South East Queensland

Regional Plan 2005-2026

Queensland **the Smart State**

SEQROC

Queensland Government
Office of **Urban Management**
Department of **Local Government, Planning, Sport and Recreation**

South East Queensland Regional Plan 2005 - 2026

Prepared by:
The Honourable Terry Mackenroth, regional planning Minister in accordance with the *Integrated Planning Act 1997*, section 2.5A.15.

In partnership with:
South East Queensland Regional Organisation of Councils (SEQROC)

In consultation with:
The South East Queensland Regional Coordination Committee (RCC)

Published by:

Queensland Government
Office of **Urban Management**

Department of **Local Government, Planning, Sport and Recreation**

June 2005
ISBN 1 9210557 02 05

Release notes

This *South East Queensland Regional Plan 2005-2026* (the Regional Plan) is released by the regional planning Minister in accordance with the *Integrated Planning Act 1997*, (IPA), section 2.5A.15. It is a statutory instrument under the *Statutory Instrument Act 1992*.

The Regional Plan applies within the South East Queensland (SEQ) regional local government areas as defined in the IPA, section 2.5A.2. It replaces the *Draft South East Queensland Regional Plan* (the Draft Plan) released by the regional planning Minister on 27 October 2004. The Draft Plan was subject to community consultation and comment up to 28 February 2005.

The Regional Plan has been prepared in good faith, taking into account all public submissions, to provide a framework for the management and development of the SEQ region to 2026.

The Regional Plan represents an agreed Queensland Government position on the future of SEQ. Any plans, policies and codes being prepared or amended by state agencies must reflect and align with the Regional Plan.

The Regional Plan does not commit or pertain to commit any government, industry or community organisation to implement, fund or otherwise resource specific activities or programs.

Maps indicated as being for information only are intended to represent general concepts for the purpose of broad-scale regional planning. These maps do not and are not intended to identify or give attributes or rights, including land use and development rights, to specific land parcels.

The Regulatory Provisions of the Regional Plan, including the Regulatory Maps have effect from the date of release. The Regulatory Maps are cadastre based and allocate all land in the region into regional land use categories for the purpose of the Regulatory Provisions of the Regional Plan.

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South East Queensland

Regional Plan 2005-2026

Foreword

A new South East Queensland is emerging. It is a South East Queensland that values the critical balance between moving forward with our rapidly growing population and maintaining our wonderful lifestyle.

There exists an adage, 'if you fail to plan, then you plan to fail'. Whilst many of us will have heard this, it is easily forgotten and often overlooked.

The *South East Queensland Regional Plan 2005-2026* will not be forgotten and will never be overlooked.

It is the product of years of hard work undertaken by the State Government and local councils using input from all sectors of the community so that this region can grow and prosper during the next 20 years whilst also preserving our uniquely beautiful environment such as our parks, scenic delights, wildlife and habitat.

It is enshrined in state legislation so that State and local governments must follow its guidelines, boundaries and regulations when making decisions involving development. The Plan represents a Smart State way of planning in this region. If we are going to accommodate one million extra residents in this region in the next two decades, we need to be smarter in how we use the land available to us.

The State and local governments of this region have faced up to the challenges of growth and associated change. We recognise that we must develop and implement a coordinated approach to planning so that we are on track to meet future community priorities, needs and expectations.

Finalised after four months of extensive public consultation, the Regional Plan manages growth and urban development in this region over the next two decades.

It protects more than 80 per cent of all land in South East Queensland from urban development. The Regional Plan, along with the *South East Queensland Infrastructure Plan and Program 2005-2026* which was launched earlier this year, lays the foundation for safeguarding our environment, managing development and retaining the very qualities that attract people to this region in the first place. It will build a sustainable future for the region.

In this Plan, we have an overarching long-term policy plan for the region.

It offers the private sector greater certainty to allow for better-informed investment decisions and also provides strong support and protection for our regional open spaces and rural production areas - both vitally important to the future of South East Queensland.

The State Government is delivering a long-term and achievable means of balancing the competing economic and environmental pressures in the region.

The *South East Queensland Regional Plan 2005-2026* maps out a better future for everyone living and working in this wonderful part of the world.

The Honourable Peter Beattie MP
Premier and Minister for Trade

The Honourable Terry Mackenroth MP
Deputy Premier, Treasurer
and Minister for Sport

The Right Honourable Lord Mayor
Councillor Campbell Newman
Chair of the South East Queensland
Regional Organisation of Councils

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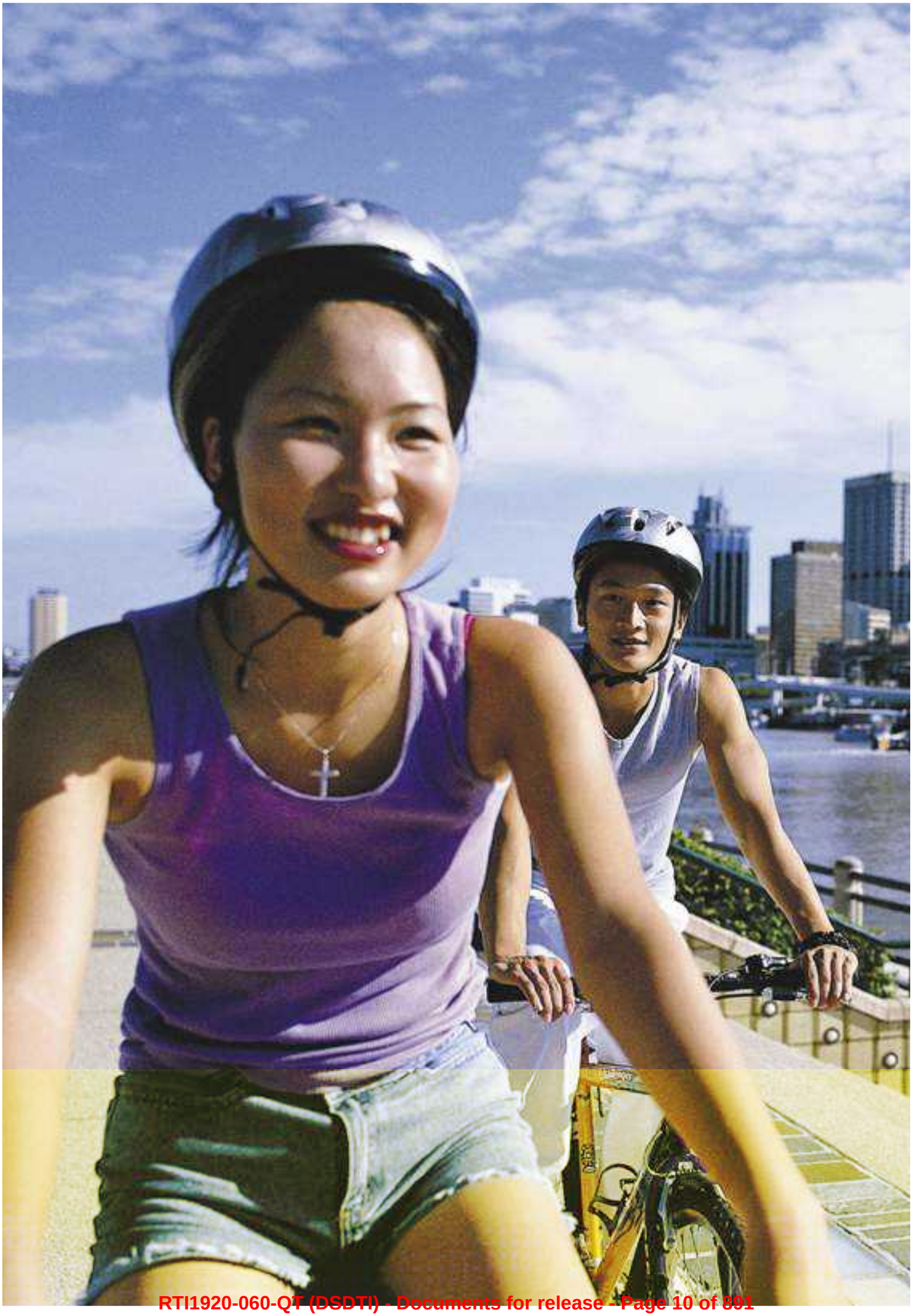


Part A
Preamble

Purpose

The South East Queensland (SEQ) region is Australia's fastest-growing region, attracting on average 55,000 new residents each year over the past two decades. The region is also experiencing rapid employment growth and is emerging as a significant economic hub with national and international recognition.

The *South East Queensland Regional Plan 2005 - 2026* (the Regional Plan) will help to manage this growth and associated change in the most sustainable way and to protect and enhance the quality of life in the region.

The primary purpose of the Regional Plan is to provide a sustainable growth management strategy for SEQ to the year 2026. This strategy encompasses:

- determining appropriate developable land to meet future population growth;
- providing timely and cost-effective infrastructure and services;
- establishing sound urban development principles that support a compact, well-serviced and efficient urban form;
- protecting and enhancing the region's natural environment, biodiversity and natural resources;
- maintaining and enhancing the quality of life for the existing and future communities; and
- supporting a viable and diverse economy with well-located employment opportunities and economic activity centres.

Preparation

The Regional Plan has been prepared in accordance with section 2.5A of the *Integrated Planning Act 1997* (IPA).

The IPA sets out the required procedure which the regional planning Minister must follow in preparing and making the Regional Plan. The key steps include:

- preparing a Draft Plan;
- making the Draft Plan available for public consultation for a minimum of 60 business days;
- considering all properly made submissions on the Draft Plan; and
- consulting with the Regional Coordination Committee (RCC).

To comply with these requirements, the preparing and making of the Regional Plan included:

- preparing a Draft Plan which was released on 27 October 2005;
- undertaking a comprehensive public consultation program on the Draft Plan, which was on public exhibition for a period of four months (85 working days) through to 28 February 2005;
- reviewing 8500 formal submissions. Each submission was assessed and summarised, and the key issues collated into a Consultation Report with recommendations for the regional planning Minister to consider; and
- the regional planning Minister consulting with the RCC during preparation of the Draft and final Regional Plan.

The primary purpose of the Regional Plan is to provide a sustainable growth management strategy for SEQ to the year 2026.

Application

The Regional Plan is a statutory instrument under the *Statutory Instruments Act 1992* and is also a planning instrument under the IPA. It has a direct effect in its own right and indirect effect through the amendment and alignment of local government planning schemes and state plans and policies.

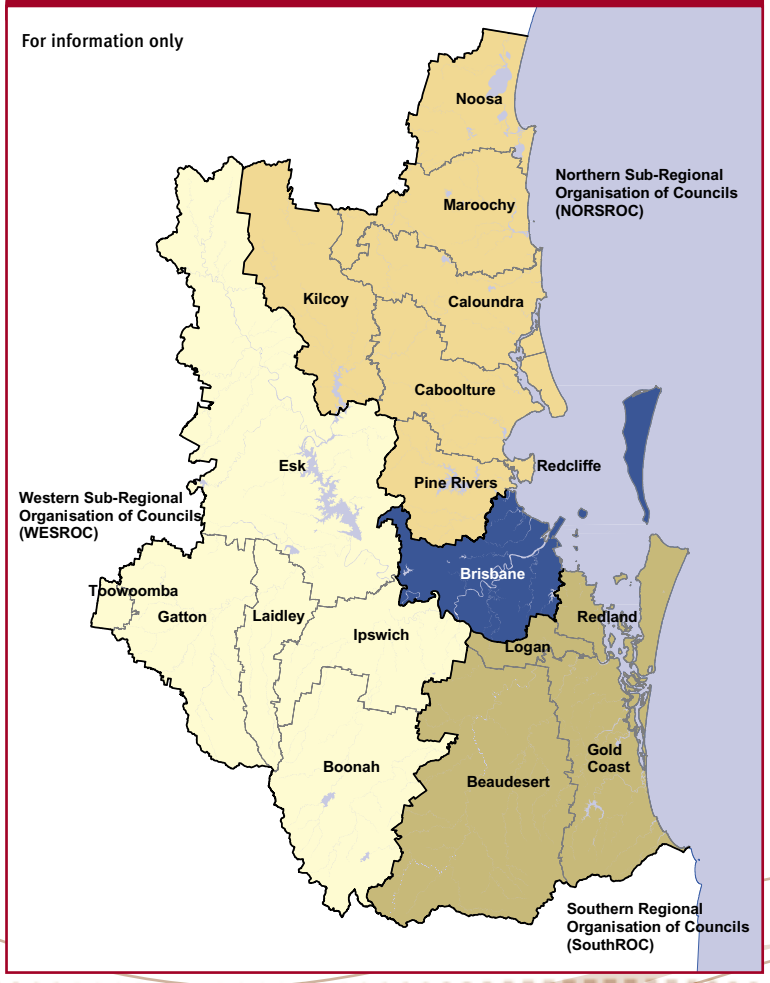
SEQ region

The Regional Plan only applies to those local government areas within the SEQ region as defined in section 2.5A.2 of the IPA. It comprises the following:

- Beaudesert Shire;
- Boonah Shire;
- Brisbane City;
- Caboolture Shire;
- Caloundra City;
- Esk Shire;
- Gatton Shire;
- Gold Coast City;
- Ipswich City;
- Kilcoy Shire;
- Laidley Shire;
- Logan City;
- Maroochy Shire;
- Noosa Shire;
- Pine Rivers Shire;
- Redcliffe City;
- Redland Shire; and
- Toowoomba City.

For the purpose of the Regional Plan, the SEQ region also includes Queensland waters adjacent to these local government areas.

Map 1 – SEQ region



Effect

The Regional Plan has effect on and from the day the making of the plan is published in the Gazette.

The effect of the Regional Plan is established under section 2.5A of the IPA.

For the purpose of the IPA, the Regional Plan is taken to be of state interest.

The Regional Plan represents an agreed Queensland Government position on the future of SEQ.

The Regional Plan is the pre-eminent plan for the SEQ region and takes precedence over all other planning instruments. Under the IPA, the Regional Plan prevails where there is any inconsistency with any other plan, policy or code, including any other planning instrument made under state legislation, that have effect within the SEQ region. The Regional Plan, however, has been prepared to complement, rather than to override other relevant state planning instruments.

Any plans, policies and codes that relate to the SEQ region being prepared or amended by state agencies must reflect and align with the Regional Plan.

The Regulatory Provisions of the Regional Plan are required to be taken into account in planning and development decision-making processes, including:

- Queensland Government plans and polices;
- local government planning schemes and other plans and policies;
- planning and development process under the IPA; and
- development applications made under the *Integrated Development Assessment System* (IDAS) of the IPA.

Where local government planning schemes materially contradict the Regional Plan, the planning scheme must be amended to ensure alignment.

Planning period

The Regional Plan provides the framework for managing growth, change, land use and development in the SEQ region to the year 2026.

It also considers the region's potential growth needs beyond 2026 and in particular, the need to ensure planning decisions made today do not compromise options to meet longer-term regional needs.

Review and amendment

Amendments to the Regional Plan must be made in accordance with the procedures set down in section 2.5A of the IPA.

The Regional Plan will be monitored and reviewed on a regular basis to ensure it continues to provide the most appropriate framework for managing growth and change in SEQ. This process recognises the dynamic nature of development in SEQ and the need to balance certainty with the flexibility to deal with changing circumstances.

A formal review of the Regional Plan shall be undertaken every five years. The first formal review will be undertaken by July 2010.

Notwithstanding the above, the regional planning Minister can amend or replace the Regional Plan at anytime under the procedures set out in the IPA.

Other SEQ regional planning documents

The Regional Plan indicates a range of supporting documents will need to be prepared. These include, but may not necessarily be restricted to:

- the annual *SEQ Infrastructure Plan and Program* (the Infrastructure Plan);
- guidelines and/or codes associated with regional policies or Regulatory Provisions;
- maps indicating areas where specific regional policies or Regulatory Provisions apply;
- Local Growth Management Strategies; and
- structure plans.

The status of these documents will vary depending upon the enabling legislation and planning intent applied in the Regional Plan. The planning intent and statutory basis shall be set out in each document.

Definitions

Terms used in this Regional Plan are as defined in the IPA, unless otherwise specified in the Regulatory Provisions or glossary.

The Regional Plan provides the framework for managing growth, change, land use and development in the SEQ region to the year 2026.

Structure

The Regional Plan is set out under the following sections:

Part A Preamble
The preamble provides background material to establish the context and intent of the Regional Plan. It also outlines the need for the Regional Plan and its relationship with other planning instruments.

Part B Growth management
The growth management section outlines the population, housing and employment projections for the region and their implications for the region.

Part C Regional vision
The vision statement outlines the desired future for the SEQ region.

Part D Strategic directions
The strategic directions statements set down the broad policy framework for the Regional Plan.

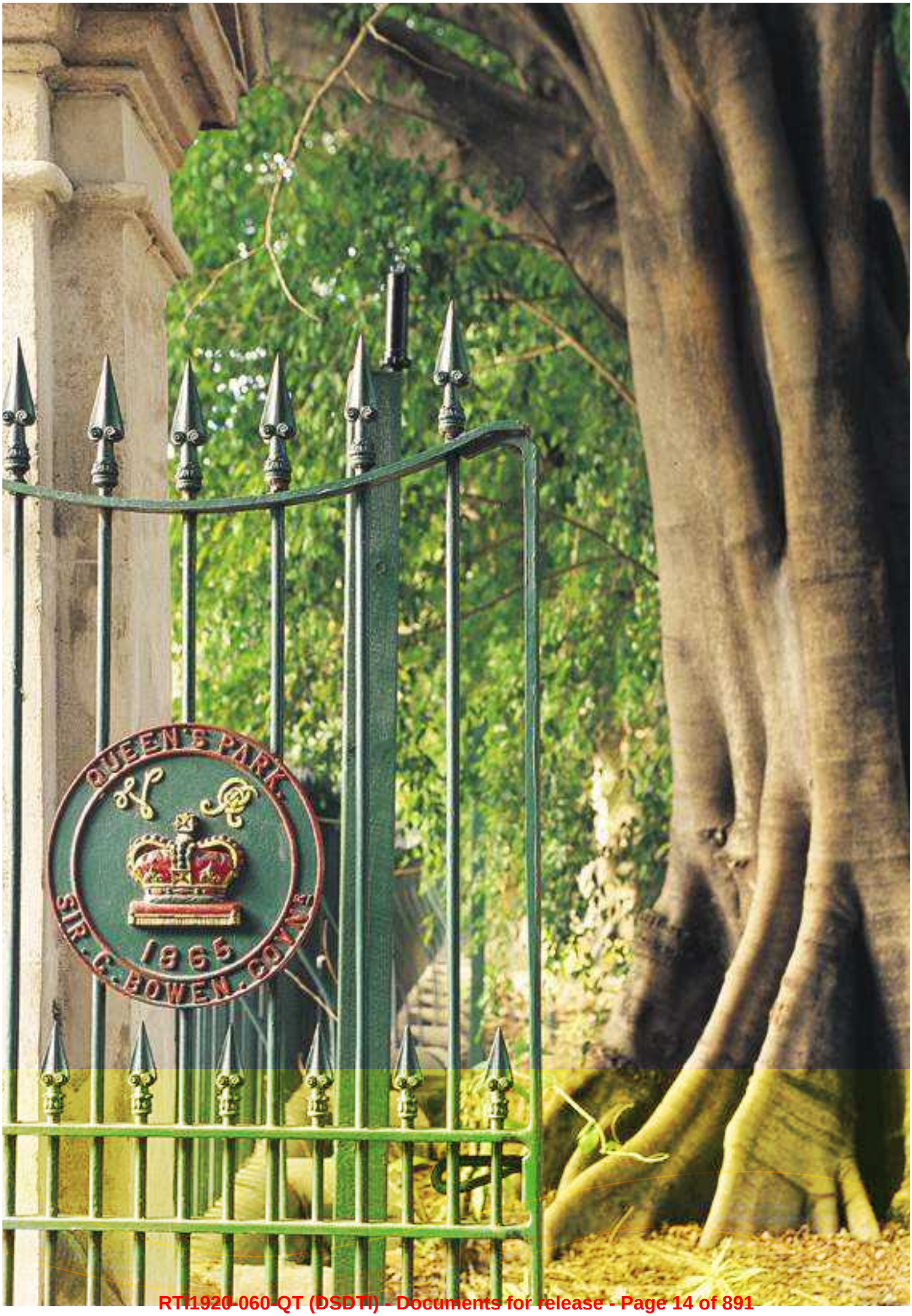
Part E Regional land use pattern
The regional land use pattern establishes the land use categories that define the structure of the region and provides the basis for application of the Regulatory Provisions.

Part F Regional policies
Regional policies provide the planning principles and guidelines for managing the future development of the SEQ region. Regional policies must be reflected in all relevant plans, policies and codes being prepared or amended by State or local governments in the SEQ region. They are also of state interest with respect to consideration of local government planning schemes and development applications under the IPA.

The supporting notes provide guidance on interpreting and applying the regional policies.

Part G Implementation and monitoring
The implementation section sets out the proposed governance arrangements for implementing the Regional Plan.

Part H Regulatory Provisions
The Regulatory Provisions of the Regional Plan apply to development applications for material change of use and subdivisions in the SEQ region.



Part B
Growth management

Population growth

SEQ has experienced high and sustained population growth since the 1980s, growing at an average of 55,300 persons each year between 1986 and 2004. The estimated resident population of the region in 2004 was 2,666,600 people.

The current population projections for the SEQ region are set out in Table 1 and shown graphically in Figure 1. In order to encompass the range of possible outcomes three series were produced: low, medium and high projections.

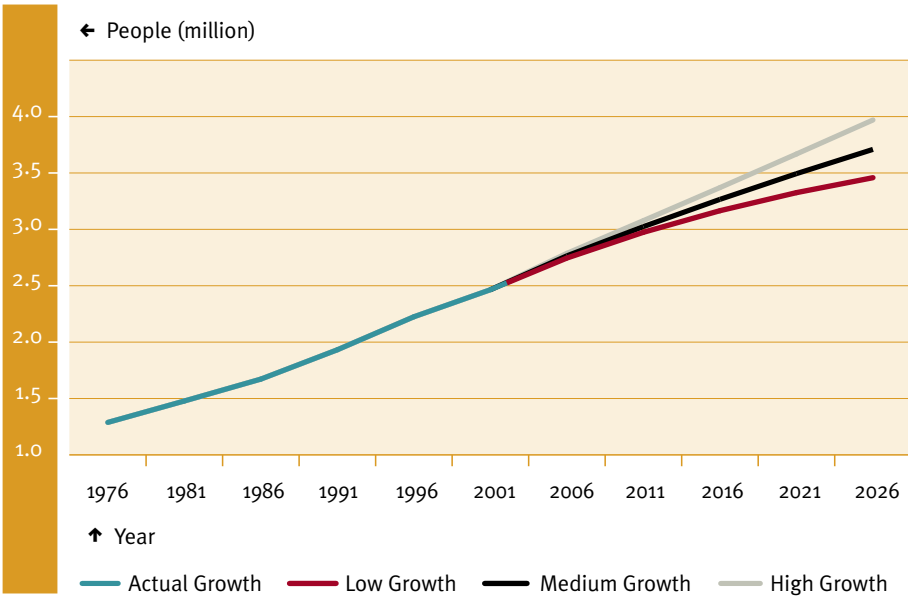
The Regional Plan is based on the medium series projections, which are considered at this time to be the most likely outcome. Population growth in the region will, however, be monitored and kept under review to ensure future planning utilises the most up-to-date information.

Table 1 – SEQ region population projections (2001 to 2026)

	Population projection series (million)		
Year	**Low**	**Medium**	**High**
2001	2.46	2.46	2.46
2006	2.75	2.77	2.79
2011	2.97	3.03	3.08
2016	3.17	3.27	3.37
2021	3.33	3.49	3.67
2026	3.46	3.71	3.97
Average increase per year 2001 to 2026	**40,000**	**50,000**	**60,000**

Source: *Department of Local Government, Planning, Sport and Recreation, Planning Information and Forecasting Unit, 2003.*

Figure 1 – SEQ region actual and projected population growth (1976 to 2026)



Source: *Department of Local Government, Planning, Sport and Recreation, Planning Information and Forecasting Unit 2003.*

Population distribution

The region's population is heavily urbanised and is generally concentrated along the coast between Noosa and Coolangatta. The metropolitan areas of the Brisbane Statistical Division, Gold Coast and Sunshine Coast Statistical Districts account for 90 per cent of the region's population. The six predominantly rural shires of Beaudesert, Boonah, Esk, Gatton, Kilcoy and Laidley account for 55 per cent of the region's land area but only 4.3 per cent of the population.

Table 2 – SEQ region population growth distribution (1986 to 2004)

Local government area	1986	2004		Growth 1986 to 2004	
	Population	Population	per cent	Population	per cent
Brisbane City	**737,418**	**957,010**	**35.9**	**219,592**	**22.1**
NORSROC					
Caboolture Shire	48,731	126,729	4.8	77,998	7.8
Caloundra City	36,277	86,468	3.2	50,191	5.0
Kilcoy Shire	2,705	3,467	0.1	762	0.1
Maroochy Shire	61,480	141,069	5.3	79,589	8.0
Noosa Shire	18,778	47,606	1.8	28,828	2.9
Pine Rivers Shire	76,748	139,228	5.2	62,480	6.3
Redcliffe City	45,829	52,303	2.0	6,474	0.7
Total	**290,548**	**596,870**	**22.4**	**306,322**	**30.8**
SouthROC					
Beaudesert Shire	26,641	59,393	2.2	32,752	3.3
Gold Coast City	214,949	469,214	17.6	254,265	25.6
Logan City	121,223	173,331	6.5	52,108	5.2
Redland Shire	60,231	127,777	4.8	67,546	6.8
Total	**423,044**	**829,715**	**31.1**	**406,671**	**40.9**
WESROC					
Boonah Shire	7,341	8,567	0.3	1,226	0.1
Esk Shire	10,763	15,206	0.6	4,443	0.4
Gatton Shire	12,653	16,288	0.6	3,635	0.4
Ipswich City	103,952	135,579	5.1	31,627	3.2
Laidley Shire	7,178	13,351	0.5	6,173	0.6
Toowoomba City	79,067	94,043	3.5	14,976	1.5
Total	**220,954**	**283,034**	**10.6**	**62,080**	**6.2**
Total SEQ region	**1,671,964**	**2,666,629**	**100**	**994,665**	**100**

Source: *Prepared from Australian Bureau of Statistics, Regional Population Growth, Australia and New Zealand, 2003-2004, Cat No 3218.0 and companion data; ABS, Regional Population Growth (various editions), Cat No 3218.0; unpublished data; and Planning and Information Forecasting Unit sources.*

Housing demand

The projected population increase, combined with the continuing trend towards smaller households, will require an estimated 575,000 new dwellings in the region by 2026. There will also be a greater demand for a diversity of housing forms to match the needs of changing household structures, particularly an increase in one- and two-person households.

The average household size in SEQ in 2001 was 2.6 people. This is expected to decline to 2.45 people by 2011 and 2.29 people by 2026.

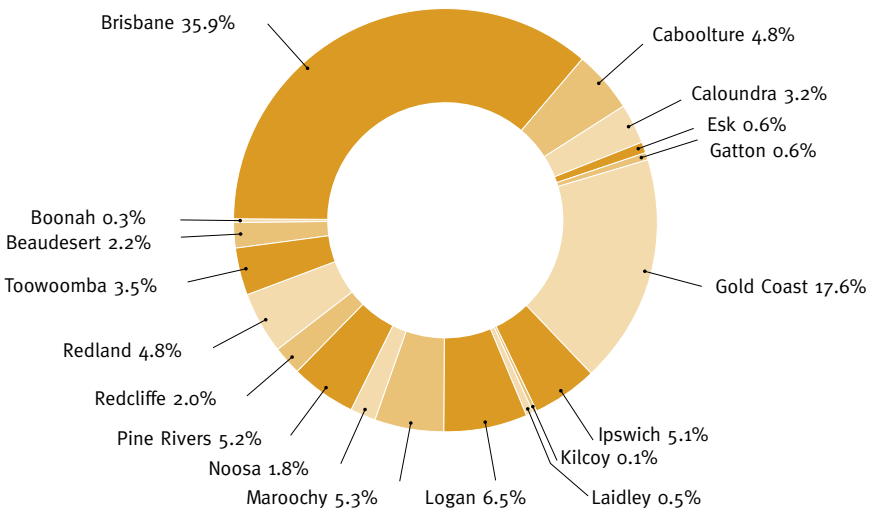
The falling household occupancy rates result from changes in the household structure in the region. By 2026, one- and two-person households are expected to account for around 60 per cent of all households. This compares to around 50 per cent in 2001. This trend will impact on the housing projections and type of dwellings required for the future and has been considered in the estimate of new dwellings.

The changing household structure and resulting reduction in average household size will mean the percentage growth in housing demand will continue to be higher than the population growth rate.

Employment and services

The increased population in SEQ will generate demand for around 425,000 new jobs by 2026. There will also be a wide variety of supporting infrastructure and services required, ranging from arterial roads, public transport and water storages to local parks, shops and community facilities. These demands will continue to create opportunities and also impose significant social, economic and environmental pressures on the region.

Figure 2 – Population distribution in the SEQ region by local government area (at 30 June 2004)



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The projected population increase, combined with the continuing trend towards smaller households, will require an estimated 575,000 new dwellings in the region by 2026.

Growth projections

The Regional Plan is based upon current regional forecasts of population growth, household formation, demand for new dwellings, employment needs and land availability to 2026.

Successful implementation of the Regional Plan will influence decisions about where growth occurs in the region. At this time, the current projections are as accurate as possible and are considered to provide a sound basis for regional planning. Growth will be closely monitored and projections adjusted accordingly.

Some submissions on the Draft Regional Plan suggested growth should not be planned for, but rather should be redirected to alternative locations in the State. While this could be encouraged, there is no available or generally acceptable policy arrangement to direct this outcome.

Implications of current growth patterns

Many of the region's growth pressures are closely related to past and current patterns of development.

The region has experienced significant impacts from the Australia-wide 'sea-change' phenomenon, with the majority of population growth occurring along the coast. Between 1986 and 2004, the fastest-growing areas were Gold Coast City, Brisbane City and Maroochy Shire. In contrast, the western parts of the region, which include Ipswich City and Toowoomba City, have traditionally grown more slowly than the region as a whole. Since 2001, however, both cities have shown significant increases in population growth rates.

The gradual reduction in household occupancy rates and increased proportion of one- and two-person households will impact on dwelling types. Lifestyle changes may also influence housing location choices. As a result, future planning will need to provide for a greater diversity of housing type and location.

Urban densities remain very low in SEQ, with only a small increase in the proportion of attached houses, townhouses and apartments over the past decade. Across the region, attached housing comprised 37 per cent of total dwelling approvals in 2004. Brisbane City and Gold Coast City were highest at around 50 percent. The number of small lots (less than 450m^2) as a proportion of all detached housing lots increased only slightly, from nine per cent in 1994 to 10 per cent in 2004.

There has been significant fragmentation of rural lands and bushland brought about by the excessive use of rural residential development on the urban fringe and in rural areas. Between 1991 and 2001, rural residential approvals accounted for more than 70 per cent of all land allocated for residential purposes, but accommodated only 15 per cent of developed allotments.

An alternative approach

As a community, it is important to ask what sort of future is desired for SEQ. It is also necessary to understand the implications of continuing the current trend of using low-density residential development as the principal means of accommodating future population growth.

The community does not, however, have to accept this future. Alternative strategies can be adopted to better manage growth.

A move towards a more compact urban form with higher densities in select areas which are ready and appropriate for change, could achieve significant benefits.

A more compact urban form would reduce travel demands, thereby reducing energy usage and emission of pollutants. It could also improve levels of accessibility and have fewer detrimental impacts on the region's environment and natural resources. It would help protect the region's rural production and regional landscape areas from urban encroachment.

Significant benefits could also be achieved if growth pressures on the coast were relieved and complemented with urban growth opportunities and broader housing choices in other less sensitive parts of the region.

To achieve shifts of this nature will require major changes in the way growth in the region is currently planned. The Regional Plan proposes a new approach, based on managing rather than responding to growth, leading the desired results through timely provision of infrastructure and assisting employment creation in identified growth areas.

Key features of the Regional Plan's approach to managing growth are:

- clearly identifying and protecting regional landscape and rural production areas from inappropriate development;
- allocating adequate land to accommodate future urban growth;
- supporting growth in the Western Corridor;
- defining principles and policies to guide growth, change and development;
- using Regulatory Provisions to prevent development that is not consistent with the intent of the Regional Plan;
- ensuring the Regional Plan is the pre-eminent plan for SEQ and is reflected in all other State and local government plans and strategies;
- giving direction to the Infrastructure Plan regarding the provision and investigation of regional infrastructure;
- linking the Regional Plan with state infrastructure and service delivery programs and budgetary processes; and
- informing local government infrastructure programs and budgets, and providing certainty to the private sector.

While the Regional Plan is intended to relieve pressure on the coastal environment as much as possible, it also acknowledges existing commitments, embedded infrastructure and community investment, and historic patterns of development.

There are no absolute or definitive answers; some trade-offs are inevitable and necessary. These are some of the choices the community can make.

Part C
Regional vision

The regional vision defines the community's long-term aspirations for the region. It describes the environment the community desires to live in now and the environment it wishes to protect for future generations.

The regional vision for SEQ is:

A future for SEQ which is sustainable, affordable, prosperous and liveable; 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, well-designed and the subtropical character of the region is recognised and reinforced;
- ecological and culturally significant landscapes are valued, celebrated and protected; and
- the community has access to a range of quality open space and recreational opportunities.

By 2026, SEQ is a region of inter-connected communities, with excellent accessibility and an extensive and efficient public transport system. At its heart is Brisbane, State capital and subtropical world city. Surrounding the capital, the region contains a number of 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, the Bay and islands, extensive beaches, parks, bush and farmlands.

SEQ is well managed with a sustainable quality of life, based on a unique landscape, quality built form and diverse cultures. It has a progressive and well-informed community and enjoys international recognition for leadership in fostering sustainable regional equality and prosperity.

Part D
Strategic directions

To achieve the vision and the desired outcomes for the region, the Regional Plan proposes to manage growth and change through appropriate policies and the timely provision of infrastructure and employment. The strategic directions to manage growth in SEQ are:

Creating a more sustainable future

A key objective underpinning the Regional Plan is to ensure future growth and change is managed in the most sustainable way possible.

The Regional Plan aims to protect biodiversity, contain urban development, build and maintain community identity, make travel more efficient, and support a prosperous economy. At the same time, the Regional Plan proposes that communities be built and managed using the most up-to-date and effective measures to conserve water and energy and for the design and siting of buildings to take advantage of the subtropical climate.

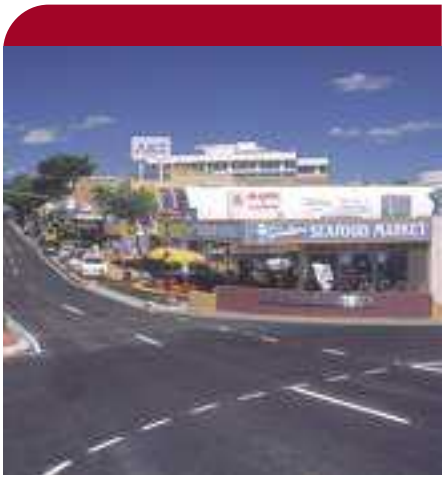
Protecting and supporting regional landscape and rural production values

The rural and natural landscape areas of SEQ support many environmental, rural production, recreational, cultural and scenic features that are highly valued by the region's population. These natural environment and economic resources underpin the region's liveability, form a substantial component of the economy, and will be protected from urban development and rural residential subdivision.

Identifying land to accommodate future growth

The Regional Plan identifies sufficient land to accommodate a projected population of between 3.5 and 4 million people by 2026. Urban growth areas are distributed across the region to facilitate choice, assist housing affordability and strengthen regional identity. Additional land has been identified for employment and economic development.

Future growth will be accommodated through a combination of infill and redevelopement in existing urban areas, greenfield development and rural living. Investigation Area sites have also been identified to accommodate medium- to long-term urban development if required, or to meet unforeseen market and community needs.



A key objective underpinning the Regional Plan is to ensure the future growth and change in the region is managed in the most sustainable way possible.

Promoting land use efficiency

The Regional Plan requires a more efficient use of urban land by redeveloping older and under-utilised areas which are suitable and ready for renewal, by setting targets for infill development across the region, and by improving yields and choice in new areas. Structure plans will be required for all greenfield development sites. State Infrastructure Agreements are required to accompany approval of these plans.

A significant proportion of future dwelling growth will be accommodated through infill and redevelopment within existing urban areas; consolidated around urban activity centres and public transport nodes. New residential areas will be developed at densities that support public transport services and efficient delivery of infrastructure.

Enhancing the identity of regional communities

Emphasis is placed on building strong and well-serviced communities, with distinct local character and identity.

Growing urban areas will be contained and framed by the Regional Landscape and Rural Production Area to preserve key inter-urban breaks; defining the extent and character of regional communities. These inter-urban breaks range in scale from a separation of the Brisbane metropolitan area and the Gold and Sunshine Coasts, to smaller inter-urban breaks defining local settlements. The preferred structure also encourages consolidating growth within and immediately adjacent to rural townships.

Facilitating growth in the Western Corridor

An increased proportion of the region's future population will be accommodated in the Western Corridor, making use of significant areas of available land and reducing pressure on the coast. Future growth in this corridor also provides the opportunity to achieve a good relationship between employment, transport infrastructure and population growth. By identifying areas for future urban development and giving priority to infrastructure and services, increased economic and population growth can be attracted to the Western Corridor.

New development is expected to provide for a wide range and choice of housing type, location and density to meet the needs of the community and to complement priority infrastructure investment.

Supporting rural futures

The Regional Plan identifies 80 per cent of the region as a Regional Landscape and Rural Production Area. While a proportion of this area comprises protected national and conservation parks, water storage and state forests, the majority is privately-owned farmland and contributes significantly to the regional economy. Not all land is good quality productive land and there are particular difficulties where water accessibility is limited and in areas adjacent to urban development. The Regional Plan proposes policies to help rural communities, towns and villages remain viable.

Providing infrastructure and services

Infrastructure required to support the future development of the region is identified in order to manage future growth patterns and inform the implementation and review of the Infrastructure Plan. Water and energy use will be a key focus of attention across the region; to reduce consumption, manage demand and increase the use of renewable resources in the interests of a more sustainable region.

Integrating land use, transport and economic activity

Community needs, quality of life and economic development opportunities can be enhanced by easy access to a good transport system. Future land use and transport will be planned and delivered to integrate and focus future urban growth around transport. Transport infrastructure and service investment across all transport modes will lead and support the desired future urban form.

Attention will be given to the form and density of development around transport infrastructure to improve the relationship between land use and transport and to increase the overall efficiency of existing and proposed investment in transport infrastructure.

Part E
Regional land use pattern

Purpose

The regional land use pattern defines the spatial framework for the region to achieve the desired regional outcomes. It identifies:

- regional land use categories;
- areas of regionally significant conservation, natural resource, landscape, rural production and recreational value; and
- land to accommodate urban development to 2026.

It also assists in aligning regional infrastructure and transport systems with urban and economic activity areas.

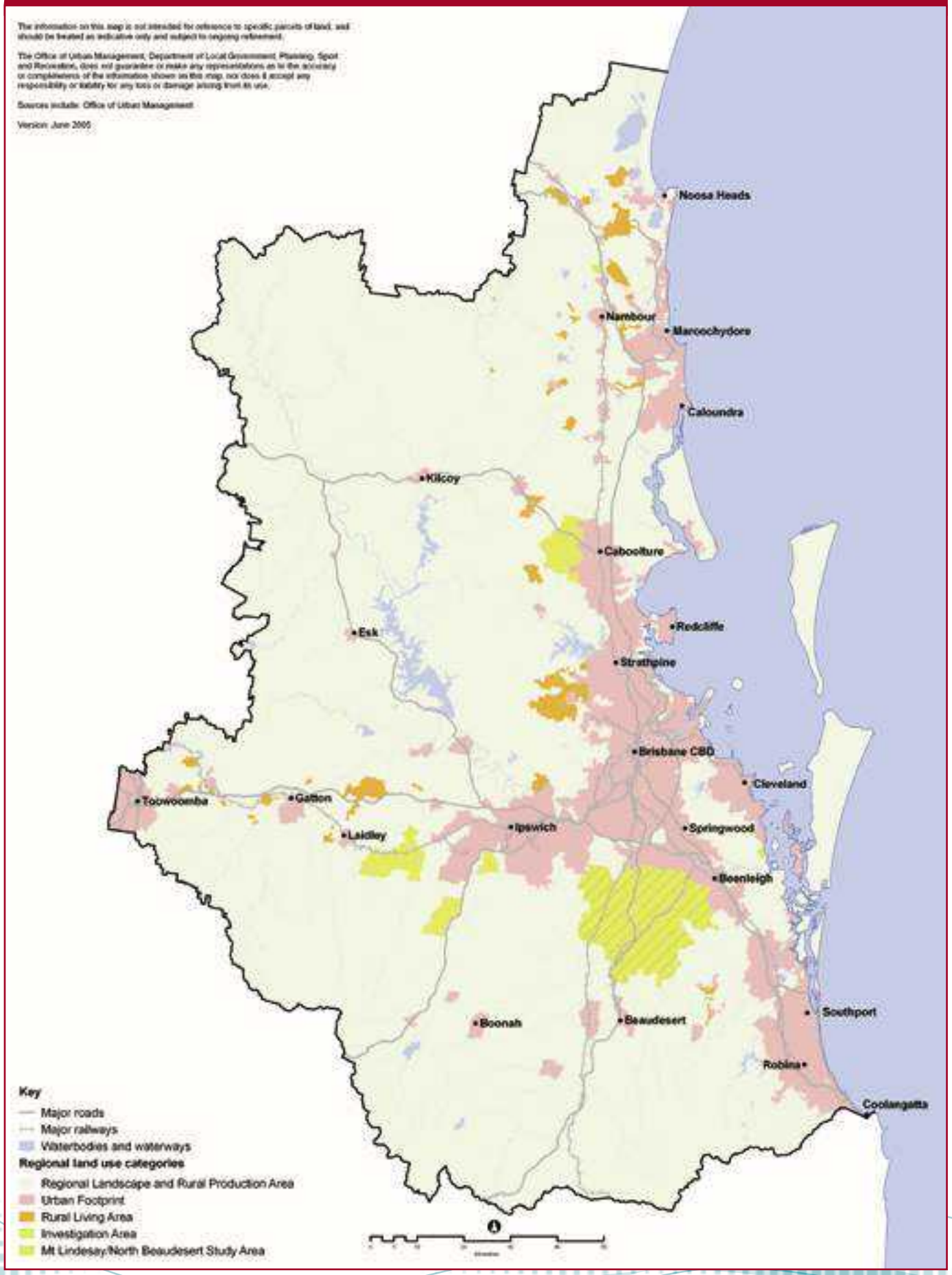
Regional land use categories

The Regional Plan allocates all land in SEQ into one of five regional land use categories. These categories provide the spatial context for the Regulatory Provisions of the Regional Plan. The land use categories are shown in Map 2 and are more precisely defined on the Regulatory Maps (at 1:50,000 scale) that form part of the Regional Plan.

The regional land use categories are:

- **Regional Landscape and Rural Production Area;**
- **Urban Footprint;**
- **Rural Living Area;**
- **Investigation Area; and**
- **Mt Lindesay/North Beaudesert Study Area.**

Map 2 – SEQ regional land use categories



Regional Landscape and Rural Production Area

Intent
The Regional Landscape and Rural Production Area identifies lands that have regional landscape, rural production or other non-urban values and protects these areas from encroachment by inappropriate development, particularly urban or rural residential development.

Description
The Regional Landscape and Rural Production Area includes land with one or more of the following values:
- state or regional nature conservation significance;
- regional ecosystems that are endangered or of concern;
- national park, conservation park, resources reserve, or other conservation area;
- Koala Conservation Area and other major koala habitat;
- Good Quality Agricultural Land and other productive rural areas;
- natural economic resources, including extractive resources and forestry plantations;
- water catchments, water storages and groundwater resources;
- native forests;
- coastal wetlands; and
- land forming strategic and regionally significant inter-urban breaks.

The Regional Landscape and Rural Production Area maintains existing land use rights. This ensures the continuation of significant activities, including agricultural production, access to natural resources, water storage, tourism, outdoor recreation and nature conservation.

Landowners whose undeveloped land is currently identified for rural residential development in local government planning schemes and that falls inside the Regional Landscape and Rural Production Area have until 27 October 2006 to make application for subdivision, being two years after the introduction of the Draft Regulatory Provisions in the Draft Regional Plan.

Regulations
The Regulatory Provisions apply to the Regional Landscape and Rural Production Area. The Regulatory Provisions restrict:
- further fragmentation of land holdings;
- urban development except within established villages; and
- expansion of rural residential development outside areas already allocated in local government planning schemes.

To achieve this, the Regulatory Provisions in the Regional Landscape and Rural Production Area:
- make material change of use applications for urban activity and rural residential purposes impact accessible; and
- prohibit the subdivision of land below 100 hectares, except where land is in an identified rural precinct in a local government planning scheme or does not create additional lots.

For the purpose of the Regulatory Provisions, urban activity is defined as a land use that has an urban function in a town or city environment. It includes residential, commercial, industrial, tourism, sporting and recreational land use.

The urban activity definition excludes activities that have a direct connection with specific natural resource values of the Regional Landscape and Rural Production Area. This includes agricultural activities, agri-business, intensive agriculture, tourist activities and low-level nature-based or outdoor recreation.

The Regulatory Provisions do not apply to a range of smaller-scale developments, such as single buildings on an existing allotment and some low-density, semi-urban developments. Urban development is also allowed around rural villages. These exclusions are detailed in the Regulatory Provisions.

Rural precincts

The Regulatory Provisions allow local authorities to create rural precincts within the Regional Landscape and Rural Production Area. Establishing these precincts enables specific subdivision and land use controls that differ from the generic Regulatory Provisions that apply in the Regional Landscape and Rural Production Area.

These controls are based on a detailed analysis of the area's landscape, rural production, environmental, recreational or other values. Potential rural precinct values include,
but are not limited to:

- nature conservation and biodiversity;
- specific physical/environmental features such as escarpments, ridge lines and coastlines;
- agriculture;
- water supply catchments;
- outdoor recreation; and
- tourist attractions.

Rural precinct plans can only be developed as a component of a local government planning scheme using guidelines prepared by the Queensland Government.

Urban Footprint

Intent
The Urban Footprint identifies land to provide for the region's urban development needs to 2026.

Description
The Urban Footprint includes existing urban areas and greenfield areas potentially suitable for future urban development.

It defines the limits of urban development to 2026 through the use of cadastral or other clearly defined boundaries.

The area includes sufficient land to accommodate the full range of acceptable urban uses, such as housing, industry, business, infrastructure, community facilities and urban open spaces projected to be required over the next 20 years.

Inclusion of land in the Urban Footprint does not imply that all such lands can be developed for urban purposes. The Urban Footprint includes some land not available or appropriate to develop. This includes national parks, state forests and wetlands. These lands will continue to be protected under state legislation such as the *Vegetation Management Act 1999* or local government planning schemes. Land in the Urban Footprint may otherwise be unsuitable for urban development for a range of more local reasons, including constraints such as flooding, land slope, scenic amenity, and protection of biodiversity values of state, regional or local significance.

Local government planning schemes and detailed local structure plans will be the principal instruments for establishing the desired use of land and the preferred timing of development within the Urban Footprint.

The Urban Footprint focuses urban growth in areas that:
- are well located with respect to existing and planned urban infrastructure, activity centres and services;
- promote cohesive communities which support a wide range of services and facilities;
- provide opportunity for redevelopment and infill in existing urban areas;
- are an orderly extension of existing urban areas or support existing centres, including the region's smaller townships; and
- have access to existing or planned employment centres.

The Urban Footprint includes some areas designated or already developed for rural residential purposes that are well located with respect to urban services and facilities. Local government is required to review these areas in order to identify potential opportunities to develop or redevelop some of these areas for urban purposes.

The Urban Footprint also takes account of existing urban development, urban and contiguous rural residential land zonings, and forward planning allocations in existing and proposed local government planning schemes as at 31 May 2005.

Regulations
The Regulatory Provisions do not apply within the Urban Footprint.

Rural Living Area

Intent
The Rural Living Area comprises locations currently designated for rural residential development in local government planning schemes, and where further rural residential development through infill and consolidation is permitted under the Regional Plan.

Description
Rural residential areas contained within the Rural Living Area can continue to be developed for rural residential purposes in accordance with the relevant local government planning scheme requirements.

Significant areas of land are already developed or allocated for rural residential development in the region. Land for rural residential purposes is to be restricted to the Rural Living Area to ensure future development is located where appropriate access to services and facilities can be provided.

Regulations
The Regulatory Provisions enable lands in the Rural Living Area to be developed for rural residential purposes.

The Regulatory Provisions make development applications for urban activities in the Rural Living Area impact assessable.

Investigation Area

Intent
The Investigation Area comprises a series of sites that provide a potential land bank for future medium- to longer-term urban development.

Not all of the land in each of these sites will necessarily be suitable for urban development. However, it is important to protect these sites from intervening and inappropriate uses whilst suitable studies are conducted to assess potential development options and the best long-term use.

Description
The Investigation Area sites are located throughout the region and include land with generally limited landscape or rural production values and few apparent physical constraints to future urban development. They are not generally considered to be required for urban development in at least the first ten years of the Regional Plan, but do provide a potential buffer against unforeseen changes in population growth and related community needs in the medium term.

State or local government can initiate studies into the Investigation Area. Once initiated, studies must be carried out on a partnership basis between State and local governments and in consultation with landowners, key stakeholders and the community.

The intended purpose and opportunities available within each of the Investigation Area sites is different. Consequently, any studies need to take account of local and sub-regional factors and the potential long-term development opportunities for each respective site. The intent and timing of the various Investigation Area sites is outlined in this document.

Regulations
The Regulatory Provisions relating to the Investigation Area are intended to prevent further fragmentation prior to appropriate studies determining the form and timing of any development. To achieve this, the Regulatory Provisions applying in the Regional Landscape and Rural Production Area also apply in the Investigation Area.

In order for urban development to occur in the Investigation Area, the appropriate lands must be reallocated to the Urban Footprint. To do this, changes in the regional land use pattern will need to be approved in accordance with the IPA procedures for amending the Regional Plan.

Additional Regulatory Provisions apply for a limited time to the Mt Lindesay/North Beaudesert Study Area. These provisions prevent further subdivision of lands prior to 26 April 2006, except under limited circumstances. This allows studies to be completed prior to considering further development applications in this area.

Investigation Area criteria

Prior to any urban development in the Investigation Area, the following must be satisfied:

- a detailed study of the relevant site has been undertaken to determine potential development opportunities and constraints;
- the proposed development is demonstrated to be consistent with the intent of the Regional Plan;
- there is a clearly demonstrated public need for the development;
- significant environmental values, open space corridors and inter-urban breaks are identified and protected;
- major transport and infrastructure corridors are identified and protected;
- land for the proposed development has been formally incorporated into the Urban Footprint, with the balance area included in appropriate regional land use categories;
- structure plans have been developed, setting out the overall intent of the proposed development;
- appropriate State Infrastructure Agreements have been finalised; and
- the relevant local government planning scheme has been amended and development approvals obtained.

Summary of Investigation Area sites

1 Bridges

This area to the north of Yandina is identified for possible future employment and enterprise purposes. It is a substantial area of land with good access to local and inter-regional transport infrastructure.

There is an acknowledged shortage of land for general light industry and logistics uses on the Sunshine Coast and a deficiency in local employment opportunities. This shortage is limiting the capacity of State and local governments to broaden the economic base of the Sunshine Coast, shifting it from its current reliance on tourism, services and construction.

Bridges has been identified as the area most likely to satisfy the need for employment in the central and northern sections of the Sunshine Coast. It requires detailed investigation to confirm the most appropriate uses and to ensure any development does not detract from the residential amenity of Yandina township.

If suitable, development in this area would be anticipated to commence in 2010-2015.

2 Caboolture

This is a substantial area of land to the west of Caboolture, providing a significant land resource for future residential, employment and enterprise purposes. The possible future development of this area will benefit from improvements to the intra-regional road and rail infrastructure in the northern corridor and more intensive development in and around the Caboolture-Morayfield Principal Activity Centre and transit node. This area also provides the opportunity to increase the availability of local jobs.

This area presents several complex planning challenges, including fragmented land-ownership, existing rural uses and the current lack of infrastructure. Planning investigations for this area will be undertaken during the next five years. If suitable, development for employment or enterprise purposes could be expected to commence in 2010-2015. Possible residential development is not currently anticipated until after 2015.

3 Purga

This area will be examined for two uses: in the northern part, as a possible extension to the Amberley aerospace park adjoining the Air Force Base; and in the southern part, as a potential inland port, including logistics, distribution, warehousing and associated activities. This is the best location in SEQ for a facility to capitalise on future defence and civilian aerospace industry expansion opportunities, with the potential to expand south of the Cunningham Highway.

The southern part has the potential to be an inland port, including logistics, distribution, warehousing and associated activities clustered around an intermodal rail/road terminal of national significance. This potential is based on the area's accessibility to interstate highways, supported by the construction of the connector between the Cunningham and Warrego Highways and the proposed dual gauge freight railway linking the area to the standard gauge line north of Bromelton. It also links to the existing rail corridor near Rosewood, providing a connection to the possible Brisbane to Melbourne rail line.

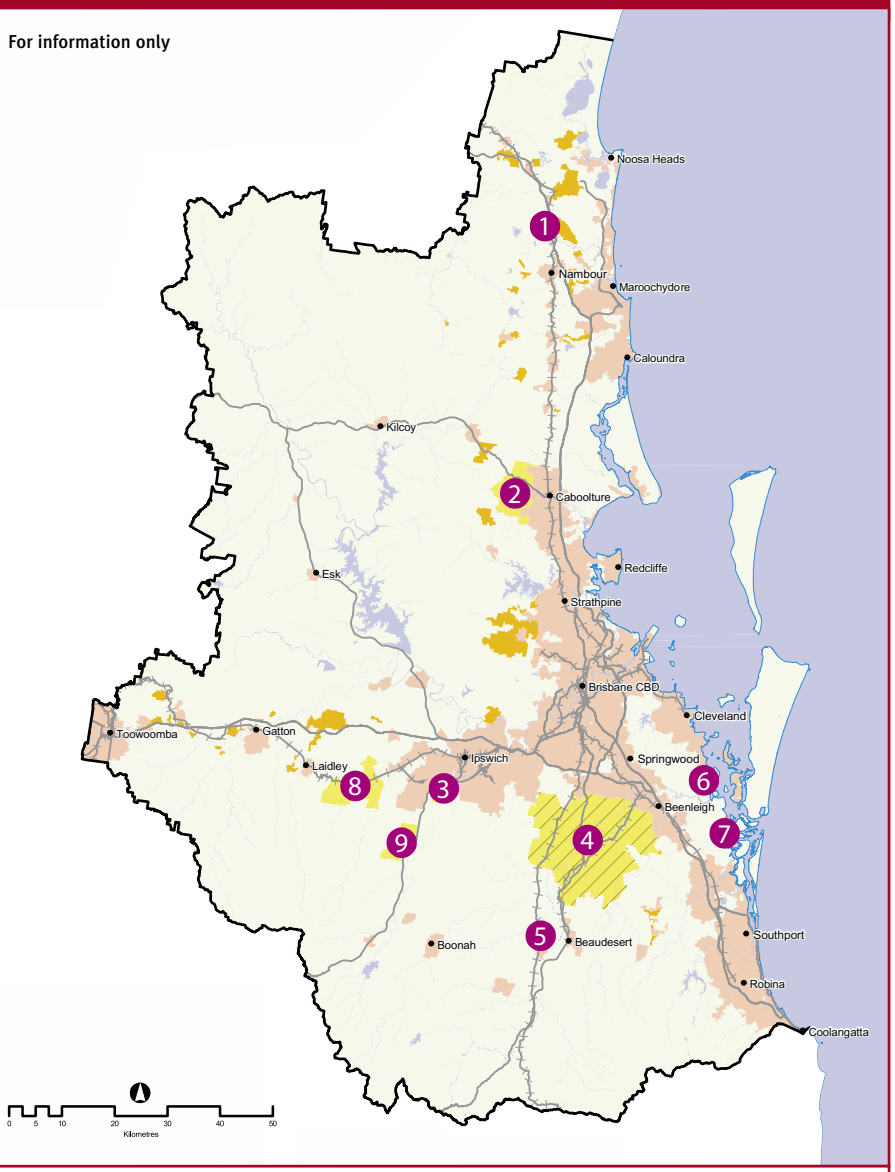
Further investigation of this site will be required as soon as practicable. Initial development of an extended aerospace park could commence prior to 2010, with an inland port being staged over the period 2010-2020.

4 Mt Lindesay/North Beaudesert

This area includes land in the northern part of Beaudesert Shire, extending into the Gold Coast and Logan cities. It is largely occupied by fragmented rural residential lots, but also has some large undeveloped landholdings with existing approvals for rural residential development. These large landholdings have the potential to accommodate future master-planned urban communities and local employment opportunities. Major issues to be resolved include identifying the precise areas to be developed, determining the required infrastructure, and the timing of development.

It is intended to resolve the future of the Mt Lindesay/North Beaudesert Study Area as a high priority. The Regulatory Provisions prevent subdivision in this area until 26 April 2006. The necessary planning investigations will be completed by this date.

Map 3 – Investigation Area sites



Key

- Major roads
- Major railways
- Waterways and waterbodies

Regional land use categories

- Regional Landscape and Rural Production Area
- Urban Footprint
- Rural Living Area
- Investigation Area
- Mt Lindesay/North Beaudesert Study Area

Investigation Area sites

1 - Bridges
2 - Caboolture
3 - Purga
4 - Mt Lindesay/North Beaudesert
5 - Bromelton
6 - Southern Redland Bay
7 - Steiglitz
8 - Rosewood
9 - Boonah

The information on this map is not intended for reference to specific parcels of land, should be treated as indicative only and subject to ongoing refinement. In some par the mapping one layer obscures another. This is not meant to imply any order of importance or priority.

The Office of Urban Management, Department of Local Government, Planning, Spor and Recreation, does not guarantee or make any representations as to the accuracy or completeness of the information shown on this map, nor does it accept any responsibility or liability for any loss or damage arising from its use.

Sources include: Office of Urban Management

Version: June 2005

5 Bromelton

This area is based around the existing industrial land at Bromelton, to the west of Beaudesert township and is only intended for employment and enterprise purposes. It occupies a strategic position within SEQ through its location on the standard gauge railway to the southern states, and its suitability for logistics operations involving intermodal freight handling. It also has potential to cater for industries needing substantial separation from residential areas. Given the significant growth in international and interstate trade through the SEQ region, Bromelton provides potential for an inland port facility and related functions. Potentially, it could service the southern Brisbane requirements for logistics, distribution, warehousing and associated activities, as well as major manufacturing operations requiring a direct access to rail.

Investigation of the Bromelton site will commence as soon as practicable. The actual timing, staging and area of appropriate development will depend on the outcome of this investigation. As several major logistics developments are currently under consideration in the Bromelton industrial area, it is anticipated development could commence by 2010.

6 Southern Redland Bay

This area is located at the southern extremity of the Redland urban area, between the coastline and the Koala Conservation Area. Before development of this area could proceed, a number of issues need to be resolved, including the:

- optimum and most suitable use of the land;
- form and intensity of development;
- impact on the adjacent areas of scenic and conservation value;
- protection and full public access to the coastline and the bay; and
- impacts on external infrastructure.

If suitable, development in this area is not anticipated to proceed until 2010-2015.

7 Steiglitz

This area has potential to develop as a marine industry precinct, similar to the successful Gold Coast Marine Precinct at Coomera. Coomera is now almost at capacity, and the area at Steiglitz has the potential to provide expansion of this valuable industry sector.

Studies will determine how much land is needed to facilitate expansion of this industry, together with any supporting infrastructure and services requirements. It will also need to assess the practicality of marine access and potential impacts on the local natural environment and natural resource values. On current indications and subject to the outcome of these investigations, a marine industry precinct could be expected to commence by 2010.

8 Rosewood and 9 Warrill View

Two areas identified for investigation in the Draft Regional Plan were to the west and south-west, adjacent to Rosewood in the City of Ipswich and adjacent to the Cunningham Highway in north Boonah Shire.

Having regard to the availability of land in Ipswich and the potential for development in the Mt Lindesay/North Beaudesert Study Area, the need to develop these sites is considered unlikely before 2026.

Part F
Regional policies

Regional policies set out the desired regional outcomes, principles and policies to address growth management issues in SEQ.

Regional policies set out the desired regional outcomes, principles and policies to address growth management in SEQ.

The policies guide State and local government planning processes and decision making.

Local government planning schemes must be consistent with the intent of the desired regional outcomes, principles and policies.

Where appropriate, notes to the regional policies are included to:

- provide an explanation of the policy statements;
- identify implementation processes; and
- provide additional relevant information.

The policies are an integrated and holistic set, with no intended priority. They appear under the following headings:

1 Sustainability
2 Natural environment
3 Regional landscape
4 Natural resources
5 Rural futures
6 Strong communities
7 Engaging Aboriginal and Torres Strait Islander peoples
8 Urban development
9 Economic development
10 Infrastructure
11 Water management
12 Integrated transport.

1 Sustainability

Desired regional outcome 1

The region grows and changes in the most sustainable way; generating prosperity, maintaining and enhancing quality of life, and providing high levels of environmental protection.

The overriding intent of the Regional Plan is to ensure the region grows and changes in a sustainable way. The 1987 report of the United Nations World Commission on Environment and Development, *Our Common Future*, defined sustainable development as '...development that meets the needs of the present without compromising the ability of future generations to meet their own needs'.

To achieve sustainability means thinking about and protecting the things that matter most: a healthy natural environment, clean air and water, safe food, good health, personal security, adequate shelter, quality education and available employment.

The concept of sustainability provides a framework for integrating economic, social and environmental considerations into decision making. It recognises the need to simultaneously pursue economic prosperity, environmental quality and social equity.

In Queensland, ecological sustainability concepts for planning and development are established in the IPA. The IPA defines ecological sustainability as a balance that integrates:

- protection of ecological processes and natural systems at the local, regional, state and wider levels; and
- economic development; and
- maintenance of the cultural, economic, physical and social wellbeing of people and communities'.

Since 1994, sustainable development principles have been included in a range of Queensland's legislative instruments such as the *Environmental Protection Act 1994*, *Integrated Planning Act 1997* and *Water Act 2000*. Likewise, the Australian Government has produced a range of documents and agreements that support the principles of ecologically sustainable development.

Despite this, current trends and patterns of development in SEQ are generally not sustainable. The Regional Plan makes significant steps towards a more sustainable SEQ, but processes and inputs from other parties are needed. The Queensland Government's *Smart Queensland: Smart State Strategy 2005-2015* helps deliver sustainability, particularly in social and economic aspects. However, greater coordination between the three levels of government, the private sector and the broader community is vital to achieve a more sustainable region.

An appropriate balance of environmental, social and economic objectives needs to be used in assessing major planning and development proposals; and in better managing the use of resources, particularly land, water and energy.

Principles of Queensland's policy on sustainability

Integrated and long-term decision making: incorporating long- and short-term environmental, economic and social considerations into decision making.

Intergenerational equity: ensuring the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations.

Intragenerational equity: ensuring a fair share of resources and opportunity amongst present generations.

Precautionary principle: ensuring that, where there are threats of serious or irreversible environmental damage, lack of full scientific certainty is not used as a reason for postponing measures to prevent environmental degradation.

