of factors including infrastructure, opportunities for clustering and specialisation, and access to world leading research and technology. (Brisbane City Council and Queensland Government, 2010, p. 54)

A2.8.3 Exports

In Australia, knowledge intensive services exports are now the second largest exporting sector after coal. DEEDI reports that Brisbane's largest exports are education and tourism. (DEEDI, 2010, p. 31) Brisbane Marketing reports that international education earned $1.78 billion in 2008, making it Brisbane's highest earning export market with at least 75 per cent of international students in Queensland studying in Brisbane. The education market has increased by 99 percent and emerging growth markets are the Middle East and Latin America. (Brisbane Marketing)Tourism is also a significant market with Brisbane ranking third, after Sydney and Melbourne, in terms of visitor expenditure. In 2009, total visitor expenditure in Brisbane was $4,530 million (comprised of $3,189 million domestic visitor expenditure and $1,341 million international visitor expenditure) representing 6.11 per cent of the total national tourism expenditure. (Department of Resources, Energy and Tourism, 2010)

Almost all knowledge intensive exports are produced in urban areas. Brisbane is Queensland's largest exporter of knowledge intensive services and this includes professional services (architecture, finance, legal, engineering etc), education services, research, advanced manufactured products and health services. Brisbane's economy has also responded to a range of demand drivers including global affluence (resulting in more tourists), rising global demand for education services, the mining and resources boom and the rapid expansion of global economic networks and communications systems supporting the expansion of knowledge intensive exports. Main growth areas, as identified through the River City Blueprint study are:

- Growth to service a growing regional population – Brisbane's capital role offers opportunities for economic growth
- Growth to provide advanced services to the resource sector – a range of services located in the city support the resource sector, which is not located in the city
- Growth in the knowledge economy – Brisbane is competitive in the knowledge economy including research, science and innovation.

DEEDI has identified several priority sectors including Advanced Manufacturing which is projected to remain a major employer and exporter. This sector describes manufacturers and industry sector, such as aerospace, electronic equipment and light metals manufacturing, that uses cutting edge processes, innovation and technology to produce high-value adding products. Ongoing expansion of this sector is dependenton increased investment in Research and Development and supporting infrastructure, innovation through the introduction of new technologies and ongoing new product development, improving productivity, import replacement, addressing skill shortages and the regulatory environment.

Other priority sectors identified by DEEDI include Machine and Equipment Sector, Metal Products Sector, Environmental Technology and Services. The Environmental Technology and Services, while

fragmented and comprised of a large number of micro and small firms, features a broad range of capabilities, a diverse client base and export orientation.

There are a range of smaller scale export initiatives, such as creative industries, that may not readily appear in broad brushstroke profiles of export. For example, the State Government's Queensland Indigenous Art Marketing and Export Agency promotes Aboriginal and Torres Strait Islander art and cultural products internationally including contemporary urban art while DEEDI and Arts Queensland have also driven export initiatives in design, visual art, architecture, interactive media and gaming, music and literature.

The Port of Brisbane also handles a significant proportion of the state's overseas commodity exports and PIFU reports that the value of export goods from Port of Brisbane has risen from $5,262.2 million to $11.024.1 million between 1998-99 to 2008-09 and from Brisbane Airport had risen from $579.6 million to $1,174.8 million. In that decade the value of goods exports from Brisbane's port and airport had approximately doubled.

The value of overseas commodity exports to the economy in 2008-2009 is approximately $11,024.1 million as listed below:

Commodity	Value ($'000)
Food and Live Animals	5,037,493
Beverages and tobacco	28,337
Crude materials, inedible, except fossil fuels	1,238,743
Mineral fuels, lubricants, and related materials	1,117,906
Animal and vegetable, oils, fats and waxes	166,547
Chemicals and related products	346,298
Manufactured goods classified chiefly by materials	1,062,960
Machinery and transport equipment	1,183,573
Miscellaneous manufactured articles	141,836
Other commodities (not otherwise classified)	700,396

A2.8.4 Innovation

Innovation is integral in the development of a competitive economy and a recent study, *Brisbane: Innovation Scorecard 2010*, establishes that Brisbane businesses are investing in innovation and the Scorecard revealed that:

- Exporting firms are more likely to invest in innovation
- Firms apply many different forms of innovation to improve their business performance
- Finance is currently the largest obstacle to further innovation
- Smaller businesses take more risk in bringing entirely new ideas to new markets and industries.

Brisbane's innovation profile is emerging and increasingly recognised, with as yet untapped opportunities for export and commercialisation.

A2.8.5 Economic Forecasts

Forecasts for Brisbane Statistical Division indicate that employment is forecast to grow by 548,000 jobs between 2006 and 2026, from 931,000 jobs to 1,480,000 jobs. NIEIR research commissioned by

the Brisbane City Council indicates that employment in the Brisbane LGA will grow by 265,000 persons from 585,000 in 2004 to 850,000 in 2026. (Brisbane City Council, 2006) Forecasts for industry growth between 2006 and 2026 in terms of employment growth reveal changes in Brisbane's largest employing industries as the graph below illustrates with retail trade and property and business services ahead of health and community services. The largest growth industries will be retail, property and business services, health and community services, construction and transport and storage. The projections also estimate strong employment growth in construction and transport. Culture is also reflected in these projections with recreation services.
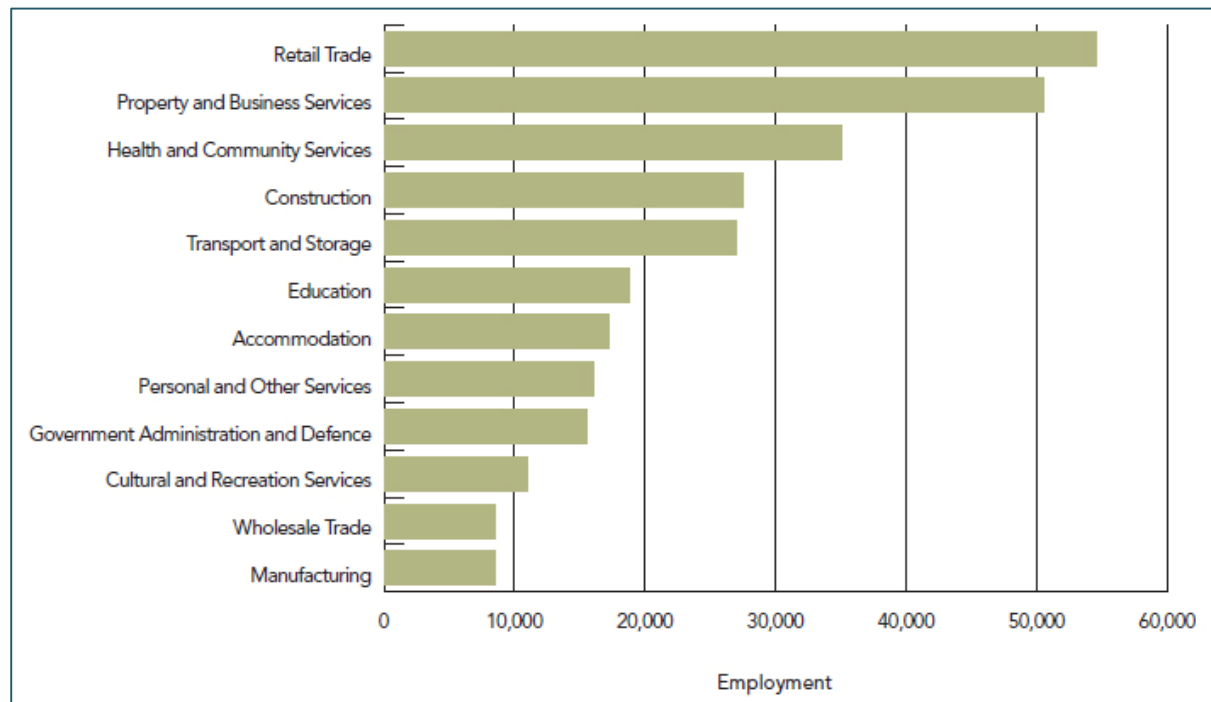
Source: NIEIR 2005 (cited in Brisbane Long Term Infrastructure Plan, 2007)

Employment growth in Brisbane is forecast to grow at a faster rate than population growth, while population growth in the SEQ Region will exceed regional employment growth. This means significant numbers of employees will be drawn from the greater region and there is a need to ensure that employees are able to travel to work within reasonable transport times.

Share of Population Growth, 2006 to 2026

Share of Employment Growth, 2006 to 2026
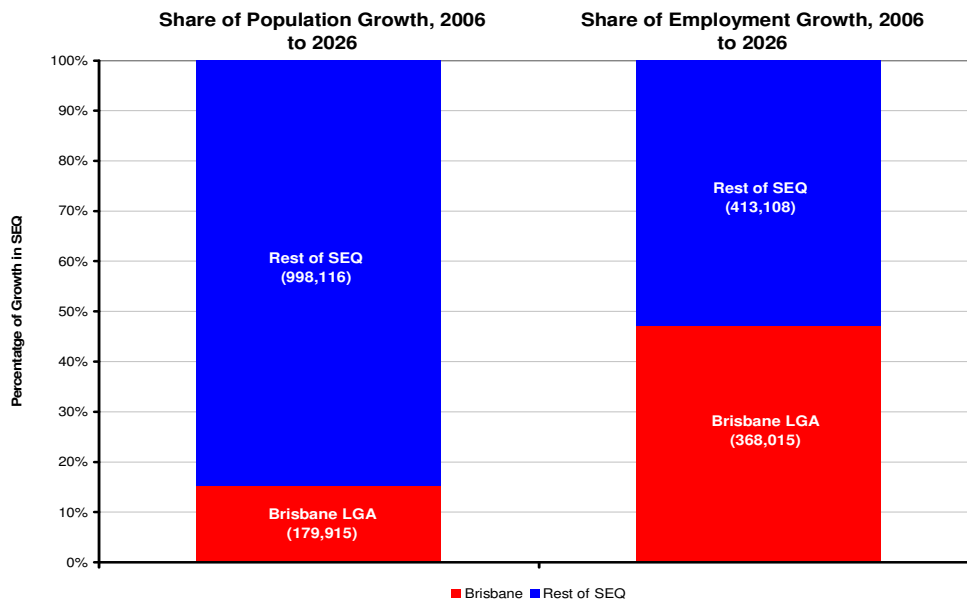
Source: supplied by Brisbane City Council

The Queensland Government has announced a decentralisation initiative within South East Queensland that is to be implemented in four stages between 2011 and 2017. The Government Office Accommodation Decentralisation Project will see over 5600 public servants moved out of the Brisbane city centre with opportunities to work closer to home. It is estimated the Government will save approximately $188 million in reduced government office leasing costs and will stimulate urban renewal and ease pressure on public transport networks to the city.

Economic activity within Brisbane is forecast to grow most in several key areas as illustrated in the map below, and it has been noted that the 80 per cent of the Brisbane LGA's growth in employment is projected to occur in approximately 20 per cent of the city's suburbs.
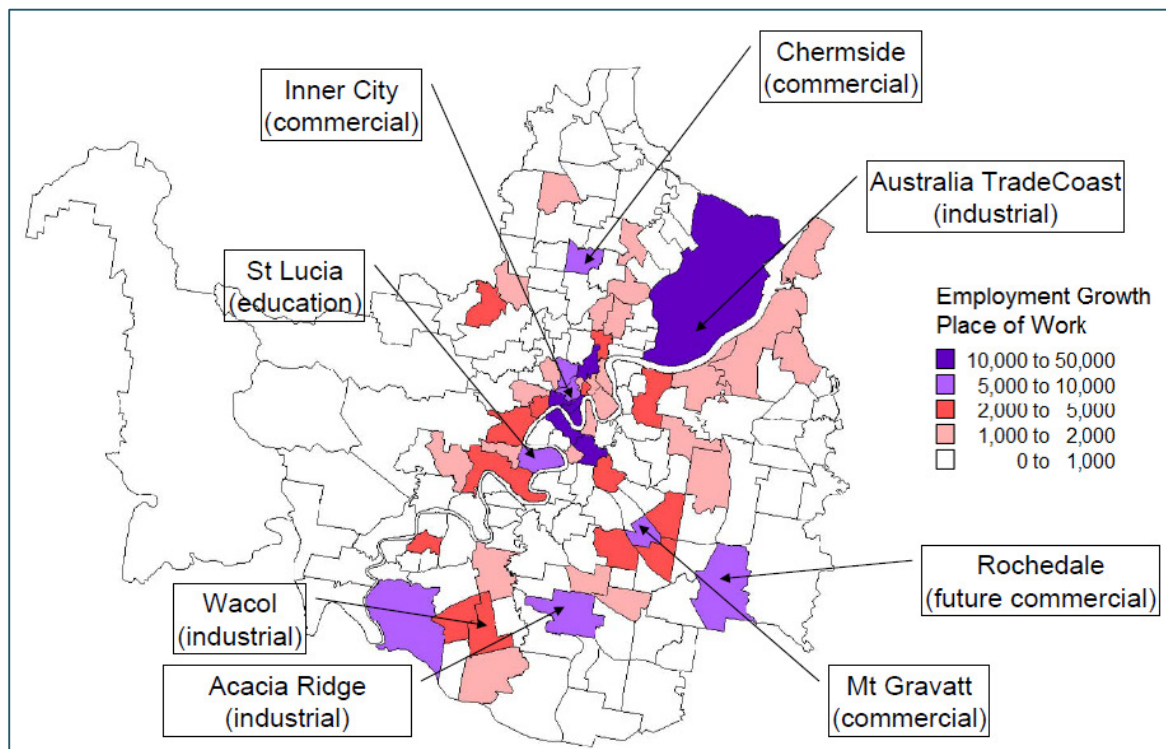
Source: NIEIR 2008 (information supplied by Brisbane City Council)