Conserving biological diversity and ecological integrity: protecting the variety of all life forms, their genetic diversity and the ecosystem of which they form a part, recognising the various services they provide to humans as well as their intrinsic values.

Internalising environmental costs: ensuring the true costs and life cycle costs (incurred from when inputs are produced through to waste disposal) of protecting and restoring environmental damage are reflected in the price of a product or service.

Source: *Queensland Government, 2002 and National Strategy for Ecologically Sustainable Development, 1992.*

The overriding intent of the Regional Plan is to ensure the region grows and changes in a sustainable way.

Characteristics of a sustainable community in SEQ

By 2026, a sustainable development in SEQ would be expected to include the following:

- compact urban forms that minimise impacts on natural resources and environmental values;
- low levels of water and energy consumption and waste generation, and high levels of reuse of natural resources and waste products;
- minimal physical, chemical, waste and nutrient impacts on the natural environment;
- buildings that are designed and oriented to maximise climatic benefits and reduce the demand for energy;
- a well-protected system of wildlife habitats and open space;
- well-designed activity centres focused around public transport hubs;
- efficient infrastructure and well-utilised public transport;
- high levels of accessibility to activities and services through transport and communication systems;
- vibrant communities with a strong sense of place and local identity;
- healthy, safe communities and high levels of physical activity;
- respect for diversity and cultural heritage; and
- a diversified and dynamic economy providing local employment opportunities.

1.1 State of the Region indicators

Principle

Monitor and report on sustainability indicators for SEQ at regular intervals.

Policies

1.1.1 Develop regional sustainability indicators based on the principles of sustainable development.

1.1.2 Link sustainability indicators to the desired regional outcomes, principles and policies contained in the Regional Plan.

1.1.3 Monitor, review and report on sustainability indicators to inform government, industry and the community of the region's progress toward achieving sustainability.

Notes

Sustainability indicators monitor changes in economic, social and environmental factors. They provide integrated information on how the region is performing against the goals and objectives of sustainable development.

A report on sustainability indicators - the *State of the Region Report* - will be produced as part of the five-year review of the Regional Plan. Collectively, these indicators will provide a snapshot of the ongoing sustainability of SEQ.

The *State of the Region Report* will help guide and inspire actions for positive change throughout the region. Addressed together, the indicators will highlight sustainability challenges and inform future iterations of the Regional Plan. Future Regional Plans can advance goals toward increasing efficient use of resources, building on the foundation of economic stability, and investing in education and social capital.

Sustainability indicator reporting for SEQ will use a combination of state and region-specific indicators.

The initial sustainability indicators proposed for the *State of the Region Report* in SEQ are documented in Table 3. These indicators will change as new information becomes available and further studies and strategies completed.

Sustainability indicators monitor changes in economic, social and environmental factors.

Table 3 SEQ State of the Region indicators	
Natural environment	
1	Aquatic ecosystem health
2	Air quality
3	Annual greenhouse emissions
4	Terrestrial protected areas
5	Marine protected areas
6	Koala populations
7	Extinct, endangered and vulnerable species and ecological communities
8	Extent of regional ecosystems
Strong communities	
9	Social disadvantage index
10	Housing access and affordability
11	Education attainment
Urban development	
12	Residential dwelling densities
13	New dwelling approvals by type and location
Economic development	
14	Economic growth
15	Employment and unemployment rates
16	Tourist visitor numbers
17	Education attainment
Infrastructure	
18	Energy usage
Water management	
19	Water usage
20	Wastewater treatment and disposal
Integrated transport	
21	Car ownership
22	Distance travelled by passenger vehicles
23	Access to public transport services
24	Mode share
25	Road congestion
26	Average distance to work
27	Freight movements

2 Natural environment

Desired regional outcome 2

A healthy natural environment supports the region's rich biodiversity, clean air and water; and is sustainably managed to support economic development, outdoor lifestyles and community needs.

SEQ is renowned for the quality and diversity of its natural environment, including a number of distinctive features:

- subtropical climate, promoting healthy and enjoyable outdoor lifestyles;
- rich and diverse native flora and fauna;
- diverse coastline and marine waters encompassing:
  - coastal wetlands, including Pumicestone Passage and Carbrook;
  - unique sand islands, including Moreton, Stradbroke and Bribie Islands;
  - the dugong, turtle and fish habitats of Moreton Bay; and
  - family-friendly surf beaches, including the Gold and Sunshine coasts.
- spectacular mountain ranges including the Lamington Plateau, D'Aguilar Range, Blackall Ranges, the Glass House Mountains and the Main Range;
- waterways and floodplains of the Brisbane, Logan and Lockyer valleys and the Noosa River; and
- generally good air and water quality.

The population growth of SEQ and associated urban and rural development is placing increased pressure on the natural environment. Continued loss of natural areas and degradation of natural environmental processes will adversely affect the region's biodiversity, economic potential and public health, and ultimately will impact on liveability in the region.

Protecting and managing the natural environment is fundamental to achieving a sustainable future for the region. It will require the coordination of policy initiatives and collaboration across government, industry and the community to ensure protection of the region's natural environmental values.

2.1 Biodiversity

Principle

Conserve and manage the region's biodiversity values and maintain supporting ecological processes.

Policies

2.1.1 Protect, manage and enhance the region's nature conservation and biodiversity values and supporting ecological processes, including areas of state, regional and local biodiversity significance.

2.1.2 Ensure land use planning and development activities within areas of state or regional biodiversity significance respect identified biodiversity values, taking account of existing land use rights.

2.1.3 Protect, manage and enhance areas of state, regional and local biodiversity significance in areas outside the Urban Footprint, having regard to the *Vegetation Management Act 1999* and existing land use rights.

2.1.4 Avoid or mitigate potential adverse impacts in areas of state or regional biodiversity significance inside the Urban Footprint, having regard to the development intent for the land in local government planning schemes and associated planning instruments.

2.1.5 Develop and implement local nature conservation strategies, addressing biodiversity values within the regional nature conservation framework.

2.1.6 Develop an integrated, accessible regional biodiversity information system and associated guidelines to assist planning and decision making.

Notes

Biodiversity (biological diversity) is defined as the variety of all life forms, including plants, animals and micro-organisms; the genes they contain; and the ecological systems of which they form a part.

Conserving biodiversity and supporting ecological processes, such as the water cycle, is fundamental to achieving ecological sustainability. Biodiversity also supports natural resources and makes a significant contribution to economic, cultural, spiritual, social and physical wellbeing. The need to safeguard biodiversity is an essential component of national, state, regional and local planning.

The *SEQ Regional Nature Conservation Strategy* (RNCS) sets the regional framework for nature conservation. The strategy has been endorsed by State and local governments and establishes agreed processes for assessing, protecting and managing nature conservation and biodiversity values in SEQ.

The RNCS supports using of the Common Nature Conservation Glossary Classification System to help identify and assess nature conservation and biodiversity significance on a uniform basis in the SEQ region. This system can be applied at a regional, local and site-specific level.

The RNCS also supports a biodiversity planning assessment at the regional scale to identify areas of state, regional and local biodiversity significance.

The areas of state, regional and local biodiversity significance identified through the regional biodiversity planning assessment are shown in Map 4.

The RNCS promotes a range of conservation mechanisms and strategies to better protect and manage areas of biodiversity significance. It acknowledges that nature conservation will involve a combination of implementation arrangements to suit the particular situation at the regional, local and site-specific scales. The RNCS policies guide and complement local provisions to provide a regionally consistent approach to nature conservation.

The *State Coastal Management Plan - Queensland Coastal Policy - August 2001* and associated regional plans and the *Vegetation Management Act 1999* (VMA) also provide guidance on managing biodiversity values and remnant vegetation. The VMA and the Regulatory Provisions of the Regional Plan also provide protection for biodiversity values on land outside the Urban Footprint. However, the VMA does not generally protect areas of native vegetation less than two hectares or regrowth vegetation from inappropriate developement. These areas can be of critical ecological importance in riparian and wetland areas and may support locally significant biodiversity values.

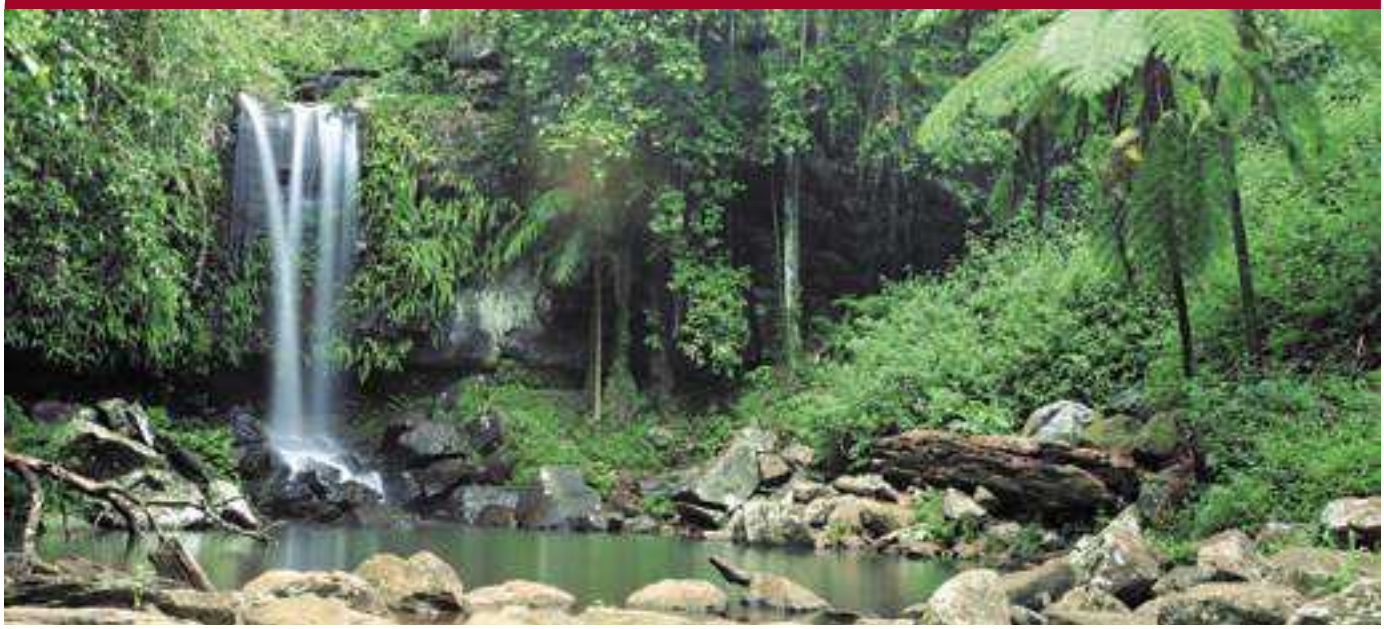
Conserving biodiversity and supporting ecological processes, such as the water cycle, is fundamental to achieving ecological sustainability.

2.1 Biodiversity (continued)

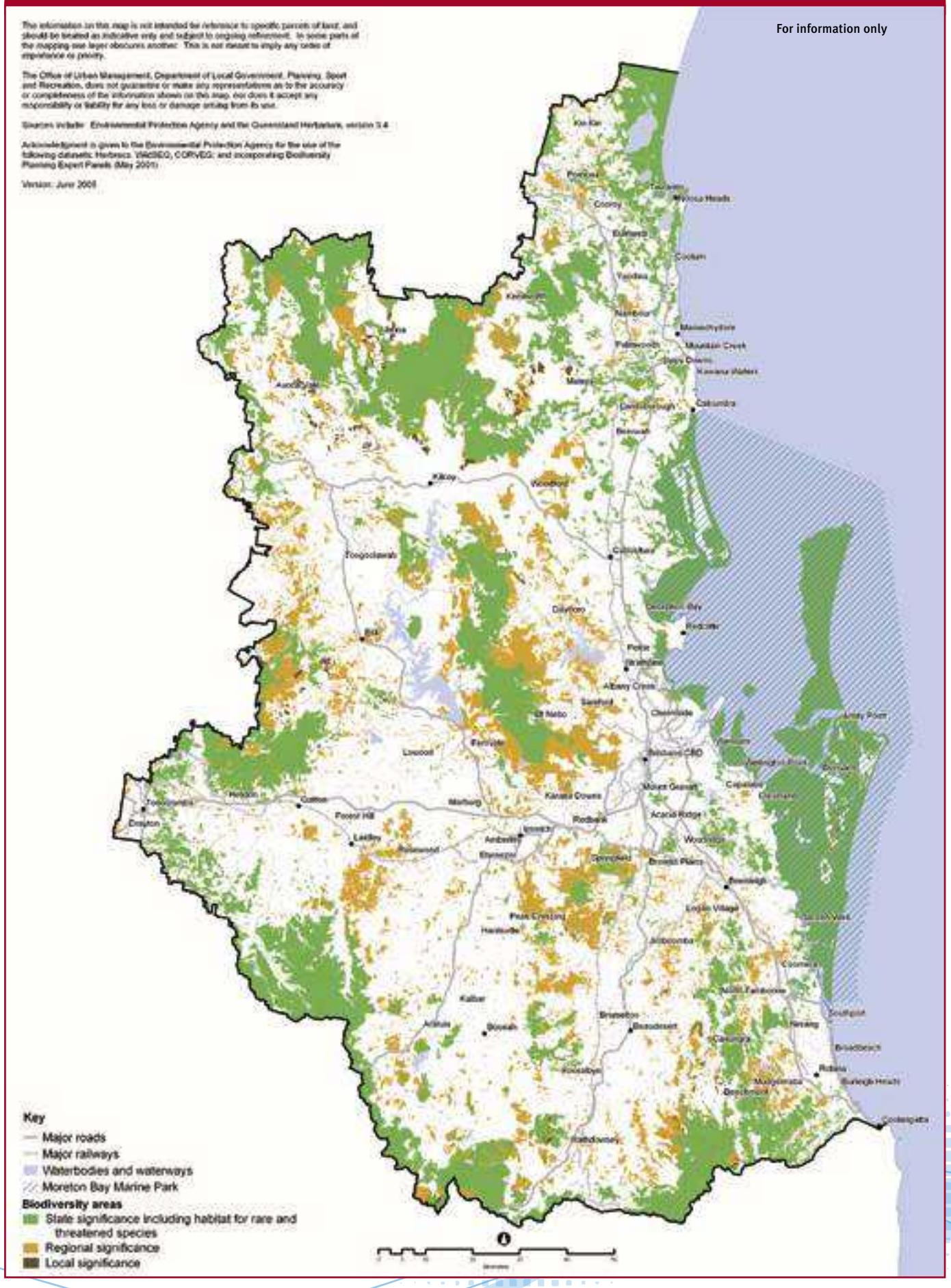
Most local governments in SEQ have implemented nature conservation planning as part of their planning schemes. The adoption of a more formal approach to local nature conservation strategies will assist in integrating strategies on a consistent basis across the region.

Local nature conservation strategies to be prepared by local government will:

- identify local biodiversity values, including terrestrial and aquatic biodiversity values, ecological corridors and threatening processes;
- identify and prioritise implementation mechanisms for best practice protection, restoration and management of the identified values, including a range of voluntary measures;
- develop management strategies for local government nature conservation reserves;
- set local targets and performance indicators;
- develop and implement a local biodiversity monitoring regime with the capacity to be integrated with State of the Region reporting; and
- be consistent with the RNCS, regional coastal management plans, the VMA and other relevant regional strategies.



Map 4 – Significant biodiversity areas



2.2 Koala conservation

Principle

Assist the survival of koalas in SEQ by protecting identified koala habitat areas and adopting conservation measures to reduce conflict between urban development and koalas.

Policies

2.2.1 Define significant areas of koala habitat in SEQ under one of three koala habitat areas: Koala Conservation Area, Koala Sustainability Area and Urban Koala Area.

2.2.2 Assess development in koala habitat areas against the koala conservation criteria contained in the *Nature Conservation (Koala) Conservation Plan 2005 and Management Program 2005-2015* or, prior to the adoption of the Conservation Plan, the *Interim Guideline: Koalas and Development*.

2.2.3 Ensure development in Koala Conservation Area and Koala Sustainability Area is compatible with the conservation of koalas, except where there are development commitments and, under certain circumstances, in areas required for extractive industry or community infrastructure.

2.2.4 Ensure development in Urban Koala Area includes measures to assist koala survival, having regard to the planning intents and requirements set out in structure plans and planning schemes.

2.2.5 Ensure local government considers koala conservation throughout their local government areas and encourage the identification of koala habitat areas in planning schemes.

Notes

Koalas are one of the most recognised native animals in Australia and their concentrations are greatest in SEQ. Koala populations are, however, declining or becoming locally extinct in many areas, primarily due to habitat loss. The koala's conservation status under the *Nature Conservation Act 1992* changed from 'common' to 'vulnerable' wildlife in the SEQ bioregion in March 2004.

The most significant koala habitats in SEQ are classified into three koala habitat areas: Koala Conservation Area, Koala Sustainability Area and Urban Koala Area. These areas comprise land containing koala habitat trees, but may also be interspersed with some cleared areas. Together, they provide a koala-friendly environment.

The Koala Conservation Area and Koala Sustainability Area are identified in Map 5. They are identified by cadastre at the local scale.

Koala Conservation Area is located within the Regional Landscape and Rural Production Area. Koala Sustainability Area is located within the Urban Footprint or Rural Living Area, but have a non-urban planning intent in the relevant local government planning schemes.

The policy intent for these areas is to protect koala habitat and avoid adverse effects on koalas. In certain circumstances, development for extractive industry or community infrastructure may proceed in these areas, subject to assessment criteria as set out in the Interim Guideline, which intends to minimise adverse impacts on koala habitat and koalas.

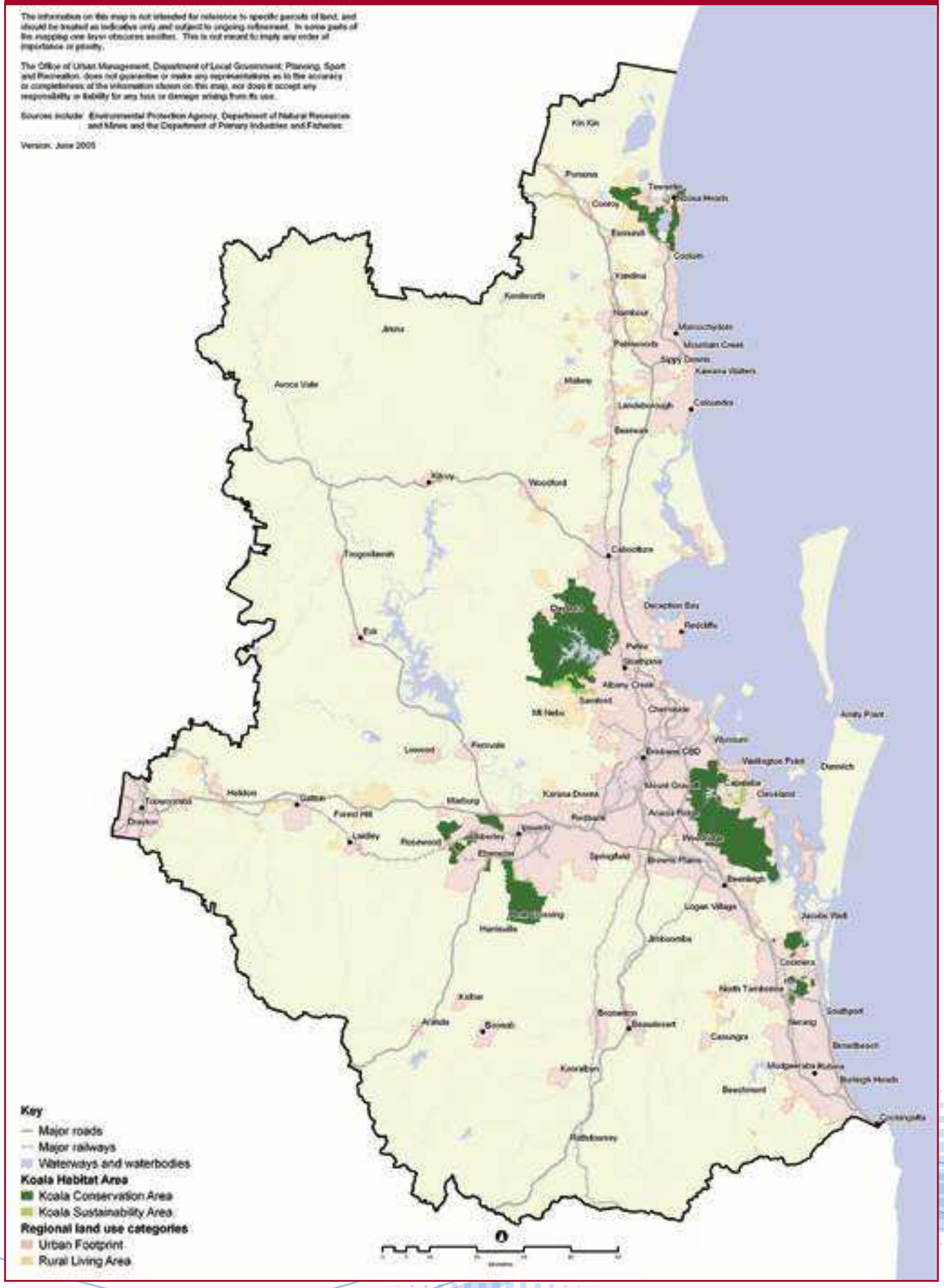
Where the Rural Living Area contains Koala Sustainability Area, intensification of development is not permitted beyond that allowable in planning schemes.

Urban Koala Area is located in the Urban Footprint and generally have an urban purpose planning intent. In these areas, urban development will require detailed planning to identify and manage habitat areas and corridors to assist koala survival. The Urban Koala Area is addressed in the Interim Guideline and subsequent Conservation Plan.

The Regional Plan and *Interim Guideline: Koalas and Development* replaces the current *State Planning Policy 1/05: Conservation of Koalas in South-east Queensland*. The Interim Guideline will be superseded by the criteria set out in the *Draft Nature Conservation (Koala) Conservation Plan 2005 and Management Program 2005-2015* when adopted.

Koalas are one of the most recognised native animals in Australia and their concentrations are greatest in SEQ.

Map 5 – Koala management areas



2.3 Atmosphere

Principle

Manage urban settlement and the use of transport, industry, energy and natural resources to minimise adverse impacts on the atmosphere.

Policy

2.3.1 Establish appropriate regional standards for air quality and monitor air quality indicators.

2.3.2 Consider air quality impacts in decisions on energy use, industrial land use and transport.

2.3.3 Improve energy efficiency, transport systems and land use practices to help reduce greenhouse gas emissions.

2.3.4 Assess the impact of potential climate change in preparing planning schemes and land use strategies.

2.3.5 Raise community awareness, knowledge and understanding of air quality, greenhouse gas emissions and climate change impacts.

Notes

The atmosphere, air and climate are vital natural assets that play a key role in ensuring the health of the community, protecting the environment and fostering economic development.

Air quality in SEQ generally meets national standards with only infrequent exceptions. The major sources of air pollutants in SEQ are associated with motor vehicle use, industrial and domestic energy consumption, and vegetation management. Continued growth in population, the number of households and increasing reliance on motor vehicles in urban areas all pose a threat to future air quality. Considering air quality impacts in land use, transport and economic planning and decision making will assist in ensuring the region's high air quality performance is maintained.

Queensland's climate is subject to the influence of the greenhouse effect and associated global warming, with discernible changes now being detected in the temperature and rainfall monitoring records. Elevated levels of greenhouse gases in the atmosphere also mean the climate is likely to continue to change throughout this century.

The Queensland Government released the *Queensland Greenhouse Strategy* in 2004. This strategy acknowledges the growing scientific consensus that the greenhouse effect is changing the world's climate and that Queensland will be vulnerable to the effects of climate change.

Greenhouse gas emissions can be reduced by:

- increasing energy efficiency;
- reducing land clearing, improving land management practices, preserving areas of native vegetation and planting trees;
- encouraging industry to use cleaner production methods, including eco-efficient technology and practices; and
- promoting sustainable transport choices such as public transport, cycling and walking.

Better knowledge and understanding of air quality, greenhouse gas emissions and climate change will provide businesses and the community with the information and skills needed to make informed choices to help reduce greenhouse gas emissions and adapt to potential impacts of climate change.

The atmosphere, air and climate are vital natural assets that play a key role in ensuring the health of the community, protecting the environment and fostering economic development.

2.4 Managing the coast

Principle

Protect and maintain the region's coast, including the foreshore, coastal wetlands, dunes, marine ecosystems and coastal marine waters.

Policies

2.4.1 Locate, design and manage coastal development to avoid or mitigate adverse effects on coastal resources and ecologically sensitive coastal areas.

2.4.2 Locate urban, tourism and other economic development along the coast within existing developed areas where possible.

2.4.3 Maintain and enhance public access to the coast, foreshores and tidal waterways, consistent with the conservation of coastal resources and public safety.

2.4.4 Ensure use and management of the coast provides for natural fluctuations in coastal processes, including storm tide inundation, climate change and sea level rise.

2.4.5 Plan, design, construct and operate infrastructure and services in the coastal area or marine waters to help maintain coastal geophysical and ecological functions.

Notes

SEQ's coastline supports diverse values and resources, including biodiversity, scenic amenity, outdoor recreation, economic activities and cultural heritage. The coast is experiencing increased pressures from urban development, vegetation clearing, water pollution and climate change impacts.

Comprehensive and detailed coastal management in SEQ will be achieved through the *State Coastal Management Plan - Queensland Coastal Policy - August 2001*, the *SEQ Regional Coastal Management Plan* (to be released in late 2005) and the proposed *Wide Bay Regional Coastal Management Plan*.

The Regional Plan assists in protecting the limited natural areas remaining along the coast by consolidating urban activities in areas already developed. Community, social and recreational access to the region's coastal areas will be maintained and enhanced.

To support coastal management, planning processes should:

- maintain, protect and enhance the values of significant coastal wetlands and dune systems;
- protect undeveloped sections of tidal waterways;
- ensure new maritime infrastructure demonstrates a public need and avoids adverse impacts on coastal values and resources;
- mitigate impacts from urban and rural activities on coastal values and resources;
- maintain and manage erosion-prone areas and natural coastal processes; and
- provide public access to and along the coast and tidal waterways where public safety and coastal resources are not compromised.

2.5 Waterways and wetlands

Principle

Protect, maintain and enhance the natural functions and environmental, social and economic values of the region's waterways, wetlands, riparian areas and floodplains.

Policies

2.5.1 Recognise and take account of the environmental values and natural functions of the region's waterways, wetlands, riparian areas and floodplains in land use planning, infrastructure design, natural resource management, and development assessment and decision making.

2.5.2 Protect and manage riparian areas to secure their scenic, biodiversity, ecological, recreational and corridor values.

2.5.3 Avoid clearing native vegetation or development within a waterway, wetland, riparian area or floodplain, and where unavoidable, mitigate adverse impacts through best practice design, rehabilitation and management.

2.5.4 Rehabilitate and restore degraded waterways, wetlands and riparian areas.

2.5.5 Coordinate natural resource management programs and projects concerning waterways, wetlands, riparian areas and floodplains.

Notes

Waterways, wetlands and associated floodplains and riparian areas support a range of natural and economic functions, including habitat for aquatic and terrestrial wildlife, nursery grounds for river and bay fisheries, potable water supplies, stormwater conveyance, dilution of sewage effluent disposal, provision of sand and gravel for building materials, ecological linkages, scenic amenity and recreational opportunities.

Land use activities have resulted in significant changes to many of the region's waterways and wetlands. These changes include the loss and degradation of riparian vegetation, salinisation, acidification, increased nutrient levels, reduction in environmental flow, and destructive increases in peak flows.

Waterways often provide the only ecological linkages and wildlife corridors remaining in developed urban and rural areas.

The natural functions and values of the region's coastal wetlands, Moreton Bay marine ecosystems and the major river and creek systems should be protected as valuable natural features. Development within watercourses, wetlands, riparian areas and floodplains should be restricted unless there is a demonstrated overriding need in the public interest. Rehabilitating degraded waterways, wetlands and riparian areas should be undertaken to restore natural ecological and geophysical functions.

The potential cumulative impact of development on the functions and values of waterways, wetlands, riparian areas and floodplains needs to be taken account in planning and development decisions.

Community activities involving the rehabilitation and management of waterways and wetlands need to be fostered and coordinated to achieve integrated natural resource management. This should include supporting existing catchment management, natural resource management and other community-focused groups.

Development within watercourses, wetlands, riparian areas and floodplains should be restricted unless there is a demonstrated overriding need in the public interest.

2.6 Natural hazards

Principle

Reduce community risk and exposure to the adverse impacts of natural hazards such as flood, storm tide, bushfire and landslide.

Policies

2.6.1 Address the potential impacts of flood, storm tide, bushfire and landslide through land use planning, development assessment and land management practices.

2.6.2 Coordinate regional data sets and apply a consistent approach in identifying natural hazard areas and associated risks to inform land use planning, development assessment and disaster management plans.

Notes

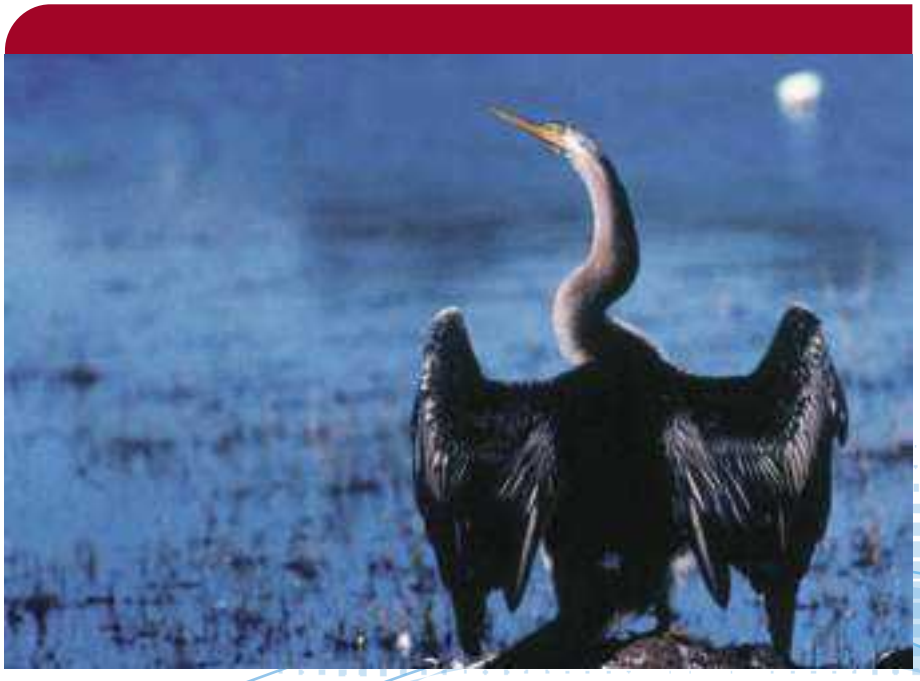
Various parts of SEQ are at risk from natural hazards such as flood, storm tide, landslide and bushfire. Development in natural hazard prone areas is a major community safety issue. Natural disasters are a significant and rising expense for the Queensland community, costing about $240 million per year.

Population growth, lifestyle changes and increased economic activity are generating pressures for development in areas prone to natural hazards, in particular along the coast and waterways, in bushlands and on steep slopes. Further development in these areas exposes the community to the risk of flood, storm tide, bushfire and landslide events.

Natural hazards become natural disasters when the fabric of a community is severely disrupted and requires intervention to return to normal. Mitigation measures reduce the severity of, or eliminate the risk from, a natural hazard.

Land use planning should ensure new development minimises the risk to people and property and mitigates the cost of recovering from natural disasters. Planning schemes should clearly identify natural hazard management areas for flood, storm tide, bushfire and landslide. Identifying natural hazard management areas across SEQ will inform future land use planning and development assessment.

The Queensland Government has a number of existing policies to assist in the management of natural hazards. They include the *State Planning Policy 1/03: Mitigating the Adverse Impacts of Flood, Bushfire and Landslide* and the *Guideline for the State Coastal Management Plan: Mitigating the Adverse Impacts of Storm Tide Inundation*.



3 Regional landscape

Desired regional outcome 3

The key environmental, economic, social and cultural resources of the regional landscape are identified and secured to meet community needs and achieve ecological sustainability.

The regional landscape is managed for a range of functions and values, including agriculture, water quality, nature conservation, scenic amenity, ecosystem services, heritage and outdoor recreation.

The Regional Landscape and Rural Production Area regulates development for urban purposes and the reconfiguration of land. Within this area, rural precinct plans will be developed to support integrated planning and effective management of key environmental, economic, social and cultural resources.

Regional open space in SEQ includes regionally significant lands that are publicly accessible for a range of outdoor recreation, cultural, educational and scientific research purposes. For effective regional open space planning, collaboration is required between state agencies, local government, regional natural resource management bodies, industry and community stakeholders.

3.1 Regional Landscape and Rural Production Area

Principle

Maintain and manage the values and functions of the Regional Landscape and Rural Production Area to enhance the environmental, economic, cultural and lifestyle benefits to the region.

Policies

3.1.1 Recognise important environmental, landscape, cultural and economic links between the rural and urban areas of the region.

3.1.2 Define, plan for and manage lands within the Regional Landscape and Rural Production Area in collaboration with state agencies, local government, regional natural resource management bodies and local communities.

3.1.3 Support the integrated management and prudent use of the Regional Landscape and Rural Production Area by developing a regional landscape planning framework.

3.1.4 Develop rural precinct plans where appropriate to achieve the most suitable use of lands within the Regional Landscape and Rural Production Area.

Notes

Regional landscape areas can have diverse values and functions. Table 4 describes the key regional landscape areas in the Regional Landscape and Rural Production Area and outlines the planning intent for each.

Improved knowledge and understanding of the relationships between rural and urban economies and lifestyles is required to evaluate the ecosystem, social, cultural and economic services provided by the regional landscape. Improved knowledge will assist in achieving desirable regional outcomes and the development of a regional landscape planning framework. It is intended that this framework will further define and describe key regional resources, regional landscape areas and regional objectives.

The framework will be developed alongside the *Rural Futures Strategy* and will reflect desired rural planning outcomes. The framework will recognise the critical role of private landowners and regional natural resource management bodies in the sustainable management of land and water resources.

The development of rural precincts within the Regional Landscape and Rural Production Area will assist in managing regional landscape areas and values at a local level.

The development of rural precincts within the Regional Landscape and Rural Production Area will assist in managing regional landscape areas and values at a local level.

Table 4 Regional landscape areas

Regional landscape areas
Support one or more regionally significant landscape values:

- *Nature conservation areas*
  Supporting nature conservation values of international, national, state or regional significance.
- *Rural production areas*
  Supporting rural production activities, including clusters of rural industries that capitalise on the availability of particular soil types, water, climate or proximity to markets and processing facilities.
- *High scenic amenity areas*
  Displaying high levels of regional scenic amenity, including areas or features with high visual exposure containing scenery highly preferred by the community.
- *Extractive and mineral resource areas*
  Containing regionally significant extractive and mineral resources.
- *Outdoor recreation areas*
  Recognised as regionally important for outdoor recreational activities.
- *Landscape heritage areas*
  Displaying Indigenous and non-Indigenous heritage values.

Planning intent: Regional landscape areas are managed to protect their functions and values.

Landscape corridors
Link regional landscape areas and include inter-regional links such as the coastline and bioregional wildlife corridors.
Planning intent: Landscape corridors are maintained and enhanced to ensure land uses and activities within the corridor are compatible with corridor functions.

Inter-urban breaks
Separate major urban areas, towns and villages and are dominated by rural and natural landscapes.
Planning intent: Inter-urban breaks are maintained and managed as non-urban areas supporting activities that reinforce their natural and rural character.

Rural residential
Developed or suitable for rural residential development.
Planning intent: Future rural residential development will be limited to existing designated rural residential areas.

Rural townships and villages
Smaller urban communities that service rural catchments.
Planning intent: Rural townships and villages are managed to maintain their character and role as activity nodes supporting local rural communities.

Regional infrastructure
Includes transport, energy, wastewater and water storage and supply infrastructure that is essential to the efficient functioning of the region.
Planning intent: Regional infrastructure is managed to minimise adverse impacts. Surrounding land uses are managed to ensure continued safe operation.

Water sources and catchments
Water catchments and groundwater resources.
Planning intent: Land use and development is managed within water storage catchments to protect the quality of receiving waters, storages, delivery channels and groundwater sources.

Coastal waters and foreshores
Coastal waters, wetlands, dunes and foreshores that form the region's coastal zone.
Planning intent: Coastal and marine resources are protected and managed to facilitate a variety of uses and activities.

3.2 Scenic amenity

Principle
Acknowledge, protect and manage significant scenic amenity areas and features.

Policy
3.2.1 Identify and manage areas of high scenic amenity in the regional landscape.

3.2.2 Improve knowledge and understanding of the region's scenic amenity and its contribution to the liveability and sense of place for residents and the attraction for visitors and tourists.

3.2.3 Retain and enhance public access to significant and popular viewpoints and protect important views from intrusive development.

3.2.4 Inform regional and local planning and decision making by adopting a common method of assessing scenic amenity, including design and siting of prominent developments and infrastructure.

Notes
The region has a diverse range of outstanding landforms and seascapes that combine to create the region's unique scenic amenity. These include mountain ranges, beaches, rivers, valleys, natural areas, wetlands, estuaries and islands. The quality of these scenes relates mainly to the natural visual features or combinations of natural and made elements. Many of the region's landforms and seascapes have high environmental, cultural, traditional and/or spiritual values.

The region's scenery contributes significantly to the quality of life of local communities and to visitors' experience of SEQ. Areas of high scenic amenity with outstanding natural beauty include the Gold Coast hinterland, Moreton Bay Islands, Glass House Mountains, Currumbin Valley, Tamborine Mountain, Beechmont, Montville, Blackall Range, Locker Valley, Scenic Rim and Loganholme Wetlands.

Public access to significant and popular viewpoints is important for both local residents and visitors. Access to viewpoints may include public access to privately-owned lands where voluntary arrangements have been formally established to effectively manage public access and use.

The design and siting of buildings and infrastructure must consider potential impacts on scenic amenity values.

3.3 Landscape heritage

Principle
Recognise and manage landscape heritage to maintain character, culture and sense of place.

Policies
3.3.1 Identify, evaluate and manage landscape heritage and cultural components of the regional landscape.

3.3.2 Ensure Aboriginal peoples' unique Indigenous landscape heritage and connection to country are identified, recognised and respected in planning processes.

Notes
SEQ's rich and varied landscape heritage includes both Indigenous and non-Indigenous connectivity with natural, rural and scenic landscapes. It is this connectivity that helps create the special character, culture and sense of place in SEQ.

Traditional Owners' connection to country is an important part of landscape heritage. As Traditional Owners, they are connected to, associated with, and responsible for their ancestral estates, water and air. Significant Indigenous landscape heritage ranges from bora rings, rock art, shell middens, story places and vegetation, to traditional ceremonial and camping places and paths.

Involving Traditional Owners is important in identifying and protecting Indigenous landscape heritage and managing access to significant places in the regional landscape. Indigenous landscape heritage should be identified and mapped using a protocol agreed with Traditional Owners.

The history of settlement is characterised by its association with significant landmarks and rural and natural landscapes. For example, the distinctive Glass House Mountains have great significance to Traditional Owners and are one of the earliest landmarks named by Captain James Cook. Recognising and managing significant landscape heritage protects the continuity of the landscape and identity of the region.

3.4 Outdoor recreation

Principle
Provide a range of enjoyable outdoor recreation opportunities to meet the diverse needs of the community and enhance the liveability of the region.

Policies
3.4.1 Establish and maintain a network of accessible outdoor recreation areas, including regional parks, trails and waterways, as well as private lands with the voluntary agreement of landowners.

3.4.2 Manage outdoor recreation activities to provide for community needs and expectations whilst protecting and maintaining ecological, scenic and cultural values.

3.4.3 Coordinate planning and delivery of outdoor recreation services within the framework of a regional outdoor recreation strategy.

3.4.4 Incorporate outdoor recreation activities and opportunities in land use and natural resource planning and management.

Notes
The region's climate, natural diversity and outstanding landscape provide the natural resources to support a diverse range of outdoor recreation activities. These activities are important to the wellbeing and lifestyle of the community; contributing to better social, health, economic, tourism, cultural and environmental outcomes.

Outdoor recreation includes a range of non-competitive recreation activities, undertaken in open space settings that range from predominantly natural through to rural and urban. Activities include bushwalking, rafting, diving, photography, fishing, bird watching, camping, rock climbing, bike riding and horse riding. Outdoor recreation also includes sports that make temporary use of large areas of open space and trails; for example, orienteering, rogaining, cross-country mountain bike racing, rallying and some equestrian activities.

The use of land for outdoor recreation must be balanced with other needs such as nature conservation, scenic amenity and catchment protection.

Many outdoor recreation activities occur within state lands or waters such as national parks and marine parks. Management plans for these areas typically provide for a range of outdoor recreation activities that are consistent with the nature conservation purpose of these lands. The *SEQ Forests Agreement* has resulted in a number of state forests and other tenured lands being converted to protected area tenure such as national park. This may result in some current land uses being phased out.

3.5 Regional open space

Principle
Provide for a high-quality and accessible regional open space network.

Policies
3.5.1 Identify and develop publicly accessible open space that meets community and tourist needs.

3.5.2 Involve the community, landowners and other stakeholders in developing and managing a regional open space network.

Notes
A regional open space network includes publicly accessible land which is used for a range of outdoor recreation, cultural, educational and scientific research purposes.

Publicly accessible land in a regional open space network is generally owned and managed by State or local government and includes national parks, marine parks, state forests, beaches, regional parks, regional trails, water supply reservoirs, and major parks and reserves, as well as land acquired for regional open space purposes. It may also include privately-owned lands where voluntary arrangements have been formally established to manage public access and use. Current public lands in SEQ are shown in Map 6.

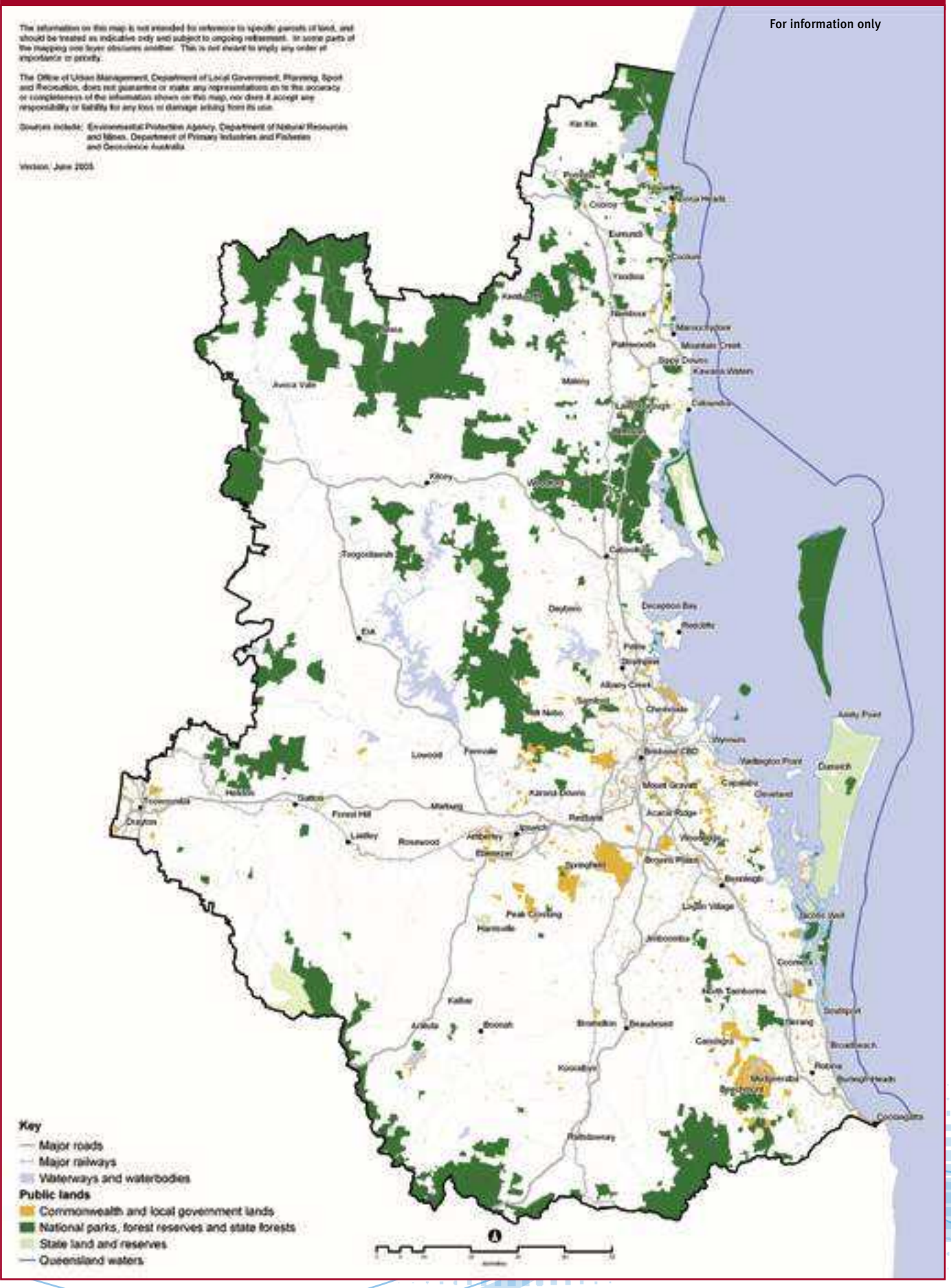
Regional open space caters to a range of community and environmental needs, including preserving rural and scenic landscapes, preserving biodiversity, providing outdoor recreation, allowing social and spiritual connectivity, and maintaining air, water and habitat quality.

Environmental infrastructure such as parks and trails, perform key roles in providing regional open space. Regional parks can be multiple-tenure and can be managed by private or public agencies. A regional trails network provides a coordinated network of trails for walking, riding, cycling, canoeing and driving.

Publicly accessible regional open space will be developed and managed in consultation with Traditional Owners, interested community members, groups and industry bodies, private landowners, local government, and relevant state and land management agencies.

Map 6 – Public lands

For information only



4 Natural resources

Desired regional outcome 4

Regional natural resource and rural production areas are protected, enhanced and used sustainably.

Natural resources include natural assets such as land, fresh and marine waters, air, forests, minerals, native animals and plants. They underpin the region's major economic activities, supporting a diverse range of industries that rely on the quality and accessibility of these resources.

The Regional Plan promotes the sustainable management of rural production and natural resource areas by protecting them from incompatible development. It also supports the livelihoods of people who work in and depend on rural and natural resource-based industries. Natural resources also provide lifestyle and economic benefits to the region through outdoor recreation, ecotourism and related activities.

4.1 Natural resource management

Principle

Coordinate the management and use of natural resources to enhance community, economic and environmental values.

Policies

4.1.1 Integrate Commonwealth, State and local government natural resource programs, policies and planning processes.

4.1.2 Engage the community, landowners and industry in promoting and practicing sustainable natural resource management.

4.1.3 Establish a strategic and coordinated process for capturing, analysing and managing natural resource information.

4.1.4 Align regional natural resource management planning, investment, monitoring and reporting with the Regional Plan.

Notes

Natural resource management should be undertaken in a coordinated and integrated manner with effective partnerships between government, landowners, Traditional Owners and the community.

The Commonwealth and State bilateral agreements for the *Natural Heritage Trust* and the *National Action Plan for Salinity and Water Quality* establish a strategic framework of regional bodies and accredited regional plans to deliver desired outcomes. These bilateral agreements have established community-based regional Natural Resource Management (NRM) bodies. The NRM bodies currently established in the SEQ area are:

- SEQ Western Catchments Group;
- Natural Resource Management SEQ Incorporated; and
- Burnett Mary Regional Group for natural resource management objectives.

These bodies will be implementation partners in regional landscape and natural resource planning, assisting to:

- establish common regional natural resource management objectives; and
- promote and develop complementary planning policies and joint research.

Most resource management actions take place at the landowner and community level. Sustainable natural resource and environmental management can only be achieved through the commitment and involvement of community and industry groups. There is a need to provide a regular exchange of information and ideas between the community, stakeholder groups and regulatory authorities. An integrated approach to collecting and analysing natural resource information is required.

Natural resource management should be undertaken in a coordinated and integrated manner with effective partnerships between government, landowners, Traditional Owners and the community.

4.2 Land, extractive resources, minerals, forestry and fisheries

Principle

Manage the region's natural economic resources to sustainably and efficiently meet the needs of existing and future communities.

Policies

4.2.1 Identify and protect natural economic resource areas from further fragmentation and inappropriate land use.

4.2.2 Protect the region's Good Quality Agricultural Land and provide for its long-term and sustainable agricultural use.

4.2.3 Identify and protect extractive and mineral resources for potential future extraction, including the provision of appropriate transport corridors and buffers.

4.2.4 Protect, enhance and sustainably manage the region's forestry plantations.

4.2.5 Rehabilitate, protect and manage the region's marine and freshwater fish habitats in a sustainable way.

Notes

The distribution and accessibility of the region's natural resources influences the location of economic activities such as farming, forestry and mining. Many natural resources are limited and some are non-renewable. Overuse or irreversible loss of natural resources could have significant environmental, economic or social implications for the region. These resources are generally indicated in Map 7.

The majority of the region's agricultural area is used for beef farming, with some dairy farming located on productive grazing land. The rich alluvial soils along the valleys in the west and south of the region - including the Brisbane, Lockyer, Fassifern and the Albert-Logan valleys - support a vast array of cropping industries. Closer to the coast, horticultural and cropping industries thrive in the Gold Coast, Redlands, Glass House Mountains and Sunshine Coast districts. Protecting lands with agricultural potential is important to maintaining a viable farming industry in SEQ.

The extractive resources of SEQ are dispersed across the region. Hardrock resource deposits include those at Beerwah, Bracalba, Kholo Creek, Petrie/Narangba, Beenleigh and the Darlington Range. Sand and gravel resources are found in the alluvial flats of the Pine and Logan rivers and Beachmere.

The Queensland Government has prepared the *Draft State Planning Policy for Protection of Extractive Resources*. When finalised, this planning policy will protect the long-term availability of extractive resources of state or regional significance. This will include identifying and protecting key resource areas in local government planning schemes.

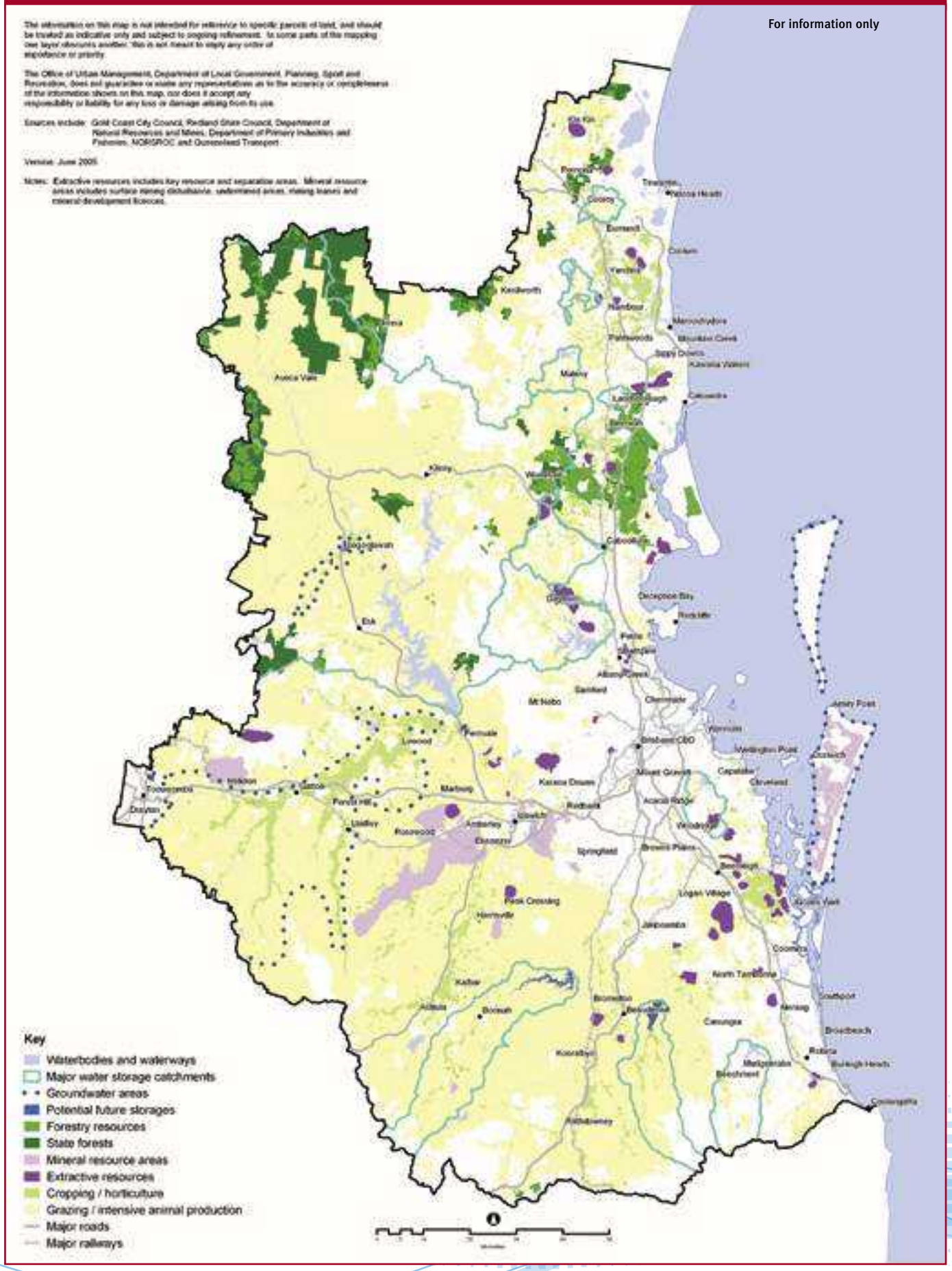
Mineral resources in the region include coal, metallic ores and industrial minerals such as rutile, zircon, silica and foundry sand. Locations include the coalfields around Ipswich, mineral sands on North Stradbroke Island and sandstone near Helidon. Other known deposits include silica sand, dolomite, diatomite, perlite and ceramic clay. Granted mining leases, claims, licences or applications cover most of the valuable resources in the region.

Mining activities are undertaken in accordance with the requirements of the *Mineral Resources Act 1989*. Key mineral resource areas will continue to be identified and protected from inappropriate development by local government planning schemes.

SEQ has significant areas of forestry plantation, incorporating about 15 per cent of State-owned plantations. The largest plantation is in the Beerburrum area. Plantation forestry is a profitable business that supports a range of value-adding enterprises. Demand for plantation-grown timbers continues to rise, with Australia still a net importer of forest products.

SEQ has important freshwater and estuarine fisheries and fish habitats. Moreton Bay accounts for 20 per cent of the commercial fisheries catch in Queensland. Recreational fisheries - including estuaries, bays and ocean beaches - are important to the lifestyle of the region. Active fish restocking programs support freshwater fishing in rivers and impoundments. Aquaculture is a key emerging industry in the region, concentrating on freshwater finfish and crayfish, marine oysters and prawns.

Map 7 – Rural production and natural resources



5 Rural futures

Desired regional outcome 5

Rural communities are strong and viable with sustainable economies, contributing to the health, character and liveability of the region.

Rural communities, industries and environments make an important and often under-recognised contribution to the region's quality of life. SEQ's rural communities are a major contributor to Queensland's economy, providing diverse agriculture, grazing, forestry and fishing opportunities.

The Regional Plan identifies around 80 per cent of the region as Regional Landscape and Rural Production Area. A proportion of this area comprises protected national and conservation parks, water storages and state forests. The majority, however, is privately-owned farmland, generally designated 'rural' in local government planning schemes.

There is extensive community interest in the future of rural areas and a desire to ensure rural communities remain viable. In these constantly changing times, rural communities and industries are facing financial, economic, social, environmental and climate challenges. Whilst it is critical for a healthy region to ensure rural communities and industries remain viable and sustainable, rural issues must be considered in the context of the national and international economic and social climate.

Along with increasing global competition, key issues affecting the profitability of the rural sector include the accessibility and cost of water, the availability and affordability of labour, the increase in regulation and the uncertainty surrounding climate change. In some locations, industry-specific issues dominate, such as the deregulation of the dairy industry or the viability of sugar cane farming.

By not allowing further urban development in the Regional Landscape and Rural Production Area, the Regional Plan makes a very strong statement to protect the future of agricultural lands and rural communities. On the urban fringe, however, where rural lands are close to urban development, expectations and speculation about future urban development potential are likely to continue. In the past, conflict between rural activities and urban uses has generally seen farming curtailed where it is no longer considered viable. This is exacerbated in areas such as some cane lands for which there are no obvious or immediate alternative rural uses.

At the same time, much of the Regional Landscape and Rural Production Area is already fragmented and has for some time provided lifestyle opportunities on small rural allotments. In some parts of the region, this has been the predominant form of development over the past three decades, even though the corresponding dwelling entitlement has not always been exercised.

Whilst rural production areas represent a significant proportion of the total area of SEQ, planning in the region to date has placed a greater emphasis on managing urban growth. This has particularly been the case in the face of a rapidly increasing demand for urban housing, jobs and services. Strategic, integrated rural planning has yet to occur.

The joint Queensland Government and Agforce initiative, *Blueprint for the Bush*, together with investment strategies under the NRM bodies, provide an opportunity to achieve positive long-term outcomes that support sustainable rural and regional communities across Queensland.

Planning for rural communities requires a different approach to past regional initiatives. These are large geographical areas, with a small and dispersed population. They have a low rate base, high dependency on resource-based industries and often experience a limited capacity to participate in planning and related activities.

The Regional Plan includes strategies to support rural production areas and proposes a framework to undertake more detailed planning, with the following objectives:

- maintaining viable farm sizes and the ability to continue farming practices;
- protecting productive rural lands from incompatible land uses;
- identifying alternative economic uses of rural land;
- ensuring suitable management of peri-urban areas;
- providing infrastructure, facilities and transport services in rural areas; and
- encouraging growth in rural towns and villages.

There is extensive community interest in the future of rural areas and a desire to ensure rural communities remain viable.

5.1 Rural Futures Strategy

Principle
Recognise the significant role rural areas play in SEQ, ensure healthy and viable rural futures, and enhance the interdependence of urban and rural communities.

Policies
5.1.1 Ensure sustainable rural communities by developing a *Rural Futures Strategy* to coordinate rural policies and implement through planning schemes, polices and other programs.

5.1.2 Address issues of sustainable rural communities by establishing a Rural Futures Committee under the auspices of the regional planning Minister.

5.1.3 Improve coordination of rural issues and service delivery by reviewing institutional arrangements for rural land use policy and implementation.

Notes
The *Rural Futures Strategy* will form the basis for an integrated rural planning framework in SEQ across State and local government. It will build upon existing strategies, policies and programs and provide a whole-of-government approach to the future needs of rural SEQ.

The objective of a *Rural Futures Strategy* will be to balance the competition for land and natural environmental resources, the needs of rural landowners and rural communities, and the impacts of overall regional population growth. Issues affecting rural communities of the region include:

- bridging the rural/urban gap;
- rural sustainability and viability;
- economic development opportunities;
- water and vegetation management; and
- infrastructure and service delivery.

5.2 Rural planning

Principle
Conserve and manage rural areas to enhance their contribution to the regional economy, rural industries and the regional landscape.

Policies
5.2.1 Consolidate future rural population growth around existing towns and villages.

5.2.2 Encourage sustainable rural areas by supporting innovative planning approaches, including rural precinct planning.

5.2.3 Maintain the capacity of the region's environmental resources to supply ecosystem services.

Notes
The viability of rural areas in SEQ is related to the sustainability of rural industries, water resource management and sound land use planning. Beyond this, there is an emerging emphasis on ecosystem services, alternative commercial uses, the development of viable agricultural precincts, value-adding to local produce and multiple land uses.

Planning approaches for rural areas include:

- identifying key areas where agricultural production is viable and can sustain rural industry;
- preventing inappropriate fragmentation of land;
- enhancing infrastructure and investment opportunities for agriculture;
- protecting farming operations from conflict with non-farming or rural lifestyle residents;
- enabling rural industries to diversify, adjust, innovate and value-add;
- identifying non-viable rural lands and preferred future uses of these lands;
- assisting local government to protect and enhance productive rural lands and their associated environmental and landscape values; and
- sustaining the benefits to the community which are derived from the natural environment.

Ecosystem services refers to the broad range of benefits flowing to the community from the natural environment, including air and water purification, climate regulation, pollination, pest control and soil fertility. The quality of these ecosystem services is very much dependent on land management practices in the region's rural areas. Adoption of best practice land management in relation to issues such as stormwater run-off, erosion control, water management, vegetation clearing and stock management can assist in maintaining and enhancing the quality of the region's ecosystems and the services they provide.

5.3 Rural communities

Principle
Ensure rural communities gain benefits from future growth and participate fully in the planning and development of the region.

Policies
5.3.1 Assist rural communities to identify strategies for economic development and growth, capitalising on their rural character and local attributes.

5.3.2 Provide and maintain appropriate levels of infrastructure and services to rural towns and villages.

Notes
Rural communities generally have less access to social infrastructure and diverse employment opportunities than their city counterparts. Long travel distances to regional centres and a lack of public transport services often compound this situation.

A new approach is required across the region to address key issues and develop a more sustainable community. To address this, State and local governments will work together to improve infrastructure and services to rural areas.

Partnerships between government and local communities can build leadership and networking in local communities, thereby facilitating positive change. Initiatives to achieve this include:

- coordinating assistance for rural communities to respond to changing rural industries and economic circumstances;
- improving community capacity to contribute to planning and other regional engagement processes; and
- investigating alternative strategies for economic development and growth in rural communities.

The regional land use pattern provides sufficient land around rural towns to facilitate future planning and growth of these centres. The intent is to reduce isolated rural residential developments by consolidating growth around discrete serviceable urban centres.

The Regional Plan also identifies a number of Rural Activity Centres to focus the delivery of higher order infrastructure, community services, commercial activitites and transport into rural areas.

5.4 Rural industries

Principle
Maintain a viable rural production sector, capitalising on existing advantages and ready to meet changing circumstances.

Policies
5.4.1 Strengthen rural industries by increasing adaptability, productivity, value adding and access to markets.

5.4.2 Identify and support sustainable new rural industries and innovative non-urban uses for rural land.

5.4.3 Ensure land use policies do not constrain the development of agriculture, agri-business, appropriate ecotourism and recreation opportunities in rural areas.

Notes
The rural sector continues to undergo structural adjustment due to a range of factors, including competition, deregulation and changing product demands. The intent of the Regional Plan is to maintain industries which are competitive and to transition others to new activities.

The changes being experienced by rural areas provide opportunities to develop new activities through the emergence of rural ecotourism, sport and recreation, culture, art and crafts, niche agricultural products, and associated industries.

Providing an expanded range of services to surrounding areas will generate a variety of employment opportunities. For example, expansion of industrial and service activity in the Western Corridor should yield benefits for surrounding rural areas.

The cultural heritage and tourism appeal of the region's rural towns and villages is becoming increasingly important. The unique character of rural towns and villages and the diversity of natural features, provide significant opportunities to boost these activities.

Access to a reliable water supply, together with good access to infrastructure and services is crucial to the ongoing viability of rural industries and communities.

6 Strong communities

Desired regional outcome 6

Cohesive, inclusive and healthy communities with a strong sense of identity and place, and access to a full range of services and facilities that meet diverse community needs.

Communities in SEQ are continually changing: the ageing of the population, emerging needs, multicultural identity and varying lifestyle choices all affect the provision of community services and housing. Some people in SEQ face social, cultural and locational disadvantages. Many live in urban fringe locations, rural areas and some suburbs where services may be limited.

Increasing population density and the continuing gentrification of inner suburbs creates opportunities for some sections of the community, but disadvantages and limits the choices of others.

Building strong communities in SEQ will be assisted by improving the quality and safety of the built environment through excellent urban design, strengthening activity centres, ensuring housing meets community needs, and planning for the adequate and appropriate provision of community services and facilities.

6.1 Access to social infrastructure

Principle
Maximise access to appropriate social infrastructure for all residents in the region.

Policies
6.1.1 Plan for the future provision of a range of community services and facilities to meet community need.

6.1.2 Provide accessible social infrastructure that is well located in relation to transport, residential areas and employment.

6.1.3 Develop hubs of co-located multipurpose community facilities and services, which can respond to changing and emerging community needs.

6.1.4 Identify opportunities to utilise surplus government land or infrastructure for community purposes.

6.1.5 Improve planning and delivery of social infrastructure by developing collaborative working relationships.

Notes
Social infrastructure falls into several broad categories, including health, individual, family and community support, community development, education, arts and culture, information, sport and recreation, housing, employment and training, legal services, public safety, emergency services and community transport.

Social infrastructure is the framework of community services and facilities required to provide quality of life and community wellbeing. It is financed and managed through a range of mechanisms by government agencies, non-government community organisations and the private sector.

An increasing regional population makes it vital that social infrastructure is incorporated into the planning and design process for areas of new development and redevelopment. Providing social infrastructure should occur in sequence with new residential development, particularly in greenfield areas located in outlying and fringe localities with high service and transport needs.

Social infrastructure must be responsive to changing demographics and community needs. An ageing population, for example, will require innovative service responses to meet changing needs. New models for the use of, and access to existing and proposed community facilities and services will be required to maximise community benefit. Flexible multipurpose and multifunctional facilities are better able to respond to changing needs.

Integrating and co-locating services and facilities allows a number of uses to occur in one locality or hub. Facilities and services located in a common space or area assists in cost-effective delivery, enhances access and maximises community use. Hubs should be safely and conveniently located adjacent to compatible land uses and accessible by public transport, pedestrian and cycle paths.

Using benchmarks when planning community services and facilities is important to ensure adequate provision for the future.

Collaborative partnerships across the government, non-government and private sectors will be increasingly required to fund, manage and deliver social infrastructure.

6.2 Social planning

Principle
Ensure the social effects of growth and change on the local community are planned for, monitored and evaluated.

Policies
6.2.1 Use demographic and socio-economic information to identify the effects of growth and change on regional communities and to inform social infrastructure planning.

6.2.2 Incorporate social planning considerations into land use planning and development decision-making processes.

Notes
Considering social and community trends, issues and changes through planning processes assists in developing better community outcomes. Important planning information includes existing and likely future socio-demographic characteristics, the social impacts of growth and development, and current and emerging community needs.

6.3 Addressing disadvantage

Principle
Address issues of disadvantage in communities.

Policies
6.3.1 Ensure the planning and development of new residential areas avoids creating disadvantaged communities.

6.3.2 Integrate greenfield communities and redevelopment areas with existing or adjacent communities to prevent areas of disadvantage.

6.3.3 Coordinate funding programs and collaboration between agencies and the community to focus on areas of disadvantage.

Notes
Areas of disadvantage contain concentrations of low-income households and unemployment, experience poor community services and facilities, and often have difficulty in accessing employment opportunities and public transport.

Groups with the highest needs are often concentrated in urban fringe locations, rural areas and some suburbs where services are not always available or well-matched. Preventing the development of future areas of disadvantage requires basic human service needs be met, including affordable housing, education and training, employment and income support, health, a range of community facilities and support services, recreation and leisure, and transport.

Many groups face a range of potential social, cultural, financial or locational disadvantages. People in these groups include low income individuals and families, unemployed people, people living in rural communities, young people, older people, culturally and linguistically diverse people, some Aboriginal and Torres Strait Islander peoples, people with disabilities, and people who are homeless or at risk of homelessness.

Considering social justice principles such as access, equity, participation and inclusiveness assists in preventing social polarisation and displacement, and enhances social diversity and inclusiveness in new developments. Prevention and early intervention programs are crucial in helping to address disadvantage.

6.4 Safe and healthy communities

Principle

Create well-designed, safe and healthy local environments, encourage active community participation, promote healthy lifestyles and prevent crime.

Policies

6.4.1 Improve community health and safety by using best practice urban design, local transport investment, community engagement and social planning practice.

6.4.2 Create safe urban and rural environments by providing appropriate social infrastructure and involving local communities in planning activities.

6.4.3 Incorporate community health and safety issues in the planning and development of new urban areas and redevelopment sites.

Notes

There are strong links between the physical environment, socio-economic issues and community health and wellbeing. Best practice planning and design of the built environment encourages physical activity and healthy lifestyle choices, provides a sense of community safety, and assists in crime prevention. Communities that contain a broad mix of housing choices, good public transport systems, ample employment opportunities, appropriate local support services, adequate social infrastructure and strong community networks tend to be safe communities.

Safe and healthy communities:

- use best practice urban design to create built environments which foster and enhance community safety;
- include Crime Prevention Through Environmental Design (CPTED) principles and strategies in planning processes to improve safety;
- establish safe, convenient and legible pathways and movement systems with good connectivity between places of activity;
- allow for mobility and access by all members of the community;
- encourage increased physical activity through the provision of cycling and pedestrian networks, open space, and informal and formal sport and recreation facilities;
- provide inclusive public spaces for community interaction and activity;
- address social and locational disadvantage, particularly for high needs groups; and
- consider major emergency situations such as floods, chemical hazards, fires and traffic accidents which require efficient delivery of emergency services.

Improving community health and safety requires good working partnerships between all levels of government, the development industry and the community.

There are strong links between the physical environment, socio-economic issues and community health and wellbeing.

6.5 Community engagement and capacity building

Principle
Support community engagement and community capacity building in the planning and development of future communities.

Policies
6.5.1 Support community engagement in planning processes, enabling local communities to identify, articulate and enhance their sense of place and wellbeing.

6.5.2 Establish partnerships to enhance community engagement and capacity building.

6.5.3 Target community capacity building in areas undergoing significant change.

Notes
Community engagement refers to the connections between governments and communities on a range of policy, program and service issues. It encompasses information sharing, community consultation and in some instances, active participation in government decision making.

Community engagement is a powerful mechanism for identifying new approaches and solutions required in managing growth and development.

Community capacity describes the set of skills, relationships and networks that collectively exist in a community. These capacities provide social support, especially when people need assistance.

The more capacity a community possesses, the more likely it is to be able to take part in and influence decisions and processes for change. In some communities, the capacity to become involved in planning, create community events and build relationships and connections is lacking. This is especially the case in newly developed communities.

Enhancing community capacity building and community engagement will require cooperation between State and local governments and the community.

Community capacity building events and activities can develop social capital and help to create a strong sense of identity and belonging in a community.

6.6 Community, place and identity

Principle
Manage urban growth and development to create, maintain and enhance a sense of community, place and local identity throughout the region.

Policies
6.6.1 Reinforce local character and identity in planning and development of activity centres, rural towns, greenfield developments and infill areas.

6.6.2 Coordinate community engagement and community capacity building programs when planning for greenfield developments and redevelopment projects.

Notes
A sense of place can be found in the distinctive features of an area's physical landscape, population characteristics, economy, arts and cultural heritage. It can also be based upon the relationships, connections and networks between the people who live and work in that community. This sense of belonging is an essential part of building and holding communities together.

Planning for new development and redevelopment should maintain and reflect local community characteristics and sense of identity. Using community engagement in planning processes assists in identifying unique local characteristics and building greater community ownership of outcomes.

The success of any greenfield, infill, or redevelopment not only depends upon changes to the built environment, but also the building of inclusive and diverse communities, which reflect local identity and values.

Planning for new development and redevelopment should maintain and reflect local community characteristics and sense of identity.

6.7 Cultural heritage, arts and cultural development

Principles

Protect the region's unique cultural heritage, including historic places.

Support the arts and cultural development through the planning and provision of cultural infrastructure and spaces.

Policies

6.7.1 Identify, conserve and manage places of significant cultural heritage.

6.7.2 Plan for the future provision of the arts and cultural infrastructure and facilities, including cultural precincts in new developments.

6.7.3 Provide appropriate public spaces for cultural activities, events and festivals when planning communities.

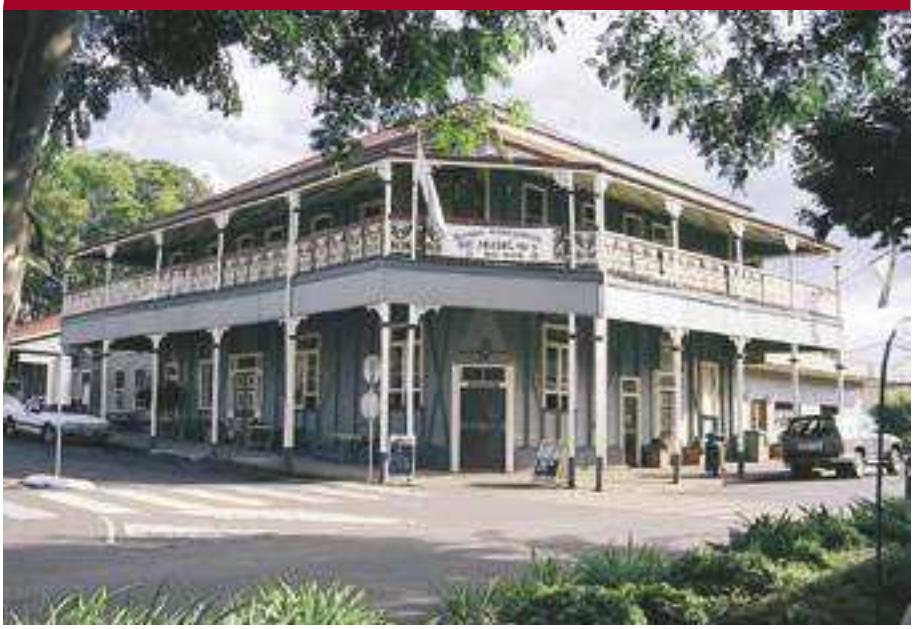
Notes

SEQ has many distinctive places that reinforce a sense of place and identity for local communities through the historic and cultural associations they provide. These places, including landscapes, landmarks, streetscapes, buildings and other structures form an integral part of the region's appeal, image and identity. Dealing appropriately with the valued legacy of the past is a challenge for the region, considering the future growth and change to be accommodated in SEQ.

Redevelopment involving heritage places is particularly complex, but offers the opportunity to bring a vitality and character to communities which is difficult to replicate through new development alone. In undertaking redevelopment, an area's unique character and potential contribution to the life of the new community should be recognised and respected. The local context should inform design through continuity of community character, historic fabric and street pattern.

Culture involves the values, beliefs, ideas, knowledge, symbols, way of life, traditions and aspirations of a society. Culture can be represented in heritage, tradition, architecture, crafts, design, festivals and the arts including public art; as well as aspects of media, tourism, leisure, sport and recreation. All influence the cultural life of an area.

The development of arts and culture provides crucial opportunities to achieve a sustainable future for the region. It encourages collaborative processes across art forms, enhancing many aspects of cultural life. It addresses social issues, celebrates diversity, develops community confidence, expresses identity, enhances public space and provides a tool for economic development. Cultural facilities act as focal points for communities to foster community cohesion, cultural identity and sense of place.



SEQ has many distinctive places that reinforce a sense of place and identity for local communities through the historic and cultural associations they provide.

7 Engaging Aboriginal and Torres Strait Islander peoples

Desired regional outcome 7

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.

SEQ is home to almost one third of Queensland's Aboriginal and Torres Strait Islander population. They consist of those who identify as descendants of the original inhabitants of the region (Traditional Owners) and those who have moved to the region and made it their home (historical and contemporary residents). When engaging Aboriginal and Torres Strait Islander communities, it should be recognised that both Traditional Owners and historical and contemporary residents are important stakeholders with differing needs and aspirations.

Regardless of origin, all Aboriginal and Torres Strait Islander peoples should be able to enjoy a high standard of living and participate fully as residents of the region. The challenge is to identify ways to involve Aboriginal and Torres Strait Islander peoples effectively in planning for the future of SEQ.

7.1 Traditional Owner engagement

Principle

Recognise Aboriginal Traditional Owners as stakeholders in land use planning processes and understand and respect their relationship with the land, sea and natural resources.

Policies

7.1.1 Engage Aboriginal Traditional Owners in land use planning processes through a current and culturally appropriate engagement framework.

7.1.2 Consider Aboriginal Traditional Owner issues in relation to land, water and natural resources in a comprehensive and coordinated way that complements other Traditional Owner land use processes and allows for recognition of their social, environmental and economic aspirations.

Notes

The SEQ region is home to several Traditional Owner groups. As Traditional Owners, Aboriginal peoples have a unique connection to their ancestral lands and have responsibilities to land under their traditional law and customs. Aboriginal values and uses of land often differ to those expressed in mainstream planning schemes and documents.

Consultation processes with Traditional Owners on land and resource planning needs to be culturally appropriate, not just inclusive. Organisations and agencies must also consider that Traditional Owner boundaries may differ from mainstream administrative boundaries. A framework for effective engagement with Traditional Owners should consider regional, sub-regional and local levels of planning. Traditional Owners are building capacity to engage in these planning processes through a culturally appropriate engagement framework.

Traditional Owners have expressed a desire for proper acknowledgment, respect and commitment to progress their interests and responsibilities through planning processes. Regional and local land use planning processes need to ensure they complement other Traditional Owner processes occurring in the region such as native title and cultural heritage activities. In doing so, this incorporates the social, environmental and economic aspirations of Traditional Owners.

7.2 Community engagement

Principle

Provide Aboriginal and Torres Strait Islander peoples with historical and contemporary connections to SEQ with the opportunity for active involvement in planning processes.

Policies

7.2.1 Inform planning processes through localised, place-based partnerships that actively engage the diverse range of interests existing in the Aboriginal and Torres Strait Islander community.

7.2.2 Ensure agencies responsible for planning and land management understand and meet the needs of Aboriginal and Torres Strait Islander peoples.

7.2.3 Enhance the opportunities for Aboriginal and Torres Strait Islander peoples to play an active role in planning and land management processes.

Notes

For land use planning processes to seek to adequately address the needs of the Aboriginal and Torres Strait Islander community, they must include appropriate involvement mechanisms that recognise the diversity within this community. Localised, place-based partnerships have proven to be an effective mechanism for engaging Aboriginal and Torres Strait Islander peoples and identifying the diversity of issues.

Local government is in the best position to foster localised partnerships with the Aboriginal and Torres Strait Islander community. Successful examples of place-based partnerships in SEQ include the Yarning Circles (Brisbane City Council), the Brisbane Place Program (Department of Communities and Brisbane City Council) and the Brisbane North Negotiation Table (Department of Aboriginal and Torres Strait Islander Policy). A common element of all these initiatives is that the partnerships have been based on understanding and respect for cultural differences.

State and local governments responsible for planning and land management must gain an enhanced appreciation of the valuable contribution that Aboriginal and Torres Strait Islander peoples can provide. *Partnerships Queensland* is the Queensland Government's primary policy initiative for Indigenous Queenslanders and provides advice and support to local government in establishing successful partnership arrangements. Aboriginal and Torres Strait Islander peoples' involvement seeks to empower their community to identify its own issues, strategic directions and solutions.

7.3 Social and economic equity

Principle
Assist Aboriginal and Torres Strait Islander peoples living in SEQ to have equal access to a high standard of living, good economic prospects and general wellbeing as other residents of the region.

Policies
7.3.1 Improve Aboriginal and Torres Strait Islander peoples' access to community services and facilities.

7.3.2 Improve the quality of data relating to Aboriginal and Torres Strait Islander peoples and use this information to inform and guide local and regional planning processes, infrastructure and services planning, decision making and reporting.

7.3.3 Identify and manage the social impacts which development and growth has upon Aboriginal and Torres Strait Islander peoples living in both urban and regional areas.

7.3.4 Address the housing needs of Aboriginal and Torres Strait Islander peoples by using regional and local housing strategies.

Notes
Aboriginal and Torres Strait Islander peoples must be able to access the same range of services, housing and economic opportunities available to the mainstream community. Both urban and regional Aboriginal and Torres Strait Islander communities should be considered and the delivery of services should take account of their specific cultural values and needs. This may require tailoring policy responses and service delivery mechanisms to suit.

The collection, analysis, quality and use of data relating to Aboriginal and Torres Strait Islander communities assists in evaluating and servicing their needs across different portfolio areas. Additional data may need to be collated from a wide range of sources, including those non-government community organisations responsible for delivering services to Aboriginal and Torres Strait Islander peoples. Coordinating the collection and collation of data relating to Aboriginal and Torres Strait Islander communities could assist in improving the uniform flow of information to service agencies.

7.4 Cultural heritage

Principle
Recognise, protect and conserve Aboriginal cultural values in land, water and natural resources.

Policies
7.4.1 Recognise and acknowledge Aboriginal cultural values in regional and local planning processes.

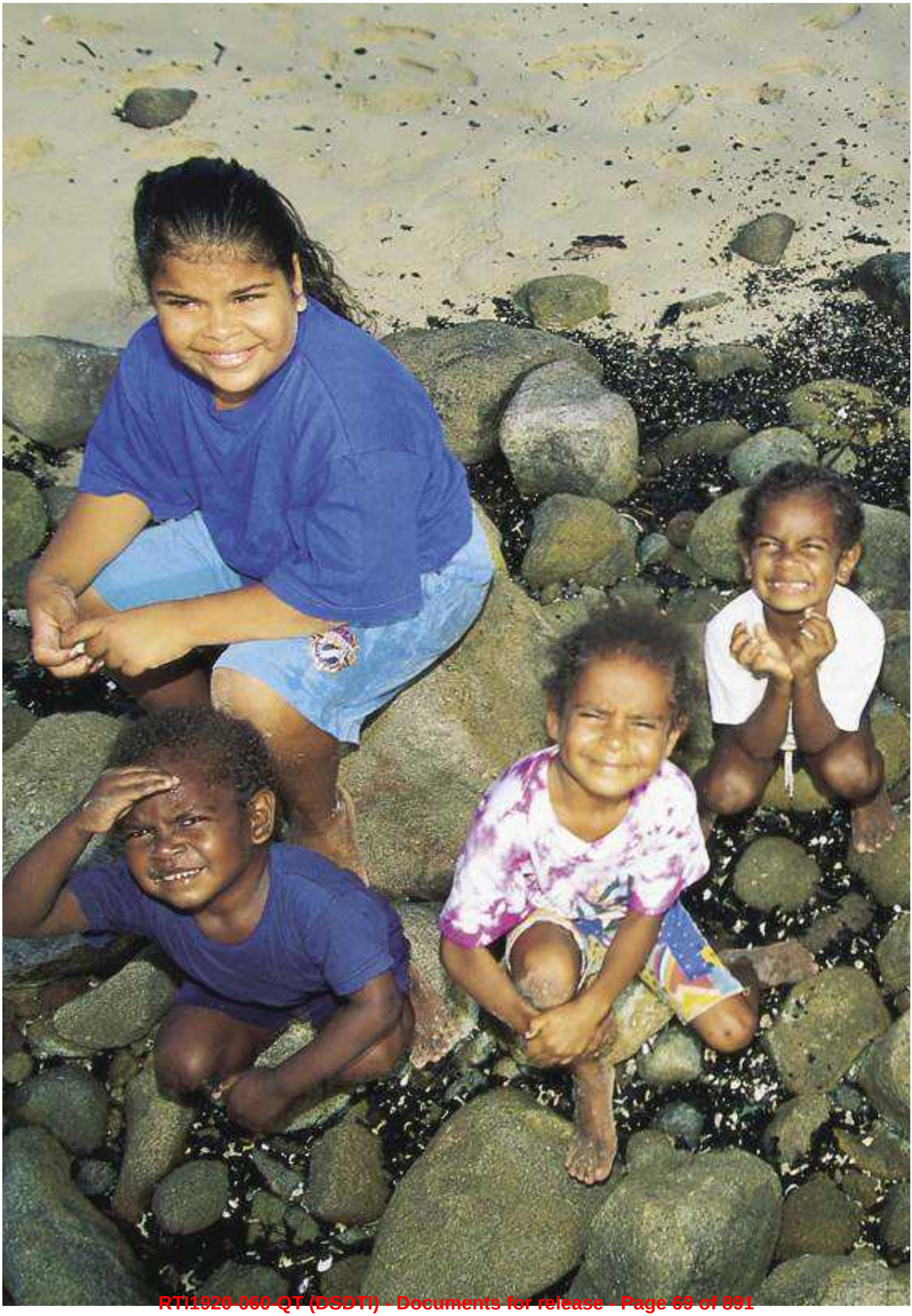
7.4.2 Protect and maintain Aboriginal cultural landscapes and culturally significant places in land use policy, planning and management arrangements.

7.4.3 Manage areas of high cultural significance for Aboriginal and Torres Strait Islander communities appropriately.

Notes
Cultural heritage is important to Aboriginal and Torres Strait Islander peoples as a sense of identity for present and future generations. The Queensland Government has legislated to protect, conserve and manage Aboriginal cultural heritage across the state through the *Aboriginal Cultural Heritage Act 2003*.

Knowledge of cultural places and their values is often confidential and difficult to obtain. Engagement and partnerships with the Aboriginal and Torres Strait Islander community can provide opportunities for information sharing and effective management of cultural values and cultural heritage. Information about places of cultural significance must be managed in a way that satisfies the custodians of the area while ensuring those managing the land have access to sufficient data to ensure proper management. State and local government policy, planning and land management arrangements must acknowledge and protect Aboriginal cultural heritage and areas that are of cultural significance to Aboriginal and Torres Strait Islander peoples.

Cultural heritage is important to Aboriginal and Torres Strait Islander peoples as a sense of identity for present and future generations.



8 Urban development

Desired regional outcome 8

A compact and sustainable urban pattern of well-planned communities, supported by a network of accessible and convenient centres close to residential areas, employment locations and transport.

SEQ is the third largest urban region in Australia and is continuing to experience significant and sustained growth pressure. With a forecast average of 50,000 new residents per year over the next 20 years, this level of growth is placing high demand on the region's natural resources, urban systems, infrastructure and services.

SEQ is Australia's only subtropical urban region and over the past two decades has become increasingly recognised for its high quality of life, prosperity and relaxed lifestyle. Managing future growth and associated change in a way that protects natural resources, biodiversity and lifestyle values requires a highly sustainable pattern of development based on efficient utilisation of land and infrastructure, and tighter controls over ad-hoc and dispersed forms of development.

To maintain this quality of life, there must be a good understanding of the close relationship between the urban and rural parts of the region. To achieve this requires careful attention and management at all levels - from regional and local plans through to the final form and design of development and public spaces. The ultimate success in managing growth in the region will depend upon the ability to adopt the best possible urban development practices and most suitable governance arrangements.

8.1 Urban structure

Principle

Accommodate the majority of regional growth in existing urban centres or within identified urban growth areas.

Policies

8.1.1 Contain urban development within the Urban Footprint.

8.1.2 Develop a well-planned region of connected cities, towns and villages that reinforces the strengths, individual character and identity of each urban area.

8.1.3 Protect the character and identity of regional communities by preventing urban development in defined inter-urban breaks.

Notes

The SEQ region includes several major interconnected urban areas, separated by rural lands and each with its own special identity, character and role. They provide a rich variety and choice of places to live, work and recreate. This variety is one of the key characteristics of the SEQ lifestyle. Each of the major urban areas in SEQ is contained within the Urban Footprint and framed by the Regional Landscape and Rural Production Area. The Regional Plan preserves and promotes the special characteristics and identity of each of these major urban areas.

Making the most sustainable use of space within the Urban Footprint is supported by the protection and enhancement of strategic inter-urban breaks across major urban growth corridors. These breaks are located along the Pacific Highway (Brisbane to Gold Coast), Warrego Highway (Brisbane to Toowoomba), Bruce Highway (Brisbane to Sunshine Coast), Old Cleveland Road (Brisbane to Redland) and the Mt Lindesay Highway/Beaudesert Road and Logan Motorway (Brisbane to Logan, and Brisbane to Beaudesert). Prior to any future development taking place in the Mt Lindesay/North Beaudesert Study Area, inter-urban breaks and associated open space corridors will be identified and protected.

The major urban areas in SEQ include:

Greater Brisbane

The primary urban centre of SEQ comprises Brisbane City and the surrounding local governments of Caboolture, Logan, Pine Rivers, Redcliffe and Redland. Spatially, this major urban area is framed by the hills of Brisbane Forest Park and the D'Aguilar Range to the west; Moreton Bay and the bay islands to the east; and the major inter-urban break at the Glass House Mountains/Pumicestone Passage to the north.

Local governments in the area have a current population of 1.56 million people, with an expected population of around 1.95 million people by 2026.

The Greater Brisbane urban area is focused on the Brisbane Central Business District (CBD) and contains a large number of other regional activity centres, tertiary level hospitals, universities and other centres of research and learning, cultural hubs, and the region's principal air and sea ports. The area is well-serviced with urban infrastructure including a suburban rail service. It contains many diverse communities ranging from well-established 'timber and tin' suburbs to high-rise apartments and new master-planned estates. While it contains a high proportion of the region's major employment opportunities, these are not evenly distributed.

Greater Brisbane provides significant opportunities for urban consolidation, particularly through infill and redevelopment of areas with good accessibility to activity centres and public transport. Recognising these opportunities, the Regional Plan requires a high level of infill and redevelopment in appropriate locations which are ready for growth and change. The challenge is to achieve this while maintaining local community identity and protecting important cultural assets and natural environmental values. There are also significant opportunities for housing choice, with land available for greenfield development, particularly in Pine Rivers and Caboolture.

Sunshine Coast

The Sunshine Coast comprises the local government areas of Noosa, Maroochy and Caloundra. It has a current population of around 275,500 people and is expected to reach 424,000 people by 2026.

The area provides a wide range of both urban and rural lifestyle options and is an important local, national and international holiday destination. The Sunshine Coast is a high-growth area, requiring careful management to ensure it does not lose the special qualities that make it such an attractive place for residents and visitors.

The Urban Footprint has been carefully chosen to protect the special character and qualities of the small hinterland townships and the coastal communities north of the Maroochy River, while also providing significant greenfield development opportunities in the southern coastal parts of the Sunshine Coast. In order to preserve the identities of both the Sunshine Coast and Greater Brisbane, the Regional Plan protects the major inter-urban break between these two urban communities.

8.1 Urban structure (continued)

It is particularly important that developable land is used efficiently on the Sunshine Coast to relieve pressures on land with important economic, rural, natural and scenic amenity values. The urban areas of the Sunshine Coast contain many attractive locations, which are close to beaches and rivers, providing opportunities for higher-density development. These infill opportunities must be identified and maximised, and greenfield land developed to achieve optimum yields and diversity.

The economy of the Sunshine Coast is reliant on the tourism and construction sectors, with limited local employment opportunities. The Regional Plan aims to address this issue by providing additional land for business and industry development; improving infrastructure networks, particularly transport; and promoting new economic development opportunities such as the proposed knowledge hub, focused on the University the Sunshine Coast.

Gold Coast

There are two major urban areas in Gold Coast City. The northern area comprises an urban corridor, extending along the Pacific Motorway south from the Logan River to Yatala and focused on the Beenleigh activity centre. This is essentially an extension of the Greater Brisbane urban area and is separated from the main part of the Gold Coast by a fragile inter-urban break around Pimpama River and Hotham Creek. The larger area extends from Coomera to Coolangatta and has close links to Tweed Shire in northern New South Wales.

With a current population of around 475,500 people, the Gold Coast is expected to grow to around 719,000 people by 2026. A large proportion of this growth will be accommodated through infill and redevelopment, continuing a longstanding trend to higher-density development in attractive locations. The Regional Plan establishes clear limits to urban expansion on the Gold Coast and protects rural and environmental values and inter-urban breaks from inappropriate forms of development.

The Gold Coast is renowned as a holiday destination and recreational playground, both locally and overseas. The Gold Coast's popular image is one of accessible beaches, high-rise residential apartments and hotels, and a green backdrop of mountains and hills, including national parks and World Heritage areas. The Gold Coast has a thriving multi-faceted economy with particular strengths in tourism, education, knowledge-based industries and niche manufacturing activities like boat building and surf wear. It also provides a wide variety of residential environments, including extensive low-density residential communities.

As a high growth area, the Gold Coast faces a number of challenging growth management issues. These include protecting the fragile coastal, riverine and mountain environments; a dwindling stock of developable greenfield land; the need to ensure adequate water supplies and transport infrastructure; and the retention of key inter-urban breaks. Some of these issues can only be resolved at the local planning level, for example through the sustainable and efficient urban design of greenfield areas.

There is a strong relationship between the Gold Coast and the adjoining urban areas in Tweed Shire and northern New South Wales. Major planning and infrastructure issues require cross-border cooperation with the New South Wales Government and relevant local government authorities.

Western Corridor

The Regional Plan identifies a major new urban growth corridor in Ipswich City, taking advantage of land suitable for residential, business and industry development. This corridor will relieve environmental pressures on coastal parts of the region. Considerable growth and change is expected to occur in Ipswich City over the period of this plan. Current population in this area is around 135,500 people and forecast to be around 318,000 people by 2026.

8.1 Urban structure (continued)

The Western Corridor is expected to play a significant role in the future development of SEQ. This corridor has land available for new housing and industry, the opportunity for large numbers of new jobs and economic growth, and significant investment in infrastructure and services. Economic development opportunities include more aerospace industries which are attracted by synergies with the Amberley airbase, establishing one or more potential major inter-modal freight hubs; and developing extensive areas of industrial land suitable for large or difficult-to-locate industries. Employment in knowledge-based industries associated with industry training and the Ipswich and Springfield campuses of the University of Queensland and the University of Southern Queensland is also a source of potential economic growth for this area.

Challenges in the Western Corridor include delivering timely infrastructure to lead planned growth and sustain the creation of new and varied job opportunities.

New master-planned communities will provide the main new residential development in this area, located in proximity to employment. They will provide a range of housing choice and employment opportunities and use sustainable development practices that protect the environmental values and scenic amenity of the area. Activity centres at Springfield and Ripley Valley will support these new communities. There is also a need and opportunity to revitalise the Ipswich City Centre and take advantage of its unique cultural and built heritage.

Toowoomba
Located at the western periphery of SEQ, Toowoomba City has a strong and diverse economy, reflecting its role as the main urban centre for the eastern Darling Downs. It is expected to grow from a current population of 92,000 people to around 110,000 people in 2026, through a combination of greenfield development and increasing levels of infill and redevelopment in suitable locations and around activity centres.

A key issue for Toowoomba and environs is the proliferation of very low-density residential areas in adjoining local governments to the west. Much of this development is occurring outside the SEQ region and needs to be addressed by measures other than this Regional Plan. Key measures in this plan include the clear identification of urban growth areas and the protection of the unstable and scenically significant eastern escarpment from inappropriate forms of development.

Beaudesert
Beaudesert Shire comprises two distinct parts. The southern part extends from just north of the Beaudesert township to the New South Wales border and is predominantly rural in nature. It contains important environmental areas, including the impressive scenic rim along the state border. The Regional Plan protects these rural and natural values while allowing for growth in rural towns and villages. East of the Beaudesert township is a large industrial area at Bromelton, which is expected to be developed during the life of the Regional Plan to take advantage of its location adjacent to the standard gauge interstate rail line. The possible expansion of Bromelton is identified for further investigation.

The northern part of Beaudesert Shire is characterised by extensive areas of scattered low-density rural residential development with a relatively low level of employment opportunities and services. This area comprises the bulk of the Mt Lindesay/North Beaudesert Study Area, which is under detailed investigation to determine the feasibility, extent and timing of potential future urban development to cater for the longer-term needs of the region. It provides potential to relieve pressure on the Gold Coast as suitable land for development on the coast is progressively exhausted.

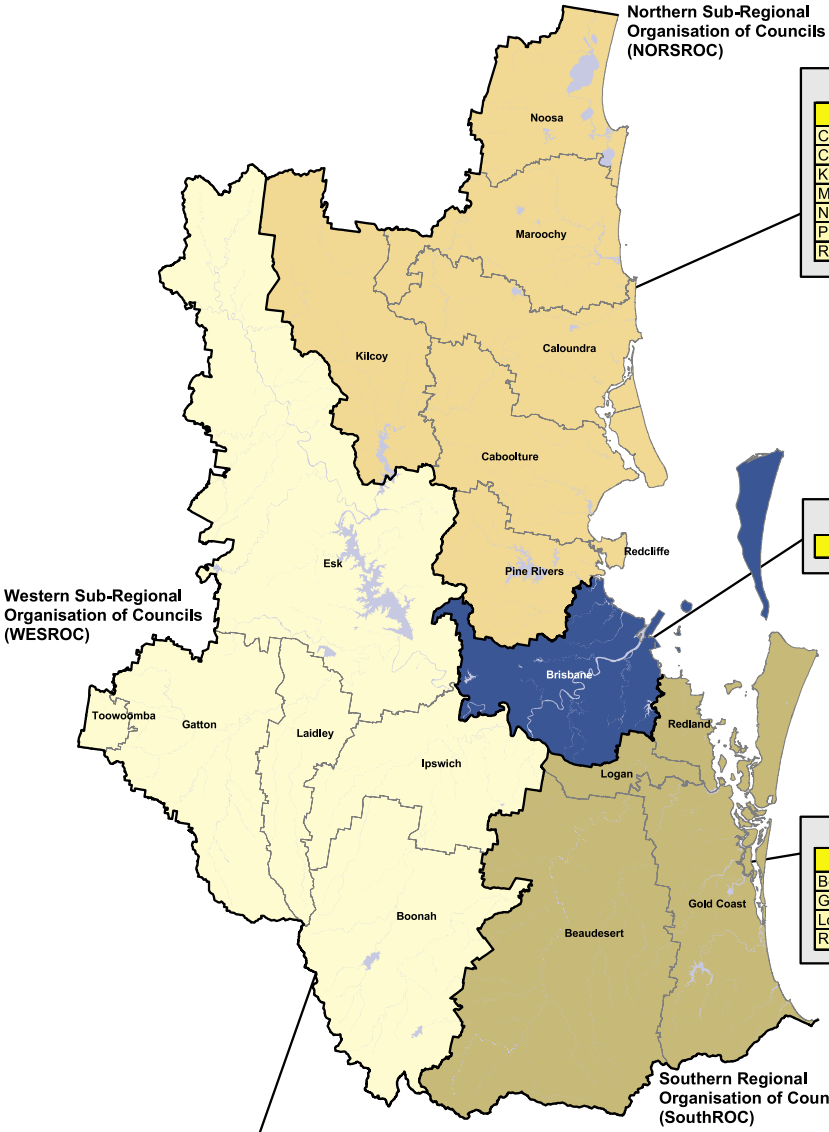
Rural communities
Outside the major urban areas, the Regional Plan promotes growth of rural towns and villages and limits ad-hoc and dispersed development throughout the rural landscape. Rural towns that have sufficient local capacity to accommodate reasonable growth have been identified by an Urban Footprint. Some of the larger towns have been identified as Rural Activity Centres and are intended to be the focus for a wide range of public and private services for their catchments.

Figure 3 – Indicative planning populations by sub-region

Source: Office of Urban Management

Version: June 2005

	2004	2016	2026
SEQ region	**2,654,500**	**3,265,900**	**3,709,000**



	2004	2016	2026
NORSROC	**590,500**	**765,800**	**868,800**
Caboolture	124,500	157,500	180,500
Caloundra	85,000	120,500	155,500
Kilcoy	3,500	3,800	4,300
Maroochy	142,000	201,000	216,000
Noosa	48,500	52,000	52,500
Pine Rivers	135,500	174,000	201,000
Redcliffe	51,500	57,000	59,000

	2004	2016	2026
Brisbane	**948,000**	**1,071,000**	**1,153,000**

	2004	2016	2026
SouthROC	**835,000**	**1,024,500**	**1,184,000**
Beaudesert	60,000	84,500	109,000
Gold Coast	475,500	605,000	719,000
Logan	173,500	185,500	200,000
Redland	126,000	149,500	156,000

	2004	2016	2026
WESROC	**281,000**	**404,600**	**503,200**
Boonah	8,500	9,100	9,800
Esk	15,000	16,700	18,600
Gatton	16,500	19,500	22,000
Ipswich	135,500	236,500	318,000
Laidley	13,500	18,300	24,800
Toowoomba	92,000	104,500	110,000

8.2 Urban form

Principle

Make the most efficient use of land allocated for urban development.

Policies

8.2.1 Use the urban area efficiently by accommodating a higher proportion of growth through infill and redevelopment, together with well-planned greenfield development.

8.2.2 Accommodate projected growth and change by ensuring there are adequate supplies of land for all urban development needs.

8.2.3 Consolidate urban development in existing and new urban areas to improve utilisation of land and the efficient provision of infrastructure and services.

8.2.4 Achieve targets to progressively increase the proportion of new dwellings created by infill and redevelopment of existing urban areas.

8.2.5 Focus higher density and mixed-use development in and around regional activity centres and public transport nodes and corridors.

8.2.6 Measure the rates of development and availability of land stocks on a regular basis by establishing a regional land monitoring program.

Notes

Table 5 Urban structure population capacities

Population location	Current trends	Plan provision
Existing population	2,470,000	2,470,000
Additional capacity		
Urban Footprint	1,260,000	1,700,000
Rural Living Areas	20,000	20,000
Other	25,000	25,000
Total estimated population capacity	**3,775,000**	**4,215,000**

The population capacity of the Regional Plan's settlement pattern is estimated to be within the range of 3.8 million to 4.2 million people. This provides sufficient land to accommodate the projected population of 3.7 million people by 2026, taking account of any relevant physical constraints.

The population capacity estimates in Table 5 are based on the current urban development pattern and the preferred regional settlement pattern, greenfield and infill dwelling targets.

The population capacity will be reviewed every five years and appropriate adjustments made to ensure that at least 15 years of projected regional land supply is maintained. A formal land monitoring program will be established in cooperation with local government and the development industry to enable the rate and type of development, land stocks, dwelling yields and population changes to be monitored annually.

The estimates do not include allowances for urban population growth within the Investigation Area during the current plan period. The Investigation Area provides significant opportunities for additional residential and economic growth when required.

The indicative population distribution in SEQ, based on the preferred regional settlement pattern is shown in Figure 3.

By 2026, approximately 575,000 new dwellings will be required to accommodate the projected population changes in the region. Continuing to provide a high proportion of these dwellings as low-density detached houses on the urban fringe will not match the changing structure of households or projected needs of the population. It would also be unsustainable both in terms of land consumption and the cost of providing urban services. An alternative is to provide a higher proportion of the new dwellings in locations that take advantage of existing facilities and services and at the same time ensure greenfield development uses land as efficiently as possible.

To promote a more compact form of development within the Urban Footprint, the Regional Plan:

- sets targets by local government area for increasing the proportion of new dwellings provided through infill or redevelopment to achieve an aggregate target of 40 per cent of all new dwellings constructed in the region between 2004 and 2016, increasing to 50 per cent between 2016 and 2026 (Table 6);
- requires major new residential developments to maximise residential yield, taking account of location, topography and demonstrated community need;
- requires a range and mix of dwelling types to match the changing needs of the community and changing household size and structure. This particularly applies to greenfield sites which traditionally provide a greater proportion of detached housing. Large greenfield developments will include a range and mix of housing types and density over the whole development site;
- requires higher density residential development to be focused within and around regional activity centres and public transport nodes and corridors to improve accessibility to existing and planned facilities and services; and
- constrains the further allocation of lands for rural residential development and promotes more sustainable use of existing lands designated as rural residential.

8.2 Urban form (continued)

Table 6 also sets out estimates for each local government area of the total number of new dwellings required through both infill and greenfield development. These estimates are based on an assessment of land available for residential development within the Urban Footprint and the achievement of the Regional Plan's strategic directions and policy intent. The total number of new dwellings is not a target - they are the anticipated total requirements and provide guidance for major infrastructure and other broad-scale planning activities in SEQ. Local government and developers should be guided by the policy requirement to maximise the residential yield and variety of dwellings from greenfield development areas, consistent with local planning constraints.

Table 6 also sets targets for the number of new dwellings to be provided by infill and redevelopment in major urbanised local government areas. In keeping with the Regional Plan's overall intent for more efficient use of land, local government is encouraged to exceed these minimum numbers where Local Growth Management Strategies demonstrate this is achievable.

Table 6 Dwellings by local government area (2004 to 2026)

Local government area	2001	2004-2016		2016-2026		2004-2026	
	Existing dwellings	Total new dwellings	Infill dwellings	Total new dwellings	Infill dwellings	Total new dwellings	Infill dwellings
Beaudesert Shire	8,800	10,000	1,000	10,000	1,000	20,000	2,000
Boonah Shire	3,400	400	NA	400	NA	800	NA
Brisbane City	359,000	82,000	59,000	63,000	56,000	145,000	115,000
Caboolture Shire	41,900	15,000	3,000	11,400	3,000	26,400	6,000
Caloundra City	32,800	17,500	4,000	17,250	4,200	34,750	8,200
Esk Shire	6,000	900	NA	1,000	NA	1,900	NA
Gatton Shire	5,700	1,300	NA	1,100	NA	2,400	NA
Gold Coast City	180,900	74,000	35,000	62,500	30,000	136,500	65,000
Ipswich City	45,600	42,200	6,000	35,000	7,800	77,200	13,800
Kilcoy Shire	1,400	200	NA	250	NA	450	NA
Laidley Shire	5,000	2,000	NA	2,700	NA	4,700	NA
Logan City	58,200	7,100	1,500	8,500	3,000	15,600	4,500
Maroochy Shire	53,100	30,000	7,000	11,000	6,700	41,000	13,700
Noosa Shire	21,200	3,000	1,500	1,200	1,000	4,200	2,500
Pine Rivers Shire	41,400	16,500	4,000	12,700	4,100	29,200	8,100
Redcliffe City	21,500	4,400	2,500	2,500	2,100	6,900	4,600
Redland Shire	43,400	12,000	4,000	5,500	4,100	17,500	8,100
Toowoomba City	34,300	6,500	1,500	4,000	2,000	10,500	3,500

Notes: NA = not applicable
The figures shown for Beaudesert Shire are notional and will be revised when the planning issues in the Mt Lindesay/North Beaudesert Study Area are resolved.

The distribution of regional infill and redevelopment targets between local government areas is based on a range of factors, including:

- the size of the existing developed area and number and type of existing dwellings;
- accessibility to employment, education, recreation and public transport opportunities;
- the embedded demographic structure, which varies across the region;
- environmental or natural constraints within the urban area;
- proximity to natural attractions;
- available stocks of greenfield residential development land; and
- current trends in housing demand.

Achieving the regional consolidation and infill targets will be assisted by a relatively high contribution from major urbanised local government areas such as Brisbane and the Gold Coast.

8.3 Urban character and design

Principles

Design and site new development to reflect SEQ's subtropical climate, reinforce local character and achieve design excellence and innovation.

Policies

8.3.1 Ensure all new development incorporates subtropical design principles, including orientation, siting and passive climate control.

8.3.2 Achieve design excellence for all new prominent buildings and public spaces in the Brisbane CBD, regional activity centres and transit communities.

8.3.3 Plan and design new and changing urban areas to maximise liveability, safety and pedestrian connectivity and reinforce local character.

8.3.4 Provide for an accessible and high-quality public domain in all new and existing urban development areas by allocating or revitalising open space and creating well-designed public places.

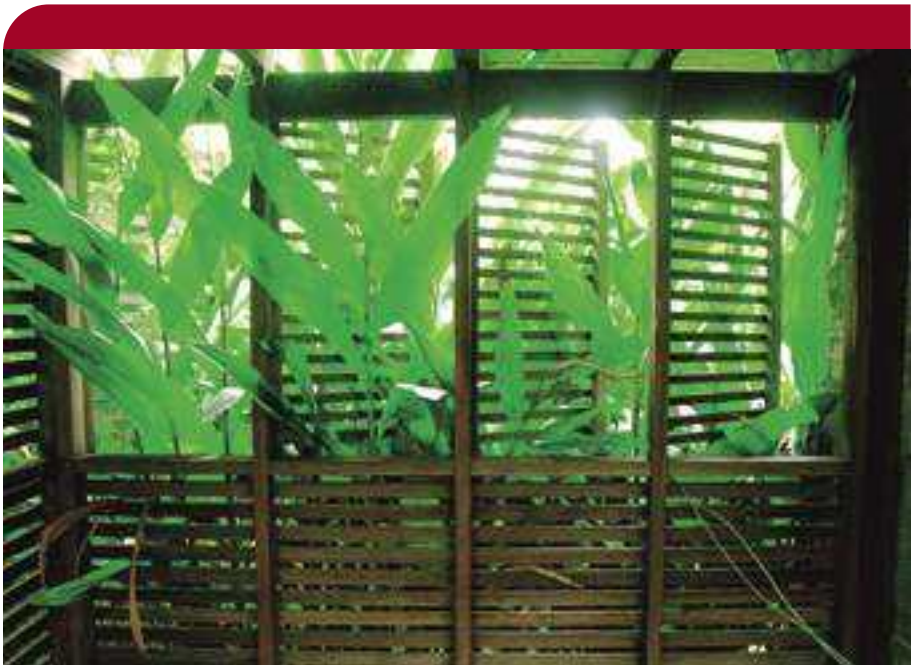
Notes

The Regional Plan seeks to accommodate growth and protect liveability by ensuring the design of future development is of the highest standard; retains regional and local character; creates a safe and appealing environment; and enhances pedestrian connectivity. Liveability is the overall attractiveness of an area as a place to live, as perceived by residents and visitors. Attributes of liveability can include safety, the quality of social interactions, opportunities for recreation and entertainment, aesthetics, and environmental and cultural characteristics including historic, structures, mature trees, traditional architectural styles, building materials and shade elements.

Subtropical environment

There is a substantial national trend towards increased energy consumption. Despite this, the orientation, siting and design of buildings to respond to local climatic conditions is largely neglected. Whilst there is a growing recognition that this pattern is not sustainable, local climatic factors are generally not considered in construction; either because they are not of immediate interest and concern to the building industry, designers, developers and owners or they are seen as too expensive. This has led to an increasing dependency on energy-intensive airconditioning systems which also add significantly to the long- and short-term costs of home ownership.

Climate responsive building, or passive climate control, involves using natural ways to reduce energy consumption through design, construction and use of materials appropriate to a specific climate. SEQ is Australia's only subtropical metropolitan region. Design should be more responsive to the subtropical environment and appppropriate design principles should, therefore, guide all planning and design considerations.



8.3 Urban character and design (continued)

Subtropical design principles for SEQ

Recognise subregions: recognise and reflect the diversity of climatic, landscape, cultural, and habitat sub-regions of SEQ in the application of design principles.

Respect topography: protect the integrity and character of the hills, mountains and ridgelines that are important in framing and defining the subtropical environment.

Diversify the built environment: incorporate a diversity of building densities, heights, type, and scale into new developments.

Consider local character and design: recognise the contribution of contemporary design and appropriate use of building materials to the character and diversity of the subtropical environment.

Orientation: design for appropriate climate-based orientation, provide shade and allow for the penetration of breeze, sunlight and the natural environment. Integrate with nature.

Acknowledge informality: recognise the informal relationship between the natural, built and rural environments.

Use vegetation: make use of extensive native vegetation and large shade trees in private and public spaces.

Use nature in transport: incorporate significant local vegetation in transport corridors.

Ensure diversity of open space: ensure open space is diverse, integrated and designed to form networks.

Incorporate access to open space: reflect the proximity of nature in subtropical environments and SEQ's outdoor-based lifestyle in the access to open space.

Design for water: reflect the importance and presence of water and provide for public access to any natural or artificial waterways.

Develop outdoor centres: outdoor dining, entertainment, recreation, sheltered access to public transport and shaded pedestrian pathways are the attributes of informality and village-like character.

Develop outdoor meeting places: incorporate outdoor meeting places into building and design.

Urban open space

Thoughtfully planned, developed and managed open space systems are essential to the quality and health of urban living. The ability to easily access high quality open space close to home or work can significantly contribute to the liveability of an urban area and the health of the community.

In planning for new communities and revitalising existing communities, urban open space should be highly accessible, well designed and provide options for a diversity of experiences. It should facilitate cultural, spiritual, recreational, economic and environmental outcomes that positively deal with the pressures of urban growth. Benefits include supporting outdoor recreation opportunities, defining urban communities, protecting ecologically sensitive areas, incorporating wildlife corridors, enhancing community health benefits, and assisting in water quality management and flood mitigation. Open space planning is an integral part of the structure-planning process for new communities.

8.3 Urban character and design (continued)

Pedestrian connectivity and amenity
A high-quality pedestrian environment improves accessibility, liveability and amenity; encourages physical activity; and can reinforce a sense of place. Amenity can be achieved by providing canopy trees along footpaths and developing to street frontages to provide casual surveillance, increased activity and visual interest for pedestrians. Connectivity for pedestrians and cyclists can be achieved through well-connected streets and networks having many short links, numerous intersections and minimal cul-de-sacs.

Active public spaces
Pedestrian-friendly streets create opportunities for people to meet and interact, helping to build and maintain strong community networks. Public space is also important as it allows and encourages events which bring vitality and community interaction, increase liveability, and stimulate economic activity. Active public spaces should be encouraged through thoughtful design in activity centres and around transit nodes.

8.4 Housing mix and affordability

Principle
Provide a variety of housing options to meet diverse community needs, and achieve housing choice and affordability.

Policies
8.4.1 Provide housing choice through a range and mix of dwelling type, size and location in new residential development.

8.4.2 Support an increased provision of affordable housing through community-based, not-for-profit entities and housing cooperatives.

8.4.3 Encourage all major new development and redevelopment to incorporate affordable housing, including appropriate housing for the entry buyer and low-income housing markets.

8.4.4 Consider measures for providing and retaining affordable housing in Local Growth Management Strategies.

8.4.5 Consider affordable housing in decisions on the disposal or redevelopment of government property and surplus land.

8.4.6 Monitor housing prices, land availability and other factors which affect housing costs as part of an annual land monitoring program.

Notes
Providing diverse and affordable housing options is a significant issue and key challenge nationally, as well as in the SEQ region. Providing a range of housing choice assists in creating diverse communities and preventing social polarisation and displacement.

With significant population growth, SEQ is experiencing economic, social and demographic change. This growth is creating demand for an increased range of housing options, including more affordable housing. Understanding these changes and the implications for housing demand and supply at a local level can assist in determining the type of housing needed in new development.

There are a number of groups at risk from housing stress. They include working families, specific industry workers, indigenous families and young singles on fixed incomes. These groups constitute the bottom 40 per cent of household income distribution and are likely to have to pay more than 30 per cent of their household income in rent or home loan repayments for appropriate housing in the private market.

The supply of affordable housing throughout the region can be influenced by flexible land use policies to provide a range of housing type and tenure. It is important that affordable housing is not marginalised to fringe areas. It should be well located in relation to transport, community facilities and services, open space and recreation, and education and employment opportunities.

8.5 Rural residential development

Principle

Contain and limit areas allocated for rural residential development to ensure efficient provision of services and infrastructure and limit further land fragmentation.

Policies

8.5.1 Restrict further rural residential development to the identified Rural Living Area and the Urban Footprint.

8.5.2 Facilitate opportunities to consolidate existing rural residential development in the Urban Footprint or convert it to an appropriate urban use.

Notes

Rural residential development is large lot residential subdivision in a rural, semi-rural or conservation setting. Allotments are generally connected to a power supply but have a limited range of other services such as reticulated water and sewerage.

To date, a significant proportion of new development in the region's rural and semi-rural areas has been rural residential. Sufficient land has been zoned or identified as rural residential to satisfy demand for the period of the Regional Plan. The Regional Plan restricts the amount of committed rural residential land and allows the appropriate consolidation of existing areas by:

- halting further allocation of land for rural residential development;
- containing future rural residential development to areas within the Rural Living Areas and in some limited cases, the Urban Footprint; and
- investigating options to consolidate or convert to appropriate urban uses any rural residential areas within the Urban Footprint and Investigation Area.

While rural living is an important dimension to the region's lifestyle and provides choice in living opportunities, it has not always been well planned or located. Any further transition of land in the Regional Landscape and Rural Production Area to rural residential uses would raise a number of concerns, including:

- scattered communities without access to services and facilities;
- losing productive agricultural land in some areas;
- declining rural character and resultant loss of regional liveability;
- potentially poor land management leading to land degradation, loss of biodiversity and declining water quality;
- fragmented land on the urban fringe that may be more suitable for future urban development; and
- long commuting trips to work.

8.6 Regional activity centres

Principle

Focus employment and community services in well-planned, vibrant and accessible regional activity centres.

Policies

8.6.1 Ensure all new development supports the regional activity centres network defined in the Regional Plan.

8.6.2 Locate major employment and trip generating activities within regional activity centres.

8.6.3 Locate suitable government employment activities of regional and sub-regional significance within regional activity centres.

8.6.4 Support regional activity centres with appropriate transport infrastructure, government and community services.

8.6.5 Control inappropriate forms of out-of-centre land use and development.

8.6.6 Prepare detailed master plans for regional activity centres to guide land use, transport, quality of design of buildings and public spaces.

Notes

Regional activity centres are a concentration of business, employment, research, education, services, higher density living and social interaction. A strong and successful network of regional activity centres provides a community focus and can help to achieve compact, self-contained and diverse communities. They facilitate an efficient public transport system, provide a focus for government investment in infrastructure and services, promote commercial confidence and encourage complementary private sector investment.

The regional activity centres network encourages the development of centres which:

- provide for economic growth by co-locating a mix of land uses;
- achieve a more efficient concentration of goods and services;
- identify appropriate locations for government investment in public transport, health, education, cultural and entertainment facilities;
- provide a focus for community and social interaction;
- manage private travel demand by encouraging multipurpose trips and shorter travel distances;
- provide better opportunities for land use and transport integration, particularly walking, cycling and public transport;
- accommodate higher density residential development and land uses that support high levels of employment and trip generating activities and facilitate transit oriented development; and
- provide a focus for delivering a range of services to rural communities.

Developments that provide concentrated employment opportunities or generate significant community patronage should be located within activity centres.

Out-of-centre development is inconsistent with the strategic intent of the Regional Plan. It can diminish activity centre vitality and detract from economic growth by diluting public and private investment in centre related activities, facilities and infrastructure.

Certain development, however, may not always be appropriately located within centres. For example, large format premises involved in non-food bulky goods retailing and single purpose non-food retail activities occupying large sites.

Whilst in most cases these uses should ideally be located within centres, their location out of centre should be assessed on community need and potential impact on the:

- primacy and functionality of surrounding centres;
- maintenance of pedestrian convenience and transport system efficiency; and
- standard of amenity with surrounding residential neighbourhoods.

Local Growth Management Strategies will determine appropriate non-centre locations suitable for such development.

In preparing Local Growth Management Strategies, local government should develop measures to support and reinforce the roles of regional activity centres. This will include identifying activity centre boundaries and determining the extent of future growth that each activity centre will accommodate, including residential development opportunities. Careful attention should also be given to urban design principles and the quality, functionality and interrelationships of building form and public spaces.

8.6 Regional activity centres (continued)

Regional activity centres network

The SEQ regional activity centres network is shown in Maps 8 and 9. It is based on the following definitions and incorporates existing and planned activity centres:

Primary Activity Centre

The Brisbane CBD is the region's Primary Activity Centre. It accommodates the largest and most diverse concentration of activities and land uses. For some activities, it has a statewide function. It is the key focus of government administration, retail, commercial and specialised personal and professional services. In addition, it accommodates cultural, entertainment, health and education facilities of state, national and international significance. Being the centre of highest employment depth, mix and density and supporting a significant in-centre residential population, the CBD generates and attracts a large number of transport trips. It is the focus of the region's radial public transport system. Recently, the CBD's influence has extended to include South Bank and South Brisbane, which should be acknowledged and supported with appropriate land uses forms of development and services.

Principal Activity Centres

The region's Principal Activity Centres serve catchments of sub-regional significance and accommodate key concentrations of employment. They also serve business, major comparison and convenience retail, and service uses. These centres provide a secondary administrative focus, accommodating regional offices of government and regionally significant health, education, cultural and entertainment facilities. Outside the Brisbane CBD, Principal Activity Centres provide the key focal points of regional employment and in-centre residential development. As major trip generators, these centres are typically serviced by multimodal public transport services and comprise key nodes in the regional public transport system. Residential development densities of between 40 and 120 dwellings per hectare (net) or greater should be achieved in proximity to Principal Activity Centres.

Major Activity Centres

These centres complement the Principal Activity Centres, serving catchments of regional significance and accommodating key concentrations of employment. They also provide business, service, limited comparison and major convenience retail functions. As a secondary sub-regional focus of administration, they accommodate district or branch offices of government and cultural and entertainment facilities of regional significance. Providing a focus for residential intensification, these centres typically comprise key suburban or inter-urban nodes of the regional public transport system. Residential development densities of between 30 and 80 dwellings per hectare (net) or greater should be achieved in proximity to Major Activity Centres.

Specialist Activity Centres

As precincts of regional economic significance, these centres provide a primary focus for specialised economic activity, employment and/or education rather than having a retail function. The core emphasis of these centres results in high levels of trip generation.

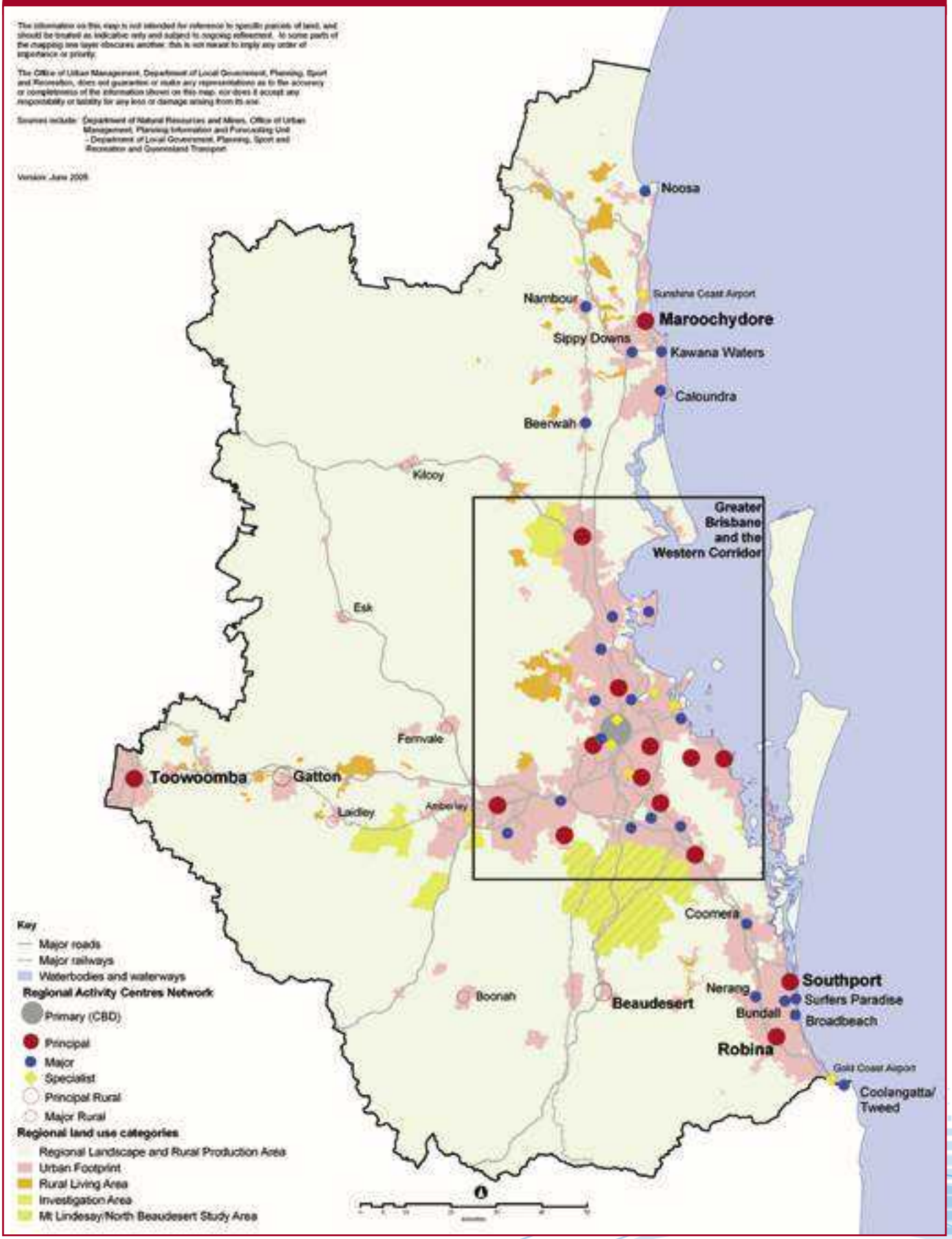
Principal Rural Activity Centres

These centres are important service and community hubs in the rural areas. They support a sub-regional rural catchment and contain a concentration of rural services; commercial, retail, government and community activities; and have good road and public transport linkages. Additional land has been provided within the Urban Footprint to encourage appropriate investment and residential development to support growth of each centre.