Over the next 25 years, the Brisbane CBD and Australia TradeCoast (ATC) will be primary employment and export growth locations. Both Brisbane Airport and Port of Brisbane serve as gateways for Brisbane's exporting industriess and contribute towards Australia TradeCoast. Major industrial areas such as Wacol and Acacia Ridge will also generate notable export activity as represented in the graph below.
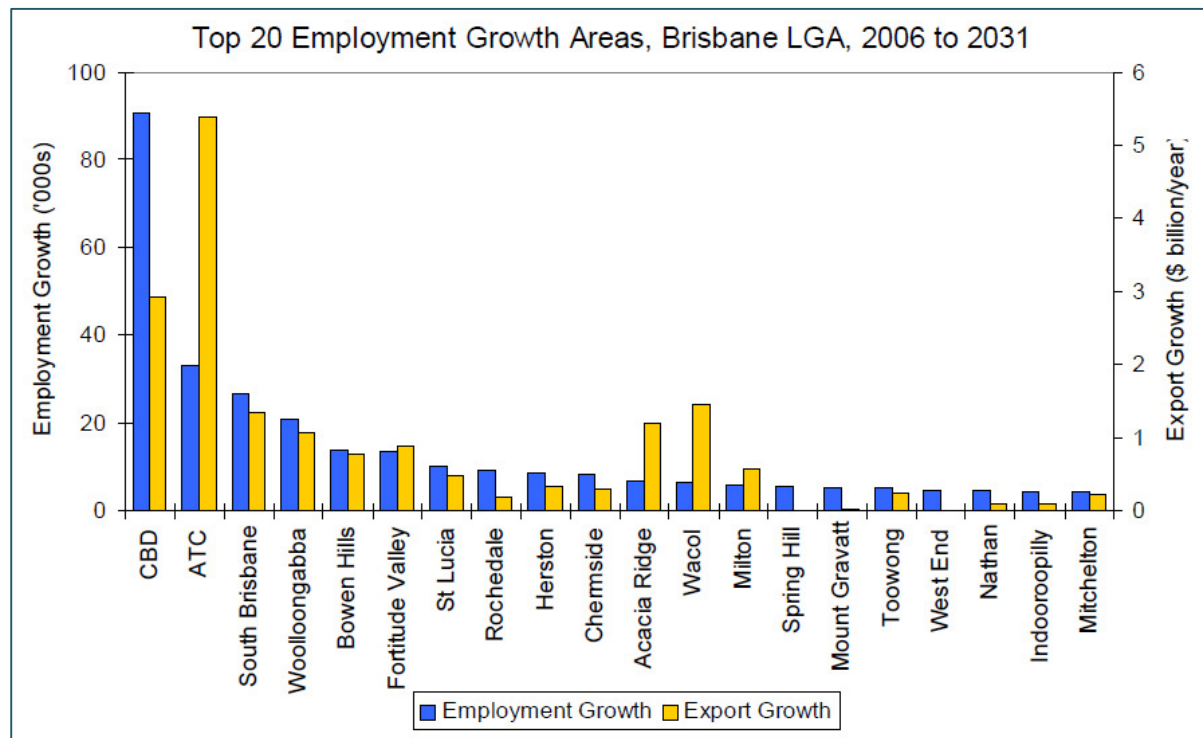
Source: Information supplied by Brisbane City Council

According to NIEIR, the growth in out-of-region exports is expected to change from $41 billion (in 2001 $ billion) in 2004 to $98 billion in 2026, a $57 billion increase or an average growth rate of 4 per cent per annum. Brisbane City Council is also supporting specific export initiatives for education and the film industry. The projections for export growth industries in the period 2004 to 2026 are provided in the following graph.
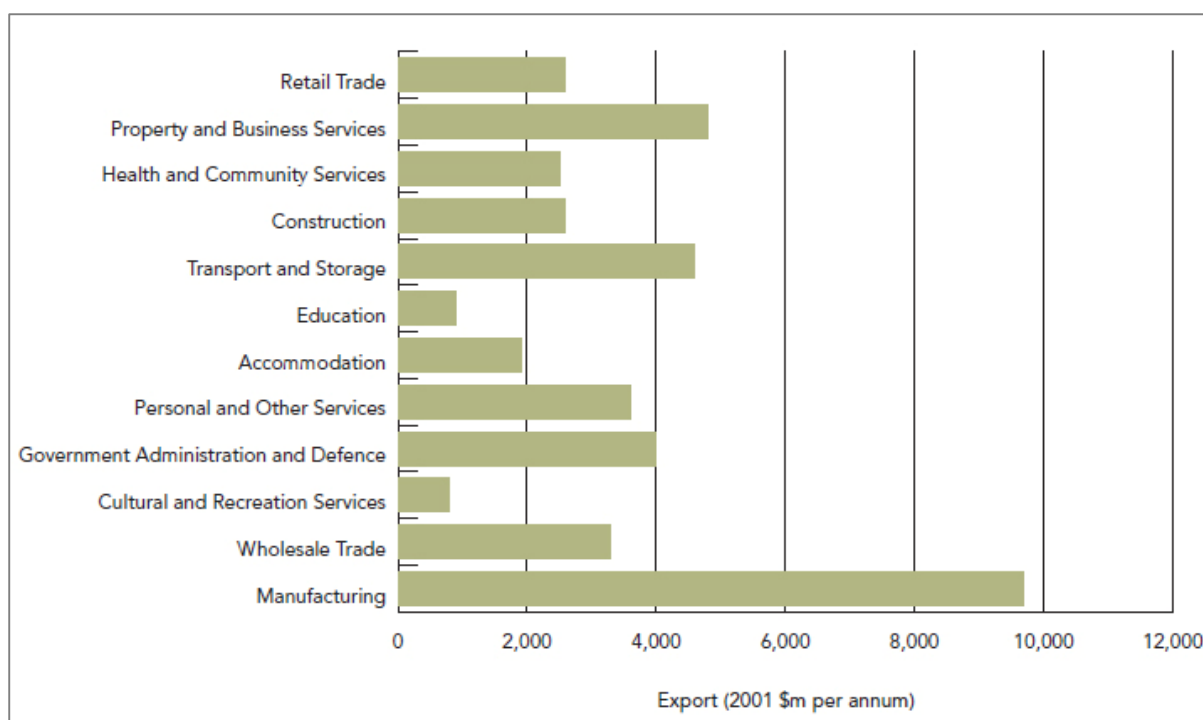
Source: NIEIR 2005 (cited in Brisbane Long Term Infrastructure Plan 2007)

A2.9 Educational Institutions

Brisbane's educational institutions include schools, TAFE and several university campuses.[12] These categories are detailed as follows. This information does not provide any assessment of these facilities and does not provide details about age or adequacy of the facilities. It is acknowledged that population growth may necessitate the provision of additional of educational facilities to meet desired standards of service.

Education is one Brisbane's major exports and several regional universities have established campuses in Brisbane, targeting international students, to capture greater market share. In 2010, Brisbane Marketing made a presentation to RDA Brisbane to highlight the importance of education as a major export and stressed the need for concerted effort in the areas of export development and social inclusion.[13] It was identified that Brisbane hosts 80,000 international students per annum and is responsible for 85 per cent of Queensland's international student enrolments which was worth $2.01 billion in 2009.

A2.9.1 State Schools

The number of state schools in Greater Brisbane (Education Queensland region) are detailed as follows:

Type	Number

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[12] This information does not include private educational and training facilities and other Registered Training Organisations. There are over 200 independent/non-government primary and secondary schools located in Brisbane.

[13] RDA Brisbane had identified international students as a possibly priority area and has been investigating possibilities for adding value in this issue. The presentation by Brisbane Marketing identified that the international students generally fell into two groups: ELICOS students studying at private language schools and those participating in further and higher education programs.

Primary Schools	150
Primary/Secondary Schools	8
Secondary Schools	39
Schools of Distance Education	1
Special Schools	15

A2.9.2 TAFE Queensland

TAFE Queensland provides vocational education and training, delivering educational products to approximately 230,000 students annually. TAFE Queensland courses are available through an extensive network of institutes via traditional (classroom), distance, online, workplace-based or a blended modes of delivery.

Brisbane's Regional TAFE Institutes are listed below:

Institute	Campuses
Brisbane North Institute of TAFE Incorporating TAFE Open learning	▪ Bracken Ridge ▪ Caboolture ▪ Gateway (Eagle Farm) ▪ Grovely, Ithaca (Red Hill) ▪ Redcliffe
Metropolitan South Institute of TAFE Incorporating non-trade from Logan, Moreton and Yeronga	▪ Alexandra Hills ▪ Annerley ▪ Beaudesert ▪ Browns Plains ▪ Loganlea ▪ Mr Gravatt ▪ Springwood
Southbank Institute of Technology	▪ Morningside ▪ South Brisbane
Skills Tech Australia Incorporating trade from Logan, Yeronga, Moreton and Brisbane North	▪ Acacia Ridge ▪ Eagle Farm ▪ Salisbury ▪ Yeronga ▪ Alexandra Hills ▪ Bracken Ridge ▪ Ithaca ▪ Logan ▪ Mr Gravatt ▪ South Brisbane
TAFE Open Learning (now part of Brisbane North institute of TAFE)	▪ Distance and correspondence programs offered statewide

A2.9.3 Universities

There are six universities operating in Brisbane and some of these occupy multiple campuses. Some of these campuses are integral or foundational in specific precincts and research centres. The universities reflect the changing landscape of education and research in the global economy.

University	Australian Catholic University

Campuses	Description
Banyo	The Australian Catholic University (ACU) is Australia's only public Catholic university with campuses in three states and the ACT. The university offers a range of programs in business, humanities, social science, health, education and theology. The University also promotes community engagement through its Institute for Advanced Community Engagement, promoting social inclusion and a 'better future'. Notes: ▪ The university is also acknowledged as a leader in programs targeting Indigenous business, health and education, with a high level of Indigenous participation both on campus and at distance.

University	**Central Queensland University**
Campuses	*Description*
Brisbane CBD	CQ University's Brisbane campus is housed in a, 26 floor, purpose built building with on-site student accommodation. The university offers four access programs, free bridging programs and a mix of classroom and workplace based learning. The university offers over 45 undergraduate and 40 postgraduate degree programs, including research opportunities, English Language Studies and Diploma Studies. The Brisbane campus is one of several International Campuses and teaching sites located in Sydney, Melbourne, Brisbane, the Gold Coast and Rockhampton. Notes: ▪ A major distance education provider

University	**Queensland University of Technology**
Campuses	*Description*
Gardens Point CBD Kelvin Grove Carseldine (disused since January 2009)	Queensland University of Technology (QUT) has an applied emphasis in courses and research. The University has 40,000 students, including 6,800 international students from around 90 countries. In 2008 and 2009 QUT won more awards for teaching excellence than any other Australian university at the Australian Learning and Teaching Council Awards, the nation's top teaching benchmark. QUT ranked 195 in the World University Rankings in 2007; the rankings were released by The Times Higher Education Supplement. QUT is also ranked 10 in the Australian Universities National Ranking in 2007. This was compiled by the Melbourne Institute which is an applied economic and social research centre under the University of Melbourne. QIT began as Central Technical College. The CTC was established in 1908 at Gardens Point. Its name was changed to QIT in 1965. Notes: ▪ Cultural Precinct at Gardens Point ▪ Creative Industries Precinct at Kelvin Grove ▪ Plans to build a $200 million science and technology precinct on its Garden Point Campus in Brisbane's CBD ▪ Institute of Health and Biomedical Innovation, Kelvin Grove ▪ QUT's Information Security Institute (ISI) is one of the major education institutes majoring in the research of security. ▪ The Institute for Creative Industries and Innovation is a multidisciplinary

	research centre

University	**James Cook University Brisbane**
Campuses	*Description*
Brisbane	James Cook University (JCU) is the second oldest university in Queensland. Offering teaching and research, JCU is a vibrant, multi-campus university with its main sites in the tropical Queensland cities of Townsville and Cairns, and modern city campuses in Singapore and Brisbane. The Brisbane campus is focused on business studies at undergraduate, diploma and postgraduate levels. The Brisbane campus is located in the CBD. Notes: ▪ A major distance education provider

University	**Griffith University**
Campuses	*Description*

Nathan
South Brisbane
	Griffith University has five campuses in the Gold Coast and Brisbane regions. Current total enrolment is approximately 38,000 with 3500 full-time equivalent staff. Griffith University offers undergraduate and postgraduate degrees across a number of disciplines including Arts, Health, Business, Music and Law. In Australian University Rankings it consistently ranks in and around the top 20 in the country. The university was formally founded in 1971 and opened its doors in 1975.
	