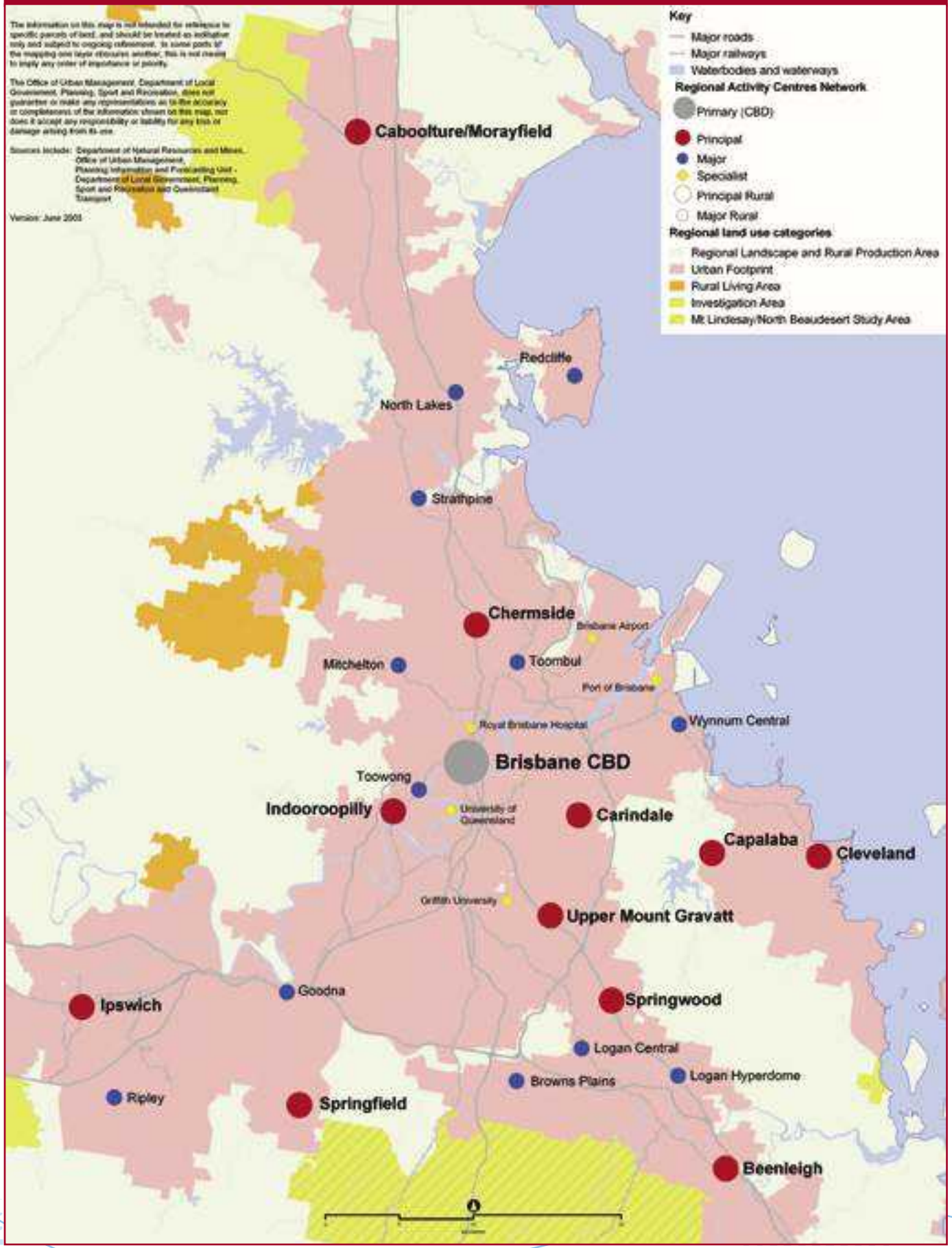
Major Rural Activity Centres

Rural towns providing more than one function to the surrounding rural catchment are Major Rural Activity Centres. They are characterised by a concentration of retail, commercial, community and some government services. They have good road connections and may have public transport services.

Map 8 – Regional activity centres network – SEQ region



Map 9 – Regional activity centres network – Greater Brisbane and the Western Corridor



8.7 Integrated land use and transport planning

Principle

Integrate development with transport infrastructure, community services and employment.

Policies

8.7.1 Ensure land use and transport planning is undertaken concurrently.

8.7.2 Plan new public transport routes, facilities and services to ensure safe and convenient passenger accessibility; and support the inter-relationship between land use and transport.

8.7.3 Allocate suitable land and facilitate mixed-use activities in proximity to transit nodes and regional activity centres to support employment opportunities.

8.7.4 Promote the integration of land use, transport and employment, through planning schemes, Local Growth Management Strategies and structure plans.

8.7.5 Develop greenfield sites as integrated communities with appropriate connections and accessibility to surrounding communities.

8.7.6 Facilitate appropriate forms of transit oriented development in proximity to regional activity centres and high capacity public transport nodes and corridors.

8.7.7 Manage car parking provision in regional activity centres and high capacity transport nodes to support walking, cycling and public transport accessibility.

8.7.8 Ensure all new development within walking distance of a transit node or regional activity centre maximises pedestrian amenity, connectivity and safety.

Notes

Land use, transport and employment integration plays a key role in achieving social, economic and environmental sustainability in the region. By shaping the pattern of development and influencing the location, scale, density, design and mix of land uses, integrated planning can help to create complete communities. Accommodating future residential and employment growth in areas with good access to high frequency public transport and a mixture of land uses promotes social equity, travel choice, and maximises efficient use of existing and planned infrastructure.

Integrating land use and transport reduces the need to travel; creates shorter journeys; provides safer and easier access to jobs, schools and services; supports more efficient use of land and existing infrastructure and maintains the environmental benefits of compact development.

Transit oriented development

Transit oriented developments are mixed-use residential and employment areas designed to maximise the efficient use of land through high levels of access to public transport. A transit oriented development has a walking and cycle-friendly core with a rail or bus station surrounded by relatively high-density residential development, employment or a range of mixed uses.

Prerequisites for transit oriented development sites include:

- they are, or will be serviced by quality and high frequency public transport;
- they have the capacity to provide levels of development density and intensity that support public transport; and
- they can provide a vital and active pedestrian-friendly, walkable catchment, centred around a public transport node or corridor.

Transit oriented development principles should be applied in the detailed planning of all regional activity centres and in close proximity to high-capacity public transport nodes and corridors. Where transit oriented development principles are to be applied to appropriate lower-order centres and neighbourhoods outside regional activity centres, these precincts are referred to as transit oriented communities. They will be identified by local government when preparing Local Growth Management Strategies.

In addition to nominating areas suitable for transit oriented development, Local Growth Management Strategies will identify incentives and measures, including minimum densities, to facilitate appropriate development consistent with the location and design principles outlined in Table 7. The specific scale, intensity and mix of land uses for each precinct will be determined through the preparation of detailed master plans.

Whilst density guidelines are provided in Table 7, actual densities will be determined by taking into account site-specific planning issues such as topography, infrastructure capacity and transit service frequency. Individual sites may have the capacity to accommodate higher densities. Care should be taken to respect the context of the site and character of surrounding neighbourhoods.

Transit oriented development proposals under consideration in 2005 include redevelopment focused around Milton, Bowen Hills, Cleveland, Albion, Park Road and Buranda railway stations; Woolloongabba busway station; and Southbank busway and railway stations.

Transit oriented development precincts will vary in size. Catchment sizes will relate to pedestrian accessibility, generally within a comfortable 10-minute walk of the transit node, or 600-800 metres. Walking distances can be affected by topography, climate, intervening roads and other physical features.

8.7 Integrated land use and transport planning (continued)

Appropriate uses will vary from precinct to precinct and could include residential, commercial, retail, recreation and community facilities. Low employment generating land uses and those mainly dependent on car travel are inconsistent with transit oriented development.

Car parking provision for non-residential land uses in activity centres and transit communities should be reduced over time. This reflects proximity to high-frequency transit services, a walk-friendly environment and mix of uses. Whilst park-and-ride lots will continue to be a part of the SEQ transit system, surface parking lots specifically devoted to park-and-ride should generally not be located within transit communities, or should be designed in a manner that does not separate the station from the community it is intended to serve. New public transport stations should be located in areas with development potential and transit facilities should be designed to allow for direct pedestrian connections to adjacent communities.

Transit oriented development strategies for SEQ

Transit oriented development will be achieved by:

- implementing transit oriented development principles through detailed planning for regional activity centres;
- increasing residential densities and the mix of uses around high-capacity rail and busway stations to create transit oriented communities;
- ensuring appropriate built form and densities in proximity to ferry stops;
- concentrating higher density development in greenfield areas designed around existing or future public transport nodes;
- preparing master plans for activity centres and transit oriented communities;
- providing incentives, research, education and other services to support transit oriented development;
- preparing guidelines for transit oriented development to assist best practice design; and
- establishing a Transit Oriented Development Taskforce or alternative special purpose governance arrangements to assist in delivering of transit oriented development outcomes.

8.7 Integrated land use and transport planning (continued)

Table 7 Transit oriented development principles for SEQ

Location	
Level of infrastructure and services	Focus development around nodes or corridors where infrastructure capacity exists or can be created. Locations with high levels of transit service frequency should be given priority.
Level of development	Ensure transit oriented development occurs at a scale appropriate to the location.
New development	Apply transit oriented development principles in new communities where transit nodes exist or are proposed.
Land use	
Type	Ensure transit oriented development precincts are dominated by land uses that support transit.
Density	Incorporate higher density residential uses in transit oriented development precincts to increase vitality and provide more convenient access to services and transit. Baseline density guidelines are: ➔ Activity centre: between 30 and 120 dwellings per hectare (net) or greater. ➔ Transit oriented community: between 30 and 80 dwellings per hectare (net) or greater.
Intensity	Incorporate high employment intensities and a mix of employment opportunities.
Mix	Promote an integrated mix of uses to achieve a greater variety of services.
Continuity	Encourage continuous activity in transit oriented development precincts to provide a sense of vitality and safety.
Design	
Adaptability	Ensure development delivers a built form that is robust and flexible, allowing adaptation or redevelopment over time to a variety of uses, increased densities or increased employment intensity.
Built form	Ensure development features high-quality subtropical design that maximises amenity, street activity and pedestrian connectivity.
Open space	Provide for a high-quality public realm to promote social cohesion and the development of a sense of place through design.
Integration	Ensure development precincts are designed to achieve a seamless integration between transit node and community.
Parking	Manage car parking in transit oriented development precincts to ensure it is located, designed and provided in a manner that supports walking, cycling and public transport accessibility.
Transport	
Mode share	Achieve an increased mode share for walking, cycling and public transport.
Transport efficiency	Facilitate a high level of intermodal connection.
Social	
Social mix	Provide for a mix of housing types, tenures and levels of affordability in transit oriented development precincts to promote community sustainability.

8.8 Local Growth Management Strategies

Principle
Achieve the strategic intent of the Regional Plan at the local level.

Policies
8.8.1 Ensure each local government prepares a Local Growth Management Strategy to identify opportunities for the appropriate location and form of future development, and to accommodate additional dwellings and employment.

8.8.2 Ensure each local government amends local planning schemes to reflect approved Local Growth Management Strategies and to align with the Regional Plan.

Notes
Local Growth Management Strategies are a tool to assist local government to implement the Regional Plan at the local level, in consultation with local communities.

Local Growth Management Strategies will enable each local government to demonstrate how it proposes to meet dwelling targets and development policies outlined in the Regional Plan. They will identify and plan for growth and change in transit communities, regional activity centres, greenfield areas and redevelopment sites which are ready for change.

The Regional Plan envisages a higher proportion of growth being provided by mixed-use or medium- to high-density forms of living. Higher-intensity development is not appropriate in every setting. Detailed local investigations will determine suitability to accommodate growth, considering factors such as existing infrastructure capacity, local employment, public transport and social service availability. Measures and incentives to achieve desired outcomes for each precinct will also be identified.

Consultation with adjoining local governments, state agencies and local communities will be required during the preparation of Local Growth Management Strategies. Councils will submit completed Local Growth Management Strategies for approval by the regional planning Minister by 30 June 2007. Local Growth Management Strategy Guidelines outline the process and requirements for preparing these strategies.

Purpose of Local Growth Management Strategies
Local Growth Management Strategies will:

- investigate the projected housing need and the diversity and affordability of housing types required for future communities;
- demonstrate how dwelling targets and associated jobs and infrastructure will be accommodated, including opportunities for infill and redevelopment;
- set priorities for investigating and planning for higher densities, including identifying transit oriented communities;
- review land and infrastructure availability in regional activity centres to ensure they perform their intended function;
- ensure measures are in place to prevent inappropriate out-of-centre development;
- identify available greenfield and redevelopment areas which require structure planning or master planning; and
- identify planning scheme amendments required to implement the Local Growth Management Strategy.

Councils will submit completed Local Growth Management Strategies for approval by the regional planning Minister by 30 June 2007.

8.9 Structure plans

Principle

Subject all major new urban development areas to a thorough and collaborative planning process to establish the broad structure, layout, appropriate land uses and service corridors required for future development and community needs.

Policies

8.9.1 Prepare and adopt structure plans for all new major development areas of 100 hectares or greater prior to development.

8.9.2 Prepare detailed master plans for significant new urban development and redevelopment areas or precincts of less than 100 hectares.

8.9.3 Complete State Infrastructure Agreements as an integral component of a structure plan or master plan, where appropriate.

Notes

Structure plans and master plans

Land suitable for urban development is a finite resource. To ensure that greenfield and redevelopment sites contribute to sustainable growth and are developed efficiently, all major new development areas are required to have an approved structure plan or master plan prior to development, setting out the overall intent for development, together with a State Infrastructure Agreement.

Structure plans must be prepared and adopted for all major new urban development areas over 100 hectares, which may include more than one development site. They must respect all significant environmental constraints and maintain open space and create landscaped buffers to major development corridors. Preparation of structure plans for major new urban areas are to be managed by the local authority, in partnership with the principal landowners/stakeholders and must be approved by the regional planning Minister. Guidelines will be prepared to assist the development of structure plans.

Detailed master plans for individual precincts or smaller development sites should be prepared as part of the normal planning and development approval process. These master plans detail the use, form and urban design of each area at a local or site-specific level.

State Infrastructure Agreements

The Infrastructure Plan commits significant infrastructure expenditure by the Queensland Government. In some instances, expenditure on infrastructure will be used to lead development in order to achieve specific outcomes. This will provide clear benefits to some sections of the community. In these instances, the Queensland Government considers it reasonable for beneficiaries to bear some of the cost of this infrastructure provision.

Where the Queensland Government is providing major new infrastructure to lead development in the region and it is ahead of full anticipated demand, landowners and developers of greenfield or redevelopment areas who stand to benefit, will be required to contribute to infrastructure provision through a State Infrastructure Agreement. Structure plans and master plans will only be approved subject to a satisfactory State Infrastructure Agreement which details contributions towards priority state infrastructure, including land for schools, where required.

These agreements will be negotiated between the Queensland Government and developers or landowners on an area-by-area basis, taking into account the particular circumstances of each and the exact nature of infrastructure commitments.

8.9 Structure plans (continued)

Purpose of structure plans

Structure plans will ensure developments:

- contain acceptable urban uses;
- are designed to incorporate best practice sustainability principles, ensuring demand for water, power and waste are minimised and maximum advantage is taken of all reuse opportunities;
- achieve dwelling densities which maximise yield;
- achieve land use and transport integration;
- connect with surrounding areas;
- concentrate a mix of higher residential densities and commercial intensities around existing or future public transport nodes;
- create balanced and affordable communities with a clearly defined range and mix of housing type and price;
- have the capacity to be serviced by physical and social infrastructure which can be staged economically to meet the demand;
- identify and preserve infrastructure corridors;
- identify sites and make provision for community uses and public services, including education, health, social and emergency services;
- take place in an appropriate sequence, with any out-of-sequence or bring-forward costs covered by the development;
- respond to development constraints, including identifying and protecting significant nature conservation and other environmental values and mitigating undesirable impacts;
- make provision for local job opportunities and economic activity areas;
- provide for and support the use of internal and external public transport, walking and cycling;
- make available up-to-date communications technology to all homes and businesses; and
- provide for open space within the area and inter-urban breaks where required.

8.10 Inter-regional coordination

The SEQ region has a very close nexus with surrounding areas, including Cooloola (north), the Eastern Downs around Toowoomba (west), Warwick (south-west) and the Tweed Shire in New South Wales (south).

Some of these areas are experiencing comparable growth pressures and face similar issues to the SEQ region. In the Eastern Downs and Tweed Shire, in particular, the growth pressures are heavily influenced by growth within the SEQ region, specifically in Toowoomba and the Gold Coast.

The Regional Plan does not directly influence the planning processes or regulate the use of land in areas outside SEQ. It is important, however, that potential cross-regional development issues be considered in a broader planning context and arrangements are put in place to address these issues.

Eastern Downs

In addition to its role within the SEQ region, Toowoomba is the major urban centre for the Eastern Downs region, which includes key agriculture and rural areas, stretching from Dalby in the north to Warwick in the South.

The broader Toowoomba Statistical District includes Toowoomba City, and the shires of Crows Nest, Rosalie, Jondaryan and Cambooya (Figure 4).

Issues to be considered on the Eastern Downs include:

- maintaining the importance of Toowoomba as the Principal Activity Centre for the Eastern Downs region;
- managing the limited land availability in Toowoomba City itself for future growth;
- recognising growth pressures on land to the west of Toowoomba City;
- protecting areas of significant vegetation and biodiversity;
- optimising water infrastructure and addressing measures to reduce demand;
- ensuring more equitable and efficient water use;
- supporting the University of Southern Queensland's Toowoomba Campus as a regional knowledge hub;
- supporting the development of the Charlton/Wellcamp Integrated Employment Area; and
- maximising investment in regional infrastructure proposals such as the Toowoomba second range crossing and Gowrie to Grandchester freight rail upgrade.

Integrating planning for the Eastern Downs and SEQ regions is being managed jointly through the Eastern Downs Regional Planning Advisory Committee, the Office of Urban Management and the Department of Local Government, Planning, Sport and Recreation.

Tweed Shire

Tweed Shire is located in northern New South Wales, adjacent to Gold Coast City. The area has a close association with the Gold Coast and with the Tweed Heads to Pottsville coastal corridor, effectively forming an extension of the greater Gold Coast urban area.

Population of Tweed Shire in 2003 was around 78,000 people. Under the *Tweed 04/24 Draft Strategic Plan*, this is expected to increase to around 120,000 people by 2024. The majority of this growth is likely to take place in the northern and coastal areas of the shire, closest to Gold Coast City.

Tweed Shire is facing many of the same growth management issues as SEQ - rapid population growth; high tourism visitations; development pressures on natural areas, the coastal zone and agricultural lands; and a requirement to invest in additional infrastructure and community services.

Proposed completion of the Pacific Motorway at Tugun will significantly improve travel times between SEQ and Tweed Shire, which is likely to increase urban and tourism development pressure on both sides of the border.

A positive partnership has been established between the Office of Urban Management and the North Coast Regional Office of the New South Wales Department of Infrastructure, Planning and Natural Resources. The aim of this partnership is to share information and promote consistent planning.

Figure 4 – Toowoomba Statistical Subdivision

9 Economic development

Desired regional outcome 9

A strong, resilient and diversified economy - growing prosperity in the region by utilising its competitive advantages to deliver exports, investment, and sustainable and accessible jobs.

SEQ is the main economic engine for Queensland. In recent years, the economy of the region has been growing faster than the Australian average, driven mainly by consumption as a result of its high population growth.

The regional economy is not homogenous, but is overwhelmingly a services economy. There are variations in employment and economic activity throughout the region. To sustain living standards it is necessary to strengthen and diversify the region's economy and raise productivity.

Accordingly, the region's capacity to create jobs and support the preferred pattern of development requires specific sub-regional strategies and initiatives. These will focus attention on:

- encouraging skills to support industry and regional growth;
- developing a more outward looking, entrepreneurial culture including increased integration into the global economy;
- continuing to provide land for industry and economic activity that creates employment close to where people live;
- preserving the region's natural economic advantages; and
- diversifying the region's economic base.

The economic development initiatives reflected in the Regional Plan are underpinned by the Queensland Government's *Smart Queensland: Smart State Strategy 2005-2015*. This Strategy identifies investment in research, development, technology diffusion and commercialisation of ideas. It also includes investments in knowledge, skills, diversity, creativity and connectivity as the key mechanisms to achieve increased productivity and a better quality of life.

Other factors that support continued economic growth and development include providing infrastructure and services such as transport and freight networks; educational, scientific and technological institutions; and water and power. One way of diversifying the economy and stimulating investment is to plan and design mixed-use developments that foster collaboration and networks between business, industry and research institutions.

The continuing movement of people into the region will drive consumption-related jobs and provide employment in emerging residential areas. The challenge is to continue to create higher-skilled jobs in knowledge-based industries.

Current and impending skills shortages are recognised as critical issues. Attractive living environments and lifestyle opportunities are therefore, an important way to attract or retain such skills.

Variations in the economic base around the SEQ region necessitate more detailed sub-regional strategies, addressing local issues such as reliance on one or two industry sectors, specific skills shortages and infrastructure needs.

Western Corridor

As a significant growth area for SEQ, the Western Corridor provides major opportunities for economic development and employment creation. Factors supporting this include:

- suitable land available for large-scale industries and logistics with adequate separation from sensitive land uses;
- good freight transport links to state and national highway and rail networks;
- a workforce with the appropriate mix of skills for local industries;
- investment in training and upgrading skills; and
- competitively-priced energy.

Priority industries for the Western Corridor comprise food, manufacturing, aviation, aerospace and education. Key initiatives include the:

- planned redeployment of Australian Defence Force personnel to Amberley airbase, creating the opportunity for continued growth through development of the Amberley aerospace park;
- University of Queensland campuses at Ipswich and Gatton and the University of Southern Queensland campus at Springfield;
- Bremer and Southern Queensland Institutes of TAFE;
- development of regional activity centres at Ipswich, Springfield and Ripley;
- Swanbank Enterprise Park centred on the Swanbank Power Station and nearby Bremer Business Park;
- location of heavy, difficult to locate or large footprint industries at Ebenezer; and
- investigation of the opportunity to redevelop the Wacol Institutions Precinct to provide a major gateway development for the Western Corridor.

9.1 Economic development and growth strategies

Principle
Develop a diversified regional economy, characterised by knowledge-based, high value-adding industries that build on existing regional and sub-regional competitive advantages and specialisations.

Policies
9.1.1 Refine and implement sub-regional economic development strategies that deliver high value-added jobs and build knowledge-based industries.

9.1.2 Develop industry clusters and partnerships, targeting industries relevant to the region's competitive advantages and market opportunities.

9.1.3 Initiate and implement projects that support economic development of the Western Corridor.

Notes
Economic development strategies exist for all sub-regions within SEQ. Some need to be updated to take account of contemporary circumstances, including the Regional Plan. Local government is working with the State to boost business investment, diversify local economies and enable businesses to grow.

The Queensland Government has recently initiated the *Leading Smart Regions* project in partnership with key regional economic development stakeholders. This project aims to create shared visions for economic development in each of Queensland's regions and enable stakeholders to identify economic development objectives based on local competitive strengths.

9.2 Industry and business development

Principle
Expand business activity, increase business competitiveness and encourage regional exports.

Policies
9.2.1 Raise business competitiveness by using the Queensland Government's export, business improvement, sectoral development, and education and skills programs.

9.2.2 Facilitate private sector investment and reinvestment in the region's economy.

9.2.3 Ensure a positive regulatory environment for business.

9.2.4 Target development of high value-added and knowledge-based industries.

Notes
Business improvement programs are best targeted according to local and sub-regional economic development strategies and the needs of individual enterprises. A wide range of programs support economic development in the region. These programs should be implemented and tailored to support business development throughout SEQ.

There are a number of existing Queensland Government export, business improvement, sectoral development and skills programs that build industry competitiveness. These programs include:

- Business support programs, including grants-based schemes such as the Smart State Research Facilities Fund and the Targeted Industry Grants Program; as well as specific industry programs such as those detailed in the *Making Queensland's Future - A Manufacturing Development Plan* which sets out the agenda for continuing development of the manufacturing sector.
- The State's trade strategy, *Export Solutions*, aimed at expanding and diversifying Queensland's export base and fostering more knowledge-intensive exports.
- Tailored programs such as the Innovation Start-Up Scheme, teQstart and the Queensland Capital Raising Pipeline that target start-up companies, particularly in emerging industry sectors. Various types of support for small business are available through the *Smart Small Business Strategy*.
- A wide range of training programs aimed at raising productivity, increasing workforce participation and supporting economic development of the region are contained in the *SmartVET Strategy*. These include Skilling Solutions, Industry Training Partnerships and Skills Formation Strategies.

9.2 Industry and business development (continued)

Priority industries

Queensland has a range of priority sectors for the development of high value-added, knowledge-based jobs. These include creative industries, advanced manufacturing, aviation and aerospace, biotechnology, professional and business services, information and communications technology, food and agribusiness, tourism, marine, mining technologies, and pharmaceuticals. All of these sectors are represented in SEQ.

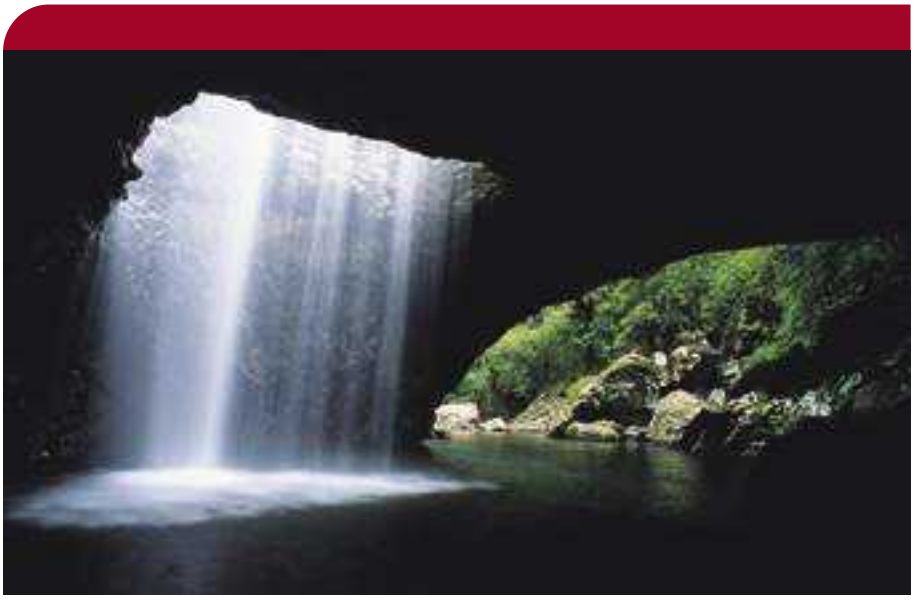
Many companies in these industries are high technology in nature and depend on close relationships with nodes of research and development located around the region. There are specific industry development programs or initiatives for all these industries. Skills formation strategies are being developed to support their continued growth.

Tourism

SEQ is one of Australia's major destinations for domestic and international visitors. Tourism in SEQ contributes over $3.7 billion to Queensland's Gross State Product and directly employs over 61,000 people. International visitation to Queensland is currently growing by nearly 8 per cent per annum. The major visitor market segments are seeking beach, marine and nature experiences.

Protecting the natural attractions and character of the region is important to help sustain tourism. There are also opportunities to grow the regional tourism sector by building the convention and conference market and capitalising on local attractions such as theme parks and entertainment facilities.

The *Queensland Tourism Strategy,* combined with destination management plans for each of the State's regional tourism destinations, provides a detailed strategy for growing tourism in SEQ and Queensland as a whole. The Queensland Government is also preparing a 10-year vision for the tourism industry.



9.3 Smart State - innovation, skills and technology

Principle

Foster innovation and develop skills and technological capabilities in the region to support existing and future industries.

Policies

9.3.1 Develop an accessible range of regional education and training infrastructure and programs that encourage workforce participation, respond to specific regional industry needs, and support skills development in the workforce and broader community.

9.3.2 Support existing and emerging clusters of science, innovation, and research and development.

Notes

The Brisbane CBD and surrounding areas are home to globally recognised knowledge clusters such as Herston (medical research) and Kelvin Grove (creative industries and health). The information and communications technology sector is developing in Milton and Fortitude Valley, with government representation in the iLab incubator at Toowong and Information Industries Bureau at Milton. Substantial research and development activity is also centred around the University of Queensland at St Lucia which houses the Queensland Bioscience Precinct, including the Institute for Molecular Bioscience, Queensland Brain Institute and Australian Institute for Bioengineering and Nanotechnology. There is a natural resources and environmental cluster nearby at Indooroopilly Longpocket.

There are more research, development and commercialisation facilities located south of the city at Griffith University's Nathan campus, nearby Mt Gravatt Research Park and Brisbane Technology Park at Eight Mile Plains. Others are located at the University of the Sunshine Coast, Bond University and Griffith University's campus at the Gold Coast. The Gold Coast is also home to a thriving information and communications technology industry, and enterprises associated with leisure and entertainment. Elsewhere in the region, there is growth in research and development at sites such as Pullenvale (minerals and energy), Coopers Plains (health and food sciences) and Cooroy (plantation forestry and timber).

Science and technology precincts are also developing in urban redevelopment areas like Boggo Road/Dutton Park. The Boggo Road Precinct is planned as both an inner-urban knowledge-based research and business precinct and a transit oriented development. It will feature a mix of research, residential and commercial uses. It has easy access to public transport and high-speed broadband telecommunications. The inner city location offers the opportunity to develop high-quality research and technology facilities to support industry.

The Southbank Institute of TAFE is being redeveloped into a high-technology education and training precinct. It is Queensland's first public/private partnership.

The ongoing development of university campuses at Ipswich, Springfield and Gatton will be a key factor in diversifying economic activity, as well as increasing access to education and training in the Western Corridor.

The Queensland Government's Smart Queensland: Smart State Strategy 2005-2015 *promotes the use of knowledge, creativity and innovation to drive economic growth and increase prosperity for a better quality of life.*

9.3 Smart State - innovation, skills and technology (continued)

Smart state

The Queensland Government's *Smart Queensland: Smart State Strategy 2005-2015* promotes the use of knowledge, creativity and innovation to drive economic growth and increase prosperity for a better quality of life.

The strategy details investment under two main themes: innovation and building a sustainable society.

Initiatives to encourage innovation include:

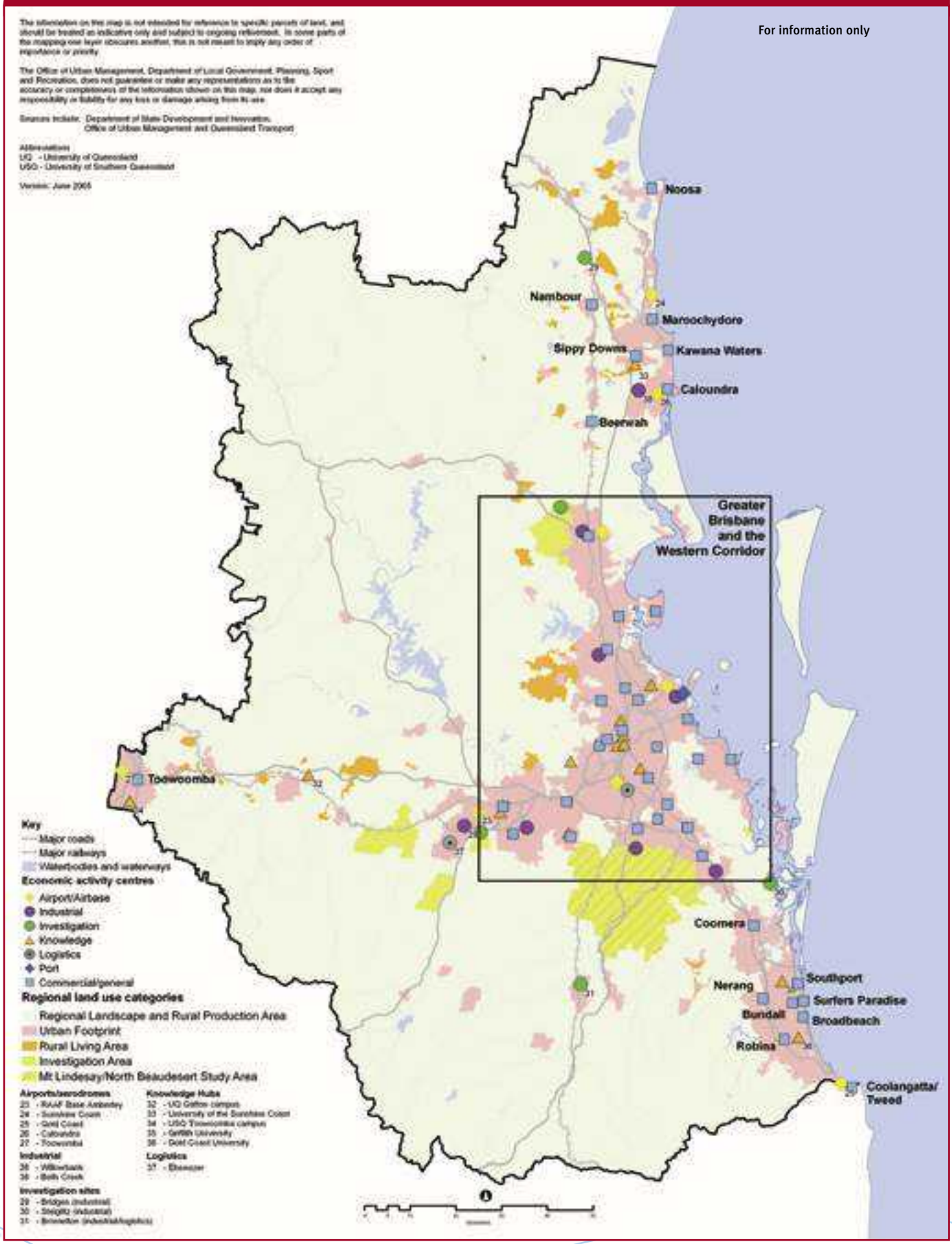
- allocating funding on a competitive basis to stimulate research and development, commercialisation and technology diffusion through programs such as the Innovation Building Fund, Innovation Projects Fund, and Innovation Skills Fund;
- supporting priority industry sectors and building export capability; and
- building strategic alliances and networks such as those established through the *International Collaborations Program*.

A key component of the strategy is developing education, training and skills. Initiatives include:

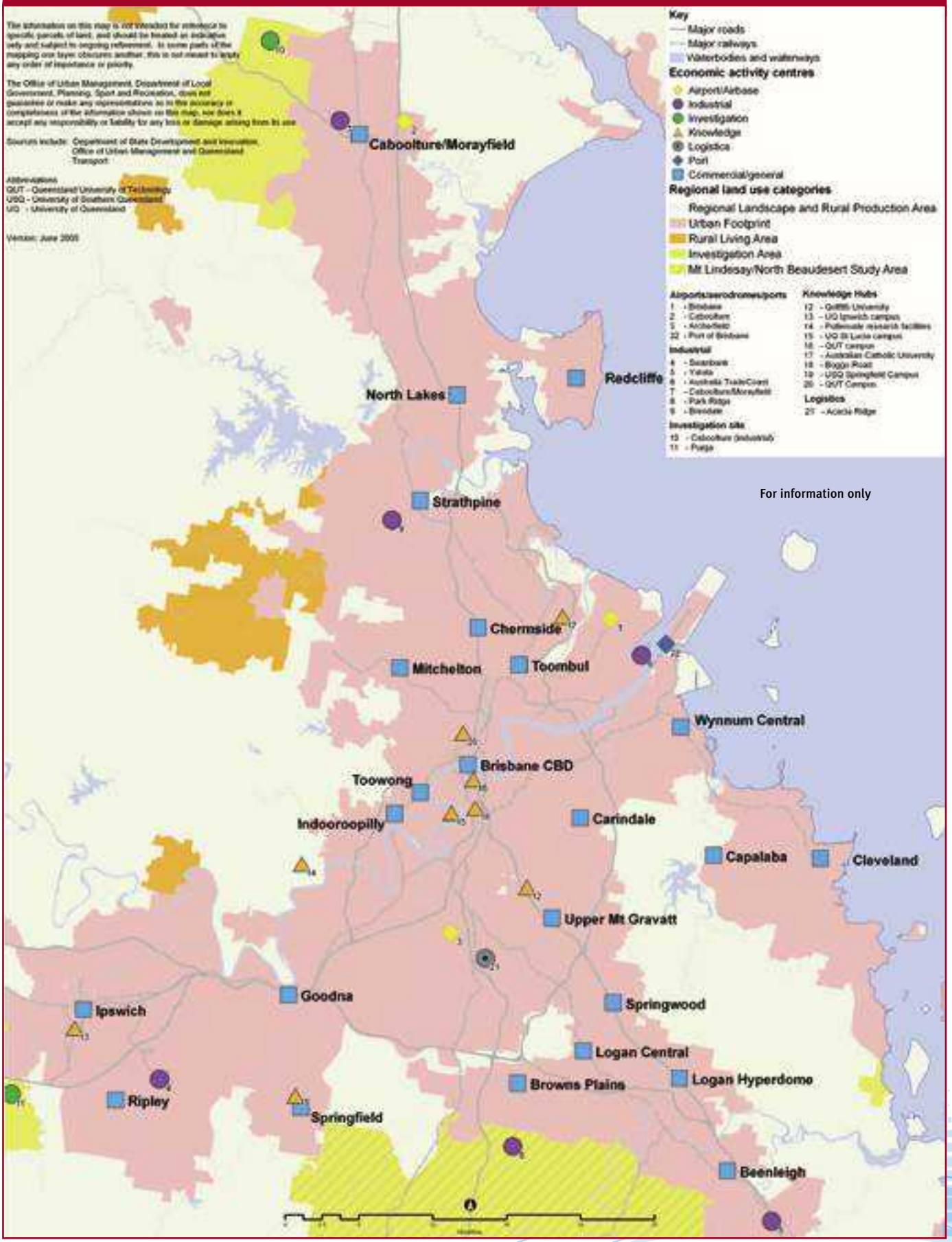
- establishing a Smart State University Internship program to assist students to become work-ready;
- comprehensively reviewing Queensland's training system to alleviate skills shortages, place greater emphasis on higher-level qualifications, reform TAFE and increase labour market participation;
- establishing two Smart Academies for senior students who excel in sciences, maths or the creative arts; and
- continuing to implement Skilling Solutions Queensland - a one-stop-shop for training and career advice.

These training reforms will build on SmartVET, which is a collaborative initiative with industry to help the workforce to meet needs of new and growing industries. The Queensland Government's skill formation strategies continue to underpin the reforms and consider factors such as workforce management, industry attractiveness, training and recruitment. In addition, *Education and Training Reforms for the Future* is reshaping the education and training system to provide more diverse, flexible pathways to higher learning for young people.

Map 10 – Economic activity – SEQ region



Map 11 – Economic activity – Greater Brisbane and the Western Corridor



9.4 Employment and economic activity areas

Principle

Maximise job creation and employment diversity in centres of economic activity, including regional activity centres, major industrial areas, mixed-use developments and knowledge precincts.

Policies

9.4.1 Provide for employment opportunities in the planning and development of all major new urban development areas.

9.4.2 Encourage employment growth in regional activity centres and economic activity locations.

9.4.3 Identify, promote and support new business and industry initiatives in rural centres, building on local strengths and opportunities.

Notes

The Regional Plan supports established areas of economic activity and identifies areas of emerging and future employment. The region's major current and emerging economic, commercial and knowledge activity areas are shown in Maps 10 and 11.

Other major economic activity areas and industry clusters include:

Manufacturing:

- The Western Corridor extending from the Acacia Ridge, Coopers Plains, Archerfield and Rocklea through to Darra, Wacol, Sumner Park, Carole Park, Redbank, Bundamba, Wulkuraka, Karrabin, Swanbank and Ebenezer.
- On the northern side of Brisbane extending to the Sunshine Coast, including Virginia, Zillmere, Geebung, Northgate, Brendale, Narangba, Morayfield, Wamuran, Bells Creek, Yandina and Peregian (south).
- On the Brisbane-Gold Coast corridor, mainly at Yatala.

Aviation and aerospace:

- Brisbane Airport, Amberley/Purga and Archerfield.

Food:

- Banyo, Yatala, Rocklea, Crestmead, Redbank, Bundamba, Wulkuraka and Yandina.

Logistics and freight distribution:

- Acacia Ridge, Darra, Parkinson, Heathwood, Larapinta, Purga, Swanbank, Bromelton and the Australia TradeCoast.

Marine:

- Gold Coast Marine Precinct, Brisbane Marine Industry Park and Steiglitz.

Recycling and processing:

- Swanbank.

Regional activity centres, transit oriented communities and other mixed-use developments also provide the opportunity to create employment in high value-added services, including a dynamic mix of retail, commercial, professional, research and academic activity. Well-designed centres provide the opportunity to boost creativity and innovation. The goal is to foster business and industry networks in proximity to higher density living and recreational facilities by encouraging companies, universities, researchers, professionals and their industry organisations to invest in creative building design and innovative commercial arrangements.

Australia TradeCoast

The Australia TradeCoast, including the Brisbane Airport and Port of Brisbane, is Queensland's export gateway to the world and SEQ's main industrial and logistics hub. It is a critical driver of economic growth in the region as well as a significant generator of employment. Identifying a strategic freight network that connects the Australia TradeCoast with major manufacturing and multimodal logistics areas as well as interstate transport corridors is vital to maintain and develop the strategic advantages of the area within the state and national economies. The area has the potential to develop further as a major industrial and logistics hub on a national and international scale.

9.5 Land and infrastructure

Principle

Identify, provide and protect land and infrastructure required for the region's future economic development.

Policies

9.5.1 Identify and designate suitable sites for future industrial and economic activity, including high impact, logistics and special purpose activities.

9.5.2 Identify and protect existing and future economic infrastructure sites and corridors from encroachment by incompatible land uses.

9.5.3 Maintain and enhance the region's strategic freight network to link regional industries to markets, including priority linkages through the Western Corridor to the Australia TradeCoast.

Notes

Identifying, protecting and developing appropriate sites for industrial and economic use is essential for the region's economic development. High impact and large footprint industries often require specific site conditions to operate. These conditions include good access to transport, power and water, plus a separation or buffering of industries from surrounding uses, particularly residential. Some industries also require specific location conditions, such as access to the coast or interstate transport services.

The key areas for industrial development in SEQ include the intermodal freight terminal at Acacia Ridge, which is of state significance; and general industrial areas at Archerfield, Coopers Plains, Rocklea, Darra, Sumner Park, Wacol, Carole Park, Redbank and Swanbank, along with Parkinson, Larapinta and Heathwood. There are also opportunities for additional industry and logistics development in the Australia TradeCoast precinct. To the north, these areas include Northgate, Banyo, Virginia, Geebung, Brendale, Narangba and Yandina. Future industrial development areas for manufacturing and similar activities have been identified at Bundamba, Ebenezer/Willowbank and Purga, as well as Park Ridge and Bells Creek.

The need for significant tracts of land for future logistics operations will become increasingly important as the SEQ population grows. A major opportunity exists in the Western Corridor, particularly for a multimodal inland port at Ebenezer/Purga. There are also opportunities to provide sites for logistics operations to support the emerging population on the Sunshine Coast. Investigation Area sites have been identified at Bridges, adjacent to the existing Yandina Industrial Estate and another at Caboolture.

Bromelton, located near Beaudesert on the standard gauge rail link, offers opportunities for longer-term development, particularly for logistics and light industry. Accordingly, an extension of the Bromelton industrial area is included in the Regional Plan for further investigation.

Identifying, protecting and developing appropriate sites for industrial and economic use is essential for the region's economic development.

10 Infrastructure

Desired regional outcome 10

Regional infrastructure and services are planned, coordinated and delivered in a timely manner to support existing and future settlement patterns and desired community outcomes.

Rapid population growth and low-density urban development in SEQ has made it difficult to provide well-located and timely infrastructure. Increasingly, the form and density of development must be planned to assist in providing efficient and cost-effective infrastructure and services.

Infrastructure helps shape and attract development. The provision of new infrastructure and the maintenance of existing assets are strategic tools to achieve the preferred regional settlement pattern. It is intended, wherever possible, that infrastructure will lead major development, rather than follow it. Key challenges include maximising the use of existing infrastructure by managing it efficiently and effectively, finding better ways to prioritise and coordinate new infrastructure projects, establishing the correct balance between funding new infrastructure and maintaining existing assets, and harnessing innovative funding and delivery mechanisms.

Timely provision of appropriate infrastructure is also critical to achieving the Queensland Government's economic development and employment objectives. For example, industrial development in the Western Corridor is dependent on the availability of transport, power and water infrastructure.

The Smart State Strategy supports education, training and skills, research and development, and innovation. It provides funding initiatives for infrastructure to support research facilities and technology incubators.

The South East Queensland Infrastructure Plan and Program 2005-2026 (the Infrastructure Plan) outlines the Queensland Government's infrastructure priorities to support the Regional Plan. It establishes priorities for regionally significant infrastructure over the next ten years, within a 20-year planning timeframe.

The Infrastructure Plan will be updated annually as part of the State Budget process. It will ensure state agencies align their infrastructure and service priorities with the Regional Plan. It will also provide greater coordination of infrastructure and services provided by state agencies and Government Owned Corporations, as well as local government and the private sector.

10.1 Leading regional growth

Principle
Use infrastructure to lead and support desired regional growth and help create a more compact urban pattern, cohesive urban and rural communities, and regional economic development.

Policies
10.1.1 Identify and plan infrastructure which supports the Regional Plan, shapes the preferred settlement pattern and provides greater certainty for development.

10.1.2 Upgrade infrastructure and services in a timely manner to facilitate urban infill and redevelopment, including transit oriented development and activity centres.

Notes
The Queensland Government has made a commitment to long-term infrastructure planning through the Infrastructure Plan. To remain effective, however, this relies on sharing information amongst state agencies and local government to identify, fund and deliver significant infrastructure needs ahead of time.

Use of infrastructure programs to lead development can substantially influence the preferred settlement pattern and urban form. This includes greenfield areas, urban infill and redevelopment sites, transit oriented development and regional activity centres.

The location and timing of infrastructure delivery can also drive economic development activities and the distribution of employment opportunities.

10.2 Infrastructure planning, coordination and funding

Principle
Coordinate, prioritise and sequence infrastructure through strategic plans, programs, budgets and statutory planning.

Policies
10.2.1 Coordinate and integrate the planning and delivery of infrastructure services at regional, sub-regional and local levels.

10.2.2 Use demographic forecasts and targets for the region and monitor development activity to inform infrastructure planning and service delivery.

10.2.3 Update the Infrastructure Plan annually.

10.2.4 Align and coordinate infrastructure plans, priorities and budgets of state agencies with the Regional Plan and the Infrastructure Plan.

10.2.5 Identify the best delivery options and funding mechanisms for infrastructure projects with due consideration to benefits, public interests and risk management.

10.2.6 Develop State Infrastructure Agreements between the Queensland Government and benefiting landowners and developers, where infrastructure is provided in advance of demonstrated need.

Notes
Significant cost and service efficiencies can be achieved by improving coordination between individual infrastructure agencies and between infrastructure, land use and economic planning agencies.

The Infrastructure Plan is the principal mechanism for identifying, prioritising and delivering infrastructure projects to support the Regional Plan. The Infrastructure Plan is linked to the annual State Budget process and is based on the principle that strategically focused infrastructure investment will help to lead and support the preferred pattern of development and achieve key policy outcomes. In some instances, this means implementation ahead of existing need.

Infrastructure coordination takes place at national, state, regional and local levels. To ensure coordination with local government, the Queensland Government is holding regular sub-regional infrastructure forums with councils. These forums complement other State and local government infrastructure processes such as the *Main Roads and Local Government Road Management and Investment Alliance 2002-2007* and will ensure a shared understanding of infrastructure issues and priorities.

In preparing Local Growth Management Strategies and Priority Infrastructure Plans, local government should take account of Queensland Government infrastructure priorities as expressed in the Infrastructure Plan.

Funding of regional infrastructure must address whole-of-life costs to ensure equity between current and future beneficiaries and users. Where appropriate, options for funding and delivery of these projects will be evaluated through the Queensland Government's *Value for Money Framework*. This framework promotes innovation and ensures maximum effectiveness of planned investment.

There are a number of funding and charging mechanisms used to finance infrastructure projects and services. These include Federal and state taxes, local government rates, state agency funding, special purpose levies, user charges, private investment, public/private partnerships and developer contributions. The Queensland Government has a process to identify projects that are suitable for public/private partnerships.

Where the Queensland Government is providing major new infrastructure to lead development in the region and it is ahead of full anticipated demand, landowners and developers of new areas who stand to benefit significantly will be required to contribute to infrastructure provision through a State Infrastructure Agreement.

10.3 Managing demand

Principle
Manage demand and influence consumer behaviour to maximise the use and benefits of existing infrastructure, and to minimise the need for additional infrastructure and services.

Policies
10.3.1 Incorporate demand management principles in transport, water, energy and other infrastructure planning.

Notes
Demand management aims to make better use of existing infrastructure by modifying consumer behaviour, rather than directing limited resources towards major new or upgraded infrastructure. It is commonly considered in relation to transport, water and energy resources.

Demand management initiatives can include a broad range of economic, social planning and regulatory tools, for example:

- educational or incentive measures to bring about voluntary changes to consumer behaviour, including reductions in use;
- the introduction of technology to make better use of existing resources; and
- restrictive or pricing measures designed to reflect the true cost or increase the comparative attractiveness of alternatives.

10.4 Protecting key sites and corridors

Principle
Identify, protect and manage key infrastructure sites and corridors.

Policies
10.4.1 Identify, preserve and protect key sites, corridors and buffer areas for current and future regional infrastructure and services.

10.4.2 Identify opportunities to utilise joint infrastructure services, sites and corridors.

Notes
To achieve the strategic intent of the Regional Plan, sites and corridors for infrastructure such as transport and freight networks, pipelines, dams, transmission and distribution lines must be identified and preserved well ahead of time. The Infrastructure Plan identifies a number of investigations where, dependent on circumstances, it would be prudent to preserve potential corridors and sites at an early stage.

Co-locating infrastructure has the potential to reduce the need for new infrastructure sites and corridors, thereby reducing the overall cost to the community. For example, emergency services, transport and /or public utilities could be co-located in generic infrastructure corridors.

To achieve the strategic intent of the Regional Plan, sites and corridors for infrastructure such as transport and freight networks, pipelines, dams, transmission and distribution lines must be identified and preserved well ahead of time.

10.5 Energy

Principle

Provide energy generation production, transmission and distribution capacity to meet the needs of a growing population and support the use of viable alternative energy sources where appropriate.

Policies

10.5.1 Identify and prioritise additional electricity transmission lines, substations and auxiliary infrastructure required to support the preferred pattern of development.

10.5.2 Identify, preserve and acquire sites and corridors for substations, easements and other necessary energy infrastructure.

10.5.3 Ensure energy infrastructure agencies address long-term regional energy needs.

10.5.4 Ensure the use of gas as an additional energy source is considered for new developments.

Notes

As a result of National Competition reforms, the electricity industry in Queensland operates as an open market. The Queensland Government's principal role in this market is to ensure a supportive investment climate exists which encourages timely investment to meet emerging demands.

The electricity generation sector is competitive, with substantial private sector interest in providing future generating capacity. The Queensland Government monitors investment activity to ensure there is adequate generation capacity for the region as it grows.

Transmission and distribution networks remain monopolies, owned and operated by Government Owned Corporations, which are subject to economic regulation. Before committing to new electricity infrastructure, transmission and distribution entities must pass regulatory tests imposed by the Australian Competition and Consumer Commission and the Queensland Competition Authority respectively. The Ministerial Council on Energy is overseeing the development of a new national energy regulatory framework which will see the transmission responsibilities of the Australian Competition and Consumer Commission pass to the newly established Australian Energy Regulator.

The Queensland Competition Authority's *Final Determination on the Regulation of Electricity Distribution* for the next five-year regulatory period commences on 1 July 2005. Based on this determination, Energex is investing between $2.71 and $3.43 billion in capital projects in SEQ over this period.

The Queensland energy policy, *A Cleaner Energy Strategy*, provides the broad policy framework for identifying and providing generating capacity in SEQ and the rest of the State. It also sets the targets for using sources other than coal-fired power, including gas and renewables. This policy is expected to be updated in late 2005.

Demand for gas in SEQ is increasing by 4.3 per cent per year, compared to the national average growth rate of 3.8 per cent. As a result, challenges for the gas industry in this region include:

- the ability of transmission and distribution infrastructure to keep pace with future demand requirements and changing customer usage patterns, especially in the domestic, commercial and small industrial sectors;
- the need to expand and optimise the use of gas distribution networks;
- maintaining growth in exploration and production; and
- providing a sound legislative and regulatory base for future growth of competitive gas markets.

Houses built in new, master-planned communities will need to take account of subtropical design principles to better recognise the important relationship that exists between the natural and built environments. This not only means houses will be more energy efficient, but it will add value to SEQ's long-term housing stock.

10.6 Information and communication technologies

Principle
Provide affordable access to high-speed broadband telecommunications.

Policies
10.6.1 Expedite the deployment of high-speed broadband telecommunications in SEQ.

Notes
The Australian Government has principal responsibility for the policy and regulatory environment of the telecommunications industry. State and local governments are constrained in the range of actions available to them to influence investment in telecommunications infrastructure.

In recent years, the policy environment has been progressively deregulated. While a more competitive marketplace for infrastructure has developed, the incumbent infrastructure provider is still the main supplier of the 'last mile' - the connection to the individual or end user, mainly using existing copper wire connections.

There is duplicated access to advanced fibre optic telecommunications in many metropolitan areas, but gaps in most outlying and more remote areas. The optimal technology to provide the next generation broadband is still considered to be fibre optical cable, but other technologies such as Asymmetric Digital Subscriber Line (ADSL), wireless and Broadband over Power Line (BPL) technology will also be used in particular situations to satisfy demand, particularly in multistorey buildings, and outlying and remote areas.

At present, there are differing processes applied by local government when assessing approvals for telecommunications infrastructure. State and local governments are working together to review this, with the aim of providing a consistent approach to infrastructure approvals across the State. It is expected that this, together with other possible measures such as mandating the provision of conduits/optic fibre in new developments, multi-tenanted buildings and major infrastructure projects, will reduce time delays and the cost of providing telecommunications infrastructure and services across the State and in the SEQ region.

10.7 Waste

Principle
Minimise waste and associated environmental impacts and maximise reuse and recycling.

Policies
10.7.1 Promote policies to reduce or eliminate waste.

10.7.2 Promote policies that recognise waste as a resource and encourage reuse and recycling of waste to reduce the proportion going to landfill.

10.7.3 Utilise demand management and pricing policies to encourage better industry and community waste management practices.

10.7.4 Develop an integrated and coordinated system for waste management across the region to encourage efficiencies, economies of scale and innovation.

Notes
Existing waste management infrastructure in the region comprises 46 operating landfills, 63 waste transfer stations and 11 materials recovery facilities. At current filling rates, it is predicted that about one-third of existing landfills will close within the next five years.

Currently approved landfill capacity across the region is around 35 million tonnes, or around 17 years. There is potential for increasing this capacity to around 100 million tonnes, or 50 years landfill life, by extending existing sites, establishing new sites and improving recycling. This potential increase in landfill capacity is primarily located to the west and south of the region.

The State of Waste and Recycling in Queensland 2003 report gives a high-level overview of current rates of waste generation, recycling and waste sent to landfill. Some types of waste are now being recycled at significantly improved rates. The report highlights landfill diversion (recycling) rates for biosolids (98 per cent), green and organic waste (71 per cent), and construction and demolition waste (42 per cent).

The SEQROC Biosolids Management Project Group was formed in 2000 to coordinate a regional approach to sustainable management of biosolids in SEQ. Members of the group include representatives from local government and the Queensland Government. The aims of this regional approach are to:

- recycle biosolids on a sustainable basis;
- identify potential cost savings; and
- minimise adverse environmental effects.

Through the *Queensland Waste Management Strategy*, the Queensland Government is aiming to achieve more efficient use of resources amongst industry and the community.

10.8 Social infrastructure

Principle

Plan and coordinate the effective and timely provision of social infrastructure.

Policies

10.8.1 Identify and plan for social infrastructure needs in growth areas in advance of development.

10.8.2 Identify and secure sites for community services and facilities, including co-location opportunities, when planning for new communities.

10.8.3 Ensure all developments, existing or new, make adequate provision for essential social infrastructure.

10.8.4 Establish arrangements to coordinate the planning and delivery of social infrastructure and services.

Notes

Social infrastructure meets a wide range of community needs and enhances social wellbeing.

Key issues in providing social infrastructure in SEQ include the:

- high population growth rate in SEQ causing strain on services in some areas;
- limited community services and facilities available in rural and urban fringe areas;
- mismatch of services in inner and middle-ring urban areas, related to the effects of existing urban development and gentrification; and
- potential to gain maximum benefit from community facilities and services through co-location, integration and providing for greater community access to existing facilities such as schools.

To address these issues, there is the need to:

- provide social infrastructure in an efficient, coordinated and integrated way;
- ensure new developments include the timely provision of social infrastructure; and
- provide additional social infrastructure in urban-fringe developments, rural areas and urban areas of social disadvantage.

Quality community services and facilities are increasingly used to attract people to new master-planned communities. The challenge is for the development community to work in partnership with government to ensure the adequate provision of community facilities and services in all developments. Structure plans and master plans to achieve a more compact urban form will assist in meeting this challenge.

11 Water management

Desired regional outcome 11

Water in the region is managed on a sustainable and integrated basis to provide adequate supplies for human and environmental uses.

Water is a precious and limited resource. Climate variability, change and other risks reveal the need to diversify water sources and to combine water usage across the region into an integrated water management system. It is also recognised that sustainable management of the water cycle is crucial to the ecological health of the region. Water quality issues are inextricably linked with developing and managing the region's water resources. The issue is not just about the amount of water that the region needs, but importantly how efficiently the community uses and manages its water resources.

Based on current demand levels, population projections and revised estimates of the water available from existing sources, the region will need additional water sources by 2020. This timing could be extended if effective demand management measures are introduced across the region to reduce consumption.

The Queensland Government's strategic priorities for water in the region are to:

- ensure more efficient management and use of water;
- increase the supply of water to accommodate growth in the region;
- diversify water supplies to address climate variability, climate change and other supply risks;
- ensure policy frameworks and subsidies support total water cycle management; and
- review institutional arrangements to ensure efficient, sustainable and equitable coordinated regional water planning and the delivery of bulk water supply and treatment services.

The region's urban water supply comes from a variety of sources, primarily the Wivenhoe and Somerset Dam system; North Pine, Baroon Pocket and Hinze Dams; and the Stradbroke Island aquifers. Water for irrigation is supplied from these and the region's other water storages, waterways and groundwater sources.

The options for additional and alternative water sources include new dams, desalination, stormwater harvesting and wastewater reuse. A combination of these sources would improve security of supply and minimise the impact of drought. Given the long lead times to commission a new source, a decision about future water sources will be needed before 2010.

Establishing new dams is a very expensive and lengthy process and there are only a few suitable locations within SEQ. Potential future dam sites have been identified and protected from inappropriate development.

Desalination technology is improving and may become economically viable and sustainable in the foreseeable future.

Some recycled water is already used in the region by industry and the agricultural sector. Expanding the reuse of wastewater and stormwater for a range of industrial, irrigation and some domestic activities may reduce the need for potable water, potentially delaying infrastructure upgrades.

Reducing consumer demands can also delay the need for new infrastructure. There are a number of demand management approaches currently being used by local government in SEQ. To achieve the greatest impact, these measures should be applied consistently across the region and introduced as soon as possible to achieve critical mass. Some measures such as dual reticulation and rainwater tanks have merit, but may cost more over their full lifecycle when compared with alternative supplies. Some initiatives also shift costs from water providers to consumers, which may help manage demand.

Managing water catchments appropriately reduces contamination of the region's waterways helps to reduce the cost of water treatment. It will also assist in protecting water quality and quantity, particularly by improving the quality of rivers and water bodies in the region and providing for environmental flows.

Regional Water Supply Strategy

The Queensland Government, in partnership with local government and other stakeholders is preparing the SEQ Regional Water Supply Strategy (SEQRWSS), which aims to balance water demands and supplies in the region. The SEQRWSS will examine alternative water sources and demand management options, developing a strategic direction for water supply in the region through to 2050. It will be finalised by the end of 2006, to provide a comprehensive policy framework and identify further investment priorities for water in SEQ.

11.1 Total water cycle management

Principle

Acknowledge water as a valuable and finite regional resource and manage it on a total water cycle basis.

Policies

11.1.1 Base water planning in SEQ on the principles of total water cycle management.

11.1.2 Encourage and support local government and other water providers to adopt principles of total water cycle management, minimise water use and water losses, and meet water consumption targets.

11.1.3 Use best practice standards for the planning, design and operation of sewage and wastewater collection, transport, treatment, disposal and reuse.

11.1.4 Achieve appropriate flood immunity and minimise downstream impacts by managing development within floodplains.

Notes

Total water cycle management recognises the finite limit to the region's water resources, and the inter-relationships between the uses of water and its role in the natural environment.

Key principles of total water cycle management include:

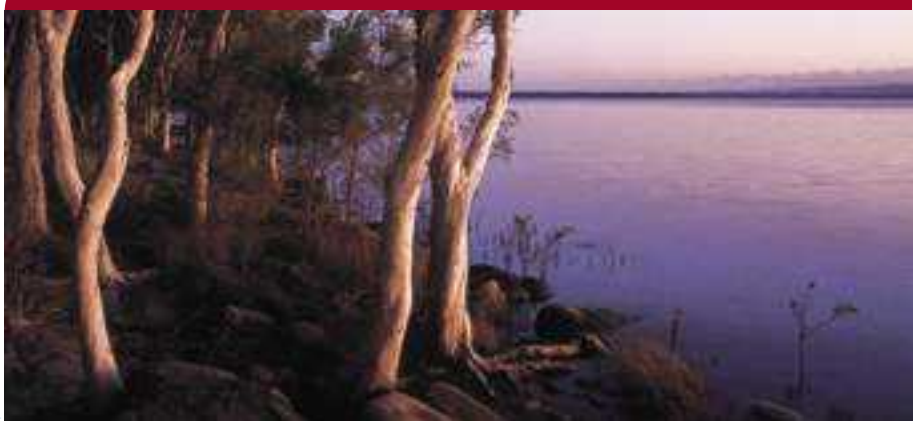
- considering all water sources, including wastewater and stormwater;
- using all water sources sustainably;
- allocating and using water equitably; and
- integrating water use and natural water processes, including maintaining environmental flows and water quality.

The Queensland Government is currently preparing water resource plans across the State to determine bulk water allocations between various water uses, including environmental flows. Plans are being prepared for the Logan, Mary and Moreton basins and for the Gold Coast area.

Local government subsidies for water and sewerage infrastructure continue to be provided by the Queensland Government through the Local Governing Bodies Capital Works Subsidy Scheme. Projects that reduce consumption or water losses will be eligible for subsidy under this scheme from 2006. A new program will supplement this scheme, beginning in 2008 and will provide subsidies for a wider range of projects, including stormwater, flooding and erosion control. Local government is required to adopt total water cycle management principles, minimise water losses and adopt water consumption targets in order to qualify for subsidies.

The Queensland Government has developed guidelines for the use of recycled water and is currently preparing the *SEQ Water Recycling Action Plan*. This plan will coordinate the State's involvement in water recycling as a key element of integrated urban water management. It will identify issues and options for further uptake of water recycling and nominate targets and strategies for water recycling in the industrial, commercial and rural sectors. It will link to other initiatives, including the SEQRWSS and Sustainable Housing Codes.

The Queensland Water Efficiency Taskforce was established to review and improve Queensland's readiness for drought by overseeing a number initiatives, including policies which will reduce water demand. These initiatives will assist in developing a regional response to drought management.



11.2 Water demand management

Principle

Achieve targeted reductions in water consumption by using water efficiently and managing consumer behaviour and demand for water.

Policies

11.2.1 Ensure all urban water providers adopt minimum residential reticulated water consumption targets, excluding leakage and other system losses, of at least:

- 270 litres per person per day by 2010;
- 250 litres per person per say by 2015; and
- 230 litres per person per day by 2020;

or will adopt the targets identified for each local government area in the SEQRWSS, when completed.

11.2.2 Use water consumption targets for water supply planning and financial assessment purposes.

11.2.3 Continue initiatives to improve water efficiency in the rural sector.

11.2.4 Encourage industrial and commercial developments to meet best practice approaches in minimising water use and using water efficiently.

11.2.5 Base water pricing on a structure that reflects the true cost of water and encourages more efficient use.

Notes

Stage two of the SEQRWSS will review residential water consumption targets for each local government area and set targets to reduce losses in water system distribution.

Following the review of the Local Governing Bodies Capital Works Subsidy Scheme, subsidies for traditional and alternative sources of supply, pressure and leakage management, and measures to reduce water consumption will be linked to their cost effectiveness.

The *Water Act 2000* requires water service providers to develop and implement leakage management plans.