	Notes:
	▪ Queensland College of Art and Queensland Conservatorium of Music located at South Brisbane
	▪ Externally supported research centres include
	   o ARC Centre of Excellence in Policing and Security
	   o National Centre for Adult Stem Cell Research
	   o National Climate Change Adaptation Research Facility
	   o Smart Water Research Centre
	▪ Research strengths in science and technology, including environmental science

University	**University of Queensland**
Campuses	*Description*
St Lucia Facilities located at Turbot Street (CBD), UQ Regiment Indooroopilly, Herston, Pinjarra Hills	The University of Queensland was founded in 1909 and is the oldest university in Queensland and the fifth in the nation. The main campus is located in St Lucia. UQ is a member of the Australia's Group of Eight lobby group, and the Universitas 21, an international network of research-intensive universities. UQ is ranked among the top universities, both in Australia and the world. Notes ▪ In 2009, the Australian Cancer Research Foundation reported that UQ have taken the lead in numerous areas of cancer research, having awarded almost $10 million in grants over a three year period. ▪ Six major research institutes - Institute for Molecular Bioscience, The Diamantina Institute for Cancer, Immunology and Metabolic Medicine,

	Australian Institute for Bioengineering and Nanotechnology, Institute for Social Science Research, Sustainable Mineral Institute and the Queensland Brain Institute.
	▪ The Queensland Bioscience Precinct on the St Lucia campus houses scientists from the Commonwealth Scientific and Industrial Research Organisation (CSIRO), the Institute for Molecular Bioscience, the Australian Institute for Bioengineering and Nanotechnology and the Queensland Brain Institute to form one of the largest biomedical research clusters in Australia
	▪ Other notable institutes and facilities include the Queensland Institute of Medical Research (QIMR), including Clive Berghofer Cancer Research Centre, Co-operative Research Centre for Enterprise Distributed Systems Technology and NICTA – National Information and Communication Technology Research Centre, co-supported by University of Queensland.

A2.9.4 Other Innovation, Science and Technology Precincts

The State and Federal Governments together with the education sector, industry and other sectoral interests has also made a range of strategic investments in knowledge precincts. This has resulted in research centres, institutes and precincts. Examples include Brisbane Technology Park at Eight Mile Plains, Queensland Biosciences Precinct at St Lucia and the Creative Industries Precinct at Kelvin Grove. Work is underway for the Ecosciences Precinct at Boggo Road and the Health and Food Sciences Precinct at Coopers Plains. The Queensland Government is also planning a number of Smart Communities that will integrate research activities with business, residential and lifestyle centres. Notable among those initiatives is the Brisbane Knowledge Corridor, a four-kilometre spine of tertiary education campuses, health and medical centres, research precincts and cultural and creative facilities transecting the city centre. Such initiatives strengthen Brisbane's innovation, science and technology profile and capacity, are attractive to workforce and also enhancing clustering. Productive precincts, including education, science, technology and innovation precincts, is also a key platform of BCC's Economic Development Plan 2006 – 2011.

A2.10 Infrastructure

Both the Brisbane City Council and State Government have undertaken infrastructure planning for the LGA and SEQ region. Supporting the SEQRP, the State Government's SEQ Infrastructure Plan and Program (SEQIPP) sets out major infrastructure priorities for the region. Without appropriate investment in infrastructure the social, environmental and economic stability and security of the region may be at risk and this has been identified as a challenge for the region. Over the past decade, economic demand placed on the city's assets has outpaced the provision of additional infrastructure. Continued expansion of the city's economy and future contribution to regional and national economic growth is at risk.

In a submission to Infrastructure Australia, Brisbane City Council proposes that infrastructure investment is required to underpin the city's industrial economy strategy. Additional modelling undertaken by NIEIR indicates infrastructure investments will increase employment by an additional 27,400 jobs. At constant productivity, this additional employment would increase Brisbane's GRP by 2026 by an additional $4.4B per year, and South-East Queensland's GRP by an additional $5.9 billion. The submission identifies that the connectivity between Australia TradeCoast (ATC), the Brisbane CBD and the South Western Industrial Region (Wacol, Richlands and the Western Corridor) are

integral to the future growth of the city economy. Brisbane's port and airport are located in the Australia TradeCoast area at the mouth of the Brisbane River.

This section of the Regional Roadmap does not endeavour to assess need, itemise or audit the city's infrastructure, but rather draws on the major infrastructure planning instruments that identify current and future infrastructure need to establish the strategic priorities for infrastructure development. The infrastructure programs of State and Local Governments are vast. Both the SEQIPP/SEQRP and Brisbane Long Term Infrastructure Plan (BLTIP), which is currently under review, identify a range of infrastructure planning principles, objectives and projects. In many instances, these projects involve multiple levels of government as well as private-public partnerships – there are challenges in the financing and governance of infrastructure. In planning for population growth, infrastructure provision is both a response to overall growth as well as to the distribution of this growth.

As a growing capital city that is a driver of the state's economy and growth, Brisbane has significant needs for infrastructure. A major objective of the SEQIPP is to contain population growth within the urban footprint to ensure the most efficient use of land, infrastructure and services. This also protects environmentally significant areas and curtails sprawl. In 2009, the SEQIPP reported that of the 378 projects planned for the SEQ region, 118 were yet to commence, 91 were in progress or underway, 82 were under construction and 87 were complete. To date, the government has invested $16.4 billion in the program - completing around 87 projects, including the Tugun Bypass, Queensland Tennis Centre, components of the SEQ Water Grid, Inner Northern Bus way, 27 new 3-car trains and 63 kilometres of new track. Additionally, around 173 projects are currently underway including work on the Gateway Upgrade Project, Airport Link, sections of South East Queensland's bus ways, multiple rail upgrades and line extensions, Queensland Children's Hospital and Princess Alexandra Hospital emergency department.

The SEQIPP targets the following infrastructure areas to meet its strategic goals. The plan also includes significant detail about specific projects and initiatives and these are not itemised here:

Transport

- Providing quality public transport infrastructure and services to link activity centres with the CBD
- Building and maintaining a high-standard orbital motorway system
- Managing congestion and travel demand
- Development of the Principal Cycle Network
- Increasing road capacity to cater for growth

Activity centre renewal and transit oriented development

- The Queensland Government is working with developers, local government and the Urban Land Development Authority to pave the way for transit oriented communities in a range of locations, including Albion, Bowen Hills, Buranda, Fitzgibbon, Southbank, Milton, Hamilton Northshore, Woolloongabba, Gold Coast University Hospital and sites along the proposed Eastern and Northern Busways and Gold Coast Rapid Transit corridor.
- Funds have been allocated to build a pedestrian bridge to Albion rail station as part of that precinct's redevelopment. Detailed design plans are under preparation.
- T he Queensland Government is working in cooperation with local government to plan for regional activity centres based on transit oriented development principles at a range of locations throughout South East Queensland, including Coomera, Chermside, Caboolture, Maroochydore and Ipswich.

- Construction is underway on the Boggo Road Urban Village, which is a transit oriented community.

Industry development

- Brisbane Convention and Exhibition Centre expansion
  Designed to meet increasing international and national demand for convention facilities. The expansion design incorporates five levels of boutique convention and event space, including two new auditoriums. An additional 23 000 square metres of space will allow capacity comparable to the new Melbourne Convention Centre.
- Land for industry
  A range of initiatives to ensure sufficient supply of suitably located and serviced industrial land and supporting infrastructure including:
  o Industrial land supply and demand analysis
  o Specific industry sector studies and projects including aviation and marine
  o Planning and design of infrastructure corridors and facilities to support economic growth and regional connectivity
  o Site identification and land use planning of employment-generating projects such as the Amberley Aerospace Park and Special Industry Estates Study
- Science precincts including Ecosciences Precinct, Health and Food Sciences Precinct and Pharmacy Australia Centre of Excellence

Information and communication technology

- Assisting the ICT industry to grow by helping with product development, productivity improvement and technology diffusion
- Managing, coordinating and promoting state-based Commonwealth programs by facilitating and partnering with economic development organisations, local government and community groups
- Coordinating state telecommunications activity through the Queensland Telecommunications Steering Committee, with a strong focus on broadband infrastructure and applications to ensure that Queensland benefits from emerging federal initiatives
- Defining the key strategies and actions for government in telecommunications infrastructure and services through the Queensland Telecommunications Strategic Framework 2009–12
- Providing recommendations to government on the delivery of the government's economic agenda over the next five years through the Smart State Council. The council has highlighted the critical role of broadband and ICT as fundamental enablers of economic growth
- Rationalising government networks and internet services through CITEC
- Collaboration with Federal Government on major infrastructure and policy initiatives

Water

Projects include the establishment of the South East Queensland Water Grid, an extensive pipeline network, new dams, reactivating old damns, desalination and other recycled water projects to pursue the following priorities:

- Increasing the supply of water to accommodate growth in the region
- Diversifying water supplies to address climate variability, climate change and other supply risks
- Ensuring more efficient management and use of water
- Providing policy frameworks and subsidies to support more sustainable and integrated water-cycle management systems

- Ensuring institutional arrangements provide efficient, sustainable and equitable delivery of bulk water supply and treatment services.

Energy

- A range of power supply projects including new distribution and transmission networks, renewable and alternative energy, managing greenhouse emissions, promotion of energy efficiency, new substations and improving supply and gas initiatives.

Health, Primary and secondary education, Vocational education and training, Community services, Justice services, Infrastructure for rural development and Regional sport and recreation

The initiatives in this section of the SEQIPP include:

Health	• Hospital upgrades at Prince Charles Hospital; Queensland Children's Hospital; Browns Plains Health Precinct and Princess Alexandra Hospital
Education	• Early Childhood – kindergarten program; early years centres; early childhood education and care services • Primary and Secondary – Population growth may trigger the need for more schools with several planned in the SEQ Region • Vocational Education and Training – SkillsTech Australia facility at Acacia Ridge; South Bank Institute of TAFE redevelopment and renewal
Community Services	• Police – new, upgraded and replacement police stations; new police beats • Emergency Services – Kedron Park facility upgraded as a state of the art facility • Justice Services – new Brisbane Supreme Court and District Court to consolidate an inner city legal precinct • Social Housing – 4000 new properties in SEQ between 2009 and 2012
Sport and Recreation	• Working with local government to develop sport and recreation facilities including Queensland Tennis Centre, Aquatic Centres at schools and new tennis courts; Horse riding trails

Brisbane City Council is presently reviewing the Brisbane Long Term Infrastructure Plan that will detail infrastructure priorities beyond the Priority Infrastructure Plan (as a mechanism for infrastructure charging including community infrastructure) and in consideration of the SEQIPP. The current Brisbane Long Term Infrastructure Plan was released in 2007 in response to the SEQRP 2005. Issues identified in the plan include congestion, traffic delays, freight constraints, parking issues and catering for walking and cycling. Anecdotal reports indicate that many of these issues remain current while infrastructure projects are rolled out. The projects identified in the BLTIP reflect the SEQIPP. BCC's Economic Development Plan 2006 – 2011 reinforces the message of maintaining and developing infrastructure to support economic growth and to secure the city's competitiveness. Infrastructure is one of the central platforms of the plan which states that a backlog of infrastructure projects is inhibiting economic development in Australia TradeCoast and other areas. The plan stresses the need for innovative and collaborative arrangements in the realisation of major infrastructure projects.

There are also issues in Brisbane associated with rail level crossings and an RACQ red spot survey identified the following as the more reported crossings were:

- Newman Road near Robinson Road East/West, Geebung
- Boundary Road near Orange Grove Road, Coopers Plains

- Telegraph Road near Lacey Road, Bald Hills
- Cavendish Road near Temple Street/Clarence Street, Coorparoo
- Warrigal Road near Beenleigh Road, Runcorn

The Brisbane City Council is seeking to address these crossings in partnership with the State Government.

High speed broadband also remains a major priority that is integral to regional development. Both State Government and Council infrastructure plans stress the importance of high speed broadband. Brisbane City Council recently announced an initiative to expedite the installation of broadband. The city is investigating the use the network of sewer pipes to carry the fibre optic cable.

A2.10.1   Social Infrastructure

The BLTIP and the SEQRP also provides further comment on social infrastructure which is a necessary catalyst for social capital, liveability and social inclusion. *Implementation Guideline No. 5— Social Infrastructure Planning* guides and supports planning for social infrastructure in accordance with SEQ Regional Plan policies in relation to social inclusion and social disadvantage. These Guidelines are intended to provide agencies with non-statutory planning guidelines and define social infrastructure as:

> *community facilities, services and networks which help individuals, families, groups and communities meet their social needs, maximise their potential for development, and enhance community wellbeing.*

They include:

- *universal facilities* and services such as education, training, health, open space, recreation and sport, safety and emergency services, religious, arts and cultural facilities, and community meeting places
- *lifecycle-targeted facilities and services*, such as those for children, young people and older people
- *targeted facilities and services for groups with special needs*, such as families, people with a disability and Indigenous and culturally diverse people. (Queensland Government 2005)

The Queensland State Government Social Infrastructure Standards use a population trigger to provide an indicator of provision rates. Planning for social infrastructure also requires an assessment of needs and lifestyle factors and the particular role of location. In general, lower densities warrant lower rates of provision. However, as the information in this document demonstrates, many low density areas are low income areas; some of these areas are experiencing marked disadvantage (SEIFA).[14]

The Guideline does not address affordable housing but acknowledges that this is an important component of social infrastructure and social equity. The Urban Land Development Authority has

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[14] In the USA, the Brooking Institute has found that low income and poor people are relocating to outer suburbs for reasons of affordability, gentrification and the like. This is creating concentrations of poverty in sprawling outer zones with few social services, social networks and little social capital. (see Kneebone & Garr, 2010) A higher proportion of people in the lowest socio-economic groups live in areas characterised by poor urban design, inadequate infrastructure and facilities, and lack of healthy, affordable food options. (see Giles-Corti & Donovan 2002) This could mean that the geography of poverty in SEQ is moving into the LGAs flanking Brisbane given the trends of increasing incomes and inward migration.

been established to make land available for affordable housing as part of the State Government's Affordable Housing Strategy, with initiatives in three areas in Brisbane: Northshore Hamilton, Fitzgibbon, Woolloongabba and Bowen Hills.

BCC has undertaken a comprehensive audit of social infrastructure in Brisbane LGA and this identifies priority areas, staging and strategies for implementation. In scoping community facilities in Brisbane, the *Community Facility Network Plan* 2008 – 2009 (draft, 2009) acknowledges that community needs and funding capacities are changing and that approaches to service delivery are increasing in diversity with more possible partnership opportunities. The purpose of the Community Facility Network Plan is to secure efficient provision and management of facilities or participation in the process of delivery and management of different facilities. This planning has been used to inform the Infrastructure Charges Plan for Community Purposes Infrastructure in Brisbane City Council Infill Areas and the Priority Infrastructure Plan (due for completion in 2011). The desired outcome is "a well linked and readily accessible network of high quality, flexible and well-utilised community facilities that provides opportunities for a diverse range of community activities, fosters broad inclusion in community development and enhances the overall health and wellbeing of the Brisbane community" (Brabon 2010). The Community Facility Network Plan cites a ROSS Planning study that provided a comparison of community facilities across the city and identified current provision to be inequitable, with much lower levels of facility provision in the outer rings of the city including the outer north and outer south, outer south-west and outer south-east. The Community Facility Network Plan endeavours to address these shortfalls.

While the BLTIP acknowledges studies that cite perceived gaps in provision, it asserts a need for more accurate needs assessments in the development of strategic plans for the range of community facility types. The BLTIP notes the provisions of 32 fixed location libraries across the cities which can act as anchors for community hubs. It also acknowledges the provision of 110 facilities as well as 686 halls and clubhouses. According to the plan, Council recognises that the need to generate more opportunities for performing arts activities in outer suburban areas. The BCC is also developing a Social Economy project through which to realise the improvement and renewal of old community facilities through a range of social enterprise and community capacity building methods. Brisbane also provides world city level social and cultural infrastructure including South Bank, Queensland Cultural Centre and GOMA as well as a range Roma Street Parklands, the Botanic Gardens and a range of other facilities.

As part of the review of City Plan 2000, it is proposed that future social infrastructure needs of communities such as community halls, libraries and education facilities will be reflected in the updated infrastructure plans. These social infrastructure plans will respond to Council's updated Desired Standards of Service for community infrastructure. This work will not only investigate the type of infrastructure required, but also where infrastructure should be located (e.g. close to high-quality public transport). (Brisbane City Council, 2009, p. 18)

The River City Blueprint consultation process (Brisbane City Council and Queensland Government, 2010) also found that non-profit organisations own property assets that can present opportunities for partnerships for development projects to meet social outcomes and strengthen the economic base of the non-profit sector. Because non-profit organisation experience difficulties in raising capital for investment in property and community asset development, there is untapped potential in this area to expand social infrastructure and community hubs.

Green space is a priority for the Brisbane City Council and State Government with the Premier Anna Bligh announcing a green space strategy, and use of schools and educational facilities to realise the Q2 target of increased green space. The BLTIP proposes an increase of 13 per cent of park through

Chargeable Park Acquisition (through infrastructure charging). This would mean an additional 554.3 hectares. Other than promoting recreational activity, green space enhances the city's sub-tropical image, lifestyle, biodiversity and mitigates climate change and thermal mass issues. Green space provision does not include initiatives in green walls, green roofs, community gardens and similar initiatives that are integrated into the built environment and architectural forms.

A2.10.2   Tourism

The *Brisbane City & Hinterland Regional Tourism Investment and Infrastructure Plan 2008 – 2018* recommends 80 investment opportunities including 10 catalyst projects to enhance Brisbane's standing as a world city and tourist destination. This report also stresses the need for enhanced infrastructure, particularly transport, connectivity, sustainable water supply and telecommunications. The catalyst projects identified in this plan are:

1. Internationally significant Indigenous themed visitor attraction on South Bank
2. Moreton Bay marine focussed aquarium and marine discovery centre attraction on a centrally located river frontage site
3. Story of Brisbane high tech interpretation centre on Mt Coot-tha and viewing platform of Greater Brisbane and Scenic Rim
4. Two new/redeveloped river piers for river boat and island boat services (one at Eagle Street and one potentially at North Shore)
5. Consideration of a purpose built Cruise Terminal to supplement existing facilities and developed on the seaward side of the Gateway Bridge to accommodate the new generation of cruise ships;
6. Two major international brand 5-6 star hotels to be built at Victoria Park and a downtown CBD location such as Howard Smith Wharves, Kurilpa Point or Newstead River Park, offering over 600 new rooms
7. Ipswich to build on the heritage railway theme (create a tourism precinct with conference and accommodation facilities) as the Railway Workshop Museum is a large, high quality facility. Using the existing railway workshop attraction as an anchor for a wider tourism precinct retrofitting existing buildings (if private sector investment allowed) and then link via cycle ways, path ways and possibly tram-light rail to the CBD i.e. Transport attraction excitement.
8. Developing a major walk of international significance with associated huts and high quality lodge accommodation infrastructure in the Scenic Rim
9. Development of a major ferry terminal at or near the mouth of the Brisbane River for faster and more effective linkage between Brisbane CBD and Moreton Bay and Islands
10. Creation of an eco-resort on Moreton Island.

Brisbane's infrastructure requirements are significant at all scales of community and economic life. There are concerted attempts at all levels of government to ensure that the city is able to bring the infrastructure needed for a socially inclusive, economically competitive and environmentally sustainable and liveable capital city that provides opportunities for its citizens and visitors alike.

Appendix 3
Shaping Tomorrow's Queensland

The State Government's *Shaping Tomorrow's Queensland* Strategy is extensive. The following action areas have been specifically identified as having particular resonance for Brisbane in relation to the RDA's key outcome areas as well as potentially providing linkage to the Federal Government's population policy and local government initiatives. The *Shaping Tomorrow's Queensland* Strategy presents a whole of government opportunity through which the RDA can realise positive outcomes for Brisbane.

Theme	State Government Proposed Action	RDA Involvement in relation to outcome area/s
Shaping The Future	Investigate a new Liveability Grants Program to support new initiatives that engage local neighbourhoods in planning for the future	- Consultation and Engagement with the Community - Community and Economic Development
	Develop a community engagement strategy for growth management	- Consultation and Engagement with the Community - Whole-of-Government Activities *Note: Consultation outcomes shared across and informing all levels of government*
Strengthening our regions	Partner with the Australian Government to develop a *Queensland Migration Plan,* which will inform the *Queensland Regionalisation Strategy*, to attract skilled migrants to meet employment needs in specialised fields and in desired locations	- Consultation and Engagement with the Community - Whole-of-Government Activities - Community and Economic Development *Note: ensure that Brisbane remains competitive and is not disadvantaged in attracting skilled migrants*
	Work with the Australian Government to develop a *National Population Strategy* (that is then reflected in a state policy)	- Consultation and Engagement with the Community - Informed Regional Planning - Whole-of-Government Activities
Promoting liveable and affordable communities	Release Transit Oriented Development Guidelines that identify best practice in delivery of compact communities by September 2010, supported by training and workshops to build capacity around transit oriented development delivery	- Consultation and Engagement with the Community - Whole-of-Government Activities - Promotion of Government Programs - Community and Economic Development
	Provide leadership in urban design through exemplar developments,	Consultation and Engagement with the Community

	the Design Triennial, and the preparation of a guideline for government buildings, precincts and infrastructure	
	Encourage best practice in urban design through research, funding and programs aimed at increasing urban design skills	▪ Consultation and Engagement with the Community
Delivering infrastructure	Work more closely with local governments in sequencing infrastructure projects to take into account local infrastructure investment	▪ Consultation and Engagement with the Community ▪ Whole-of-Government Activities ▪ Promotion of Government Programs ▪ Community and Economic Development
	Investigate options (such as tolling policies) to fund infrastructure in greenfield sites which rely on high levels of state investment	▪ Consultation and Engagement with the Community ▪ Informed Regional Planning
	Examine alternative mechanisms for the financing of state infrastructure	▪ Consultation and Engagement with the Community ▪ Informed Regional Planning ▪ Whole of Government Activities
Protecting our lifestyle and environment	Release a *Queensland Integrated Waterway Monitoring Framework* which will improve waterway monitoring and contribute to enhanced land and water management	▪ Consultation and Engagement with the Community ▪ Informed Regional Planning ▪ Whole-of-Government Activities
	Investigate a 'Most Sustainable Suburb' initiative using social media to foster more sustainable living	▪ Consultation and Engagement with the Community ▪ Community and Economic Development
	Release the *Valuing the things we waste: Queensland's Waste Avoidance and Resource Efficiency Strategy* to reform current waste management practices	▪ Consultation and Engagement with the Community ▪ Whole-of-Government Activities ▪ Promotion of Government Programs
Connecting communities	Finalise and release the draft *ConnectingSEQ* to provide the blueprint for future transport needs, help tackle congestion and progress the vision of '15 minute neighbourhoods'	▪ Consultation and Engagement with the Community ▪ Informed Regional Planning ▪ Whole-of-Government Activities ▪ Promotion of Government Programs
	Encourage local government to provide funding for expanded public transport services and infrastructure	▪ Consultation and Engagement with the Community ▪ Whole-of-Government Activities
	Explore opportunities to rollout wireless internet connection to major public spaces and major public transport stations	▪ Consultation and Engagement with the Community ▪ Whole-of-Government Activities ▪ Promotion of Government

| | | Programs |
| | | ▪ Community and Economic Development |

Appendix 4
Policy Review

In developing the Regional Roadmap, the following documents were reviewed to establish current government priorities at all levels.

Federal Government	Federal Government Policy Priorities ▪ Major Cities ▪ Social Inclusion Intergenerational Report - *Australia to 2050: future challenges* COAG Reform Agenda
State Government	Toward Q2 SEQ Regional Plan 2009 – 2031 (SEQRP) SEQ Infrastructure Plan and Program (SEQIPP) Shaping Tomorrow's Queensland: Population Growth Management Departmental priorities as articulated in Strategic Plans and other corporate documents
Brisbane City Council	Living in Brisbane 2026 BCC Corporate Plan BCC Economic Development Plan 2006 - 2011 City Plan 2000 Brisbane Long Term Infrastructure Plan Draft CityShape Implementation Strategy River City Blueprint (draft documents only)

A4.1 Australian Federal Government

Australian Government's Strategic Priorities (as stated on the Prime Minister's website and communicated to the RDA)	▪ *Building a stronger Australia*
	  o Economic reform
	▪ *Building a fairer Australia*
	  o Workplace relations, disadvantage, social inclusion
	▪ *Preparing for future challenges*
	  o Education, infrastructure and innovation, health and hospital reform, climate change and water
	  o A new way of governing

Social Inclusion Agenda	The Australian Government's vision of *a socially inclusive society is one in which all Australians feel valued and have the opportunity to participate fully in the life of our society*. Achieving this vision means that all Australians will have the resources, opportunities and capability to: ▪ Learn by participating in education and training ▪ Work by participating in employment, in voluntary work and in family and caring ▪ Engage by connecting with people and using their local community's resources and ▪ Have a voice so that they can influence decisions that affect them.

The Australian Government has adopted a set of principles developed by the Australian Social Inclusion Board to guide the Social Inclusion Agenda. These principles include a set of aspirations - what we want to achieve - and approaches to help us get there.

Aspirations
- reducing disadvantage
- increasing social, civic and economic participation
- developing a greater voice, combined with greater responsibility

Approaches
- building on individual and community strengths
- building partnerships with key stakeholders
- developing tailored services
- giving high priority to early intervention and prevention
- building joined-up services and whole of government(s) solutions
- using evidence and integrated data to inform policy
- using locational approaches
- planning for sustainability

Priorities
Australians generally have a good standard of living compared to other countries. But there are still about five per cent of those aged 15 years and older who experience multiple disadvantages which are likely to affect their ability to learn, work, engage and have a voice. Disadvantage and social exclusion tends to be higher amongst certain groups of people and the Australian Government has identified priorities in which to start the work of addressing social exclusion and increasing social inclusion:

- Supporting children at greatest risk of long term disadvantage by providing health, education and family relationships services
- Helping jobless families with children by helping the unemployed into sustainable employment and their children into a good start in life
- Focusing on the locations of greatest disadvantage by tailoring place-based approaches in partnership with the community
- Assisting in the employment of people with disability or mental illness by creating employment opportunities and building community support
- Addressing the incidence of homelessness by providing more housing and support services
- Closing the gap for Indigenous Australians with respect to life expectancy, child mortality, access to early childhood education, educational achievement and employment outcomes.

In developing programs for increasing participation by the above priority groups, the Government is also committed to helping vulnerable new arrivals and refugees.