Subsidies to promote the widespread take-up of water-efficient devices, water recycling and use of fit-for-purpose water are available through the Queensland Government's EcoBiz program. This program assists industrial and commercial water users to reduce water consumption. The Queensland Government is also working to reduce commercial and industrial water use and is developing water consumption targets for high-rise buildings. The Queensland Government's Water Use Initiative promotes water efficient practices in state buildings and across state programs.

Stage one of the Queensland Government's *Sustainable Housing Policy* is expected to be complete by 2006. This policy proposes mandatory installation of water-efficient measures (such as pressure-limiting AAA-rated showerheads and 6/3 litre dual flush toilets) in new houses and apartments. Stage two of the *Sustainable Housing Policy* will review additional water efficiency measures for houses, units, other buildings and renovations.

Queensland's WaterWise program will continue to provide educative materials for schools, community groups and the general public on water efficiency.

To support better water efficiency, the Queensland Government is also:

- implementing the Rural Water Use Efficiency Program to assist farmers in introducing water-efficiency practices to their farms;
- preparing guidelines to assist local government to provide water consumption information on consumer water bills;
- developing standards and guidelines for usage-based residential water tariffs and pricing recycled water;
- developing best practice guidelines for permanent low-level restrictions on exterior water use;
- implementing a water efficiency labelling scheme for domestic appliances; and
- investigating how local government can equitably share the cost of meeting water consumption targets amongst water consumers.

11.3 Water supply

Principle
Provide assured supplies of water to meet the reasonable needs of growth and development in the region.

Policies
11.3.1 Develop new and upgrade existing dams and weirs as part of an integrated water supply system where appropriate.

11.3.2 Enable local government to mandate or support the voluntary installation of rainwater tanks in new houses and apartments.

11.3.3 Use recycled water and stormwater as an alternative to potable water where appropriate and on a fit-for-purpose basis.

11.3.4 Allow greywater reuse in sewered areas, having regard to the protection of water quality and public health.

11.3.5 Use desalination as an alternative water supply source where appropriate.

11.3.6 Manage groundwater aquifers on a sustainable and controlled basis for water supply and storage.

Notes
The Infrastructure Plan identifies the Queensland Government's investment priorities for additional water supplies, including investigating new dams and weirs, and support for water recycling and alternative water sources.

The SEQRWSS will determine the appropriate balance of water supplies to meet regional demands, taking into account likely yields, costs of supply and supply risks for each source.

The Queensland Government is developing a regulatory framework for the control of aquifer storage and recovery, including enabling local government to manage aquifers across SEQ.

A regulatory framework is being prepared by the Queensland Government for using recycled water (including dual reticulation) in residential development and public spaces.

Legislation to enable greywater reuse in sewered areas is being developed for implementation in 2006-07. A permit system for greywater use by residents will be developed to assist local government.

Stage one of the *Sustainable Housing Policy* proposes local government will have the ability to mandate installing rainwater tanks in new houses and apartments in accordance with a state code. Stage two of this policy will review further measures and consider extending this mandate to cover renovations, apartments and other accommodation.

11.4 Water supply planning

Principle
Increase security of supply and minimise overall system costs by planning and coordinating regional water supplies.

Policies
11.4.1 Undertake long-term water supply planning for the benefit of all communities in the region.

11.4.2 Minimise the impact of drought and other supply risks by diversifying water supply sources.

11.4.3 Ensure the water supply system includes contingency plans in the event of supply shortages.

11.4.4 Reduce duplication, manage risks and minimise system costs through better planning and management of the water supply system.

11.4.5 Support sustainable water planning and management through appropriate institutional arrangements.

Notes
Appropriate and effective governance arrangements will be essential to ensure the optimum planning, distribution and use of water for the future. The Queensland Government, in consultation with key stakeholders, is undertaking a review of the institutional arrangements for planning and water management in the region.

There is a need for regional water service providers to gather common and consistent information about water consumption and wastewater management as part of their regular reporting regimes.

The *Water Act 2000* requires water service providers to develop Drought Management Plans to ensure communities are prepared for periods of drought.

11.5 Environmental values and water quality

Principle

Protect and enhance the ecological health and water quality of surface and groundwater, including regional waterways, wetlands, estuaries and Moreton Bay.

Policies

11.5.1 Protect or improve the quality of receiving waters through land use planning, development standards and land management practices.

11.5.2 Evaluate and communicate the health of SEQ's waterways through regular monitoring of regional ecosystems.

11.5.3 Ensure the potential impacts of development on water quality in receiving waters are taken into account in planning and development decisions.

11.5.4 Minimise development impacts on the natural water cycle by adopting water sensitive design and water quality standards.

Notes

The Moreton Bay Waterways and Catchment Partnership is reviewing the SEQ Regional Water Quality Management Strategy (SEQRWQMS) to identify what actions are required to ensure future growth has minimal impact on the region's waterways. The SEQRWQMS review will be integrated with the SEQRWSS.

Local government is encouraged to require all development proposals to demonstrate, prior to approval, how stormwater or sewage effluent generated or affected by the development will be managed. Treatment should use the best management practices to ensure discharged water does not adversely affect environmental values and meets water quality standards.

The regional *Ecosystem Health Report Card* prepared and coordinated by the Moreton Bay Waterways and Catchment Partnership will continue to be used to monitor aquatic ecosystem health and water quality in the region to promote a common understanding of the region's water values.

Water sensitive design aims to minimise the impact of development and land management on the natural water cycle. It recognises that opportunities for achieving sustainable urban design, landscape architecture, stormwater management, wastewater management and water supply are intrinsically linked. All forms of development and land management can benefit from water sensitive design. The scale of application can range from individual allotments, streetscapes and precincts, to master-planned suburbs.

A *Strategy for Water Sensitive Design in SEQ* is being prepared as part of the review of SEQRWQMS. It will provide explicit design objectives and assist industry demonstrate compliance and minimise impact on the water cycle.

Water sensitive design will be incorporated into developments to:

- protect and enhance the intrinsic values of the natural water cycle by minimising disturbance to natural landforms, wetlands, watercourses and riparian zones;
- protect the quality of surface and groundwater to maintain and enhance aquatic ecosystems and enable reuse opportunities;
- reduce downstream flooding and drainage impacts on aquatic ecosystems by managing stormwater runoff and peak flows;
- promote more efficient use of water by reducing potable water demand and encouraging use of alternative water supplies;
- minimise wastewater generation and ensure treatment of wastewater to a standard suitable for effluent reuse and/or release to receiving waters;
- use stormwater in the landscape to maximise the visual and recreational amenity of development; and
- control soil erosion during construction and operational phases.

11.6 Catchment protection

Principle
Protect catchments of the major regional potable water sources and supplies from adverse impacts of inappropriate land use and development.

Policies
11.6.1 Maintain water quality by protecting potable water catchments from inappropriate land use and development.

Notes
Maintaining and improving potable water quality is dependent on protecting the region's waterways and catchments, and implementing sustainable land management practices.

A collaborative approach to catchment management is necessary between water providers, land managers, regional NRM bodies, regulatory authorities and the community.

11.7 Rural water

Principle
Ensure rural water needs are met in an efficient and sustainable way.

Policies
11.7.1 Incorporate consideration of water allocation for rural use into water resource management and allocation decisions.

11.7.2 Improve the efficiency of rural water use, particularly irrigation.

11.7.3 Identify alternative economic sources of water for rural use.

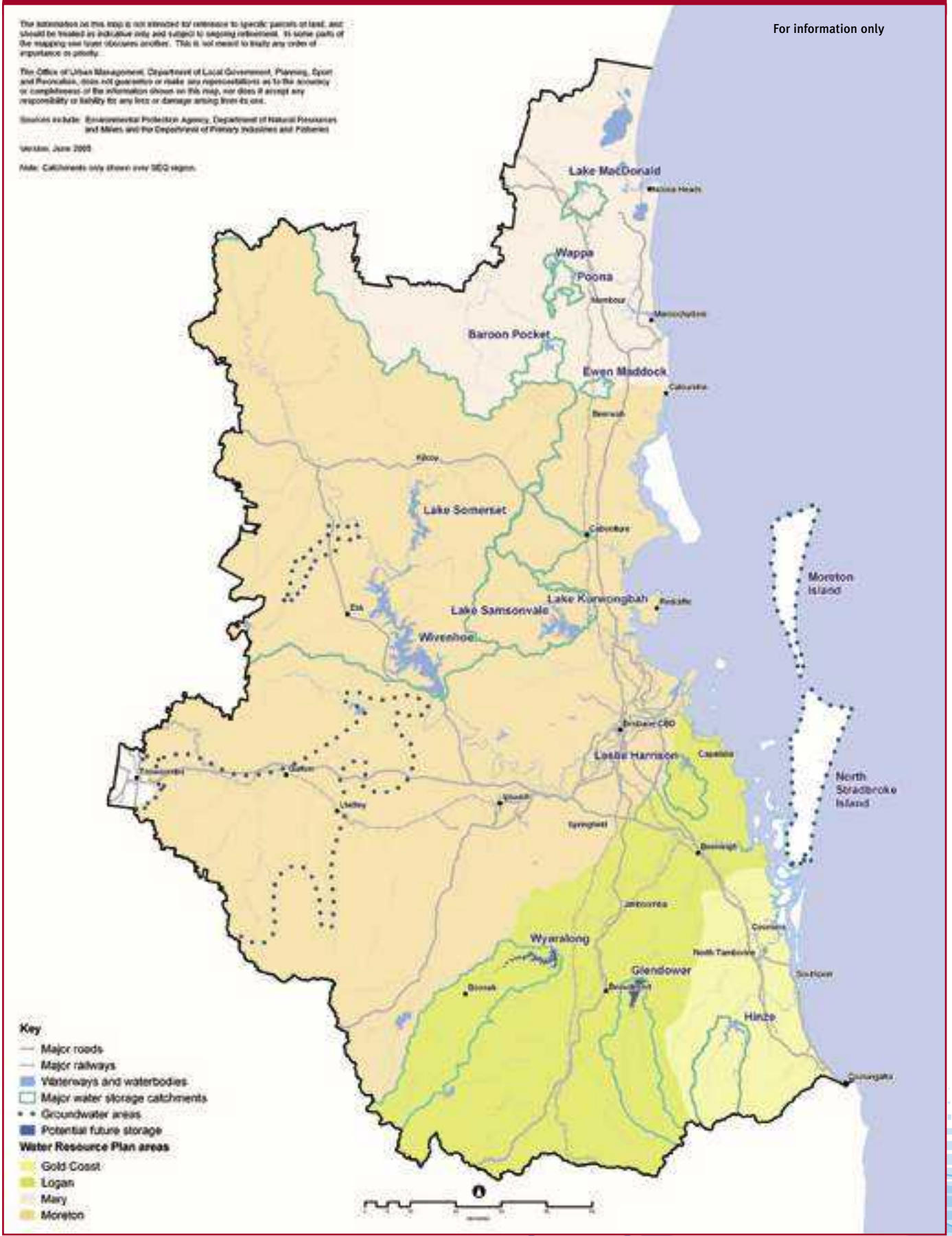
Notes
Water resource plans are currently being prepared across the region to provide a sustainable framework for managing, taking and allocating water, including rural water use.

The SEQRWSS will also include a component to address rural water issues. These issues include the efficiency of water use, water management, on-farm management practices for recycled water, and additional supplies of water for rural use.

The Queensland Government has allocated funding in the Infrastructure Plan for efficiency initiatives in rural water use.

Map 12 – Water resources

For information only



12 Integrated transport

Desired regional outcome 12

A connected and accessible region based on an integrated transport system that supports more compact urban growth and efficient travel; connects people, places, goods and services; and promotes public transport use, walking and cycling.

The quality of life for people living in SEQ relies on a transport system to connect the wider community with goods, services and employment.

An additional one million people in the region by 2026 will generate five million more trips on the transport system each day. There will also be a major increase in the freight task, particularly associated with continued growth in the Australia TradeCoast area and the Western Corridor.

An effective, integrated network of roads, railways, ports and airports supports the competitiveness of industry and business. Public transport provides access for the whole community, including those who do not have access to a private vehicle or choose not to drive. Walking and cycling networks provide flexibility as well as significant health and environmental benefits.

Transport has some negative impacts, including greenhouse gas emissions, air and noise pollution, accidents, and congestion. These impacts must be managed effectively to assure future sustainability for SEQ.

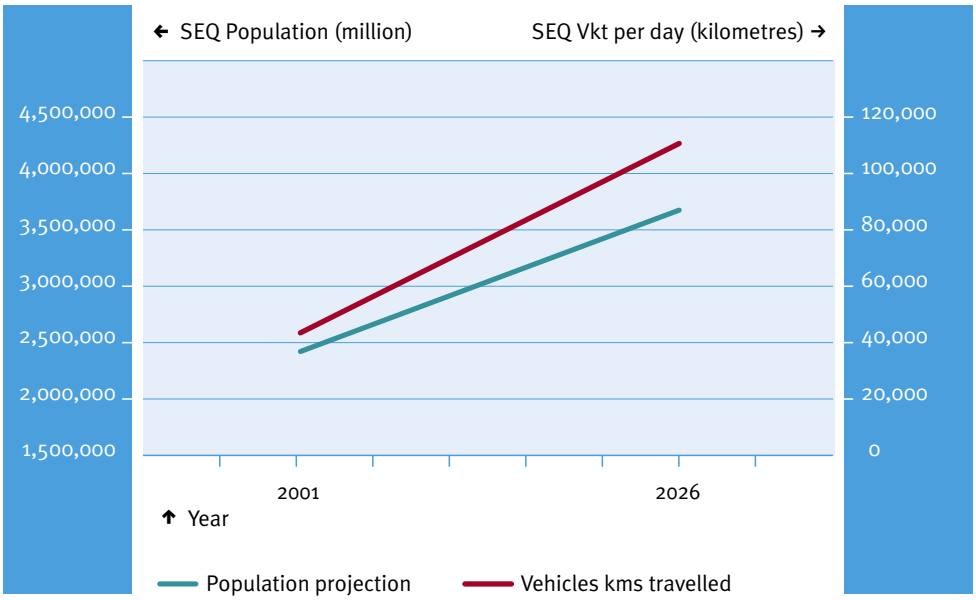
The use of cars in SEQ is growing faster than the population: there are far more cars, being used more often and driven further than ever before. It is acknowledged that private cars will continue to be used into the future for the majority of trips in SEQ. However, the alternatives - public transport, walking and cycling - are more sustainable transport modes and must be made more viable and attractive.

The foundations are in place for an integrated transport system in SEQ. A strong busway network has been started in the Brisbane area and TransLink is delivering an integrated public transport system to increase bus, ferry and train use across the region. Further planned investment in public transport infrastructure and services will make public transport a more attractive choice in the future. At the same time, new roads, better orbital road networks, and improvements to existing roads are being planned to address the most congested parts of the network and ensure effective regional connections.

The success of the transport components of the Regional Plan will be complemented with further developments in transport policy aimed at reducing dependence on private vehicle travel in the region.

All levels of government will continue to have a role in managing and developing the SEQ transport system.

Figure 5 – SEQ population and vehicle kilometres travelled per day: the trend to 2026



Source: *Queensland Transport, 2005.*

12.1 Strategic transport planning

Principle

Support a more compact pattern of urban development and promote the self-containment of travel in sub-regions by integrating transport and land use planning.

Policies

12.1.1 Create an interconnected and coordinated transport system by integrating infrastructure and services planning and delivery across all modes of travel.

12.1.2 Support transit communities and regional activity centres with priority public transport networks and services.

12.1.3 Ensure planning and development of urban areas supports walking, cycling and public transport.

12.1.4 Develop strategic and integrated regional road, passenger transport and freight network plans.

12.1.5 Align transport plans, policies and implementation programs at regional and local levels.

Notes

The Regional Plan emphasises the need for better integration of transport and land use planning. Integrated transport planning recognises the complementary roles that roads, public transport, cycling, walking and land use arrangements play in a sustainable transport system.

The Regional Plan places a strong emphasis on improving the public transport system in SEQ. Policy directions include more compact forms of urban development and self-containment of travel, developing public transport spines for the Sunshine and Gold Coasts, and expanding the busway and passenger rail network in Brisbane.

The Regional Plan identifies some of the tools, such as structure planning in greenfield areas and the development of State Infrastructure Agreements, which will be used to ensure better integration of land use and transport planning in urban developments.

Transit oriented development and regional activity centres are essential components of urban structure and form. Transport investment by the Queensland Government, particularly in public transport, will support transit oriented development and regional activity centres.

To provide further detail on implementing the integrated transport and land use aspects of the Regional Plan, Queensland Transport will update the *SEQ Integrated Regional Transport Plan* (SEQIRTP), published in 1997. This will also reflect the new regional transport infrastructure planning process incorporated in the Infrastructure Plan.

The new SEQIRTP will be supported by Integrated Local Transport Plans. These plans will be prepared and updated by local government.

12.2 Sustainable travel and improved accessibility

Principle

Provide sustainable travel choices to support the accessibility needs of all members of the community.

Policies

12.2.1 Develop a high quality and accessible public transport network linked to regional and sub-regional centres and services.

12.2.2 Support walking, cycling and public transport use with new infrastructure, improved services and information.

12.2.3 Increase awareness of options for sustainable travel and influence travel behaviour to reduce dependence on private car travel.

12.2.4 Adopt a regional approach to manage parking to support transport objectives and regional activity centre functions.

Notes

Access to a public transport system that conveniently connects people with goods, services, places and other people is essential in a large and vibrant urban region.

A high quality public transport network in SEQ will:

- support increased urban densities around public transport nodes and along public transport corridors;
- provide access to community services and employment;
- reduce commuter travel time, travel stress and loss of productive work time;
- improve environmental outcomes by reducing the number of private motor vehicle trips, and
- improve travel choices, particularly for people disadvantaged in their access to transport.

Smart Travel Choices for SEQ: A Transport Green Paper

The proposed release of *Smart Travel Choices for SEQ: A Transport Green Paper* was announced in April 2005. The paper will canvass a package of transport policy initiatives for SEQ to reduce dependence on travel by private car. The measures are aimed at cleaner and less congested travel in SEQ. The Green Paper will be released for public consultation towards the end of 2005.

The annual *TransLink Network Plan* outlines a three-year rolling program of improvements, within a ten-year planning cycle, for public transport services and infrastructure in SEQ. The Network Plan supports the directions contained in the Regional Plan and is the key vehicle for coordinating and delivering major investments in the public transport system.

The *SEQ Regional Cycle Network Plan* identifies key links in the regional cycle network. The plan is used to prioritise and guide state investment in cycling. *The Action Plan for Pedestrians 2004-2006* will also guide initiatives to improve pedestrian safety and to encourage walking.

Access to a public transport system that conveniently connects people with goods, services, places and other people is essential in a large and vibrant urban region.

12.3 Effective transport investment

Principle
Invest in the transport system to maximise community benefit.

Policies
12.3.1 Support the preferred sequence and form of development through investment in transport infrastructure and services.

12.3.2 Support a range of measures to improve travel choices, including policy, education, infrastructure and services, regulation, demand management, marketing and non-transport solutions.

12.3.3 Develop and manage strategic road and rail linkages to regional Queensland and other states.

Notes
Investment in transport infrastructure, public transport services and new policy measures will be a major component of the preferred future for SEQ.

The Regional Plan strongly supports public transport and active transport modes such as walking and cycling. The early planning and provision of public transport services and walking and cycling networks in emerging communities will ensure residents have access to sustainable transport choices from the outset.

For the road system, orbital road networks and new links that connect centres are needed to reduce traffic congestion and manage growth.

The Infrastructure Plan is the main instrument for coordinating the planning and delivery of regionally significant transport infrastructure within SEQ. Detailed implementation of transport projects in the Infrastructure Plan will occur through agency programs such as the Main Roads' *Roads Implementation Program*, the *TransLink Network Plan*, the Australian Government's AusLink program and through local government works programs. The Transport Green Paper and the updated SEQIRTP will be key vehicles for actioning the initiatives required to improve travel choice.

Investment in transport infrastructure, public transport services and new policy measures will be a major component of the preferred future for SEQ.

12.4 Transport system efficiency

Principle
Provide an efficient and integrated transport system for the region.

Policies
12.4.1 Maximise the use of existing transport assets and services by prioritising transport investments and policies.

12.4.2 Identify, protect and manage key existing and future transport sites and corridors.

12.4.3 Improve connectivity and provide a hierarchy of alternative routes by enhancing road and public transport networks.

12.4.4 Develop consistent and coordinated systems for managing road network operations.

Notes
Transport system efficiency refers to the ability of the transport system to satisfy the community's transport needs at least cost. This includes maximising benefits from investment in existing transport infrastructure and systems. It considers whole-of-life asset costs, system connectivity, travel speeds, and economic and social costs. The Regional Plan promotes a future transport system for SEQ that will provide the maximum transport benefit for the lowest transport cost, for both people and freight movement.

Identifying and protecting future transport corridors to support longer-term land use and development is critical. A joint approach between State and local government will ensure that planning schemes reflect the strategic long-term importance of these corridors.

Designing and maintaining infrastructure so that whole-of-life asset costs are minimised is particularly important in the highly trafficked areas of SEQ where maintenance works on major roads and rail systems can cause significant delays.

New technology provides the opportunity to significantly enhance operation of the road network. A cooperative approach between all levels of government in applying new technology will result in improved road system efficiency. Examples include managing access to the road network for higher-mass limit vehicles, providing information to road users, and coordinating traffic signals and other road network management initiatives.

Similar benefits from new technology are also available for rail, sea and air networks.

The region has several important national and inter-regional transport assets that must be supported with local transport linkages. These include the:

- Port of Brisbane;
- Brisbane, Gold Coast and Sunshine Coast airports;
- rail linkages to regional Queensland and the standard gauge line to Sydney and Melbourne; and
- national and state highway networks.

AusLink
The Australian Government has recently changed its approach to investing in nationally significant transport infrastructure. The new approach bases investment by the Australian Government around an *AusLink National Transport Network*. The National Network is an integrated network of land transport corridors of national importance.

Key transport corridors of interest to AusLink in SEQ are the:

- Ipswich Motorway;
- Bruce Highway;
- Brisbane Urban Corridor;
- Cunningham Highway;
- Port of Brisbane Motorway;
- Sydney to Brisbane Railway;
- Pacific Motorway/Pacific Highway;
- Warrego Highway;
- Gateway Motorway and Bridge;
- Logan Motorway;
- Proposed inland rail freight corridor; and
- North coast rail line.

Improvements to the above assets will be negotiated with the Australian Government through the AusLink process.

12.5 Efficient freight services

Principle

Provide an efficient and integrated freight transport system for the region.

Policies

12.5.1 Enhance SEQ's position as a major national and international freight and logistics centre servicing the Australian east coast.

12.5.2 Develop partnerships between all levels of government and industry stakeholders to improve freight efficiency and movement to/from and within the region.

12.5.3 Develop and implement a regional freight network plan, including freight interchange requirements.

12.5.4 Manage and protect the strategic freight network.

12.5.5 Manage the impacts of freight in urban areas.

Notes

Freight movements across Queensland are forecast to double by 2020. There will be rapid growth in SEQ with expanding import and export activities in the Australia TradeCoast area. The ability to easily move freight into and around SEQ will be essential for economic growth.

There are challenges in managing of road freight including ensuring road space is shared effectively between heavy vehicles, passenger vehicles and other road users. For rail, there are challenges in improving rail's share of the freight task, particularly for heavy long distance loads, and in managing the demand from rail passengers and freight on a limited number of rail lines in the metropolitan network.

For rail freight, initiatives in the Infrastructure Plan include:

- expanding the capacity of the Acacia Ridge rail terminal;
- increasing rail capacity through the metropolitan network to the Port of Brisbane;
- increasing capacity on the northern line;
- investigating new inland port options and associated infrastructure upgrades; and
- integrating with any future inland rail proposals.

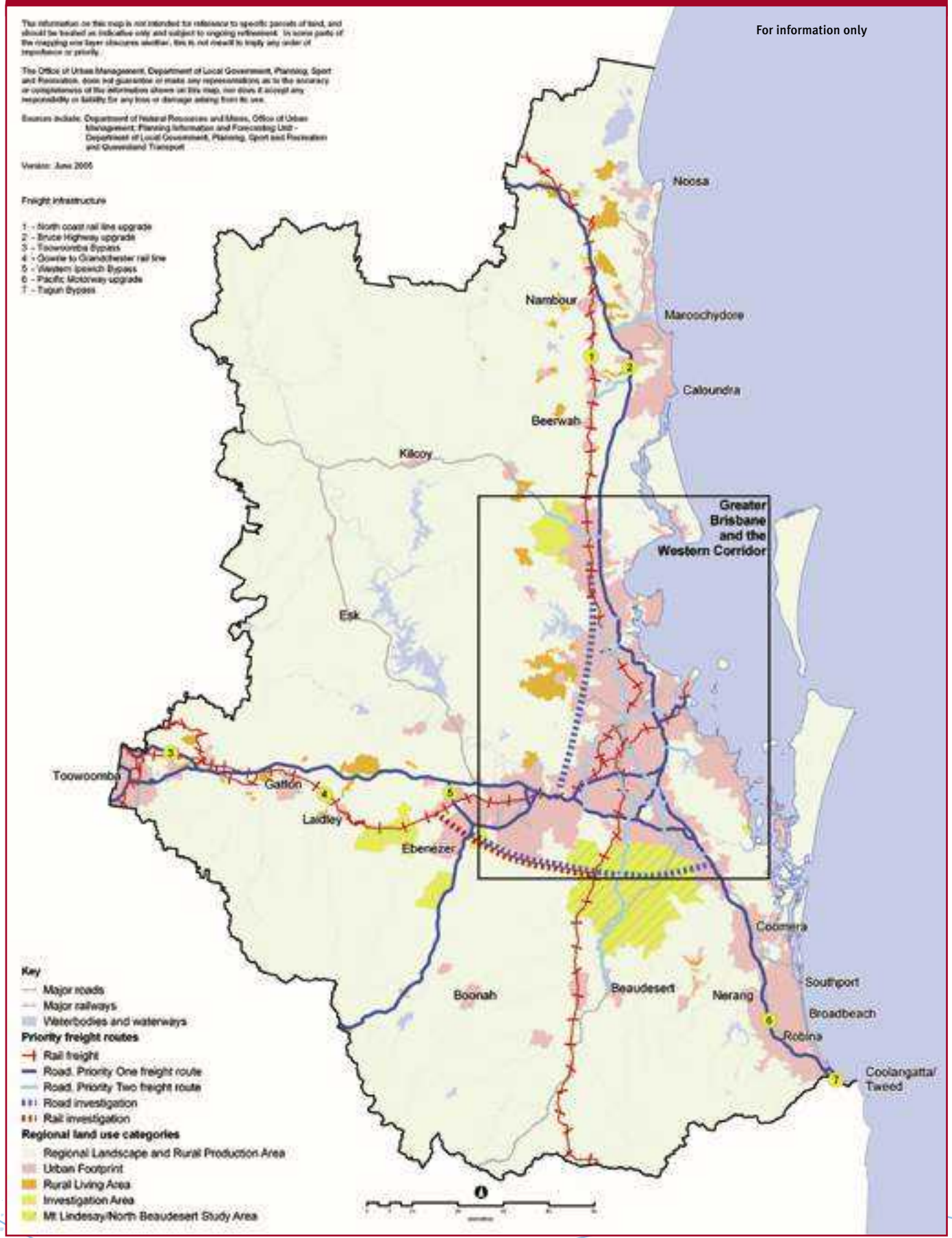
For road freight, initiatives in the Infrastructure Plan include:

- supporting economic development in the Western Corridor by upgrading strategic road freight corridors;
- improving freight flows into and around the Australia TradeCoast; and
- ensuring Priority One freight routes are adequately developed to handle their share of the freight task.

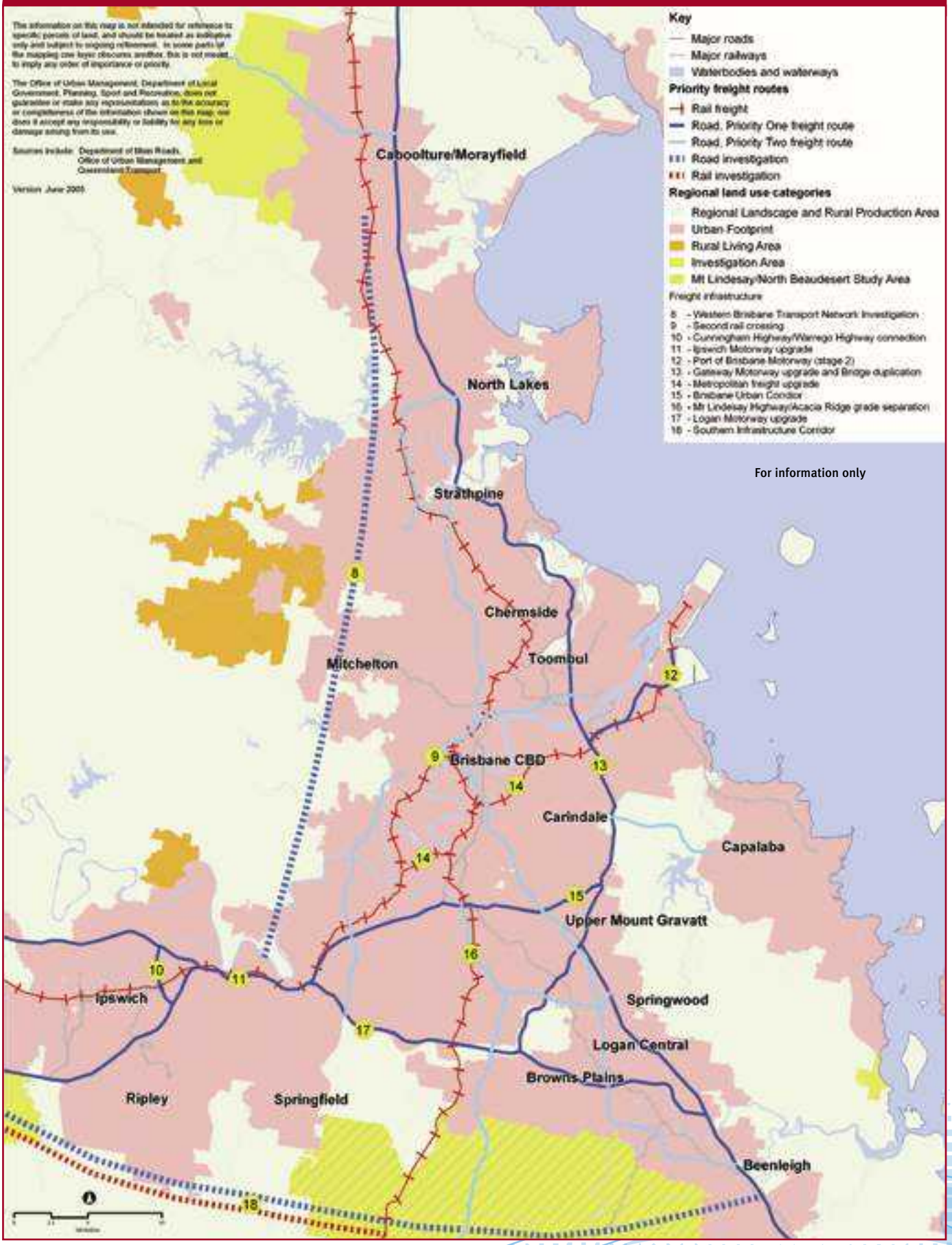
Maps 13 and 14 show a strategic freight network for SEQ. Priority One routes facilitate high volume, business-to-business freight movements. Priority Two freight routes allow freight to be distributed from factories or distribution centres to retail outlets or warehouses. The Maps also include priority freight links for further investigation.

Freight movements across Queensland are forecast to double by 2020.

Map 13 – Freight routes – SEQ region



Map 14 – Freight routes – Greater Brisbane and the Western Corridor



12.6 Coordinated air and sea transport

Principle
Provide efficient air and sea transport to service both freight and passenger needs.

Policies
12.6.1 Support development of regional airports as significant economic and social links for regional communities.

12.6.2 Provide transport infrastructure to support the primary role of regional air and sea ports.

12.6.3 Protect the major economic nodes of the Port of Brisbane and Brisbane Airport (the Australia TradeCoast) from incompatible urban uses.

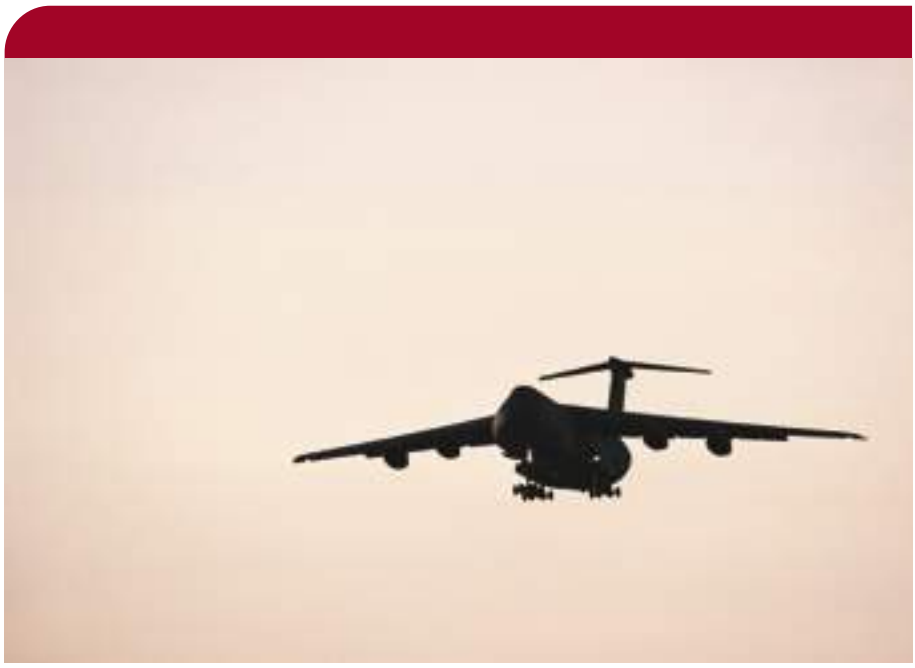
12.6.4 Protect and enhance the freight movement function of road and rail corridors to the Australia TradeCoast.

Notes
Brisbane International Airport is a major international gateway for air transport to and from eastern Australia and SEQ. Gold Coast (Coolangatta) and Sunshine Coast (Maroochydore) airports also provide scheduled services to and from the region. A major Royal Australian Air Force Base is located at Amberley. SEQ also has a number of other airports, including Archerfield, Caboolture, Caloundra, Toowoomba and Redcliffe. These, and other local airports play an important economic and social role in SEQ, increasingly as the focus of a range of employment and land use options.

The Queensland Government has published the *Queensland Aviation Strategy* (2002) (including the *Queensland Commercial and Tourism Aviation Plan*, the *Queensland Aerospace Industry Development Plan* and the *Queensland Airports and Regulated Air Transport Plan*). The *Queensland Aviation Strategy* (2002) and the *SEQ General Aviation Needs and Opportunities Study* (2000) will be reviewed and updated.

Priority development areas related to the air transport industry are located around the Brisbane Airport and Amberley Airbase. The Australia TradeCoast will continue as a major regional employment generator in future. The Amberley aerospace precinct will also have a major role to play as a significant and increasing employment generator in the Western Corridor.

Sea transport is important to SEQ and the Port of Brisbane makes a major contribution to the regional, state and national economy. The Port of Brisbane handles over 25 million tonnes of bulk and non-bulk freight, and in excess of 650,000 standard containers each year. Access to the port is by a dual gauge rail line and the Port of Brisbane Motorway. Continued development of the Port of Brisbane and associated land facilities have the potential to make the Port a major national logistics centre.



12.7 Sub-regional transport systems

Western Corridor

The Regional Plan provides for significant population and employment growth in the Western Corridor. New and enhanced infrastructure and services will be needed to support sub-regional self-containment in this area. Early provision of public transport networks and services such as the new Springfield rail line will encourage take-up of these services.

Transport networks in the Western Corridor will need to provide for local demand, but also take regional requirements into account. For example, a multi-user infrastructure corridor that allows for road, standard/dual gauge rail and other infrastructure connections east-west between the new industrial areas south of Ipswich and the industrial areas at Yatala, connecting the interstate rail line and the Pacific Motorway may be required.

The road and rail links from Ipswich west to Toowoomba are a key component in the region's freight network. These links provide access to agricultural areas in the Eastern Downs as well as access to the inland freight routes to Central Queensland and north-west New South Wales. The second range crossing for Toowoomba and the Gowrie to Grandchester rail line upgrade are also important in this context.

Proposals in the Infrastructure Plan for the Western Corridor include:

- Upgrading the Ipswich Motorway.
- Delivering public transport networks and services ahead of major population growth, such as the Springfield rail line to encourage preferred land use development.
- Supporting employment and industry growth in this corridor, including Ebenezer as a freight hub and Amberley as an aerospace precinct, with road and rail infrastructure enhancements.
- Improving the connectivity of the Western Corridor with the rest of the region through additional and enhanced public transport and road connections, including the Centenary Highway extension through Ripley to Yamanto.

Greater Brisbane

Within Greater Brisbane, transport system connectivity is constrained due to the pattern of waterways throughout the sub-region and the extent of existing urban development. Major transport initiatives are required to develop the vibrancy and amenity of the inner city and to enhance the SEQ economy.

New public transport corridors will build on an already significant investment in busways and passenger rail. Key corridors include a south-west corridor, an eastern busway, a northern busway, a Petrie to Redcliffe public transport corridor and links to the west. Rail crossings of the Brisbane River are a significant issue for investigation.

Improvements to public transport infrastructure and services will be made to provide support for transit communities.

Quality orbital road systems will be considered to support connectivity of urban centres and to bypass major road congestion points. This will be accompanied by enhanced public transport services and better walking and cycling facilities on existing routes.

For freight, a clear priority will be to enhance the rail freight network and freight logistics operations, including new inter-modal terminals.

Proposals for Greater Brisbane include:

- Increasing the coverage and quality of the public transport system through expansion of the busways network with a northern and eastern busway, and increasing the capacity of the rail network.
- Further considering the development of orbital road networks that bypass inner city areas, including the North-South Bypass Tunnel and Airport Link, and investigating the transport needs of western Brisbane.
- Enhancing the quality of public transport services in radial corridors and to key activity centres.
- Supporting walking and cycling with the development of new pedestrian and cycle bridges in Brisbane City.
- Protecting and enhancing the ability of freight to move competitively between manufacturing, production and export nodes, focusing on the regional road and rail freight network with projects such as the Gateway Bridge duplication, Gateway Motorway upgrade and freight interchange improvements.

Brisbane City Council and TransApex

Brisbane City Council has a particularly significant role in transport in SEQ as it manages a large part of the regional road network and delivers much of the public transport system in the Greater Brisbane urban area.

Brisbane City Council is currently investigating a series of cross-city tunnel projects (TransApex), to reduce traffic congestion in the inner areas of Brisbane. The Queensland Government has provided in-principle support for the North-South Bypass Tunnel and is a partner in a detailed feasibility study of the Airport Link.

The sub-regional transport infrastructure for the Western Corridor and Greater Brisbane is shown on Maps 15 and 16.

Map 15 – Transport infrastructure – SEQ region

The information on this map is not intended for reference to specific parcels of land, and should be treated as indicative only and subject to ongoing refinement. In some parts of the mapping one layer obscures another, this is not meant to imply any order of importance or priority.

The Office of Urban Management, Department of Local Government, Planning, Sport and Recreation, does not guarantee or make any representations as to the accuracy or completeness of the information shown on this map, nor does it accept any responsibility ir liability for any loss or damage arising from its use.

Sources include: Office of Urban Management, Queensland Transport and the Department of Main Roads

Version: June 2005

For information only

Key

- Inner city
  Under investigation for optimum cross-city transport links including Hale Street and North-South Bypass Tunnel
- Network investigation
- Road and bus link improvement
- Quality public transport route investigation
- Quality public transport route
- Rail improvement
- Rail investigation
- Rail existing
- Road existing
- Road improvement
- Road investigation
- Urban Footprint
- ✱ Grade separation

Description

1 Second range crossing (road)
2 Rail upgrade (Gowrie to Grandchester)

Map 16 – Transport infrastructure – Greater Brisbane and the Western Corridor

The information on this map is not intended for reference to specific parcels of land, and should be treated as indicative only and subject to ongoing refinement. In some parts of the mapping one layer obscures another, this is not meant to imply any order of importance or priority.

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Key

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  Under investigation for optimum cross-city transport links including Hale Street and North-South Bypass Tunnel
- Network investigation
- Quality public transport route investigation
- Quality public transport route
- Rail improvement
- Rail investigation
- Rail existing
- Road existing
- Road improvement
- Road investigation
- Urban Footprint
- Grade separation

1 Caboolture to Landsborough rail improvement
2 North-South Arterial
3 Western Brisbane transport network investigation
4 Petrie to Redcliffe public transport
5 Houghton Highway
6 Gateway Bridge and Motorway
7 Northern busway investigation
8 Airport Link
9 Port of Brisbane Motorway
10 Inner Northern Busway
11 Inner city investigation
12 Northern Link
13a Beaudesert passenger rail investigation
13b Freight rail upgrade
14 Eastern busway investigation
15 Centenary Highway
16 Brisbane Urban Corridor
17 South-East Busway
18 Ipswich Motorway
18a Ipswich Motorway Northern Bypass
19 Improved capacity Ipswich rail line
20 Mt Lindesay Highway/Acacia Ridge Grade separation
21 South-West public transport investigation
22 Western Ipswich Bypass
23 Springfield rail
24 Logan Motorway
25 Transit lane extension Pacific Motorway
26 Springfield to Ipswich public transport investigation
27 South-West transport corridor
28 Gateway extension investigation
29 Gold Coast rail upgrade
30 Intra-regional transport corridor
31 Southern corridor investigation (road and rail)

Sunshine Coast

The focus on the Sunshine Coast is to continue to develop, protect and manage the transport function of the major north-south road spines - the Sunshine Motorway and Bruce Highway - and the east-west grid road network. In developing areas, such as the area south-west of Caloundra, road networks will be required to take account of regional and local needs, including an extension of the Sunshine Motorway.

For public transport, a north-south spine developed by the Caboolture to Maroochydore Corridor Study (CAMCOS) will promote self-containment of travel and more compact urban growth. Improved public transport links between the coast and hinterland are also needed. The continued upgrade of the north coast rail line will serve the dual purpose of improving passenger and freight services.

Traffic congestion in peak tourism periods is a major problem in popular tourist and recreational areas such as Maroochydore, Coolum, Mooloolaba, Caloundra and Noosa. The use of innovative transport solutions, such as park-and-ride facilities, local bus services, parking controls and accessible walking and cycling facilities can offset the need for major road improvements and maintain the amenity of these areas in the face of high travel demand.

Proposals in the Infrastructure Plan for the Sunshine Coast include:

- Establishing public transport spines connecting the key centres of Maroochydore and Caloundra with a link to the University of the Sunshine Coast and ultimately a connection back to the north coast rail line via the CAMCOS corridor.
- Protecting and managing the Bruce Highway as a road link of national significance.
- Upgrading the north coast rail line between Caboolture and Landsborough to increase passenger and freight capacity.
- Improving connectivity with selective road and public transport network enhancements including the Sunshine Motorway and east-west links such as Maroochydore Road.

Gold Coast

The Gold Coast corridor is undergoing significant population growth and development. The key transport challenge is to cater for growth in local travel while maintaining effective inter-regional linkages to Brisbane and northern New South Wales via the Pacific Highway.

A dedicated public transport spine linking the key centres of Helensvale/Parkwood and Broadbeach and ultimately Coolangatta, within the coastal area will be a significant investment. Improved east-west links, such as Nerang-Broadbeach Road, will provide better road and public transport connections between the coast and the hinterland. The regional road network will also be enhanced and new roads will be planned, such as the Intra-Regional Transport Corridor, to take account of regional as well as local traffic.

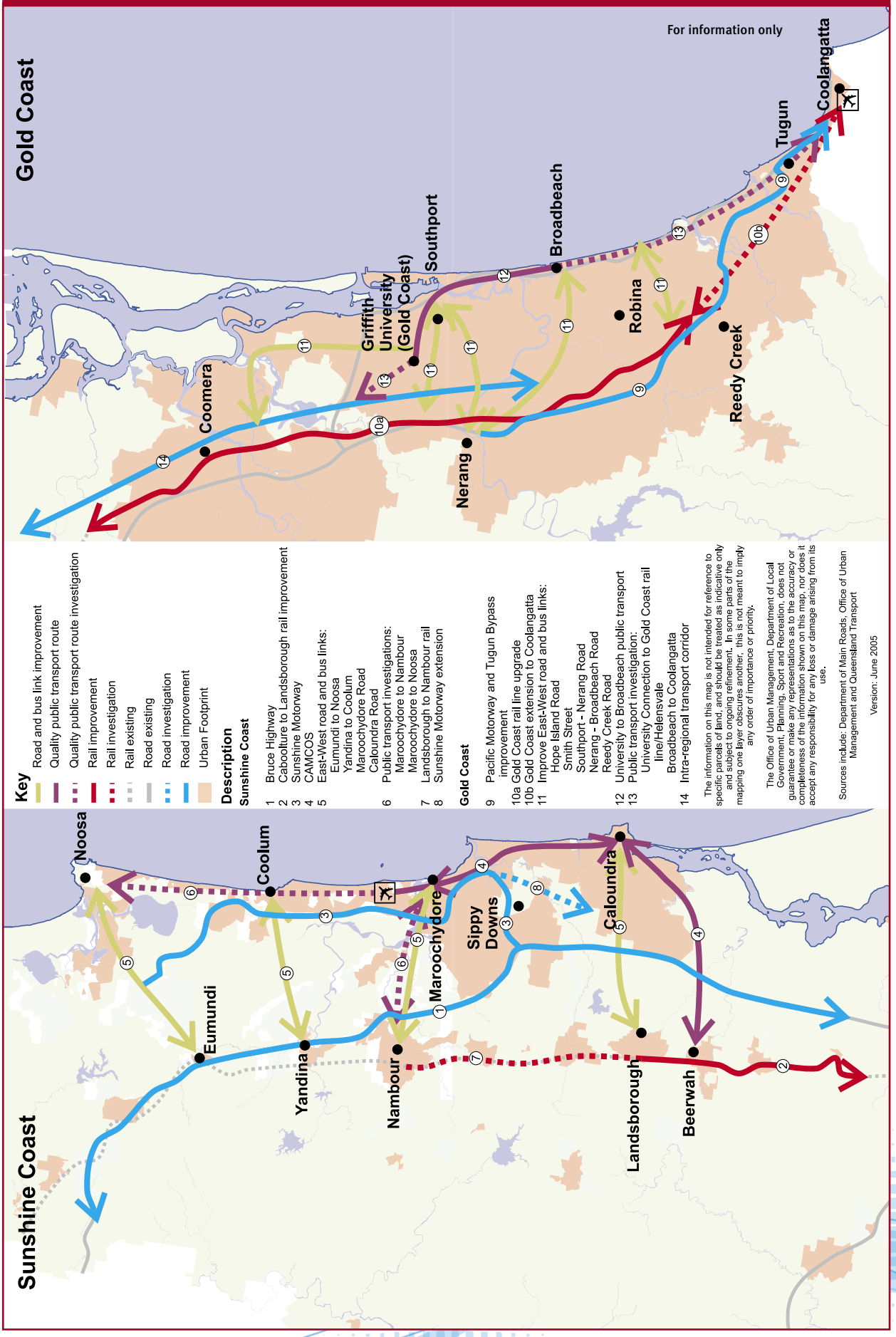
The Brisbane to Gold Coast rail link is a significant component of the sub-regional transport system. It has further potential to reduce the demand for car travel on key regional roads. High patronage from residents and visitors means that the system is rapidly approaching its current service capacity. Upgrading of the rail network, including staged duplication of the track, development of new stations and extension of the line south of Robina will significantly improve rail services between Brisbane and the Gold Coast.

Proposals for the Gold Coast include:

- Establishing public transport spines connecting the key centres on the Gold Coast and ultimately connecting the coastal strip to the south coast rail line.
- Extending the Brisbane to Gold Coast rail link.
- Protecting and managing the Pacific Highway as a road link of national significance, including development of surrounding road networks to cater for local traffic.
- Improving connectivity with selective road network enhancements, including east-west links such as Hope Island Road and with new corridors such as the Intra Regional Transport Corridor.

The sub-regional transport infrastructure for the Sunshine and Gold Coasts is shown on Map 17.

Map 17 – Transport infastructure – Sunshine and Gold Coasts



Part G
Implementation and monitoring

The Regional Plan is a framework to achieve good planning, management and development of the SEQ region. It is both a strategic and statutory plan.

Effective implementation requires cooperation by community stakeholders and coordination of State and local government activities and plans. Implementing the Regional Plan involves coordinating and reviewing a range of plans, infrastructure and services.

Statutory processes

The Regional Plan is a statutory instrument under the *Statutory Instrument Act 1992* with effects of the Regional Plan established under section 2.5A of the IPA.

Relevant provisions of the legislation include:

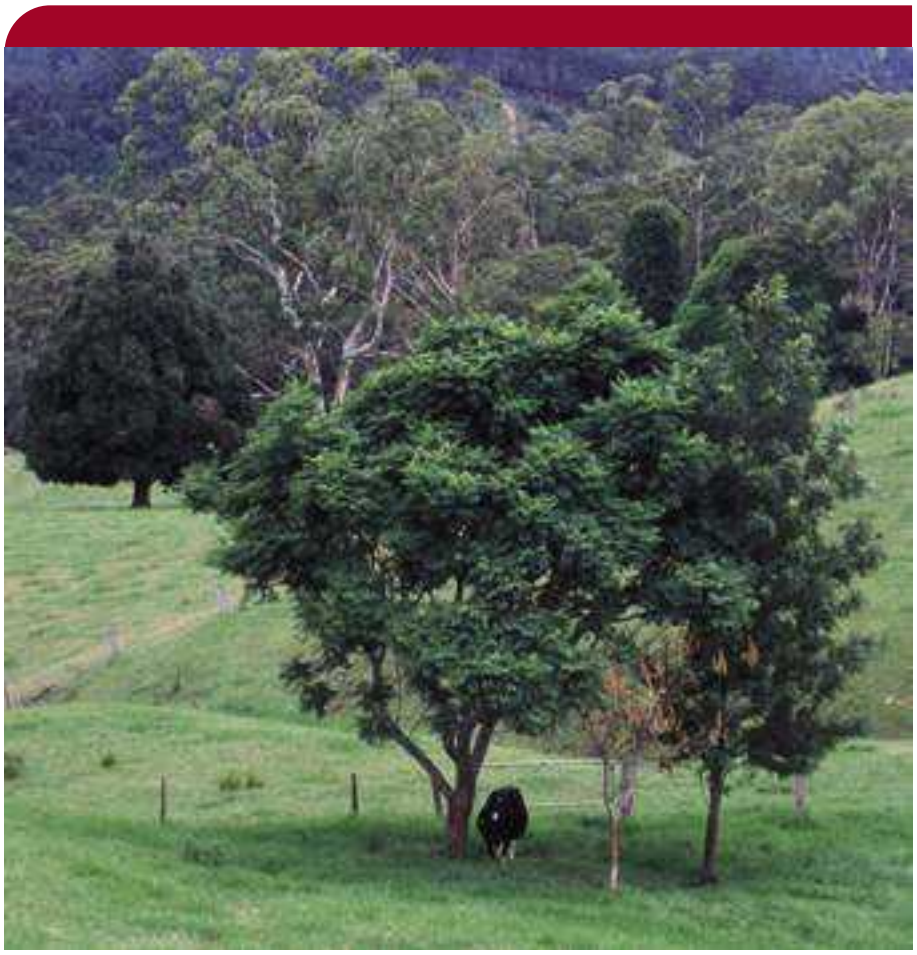
- establishing the RCC to advise the regional planning Minister on regional issues;
- ensuring local government planning schemes reflect the Regional Plan;
- ensuring State and local governments take account of the Regional Plan when preparing or amending a plan, policy or code that may affect a matter covered by the Regional Plan;
- ensuring development assessment processes, including referral agency obligations for development applications address matters covered in the Regional Plan;
- enabling Regulatory Provisions to be included in the Regional Plan;
- allowing the regional planning Minister to exercise 'call in' powers; and
- establishing processes for amending the Regional Plan.

Implementation

The Regional Plan establishes a range of desired regional outcomes, principles and policies to guide the development of SEQ through to 2026.

Implementing these policies at the regional level will be primarily focused on State and local governments. It may also involve a wide range of community and industry groups, particularly at the sub-regional and local levels.

State agencies are required to implement the Regional Plan and adopt its principles and policies in their own planning. Local government is required to prepare Local Growth Management Strategies, amend planning schemes and adopt other policies to align with the Regional Plan.



Infrastructure and services coordination

The Infrastructure Plan is updated annually and identifies regional infrastructure priorities required to support the Regional Plan. To ensure budget proposals align with the Regional Plan, state agencies will prepare their infrastructure and services plans in line with the Regional Plan.

Sub-regional infrastructure forums involving state agencies and local government will ensure coordination between State and local government priorities and budgets. State agencies will consult with local government to coordinate infrastructure in various infrastructure sectors, including transport and water.

Monitoring and review

SEQ is subject to changes in population growth, demographics, housing demands and land development activity. These aspects of the region will be monitored and reviewed annually. This information will also inform annual reviews of the Infrastructure Plan.

The Regional Plan will be reviewed formally every five years in accordance with the procedure set out in section 2.5A of the IPA. The regional planning Minister may then amend or replace the Regional Plan. There is also a provision under the IPA for the regional planning Minister to approve minor revisions of the Regional Plan at any time, if required.

The *State of the Region Report* will be prepared on a regular basis to assess key sustainability indicators for the region. These indicators are the primary measures to monitor the region's progress towards sustainability.

The indicators:

- set benchmarks;
- monitor change at a regional scale;
- increase awareness of regional trends;
- measure an outcome of the Regional Plan or elements that can be influenced; and
- use data that can be readily collected.

The *State of the Region Report* will be prepared every five years, as part of the review of the Regional Plan.

Implementation of the Regional Plan and the effectiveness of its policies will be regularly reviewed and monitored. This will guide further policy development and assist in setting future priority projects and actions.

A regional land monitoring program will be established jointly between State and local government and the development industry to monitor land availability for future development. This program will take into account available broadhectare land stocks, rates of development, development yields and densities being achieved, and population growth and forecast demand.

Roles and responsibilities
The RCC advises the Queensland Government, through the regional planning Minister, on the development and implementation of the Regional Plan.

A Regional Plan Implementation Group, consisting of representatives of State and local government, will be established to assist in monitoring policies and actions to implement the Regional Plan. This group will report to the RCC and regional planning Minister through the Office of Urban Management.

The Office of Urban Management works collaboratively with Queensland Government agencies, local government and stakeholders to facilitate and coordinate implementation of the Regional Plan. The Office of Urban Management through the Department of Local Government, Planning, Sport and Recreation is also a Concurrence Agency for parts of the Regional Plan's Regulatory Provisions.

A Transit Oriented Development Taskforce or alternative special-purpose governance arrangements will be established oversee implementation of the transit oriented development principles. Members will be appointed by the regional planning Minister and include representatives from State and local government and the private sector.

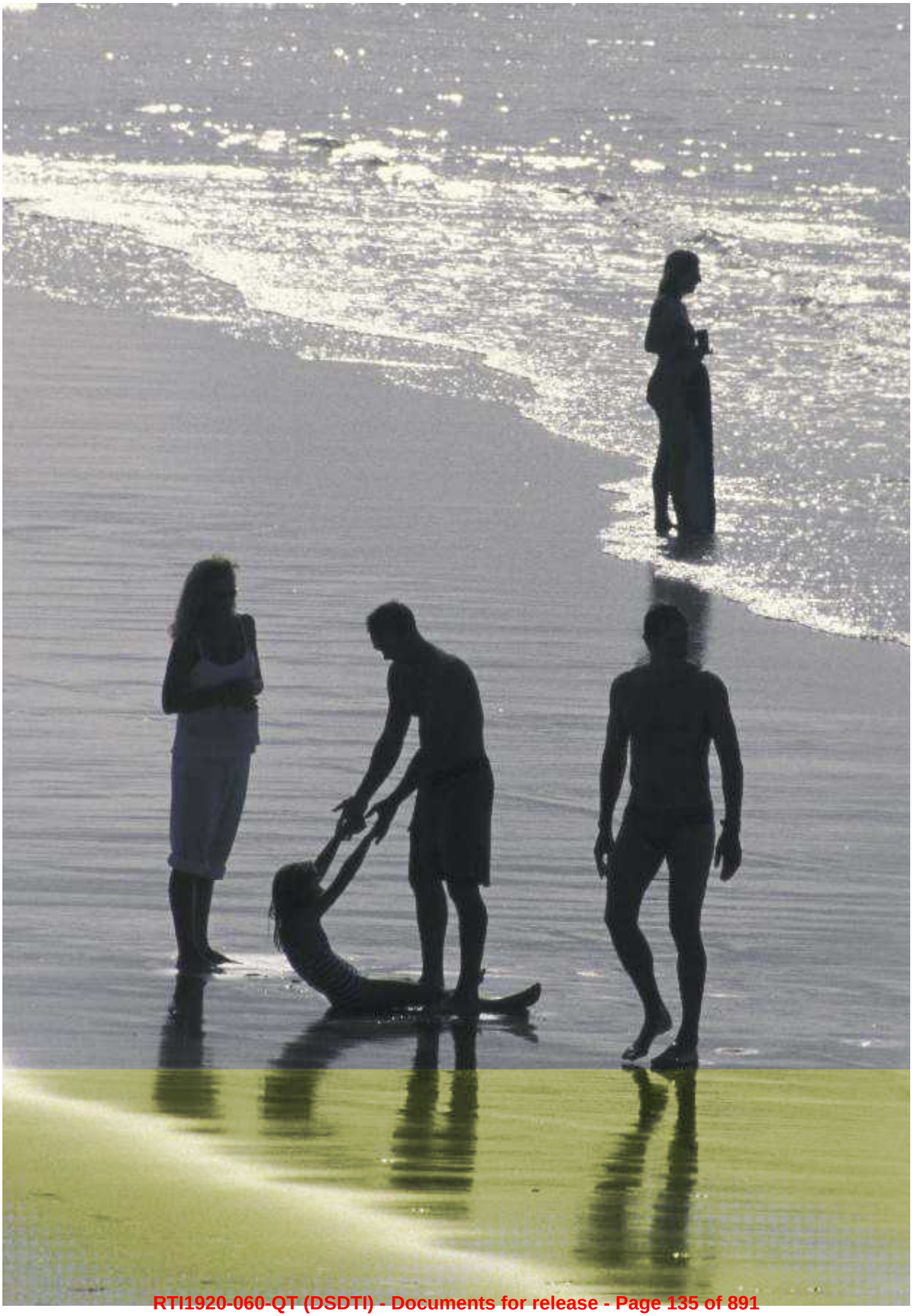
A Rural Futures Committee will be established by the regional planning Minister to provide advice and assist with the preparation of a *Rural Futures Strategy* for SEQ. Representation will be drawn from State and local government and rural stakeholders.

The Queensland Government has established a Regional Infrastructure and Services Coordination Group, comprising representatives of key state agencies. It provides a whole-of-government approach to infrastructure and services planning, programming, budgeting and review. This group monitors implementation of the Infrastructure Plan and ensures agencies take the Regional Plan's targets, projections and strategic directions into account in their infrastructure and services planning.

Regional Plan interest and advisory groups
A number of interest and advisory groups provide specialist advice to the Office of Urban Management about the Regional Plan. These groups include the:

- Regional Landscape and Open Space Advisory Committee;
- Business, commerce and development industry interest group;
- Communities and human services interest group;
- Environment and natural resources interest group; and
- Professional and academics interest group.

Other advisory groups will be established as needs arise.



Part H
Regulatory Provisions

Division 1 Preliminary

1. When the regulatory provisions do not apply

(1) The regulatory provisions do not apply to the following -

(a) a development application that was properly made before 27 October 2004; or
(b) development that is exempt from assessment against a planning scheme under the *Integrated Planning Act 1997* (IPA), schedule 9; or
(c) development that is generally in accordance with a current rezoning approval given under the *Local Government (Planning and Environment) Act 1990* (repealed) section 4.5(6), 4.8(6), 4.10(6) or 8.10(9A); or
(d) development that is generally in accordance with a current approval given under the *Local Government Act 1936* (repealed) section 5(k), to which section 5(m) also applies.

(2) An approval mentioned in subsection (1)(c) includes an approval resulting from the application of the *Integrated Planning Act 1997*, section 6.1.26.

(3) Also, subsection (1)(b) applies even if further development permits are needed to facilitate the development generally in accordance with the current rezoning approval.

(4) In this section –
Current rezoning approval means:

(a) an approval for which the zone resulting from the approval still exists under a transitional planning scheme; or
(b) if the resulting zone no longer exists –
(i) there is for the premises –
(A) a development permit given for a development application (superseded planning scheme) in relation to the resulting zone; or
(B) an acknowledgement notice mentioned in the *Integrated Planning Act 1997*, section 3.2.5(1)(a) in relation to the resulting zone; or
(ii) the development rights conferred by the resulting zone have been preserved under an IPA planning scheme.

2. SEQ region divided into categories

(1) The regional plan allocates all land in the SEQ region into one of the following categories -

(a) Regional Landscape and Rural Production Area;
(b) Rural Living Area;
(c) Urban Footprint;
(d) Investigation Area;
(e) Mt Lindesay/North Beaudesert Study Area.

(2) The maps referred to in schedule 1 show these areas.

Division 2 Provisions affecting planning schemes – *Integrated Planning Act 1997* s2.5A.12(2)(a) – (c)

3. Urban activities

(1) A material change of use of premises for urban activities is assessable development requiring impact assessment to the extent the premises are in the -

(a) Regional Landscape and Rural Production Area; or
(b) Rural Living Area; or
(c) Investigation Area; or
(d) Mt Lindesay/North Beaudesert Study Area.

(2) Subsection (1) does not apply to premises zoned for urban activities under a planning scheme in the following –

(a) a rural village; or
(b) the Mt Lindesay/North Beaudesert Study Area.

(3) In addition to any relevant matters applying under a planning scheme for assessing and deciding a development application to which subsection (1) applies, the application complies with these regulatory provisions only if -

(a) for premises adjoining a rural village – the development is consistent with the planning intent for the village under the planning scheme; or
(b) if paragraph (a) does not apply -
  (i) the locational requirements or environmental impacts of the development necessitate its location outside the Urban Footprint; and
  (ii) there is an overriding need for the development in the public interest[1].

4. Rural residential purposes

(1) A material change of use of premises for rural residential purposes is assessable development requiring impact assessment to the extent -

(a) the premises are not zoned for rural residential purposes; and
(b) the premises are in the -
  (i) Regional Landscape and Rural Production Area; or
  (ii) Investigation Area; or
  (iii) Mt Lindesay/North Beaudesert Study Area.

(2) In addition to any relevant matters applying under a planning scheme for assessing and deciding a development application to which subsection (1) applies, the application complies with these regulatory provisions only if there is an overriding need for the development in the public interest[1].

[1] *See schedule 3 for guidance on how to determine overriding need in the public interest.*

DIVISION 3 PROVISIONS REGULATING DEVELOPMENT – *INTEGRATED PLANNING ACT 1997* S2.5A.12(2)(D))

5. Particular subdivision prohibited

(1) Subsection (2) applies for land in the following areas -

(a) Regional Landscape and Rural Production Area; or
(b) Investigation Area.