Programs
The Australian Social Inclusion Agenda is being pursued across the whole of government. Many Australian Government departments are collaborating on the agenda to deliver programs and services that support social inclusion

	outcomes for disadvantaged Australians and address the priorities.
Intergenerational Report 2010 - *Australia to 2050: future challenges* Treasury	The *Intergenerational Report 2010* provides an analysis of the challenges that Australia will face over the next forty years. The report states that its "key conclusion is that an ageing population and climate change present significant long term risks for the economy and the sustainability of government finances. As the population ages, the rate of economic growth will slow. Pressures for government spending will increase, particularly in the health sector. At the same time, we will face the global challenge of climate change, which represents the largest threat to our environment and one of the most significant challenges to our economic sustainability." *Key points on **ageing and population**:* ▪ Population ageing reduces the proportion of working age people supporting people aged over 65 years. ▪ The rate of improvement in average living standards is projected to fall, placing pressure on Australia's capacity to fund the spending pressures associated with an ageing population, particularly in terms of health spending. ▪ Australia's population will continue to grow over time, though at slightly lower rates than experienced over the past 40 years. This will put pressure on infrastructure, services and the environment, but the growth also assists in managing the pressures of an ageing population by providing the skills and innovation needed to underpin continued economic growth. ▪ A key challenge is to grow Australia's human and social capital by enhancing the skills and opportunities of all Australians today, particularly those facing, or at risk of, entrenched disadvantage. ▪ Economic growth through productivity, participation and population — the '3Ps' ▪ Productivity-enhancing reforms, particularly through nation building infrastructure and improving the skills base, will grow the economy, improve living standards, and partly offset the fiscal pressures of ageing. ▪ Reforms that reduce barriers to participation will also lift growth and reduce future pressures especially for women and mature age people. ▪ Steps to grow the economy and ensure permanent spending growth is sustainable, including through the implementation of the Government's fiscal strategy, will reduce future adjustment costs and the economic and fiscal consequences of ageing. ▪ Immigration plays a role in ameliorating the ageing of the population because migrants tend to be younger on average than the resident population. ▪ The development of Australia's cities will also be central to improving productivity performance. Much of a city's capacity to accommodate population increases while supporting productivity growth is reliant on the efficacy and adequacy of its infrastructure, including its housing stock. The sustainability of Australia's cities will also be dependent on better governance in the planning and organisation of city infrastructure and more efficient use of existing infrastructure. ▪ Social sustainability - assist the next generation by building capabilities

and expanding opportunities, especially for those in disadvantaged circumstances - improvement in Australia's aggregate human and social capital.

*Key points on **Climate Change**:*
▪ As a hot and dry continent, Australia is more at risk from climate change than many other developed countries.
▪ Regarded as the largest threat to the environment and represents one of the most significant challenges to economic sustainability
▪ Issues for water availability and Australia's unique environment.
▪ Population growth has implications for the environment, including: greenhouse gas emissions, biodiversity and water availability; urban amenity; and infrastructure and government service delivery requirements.
▪ Tackling climate change early will avoid larger costs for future generations, and a more severe adjustment to the economy in future years.
▪ The global consensus is that this use of market-based mechanisms is the least cost mechanism to reduce carbon emissions while protecting jobs and growth. There are currently 32 countries that are operating emissions trading schemes, and others are in the process of introducing them. The Carbon Pollution Reduction Scheme (CPRS) is designed to deliver significant and certain reductions in carbon emissions in a cost-effective way, while protecting Australian businesses and jobs during the transition period.
▪ Early action on climate change will allow strong long term growth by steadily transforming the economy, rather than imposing on future Australians the need for a sharp, more costly shock to make the inevitable change to a sustainable low pollution economy.
▪ By 2050 output from the alternative energy sector is expected to be up to 30 times larger under a CPRS and expanded Renewable Energy Target.
▪ At the same time efforts to bring about sustainable land use will be imperative to protecting Australia's unique biodiversity while supporting agricultural productivity.

Government Policy Response

Lifting productivity to grow the economy
▪ High productivity growth — producing more output with proportionately fewer workers — is the key to continued growth with an ageing population. Developing Australia's skills and infrastructure base will lead to a lasting improvement in productivity.
▪ Education and skills – education reform including increased funding, additional tertiary institution places, vocational education and training and increased flexibility of education providers.
▪ Early childhood and school years – emphasis on literacy and numeracy
▪ Tertiary education – recognising skill shortages; recognising the importance of vocational education and training in delivering – additional places and targets for higher qualification completions; boost participation in higher education.
▪ Nation building infrastructure - Australia's land transport networks

targeting roads, rail and ports; development of metropolitan rail networks; investment road networks

- *National Broadband Network* - high speed broadband to meet the growing need for advanced telecommunications services over the long term, and aid in the delivery of services in areas such as education and health.
- *Infrastructure planning and reform* - Infrastructure Australia (IA) provides a strategic, national approach to infrastructure planning and investment. IA assisted in the development of a set of national public-private partnership (PPP) policies and guidelines. Agreed by COAG in November 2008, this establishes a best-practice and a consistent national approach to delivering PPPs.
- *Energy, transport and water reforms* - The Government is working with the States and territories to improve the management of the nation's critical infrastructure - particularly in the areas of energy, transport and water.
- *Seamless national economy* - Reducing inconsistent and unnecessary regulation across Commonwealth, State and Territory governments in 27 different areas and ensuring new regulation is introduced in a manner which minimises costs to business and which ultimately improves Australia's international competitiveness. COAG's Seamless National Economy National Partnership Agreement includes reforms to achieve: nationally uniform occupational health and safety laws; a more efficient system of environmental assessments and approvals; and consistent administration of payroll tax.
- *Innovation* - Innovation supports productivity by creating and diffusing more efficient processes and better products through the economy. Increased investment in science and innovation is supported by investments in infrastructure to sustain the innovation process — including the National Broadband Network — and in the Education Revolution, which is transforming every stage of the learning journey from pre-school to post-doctoral studies.
- *Sound macroeconomic management* - The Government's investments in future productivity are complemented by sound macroeconomic management, including minimising the impact of the global financial crisis on Australia's potential growth rates through judicious use of temporary fiscal stimulus.

Addressing the direct impacts of an ageing and growing population
- Investing in health for the future – health and aged care reforms and COAG partnerships underway
- Sustainable pension reform to enhance the sustainability of the pension system; increased age pension age to 67 beginning 2017
- Boosting labour force participation - increasing incentives to work through personal income tax cuts and increases in the Child Care Tax Rebate; reforms in the areas of education, employment services and health; and the Productive Ageing Package to support mature age participation through practical measures, including retraining and re-skilling programs and enhanced assistance through the Keep Australia Working Career Advice Line.

	Managing the budget in the face of demographic change ▪ Productivity - The productivity agenda is a key response to addressing the fiscal pressures of an ageing population. Investment in infrastructure and improving Australia's skill base to increase the growth potential of the economy will improve budget revenues without increasing the overall tax burden on the economy, and as a result the government's medium term-fiscal outlook will improve. ▪ Fiscal strategy – A range of targets associated with recovery, growth and spending to achieve savings and surplus *Underpinning investments in the future, with a sound response to climate change* ▪ Addressing the social and economic challenges of an ageing population needs to be supported by ambitious and effective policies to tackle the fundamental challenge of climate change. ▪ Transformation to a low pollution economy - The introduction of a price mechanism is a cost effective response to reduce the level of carbon emissions. The CPRS introduces a carbon price and will deliver certainty and efficiency in the level of emissions reductions over time; expanded national Renewable Energy Target (RET) scheme, designed to ensure that 20 per cent of Australia's electricity supply is from renewable sources by 2020; By 2050 output from the alternative energy sector is expected to be up to 30 times larger under a CPRS and expanded renewable energy target. ▪ Investing in clean energy infrastructure - Clean Energy Initiative is helping support the development of low-emissions technology while also building the necessary infrastructure and skills and capacity needed for a low pollution future; key initiatives of Carbon Capture and Storage Flagships and Solar Flagships ▪ Supporting action by households - Energy Efficient Homes program *Promoting social inclusion* ▪ Social inclusion agenda will support human capital development and productivity and participation, by seeking to ensure that all Australians have the capabilities and opportunities to participate fully in social and economic life. ▪ Seeking new ways to overcome disadvantage in the Australian population to ensure that all Australians will be able to: learn by participating in education and training; work by participating in employment, in voluntary work and in family and caring activities; engage by connecting with people and accessing their local community's resources; and have a voice so that they can influence decisions that affect them.

COAG Reform Agenda	The COAG Reform Agenda is consistent with Federal Government strategic priorities and policy statements. The goals of the COAG reform agenda are to boost productivity, workforce participation and geographic mobility, and support wider objectives of better services for the community, social inclusion, closing the gap on Indigenous disadvantage and environmental sustainability. Reforms are prioritised in the following arenas in a manner that is intended to introduce a new approach to Federal-State Government relations.
	
	Current intergovernmental agreements monitored by the COAG Reform Council are:
	
	▪ **National Agreements**
	   o National Healthcare Agreement
	   o National Education Agreement
	   o National Agreement for Skills and Workforce Development
	   o National Disability Agreement
	   o National Affordable Housing Agreement
	   o National Indigenous Reform Agreement
	
	▪ **National Partnerships (with reward payments)**
	   o National Partnership on Preventative Health
	   o National Partnership on Elective Surgery Waiting List Reduction Plan
	   o National Partnership on Essential Vaccines
	   o National Partnership on Improving Teacher Quality
	   o National Partnership on Literacy and Numeracy
	   o National Partnership on Youth Attainment and Transitions
	   o National Partnership to Deliver a Seamless National Economy
	
	▪ **National Partnerships (contributing to the objectives of the National Agreements)**
	   o National Partnership on Hospital and Health Workforce Reform
	   o National Partnership on Health Services
	   o National Partnership on Health Infrastructure
	   o National Partnership on e-Health
	   o National Partnership on TAFE Fee Waiver for Childcare Places
	   o National Partnership on Low Socio-Economic Status School Communities
	   o National Partnership on Early Childhood Education
	   o National Partnership on National Quality Agenda for Early Childhood Education and Care
	   o National Partnership on Productivity Places Program
	   o National Partnership on Social Housing
	   o National Partnership on Homelessness
	   o National Partnership on Closing the Gap in Indigenous Health Outcomes
	   o National Partnership on Remote Indigenous Housing
	   o National Partnership on Indigenous Economic Participation
	   o National Partnership on Remote Service Delivery
	   o National Partnership on Indigenous Early Childhood Development
	   o National Partnership on Remote Indigenous Public Internet Access

	▪ Water Management Partnerships (between the Commonwealth and five Basin States)

COAG - Capital Cities Reform	At its December 2009 meeting, COAG agreed to ensure Australia's capital cities are *globally competitive, productive, sustainable, liveable and socially inclusive, and well placed to meet future challenges and growth*. By 1 January 2012 all States are required to have in place long term plans that meet the nationally agreed criteria, which address such matters as climate change, improving housing affordability and tackling urban congestion. Future infrastructure funding decisions made by the Commonwealth will be based on States meeting the national criteria.
	
	In June 2010, the Prime Minister announced the appointment of an expert advisory panel to support the COAG Reform Council to review the consistency of capital cities strategic planning systems with new national criteria.
	
	National criteria for capital city strategic planning systems will provide the platform to re-shape capital cities. The criteria will ensure cities have strong, transparent and long term plans in place to manage population and economic growth; plans which will address climate change, improve housing affordability and tackle urban congestion. They will also:
	
	▪ provide for future-oriented and publicly available long term strategic plans
	▪ be integrated across functions (for example, land-use, infrastructure and transport) and coordinated between all three levels of government
	▪ clearly identify priorities for future investment and policy effort by governments
	▪ provide for effective implementation arrangements and supporting mechanisms
	▪ support and facilitate economic growth, population growth and demographic change.
	
	National Objective and Criteria for Future Strategic Planning of Capital Cities
	
	Objective: *To ensure Australian cities are globally competitive, productive, sustainable, liveable and socially inclusive and are well placed to meet future challenges and growth.*
	
	Criteria
	Capital city strategic planning systems should:
	1. be integrated: -
	   a. across functions, including land-use and transport planning, economic and infrastructure development, environmental assessment and urban development, and
	   b. across government agencies;
	2. provide for a consistent hierarchy of future oriented and publicly available plans, including: -
	   a. long term (for example, 15-30 year) integrated strategic plans,
	   b. medium term (for example, 5-15 year) prioritised infrastructure and

	land-use plans, and
	   c. near term prioritised infrastructure project pipeline backed by appropriately detailed project plans;
	3. provide for nationally-significant economic infrastructure (both new and upgrade of existing) including: -
	   a. transport corridors,
	   b. international gateways,
	   c. intermodal connections,
	   d. major communications and utilities infrastructure, and
	   e. reservation of appropriate lands to support future expansion;
	4. address nationally-significant policy issues including: -
	   a. population growth and demographic change,
	   b. productivity and global competitiveness,
	   c. climate change mitigation and adaptation,
	   d. efficient development and use of existing and new infrastructure and other public assets,
	   e. connectivity of people to jobs and businesses to markets,
	   f. development of major urban corridors,
	   g. social inclusion,
	   h. health, liveability, and community wellbeing,
	   i. housing affordability, and
	   j. matters of national environmental significance;
	5. consider and strengthen the networks between capital cities and major regional centres, and other important domestic and international connections;
	6. provide for planned, sequenced and evidence-based land release and an appropriate balance of infill and greenfields development;
	7. clearly identify priorities for investment and policy effort by governments, and provide an effective framework for private sector investment and innovation;
	8. encourage world-class urban design and architecture; and
	9. provide effective implementation arrangements and supporting mechanisms, including: -
	   a. clear accountabilities, timelines and appropriate performance measures,
	   b. coordination between all three levels of government, with opportunities for Commonwealth and Local Government input, and linked, streamlined and efficient approval processes including under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999,
	   c. evaluation and review cycles that support the need for balance between flexibility and certainty, including trigger points that identify the need for change in policy settings, and
	   d. appropriate consultation and engagement with external stakeholders, experts and the wider community.

Infrastructure Australia & Major Cities Unit	**Infrastructure Australia** The role of Infrastructure Australia is to advise governments, investors and owners of infrastructure concerning: ▪ nationally significant infrastructure priorities

- policy and regulatory reforms desirable to improve the efficient utilisation of national infrastructure networks
- options to address impediments to the development and provision of efficient national infrastructure
- the needs of users
- possible financing mechanisms.

The priority national infrastructure themes have been identified as:

- Transforming our cities
- Adaptable and secure water supplies
- Creation of a true national energy market
- Competitive international gateways
- A national freight network
- A national broadband network
- Providing essential Indigenous infrastructure.