(2) Subdivision may not occur if any resulting lot would have a lot size less than -

(a) if the planning scheme states a minimum lot size greater than 100 hectares - the lot size stated in the planning scheme; or
(b) to the extent the premises are located in a rural precinct - the minimum lot size stated in the planning scheme for the precinct; or
(c) in any other case – 100 hectares.

(3) However subsection (2) does not apply if the subdivision -

(a) creates the same number or fewer lots than the number of lots being subdivided; or
(b) is carried out in association with a development approval for a material change of use of premises that has not lapsed; or
(c) is in a rural village; or
(d) is:
  (i) for rural residential purposes on land zoned for rural residential purposes; and
  (ii) carried out under a development approval for reconfiguring a lot, if the development application to which the approval relates is properly made before the 27 October 2006; or
(e) creates a residual lot; or
(f) is carried out under an exemption given by the Minister[2] and an approval of an a development application that is properly made within 6 months of the exemption being given.

(4) To remove any doubt, if a development approval has been, or is given, and the approval purports to be for a material change of use of premises to reconfigure a lot, or a material change of use of premises to subdivide land, or similar terminology, the approval is not one to which the exemption described in subsection (3)(b) apply.

6. Subdivision in the Mt Lindesay/North Beaudesert Study Area

(1) Subsection (2) applies for land in the Mount Lindesay/North Beaudesert Study Area.

(2) Subdivision may not occur unless the subdivision -

(a) creates the same number or fewer lots than the number of lots being subdivided; or
(b) is carried out in association with a development approval for a material change of use of premises that has not lapsed; or
(c) is for an urban purpose on premises -
  (i) in a rural village; or
  (ii) zoned for urban activities.
(d) is carried out under an exemption given by the Minister[2] and an approval of an a development application that is properly made within 6 months of the exemption being given.

(3) This section expires on 26 April 2006.

[2] *See schedule 4 for guidance on how the Minister considers a request for exemption.*

Division 4 Transitional arrangements for the Regulatory Provisions – *Integrated Planning Act 1997* s2.5A.12(2)(e))

7. Development applications

(1) In addition to any matters applying under a planning scheme for assessing and deciding a properly made development application made after 26 October 2004 and before the day these regulatory provisions came into effect, the draft regulatory provisions apply for the application.

(2) On premises zoned for rural residential purposes, division 3 does not apply if the subdivision is –

(a) on premises identified in the draft regulatory provisions as being in the Urban Footprint or Rural Living Area; and
(b) identified in these regulatory provisions as being in the Regional Landscape and Rural Production Area or Investigation Area; and
(c) for rural residential purposes; and
(d) carried out under a development approval for reconfiguring a lot, if a development application to which the approval relates is properly made within two years of the day these regulatory provisions came into effect.

Schedules

Schedule 1 Maps

SEQ Regional Plan regulatory maps numbered SEQRP1 to Map SEQRP33.

Schedule 2 Dictionary

draft regulatory provisions means the draft regulatory provisions referred to in gazette notice dated 25 February 2005 and version 1 of the regulatory maps.

residual lot means –

(a) for premises located partly in the Urban Footprint or Rural Living Area and partly in a contiguous Regional Landscape and Rural Production Area or Investigation Area, a single lot in the Regional Landscape and Rural Production Area or Investigation Area; or
(b) for premises located in the Regional Landscape and Rural Production Area or Investigation Area and partly zoned for rural residential purposes, a single lot on the part of the premises not zoned for rural residential purposes.

rural precinct means land identified in an IPA planning scheme as a rural precinct using guidelines made under the SEQ Regional Plan.

rural residential purpose means a purpose that is predominantly a residential purpose involving a single dwelling on a lot greater than 2000m^2.

rural village means a location named in accordance with the Place *Names Act 1994* that comprises residential dwellings, some urban activity, and is not located within the Urban Footprint, including but not limited to those listed in schedule 5 or identified in a planning scheme.

subdivision means the division of 1 or more lots by a plan of subdivision under part 4, division 3 of the *Land Title Act 1994*.

urban activiry -

(1) Urban activity, in relation to the use of premises, means a residential, industrial, retail, commercial, sporting, recreational or community purpose normally found in a city or town.

(2) The term includes a tourist facility that does not have a direct connection with the rural, natural or resource value of the surrounding area, including, for example, a general theme park, water slide or go cart track.

(3) The term does not include a purpose reasonably associated with a predominant non-urban purpose for which the land or surrounding area is used, including, for example -

(a) farm workers accommodation on a farm; or
(b) a mechanical repair workshop for farm machinery or vehicles; or
(c) vehicle storage associated with transporting rural produce or resources; or
(d) a produce store predominantly selling local produce.

(4) Also, the term also does not include the following purposes -

(a) a single residential dwelling on a lot;
(b) other purposes incidental to the purpose mentioned in paragraph (a), including, for example -
(i) home based business; or
(ii) relatives accommodation;
(c) rural residential purpose;
(d) tourist accommodation, including, for example -
(i) farm stay and bed and breakfast accommodation;
(ii) other tourist accommodation up to a maximum of 20 accommodation units;
(e) service station;
(f) local shop, if the floor area for retail purposes does not exceed 250m^2;
(g) restaurant, café or tavern able to cater for no more than 100 persons;
(h) sporting, recreation or community purpose predominantly serving a local area;
(i) extractive industry, including, for example, crushing and screening;
(j) aeronautical facilities;
(k) emergency services facilities;
(l) water cycle management infrastructure;
(m) waste management facilities;
(n) wholesale nursery;
(o) aquaculture; or
(p) animal boarding facility.

zoned for premises means allocated or identified as a zone or other like term such as domain or area in a planning scheme, including in a strategic plan under a transitional planning scheme.

Schedule 3 How to determine overriding need in the public interest

To determine an overriding need in the public interest an applicant must establish –

(a) the overall social, economic and environmental benefits of the development weighed against -
  (i) any detrimental impact upon the natural values of the site; and
  (ii) conflicts with the desired outcomes of the regional plan, especially in relation to promoting consolidation of development within the Urban Footprint and preventing land fragmentation in the Regional Landscape and Rural Production Area, Investigation Area or the Mt Lindesay/North Beaudesert Study Area; and

(b) the community would experience significant adverse economic, social or environmental impacts if the development proposal were not to proceed.

This may require an assessment to determine if the development could reasonably be located within the Urban Footprint.

The following do not establish an overriding need in the pubic interest -

(a) activities with relatively few locational requirements such as residential development and shopping centres; or
(b) interests in or options over the site; or
(c) the site's availability or ownership.

Schedule 4 How the Minister considers a request for exemption

The Minister may exempt development from division 3 if –

(a) a request for exemption is lodged before 30 September 2005; and
(b) the Minister is satisfied that a development application was, on 27 October 2004, in an advanced stage of readiness for lodging with the local government; and
(c) evidence of the advanced stage of readiness for lodging the application is provided, including, for example, the following –
  (i) site analysis reports prepared by an appropriate professional regarding development constraints such as biodiversity, flooding or bushfire hazard;
  (ii) detailed planning reports;
  (iii) detailed plan of survey;
  (iv) formal correspondence with the local government about the application; including prelodgement discussions; and
  (v) infrastructure agreements.

Schedule 5 Rural village

Place name	Administrative area name
Beechmont	Beaudesert
Hillview	Beaudesert
Rathdowney	Beaudesert
Tamborine	Beaudesert
Dugandan	Boonah
Mount Alford	Boonah
Munbilla	Boonah
Warrill View	Boonah
Bulwer	Brisbane
Cowan Cowan	Brisbane
Kooringal	Brisbane
Elimbah	Caboolture
Mount Mee	Caboolture
Neurum	Caboolture
Wamuran	Caboolture
Conondale	Caloundra
Witta	Caloundra
Glamorgan Vale	Esk
Harlin	Esk
Linville	Esk
Moore	Esk
Somerset Dam	Esk
Coominya	Esk
Grantham	Gatton
Ma Ma Creek	Gatton
Murphys Creek	Gatton
Springbrook	Gold Coast
Grandchester	Ipswich
Villeneuve	Kilcoy
Jimna	Kilcoy
Ninderry	Maroochy
North Arm	Maroochy
Kin Kin	Noosa
Pinbarren	Noosa
Teewah	Noosa
Amity Point	Redland
Dunwich	Redland
Point Lookout	Redland

Glossary

Areas of state, regional or local biodiversity significance: Areas as identified and evaluated according to the Common Nature Conservation Classification System and/or the *SEQ Biodiversity Planning Assessment* of the *SEQ Regional Nature Conservation Strategy*.

Brownfield: Areas of land previously used for industrial or other purposes available to be redeveloped for alternative purposes.

Cadastre: Public register that spatially represents separate properties.

Comparison retail: The provision of items not obtained on a frequent basis, including clothing, footwear, household and recreational goods.

Concurrence Agency: An entity prescribed under the *Integrated Planning Act 1998 Regulation* as a Concurrence Agency for a development made under the IPA.

Convenience retail: The provision of everyday essential goods, including food and other grocery items.

Greenfield: Areas of undeveloped land in the Urban Footprint suitable for urban development.

Greywater: Wastewater from showers, laundry, and kitchen sinks, excluding toilet waste.

Infill development: New development that occurs within established urban areas where the site or area is either vacant or has previously been used for another urban purpose. The scale of development can range from the creation of one additional residential lot to a major mixed-use redevelopment.

Infrastructure Plan: The *South East Queensland Infrastructure Plan and Program 2005-2026*.

Inter-urban breaks: Non-urban land areas that separate and/or surround urban villages, towns and metropolitan areas.

Local Growth Management Strategy: Strategies prepared by local government to demonstrate how Regional Plan policies will be implemented at the local level. In particular, they outline how dwelling targets and associated jobs and infrastructure will be accommodated.

Major new urban areas: Greenfield sites or contiguous areas of over 100 hectares available for urban development. Can be in single or multiple ownership.

Master plan: A comprehensive plan that describes and maps the overall development concept for an area or precinct, including present and future land use, detailed urban design and landscaping, built from, infrastructure and service provision.

Net residential density: A measure of housing density expressed as dwellings or lots per hectare, calculated by adding the area of residential lots plus the area of local roads and parks, and then divided by the number of dwellings or residential lots created.

Potable water: Water that is provided for human consumption.

Regional activity centres: A centre or proposed centre identified in the SEQ regional activity centres network. These centres support a concentration of activity, including higher density living, business, employment, research, education and services.

Regional Coordination Committee: The committee established by the regional planning Minister under section 2.5A.3 of the IPA to advise the Queensland Government through the regional planning Minister on the development and implementation of the Regional Plan.

Regional Plan: The *South East Queensland Regional Plan 2005-2026*, developed in accordance with section 2.5A of the IPA.

Regional planning Minister: The Minister administering section 2.5A of the IPA.

Regulatory Maps: Set of Maps referred to in Schedule 1 of the Regulatory Provisions, identifying land categories defined under Division 1 of the Regulatory Provisions.

Regulatory Provisions: Regulatory Provisions made under section 2.5A.12 of the IPA in respect to the SEQ region.

Rural precinct: Land identified in an IPA planning scheme as a rural precinct using guidelines made under the Regional Plan.

Rural residential purposes: A purpose that is predominantly a residential purpose involving a single dwelling on a lot greater than 2000m^2.

Rural village: A location named in accordance with the *Place Names Act 1994* that comprises residential dwellings, some urban activity and is not located within the Urban Footprint.

SEQ region: The 18 local government areas within the SEQ region and the waters adjacent to these areas as defined in section 2.5A.2 of the IPA.

Structure plan: An integrated land use plan setting out the broad environmental, land use, infrastructure and development concepts to guide detailed site planning for major new urban areas.

Sustainability indicators: Broad measures of sustainability to be used to monitor the progress of the implementation of the Regional Plan.

Transit: The term used to describe public transport, for example, bus, rail or ferry services.

Transit oriented community: A precinct where it is intended principles of transit oriented development will be applied.

Transit oriented development: Mixed-use residential and commercial areas, designed to maximise the efficient use of land through high levels of access to public transport.

Urban activity: A residential, industrial, retail, commercial, sporting, recreation or community purpose, normally found in a city or town.

Western Corridor: The Greater Ipswich area, extending generally form Wacol through Ipswich City to Amberley and including Ebenezer, Swanbank, Ripley Valley and Springfield.

Yield: The number of dwellings or lots per hectare.

Zoned land: Land allocated or identified as a zone or other like term such as domain or area in a planning scheme, including a strategic plan in a transitional planning scheme.

Abbreviations

CAMCOS – Caboolture to Maroochydore Corridor Study

CBD – Central Business District

IDAS – *Integrated Development Assessment System* identified in the *Integrated Planning Act 1997*

IPA – *Integrated Planning Act 1997*

PIFU – Planning Information and Forecasting Unit of the Department of Local Government, Planning, Sport and Recreation

NORSROC – Northern Sub-regional Organisation of Councils

NRM – Natural Resource Management

RCC – Regional Coordination Committee

RNCS – *Regional Nature Conservation Strategy*

SEQ – South East Queensland

SEQIRTP – *South East Queensland Integrated Regional Transport Plan*

SEQROC – South East Queensland Regional Organisation of Councils

SEQRWSS - *South East Queensland Regional Water Supply Strategy*

SouthROC – Southern Regional Organisation of Councils

Sub-ROC – Sub-regional Organisation of Councils

VMA – *Vegetation Management Act 1999*

WESROC – Western Sub-regional Organisation of Councils.

Acknowledgments

A large number of individuals and organisations have contributed to the Regional Plan, in particular those who made written submissions on the Draft Regional Plan and attended community forums. Although it is not possible to list all of these separately, their contributions are acknowledged and appreciated.

The contributions of the following individuals and groups are acknowledged:

- members of the RCC;
- regional reference groups;
- regional interest groups;
- Regional Landscape and Open Space Advisory Committee;
- state agencies;
- local government;
- SEQROC and Sub-ROC Coordinators; and
- staff of the Office of Urban Management.

Special thanks to:

The membership of the RCC
The Hon Terry Mackenroth (Chair) - Deputy Premier, Treasurer and Minister for Sport
The Hon Desley Boyle - Minister for Environment, Local Government, Planning and Women
The Hon Paul Lucas - Minister for Transport and Main Roads
The Hon Tony McGrady - Minister for State Development and Innovation
The Hon Warren Pitt - Minister for Communities, Disability Services and Seniors
The Hon Stephen Robertson - Minister for Natural Resources and Mines
Cr Campbell Newman - Lord Mayor of Brisbane and Chair of SEQROC
Cr Bob Abbot - Mayor of Noosa and Chair of NORSROC
Cr John Freeman - Mayor of Logan and Chair of SouthROC
Cr Paul Pisasale - Mayor of Ipswich and Chair of WESROC

Queensland Government departments
Department of Aboriginal and Torres Strait Islander Policy
Department of Child Safety
Department of Communities
Department of Corrective Services
Department of Education and the Arts
Department of Emergency Services
Department of Employment and Training
Department of Energy
Department of Housing
Department of Industrial Relations
Department of Justice and Attorney-General
Department of Local Government, Planning, Sport and Recreation
Department of Main Roads
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Department of the Premier and Cabinet
Department of Primary Industries and Fisheries
Department of Public Works
Department of State Development and Innovation
Department of Tourism, Fair Trading and Wine Industry Development
Disability Services Queensland
Environmental Protection Agency
Queensland Health
Queensland Police Service
Queensland Transport
Queensland Treasury

Local governments
Beaudesert Shire Council
Boonah Shire Council
Brisbane City Council
Caboolture Shire Council
Caloundra City Council
Esk Shire Council
Gatton Shire Council
Gold Coast City Council
Ipswich City Council
Kilcoy Shire Council
Laidley Shire Council
Logan City Council
Maroochy Shire Council
Noosa Shire Council
Pine Rivers Shire Council
Redcliffe City Council
Redland Shire Council
Toowoomba City Council
Tweed Shire Council

Organisations of Council
SEQROC
NORSROC
WESROC
SouthROC
Brisbane City.

Images courtesy of:

Brisbane City Council, Boonah Shire Council, Caboolture Shire Council, Caloundra City Council, Gatton Shire Council, Ipswich City Council, Logan City Council, Maroochy Shire Council, Redcliffe City Council, Toowoomba City Council, Centre for Subtropical Design, Department of Communities, Department of Main Roads, Department of State Development and Innovation, Tourism Queensland, Michael Aird, Jemina Dunn, Darren Jew and Olivia Martin-McGuire.

South East Queensland

Regional Plan 2005-2026

Amendment 1

October 2006

[Amendment 1 should be read in conjunction with the South East Queensland Regional Plan 2005-2026 as it replaces or amends certain sections.]

Queensland **the Smart State**

Council of Mayors
South East Queensland

Queensland Government
Office of **Urban Management**
The **Coordinator-General**

South East Queensland Regional Plan 2005-2026 Amendment 1

Prepared by:
The Honourable Anna Bligh, regional planning Minister in accordance with the *Integrated Planning Act 1997*, sections 2.5A.18 and 2.5A.19.

In partnership with:
South East Queensland Council of Mayors

In consultation with:
The South East Queensland Regional Coordination Committee (RCC)

Published by:

Queensland Government
Office of **Urban Management**
The **Coordinator-General**

October 2006
ISBN 0 9758444 8 2

Release notes:

This *South East Queensland Regional Plan 2005-2026 Amendment 1* (Amendment 1) is released by the regional planning Minister in accordance with the *Integrated Planning Act 1997*, (IPA), sections 2.5A.18 and 2.5A.19. It is a statutory instrument under the *Statutory Instrument Act 1992*.

Amendment 1 applies within the South East Queensland (SEQ) regional local government areas as defined in the IPA, section 2.5A.2. It replaces the *South East Queensland Regional Plan 2005-2026 Draft Amendment 1* (Draft Amendment 1) released by the regional planning Minister on 2 March 2006. Draft Amendment 1 was subject to community consultation and comment up to 13 April 2005.

Amendment 1 has been prepared in good faith to amend the *South East Queensland Regional Plan 2005-2026* (the Regional Plan), to provide a framework for the management and development of the SEQ region, including the Mt Lindesay/North Beaudesert Study Area.

Amendment 1 represents an agreed Queensland Government position on the future of SEQ. Any plans, policies and codes being prepared or amended by state agencies must reflect and align with Amendment 1 as part of the Regional Plan. Amendment 1 does not commit or pertain to commit any government, industry or community organisation to implement, fund or otherwise resource specific activities or programs.

Maps indicated as being for information only are intended to represent general concepts for the purpose of broadscale regional planning. These maps do not and are not intended to identify or give attributes or rights, including land use and development rights, to specific land parcels.

The Regulatory Provisions of Amendment 1, including the Regulatory Maps have effect from the date of release. The Regulatory Maps are cadastre-based and allocate all land in the region into regional land use categories for the purpose of the Regulatory Provisions of the Regional Plan.

South East Queensland

Regional Plan 2005-2026

Amendment 1

October 2006

Foreword

South East Queensland continues to be the fastest-growing region in Australia. Recent population projections indicate that by 2026, this place we all call home will grow by a further 1.2 million people. Although this new growth brings many opportunities, it also brings challenges. The Queensland Government, in partnership with the councils of South East Queensland, has developed a plan to sustainably manage growth in this region over the next 20 years. It outlines a new approach, based on managing rather than responding to our increasing population.

Released on 30 June 2005, the *South East Queensland Regional Plan 2005-2026* (the Regional Plan) protects more than 80 per cent of South East Queensland from future urban development - ensuring this region remains one of the most liveable urbanised areas in the world, while catering for strong population growth and future prosperity.

Since its release, the Queensland Government has worked with councils and the community to undertake more detailed work in the Mt Lindesay/North Beaudesert area to better determine development options in this part of the region. Finalised after extensive public consultation, Amendment 1 outlines the preferred development option for this area, which is expected to accommodate around 80,000 people over the next 20 years in urban areas.

Released now as the first update to the Regional Plan, Amendment 1 provides positive planning for the future for the Mt Lindesay/North Beaudesert area. It builds on the strengths of the Regional Plan – achieving a delicate balance between developing urban areas for future growth and protecting our environment and landscape.

But the work won't stop here. The Queensland Government - through the Office of Urban Management - has worked in partnership with the Council of Mayors (SEQ) over the past twelve months to ensure the Regional Plan is effectively implemented through the preparation of Local Growth Management Strategies. Due to be finalised in mid-2007, these strategies will enable each local government to demonstrate how it proposes to meet dwelling targets and policy outcomes outlined in the Regional Plan.

Work is also progressing on the designation of Major Development Areas; structure planning for future growth areas such as Coomera and the Ripley Valley; as well as the annual updates to the *South East Queensland Infrastructure Plan and Program*.

We are pleased to release this Amendment and remain focused on meeting the challenges ahead in delivering a better future for South East Queensland.

Contents

1.0 Preamble

This section is for information only and does not form part of the formal amendment to the *South East Queensland Regional Plan 2005-2026* (the Regional Plan).

1.1 Purpose of Amendment 1

The Regional Plan provides the framework for managing the growth and development of the South East Queensland (SEQ) region over the next 20 years.

The Regional Plan was released on 30 June 2005. It is a statutory instrument under the Statutory Instruments Act 1992 and is also a planning instrument under the *Integrated Planning Act 1997* (IPA). It has a direct effect in its own right and indirect effect through the amendment and alignment of local government planning schemes and state plans and policies.

In association with the Regional Plan, the *South East Queensland Infrastructure Plan and Program 2006-2026* (the SEQ Infrastructure Plan) identifies regionally significant infrastructure planned to accommodate future growth over the next 20 years.

The *South East Queensland Regional Plan 2005-2026 Amendment 1* (Amendment 1) incorporates the following outcomes into the Regional Plan:

- the *Mt Lindesay/North Beaudesert Study Area Study Report*;
- minor changes to the Regulatory Maps to reflect existing committed urban designations in local government planning schemes; and
- amendments to the Regulatory Provisions to improve workability of the Regional Plan.

Mt Lindesay/North Beaudesert Study Area

While preparing the *Draft South East Queensland Regional Plan* (Draft Regional Plan) in 2004, the Southern Regional Organisation of Councils (SouthROC) requested that the Mt Lindesay/North Beaudesert Study Area (MLNBSA) be designated for investigation in the Draft Regional Plan. The area is largely occupied by fragmented rural residential lots, but also has some large undeveloped land holdings with existing approvals for rural residential development. As a consequence, the MLNBSA was identified as an Investigation Area in both the draft and final Regional Plan. The Queensland Government (through the Office of Urban Management) agreed to undertake a planning study in partnership with the Beaudesert Shire, Gold Coast City and Logan City Councils to identify the medium- to long-term development opportunities for the area. The *Mt Lindesay/North Beaudesert Study Area Study Report* was completed in February 2006.

An 18-month moratorium was placed on all subdivision in the MLNBSA to ensure new development did not compromise the outcomes of the study. This moratorium was included in both the draft and final Regional Plans. The Regulatory Provisions enforcing the moratorium automatically expired on 2 March 2006 with the release of the Draft Regulatory Provisions as part of Draft Amendment 1.

Amendment 1 formally integrates the regional land use and Regulatory Provision changes applicable to the MLNBSA into the Regional Plan.

Regulatory Maps

Following release of the Regional Plan in June 2005, all 18 local governments in SEQ were required to review and amend their planning schemes to align to the Regional Plan. This program identified a number of minor areas where the Regulatory Maps in the Regional Plan needed amendment to reflect existing urban zoning or committed developments.

Submissions for minor amendments to the Regulatory Maps were also received through consultation on Draft Amendment 1.

Amendment 1 formally integrates relevant minor regional land use changes into the Regional Plan.

Regulatory Provisions

The Regulatory Provisions of both the Draft Regional Plan (and later the final Regional Plan) have been in effect since 27 October 2004. The Office of Urban Management has undertaken a review of issues arising from the operation of the Regulatory Provisions since their release. This review has identified a number of areas where the assessment of development applications would be better addressed at the local level or where the Regulatory Provisions were not as effective as originally intended.

Submissions for minor amendments to the Regulatory Provisions were also received through consultation on Draft Amendment 1.

Amendment 1 formally integrates Regulatory Provision changes into the Regional Plan.

1.2 Making of Amendment 1

Amendment 1 was prepared using the amendment process for the Regional Plan set out in chapter 2, part 5A of the IPA.

Under the IPA, amending the Regional Plan means the regional planning Minister must:

- prepare a Draft Amendment;
- make the Draft Amendment available for public consultation for a minimum of 30 business days;
- consider all properly made submissions on the Draft Amendment;
- consult with the Regional Coordination Committee;
- prepare and publish the final Amendment; and
- table the Regulatory Provisions in Parlament.

1.3 Draft Amendment 1

The regional planning Minister released the *South East Queensland Regional Plan 2005-2026 Draft Amendment 1* (Draft Amendment 1) for community consultation on 2 March 2006.

Draft Amendment 1 was available for public review and comment for 31 business days, to 13 April 2006.

There were 401 formal submissions received in relation to Draft Amendment 1. These submissions were reviewed and the output summarised in the *Consultation Report on the South East Queensland Regional Plan 2005-2026 Draft Amendment 1* (the Consultation Report), October 2006.

The regional planning Minister consulted with the Regional Coordination Committee whilst preparing both the draft and final Amendment 1.

1.4 Consultation Report

The Consultation Report was prepared to assist the regional planning Minister in considering the submissions on Draft Amendment 1, and assist in developing the final Amendment. The Consultation Report is available from the Office of Urban Management to inform the community and stakeholders about how submissions on Draft Amendment 1 were considered.

1.5 Effect of Amendment 1

Amendment 1 takes effect on and from the day the making of Amendment 1 is published in the Gazette and becomes part of the Regional Plan.

Amendment 1 replaces Draft Amendment 1 entirely.

For the purpose of the IPA, the Regional Plan is taken to be a state interest. The Regional Plan represents an agreed Queensland Government position on the future of SEQ. The Regional Plan is the pre-eminent plan for the SEQ region and takes precedence over all other planning instruments. Under the IPA, the Regional Plan prevails where there is any inconsistency with any other plan, policy or code, including any other planning instruments made under state legislation, having effect within the SEQ region. The Regional Plan, however, has been prepared to complement, rather than override other relevant state planning instruments. Any plans, policies and codes relating to the SEQ region being prepared or amended by state agencies must reflect and align with the Regional Plan, including approved amendments.

1.6 Sections of the Regional Plan affected by Amendment 1

Amendment 1 should be read in conjunction with the Regional Plan as it replaces or amends certain sections.

Amendment 1 identifies the text, tables, figures and maps that it replaces in the Regional Plan:

- Section 2 is the amendments to the Regional Plan (Parts B, E and F);
- Section 3 is the Regulatory Provisions (Part H);
- Schedule 1 provides a summary of all changes; and
- Schedule 2 provides a summary of all changes to the Regulatory Maps.

1.7 Regulatory Provisions of the Regional Plan

The Regulatory Provisions of Amendment 1 take effect on and from the day the making of Amendment 1 is published in the Gazette and becomes part of the Regional Plan.

The Regulatory Provisions in Amendment 1 fully replace all versions of the Regional Plan's Regulatory Provisions, including the Draft Regulatory Provisions in Draft Amendment 1 and the Regulatory Provisions in Part H of the Regional Plan.

The Regulatory Provisions are required to be taken into account in planning and development assessment and decision-making processes, including:

- Queensland Government plans, policies and codes;
- local government planning schemes and other plans and policies; and
- planning and development processes under the IPA.

1.8 Major Development Areas

The Draft Regulatory Provisions released on 2 March 2006 provided for Major Development Areas.

On 16 June 2006, 19 Major Development Areas were identified by the regional planning Minister. One additional Major Development Area was identified on 27 June 2006. The 20 identified sites include land in the Beaudesert, Caboolture, Esk, Gold Coast, Ipswich, Logan, Maroochy and Redland local government areas. Further Major Development Area designations are likely over time. Details of these sites identified are available on the Office of Urban Management's website (www.oum.qld.gov.au) or by contacting freecall 1800 021 818.

In accordance with the Regional Plan, planning requirements for Major Development Areas will be identified within a structure plan. A structure plan is an integrated land use and infrastructure plan that provides guidance to ensure that greenfield and redevelopment sites accommodate growth in a sustainable and efficient way. Structure plans for Major Development Area are prepared by local governments and approved by the regional planning Minister.

The Regulatory Provisions ensure the future urban development potential of Major Development Areas is not compromised.

1.9 SEQ Infrastructure Plan

The *South East Queensland Infrastructure Plan and Program 2006-2026* (the SEQ Infrastructure Plan) was released on 24 May 2006. It outlines the Queensland Government's infrastructure priorities to support the Regional Plan. It establishes priorities for regionally significant infrastructure over the next 10 years, and also considers the longer term planning horizon of the Regional Plan.

1.10 Future review of the Regional Plan

Amendments to the Regional Plan must be made in accordance with the procedures set down in section 2.5A of the IPA.

The Regional Plan will be monitored and reviewed on a regular basis to ensure it continues to provide the most appropriate framework for managing growth and change in SEQ. This process recognises the dynamic nature of development in SEQ and the need to balance certainty with flexibility to deal with changing circumstances.

A formal review of the Regional Plan will be undertaken every five years. The next formal review will be undertaken by 2010.

2. SEQ Regional Plan Amendment 1

Amendment 1 should be read in conjunction with the Regional Plan as it replaces or amends certain sections. The text and maps contained in Amendment 1 modify the Regional Plan, released 30 June 2005. All section titles, page numbers and maps referred to in Amendment 1 relate to the Regional Plan.

Amendment 1 replaces Draft Amendment 1 entirely.

Part B
Growth management

Population growth (page 5)

DELETE

Population growth

SEQ has experienced high and sustained population growth since the 1980s, growing at an average of 55,300 people each year between 1986 and 2004. The estimated resident population of the region in 2004 was 2,666,600 people.

The current population projections for the SEQ region are set out in Table 1 and shown graphically in Figure 1. In order to encompass the range of possible outcomes three series were produced: low, medium and high projections.

The Regional Plan is based on the current medium series projections, which is considered to be the most likely outcome. Population growth in the region will be monitored and kept under review to ensure future planning utilises the most up-to-date information.

INSERT

Population growth

SEQ has experienced high and sustained population growth since the 1980's, growing at an average of 55,300 people each year between 1986 and 2004. The estimated resident population of the region in 2004 was around 2.67 million people.

The Queensland Government regularly monitors and updates population projections for Queensland.

The State's population projections were updated in July 2006. The current population projections for the SEQ region are set out in Table 1 and shown graphically in Figure 1. In order to encompass the range of possible outcomes, three series were produced: low, medium and high projections.

The Regional Plan, released in June 2005, was based on the medium series population projections published in 2003. At this time, the medium and high series projections for 2026 were 3.71 million and 3.97 million respectively.

The 2006 revised population projections (Table 1) indicate a long-term medium growth rate of around 60,000 people per year, which is similar to the 2003 high series projections. Consequently, the revised projections indicate an increase of around 250,000 people above the previous medium series by the year 2026 in SEQ.

Table 1 Population projections (page 5)

DELETE

Existing Table 1 - SEQ region population projections (2001 to 2026)

Table 1 – SEQ region population projections (2001 to 2026)

	Population projection series (million)		
Year	**Low**	**Medium**	**High**
2001	2.46	2.46	2.46
2006	2.75	2.77	2.79
2011	2.97	3.03	3.08
2016	3.17	3.27	3.37
2021	3.33	3.49	3.67
2026	3.46	3.71	3.97
Average increase per year 2001 to 2026	**40,000**	**50,000**	**60,000**

Source: Department of Local Government, Planning, Sport and Recreation, Planning Information and Forecasting Unit, 2003.

INSERT

New Table 1 - SEQ region population projections (2001 to 2026)

Table 1 – SEQ region population projections (2001 to 2026)

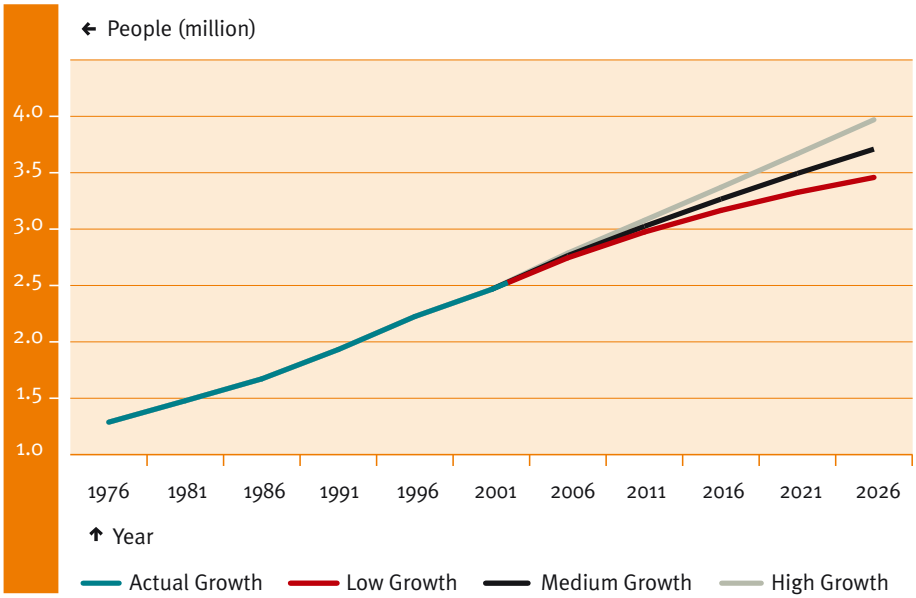
	Population projection series (million)		
Year	**Low**	**Medium**	**High**
2001	2.46	2.46	2.46
2006	2.78	2.78	2.79
2011	3.02	3.07	3.13
2016	3.25	3.38	3.52
2021	3.45	3.68	3.92
2026	3.64	3.96	4.32
Average increase per year 2001 to 2026	**47,000**	**60,000**	**74,000**

Source: Department of Local Government, Planning, Sport and Recreation, Planning Information and Forecasting Unit, 2006.

Figure 1 Population projections (page 5)

DELETE

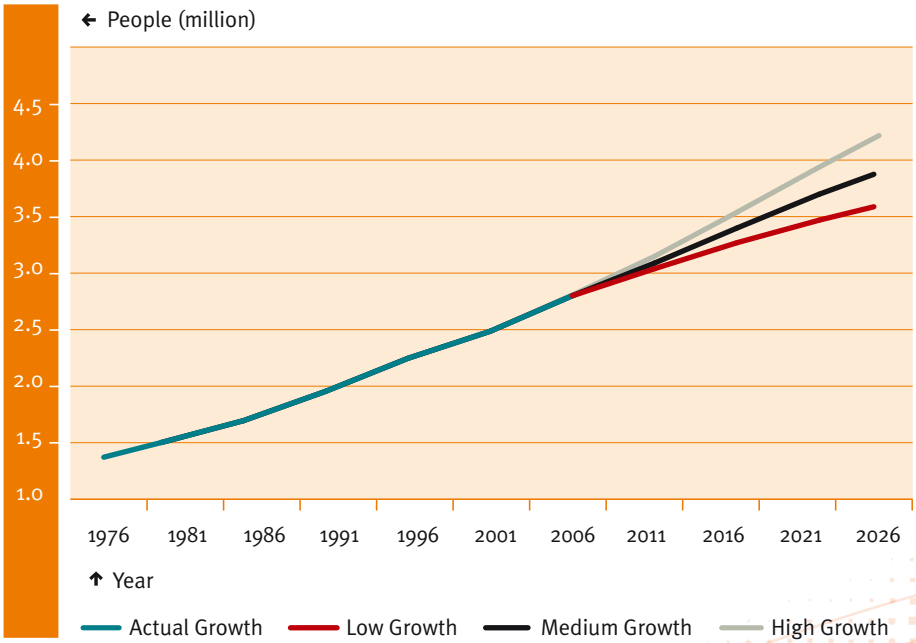
Existing Figure 1- SEQ region actual and projected population growth (1976 to 2026)



Source: Department of Local Government, Planning, Sport and Recreation, Planning Information and Forecasting Unit, 2003.

INSERT

New Figure 1 - SEQ region actual and projected population growth (1976 to 2026)



Source: Department of Local Government, Planning, Sport and Recreation, Planning Information and Forecasting Unit, 2006.

Growth projections (page 8)

DELETE

Growth projections

The Regional Plan is based upon current regional forecasts of population growth, household formation, demand for new dwellings, employment needs and land availability to 2026.

Successful implementation of the Regional Plan will influence decisions about where growth occurs in the region. At this time, the current projections are as accurate as possible and are considered to provide a sound basis for regional planning. Growth will be closely monitored and projections will be adjusted accordingly.

Some submissions on the Draft Regional Plan suggested growth should not be planned for, but rather should be redirected to alternative locations in the State. While this could be encouraged, there is no available or generally acceptable policy arrangement to direct this outcome.

INSERT

Growth projections

The Regional Plan is based upon regional forecasts of population growth, household formation, demand for new dwellings, employment needs and land availability to 2026, as available in January 2005.

Successful implementation of the Regional Plan will influence decisions about where growth occurs in the region. Growth will be closely monitored and projections adjusted accordingly.

The revised state population projections issued in July 2006 indicate population growth in SEQ to 2026 could be 7 per cent higher than the estimates used in preparing the Regional Plan (around 250,000 additional people). The revised medium series population projection for 2026 is 3.96 million people. This additional population growth could also lead to similar percentage increases in housing, employment and infrastructure demand.

Under the Regional Plan, the Queensland Government has established mechanisms to monitor and track housing market activities, including the supply of land and housing. The Local Growth Management Strategies to be prepared by local governments by June 2007 will also provide a more refined estimate of land availability for housing.

The population capacity of the Regional Plan's settlement pattern was estimated to be between 3.8 million and 4.2 million people based on a range of development assumptions. The Investigation Area sites in the Regional Plan also provide significant opportunities for additional residential and economic growth when required. The inclusion of additional Urban Footprint sites in the Mt Lindesay/North Beaudesert Study Area in Amendment 1 will potentially accommodate an additional population of around 80,000 people.

The Regional Plan will be reviewed by 2010. Part of this will include a review of population, housing and employment growth projections to ensure at least 15 years of projected regional land supply is maintained.

Some submissions on the Draft Regional Plan suggested growth should not be planned for, but rather should be redirected to alternative locations in the state. While this could be encouraged, there is no available or generally acceptable policy arrangement to direct this outcome.

Part E
Regional land use pattern

Regional land use categories (page 13)

DELETE

The regional land use categories are:

- Regional Landscape and Rural Production Area;
- Urban Footprint;
- Rural Living Area;
- Investigation Area; and
- Mt Lindesay/North Beaudesert Study Area.

INSERT

The regional land use categories are:

- Regional Landscape and Rural Production Area;
- Urban Footprint;
- Rural Living Area; and
- Investigation Area.

Map 2 SEQ regional land use categories (page 14)

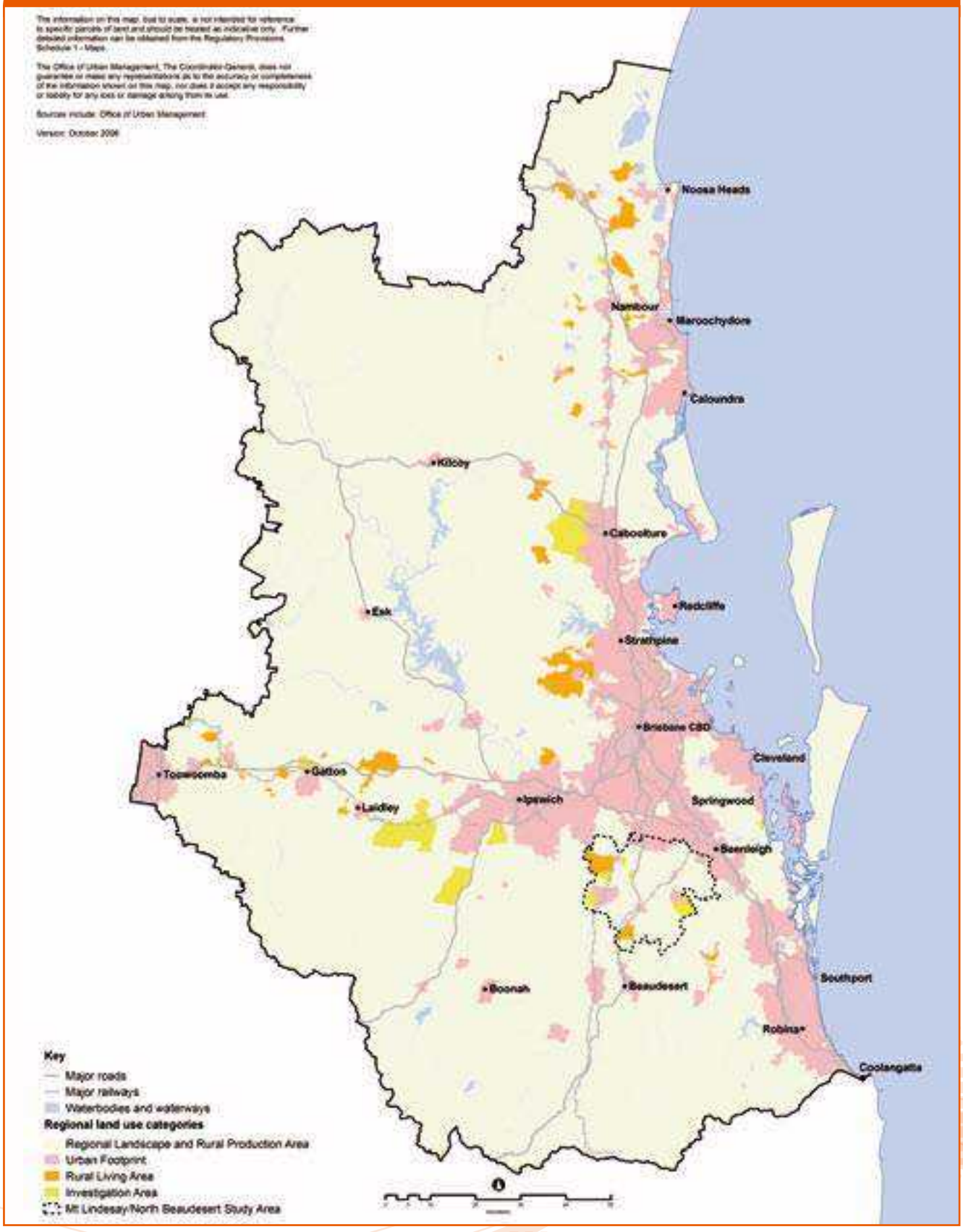
DELETE

Existing Map 2 - SEQ regional land use categories

INSERT

New Map 2 - SEQ regional land use categories

Map 2 – SEQ regional land use categories



Regional Landscape and Rural Production Area (page 15)

Under 'Description'

INSERT

Landowners whose undeveloped land is currently identified for rural residential development in local government planning schemes, and that is located inside the Regional Landscape and Rural Production Area in the Mt Lindesay/North Beaudesert Study Area, have until 1 March 2008 to make application for subdivision, being two years after the introduction of the Draft Regulatory Provisions in Draft Amendment 1.

Rural precincts (page 15)

DELETE

Rural precinct plans can only be developed as a component of a local government planning scheme using guidelines prepared by the Queensland Government.

INSERT

Rural precinct plans can only be developed as a component of a local government planning scheme.

A rural precinct plan must comply with rural precinct guidelines issued by the regional planning Minister.

Prior to a rural precinct being incorporated into a planning scheme, the regional planning Minister must be satisfied that the rural precinct complies with the rural precinct guidelines.

Urban Footprint (page 16)

Under 'Regulations'

DELETE

The Regulatory Provisions do not apply within the Urban Footprint.

INSERT

The Regulatory Provisions apply to certain development applications in areas identified as Major Development Areas under the Regional Plan.

Investigation Area (page 17)

Under 'Regulations'

DELETE

Additional Regulatory Provisions apply for a limited time to the Mt Lindesay/North Beaudesert Study Area. These provisions prevent further subdivision of lands prior to 26 April 2006, except under limited circumstances. This allows studies to be complete prior to considering further development applications in the area.

Summary of Investigation Area sites (page 18)

DELETE

4 Mt Lindesay/North Beaudesert

This area includes land in the northern part of Beaudesert Shire, extending into the Gold Coast and Logan cities. It is largely occupied by fragmented rural residential lots, but also has some large undeveloped landholdings with existing approvals for rural residential development. These large landholdings have the potential to accommodate future master-planned urban communities and local employment opportunities. Major issues to be resolved include identifying the precise areas to be developed, determining the required infrastructure, and the timing of development.

It is intended to resolve the future of the Mt Lindesay/North Beaudesert Investigation Area as a high priority. The Regulatory Provisions prevent subdivision in this area until 26 April 2006. The necessary planning investigations will be complete by this date.

INSERT

10 Greenbank Central

Located east of Teviot Road, Greenbank Central has the potential to accommodate a future urban community with a range of residential, service, transport and employment options. The area also has the potential to be serviced by a north-south transit system and an east-west system linking to Springfield and the Western Corridor. Future planning of Greenbank Central should be based on transit oriented development principles. If suitable, it is anticipated development could commence in the area after 2016.

11(a) New Beith Forest/Round Mountain

Situated on the western side of the interstate rail line, the New Beith Forest/Round Mountain Investigation Area is located between Flagstone and Greenbank Central. Future urban development of the site depends on the availability of a high-quality public transport link to the surrounding urban communities. Future investigations for the area should focus on public transport options, a strategic wildlife/landscape corridor at Round Mountain and integration with the development of the Greater Flagstone area and Greenbank Central. Beaudesert Shire Council's Local Growth Management Strategy will specify timeframes for investigation and possible development of this area. Once the investigation is complete, it is expected land zoned rural residential at the time of this Amendment release will be placed in the Rural Living Area regional land use category if not identified for urban development.

11(b) Greater Flagstone

The Greater Flagstone Investigation Area is intended to provide for the future extension of the Urban Footprint site at Flagstone. Future detailed planning for this area must ensure that important areas of biodiversity, including endangered regional ecosystems, are carefully investigated and protected with adequate buffers. If suitable, development in the area would likely be required after 2026. Beaudesert Shire Council's Local Growth Management Strategy will further specify timeframes for investigation and possible development of this area.

12 Yarrabilba

The Yarrabilba Investigation Area is intended to provide for the future expansion of the Urban Footprint site at Yarrabilba. Detailed planning will be required for the Yarrabilba area to determine land uses and infrastructure requirements for the creation of an ultimate community of between 60,000 and 70,000 people, including a Major Activity Centre and enterprise precinct. The land should be used for urban development, excluding important areas of biodiversity, such as endangered regional ecosystems, strategic wildlife/landscape corridors and adequate buffers. Development of this area would likely be required after 2026. However, its development is dependent upon the capacity of Beaudesert Shire Council and state agencies to provide essential services and infrastructure. Beaudesert Shire Council's Local Growth Management Strategy will further specify timeframes for investigation and possible development of this area.

13 North Maclean

The North Maclean Investigation Area is expected to accommodate an enterprise precinct, providing employment and services for the communities of Greenbank Central and the surrounding semi-rural areas. It is likely this precinct will be developed for office, commercial, warehouse, retail services and low-impact industrial uses. Further detailed planning for North Maclean will ensure existing areas of significant biodiversity and endangered regional biodiversity are incorporated into open space areas and that well-planned buffer areas are provided for the surrounding rural residential properties. Beaudesert Shire Council's Local Growth Management Strategy will further specify timeframes for investigation and possible development of this area.

14 Gatton North

Adjacent to the Gatton Urban Footprint, the Gatton North Investigation Area has the potential to develop as a future industrial, employment and enterprise precinct. Potential development of the area would benefit from proximity to the Warrego Highway and inter-relationships with other urban development within the Gatton township. Gatton Shire Council's Local Growth Management Strategy will further specify timeframes for investigation and possible development of this area.

15 Plainland

The Plainland Investigation Area contains existing retail and educational facilities, as well as approvals for further urban development. Potential development of the area would benefit from proximity to the Warrego Highway. Future investigations for the area should focus on integrating existing development in the area into a retail, service and commercial node, designed to complement the Laidley township. Laidley Shire Council's Local Growth Management Strategy will further specify timeframes for investigation and possible development of this area.

8 Rosewood and 9 Warrill View

Two areas identified for investigation in the Draft Regional Plan were to the west and south-west, adjacent to Rosewood in the City of Ipswich and adjacent to the Cunningham Highway in north Boonah Shire. Having regard to the availability of land in Ipswich and the Mt Lindesay/North Beaudesert Study Area, the need to develop these sites is considered unlikely before 2026. However, Boonah Shire and Ipswich City Council's Local Growth Management Strategy will further specify timeframes for investigation and possible development of these areas.

Map 3 - Investigation Area sites (page 19)

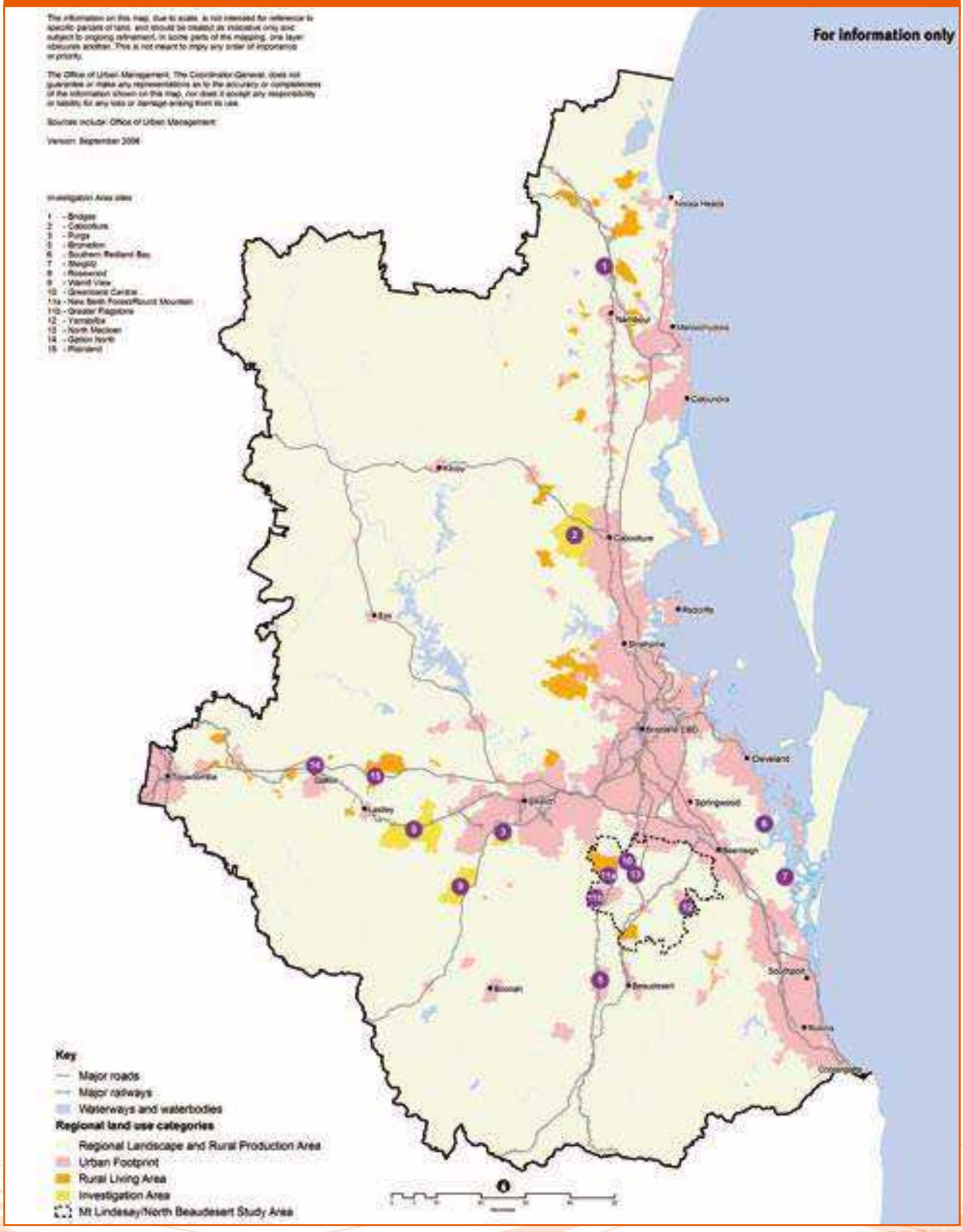
DELETE

Existing Map 3 - Investigation Area sites

INSERT

New Map 3 - Investigation Area sites

Map 3 – Investigation Area sites



New section: Summary of Mt Lindesay/North Beaudesert Study Area Urban Footprint sites (page 20)

INSERT

Summary of the Mt Lindesay/North Beaudesert Study Area Urban Footprint sites

The regional land use pattern for the Mt Lindesay/North Beaudesert Study Area (Map 18) sets out the preferred settlement pattern through to 2026. Land included in the Urban Footprint will be sufficient to cater for expected urban growth to 2026, while not compromising the intent of the Regional Plan. Inclusion of land in the Urban Footprint does not imply that all land can be developed for urban purposes as it may include land with a range of regional and local development constraints, including environmental constraints.

Further planning is required for each Urban Footprint site. It is important to note that State Infrastructure Agreements may apply to designated Major Development Areas.

The development intent for each Urban Footprint site is as follows:

1 Greenbank Central

The Urban Footprint site at Greenbank Central is located north of Pub Lane. It is included in the Urban Footprint to ensure that the final stages of the Teviot Downs estate are developed as an urban community, supporting retail and commercial activity to the east of the interstate railway. Land located on the corner of Pub Lane and Teviot Road is expected to accommodate an activity centre where transit oriented development principles should be applied. A structure plan for this area of Greenbank Central should provide for urban scale development, rather than rural residential development. Beaudesert Shire Council's Local Growth Management Strategy will specify appropriate timing for development.

2 Flagstone

The Urban Footprint site for Flagstone includes land in the existing urban area of Flagstone, the rural residential area east of the interstate railway and land west of the railway. The area immediately west of the railway is appropriate for a Major Activity Centre and enterprise precinct. Further planning for this area should provide for urban scale development, but must also ensure important areas of biodiversity, including endangered regional ecosystems and strategic wildlife/landscape corridors, are carefully investigated and protected with adequate buffers. Although much of the area west of the rail line will not be required until post-2016, it has been included as Urban Footprint to ensure the structure planning incorporates a Major Activity Centre, enterprise precinct and integrated transport solutions. New development must contribute to the creation of a functional community with a full range of services, employment and transport options. Timing of land release will be dependent upon the capacity of Beaudesert Shire Council and state agencies to provide essential services and infrastructure. Beaudesert Shire Council's Local Growth Management Strategy will provide guidance on appropriate timing for development.

3 Jimboomba

The Urban Footprint site for Jimboomba acknowledges growth of the town is restricted by flood-affected land to the west and north. However, it also enables the town to develop in a way that reinforces its role as a Major Rural Activity Centre, servicing the surrounding semi-rural community. Beaudesert Shire Council's Local Growth Management Strategy will specify appropriate timing for development.

4 Yarrabilba

Located in close proximity to the Gold Coast, Yarrabilba has the potential to accommodate future urban growth when greenfield allotments in the Gold Coast corridor begin to be exhausted around 2017. However, this is conditional on the provision of transport links to the east and other urban infrastructure and services. Further planning for this area should provide for urban scale development, with any new development contributing to the creation of a functional community with a full range of services, employment and transport options. In particular, planning must accommodate a future Major Activity Centre and enterprise precinct. Development is not intended to occur before 2016, however it could commence before 2016, provided the detailed structure planning has been undertaken and a State Infrastructure Agreement is in place. Beaudesert Shire Council's Local Growth Management Strategy will specify appropriate timing for development.

5 Logan Village

Inclusion of the Logan Village in the Urban Footprint enables it to maintain its current role and character. Beaudesert Shire Council's Local Growth Management Strategy will specify concepts for future development in this area.

6 Bahrs Scrub

The original Urban Footprint surrounding Beenleigh has been extended to include an area of Bahrs Scrub. This area's close proximity to Beenleigh will assist ongoing development of this Principal Activity Centre. It should be noted that not all lands in this area will be suitable for urban activity. Future planning for Bahrs Scrub must address the issues of through-traffic, water supply, wastewater treatment and the connectivity of biodiversity areas and wildlife corridors. Gold Coast City Council's Local Growth Management Strategy will specify appropriate timing for development.

7 Park Ridge/Boronia Heights/Logan Reserve

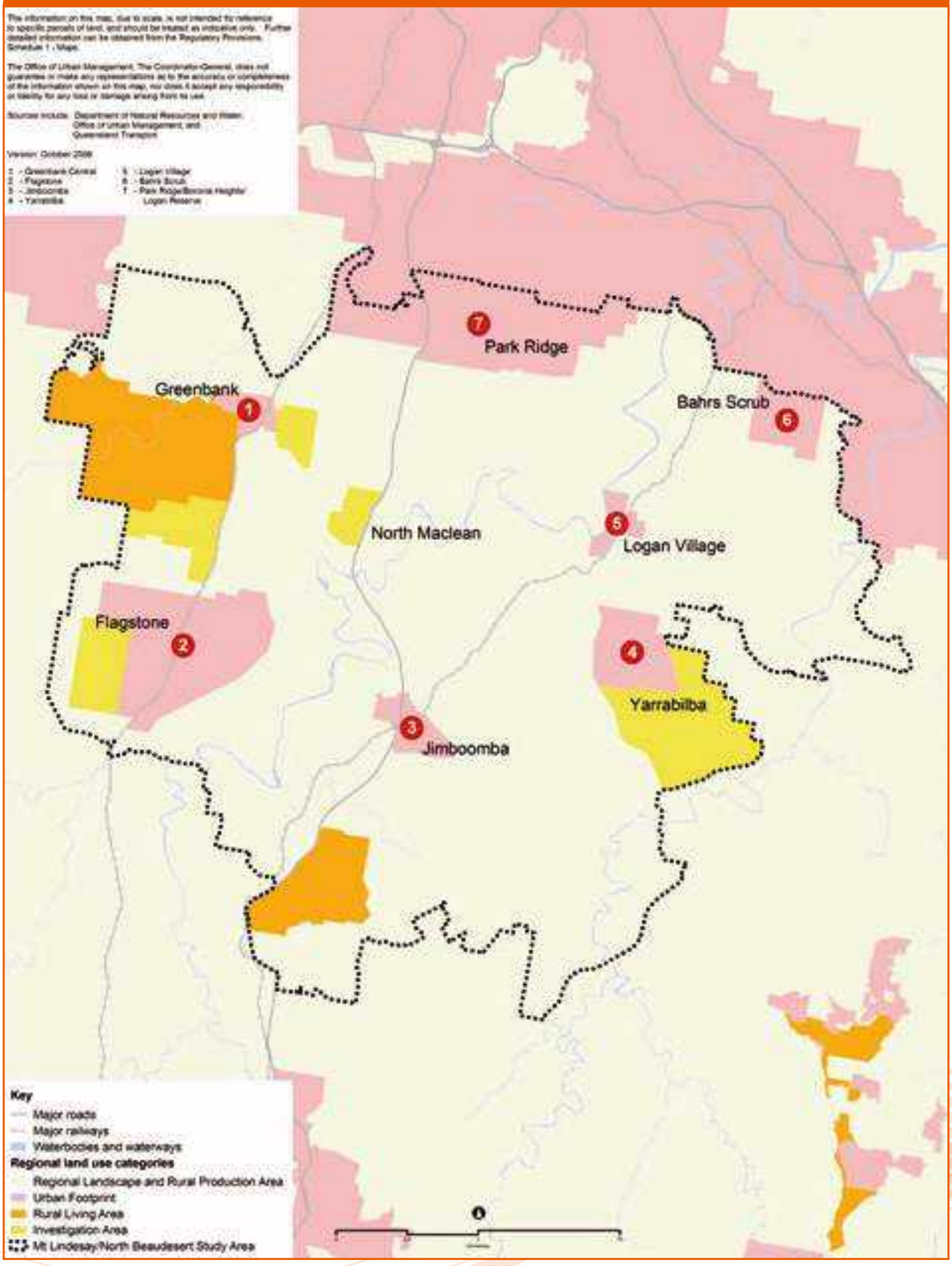
The Urban Footprint site in the Park Ridge/Boronia Heights/Logan Reserve area is an extension south of the original Urban Footprint for Logan City. Park Ridge is expected to develop as an integrated urban community and enterprise precinct, providing employment opportunities to the surrounding community. It is expected the Park Ridge enterprise precinct will focus on knowledge-based industries and contain commercial offices, service industries, business parks, research parks and low-impact industrial uses. Future planning for Park Ridge will ensure, where possible, existing areas of significant biodiversity and endangered regional ecosystem are incorporated into open space corridors - buffering the enterprise precinct from urban communities and existing rural residential properties to the south. The structure plan for Park Ridge/Boronia Heights/Logan Reserve should provide for the consolidation of existing rural residential properties to create well-planned, functional urban communities and enterprise precincts. Logan City Council's Local Growth Management Strategy will specify appropriate timing for development.

New map: Map 18 - Preferred development option to 2026 - Mt Lindesay/North Beaudesert Study Area (page 20)

INSERT

New Map 18 - Preferred development option to 2026 - Mt Lindesay/North Beaudesert Study Area

Map 18 – Preferred development option to 2026 - Mt Lindesay/North Beaudesert Study Area



Part F
Regional policies

Section 2: Natural environment
2.2 Koala conservation Map 5 - Koala management areas (page 31)

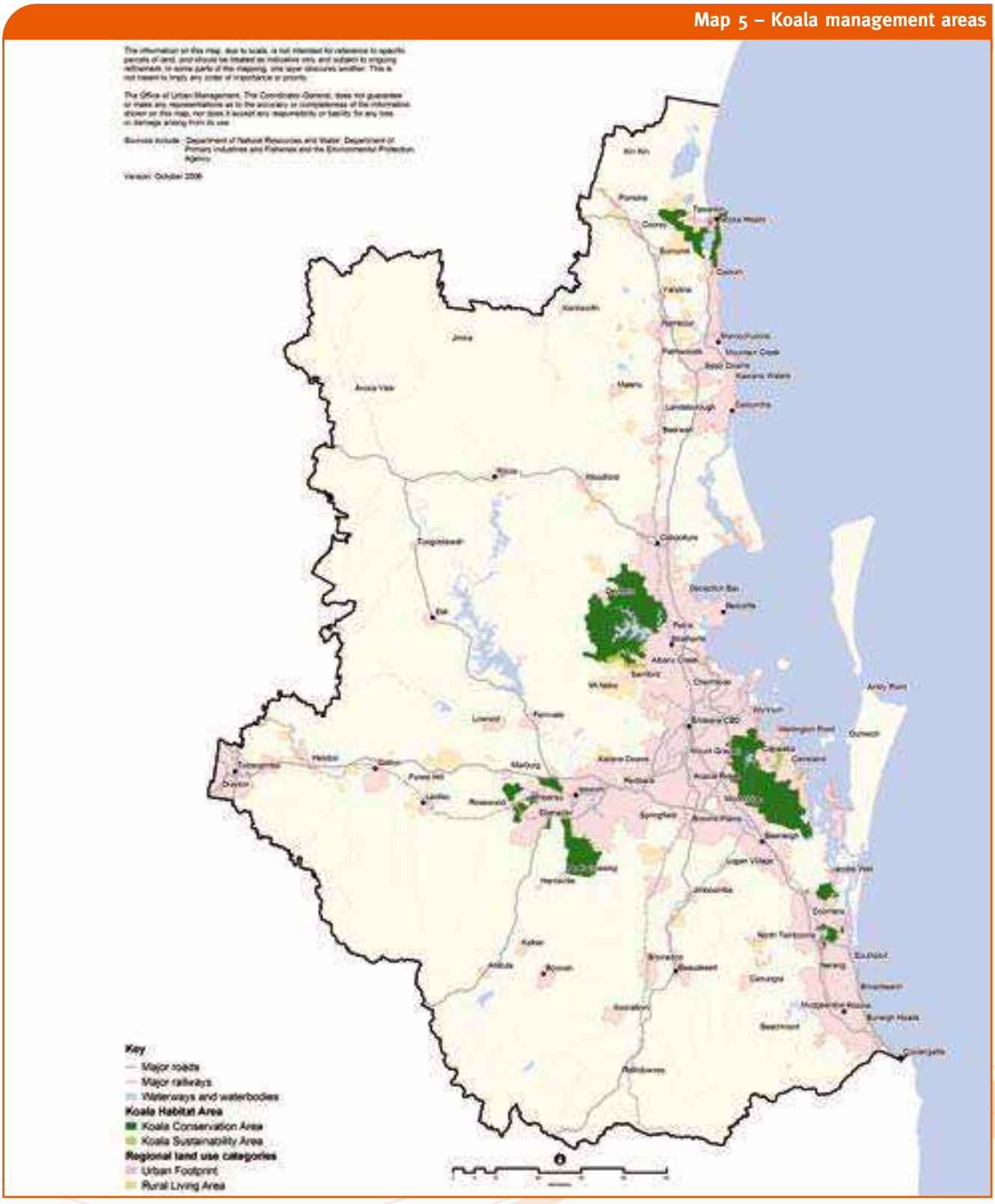
DELETE

Existing Map 5 - Koala management areas

INSERT

New Map 5 - Koala management areas

Map 5 – Koala management areas



Section 8: Urban development
8.1 Urban structure (page 63)

DELETE

Beaudesert

Beaudesert Shire comprises two distinct parts. The southern part extends from just north of the Beaudesert township to the New South Wales border and is predominantly rural in nature. It contains important environmental areas, including the impressive scenic rim along the state border. The Regional Plan protects these rural and natural values while allowing for growth in rural towns and villages. East of the Beaudesert township is a large industrial area at Bromelton, which is expected to be developed during the life of the Regional Plan to take advantage of its location adjacent to the standard gauge interstate rail line. The possible expansion of Bromelton is identified for further investigation.

The northern part of Beaudesert Shire is characterised by extensive areas of scattered low-density rural residential development with a relatively low level of employment opportunities and services. This area comprises the bulk of the Mt Lindesay/North Beaudesert Study Area, which is under detailed investigation to determine the feasibility, extent and timing of potential future urban development to cater for the longer-term needs of the region. It provides potential to relieve pressure on the Gold Coast as suitable land for development on the coast is progressively exhausted.

INSERT

Beaudesert

Beaudesert Shire comprises two distinct parts. The southern part extends from just north of the Beaudesert township to the New South Wales border and is predominantly rural in nature. It contains important environmental areas, including the impressive scenic rim along the state border. The Regional Plan protects these rural and natural values while allowing for growth in rural towns and villages. West of the Beaudesert township is a large industrial area at Bromelton, which is expected to be developed during the life of the Regional Plan to take advantage of its location adjacent to the standard gauge interstate rail line. The possible expansion of Bromelton is identified for further investigation.

The northern part of Beaudesert Shire is characterised by extensive areas of scattered, low-density rural residential development with a relatively low level of employment opportunities. Future development of this area must address the problems caused by extensive rural residential subdivision and the issues of isolation and lack of services. The Regional Plan provides for further development of areas within the northern part of Beaudesert Shire with the identification of two new Urban Footprint sites at Flagstone and Yarrabilba. They will contribute to the creation of functional communities containing a full range of services, employment and transport options - supported by a network of regional open space and recreational facilities.

Section 8: Urban development.
8.2 Urban form - Table 6 - Dwellings by local government area (2004 to 2026) (page 66)

DELETE

Existing Table 6 - Dwellings by local government area (2004 to 2026)

Table 6 Dwellings by local government area (2004 to 2026)

Local government area	2001	2004-2016		2016-2026		2004-2026	
	Existing dwellings	Total new dwellings	Infill dwellings	Total new dwellings	Infill dwellings	Total new dwellings	Infill dwellings
Beaudesert Shire	8,800	10,000	1,000	10,000	1,000	20,000	2,000
Boonah Shire	3,400	400	NA	400	NA	800	NA
Brisbane City	359,000	82,000	59,000	63,000	56,000	145,000	115,000
Caboolture Shire	41,900	15,000	3,000	11,400	3,000	26,400	6,000
Caloundra City	32,800	17,500	4,000	17,250	4,200	34,750	8,200
Esk Shire	6,000	900	NA	1,000	NA	1,900	NA
Gatton Shire	5,700	1,300	NA	1,100	NA	2,400	NA
Gold Coast City	180,900	74,000	35,000	62,500	30,000	136,500	65,000
Ipswich City	45,600	42,200	6,000	35,000	7,800	77,200	13,800
Kilcoy Shire	1,400	200	NA	250	NA	450	NA
Laidley Shire	5,000	2,000	NA	2,700	NA	4,700	NA
Logan City	58,200	7,100	1,500	8,500	3,000	15,600	4,500
Maroochy Shire	53,100	30,000	7,000	11,000	6,700	41,000	13,700
Noosa Shire	21,200	3,000	1,500	1,200	1,000	4,200	2,500
Pine Rivers Shire	41,400	16,500	4,000	12,700	4,100	29,200	8,100
Redcliffe City	21,500	4,400	2,500	2,500	2,100	6,900	4,600
Redland Shire	43,400	12,000	4,000	5,500	4,100	17,500	8,100
Toowoomba City	34,300	6,500	1,500	4,000	2,000	10,500	3,500

Notes: NA = not applicable
The figures shown for Beaudesert Shire are notional and will be revised when the planning issues in the Mt Lindesay/North Beaudesert Study Area are resolved.

INSERT

New Table 6 - Dwellings data by local government area (2004 to 2026)

Table 6 Dwellings data by local government area (2004 to 2026)

Local government area	2001	2004-2016		2016-2026		2004-2026	
	Existing dwellings	Total new dwellings	Infill dwellings	Total new dwellings	Infill dwellings	Total new dwellings	Infill dwellings
Beaudesert Shire	8,800	10,000	1,000	14,000	1,000	24,000	2,000
Boonah Shire	3,400	400	NA	400	NA	800	NA
Brisbane City	359,000	82,000	59,000	63,000	56,000	145,000	115,000
Caboolture Shire	41,900	15,000	3,000	11,400	3,000	26,400	6,000
Caloundra City	32,800	17,500	4,000	17,250	4,200	34,750	8,200
Esk Shire	6,000	900	NA	1,000	NA	1,900	NA
Gatton Shire	5,700	1,300	NA	1,100	NA	2,400	NA
Gold Coast City	180,900	74,000	35,000	62,500	30,000	136,500	65,000
Ipswich City	45,600	42,200	6,000	35,000	7,800	77,200	13,800
Kilcoy Shire	1,400	200	NA	250	NA	450	NA
Laidley Shire	5,000	2,000	NA	2,700	NA	4,700	NA
Logan City	58,200	7,500	1,500	9,000	3,000	16,500	4,500
Maroochy Shire	53,100	30,000	7,000	11,000	6,700	41,000	13,700
Noosa Shire	21,200	3,000	1,500	1,200	1,000	4,200	2,500
Pine Rivers Shire	41,400	16,500	4,000	12,700	4,100	29,200	8,100
Redcliffe City	21,500	4,400	2,500	2,500	2,100	6,900	4,600
Redland Shire	43,400	12,000	4,000	5,500	4,100	17,500	8,100
Toowoomba City	34,300	6,500	1,500	4,000	2,000	10,500	3,500

Notes: NA = not applicable
The dwelling figures are based on the medium-series population projections for SEQ, as available in January 2005.

Section 8: Urban development
8.6 Regional activity centres - Regional activity centres network (page 72)

Under 'Principal Activity Centres'

DELETE

The region's Principal Activity Centres serve catchments of sub-regional significance and accommodate key concentrations of employment.

INSERT

The region's Principal Activity Centres serve catchments of regional significance and accommodate key concentrations of employment.

Under 'Major Activity Centres'

DELETE

These centres complement the Principal Activity Centres, serving catchments of regional significance and accommodating key concentrations of employment.

INSERT

These centres complement the Principal Activity Centres, serving catchments of sub-regional significance and accommodating key concentrations of employment.

Section 8: Urban development
8.6 Regional activity centres Map 8 - Regional activity centres network - SEQ region (page 73)

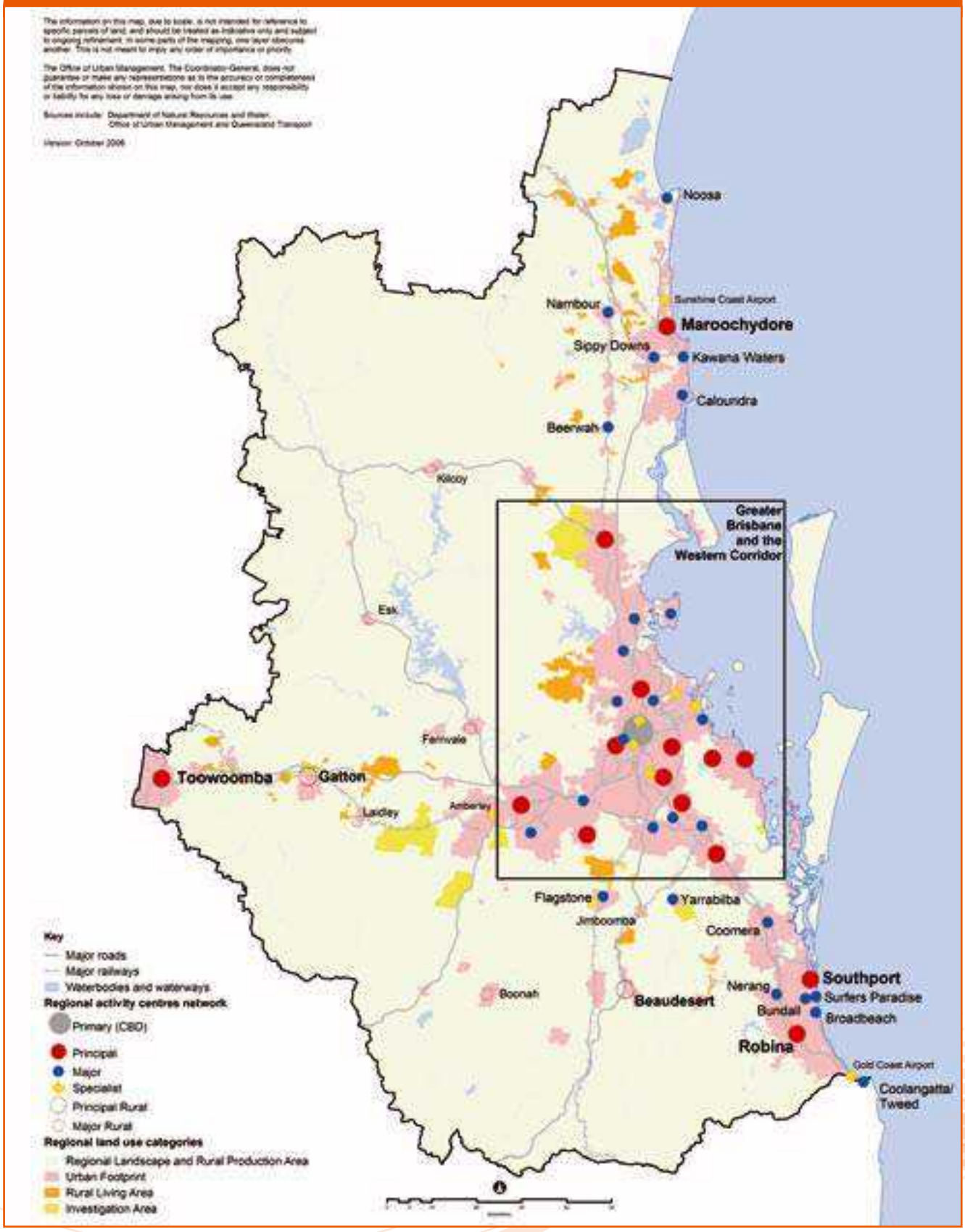
DELETE

Existing Map 8 - Regional activity centres network - SEQ region

INSERT

New Map 8 - Regional activity centres network - SEQ region

Map 8 – Regional activity centres network - SEQ region



Section 8: Urban development

8.6 Regional activity centres Map 9 - Regional activity centres network - Greater Brisbane and the Corridor Western Corridor (page 74)

DELETE

Existing Map 9 -

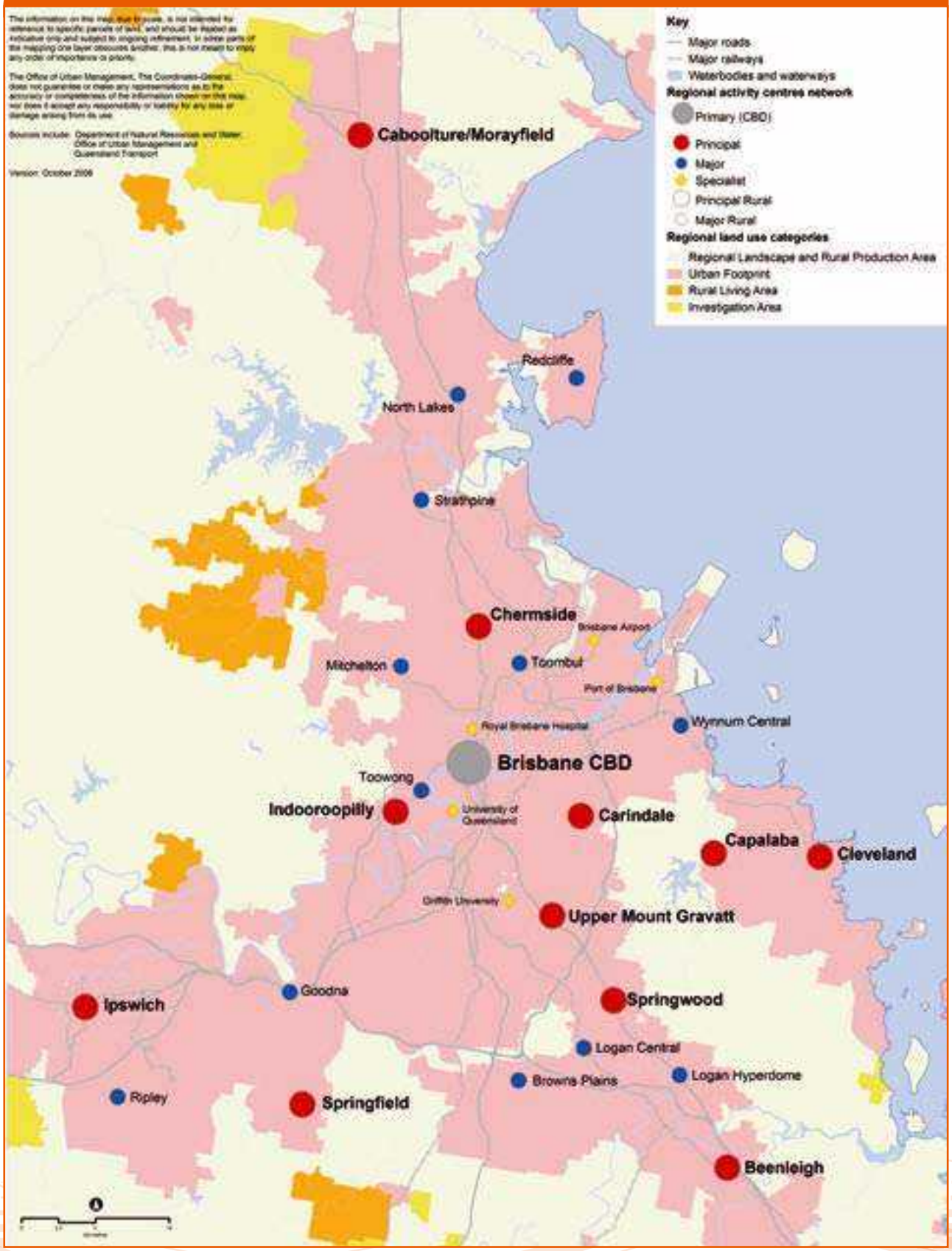
Regional activity centres network - Greater Brisbane and the Western Corridor

INSERT

New Map 9 -

Regional activity centres network - Greater Brisbane and the Western Corridor

Map 9 – Regional activity centres network - Greater Brisbane and the Western Corridor



Section 8: Urban development
8.9 Structure plans (page 79)

DELETE

Policies

1.1.1 Prepare and adopt structure plans for all new major development areas of 100 hectares or greater prior to development.

1.1.2 Prepare detailed master plans for significant new urban development and redevelopment areas or precincts of less than 100 hectares.

1.1.3 Complete State Infrastructure Agreements as an integral component of a structure plan or master plan, where appropriate.

INSERT

Policies

1.1.1 Prepare and adopt structure plans for all Major Development Areas prior to development.

1.1.2 Undertake detailed master planning for significant new urban development and redevelopment areas or precincts.

1.1.3 Complete State Infrastructure Agreements in conjunction with a structure plan, where appropriate.

Section 8: Urban development
8.9 Structure plans (page 79)

Under 'Notes: Structure plans and master plans'

DELETE

Structure plans and master plans

Land suitable for urban development is a finite resource. To ensure that greenfield and redevelopment sites contribute to sustainable growth and are developed efficiently, all major new development areas are required to have an approved structure plan or master plan prior to development, setting out the overall intent for development, together with a State Infrastructure Agreement.

Structure plans must be prepared and adopted for all major new urban development areas over 100 hectares, which may include more than one development site. They must respect all significant environmental constraints and maintain open space and create landscaped buffers to major development corridors. Preparation of structure plans for major new urban areas are to be managed by the local authority, in partnership with the principal landowners/stakeholders and must be approved by the regional planning Minister. Guidelines will be prepared to assist the development of structure plans.

Detailed master plans for individual precincts or smaller development sites should be prepared as part of the normal planning and development approval process. These master plans detail the use, form and urban design of each area at a local or site-specific level.

INSERT

Structure plans

Land suitable for urban development is a finite resource. To ensure greenfield and redevelopment sites accommodate growth in a sustainable and efficient way, detailed planning for Major Development Areas (in the form of a structure plan) needs to be undertaken. A State Infrastructure Agreement may also be required.

A Major Development Area may be identified in a local government planning scheme, Local Growth Management Strategy or by the regional planning Minister. Local governments prepare structure plans in consultation with landowners, the community and other stakeholders. They must be prepared in accordance with the guidelines issued by the regional planning Minister and approved by the regional planning Minister.

The Regional Plan and local government planning scheme for a Major Development Area will incorporate relevant components of the structure plan.

Master planning for particular purposes or precincts can also be undertaken as part of the normal planning scheme amendment and development approval processes. Use, form and urban design of each area at a local or site-specific level should also be addressed.

The Regulatory Provisions ensure the future urban development potential of Major Development Areas is not compromised.

Section 9: Economic development
9.4 Employment and economic activity areas Map 10 - Economic activity - SEQ region (page 88)

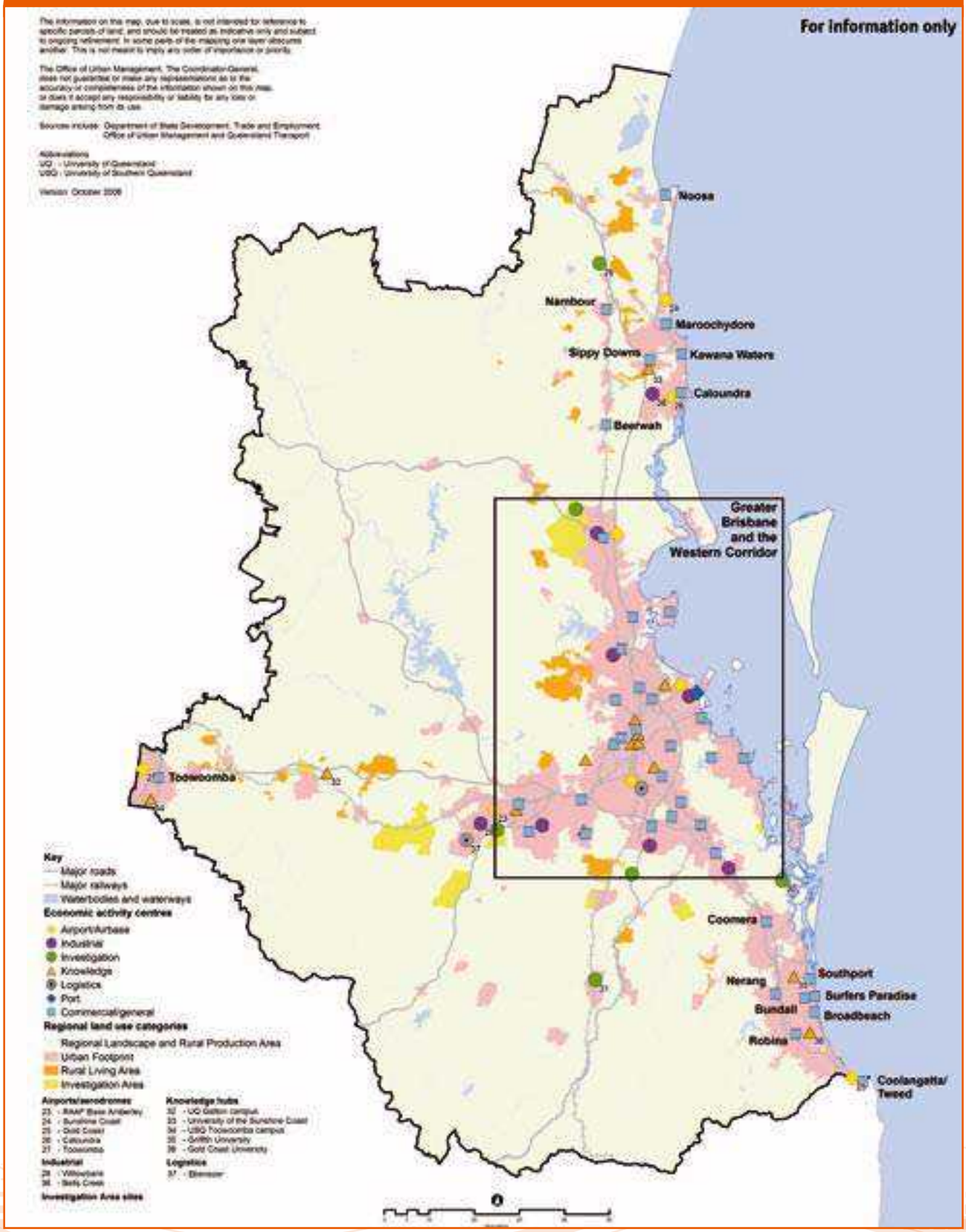
DELETE

Existing Map 10 - Economic activity - SEQ region

INSERT

New Map 10 - Economic activity - SEQ region

Map 10 – Economic activity - SEQ region



Section 9: Economic development
9.4 Employment and economic activity areas Map 11 - Economic activity - Greater Brisbane and the Western Corridor (page 89)

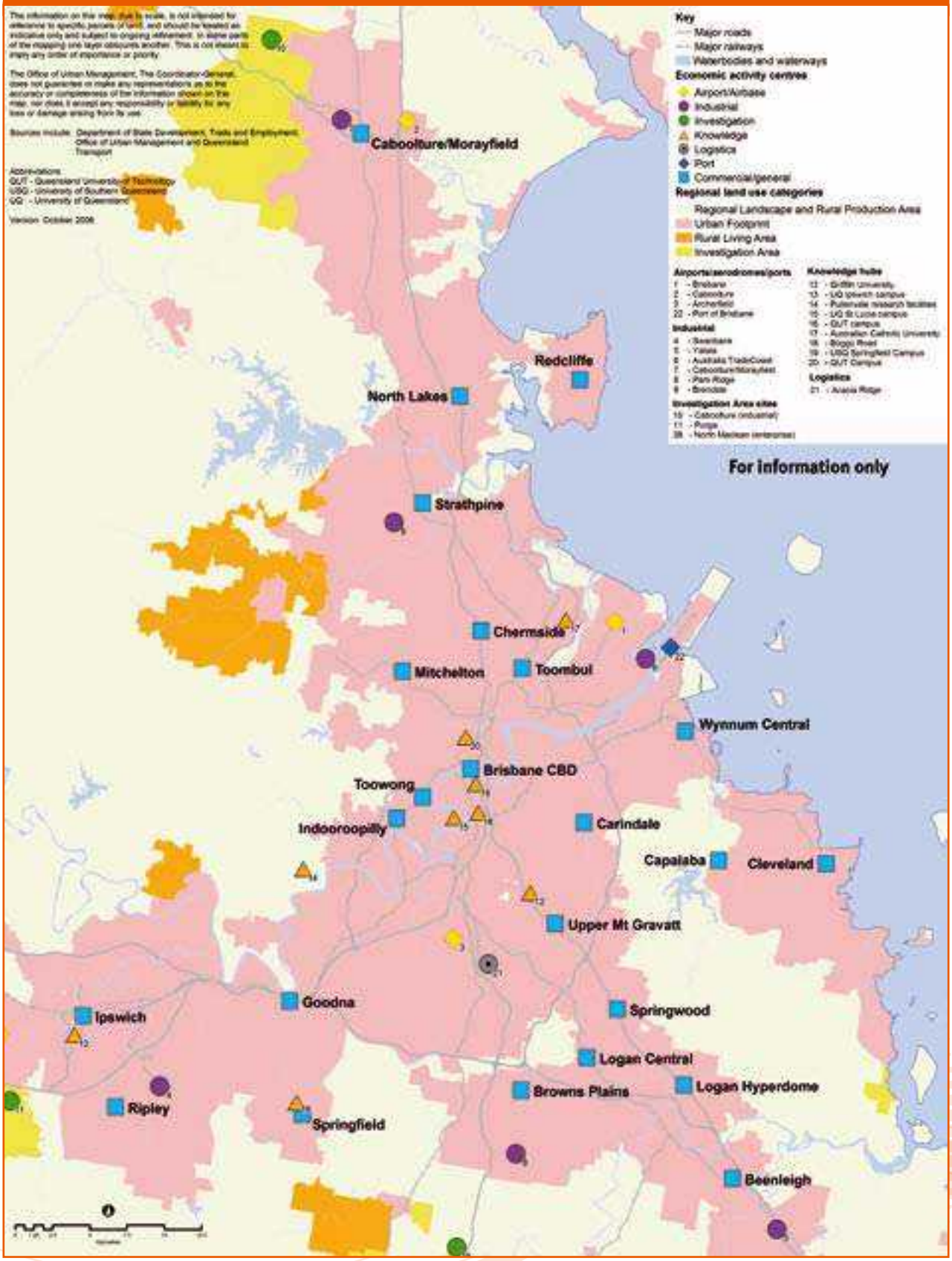
DELETE

Existing Map 11 -
Economic activity - Greater Brisbane and the Western Corridor

INSERT

New Map 11 -
Economic activity - Greater Brisbane and the Western Corridor

Map 11 – Economic activity - Greater Brisbane and the Western Corridor



Section 12: Integrated transport
12.5 Efficient freight services Map 13 - Freight routes - SEQ region (page 112)

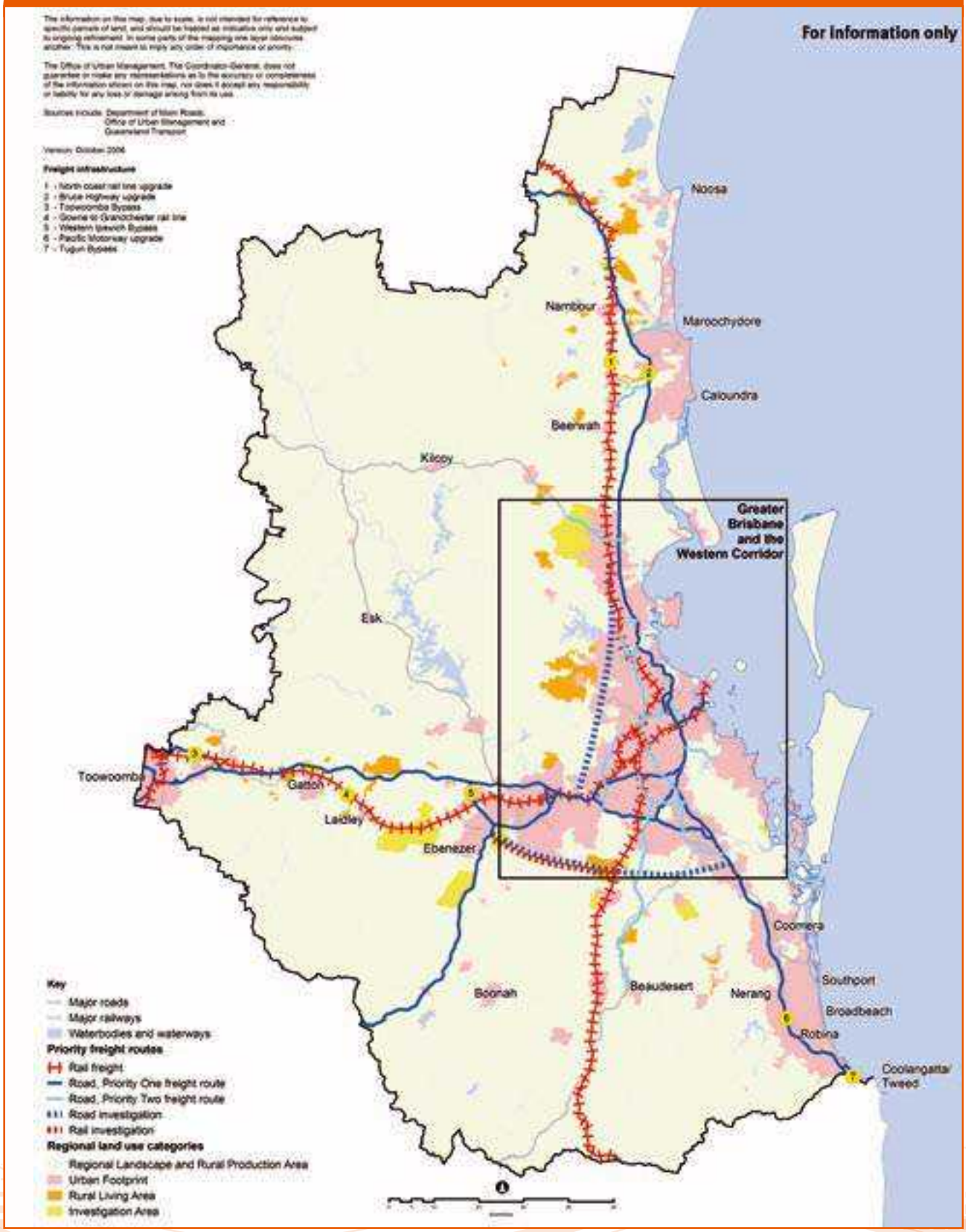
DELETE

Existing Map 13 - Freight routes - SEQ region

INSERT

New Map 13 - Freight routes - SEQ region

Map 13 – Freight routes - SEQ region



Section 12: Integrated transport
12.5 Efficient freight services Map 14 - Freight routes - Greater Brisbane and the Western Corridor (page 113)

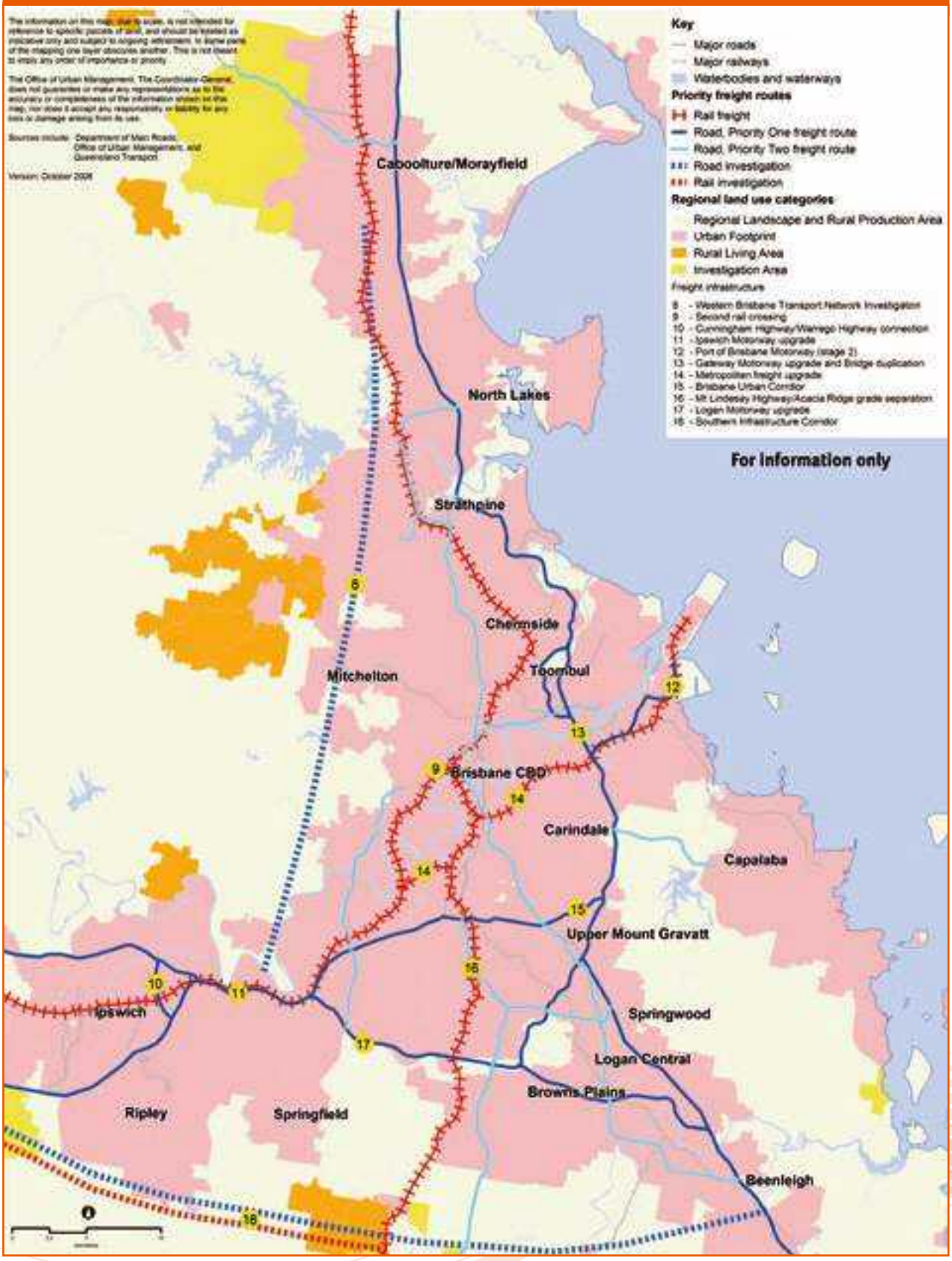
DELETE

Existing Map 14 -
Freight routes - Greater Brisbane and the Western Corridor

INSERT

Existing Map 14 -
Freight routes - Greater Brisbane and the Western Corridor

Map 14 – Freight routes - Greater Brisbane and the Western Corridor



Section 12: Integrated transport
12.7 Sub-regional transport systems Map 15 - Transport infrastructure - SEQ region (page 116)

DELETE

Existing Map 15 -Transport infrastructure - SEQ region

INSERT

New Map 15 - Transport infrastructure - SEQ region

Map 15 – Transport infrastructure - SEQ region

Section 12: Integrated transport
12.7 Sub-regional transport systems Map 16 - Transport infrastructure - Greater Brisbane and the Western Corridor (page 117)

DELETE

Existing Map 16 -
Transport infrastructure - Greater Brisbane and the Western Corridor

INSERT

Existing Map 16 -
Transport infrastructure - Greater Brisbane and the Western Corridor

Map 16 – Transport infrastructure - Greater Brisbane and the Western Corridor

Section 12: Integrated transport
12.7 Sub-regional transport systems Map 17 - Transport infrastructure - Sunshine and Gold Coasts (page 119)

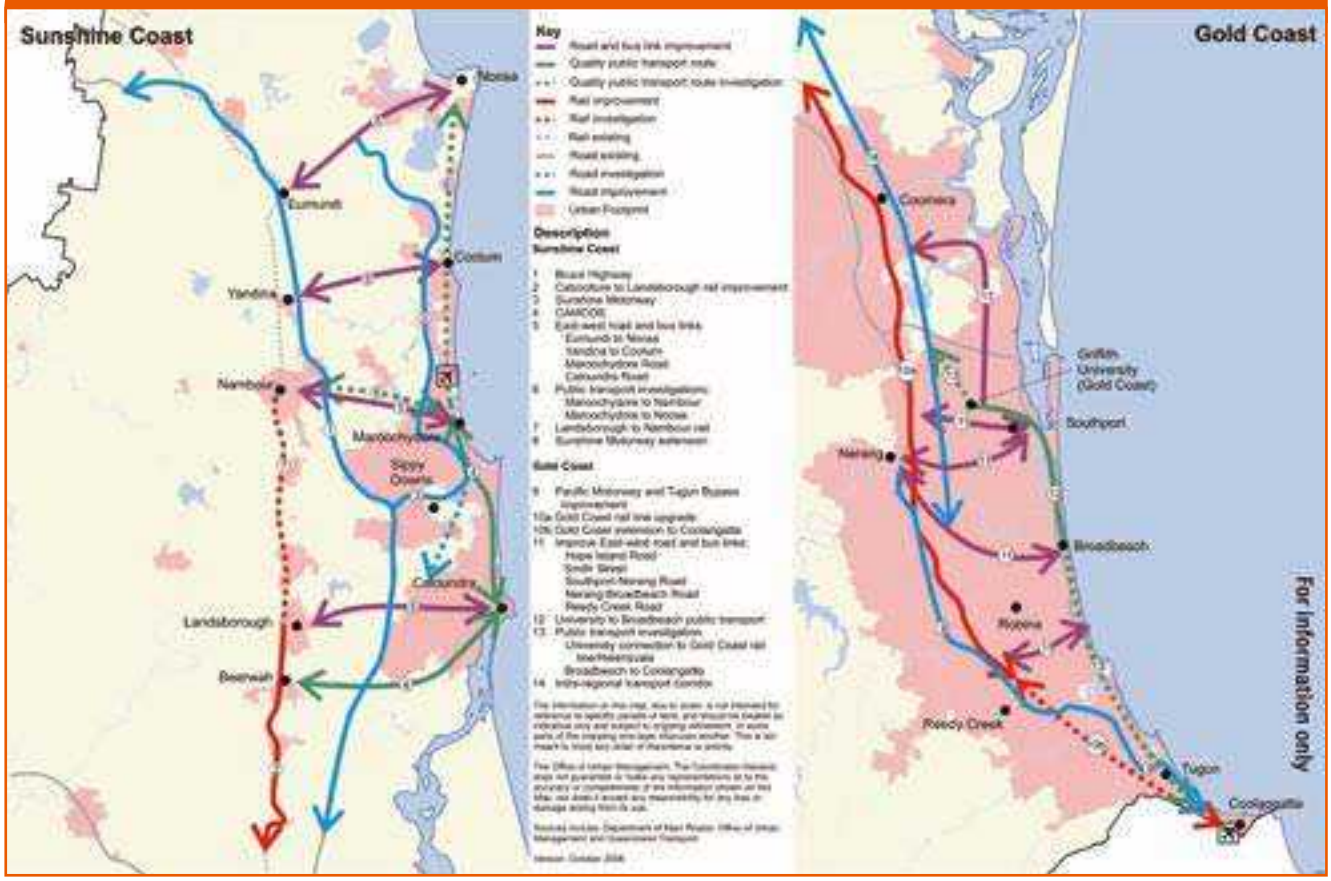
DELETE

Existing Map 17 - Transport infrastructure - Sunshine and Gold Coasts

INSERT

New Map 17 - Transport infrastructure - Sunshine and Gold Coasts

Map 17 – Transport infrastructure - Sunshine and Gold Coasts



Glossary (page 133)

DELETE

Major new urban areas: Greenfield sites or contiguous areas of over 100 hectares available for urban development. Can be in single or multiple ownership.

INSERT

Biodiversity: Biological diversity - the natural diversity of wildlife together with the environmental conditions necessary for their survival.

Enterprise precinct: An area which includes a mix of employment types, including commercial, industrial and educational purposes.

Major Development Area: As defined in the *Integrated Planning Act 1997*.

State Infrastructure Agreement: An agreement with the Queensland Government for the delivery of state infrastructure.

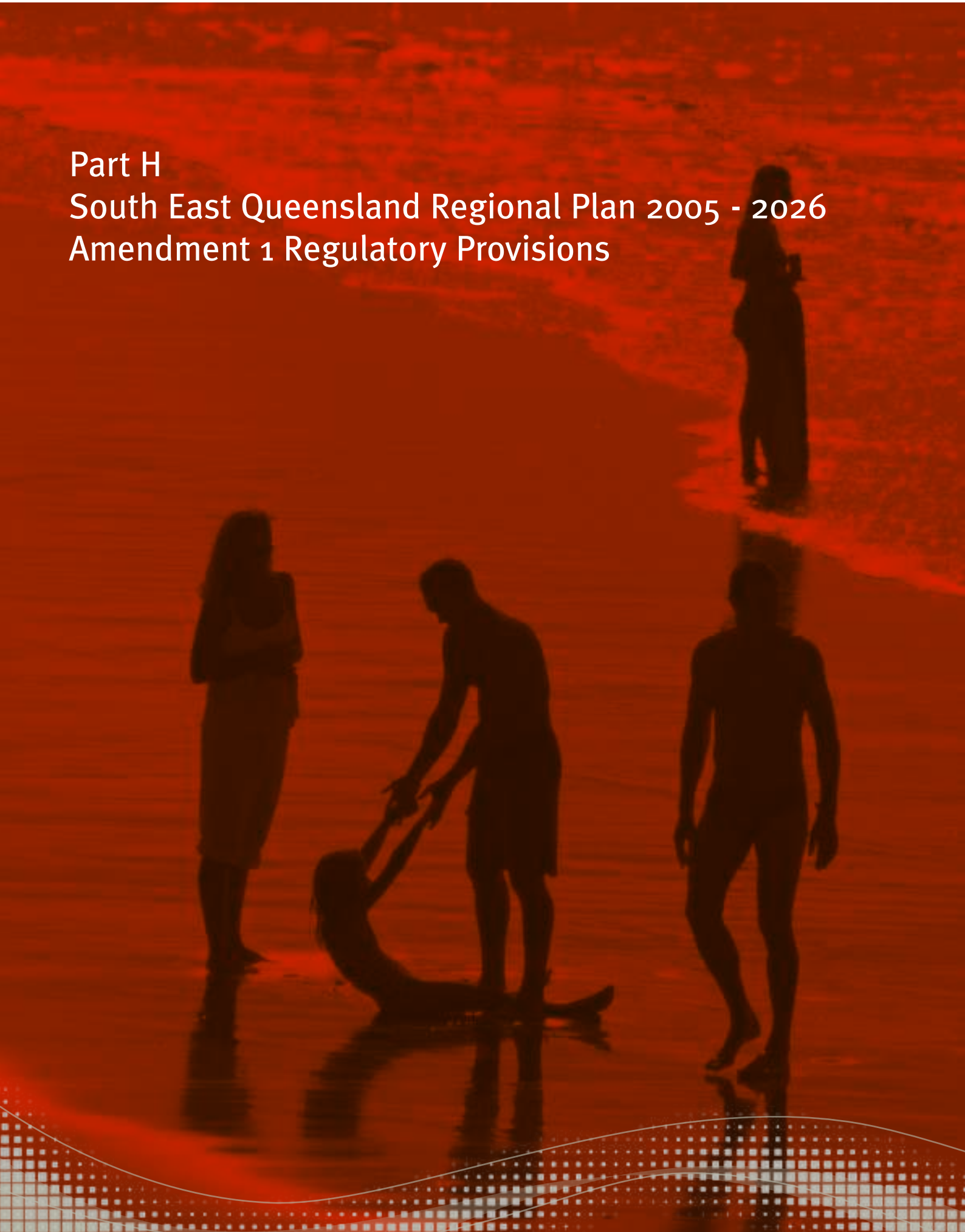
Structure plan: As defined in the *Integrated Planning Act 1997*.

Abbreviations (page 135)

INSERT

MLNBSA - Mt Lindesay/North Beaudesert Study Area

Part H
South East Queensland Regional Plan 2005 - 2026 Amendment 1 Regulatory Provisions



3. SEQ Regional Plan Amendment 1 - Regulatory Provisions

Part H
Regulatory Provisions (page 125)

The following Regulatory Provisions fully replace the Regulatory Provisions of the Regional Plan.

DELETE

Part H Regulatory Provisions

INSERT

Part H
South East Queensland Regional Plan Amendment 1 Regulatory Provisions

Division 1 Preliminary

1.1 Short title

These regulatory provisions may be cited as the SEQ Regional Plan 2005 – 2026 Amendment 1 Regulatory Provisions.

1.2 Regulatory provisions apply in addition to planning scheme

These regulatory provisions apply in addition to any relevant matters applying under a planning scheme for assessing and deciding a development application.

1.3 Definitions

Unless otherwise defined by the dictionary in schedule 2 of these regulatory provisions the *Integrated Planning Act 1997*, chapter 2, part 5A and schedule 10 define particular words used in these regulatory provisions.

1.4 When these regulatory provisions do not apply

(1) These regulatory provisions do not apply to –

(a) development carried out under a development approval for a development application that was made before 27 October 2004; or

(b) development that is exempt from assessment against a planning scheme under the *Integrated Planning Act 1997*, schedule 9; or

(c) development that is generally in accordance with a current rezoning approval given under the *Local Government (Planning and Environment) Act 1990* (repealed), section 4.5(6), 4.8(6), 4.10(6) or 8.10(9A); or

(d) development that is generally in accordance with a current rezoning approval given under the *Local Government Act 1936* (repealed), section 33(5)(k), to which section 33(5)(m) also applied; or

(e) development that is –

(i) declared to be a significant project or located in a State development area; and

(ii) confirmed in writing by the regional planning Minister to be exempt from these regulatory provisions: or

(f) development that is consistent with a preliminary approval obtained under the Integrated Planning Act 1997, section 3.1.5 that–

(i) was given for development made assessable under section 2.1 or 2.2, 2.4, 2.6, 2.8, 2.10, 2.12, or 2.14; and

(ii) has not lapsed.

(2) Subsection (1)(a) and (f) apply even if further development permits are needed to facilitate an approval mentioned in either subsection.

(3) An approval mentioned in subsection (1)(c) includes an approval resulting from the application of the *Integrated Planning Act 1997*, section 6.1.26.

(4) Subsection (1)(c) applies even if further development permits are needed to facilitate the development generally in accordance with the current rezoning approval.

(5) Subsection (1)(c) to (d) does not apply for premises zoned for a rural residential purpose.

(6) In this section *current rezoning approval* means –

(a) an approval for which the resulting zone still exists under a transitional planning scheme; or

(b) if the resulting zone no longer exists –

(i) the development rights conferred by the resulting zone have been preserved under an IPA planning scheme; or

(ii) there is for the premises –

(A) a development permit given for a development application (superseded planning scheme) in relation to the resulting zone; or

(B) an acknowledgement notice mentioned in the *Integrated Planning Act 1997*, section 3.2.5(1)(a) in relation to the resulting zone.

1.5 SEQ region divided into categories

(1) The SEQ Regional Plan allocates all land in the SEQ region into one of the following categories –

(a) Regional Landscape and Rural Production Area;

(b) Urban Footprint;

(c) Rural Living Area;

(d) Investigation Area.

(2) The maps referred to in Schedule 1 show these areas.

Division 2 Material change of use[1]

Subdivision 2.1 - Material change of use in a Major Development Area located in the Urban Footprint

2.1 When an urban activity is assessable in a Major Development Area

To the extent that a premises is located in a Major Development Area in the Urban Footprint a material change of use of the premises for an urban activity is assessable development requiring impact assessment if –

(a) for premises located in an area included in a structure plan[2] - the *Integrated Planning Act 1997*, section 3.1.6 applies to the application for the material change of use; or

(b) for all other premises –

(i) impact assessment is required under the relevant planning scheme; or

(ii) the *Integrated Planning Act 1997*, section 3.1.6 applies to the application for the material change of use; or

(iii) the premises exceeds 10000m²; or

(iv) the gross floor area on the premises will exceed 10000m².

2.2 When other development is assessable in a Major Development Area

(1) To the extent that a premises is located in a Major Development Area in the Urban Footprint a material change of use of the premises for intensive animal husbandry is assessable development requiring impact assessment.

(2) To the extent that a premises is located in a Major Development Area in the Urban Footprint a material change of use of the premises for residential development involving a rural residential purpose is assessable development requiring impact assessment.

2.3 When assessable development in a Major Development Area complies with these regulatory provisions

A material change of use of a premises that is assessable development under section 2.1 or 2.2 complies with these regulatory provisions only if –

(a) for premises located in an area included in a structure plan - the material change of use is consistent with the structure plan; or

(b) for all other premises - the material change of use would not compromise the implementation of a structure plan.

Subdivision 2.2 – Assessable development in the Regional Landscape and Rural Production Area

2.4 When an urban activity is assessable in the Regional Landscape and Rural Production Area

(1) To the extent that a premises is located in the Regional Landscape and Rural Production Area a material change of use of the premises for an urban activity is assessable development requiring impact assessment.

(2) Subsection (1) does not apply to the extent –

(a) the premises is zoned for an urban purpose under an IPA planning scheme other than a transitional planning scheme; or

[1] *See Integrated Planning Act 1997, s2.5A.12(2)(a) to (c).*
[2] *Refer to amended definition in Schedule 2 – Dictionary.*

(b) for premises in a rural precinct - the material change of use is exempt development, self-assessable development or code assessable development; or

(c) the material change of use is for outdoor recreation; or

(d) the material change of use is associated with a residential dwelling on an existing lot and is for associated dwellings - provided the total number of dwellings does not exceed 4; or

(e) the material change of use is for a restaurant, café, tavern or function room that has capacity for no more than 100 people but does not include residential development; or

(f) the material change of use is for a small scale tourist accommodation facility; or

(g) the gross floor area for urban activities on the premises other than an activity referred to in paragraphs (c) to (f) does not exceed 250m²; or

(h) the associated outdoor area on the premises other than area associated with an activity referred to in paragraphs (c) to (f) does not exceed 250m².

2.5 When an urban activity in the Regional Landscape and Rural Production Area complies with these regulatory provisions

A material change of use of a premises that is assessable development under section 2.4 complies with these regulatory provisions only if –

(a) for premises in a rural village - the material change of use is consistent with the planning intent for the rural village under the relevant planning scheme; or

(b) for premises in a rural precinct - the material change of use is consistent with the planning intent for the rural precinct under the relevant IPA planning scheme; or

(c) the material change of use predominantly caters for a local demand generated outside of both the Urban Footprint and a rural village and –

  (i) does not include residential development; and

  (ii) has no more than 500m² of gross floor area for urban activities on the premises other than for an activity referred to in section 2.4(2)(c) to (f); and

  (iii) has no more than 500m² of associated outdoor area on the premises other than area associated with an activity referred to in section 2.4(2)(c) to (f); or

(d) the material change of use has a direct connection with the rural, natural or resource value of the surrounding area and –

  (i) does not include residential development; and

  (ii) has no more than 500m² of gross floor area for urban activities on the premises other than for an activity referred to in section 2.4(2)(c) to (f); and

  (iii) has no more than 500m² of associated outdoor area on the premises other than area associated with an activity referred to in section 2.4(2)(c) to (f); or

(e) for a material change of use involving sport and recreational activity –

  (i) the capacity of the activity does not exceed 1000 people; and

  (ii) the gross floor area for urban activities on the premises does not exceed 500m²; and

(iii) the material change of use does not include residential development; or

(f) for a change to an existing urban activity that predominantly involves tourism, sport, recreation, education or a place of worship –

(i) the development approval for the existing urban activity was for a development application that was made before the day these regulatory provisions came into effect; and

(ii) the material change of use is for tourism, sport, recreation, education or a place of worship; and

(iii) if the existing urban activity includes tourist accommodation–

(A) the material change of use does not include residential development other than a small scale tourist accommodation facility; or

(B) the increase in gross floor area for tourist accommodation is no more than 100 per cent greater than allowed under a development approval for an application made before the day these regulatory provisions came into effect but does not otherwise include residential development; or

(iv) if the existing urban activity does not include tourist accommodation – the material change of use does not include residential development other than a small scale tourist accommodation facility; or

(g) for a change to an existing urban activity that is located in the Regional Landscape and Rural Production Area and does not predominantly involve tourism, sport, recreation, education or a place of worship –

(i) the development approval for the existing urban activity was for a development application that was made before the day these regulatory provisions came into effect; and

(ii) any increase in gross floor area is no more than 100 per cent greater than allowed under a development approval for an application made before the day these regulatory provisions came into effect; and

(iii) any increase in associated outdoor area is no more than 100 per cent greater than allowed under a development approval for an application made before the day these regulatory provisions came into effect; and

(iv) the material change of use does not include residential development other than a small scale tourist accommodation facility; or

(h) where paragraphs (a) to (g) do not apply –

(i) the locational requirements or environmental impacts of the material change of use necessitate its location outside the Urban Footprint; and

(ii) there is an overriding need for the material change of use in the public interest.[3]

2.6 When a rural residential purpose is assessable in the Regional Landscape and Rural Production Area

(1) To the extent that a premises is located in the Regional Landscape and Rural Production Area a material change of use of the premises for residential development involving a rural residential purpose is assessable development requiring impact assessment.

(2) Subsection (1) does not apply to the extent–

(a) for premises located in the Mt Lindesay/North Beaudesert Study Area–

(i) the development application or development application (superseded planning scheme) for the material change of use is properly made before 2 March 2008; and

3 See Schedule 3 for guidance on how to determine overriding need in the public interest.

(ii) the premises is in a zone or equivalent designated area mentioned in a notice published in the gazette by the regional planning Minister; or

(b) in any other case–

(i) the development application or development application (superseded planning scheme) for the material change of use is properly made before 27 October 2006; and

(ii) the premises is zoned for a rural residential purpose and the intent specified by the relevant planning scheme is not for either a predominantly rural purpose or a predominantly conservation purpose.

(3) Where the regional planning Minister publishes a notice in the gazette under subsection (2) the notice must state the following–

(a) the date the notice takes effect;

(b) the name of the relevant local government;

(c) the name of the zone or equivalent designated area.

2.7 When a rural residential purpose in the Regional Landscape and Rural Production Area complies with these regulatory provisions

A material change of use of a premises that is assessable development under section 2.6 complies with these regulatory provisions only if there is an overriding need for the material change of use in the public interest.[4]

Subdivision 2.3 – Assessable development in the Rural Living Area

2.8 When an urban activity is assessable in the Rural Living Area

(1) To the extent that a premises is located in the Rural Living Area a material change of use of the premises for an urban activity is assessable development requiring impact assessment.

(2) Subsection (1) does not apply to the extent–

(a) the premises is zoned for an urban purpose under an IPA planning scheme other than a transitional planning scheme; or

(b) the material change of use is for outdoor recreation; or

(c) the material change of use is associated with a residential dwelling on an existing lot and is for associated dwellings - provided the total number of dwellings does not exceed 4; or

(d) the material change of use is for a restaurant, café, tavern or function room that has capacity for no more than 100 people but does not include residential development; or

(e) the material change of use is for a small scale tourist accommodation facility; or

(f) the gross floor area for urban activities on the premises other than an activity referred to in paragraphs (b) to (e) does not exceed 250m^2; or

(g) the associated outdoor area on the premises other than area associated with an activity referred to in paragraphs (b) to (e) does not exceed 250m^2.

4 See Schedule 3 for guidance on how to determine overriding need in the public interest.

2.9 When an urban activity in the Rural Living Area complies with these regulatory provisions

A material change of use of a premises that is assessable development under section 2.8 complies with these regulatory provisions only if–

(a) for premises in a rural village - the material change of use is consistent with the planning intent for the rural village under the relevant planning scheme; or

(b) the material change of use predominantly caters for a local demand generated outside of both the Urban Footprint and a rural village and–

(i) does not include residential development; and

(ii) has no more than 500m² of gross floor area for urban activities on the premises other than for an activity referred to in section 2.8(2)(b) to (e); and

(iii) has no more than 500m² of associated outdoor area on the premises other than area associated with an activity referred to in section 2.8(2)(b) to (e); or

(c) the material change of use has a direct connection with the rural, natural or resource value of the surrounding area and–

(i) does not include residential development; and

(ii) has no more than 500m² of gross floor area for urban activities on the premises other than for an activity referred to in section 2.8(2)(b) to (e); and

(iii) has no more than 500m² of associated outdoor area on the premises other than area associated with an activity referred to in section 2.8(2)(b) to (e); or

(d) for a material change of use involving sport and recreational activity–

(i) the capacity of the activity does not exceed 1000 people; and

(ii) the gross floor area for urban activities on the premises does not exceed 500m²; and

(iii) the material change of use does not include residential development; or

(e) for a change to an existing urban activity that predominantly involves tourism, sport, recreation, education or a place of worship–

(i) the development approval for the existing urban activity was for a development application that was made before the day these regulatory provisions came into effect; and

(ii) the material change of use is for tourism, sport, recreation, education or a place of worship; and

(iii) if the existing urban activity includes tourist accommodation–

(A) the material change of use does not include residential development other than a small scale tourist accommodation facility; or

(B) the increase in gross floor area for tourist accommodation is no more than 100 per cent greater than allowed under a development approval for an application made before the day these regulatory provisions came into effect but does not otherwise include residential development; or

(iv) if the existing urban activity does not include tourist accommodation – the material change of use does not include residential development other than a small scale tourist accommodation facility; or

(f) for a change to an existing urban activity that is located in the Rural Living Area and does not predominantly involve tourism, sport, recreation, education or a place of worship–

(i) the development approval for the existing urban activity was for a development application that was made before the day these regulatory provisions came into effect; and

(ii) any increase in gross floor area is no more than 100 per cent greater than allowed under a development approval for an application made before the day these regulatory provisions came into effect; and

(iii) any increase in associated outdoor area is no more than 100 per cent greater than allowed under a development approval for an application made before the day these regulatory provisions came into effect; and

(iv) the material change of use does not include residential development other than a small scale tourist accommodation facility; or

(g) where paragraphs (a) to (f) do not apply–

(i) the locational requirements or environmental impacts of the material change of use necessitate its location outside the Urban Footprint; and

(ii) there is an overriding need for the material change of use in the public interest.[5]

Subdivision 2.4 – Assessable development in the Investigation Area

2.10 When an urban activity is assessable in the Investigation Area

(1) To the extent that a premises is located in the Investigation Area a material change of use of the premises for an urban activity is assessable development requiring impact assessment.

(2) Subsection (1) does not apply to the extent–

(a) the premises is zoned for an urban purpose under an IPA planning scheme other than a transitional planning scheme; or

(b) for premises in a rural precinct - the material change of use is exempt development, self-assessable development or code assessable development; or

(c) the material change of use is for outdoor recreation; or

(d) the material change of use is associated with a residential dwelling on an existing lot and is for associated dwellings - provided the total number of dwellings does not exceed 4; or

(e) the material change of use is for a restaurant, café, tavern or function room that has capacity for no more than 100 people but does not include residential development; or

(f) the material change of use is for a small scale tourist accommodation facility; or

(g) the gross floor area for urban activities on the premises other than an activity referred to in paragraphs (c) to (f) does not exceed 250m^2; or

(h) the associated outdoor area on the premises other than area associated with an activity referred to in paragraphs (c) to (f) does not exceed 250m^2.

2.11 When an urban activity in the Investigation Area complies with these regulatory provisions

A material change of use of a premises that is assessable development under section 2.10 complies with these regulatory provisions only if–

(a) for premises in a rural village - the material change of use is consistent with the planning intent for the rural village under the relevant planning scheme; or

(b) for premises in a rural precinct - the material change of use is consistent with the planning intent for the rural precinct under the relevant IPA planning scheme; or

[5] *See Schedule 3 for guidance on how to determine overriding need in the public interest.*

(c) the material change of use predominantly caters for a local demand generated outside of both the Urban Footprint and a rural village and–

(i) does not include residential development; and

(ii) has no more than 500m² of gross floor area for urban activities on the premises other than for an activity referred to in section 2.10(2)(c) to (f); and

(iii) has no more than 500m² of associated outdoor area on the premises other than area associated with an activity referred to in section 2.10(2)(c) to (f); or

(d) the material change of use has a direct connection with the rural, natural or resource value of the surrounding area and–

(i) does not include residential development; and

(ii) has no more than 500m² of gross floor area for urban activities on the premises other than for an activity referred to in section 2.10(2)(c) to (f); and

(iii) has no more than 500m² of associated outdoor area on the premises other than area associated with an activity referred to in section 2.10(2)(c) to (f); or

(e) for a material change of use involving sport and recreational activity–

(i) the capacity of the activity does not exceed 1000 people; and

(ii) the gross floor area for urban activities on the premises does not exceed 500m²; and

(iii) the material change of use does not include residential development; or

(f) for a change to an existing urban activity that predominantly involves tourism, sport, recreation, education or a place of worship–

(i) the development approval for the existing urban activity was for a development application that was made before the day these regulatory provisions came into effect; and

(ii) the material change of use is for tourism, sport, recreation, education or a place of worship; and

(iii) if the existing urban activity includes tourist accommodation–

(A) the material change of use does not include residential development other than a small scale tourist accommodation facility; or

(B) the increase in gross floor area for tourist accommodation is no more than 100 per cent greater than allowed under a development approval for an application made before the day these regulatory provisions came into effect but does not otherwise include residential development; or

(iv) if the existing urban activity does not include tourist accommodation – the material change of use does not include residential development other than a small scale tourist accommodation facility; or

(g) for a change to an existing urban activity that is located in the Investigation Area and does not predominantly involve tourism, sport, recreation, education or a place of worship–

(i) the development approval for the existing urban activity was for a development application that was made before the day these regulatory provisions came into effect; and

(ii) any increase in gross floor area is no more than 100 per cent greater than allowed under a development approval for an application made before the day these regulatory provisions came into effect; and

(iii) any increase in associated outdoor area is no more than 100 per cent greater than allowed under a development approval for an application made before the day these regulatory provisions came into effect; and

(iv) the material change of use does not include residential development other than a small scale tourist accommodation facility; or

(h) where paragraphs (a) to (g) do not apply–

(i) the locational requirements or environmental impacts of the material change of use necessitate its location outside the Urban Footprint; and

(ii) there is an overriding need for the material change of use in the public interest.[6]

2.12 When a rural residential purpose is assessable in the Investigation Area

(1) To the extent that a premises is located in the Investigation Area a material change of use of the premises for residential development involving a rural residential purpose is assessable development requiring impact assessment.

(2) Subsection (1) does not apply to the extent–

(a) for premises located in the Mt Lindesay/North Beaudesert Study Area–

(i) the development application or development application (superseded planning scheme) for the material change of use is properly made before 2 March 2008; and

(ii) the premises is in a zone or equivalent designated area mentioned in a notice published in the gazette by the regional planning Minister; or

(b) in any other case–

(i) the development application or development application (superseded planning scheme) for the material change of use is properly made before 27 October 2006; and

(ii) the premises is zoned for a rural residential purpose and the intent specified by the relevant planning scheme is not for either a predominantly rural purpose or a predominantly conservation purpose.