Infrastructure Australia has developed a Public-Private Partnerships framework for the delivery of infrastructure and the objectives of the National PPP Policy Framework are to:

- encourage private sector investment in public infrastructure and related services where value for money for government can be clearly demonstrated
- encourage innovation in the provision of infrastructure and related service delivery
- ensure rigorous governance over the selection of projects for PPPs and the competition for and awarding of contracts
- provide a framework and streamlined procedures for applying PPPs across Australia
- clearly articulate accountability for outcomes.

The key principles of the PPP framework are: value for money, public interest, risk allocation, output orientation, transparency, accountability and engaging the market.

The Federal Government's Nation Building Agenda has focused on infrastructure investment as part of an economic growth strategy.

Major Cities Unit

The Major Cities Unit was established to provide advice to the Australian Government and Infrastructure Australia on issues of policy, planning and infrastructure that have an impact on our cities and suburbs. The Unit aims to provide coordinated action across all spheres of government, the private sector and the community to help secure the nation's economic, social and environmental wellbeing through our cities.

The vision for Australia's cities is that they are:

- Productive, and globally competitive, with integrated land use,

	transport and infrastructure planning driving more efficient investment and outcomes
	▪ Liveable, improving the quality of life, health and wellbeing of people who live in, work, or visit cities
	▪ Sustainable, environmentally, socially and economically.
	The *State of Australian Cities 2010* report, released by the Major Cities Unit, draws together existing data and information across a range of economic, social and environmental parameters to provide a national snapshot of the 17 Australian cities with populations over 100,000 at the 2006 Census. It also highlights emerging trends and issues to promote discussion and debate on managing growth and change in the urban centres. The *State of Australian Cities 2010* report progresses the cities agenda at the national level, setting the context and scope for further involvement by the Australian Government in urban policy and planning.

A4.2 Queensland State Government

Q2: Towards Tomorrow's Queensland	The Queensland Government has presented its 2020 vision for Queensland based on five ambitions and associated targets that address current and future challenges.
	▪ **Strong Queensland** **Target 1:** Queensland is Australia's strongest economy, with infrastructure that anticipates growth. **Target 2:** 50% increase in proportion of Queensland businesses that undertake research and development or innovation.
	▪ **Green Queensland** **Target 1:** Cut Queenslanders' carbon footprint by a third with reduced car and electricity use. **Target 2:** Protect 50% more land for nature conservation and public recreation.
	▪ **Smart Queensland** **Target 1:** All children will have access to a quality early childhood education so they are ready for school. **Target 2:** Three out of four Queenslanders will hold trade, training or tertiary qualifications.
	▪ **Healthy Queensland** **Target 1:** Shortest public hospital waiting times in Australia. **Target 2:** Cut obesity, smoking, heavy drinking and unsafe sun exposure by a third.
	▪ **Fair Queensland** **Target 1:** Halve the proportion of Queensland children living in households without a working parent. **Target 2:** Increase the proportion of Queenslanders involved in their communities as volunteers by 50%.
	The targets don't attempt to cover every area of government activity or community need.
	Many important issues, such as Indigenous disadvantage, housing and

	disability services, are already being addressed through reforms at both a state and national level. This work will continue.
	
	Reaching the 2020 targets
	
	To achieve the 2020 targets, the Queensland Government established the following measures to drive its performance across all departments.
	
	1. **Target Delivery Plans**
	   ▪ Target Delivery Plans outline the Queensland Government's long term vision and strategies to achieve each target by 2020, as well as individual actions to be implemented during the following financial year.
	   ▪ Each target has a lead department responsible for coordinating the government's efforts across departments. State Cabinet approves each agreement.
	2. **Ministerial responsibility**
	   ▪ Ministers of lead and contributing departments are accountable to the Premier through their Ministerial Charters of Goals for the delivery of the ambitions and targets.
	3. **CEO accountability**
	   ▪ CEOs (Directors-General) of lead and contributing departments are accountable to the Premier for the delivery of the ambitions and targets. They are now written into their performance agreements with the Premier.
	4. **Funding**
	   ▪ Initiatives and programs that contribute to meeting the targets will be given priority in decisions about allocating new and existing funds.
	5. **Reporting**
	   ▪ Updates on the progress towards each target will be published on this website. The government will also publish an annual progress report on the targets. This report will also outline what needs to be done in the coming 12 months to work towards meeting each target.

SEQ Regional Plan 2009 - 2031	The *South East Queensland Regional Plan's* key strategic directions include: ▪ protecting and supporting regional landscape and rural production ▪ providing enough land to accommodate future growth ▪ promoting land use efficiency ▪ enhancing the identity of regional communities ▪ facilitating growth in the Western Corridor ▪ supporting rural futures ▪ providing timely infrastructure and services ▪ integrating land use, transport and economic activity. The SEQRP projects a need for 754,000 new dwellings by 2031. That means for every 10 homes we have today, another 6.7 will be needed in 20 years. The *South East Queensland Regional Plan* outlines a compact settlement form that results in around 85 per cent of the region being protected from urban development. The *South East Queensland Regional Plan* is supported

by the *South East Queensland Infrastructure Plan and Program* (SEQIPP) which is updated annually and the *South East Queensland Climate Change Management Plan*.

Desired regional outcomes articulated through the plan are:

1. *Sustainability and climate change*—the region grows and changes in a sustainable manner, generating prosperity, maintaining and enhancing quality of life, minimising the use of resources, providing high levels of environmental protection, reducing greenhouse gas emissions and becoming resilient to natural hazards including the projected effects of climate change and oil supply vulnerability.
2. *Natural environment*—a healthy and resilient natural environment is protected, maintained and restored to sustainably support the region's rich biodiversity and ecosystem services including clean air and water, outdoor lifestyles and other community needs that critically underpin economic and social development.
3. *Regional landscape*—key environmental, economic, social and cultural values of the regional landscape are identified and secured to meet community needs and achieve ecological sustainability.
4. *Natural resources*—regional natural resources and rural production areas are protected, managed and used sustainably.
5. *Rural futures*—rural communities are strong and viable with sustainable economies contributing to the health, wealth, character and liveability of the region.
6. *Strong communities*—cohesive, inclusive and healthy communities have a strong sense of identity and place, and access to a full range of services and facilities that meet diverse community needs.
7. *Engaging Aboriginal and Torres Strait Islander peoples*—Aboriginal and Torres Strait Islander peoples are actively involved in community planning and decision-making processes and Aboriginal traditional owners are engaged in business about their country.
8. *Compact settlement*—a compact urban structure of well-planned communities, supported by a network of accessible and convenient centres and transit corridors linking residential areas to employment locations establishes the context for achieving a consolidated urban settlement pattern.
9. *Employment location*—a plan for employment to support a strong, resilient and diversified economy that grows prosperity in the region by using its competitive advantages to deliver exports, investment and sustainable and accessible jobs.
10. *Infrastructure*—plan, coordinate and deliver regional infrastructure and services in a timely manner to support the regional settlement pattern and desired community outcomes.
11. *Water management*—water in the region is managed on a sustainable and total water cycle basis to provide sufficient quantity and quality of water for urban, industrial and rural uses and to protect ecosystem health.
12. *Integrated transport*—a connected and accessible region based on an integrated transport system that is planned and managed to support more compact urban growth and efficient travel; connect people,

	places, goods and services; and promote public transport use, walking and cycling.
South East Queensland Infrastructure Plan and Program	The *South East Queensland Infrastructure Plan and Program 2010–2031* (SEQIPP) outlines estimated infrastructure investment across South East Queensland to 2031. It represents a long term commitment to infrastructure delivery in SEQ. Commentary about the SEQIPP for greater Brisbane are included in the body of the Regional Roadmap. SEQIPP supports the regional plan by outlining infrastructure projects designed to contribute to the desired regional outcomes as noted above.
Shaping Tomorrow's Queensland: Population Growth Management Strategy	The State Government has formulated Shaping Tomorrow's Queensland, a response to the Population Growth Management Summit to address the following themes: 1. *Shaping the future* – supporting the delivery of growth management initiatives in partnership with all levels of government and continue the dialogue with the community on how we move forward. 2. *Strengthening our regions* - Building stronger regions, ensuring growth and economic opportunities are shared throughout Queensland and take the pressure off South East Queensland through new initiatives that support regionalisation and decentralisation. 3. *Promoting liveable and affordable communities* - Shaping liveable communities to protect Queenslanders' quality of life by working closely with local government to plan affordable and sustainable places. There are many factors that affect housing affordability, with the state only able to influence some factors such as infrastructure charging and land supply. 4. *Delivering infrastructure* - Ensuring infrastructure delivery plays a vital role in growth management by clearly linking new infrastructure with population. This will help ensure infrastructure is provided when and where it is needed. 5. *Protecting our lifestyle and environment* - Protecting Queensland's unique lifestyle, increase greenspace and strengthen environment protection through initiatives that improve the sustainability of our actions. 6. *Connecting communities* - Delivering connected communities that have ready access to jobs, services and attractions through initiatives that improve public and active transport.
Department of Employment, Economic Development and Innovation Strategic Plan 2010–14	DEEDI is the lead agency in the delivery of Q2 objectives of Strong and Fair, and contributes to Smart, Green and Healthy targets. **Vision:** A strong Queensland economy **Purpose:** To develop a globally competitive, sustainable Queensland economy [through] ▪ Productivity and employment growth ▪ Increased Labour Force Participation ▪ Strong regional economies ▪ Environmentally and socially responsible development ▪ Improved standard of living ▪ Position Queensland for the future

	Challenges ■ *Managing the Impacts and Opportunities of the Global Economy on Queensland* – providing the right business environment; diversifying the economy; assisting businesses to access global supply chains; influencing infrastructure planning ■ *Building on our Regionalised Economy* – diversifying regional economies; building productive capacity of regional firms; assisting businesses to attract skills and investment to regional areas ■ *Getting Enough People with the Right Skills* – improving labour productivity as the population ages; connecting future industries to skills and education; attracting people to regional areas where there are jobs ■ *Lifting Innovation and Productivity* – encouraging and assisting business to access and utilise research outputs; helping businesses adapt to new technology; improving competitiveness ■ *Addressing Climate Change and Variability* – business and community adaptation to a carbon constrained economy; impact on productivity; new business opportunities; sustainability ■ *Simplifying Regulation* – streamlining and simplifying regulatory processes and influencing national agendas ■ *Ensuring Safety and Health* – ensuring harm minimisation ■ *Addressing Demand for Services* – ensuring suitable access to services for different customer groups given increasing service expectations and resource limitations; working towards integrated service delivery across Government
Department of Infrastructure and Planning Strategic Plan 2009 - 2013	DIP is the lead agency for the Q2 target of Green and contributes to the Q2 targets of Strong, Green and Healthy **Vision:** Sustainable growth—Strong regions—Strong councils—Dynamic communities **Mission:** Shaping and leading local, regional and state economic, environmental and social development **Objectives** ■ Plan, coordinate and deliver key infrastructure for economic, environmental and social development and employment creation in Queensland ■ Facilitate and lead major private sector and government projects ■ Plan, secure and manage land supply for urban, industrial and economic development and for conservation and public recreation ■ Collaboratively plan sustainable and dynamic urban and regional communities ■ Shape and support an efficient, effective and sustainable local government system ■ Strengthen a professional, ethical and high-performing organisation that values and nurtures its employees **Challenges** ■ Stimulate and streamline projects which support job creation—including land development and infrastructure delivery, and planning and preparing adequate supplies of industrial land—while applying

	the principles of sustainable development.
	▪ Attract the necessary financial support to commence and deliver infrastructure projects within acceptable levels of risk.
	▪ Maintain sustainable economic and social development and deliver essential infrastructure in the face of population growth.
	▪ Building the sustainability of Queensland's local government system in line with the implementation of the national frameworks for local government is a priority. The aim is to work in partnership with the local government sector as the third sphere of government to shape and support an efficient, effective and sustainable local government system.
	▪ Support to the mining sector, by positioning key infrastructure, to be in a strong position to meet the requirements of our trading partners when demand increases.
	▪ Ongoing challenges of environmental, social and economic issues that accompany climate change such as the impact on regional planning, on protecting natural resources and for encouraging sustainable housing.
Department of Transport and Main Roads Corporate Plan 2010-2014	TMR contributes to all Q2 objectives. **Vision:** Connecting Queensland **Purpose:** Plan, deliver and manage a transport system that connects Queensland **Objectives:** ▪ A sustainable transport system which promotes economic growth and enhances liveability ▪ A safe transport system leading to improved health and wellbeing for Queenslanders ▪ An accessible transport system linking people to employment, education, services and social networks ▪ Transport-related impacts on the natural, cultural and built environments managed for the community ▪ Enhanced capability and capacity of the transport and logistics-related industries ▪ Enhanced leadership and stakeholder relationships, improving transport outcomes for Queensland ▪ Capable people and contemporary processes and systems, enabling us to achieve our corporate objectives **Challenges** ▪ Provide adequate transport options to achieve economic and social outcomes across Queensland ▪ Increase people's knowledge and understanding about transport system policies and investment choices ▪ Ensure the department's contribution to Queensland's economy remains a key driver of decision making ▪ Manage the impacts of climate change on the transport system ▪ Encourage the uptake of vehicles, or travel alternatives, that increase resilience to rising oil prices and reduce emissions ▪ Provide people with more informed travel choices and services using technology-based solutions

	▪ Enhance the capability and capacity of the department and the transport and logistics-related industries Transport and Main Roads is preparing a new regional transport plan titled Connecting SEQ 2031: An Integrated Regional Transport Plan for South East Queensland. Connecting SEQ 2031 will be a 22-year regional transport plan that serves the long term needs of the people living, working, recreating and conducting business in south east Queensland. As well as the need to manage the sustained growth of the region, some significant new challenges have emerged for the transport system over the last decade. These include: ▪ the need to reduce emissions to respond to climate change ▪ the dwindling supply and increasing price of oil ▪ increasing congestion, impacting on the region's quality of life and economic growth ▪ increasing costs to provide transport infrastructure and services. Connecting SEQ 2031 will address these new challenges and present a strategic framework for developing the future transport network for the region. It will also identify transport initiatives that will contribute to the achievement of the Toward Q2 targets.
Department of Communities Strategic Plan 2010 - 2014	Department of Communities contributes to several Q2 targets: Fair, Healthy, Smart and Green **Vision:** Fair, cohesive and vibrant Queensland communities. **Purpose:** Providing integrated community services that strengthen Queensland. **Objectives:** ▪ Better services and pathways for clients ▪ More inclusive, active and safe communities ▪ A more sustainable, community service system that delivers better value ▪ Wise and effective investment across the sector ▪ Effective internal financial management ▪ Robust systems and tools ▪ New organisational arrangements and strong leadership ▪ Good governance and strong accountability **Context/Challenges** ▪ Increasing expectations for better access to comprehensive and quality services and pathways through complex systems ▪ Increasing demand for, and cost of delivering, community services and facilities to a diverse and growing client base, comprising some of the most vulnerable and disadvantaged Queenslanders ▪ Population growth and changing demographics, including changes in family and social structures due to greater mobility and employment patterns ▪ The impact of low levels of physical activity on people's health status, wellbeing and inclusion in community life ▪ The gap in life outcomes between Indigenous and non-Indigenous Queenslanders

- Major national reforms, with significant investments and performance commitments agreed by the Council of Australian Governments.
- The global economic downturn may exacerbate some of these factors, as well as impose resource constraints on all levels of government and the not-for-profit and private sectors.

The department is a key driver of integrated community service delivery and a major contributor to social inclusion and community development across Queensland, actively promoting community participation by funding integrated services for individuals and families who experience disadvantage.

The department is committed to achieving the Queensland Government's ambitions of a fair, healthy, smart and green Queensland, as outlined in *Toward Q2: Tomorrow's Queensland*. It does this through the following outputs:
- **Aboriginal and Torres Strait Islander services**, including leading reforms to reduce the gap in life outcomes for Indigenous Queenslanders, working with Aboriginal and Torres Strait Islander Queenslanders to affirm their cultures and assisting all Queenslanders to benefit from reconciliation
- **Child Safety services**, including leading the provision of services to ensure the safety of children and young people who have been harmed, or who are at risk of harm, enhancing the wellbeing of children in its care and administering adoption legislation in **Queensland Community and Youth Justice services**, including leading integrated service delivery to support vulnerable individuals, families and communities, providing effective youth justice services and encouraging seniors to participate in their community
- **Disability, Home and Community Care and Community Mental Health services**, including leading integrated service delivery to assist people with a disability, people with a mental illness and people who are ageing to participate in their community
- **Housing and Homelessness services**, including providing integrated social housing and housing services to low-to-moderate income families and individuals and providing assistance to people who are homeless or at risk of homelessness
- **Multicultural services**, including leading the promotion of cultural diversity and enhancing community cohesion
- **Sport and Recreation services**, including services to encourage Queenslanders to lead active and healthy lifestyles, from participating in community sport and recreation activities to achieving at elite levels
- **Women's services**, including strategy and policy coordination and advice to government on issues affecting women, with a view to improving the economic security and health and wellbeing of women in Queensland.

As well, the **Queensland Government Compact** is a partnership agreement designed to guide the relationship between the non-profit community services sector and the Queensland Government to achieve better outcomes

	for Queenslanders.
Queensland Health Strategic Plan 2007–2012	Lead agency for Healthy Q2 targets

Mission: Creating dependable healthcare and better health for all Queenslanders

Strategic Priorities
- *'Making Queenslanders healthier'* focuses on the promotion and protection of the health of all Queenslanders and prevention of ill health, including how Queensland Health will meet the Q2 and AHA targets to cut obesity, smoking, heavy drinking and unsafe sun exposure by one third by 2020.
- *'Meeting Queenslanders' healthcare needs safely and sustainably'* addresses the challenge of meeting the healthcare needs of Queenslanders across the spectrum of care and outlines how we will achieve the Q2 and AHA target of Queensland having the shortest public hospital waiting times in Australia by 2020.
- *'Reducing health service inequities across Queensland'* recognises the inequities that exist across specific population groups. It specifically addresses how we will achieve the AHA targets of improving mental health care and reducing the gap in health outcomes for Indigenous and rural and remote Queenslanders.
- *'Developing our staff and enhancing organisational performance'* outlines how Queensland Health is going to best utilise its people and resources to achieve our strategic priorities. Queensland Health is committed to providing high quality, safe and sustainable health.

Strategic challenges:
- Changing the community's focus to the prevention of illness and maintenance of good health
- Managing the complex process of care delivery ensuring the right services in the right places for the right type of patients
- Building public confidence in the healthcare system
- Providing a seamless transition for patients as they move across healthcare providers and settings
- Achieving a collective and coordinated response across multiple levels and complexities of government
- Attracting and retaining skilled professionals, especially for specialist services |

Department of Education and Training Strategic Plan 2010-2014	DET is a lead agency in the delivery of Q2's Smart outcomes and contributes to Strong, Green, Healthy and Fair. **Vision:** Clever, skilled and creative Queenslanders **Purpose:** To provide Queenslanders with the knowledge, skills and confidence to maximise their potential, contribute productively to the economy and build a better Queensland. **Objectives:** *Giving children a flying start* - Queensland children will have access to quality early childhood education and care *Laying strong educational foundations* - Every young Queenslander will be prepared with the educational foundations to support successful transitions to further education, training and work *Developing skills for the economy* - Queenslanders will be skilled to maximise their opportunities and productively contribute to Queensland's economy **Challenges:** - Universal access to kindergarten in the year prior to school - A new nationally consistent regulatory regime for all early childhood education and care services - Sustained improvements to student performance - Ambitious targets to increase the number of Queenslanders who have trade, training and tertiary qualifications - Workforce reforms to better support teaching and learning - Continued major infrastructure expansion and use of technology in schools and TAFEs The Department of Education and Training has seven overarching key priority statement that focus on: 1. Early Childhood Education and Care 2. Student and School Performance 3. Teaching and Learning 4. Training and Skilling Queensland 5. Infrastructure 6. Workplace Reform 7. Policy Development
Department of Environment and Resource Management 2010-2014	Lead agency for delivering Q2 Green targets and contributes to Green, Strong, and Fair targets **Vision:** A green, strong and sustainable Queensland **Role:** DERM conserves, protects and manages the state's environment and natural resources for today and future generations. The key areas of responsibility are: - Delivering fit-for-purpose services to our clients - Meeting the challenge of climate change - Managing Queensland's land, water and vegetation resources responsibly - Protecting and enhancing the state's natural environment and

	cultural heritage ■ Securing water for Queensland's future **Objectives:** ■ Client needs are understood and met ■ Queensland is prepared for Climate Change ■ Ecosystems are healthy, protected and bio-diverse ■ Natural resources are well managed ■ Indigenous land access and ownership is improved and Queensland's cultural heritage is conserved ■ Decisions are evidence based **Challenges:** ■ Continuing population growth in urban and coastal regions will increase the community's demand for land, particularly in SEQ. Management of tensions between needs of urban and rural populations and industries, and the need to conserve the environment and sustainably manage natural resources. ■ The increasing complexity of the department's regulatory responsibilities area being reflected in increased compliance expectations and more challenging processes for gaining planning approval ■ The department has an ageing workforce, with a quarter or more of staff in most business areas becoming eligible for retirement in the next five years. This, together with increasing competition from other government agencies and the private sector, will make it more difficult to attract, replace and retain the skills needed to meet service delivery priorities ■ Demand for the department's services is increasing in an environment of scarce resources

A4.3 Brisbane City Council

Living in Brisbane 2026	**Vision:** Brisbane is a youthful and enthusiastic city – spanning city to bay and hills to bush. It is appreciated by residents and visitors for its friendliness and optimism, and respected for its leadership and achievements. Brisbane's leadership in civic governance and technology will deliver active and healthy communities, drive a strong economy, sustain a clean and green environment, create a city of cultural vibrancy and provide an enduring legacy of livability for future generations. **Vision Themes:** ■ *Friendly, safe city* - Strong, welcoming, caring and diverse communities living in a variety of friendly, safe, walkable neighbourhoods ■ *Clean, green city* - Protecting and strengthening our natural environment, our native plants and animal habitats, limiting pollution, greening the city and using our natural resources such as water, wisely. ■ *Well-designed, sub-tropical city* - A city designed to be ecologically efficient for a growing population, easy to get around and able to

bring people together in great public spaces, enjoying our outdoor lifestyle.

- *Accessible, connected city* - A diversity of private (cars, bikes, walking) and public (trains, buses, ferries) transport using many pathways and networks, interconnecting at mixed-use centres and urban villages.
- *Smart, prosperous city* - A prosperous and enterprising city with people exercising their entrepreneurship across the full spectrum of commercial, public, scientific, educational and charitable enterprises.
- *Active, healthy city* - Active and healthy lifestyles through events, facilities and spaces in which to exercise and be active. Adaptable, resilient communities having fun in Brisbane and optimistic about the future.
- *Vibrant, creative city* - A vibrant cultural city that values ideas, cooperation and cultural diversity. Supporting creative industries, festivals both small and large bring people together sharing their stories, music, art and food.
- *Regional, world city* - Residents and organisations are open to the world, generous in sharing our knowledge, working enthusiastically and collaboratively within our communities and with our neighbours in South East Queensland (SEQ) and the Asia Pacific region.

Citywide Outcomes
- *Clean air*: The air we breathe is free from pollution and disease-causing particles.
- *Food in the city*: Brisbane is lush with food-producing gardens and city farms in parks, schools, backyards, community facilities and businesses.
- *Safe communities*: Residents feel safe at home and when out and about in Brisbane. We care about each other's safety and wellbeing.
- *Sustainable water use*: We manage our precious water for today and tomorrow, using innovative and diverse options for collecting, storing and re-using water.
- *Healthy river and bay*: Our creeks, rivers and bays are free from pollution and full of marine life, with an ample cover of native vegetation on their banks.
- *Effective growth management*: We manage and plan adaptively for population growth while maintaining our quality of life.
- *Towards zero waste*: We reduce, re-use and recycle to limit waste.
- *Inclusive, caring communities*: We are friendly, welcoming and considerate. We celebrate diversity and provide for those most in need.
- *Outstanding city profile*: Brisbane people are proud of their city. We are acknowledged nationally and internationally as achieving a friendly, vibrant city with sustainable easy-living.
- *Co-operative governance*: Community, business and political leaders across all spheres work collaboratively for the betterment of the local community, city and region.
- *Cleaner sustainable energy use*: Brisbane has a low carbon footprint. The community, business and government are energy efficient, using green, renewable energy.
- *Healthy economy*: Our economy is sustainable with ample job

	opportunities and a vibrant business sector.
	▪ *Green and biodiverse city*: Brisbane has a healthy ecosystem with a variety of native plants and animals throughout the city.
	▪ *Better public health*: We maintain world-class health conditions: free from public health risks; healthy built and natural environments; and minimal exposure to diseases.
	▪ *Learning and informed communities*: Brisbane has high-quality and diverse education facilities open to a community that is receptive to learning, open to new ideas and engaged in critical debate on important issues.
	▪ *Effective road networks*: Roads will be free of congestion with more predictable travel times and safer journeys.
	▪ *Well-designed and responsive built environment*: Our streetscapes and built environments suit our climate. We have energy-efficient buildings and well-designed suburbs.
	▪ *Active and healthy communities*: Brisbane citizens are healthy and lead an active lifestyle. Brisbane has high quality facilities with parks, sporting clubs, bikeways and protected paths.
	▪ *Connected and engaged communities*: Brisbane citizens get involved, volunteer and care about the city. We have ample opportunities and places to meet and come together.
	▪ *Green and active transport*: We have alternatives to using our cars and enjoy good public transport, well-networked bikeways and safe, shady walking paths.
	Key Challenges
	▪ Every year, more and more people call Brisbane home.
	▪ Securing sustainable water supplies is a priority.
	▪ Fuel prices continue to fluctuate.
	▪ Climate change is an unprecedented global challenge.
	▪ Skill shortages are being experienced across many industries.
City Plan 2000 / City Plan 2012	Brisbane City Council is undergoing a formal review of the City Plan 2000. This should be completed by 2012. A review of City Plan is legally required by the *Sustainable Planning Act 2009* (SPA). All building and development in Brisbane is directed by the Brisbane City Plan 2000 (City Plan). City Plan sets out what we and our neighbours can build and shows where new development should go. Brisbane City Council assesses proposed new development against the City Plan. The City Plan contains three elements: • a strategic plan – the vision for the way the city will develop • the rules – practical rules and legal requirements that developments must address • Local and Neighbourhood Plans – development regulations specific to certain areas City Plan 2000 presents a vision of Brisbane is 'the Livable City'—Brisbane will be the most livable and progressive city in the Asia–Pacific Region. The vision stresses the following:

	- Quality of life – desirable, safe and healthy place to live, invest work, play and visit - Ecological sustainability - Brisbane as the economic, cultural, social and administrative heart of the South East Queensland region and the State - Living environment that is human in scale with a sense of place based on sub-tropical character - Protection of areas of environmental and scenic value by an extensive network of green spaces - Brisbane's local communities will have a clear sense of identity and have ready access to a wide range of services. Use of public transport, cycling and walking is to be easy and popular. - Brisbane is to have a strong and sustainable economy offering a diversity of employment opportunities - Universal access to a diversity of social and cultural lifestyles. - Brisbane will be a Smart City providing world–class telecommunications infrastructure with high levels of online participation and use - Infrastructure, including communication, community facilities, pedestrian ways, bikeways and transport, is to be coordinated, integrated, efficient and equitably distributed The review of CityPlan will ensure new government plans and policies are reflected in the Strategic Plan and quickly applied to new development, yet allow time for detailed work to be undertaken on the rules and the conversion to the standard format. An online document addresses the review process in relation to Living In Brisbane 2026's themes and provides some consideration of new directions for the City Plan reflecting those priorities. The Strategic Plan section will reflect elements of the Draft Local Growth Management Strategy (2005), City Shape, which responded to the SEQ Regional Plan and which presented the community's vision for the city in 2026. *http://www.brisbane.qld.gov.au/bccwr/_* *assets/main/lib576/statement_of_proposals_report.pdf*
Brisbane City Council Corporate Plan 2008 – 2012 (2009 update)	The Corporate Plan outlines the medium term path in achieving the vision of Living in Brisbane 2026 across 11 program areas: - CitySmart - WaterSmart City - Moving Brisbane - Future Brisbane - Your Brisbane - Subtropical City – Parks and Recreation - Public Health and Safety - Economic Development (see below) - Customer Focus - City Governance - Information and Communications Technology The Corporate Plan affirms the goals and targets of Living In Brisbane 2026

	and includes detail about specific initiatives and opportunity.
BCC Brisbane Economic Development Plan 2006-11	BCC aims to enhance Brisbane's capacity for long term economic growth. This involves setting appropriate policy, investment and management of critical infrastructure to ensure Brisbane continues to be the engine for growth in South East Queensland, the fastest growing region in Australia. The strategies for 2008-12 align with six program outcomes: • marketing of the city • investment and jobs attraction • creating the capacity for growth • promoting productive precincts • workforce availability and capability • export market development Brisbane Marketing plays a central role in place branding and investment attraction for the city. The BEDP also includes significant economic analysis and projections as well as the results of a SWOT analysis. Specific opportunities and strategies raised in the BEDP include: • Expansion plans for the international air and sea ports in the Australia TradeCoast provide an opportunity to renew the vision for the area • Effective city marketing will eliminate outdated perceptions of the city as a branch office and provide more opportunities for investment • Overcoming infrastructure delivery bottlenecks • Address skills shortages to facilitate the delivery of infrastructure and industry growth • Facilitate the growth of industries that are engaged and competitive in the global economy and that contribute to the high living standards and liveability • Address of social issues and challenges including locational disadvantage • Asia-Pacific education focus
Brisbane Long Term Infrastructure Plan	The Brisbane Long Term Infrastructure Plan was released in 2007 and is currently under review. It aims to provide integrated planning over a 20 year period for infrastructure required to support liveability and economic development in the city. It links to the SEQIPP. The goals of the BLTIP are: • Ensure that infrastructure provision in the city is consistent with the city's economic, social and environmental aspirations • Provide a reference point to guide the prioritisation and alignment of Council's infrastructure implementation and spending programs, project and mechanisms and to identify where Council could consider investing as a growth catalyst • Ensure that the city receives an appropriate return on its infrastructure investments in economic, social and environmental

	terms ■ Secure the potential benefits, synergies and complementarities that are available from simultaneous comprehensive planning and delivery for different infrastructure types ■ Provide a reference point for the consideration of their complementary roles in contributing to the city's infrastructure by other levels of government (State and Federal) ■ Provide a reference point for the private sector's consideration of its role in contributing to the city's infrastructure and making investment decisions based on infrastructure provision ■ Provide a basis for Council to ensure that Brisbane's infrastructure needs are addressed in CityPlan and within the framework of the SEQ regional land use and infrastructure plans. The BLTIP includes projects in the following infrastructure categories: ■ Transport – 48 projects noted including public transport, road upgrades, investigations and others ■ Water Cycle – 21 projects including sewerage, water treatment, infrastructure and recycling ■ Energy – projects include major transmission upgrades, sub-transmission and distribution ■ Telecommunications – high speed broadband and enhanced connectivity stressed with emphasis on Project Vista ■ Green Space – addressing green space deficits and ensuring that green space provision keeps pace with infill and other development ■ Social Infrastructure – some deficits noted among existing provision of sporting facilities, community facilities and libraries ■ Other Infrastructure – enhancing airport infrastructure
River City Blueprint (draft only)	The River City Blueprint is an initiative of the State and Local Governments that undertakes detailed planning for the 5 km radius around the CBD. BCC is the lead agency in this project. The project is still underway with no plans released. It is understood that the River City Blueprint will be a policy document and not a statutory document. In 2007, the Queensland Government commissioned an external advisory body, called the Smart State Council, to prepare an independent report on the inner city. The Smart State Council was originally established by the Queensland Premier to investigate impediments and opportunities affecting Queensland's transition to a Smart State. The River City Blueprint will build on the foundation established by the Smart Cities report. The report presented 11 objectives for a smart city, which will be incorporated into the River City Blueprint. Innovations recommended by the Smart Cities report will also be investigated in more depth, together with alternative strategies. The River City Blueprint area is 7,968 hectares with a population density of 27.88 people per hectare (2006). It is a mixed use area, with residential, commercial, industrial, recreational, educational, institutional, cultural and tourist land uses. The River City Blueprint area encompasses the suburbs of Albion, Auchenflower, Balmoral, Bowen Hills, Bulimba, (Brisbane) City, Dutton Park, East Brisbane, Fairfield, Fortitude Valley, Hawthorne, Herston,

Highgate Hill, Kangaroo Point, Kelvin Grove, Milton, New Farm, Newmarket, Newstead, Norman Park, Paddington, Red Hill, South Brisbane, Spring Hill, West End, Wilston, Windsor and Woolloongabba, and parts of Alderley, Annerley, Ascot, Ashgrove, Bardon, Camp Hill, Clayfield, Coorparoo, Grange, Greenslopes, Hamilton, Lutwyche, Morningside, Mount Coot-tha, Seven Hills, St Lucia, Taringa, Toowong, Wooloowin and Yeronga.

At a Community Forum held in June 2010, it was reported that the following represent the key strategic issues for the inner city of Brisbane:
- Defining a sustainable city structure
- Shifting the development trend (height/density) from river oriented to transit oriented
- Providing development capacity to meet employment targets and facilitating the growth of knowledge industries connected to education and health research precincts
- Providing housing and lifestyle affordability options that reverse the demographic trend of significantly small proportion of couples with children living in the inner city
- Providing transport modes and interchanges best suited to connecting people along the river corridor (east-west) and transit corridor (north-south) that does not impact on urban amenity and the attractiveness of the place to work, live and play
- Providing urban amenity (scale, character, quality and quantity of public space) and other community facilities to cater for users of the inner city and to provide an attractive place to work, live and play.

The plan will address the following themes:

- Sustainable City (overriding framework)
- Connected City: pedestrian, cycling, public transport and vehicular strategy
- Prosperous City: economic, innovation and creativity strategy
- Liveable City: residential communities and urban amenity strategy
- Inclusive City: social and cultural strategy

Appendix 5
Stakeholders

A5.1 Interviewees

Organisation	Sector
Property Council of Australia (Queensland)	Industry
Australian Industry Group	Industry
Brisbane Airport Corporation	Industry
Chamber of Commerce and Industry Queensland	Industry
SEQ Indigenous Chamber of Commerce	Industry
Brisbane Marketing	Industry/Government
Economic Development (BCC)	Government
City Planning and Sustainability Division (BCC)	Government
Water Resources Branch (BCC)	Government
Natural Environment & Sustainability Branch (BCC)	Government
Indigenous Aspirations Strategy (BCC)	Government
Brisbane Infrastructure, Transport and Traffic (BCC)	Government
Department of Employment, Economic Development and Innovation(State Government)	Government
Department of Communities (State Government)	Government
Department of Education & Training (State Government)	Government
Department of Transport and Main Roads (State Government)	Government
SEQ Council of Mayors	Government
QCOSS	Non-Profit

Organisation	Sector
Ethnic Communities Council of Queensland	Non-Profit
University of Queensland	Institution
Griffith University	Institution

A5.2 For follow up

Organisation	Sector
QUT	Institution
Major Cities Unit (Department of Infrastructure, Transport, Regional Development and Local Government) (Federal Government)	Government
Queensland Urban Utilities	Government
Department of Environment & Resource Management (State Government)	Government
Department of Infrastructure & Planning (State Government)	Government
Department of Health (State Government)	Government
Community Services Branch (BCC)	Government
Port of Brisbane	Industry

A5.3 Informal Discussions, Presentations & Briefings

While not formal stakeholder engagements, the following represent inputs into the Regional Roadmap process.

Organisation	Notes	Sector
Growth Management Queensland, Department of Infrastructure & Planning (State Government)	Presentation at a State Government Briefing Session	Government
State Government Briefing Session		
Department of Environment & Resource Management (State Government)	Briefing on Tomorrow's Regions and Regional Planning initiatives	Government
Department of Premier and Cabinet (State Government)	Briefing on Q2	

Department of Public Works (State Government)	Briefing included broadband	
Office of Economic & Statistical Research, Queensland Treasury	Briefing on data sources and services	
Office of Rural and Regional Health, Queensland Health		
Department of Education & Training		
DEEDI		
Department of Justice & Attorney-General		
Department of Community Safety		
Regional Managers Coordination Network (State and Local Government)	Attendance at meeting to inform about Regional Roadmap and broker contacts and establish networks – RDA invited to participate in truancy project by Queensland Police	Government
Tony Krimmer, Innovative Regions, Enterprise Connect (Federal Government)	Project proposal initiated	Government
Infrastructure for a future state Forum, Innovation Week **Industry** • Peter Grant, ICT Industry Expert • Kate Farrar, Managing Director, QEnergy • David Waldie, Managing Director, Allegro Networks **Government** • Paul Russell, Director ICT and the Digital Economy, Department of Employment, Economic Development and Innovation (DEEDI) • Steve Burmester, Program Manager, National Electronic Health Transition Authority (NEHTA) and Enterprise Architect at Queensland Health **Researchers** • Professor John Frazer, Chair of Design Science, Faculty of Science and Technology and Faculty of Built Environment and Engineering, QUT • Professor Simon Kaplan,	A forum to discuss opportunities that may be enabled by the introduction of a nationwide, super-fast broadband, as will be provided by the National Broadband Network (NBN).	Government, Institutional and Industry Representation

Professor of Computer Science and Executive Dean, Faculty of Science and Technology, QUT • Professor Edward Chung, Expert in the application of Intelligent Transport Systems (ITS) • Professor Greg Hearn, Research Professor in the Creative Industries Faculty, QUT			

Appendix 6
Stakeholder Interview Protocol

1. Introduce the RDA and explain its role

    - RDA Committees have been established across the country to grow and strengthen regions – there are 55 Australia-wide and 12 across Queensland
    - Each RDA in Queensland is an independent not-for-profit incorporated association
    - They are formed through a partnership between Federal, State and Local government – the aim is to work across all spheres of government and use their combined resources more efficiently to promote sustainable regional development
    - An MOU between the Federal and Queensland governments has been implemented; the RDA Committee includes members with specific expertise in local government including Councillors and staff
    - The Brisbane RDA region maps across the Brisbane local government area

2. Explain the purpose of the Regional Roadmap and the interview

    - Each RDA will produce a Regional Roadmap
    - This document presents a description of the region
    - It frames regional development priorities, issues and strategies
    - The Regional Roadmap takes environmental, social and economic issues into consideration, with a strong emphasis on economic development and job creation
    - Identify opportunities and mechanisms for the region to take advantage of Australian, Queensland and local government programs and services

3. What are your key priorities for the Brisbane region?

4. What are your critical issues in progressing those priorities?

5. How can your priorities be advanced through linkages with other sectors and government?

6. What results have been realised through any existing effective linkages?

7. What is missing in linkages and relationships with government and other sectors at present?

8. How do these missing links and relationships impact on your ability to advance your priorities for the region?

9. How do you think these gaps should be addressed?

10. What are the obstacles or constraints in addressing these gaps?

11. What 'big shifts' would you would like to see happen (or need to happen) in relation to Brisbane's regional development or your sector? And why?

12. Do you have anything else you would like to add or comment on in relation to how RDA Brisbane could enhance regional development?

Appendix 7
International City Rankings

Index	Brisbane's Ranking	Higher Australian City Rankings
Mercer Quality of Living 2010 *Based on 39 criteria, including political, socio-economic, environmental, health, education, and transport*	36th	10th = Sydney 18th = Melbourne 21st = Perth 26th = Canberra 32nd = Adelaide
Mercer Eco-City 2010 *Based on criteria of water availability, waste removal, sewage, air pollution and traffic congestion*	23rd	7th = Adelaide 12th = Perth 21st = Canberra
Economist Global Liveability 2010 *Each city is assigned a score for over 30 qualitative and quantitative factors across five broad categories: stability, healthcare, culture and environment, education and infrastructure*	21st	3rd = Melbourne 7th = Sydney 8th = Perth 8th = Adelaide
Monocle's Most Livable Cities Index 2010 *Important criteria in this non-scientific survey are safety/crime, international connectivity, climate/sunshine, quality of architecture, public transportation, tolerance, environmental issues and access to nature, urban design, business conditions, proactive policy developments and medical care.*	Brisbane is not in the top 25 – no other data freely available	9th = Melbourne 12th = Sydney