(3) Where the regional planning Minister publishes a notice in the gazette under subsection (2) the notice must state the following–

(a) the date the notice takes effect;

(b) the name of the relevant local government;

(c) the name of the zone or equivalent designated area.

2.13 When a rural residential purpose in the Investigation Area complies with these regulatory provisions

A material change of use of a premises that is assessable development under section 2.12 complies with these regulatory provisions only if there is an overriding need for the material change of use in the public interest.[7]

2.14 When intensive animal husbandry is assessable in the Investigation Area

To the extent that a premises is located in the Investigation Area a material change of use of the premises for intensive animal husbandry is assessable development requiring impact assessment.

6 See Schedule 3 for guidance on how to determine overriding need in the public interest.

7 See Schedule 3 for guidance on how to determine overriding need in the public interest.

2.15 When intensive animal husbandry in the Investigation Area complies with these regulatory provisions

A material change of use of a premises that is assessable development under section 2.14 complies with these regulatory provisions only if the material change of use would not compromise future land use planning options for the Investigation Area.

Division 3 Subdivision[8]

3.1 When subdivision of land not included in a Major Development Area structure plan complies with these regulatory provisions[9]

(1) Subsection (3) applies to subdivision of land to the extent the land is –

(a) located in a Major Development Area in the Urban Footprint; and

(b) not included in a structure plan.

(2) However subsection (3) does not apply to the extent that the subdivision–

(a) creates lots with a size greater than 100 hectares; or

(b) creates a residual lot; or

(c) creates the same number or fewer lots than the number of lots being subdivided; or

(d) creates a single additional lot when an existing lot is severed by a road that was gazetted before 2 March 2006; or

(e) creates a single additional lot for–

(i) an emergency services facility; or

(ii) water cycle management infrastructure; or

(iii) a waste management facility; or

(iv) telecommunications infrastructure; or

(v) electricity infrastructure; or

(vi) a cemetery or a crematorium; or

(f) is carried out in association with a development approval for a material change of use of premises that has not lapsed, if the development approval was for a development application that was made before the day these regulatory provisions came into effect; or

(g) is carried out in association with a development approval for a material change of use of premises that–

(i) was given for development made assessable under section 2.1 or 2.2; and

(ii) has not lapsed.

(3) A subdivision complies with these regulatory provisions only if the subdivision would not compromise the implementation of a structure plan.

[8] See Integrated Planning Act 1997, s2.5A.12(2)(a)-(d)

[9] Subdivision of land is assessable development under the Integrated Planning Act 1997, Schedule 8, Table 3, item 1.

3.2 When subdivision in the Regional Landscape and Rural Production Area or in the Investigation Area is prohibited

(1) To the extent that land is located in the Regional Landscape and Rural Production Area or in the Investigation Area a subdivision of the land may not occur if any resulting lot would have a lot size less than–

(a) if the relevant planning scheme states a minimum lot size greater than 100 hectares - the lot size stated in the planning scheme; or

(b) to the extent the premises are located in a rural precinct or an interim rural precinct - the minimum lot size stated in the relevant planning scheme for the precinct; or

(c) in any other case - 100 hectares.

(2) However subsection (1) does not apply to the extent that the subdivision–

(a) creates a residual lot; or

(b) creates the same number or fewer lots than the number of lots being subdivided; or

(c) creates a single additional lot when an existing lot is severed by a road that was gazetted before 2 March 2006; or

(d) creates a single additional lot for–

(i) an emergency services facility; or

(ii) water cycle management infrastructure; or

(iii) a waste management facility; or

(iv) telecommunications infrastructure; or

(v) electricity infrastructure; or

(vi) a cemetery or a crematorium; or

(e) is carried out in association with a development approval for a material change of use of premises that has not lapsed, if the development approval was for a development application that was made before the day these regulatory provisions came into effect; or

(f) is carried out in association with a development approval for a material change of use of premises that–

(i) was given for development made assessable under section 2.4, 2.6, 2.8, 2.10, 2.12, or 2.14; and

(ii) has not lapsed; or

(g) is in a rural village; or

(h) is for a rural residential purpose–

(i) for land located in the Mt Lindesay/North Beaudesert Study Area–

(A) the development application or development application (superseded planning scheme) for the subdivision is properly made before 2 March 2008; and

(B) the subdivision relates to land located in a zone or equivalent designated area mentioned in a notice published in the gazette by the regional planning Minister; or

(ii) in any other case–

(A) the development application or development application (superseded planning scheme) for the subdivision is properly made before 27 October 2006; and

(B) the subdivision relates to land zoned for a rural residential purpose; and

(C) the subdivision does not include land that has either a predominantly rural purpose or a predominantly conservation purpose under the relevant planning scheme; or

(i) is carried out under–

(i) an exemption given by the regional planning Minister[10] for an application for exemption lodged before 30 September 2005; and

(ii) a development approval for a development application that is properly made within six months of the exemption being given by the regional planning Minister; or

(j) involves the extension of an existing lease or licence over land if–

(i) no additional lots are created; and

(ii) any use permitted by a subsequent lease or licence is consistent with a use permitted by the previous lease or licence; and

(iii) the previous lease was obtained before the day that these regulatory provisions came into effect.

(3) Where the regional planning Minister publishes a notice in the gazette under subsection (2)(h)(i)(B) the notice must state the following–

(a) the date the notice takes effect;

(b) the name of the relevant local government;

(c) the name of the zone or equivalent designated area.

Division 4 Transitional arrangements[11]

4.1 Which version of the regulatory provisions apply to a development application

For assessing and deciding a properly made application made in the period–

(a) from 27 October 2004 to 24 February 2005 - the draft regulatory provisions included in the draft South East Queensland Regional Plan apply;

(b) from 25 February 2005 to 29 June 2005 - the draft regulatory provisions referred to in the gazette notice dated 25 February 2005 apply;

(c) from 30 June 2005 to 1 March 2006 - the regulatory provisions included in the South East Queensland Regional Plan 2005 – 2026 apply;

(d) from 2 March 2006 until the day before Amendment 1 of the South East Queensland Regional Plan 2005 – 2026 came into effect - the draft regulatory provisions contained in Draft Amendment 1 to the South East Queensland Regional Plan apply;

(e) from the day Amendment 1 of the South East Queensland Regional Plan 2005 – 2026 came into effect - these regulatory provisions apply.

[10] *See Schedule 4 for guidance on how the Minister considers a request for an exemption.*

[11] *See – Integrated Planning Act 1997, s2.5A.12(2)(e)*

4.2 Application of Division 3 to certain development applications

On premises zoned for a rural residential purpose, division 3 does not apply if the subdivision is–

(a) on premises identified in the draft regulatory provisions referred to in section 4.1(a) and (b) as being in the Urban Footprint or Rural Living Area; and

(b) on premises identified in the regulatory provisions referred to in section 4.1(c) as being in the Regional Landscape and Rural Production Area or in the Investigation Area; and

(c) for a rural residential purpose; and

(d) carried out under a development approval for reconfiguring a lot for a development application that is properly made before 30 June 2007.

Schedules

Schedule 1 Maps

SEQ Regional Plan Regulatory Maps numbered SEQRP1 to SEQRP33.

Schedule 2 Dictionary

associated outdoor area means the total uncovered outdoor area of the site used for or in association with urban activities and includes uncovered parking, manoeuvring, loading and outdoor storage areas.

gross floor area means the total floor area of all stories of a building measured from the outside of the external walls or the centre of a common wall.

intensive animal husbandry means the use of premises for commercial or other non-domestic operations involving the raising, keeping or farming of animals requiring supplementary feeding and containment in feedlots, sheds, pens, ponds or tanks.

interim rural precinct means an area identified as an interim rural precinct in Interim Implementation Guideline No.3 – Rural Precincts.

Mt Lindesay/North Beaudesert Study Area means the area identified as the Mt Lindesay/North Beaudesert Study Area on SEQ Regional Plan Regulatory Maps numbered SEQRP25, SEQRP26 and SEQRP29.

outdoor recreation means a recreation or sports activity that–

(a) has a direct connection to the rural, natural or resource value of the premises; and

(b) is carried on outside of a building; and

(c) requires areas of open space; and

(d) may include work necessary to manage safety and ecological impacts.

primary industry means agriculture, apiculture, aquaculture, horticulture, and pastoral industry and includes intensive animal husbandry.

residential development means development for a residential purpose that is at a scale greater than a single dwelling on an existing lot.

residual lot means –

(a) for premises located partly in the Urban Footprint or Rural Living Area and partly in a contiguous Regional Landscape and Rural Production Area or Investigation Area - a single lot in the Regional Landscape and Rural Production Area or Investigation Area; or

(b) for premises located partly in a Major Development Area and partly in a contiguous Urban Footprint area - a single lot in the Major Development Area; or

(c) for premises located in the Mt Lindesay/North Beaudesert Study Area - a single lot on the part of a premises not located in a zone or equivalent designated area mentioned in a notice published in the gazette by the regional planning Minister under section 2.6(2)(a)(ii), 2.12.(2)(a)(ii) and 3.2(2)(h)(i)(B) if–

(i) the premises is partly in a zone or equivalent designated area mentioned in a notice published in the gazette by the regional planning Minister; and

(ii) the relevant development application or development application (superseded planning scheme) for the subdivision is properly made before 2 March 2008; or

(d) for premises located in the Regional Landscape and Rural Production Area or in the Investigation Area other than premises located in the Mt Lindesay/North Beaudesert Study Area - a single lot on the part of a premises not zoned for a rural residential purpose if–

(i) the premises are partly zoned for a rural residential purpose and the intent specified by the relevant planning scheme for that part is not for either a predominantly rural purpose or a predominantly conservation purpose; and

(ii) the relevant development application or development application (superseded planning scheme) for the subdivision is properly made before 27 October 2006.

rural precinct means land identified in a planning scheme as a rural precinct if the planning scheme states that the regional planning Minister is satisfied that the rural precinct complies with the rural precinct guidelines issued by the regional planning Minister, but does not include an interim rural precinct.

rural residential purpose means a purpose that is predominantly a residential purpose involving a single dwelling on a lot greater than 2000m².

rural village means a location–

(a) named in accordance with the *Place Names Act 1994*; and

(b) designated for urban purposes in a planning scheme; and

(c) comprising residential dwellings, and some urban activity; and

(d) not located within the Urban Footprint.

significant project has the meaning given by the *State Development and Public Works Organisation Act 1971*.

small scale tourist accommodation facility –

1 Small scale tourist accommodation facility means a facility that makes units or space available for separate hire over a short term by tourists or travellers including, but not limited to a holiday cabin, a motel room, a hotel room, an apartment, a guesthouse, a camping site and a caravan park site provided:

(a) the total number of separate units or spaces made available is no more than twenty; and

(b) the total capacity of the facility is for no more than 100 people; and

(c) the gross floor area for tourist accommodation is no more than 1000m².

2 Small scale tourist accommodation facility also means a dormitory or backpackers hostel - provided the total capacity of the facility is for no more than 100 people.

3 Small scale tourist accommodation facility does not include residential development used for permanent accommodation.

State development area has the meaning given by the *State Development and Public Works Organisation Act 1971*.

structure plan means a document–

(a) prepared by a local government; and

(b) that the regional planning Minister is satisfied–

(i) is an integrated land use plan setting out the broad environmental, land use, infrastructure and development concepts to guide detailed site planning for a major development area in the local government's area; and

(ii) has been subject to adequate public consultation; and

(c) that has been included in the SEQ Regional Plan; and

(d) that the relevant planning scheme states is appropriately reflected in the planning scheme.

subdivision means –

(a) creating a lot by subdividing another lot; or

(b) dividing land into parts by agreement (other than a lease for a term, including renewal options, not exceeding 10 years) rendering different parts of a lot immediately available for separate disposition or separate occupation.

tourist accommodation means residential development that is not used for permanent accommodation and includes a small scale tourist accommodation facility.

transitional planning scheme has the meaning given by the *Integrated Planning Act 1997*, chapter 6, part 1, division 2.

urban activity–

1 Urban activity means a residential, industrial, retail, commercial, sporting, recreation, tourism or community activity.

2 Urban activity does not include a forestry or primary industry purpose or an activity reasonably associated with such a purpose for which the premises or surrounding area is used, including, for example–

(a) farm workers accommodation; or

(b) a mechanical repair workshop for farm machinery or vehicles; or

(c) vehicle storage associated with transporting forestry or primary industry produce or resources; or

(d) processing and packaging forestry or primary industry goods.

3 Urban activity does not include the following–

(a) a single residential dwelling on a lot; or

(b) a rural residential purpose; or

(c) an extractive industry, including, for example, crushing and screening; or

(d) an aeronautical facility; or

(e) an emergency services facility; or

(f) water cycle management infrastructure; or

(g) a waste management facility; or

(h) telecommunications infrastructure; or

(i) electricity infrastructure; or

(j) a cemetery or crematorium; or

(k) a wholesale nursery; or

(l) an animal boarding facility.

zoned for premises means allocated or identified as a zone or other like term such as domain or area in a planning scheme, including in a strategic plan under a transitional or superseded planning scheme.

Schedule 3 How to determine overriding need in the public interest

To determine an overriding need in the public interest an applicant must establish–

(a) the overall social, economic and environmental benefits of the material change of use weighed against–

(i) any detrimental impact upon the natural values of the site; and

(ii) conflicts with the desired outcomes of the Regional Plan, especially in relation to promoting consolidation of development within the Urban Footprint and preventing land fragmentation in the Regional Landscape and Rural Production Area or Investigation Area; and

(b) that the community would experience significant adverse economic, social or environmental impacts if the material change of use proposal were not to proceed.

This may require an assessment to determine if the material change of use could reasonably be located within the Urban Footprint.

The following do not establish an overriding need in the public interest–

(a) activities with relatively few locational requirements such as residential development and shopping centres; or

(b) interests in or options over the site; or

(c) the site's availability or ownership.

Schedule 1: Schedule of amendments

Regional Plan reference	Amendment 1 reference	Summary of amendment
Part B		
Growth management (page 5)	Replacement text	Text explains the 2006 population projections.
Growth management (page 5)	Replacement table and figure	Table and figure reflect the 2006 population projections.
Growth projections (page 8)	Replacement text	Text reflects the 2006 population projections.
Part E		
Regional land use pattern (page 13)	Replacement text	Text removes reference to the MLNBSA regional land use category.
Map 2 - SEQ regional land use categories (page 14)	Replacement Map 2	Map removes reference to the MLNBSA regional land use category and incorporates changes to Regulatory Maps.
Regional Landscape and Rural Production Area (page 15)	Replacement text	Text outlines the timeframe for applications for rural residential development in areas zoned for rural residential but that falls inside the Regional Landscape and Rural Production Area in the MLNBSA.
Urban Footprint (page 16)	Replacement text	Text describes the impact of the Regulatory Provisions for Major Development Areas.
Investigation Area (page 17)	Replacement text	Text removes reference to the intent to prepare a planning study for the MLNBSA.
Summary of Investigation Area sites (page 18)	Replacement text	Text removes reference to the MLNBSA and describes the development intent for new Investigation Area sites.
Map 3 - Investigation Area sites (page 19)	Replacement Map 3	Map removes MLNBSA and includes new Investigation Area sites.
Summary of the Mt Lindesay/North Beaudesert Study Area Urban Footprint sites (page 20)	New text	New text outlines the planning intent of new Urban Footprint sites.
Map 18 - Preferred development option to 2026 - Mt Lindesay/North Beaudesert Study Area	New Map 18	New map includes new regional land use categories.

Part F		
Map 5 - Koala management areas (page 31)	Replacement Map 5	Map removes reference to the MLNBSA and amends the regional land use categories.
Section 8.1 Urban structure - Beaudesert (page 63)	Replacement text for Beaudesert	Text removes reference to the intent to prepare a planning study for the MLNBSA.
Table 6 - Dwellings by local government area (page 66)	Replacement Table 6	Table updates dwelling targets for the Beaudesert Shire and Logan City Councils and removes reference to the MLNBSA.
Section 8.6 Regional activity centres network (page 72)	Replacement text	Text clarifies the definitions for 'Principal Activity Centres' and 'Major Activity Centres'.
Map 8 - Regional activity centres network -SEQ region (page 73)	Replacement Map 8	Map includes Flagstone and Yarrabilba as Major Activity Centres and Jimboomba as a Major Rural Activity Centre and removes reference to the MLNBSA.
Map 9 - Regional activity centres network - Greater Brisbane and the Western Corridor (page 74)	Replacement Map 9	Map removes reference to the MLNBSA and amends the regional land use categories.
Section 8.9 - Structure plans (page 79) Strategy 8.9.1	Replacement text	Text outlines the requirements for structure plans.
Section 8.9 - Structure plans (page 79) Strategy 8.9.2	Replacement text	Text outlines the requirement for master planning.
Section 8.9 - Structure plans (page 79) Strategy 8.9.3	Replacement text	Text outlines the requirement for State Infrastructure Agreements.
Section 8.9 - Structure plans (page 79)	Replacement text	Text outlines the role of structure plans.
Map 10 - Economic activity - SEQ region (page 88)	Replacement Map 10	Map includes an industrial economic activity centre at Park Ridge, removes reference to the MLNBSA and amends the regional land use categories.
Map 11 - Economic activity - Greater Brisbane and the Western Corridor (page 89)	Replacement Map 11	Map includes an industrial economic activity centre at Park Ridge, removes reference to the MLNBSA and amends the regional land use categories.
Map 13 - Freight routes - SEQ region (page 112)	Replacement Map 13	Map removes reference to the MLNBSA and amends the regional land use categories.
Map 14 - Freight routes - Greater Brisbane and the Western Corridor (page 113)	Replacement Map 14	Map removes reference to the MLNBSA and amends the regional land use categories.
Map 15 -Transport infrastructure -SEQ region (page 116)	Replacement Map 15	Map removes reference to the MLNBSA and amends the regional land use categories.
Map 16 - Transport infrastructure - Greater Brisbane and the Western Corridor (page 117)	Replacement Map 16	Map removes reference to the MLNBSA and amends the regional land use categories.
Map 17 - Transport infrastructure - Sunshine and Gold Coasts (page 119)	Replacement Map 17	Map removes reference to the MLNBSA and amends the regional land use categories.

Part H		
Regulatory Provisions (pages 125-131)	Replacement Regulatory Provisions	Replaced Regulatory Provisions include the following amendments: • incorporated findings of MLNBSA; • increased workability of the Regulatory Provisions and the Regional Plan by separating Division 2 via regional land use categories, and responding to submissions relating to small-scale development and existing uses; and • amended Regulatory Maps SEQRP2, SEQRP5, SEQRP8, SEQRP11, SEQRP15, SEQRP18, SEQRP21, SEQRP 24, SEQRP25, SEQRP26, SEQRP29 and SEQRP30.
Glossary		
Glossary (page 133)	Replacement and additional text	Text replaces 'Major new urban areas' with 'Major Development Area' and adds definitions for: 'Biodiversity'; 'Enterprise precinct'; 'State Infrastructure Agreement' and 'structure plan'.
Abbreviations		
Abbreviations (page 135)	Additional text	Additional text outlines MLNBSA.

Schedule 2: Regulatory Map amendments

The Regulatory Maps are a series of 33 maps (at a scale of 1:50,000) referred to in Schedule 1 of the Regional Plan's Regulatory Provisions. They identify regional land use categories at an individual property level for the purpose of Division 1 of the Regulatory Provisions and Part E of the Regional Plan.

The Regulatory Maps are amended as a result of Amendment 1. These amendments become effective on release of Amendment 1.

The Regulatory Map amendments are required because:

- the Mt Lindesay/North Beaudesert Study Area regional land use category has been removed and lands in this area have subsequently been re-allocated to the other four regional land use categories; and
- a review of land use designations in local government planning schemes requires land committed for urban development be included in the Urban Footprint.

Mt Lindesay/North Beaudesert Study Area

Changes in the Mt Lindesay/North Beaudesert Study Area affect Regulatory Maps SEQRP25, SEQRP26 and SEQRP29.

Map changes outside the Mt Lindesay/North Beaudesert Study Area

Minor amendments to the regional land use categories outside the Mt Lindesay/North Beaudesert Study Area affect nine Regulatory Maps: SEQRP2, SEQRP5, SEQRP8, SEQRP11, SEQRP15, SEQRP18, SEQRP21, SEQRP 24 and SEQRP30.

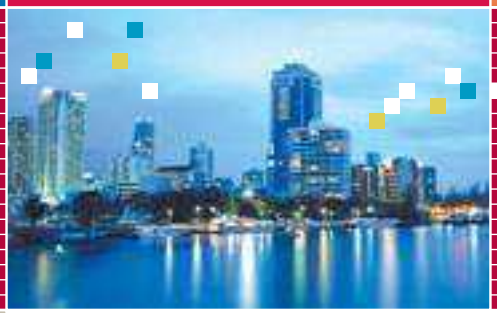
Regulatory Maps

A full version of the Regulatory Maps (including the amended maps) can be viewed on the Office of Urban Management's website (www.oum.qld.gov.au). Hard copies are available for viewing at the Office of Urban Management (level 4, 61 Mary Street, Brisbane) and selected locations in each local government area. Interested people should contact their local council for the exact locations.

Office of Urban Management

Website www.oum.qld.gov.au
Freecall 1800 021 818
Email enquiries@oum.qld.gov.au

South East Queensland Infrastructure Plan and Program 2005–2026



Queensland Government
Office of Urban Management

Department of Local Government, Planning, Sport and Recreation

Queensland the Smart State

South East Queensland Infrastructure Plan and Program 2005–2026

Foreword

The *South East Queensland Infrastructure Plan and Program* (the Infrastructure Plan) is a significant achievement for the State of Queensland. For the first time in history, the Queensland Government is making a ten-year commitment to fund the necessary infrastructure that supports growth in South East Queensland (SEQ).

Traditionally, infrastructure investment has been budgeted for on a four-year basis. The Infrastructure Plan still budgets infrastructure in this same way, but it now commits the Queensland Government to a program of infrastructure over a ten-year period. It also shows our intentions regarding planning infrastructure over the next 20 years. This Infrastructure Plan is the first in an annual series, which will be updated in accordance with the State Budget.

This commitment to infrastructure is vital in providing certainty to the Australian Government, state agencies, local governments, the private sector and the general community about the priorities and timing for major infrastructure investment in SEQ. This level of certainty will ensure infrastructure in the region is better planned and coordinated to achieve the maximum impact for the least cost.

The Infrastructure Plan is not a stand-alone piece of work. It is a key component of the regional planning process in SEQ. Due for release in its final form in June 2005, the *South East Queensland Regional Plan* will manage growth in this region over the next 20 years. It will help maintain and improve the lifestyle, economic opportunities, environment and other aspects of the region that are valued by the community. The SEQ Regional Plan will ensure the region remains an attractive place to live, where there are a wide range of residential opportunities and job prospects, as well as good access to services and facilities. The Infrastructure Plan is integral to ensuring the SEQ Regional Plan delivers these outcomes.

The Honourable Peter Beattie MP
Premier and Minister for Trade

The Honourable Terry Mackenroth MP
Deputy Premier, Treasurer and Minister for Sport

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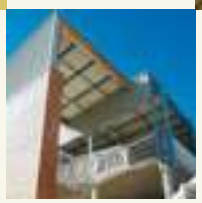
Published April 2005
ISBN: 1 9210 5700 9

Part A



Context

Introduction

South East Queensland (SEQ) is experiencing the fastest growth rate of any urban region in Australia. By 2026, the population is expected to reach around 3.7 million people – an increase of more than one million people.

To manage this growth and associated change, the Queensland Government in partnership with the South East Queensland Regional Organisation of Councils (SEQROC), prepared the *Draft South East Queensland Regional Plan* (the Draft Regional Plan). Released on 27 October 2004, the Draft Regional Plan was on public consultation for a four-month period to 28 February 2005. Following analysis of the public consultation, the final Regional Plan (the SEQ Regional Plan) will be released at the end of June 2005.

The SEQ Regional Plan sets out the future pattern of development for the region. It outlines the preferred urban structure that will guide development; protect the environmental values and liveability of the region; and support economic development. In doing so, the SEQ Regional Plan helps ensure a sustainable future for SEQ.

Centred around the capital city of Brisbane, SEQ is already a vibrant, prosperous and very liveable sub-tropical and world-class region. As a future home to around 3.7 million people, this region will be expected to exhibit a series of essential characteristics:

- modern, integrated, efficient, fast, frequent and reliable public transport;
- dedicated freight routes servicing an expanding economic base created by identifying and preserving new routes and corridors early;
- a safe road network providing for inter-regional, intra-regional and local trips, complementing the region's public transport system;
- reliable water and energy supplies, increasingly based on recycled and renewable sources and supported by demand management and consumer behaviour changes;
- community infrastructure and services that are carefully planned and which support strong and sustainable communities;
- a high-quality natural environment, including protected natural areas, waterways and beaches; and
- environmental infrastructure including public open space, national, state and regional parks and opportunities for nature-based recreation.

Role of the South East Queensland Infrastructure Plan and Program

The *South East Queensland Infrastructure Plan and Program* (the Infrastructure Plan) outlines the Queensland Government's infrastructure priorities to support the SEQ Regional Plan. It establishes priorities for regionally significant infrastructure over the next ten years in an appropriate and timely manner, but within the 20-year planning horizon.

The Infrastructure Plan seeks to provide certainty on infrastructure development for the whole community. It will enable forward planning, capacity building and innovation in project delivery. It is based on the principle that strategically focused infrastructure investment will help to lead and support the preferred pattern of development and achieve key policy outcomes. In some instances, this means implementation ahead of existing need.

The Infrastructure Plan will give direction and momentum to Queensland Government infrastructure and services investment in the SEQ region over the next 20 years. It is the beginning of a new process to ensure state agencies align their infrastructure and service priorities in the region with the SEQ Regional Plan. It will ensure greater coordination of the infrastructure and services provided by state agencies and Government Owned Corporations, as well as local government and the private sector.

"The Infrastructure Plan will give direction and momentum to Queensland Government infrastructure and services investment in the SEQ region over the next 20 years."

Future versions of the Infrastructure Plan will take into account the final SEQ Regional Plan after June 2005 and subsequent reviews.

Identified infrastructure will deliver value and outcomes to the current and future community of the region, in line with the SEQ Regional Plan.

Relationship between the Infrastructure Plan and the State Infrastructure Plan

The current *State Infrastructure Plan* (SIP) is a five-year plan, facilitating infrastructure that supports economic development at a state and regional level. The SIP was first published in 2001.

Some aspects of the SIP that are outside the scope of this Infrastructure Plan include:

- statewide infrastructure issues, including those impacting on SEQ;
- specific emphasis on the provision of land for industrial and economic development;
- inter-regional connectivity;
- private sector infrastructure delivery; and
- economic drivers such as innovation; skills development; and research and development to promote economic progression of sub-regions.

The relevant SIP components will be coordinated with this Infrastructure Plan to ensure infrastructure supports the development patterns required to accommodate rapid population growth.

Regional infrastructure priorities

The objectives of the SEQ Regional Plan establish priorities for infrastructure investment in the region. A central objective is a more efficient form of development and more economical use of infrastructure and resources.

The key objectives include:

- **A more compact urban form**

  Accommodating a higher proportion of population growth within existing urban areas will achieve the most efficient use of land, infrastructure and services. In particular, the SEQ Regional Plan seeks to increase population density around transport nodes and Activity Centres and assist with appropriate urban renewal and infill.

- **Western Corridor**

  Many of the opportunities for major developments are in the Western Corridor, which includes the greater Ipswich area, extending generally from Wacol through Ipswich City to Amberley and including Ebenezer, Swanbank, Ripley Valley and Springfield. This increase in development is supported by the corridor's potential for major industrial uses; its capacity to support employment growth; and the availability of affordable and relatively unconstrained land.

- **Sub regional self-containment**

  The SEQ Regional Plan seeks to reduce traffic and limit traffic congestion by encouraging communities to gain access wherever possible to goods and services, jobs and leisure within their sub-regional or local areas. This will reinforce individual communities across the region.

Developing the Infrastructure Plan

In developing the Infrastructure Plan, the Queensland Government is ensuring:

- the SEQ Regional Plan priorities are reflected in the Queensland Government budget process;
- the SEQ Regional Plan priorities are included in the infrastructure and services planning of key state agencies;
- the annual investment cycle is adequately informed by data on economic, demographic and development industry performance;
- there is effective coordination, planning and service provision by relevant state agencies and Government Owned Corporations, through the Regional Infrastructure and Services Coordination Group (RISCG); and
- there is effective coordination of planning and infrastructure investment with local governments and Sub-regional Organisations of Councils (Sub-ROCs) across the region.

The Regional Infrastructure and Services Coordination Group

The Office of Urban Management chairs this group, which comprises senior representatives of the key state agencies including Education Queensland; Local Government, Planning, Sport and Recreation; Main Roads; Natural Resources and Mines; Premier and Cabinet; Queensland Health; Queensland Transport; Queensland Treasury; and State Development and Innovation.

Context continued...

Developing the Infrastructure Plan continued...

The annual process has three major phases:

- **Planning phase**

  From June to November of each year, state agencies responsible for providing infrastructure and services will review their infrastructure priorities for SEQ against the SEQ Regional Plan using updated Budget information and progress on the SEQ Regional Plan.

- **Review phase**

  In October/November of each year, the Regional Infrastructure and Services Coordination Group will review the progress of the Infrastructure Plan in supporting the SEQ Regional Plan, using data on economic, demographic and development industry performance, investment intentions and the plan's sustainability indicators. An annual land monitor will be compiled in collaboration with representative industry bodies. The outcomes from this phase will inform decisions regarding relative priorities for future investment.

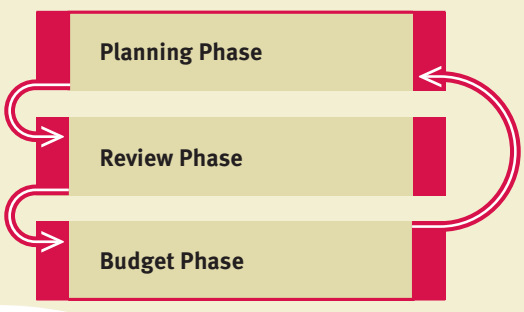
- **Budget phase**

  From December each year, the Queensland Government will develop an integrated approach to the infrastructure needs of the region and develop a consistent view about the relative priority of future infrastructure investment, within the context of the total State Budget. Once the Budget is finalised, state agencies will adjust their agency planning documents (for example, the *Roads Implementation Program* will be reviewed by Main Roads).

To ensure coordination with local government, Queensland Government representatives will meet regularly with infrastructure planners and coordinators of sub-regional groups of councils. These meetings will be in addition to other state and local government infrastructure processes such as the *Main Roads and Local Government Road Management and Investment Alliance 2002-2007*. These processes will ensure state and local government have a shared understanding of infrastructure issues and priorities, to coordinate infrastructure planning on all levels.

Figure 1

Annual processes for developing the Infrastructure Plan



Delivering the Infrastructure Plan

To provide certainty to government agencies, industry and the community, the Infrastructure Plan needs to be credible about both the capacity to fund the projects, as well as the ability of government agencies and industry to deliver the projects as required.

Options for funding and delivery of these projects will be evaluated where appropriate through the Queensland Government's *Value for Money Framework* (VfM Framework). By evaluating projects through the VfM Framework, priorities and solutions can be assessed to promote innovation and ensure maximum effectiveness of the Queensland Government's investment.

A partnership between the public and private sectors is a key component of the VfM Framework, ensuring the respective skills of each sector are best used to deliver effective infrastructure services in a timely manner. The VfM Framework aims to extract the best possible value for money on behalf of taxpayers, particularly through a rigorous approach to assessing and allocating risk; providing opportunities for innovation; and securing optimal performance outcomes.

The VfM Framework also describes the tasks involved in implementing Queensland's Public Private Partnerships (PPP) policy. It sets out a comprehensive framework for analysing and delivering all major infrastructure projects that support the Queensland Government's strategic objectives. The VfM Framework provides for rigorous analysis of the best available infrastructure delivery options, whether through the public or private sector. It proposes a fair process for applying competitive forces to drive innovation and cost effectiveness.

The Australian Government has a role in funding infrastructure in the region including transport projects through the *AusLink* program, and water projects through the *Australian Water Fund*. Projects that would attract Australian Government funding are identified in this Infrastructure Plan.

Funding the Infrastructure Plan

The two main mechanisms through which the Queensland Government funds infrastructure are operating cash flows and borrowings. In the past, high levels of operating cash flow generated through the State Budget have funded the bulk of the Queensland Government's annual infrastructure program. This will continue, however, a higher level of borrowing together with private sector involvement will be required to fund the increase in infrastructure investment set out in this Infrastructure Plan, together with the infrastructure investment required elsewhere in the state.

"The total investment for projects identified in this Infrastructure Plan is $32.3 billion."

The Queensland Government is in a strong financial position, which it is committed to maintain. The *Charter of Social and Fiscal Responsibility* details the Government's approach to capital investment; that borrowings or other financial arrangements will be undertaken only for capital investments and only where these can be serviced within the operating surplus, consistent with maintaining an AAA credit rating.

The annual State Budget papers will provide updated estimates of infrastructure spending and levels of borrowing to reflect all state infrastructure investments. The recurrent cost of these investments is fully incorporated in future budget planning.

This Infrastructure Plan commits the Queensland Government to a series of major projects over the next 10 years, with further projects identified to 2026. Overall, these projects amount to an estimated $25.7 billion additional state investment in SEQ over the next 20 years. This includes an increase over the current budget commitments of approximately $2 billion over the next four years.

The projects identified also include investment contributions from the Australian Government and the Brisbane City Council. The total investment for projects identified in this Infrastructure Plan is $32.3 billion.

State Infrastructure Agreements

This Infrastructure Plan represents a significant commitment to additional expenditure by the Queensland Government. In some instances, expenditure on infrastructure will be used to lead development in order to achieve specific outcomes. This will provide clear benefits to some sections of the community. In these instances, the Queensland Government considers it reasonable for beneficiaries to bear some of the cost of this additional infrastructure provision.

Where the Queensland Government is providing major new infrastructure to lead development in the region and it is ahead of full anticipated demand, land owners and developers of new areas who stand to benefit significantly will be required to contribute to infrastructure provision through a *State Infrastructure Agreement*. Structure plans for new greenfield areas will only be approved subject to a satisfactory *State Infrastructure Agreement*, which details private contributions towards priority state infrastructure.

Structure Plan: An integrated land use plan setting out the broad environmental, land use, infrastructure and development concepts to guide detailed site planning for large developments.

Greenfield area: Areas of undeveloped land in the Urban Footprint suitable for urban development.

Achieving the Infrastructure Plan

The Infrastructure Plan will be updated annually to reflect new developments. Further, it calls for this investment to take place in an environment of very large capital investment in Australia and overseas, by governments and private industry. It is possible this additional investment will place stress on the capacity of industry and government to deliver, on time and budget.

As such, it is hoped the forward release of the scale and sequencing of these projects will encourage industry to invest in the capacity to deliver these projects and enable it to develop innovative approaches to planning, designing and delivering projects. To ensure there are opportunities to achieve these innovative approaches, the Infrastructure Plan has been developed with a focus on outcomes, not prescriptive solutions.

Table 1: Estimated investment identified in this Infrastructure Plan (2005-2026)

Asset class	Estimated investment ($million) [1]
Transport	24,544 [2]
Water	861 [3]
Energy	3,436 [4]
Information communication technology	Not applicable [5]
Social and community infrastructure	3,357 [3]
Investigations	72.5 [6]
Total	**32,270.5**

Footnote:

1. Estimated project costs are in 2005 dollars to ensure price consistency over a 20-year time frame. Project cost estimates in State Budget and other public documents may differ, as they will incorporate project costs which reflect anticipated changes in input prices between 2005 and time of construction.
2. Queensland Government expenditure on transport projects amounts to approximately $18 billion, with the remainder to be provided by other levels of government.
3. Includes Queensland Government contribution only.
4. Projected expenditure on currently identified transmission and distribution projects is detailed in the energy section of this Infrastructure Plan. The figures shown here are Queensland Government contributions for the next five years. Projects beyond that period are not identified, as capital works programs are set in light of regulatory determinations. The generation sector is a competitive market for which potential investment figures are not available.
5. The information and communication technology section of this Infrastructure Plan provides details of current Queensland Government initiatives. However, this is a competitive market for which private sector investment for the period to 2026 cannot be forecast.
6. Queensland Government expenditure on investigation projects amounts to approximately $65 million, with the remainder to be provided by the other levels of government.

Part B

Regional infrastructure priorities and projects

Infrastructure issues and challenges

The population of SEQ is projected to increase from the current 2.6 million people to around 3.7 million people in 2026.

This will require an estimated 550,000 additional dwellings and a greater diversity of housing as household structures continue to change in composition and size over the next 20 years.

The increased population is expected to create demand for around 425,000 new jobs. Many of these jobs will be in traditional industries, responding to increased levels of consumption, but others will be new kinds of jobs related to the emergence of new technologies and markets and the Queensland Government's objective of diversifying the Queensland economy.

Increased population and employment, together with new ways of producing and delivering goods and services, will significantly increase the need for all types of infrastructure in the region.

Strategic investments in infrastructure will influence the spatial pattern and rate of development across the region. Infrastructure investments must therefore be planned carefully.

Timely provision of infrastructure will be key in realising the vision for developing greenfield areas and for supporting the pattern of infill development envisaged in the SEQ Regional Plan.

By creating certainty about the location for new and well-serviced developments, this Infrastructure Plan, together with the SEQ Regional Plan, will assist the affordability of land for future housing and planned communities.

The SEQ Regional Plan also recognises the importance of coordinating the provision of infrastructure, managing demand and planning for and securing future infrastructure corridors and sites.

Infrastructure Plan structure

The following section describes the projects contained in this Infrastructure Plan, including proposed timelines.

The sections are organised into asset classes. The transport section is further divided into sub-regional categories and a freight section. Within each section, there is discussion of the critical priorities; a schedule indicating the timing and estimated cost of each project; and a map.

The Infrastructure Plan is presented in three distinct phases over the 20-year period to 2026:

- **First phase**

  From 2005-06 to 2008-09: this phase represents the Forward Estimates period of the State Budget. It shows specific commitments to funding for the nominated infrastructure projects in 2005 dollars and their timing.

- **Second phase**

  From 2009-10 to 2015-16: this phase commits infrastructure investments to meet the strategic objectives for the region over this period, with estimated costings in 2005 dollars.

- **Third phase**

  Covering the period 2016-17 to 2025-26: this phase includes infrastructure which is likely to be required in the longer term and will need to be considered in future Infrastructure Plans. Projects are estimated in 2005 dollars.

This first Infrastructure Plan identifies only those regional investments significantly influenced by Queensland Government agencies or entities. It also refers to some Australian and strategic local government projects relevant to the SEQ Regional Plan. Where projects involve a subsidy payment to local governments, for example in the water sector, the expected quantum of state funds involved is indicated in this Infrastructure Plan, pending agreement with local governments on timing and implementation.

"Investment in transport infrastructure is essential for achieving the preferred SEQ future land use pattern and regional economic and social objectives."

The Infrastructure Plan identifies key infrastructure projects where funding is expected from the Australian Government - under the *AusLink* program - and Brisbane City Council. As these projects are not under the control of the Queensland Government, they will require further discussion with these governments. Estimated funding, however, from these other levels of government have been included in the Queensland Government's preferred timelines.

Transport

Investment in transport infrastructure is essential for achieving the preferred SEQ future land use pattern and regional economic and social objectives. This Infrastructure Plan outlines a balanced program of investment between transport modes. The future transport system for the region will have a greater focus on public transport, to provide more travel choices. Walking and cycling will also be important, with further investment being funded across the region. A range of policy and travel behaviour measures, funded by both the state and local governments, will also support infrastructure improvements.

All levels of government will continue to have a role in managing and developing the SEQ transport system. Cooperative planning and investment processes (such as the alliance between Main Roads and local government) are already in place. It is envisaged that the Australian Government will continue to direct investment towards a strategic network of transport corridors, including key rail links, under its *AusLink* program.

Brisbane City Council has a particularly significant role in SEQ as it manages a large part of the regional road network and delivers much of the public transport system in urban areas. Brisbane City Council is also currently investigating a series of cross-city tunnel projects (TransApex), with the goal of reducing traffic congestion in the inner areas of Brisbane. The Queensland Government has provided in-principle support to the North-South Bypass Tunnel and will be directly involved in a detailed feasibility study of the Airport Link.

The SEQ Regional Plan emphasises the importance of reserving and protecting strategic corridors for future transport and other infrastructure needs. Early identification of these corridors ensures better land use planning and more efficient infrastructure provision.

AusLink

The Australian Government has recently changed its approach to investing in nationally significant land transport infrastructure.

The new approach bases Australian Government investment around an *AusLink National Transport Network*. The National Network is a single integrated network of land transport corridors of national importance.

The Australian Government states the purpose of *AusLink* is to provide a more strategic framework for the Australian and state governments to cooperatively plan and identify transport corridor priorities, projects and funding. If implemented as announced, it also will enable progress on the shared objectives of better integrating land use and transport planning; modal connections; and identifying opportunities for private sector involvement.

Key transport corridors in SEQ of interest to *AusLink* are the:

- Pacific Motorway/Pacific Highway;
- Bruce Highway;
- Warrego Highway;
- Brisbane Urban Corridor;
- Gateway Motorway and Bridge;
- Ipswich Motorway;
- Cunningham Highway;
- Logan Motorway;
- Port of Brisbane Motorway;
- proposed inland rail freight corridor (incorporating Gowrie-Grandchester);
- Sydney to Brisbane Railway; and
- north coast rail line.

Projects proposed for these corridors are shown in Map 5.

The principal directions for regional transport investment over the next 20 years are:

- ensuring public transport and roads support the preferred pattern of development;
- increasing public transport infrastructure to encourage greater usage; and
- supporting economic development, including improved freight links and a greater emphasis on freight rail.

Regional infrastructure priorities and projects continued...

Transport continued...

Western Corridor

The Western Corridor extends generally from Wacol through Ipswich City to Amberley and includes Ebenezer, Swanbank, Ripley Valley and Springfield. The timely provision of infrastructure is important to support growth in this corridor.

Table 2 outlines a transport infrastructure investment program for the Western Corridor. The package focuses on upgrading existing, and constructing new roads and public transport to support population and employment opportunities around the centres of Ipswich, Springfield and Ripley, and recognises the strategic importance of the freight links within and through this corridor.

"The Western Corridor extends generally from Wacol through Ipswich City to Amberley and includes Ebenezer, Swanbank, Ripley Valley and Springfield."

The first phase of this Infrastructure Plan (2005-06 to 2008-09) addresses three major issues:

- **Dealing with traffic on the Ipswich Motorway**

  The Ipswich Motorway is the main road connecting Ipswich and other areas west of Brisbane. There is an urgent need to improve this link and to provide for future traffic growth associated with development in the Western Corridor and interstate links.

- **Improving passenger rail services on the Ipswich line**

  This line needs improvement to cater for the public transport needs of existing and future residents in the Western Corridor.

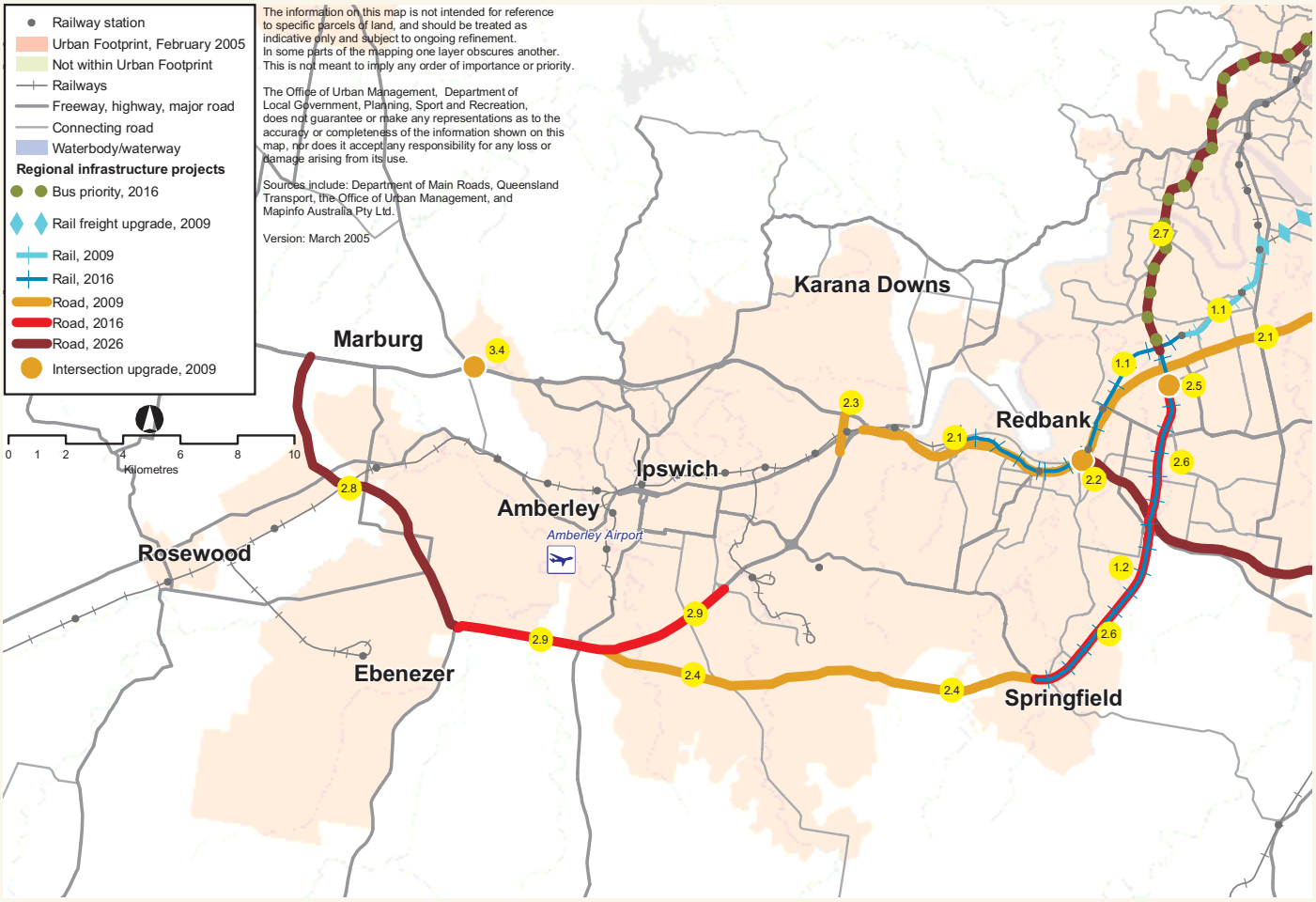
- **Improving road and public transport links to service growing population centres at Springfield and Ripley**

  The passenger rail line from Darra needs to be extended to Springfield to provide a viable public transport option for this growing centre. The road network will also be developed by extending the Centenary Highway through Ripley to Yamanto; and planning and design for duplication of the Centenary Highway between the Ipswich Motorway and Springfield.

The second phase of this Infrastructure Plan concentrates on completing the key projects commenced in phase one, as well as providing additional roads and public transport to cater for the expected growth in Springfield and the Ripley Valley.

The third phase of this Infrastructure Plan covers the period past 2015. The sequence and timing of projects continue to support the area's role as a major freight transport hub.

Map 1a: Proposed transport infrastructure – Western Corridor 2005-2026



Map 1b: Proposed transport infrastructure – Western Corridor 2005-2026

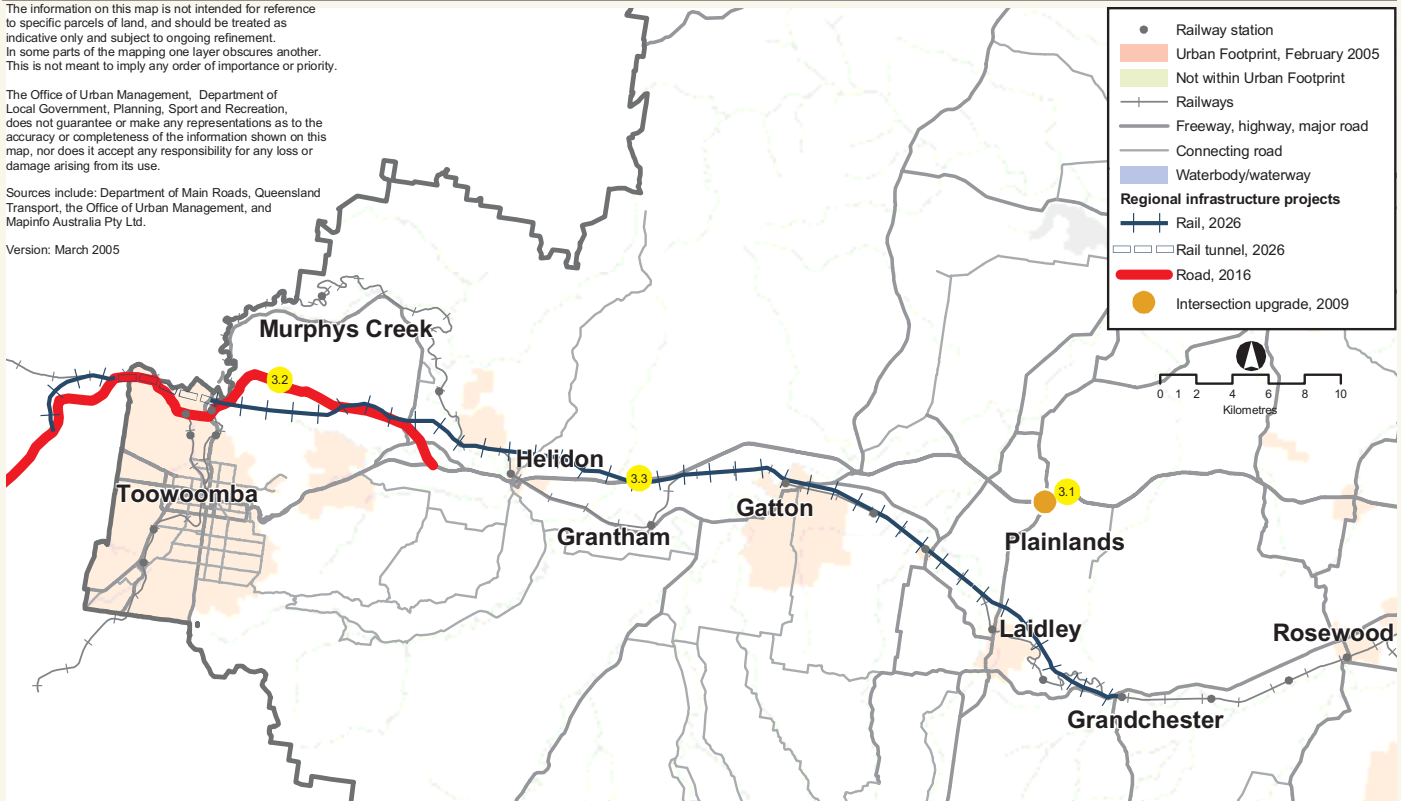


Table 2: Future Western Corridor transport infrastructure

Map ref.	Western Corridor	Estimated total cost $million	Period covering		
			2005-06 to 2008-09	2009-10 to 2014-15	2015-16 to 2025-26
Public transport connections					
1.1	Ipswich rail line Corinda-Darra, Darra-Redbank third track	290	■	■	
1.2	Springfield passenger rail line	300	■	■	
1.3	TransLink sub-regional station upgrade program	25	■	■	
Walking and cycling					
1.4	Sub-regional cycle network	20	■	■	■
Major road network					
2.1	Ipswich Motorway upgrade (pending Goodna Bypass Investigation)	870	■	■	
2.2	Logan Motorway/Ipswich Motorway interchange	160	■		
2.3	Cunningham Highway to Warrego Highway connection (pending Goodna Bypass and River Road Investigation)	70	■	■	
2.4	Centenary Highway two lanes (Springfield-Ripley, Ripley-Yamanto)	220	■		
2.5	Centenary Highway Boundary Road underpass (joint Brisbane City Council and Main Roads project)	23	■		
2.6	Centenary Highway four lanes: Ipswich Motorway to Springfield	440	■	■	
2.7	Centenary Highway bus priority/transit lanes Ipswich Motorway to Toowong	250	■	■	■
2.8	Western Ipswich Bypass	200			■
2.9	Cunningham Highway four lanes: Ripley Road to Yamanto, Yamanto to Ebenezer	90		■	
Toowoomba					
3.1	Warrego Highway: Plainlands interchange	14	■		
3.2	Toowoomba Bypass: four lanes including new range crossing	680		■	
3.3	Gowrie to Grandchester rail line	1,050			■
3.4	Warrego Highway/Brisbane Valley Highway interchange	50	■		
Total		4,752			

Footnote:

1. Estimated project costs are in 2005 dollars to ensure price consistency over a 20-year time frame. Project cost estimates in State Budget and other public documents may differ, as they will incorporate project costs which reflect anticipated changes in input prices between 2005 and time of construction.
2. Where funding is required from other levels of government, their estimated costs have been included. Where projects are part of (or connect to) the *AusLink National Transport Network*, these projects are subject to negotiation with the Australian Government.

Greater Brisbane

The Greater Brisbane sub-region is defined in this Infrastructure Plan as the cities of Brisbane, Logan and Redcliffe and the shires of Redland, Pine Rivers and Caboolture.

Greater Brisbane is expected to accommodate the majority of the infill development proposed for SEQ. This infill will mainly occur around existing Activity Centres, public transport nodes and brownfield redevelopment sites.

Brownfield: Areas of land previously used for industrial or other purposes that are redeveloped for alternative purposes.

"Greater Brisbane is expected to accommodate the majority of the infill development proposed for SEQ. This infill will mainly occur around existing Activity Centres, public transport nodes and brownfield redevelopment sites."

Table 3 outlines a transport infrastructure investment program for the Greater Brisbane area. The package addresses the following strategic transport needs:

- quality public transport connections between Principal Activity Centres;
- better transport links to industrial and logistics centres, particularly to the Australia TradeCoast; and
- orbital road networks that link centres outside the inner city, reduce traffic congestion and provide a sound basis for future traffic management.

The first phase of this Infrastructure Plan (2005-06 to 2008-09) addresses four major issues:

- **Extending public transport infrastructure**

  Public transport infrastructure such as railways and busways needs to be expanded to encourage population growth in the areas preferred in the SEQ Regional Plan. This practice is already in place with the CityTrain Network and sections of the Brisbane Busway Network. Busways now need to be expanded along northern and eastern spines to support Transit Oriented Developments in these corridors.

- **Improving freight transport links to the Australia TradeCoast**

  The expected growth in container traffic through the Port of Brisbane and passenger numbers through Brisbane Airport will require significant improvements to both road and rail networks. The Gateway upgrade is a major initiative to support this growth.

- **Supporting active transport choices**

  Active transport choices such as cycling and walking are being encouraged in this Infrastructure Plan. Two new pedestrian and cycle bridges, including one from the Millennium Arts precinct to the inner city, will build on the success of the Goodwill Bridge. The sub-regional cycle network will continue to be improved.

- **Improving road infrastructure**

  While a certain amount of congestion on the road network in large urban areas is inevitable, bypass routes for more congested road links and areas are needed. The Infrastructure Plan provides in-principle support for the North-South Bypass Tunnel and Airport Link, as well as investigations to improve orbital and bypass road networks in Western Brisbane.

Subsequent phases of the Infrastructure Plan will build on existing projects.

Map 2: Proposed transport infrastructure – Greater Brisbane 2005-2026

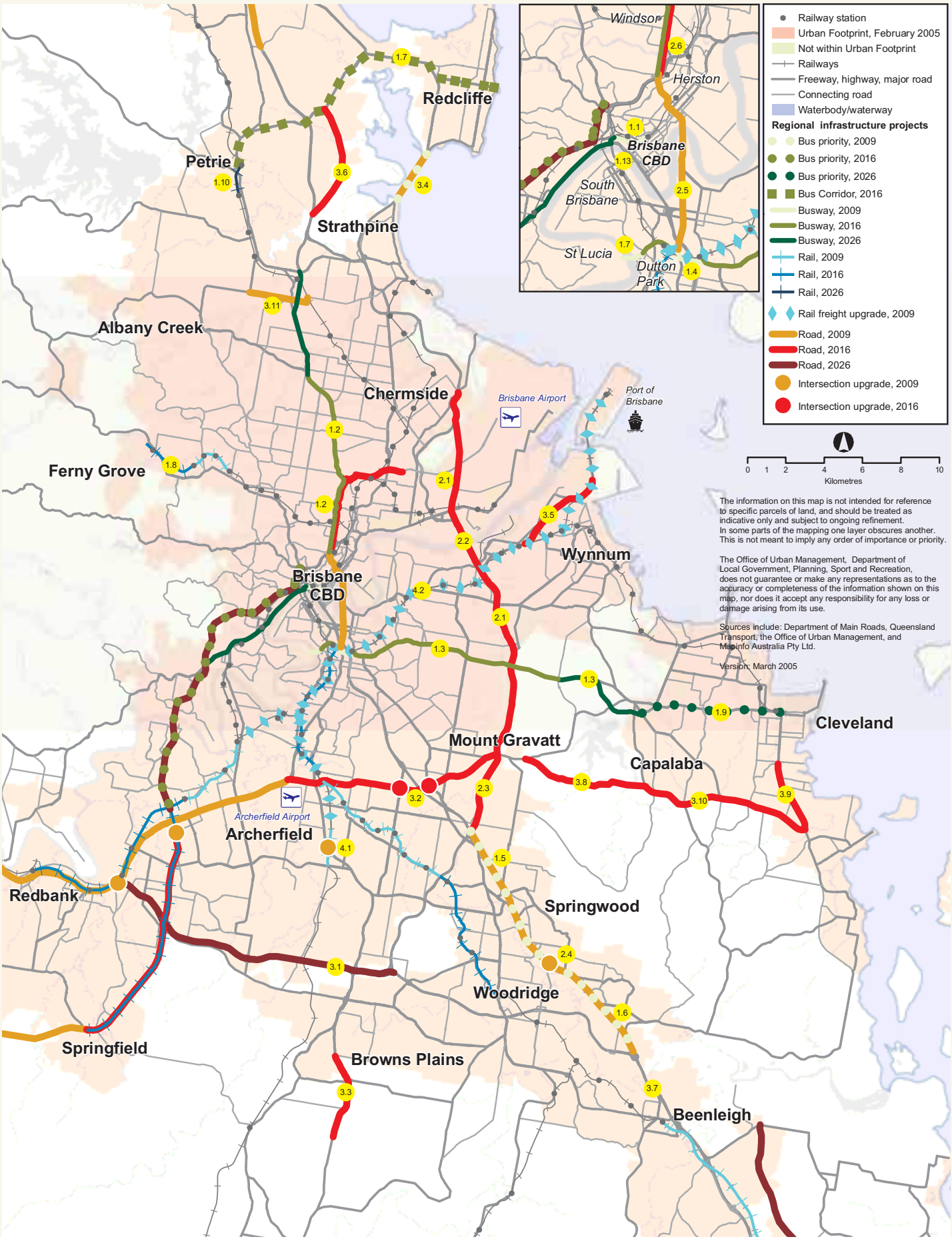


Table 3: Future Greater Brisbane transport infrastructure

Map ref.	Greater Brisbane	Estimated total cost $million	Period covering		
			2005-06 to 2008-09	2009-10 to 2014-15	2015-16 to 2025-26
Public transport connections					
1.1	Inner Northern Busway improvements, new Busway stations	460			
1.2	Northern Busway: Enoggera Creek to Aspley to Bracken Ridge	530			
1.3	Eastern Busway: Buranda to Capalaba	530			
1.4	Eastern Busway: Buranda to Boggo Road to Green Bridge	170			
1.5	South East Busway: extension to Springwood	25			
1.6	Pacific Motorway transit lanes from Gateway Motorway to Logan Motorway	390			
1.7	Petrie to Redcliffe quality bus corridor/bus priority/Busway	210			
1.8	Mitchelton to Keperra to Ferny Grove track duplication	50			
1.9	Redland's bus priority measures	100			
1.10	Lawnton to Petrie third rail track	25			
1.11	TransLink sub-regional station upgrade program	64			
Walking and cycling					
1.12	Sub-regional cycle network	80			
1.13	Pedestrian/cycle bridges in the CBD	120			
3.7	Pacific Motorway Bikeway	10			
Orbital road network					
2.1	Gateway Motorway upgrade: Mt Gravatt-Capalaba Road to Nudgee Road	910			
2.2	Gateway Bridge duplication	520			
2.3	Gateway Motorway upgrade: six lanes Mt Gravatt-Capalaba Road to Pacific Motorway	45			
2.4	Pacific Motorway: Loganlea Road interchange	40			
2.5	North-South Bypass Tunnel	1,300			
2.6	Airport Link	1,200			
Improving road connections					
3.1	Logan Motorway six lanes	200			
3.2	Brisbane Urban Corridor (Griffith Arterial)	225			
3.3	Mt Lindesay Highway four lane upgrade: Green Road to Rosia Road to Jimboomba	300			
3.4	Houghton Highway duplication and bus priority	125			
3.5	Port of Brisbane Motorway	150			
3.6	North-South Arterial Mango Hill	250			
3.8	Redland Sub-Arterial Road	150			
3.9	Cleveland Redland Bay Road	50			
3.10	Redland Bay Road	60			
3.11	Linkfield Connection Road	30			
Freight rail network improvements					
4.1	Mt Lindesay Highway/Acacia Ridge grade separation	50			
4.2	Metropolitan freight upgrades	65			
4.3	Rail crossing grade separations	150			
Total		**8,584**			

Footnote:

1. Estimated project costs are in 2005 dollars to ensure price consistency over a 20-year time frame. Project cost estimates in State Budget and other public documents may differ, as they will incorporate project costs which reflect anticipated changes in input prices between 2005 and time of construction.
2. Where funding is required from other levels of government, their estimated costs have been included. Where projects are part of (or connect to) the *AusLink National Transport Network*, these projects are subject to negotiation with the Australian Government.

Regional infrastructure priorities and projects continued...

Transport continued...

Gold Coast

The Gold Coast sub-region extends from Yatala in the north, to the border with New South Wales in the south. Significant population and activity growth in this area will challenge the capability of the local transport system. Improvements to the road system are only part of the solution, with public transport to play an increasing role in moving people efficiently. Quality public transport links are required to connect major centres and developing areas on the Gold Coast.

Table 4 outlines the transport infrastructure investment program for the Gold Coast. The strategic transport needs in this area include:

- establishing a public transport spine linking the main centres;
- increasing the use of the south coast rail line; and
- improving local road and bus links east-west across the sub-region.

"Quality public transport links are required to connect major centres and developing areas on the Gold Coast."

The first phase of this Infrastructure Plan (2005-06 to 2008-09) addresses four major issues:

- **Constructing a public transport spine**

  A high quality corridor will link Helensvale/Parkwood to Broadbeach.

- **Increasing trips on the south coast rail line**

  Sections of track will be duplicated and the rail line will be extended to Reedy Creek and later Elanora. This investment will improve services and make rail travel to Brisbane an attractive choice.

- **Upgrading the Pacific Motorway**

  This link is critical to the SEQ region and its use for inter-regional and intra-regional trips must be preserved. Additional lanes between Nerang and Tugun and improved local transport connections are essential investments.

- **Improving the east-west road and public transport links within the Gold Coast**

  Improved road and public transport links between existing and emerging Activity Centres will support continued economic growth and make best use of the passenger rail line.

Subsequent phases of the Infrastructure Plan will build on these investments.

Map 3: Proposed transport infrastructure – Gold Coast 2005-2026

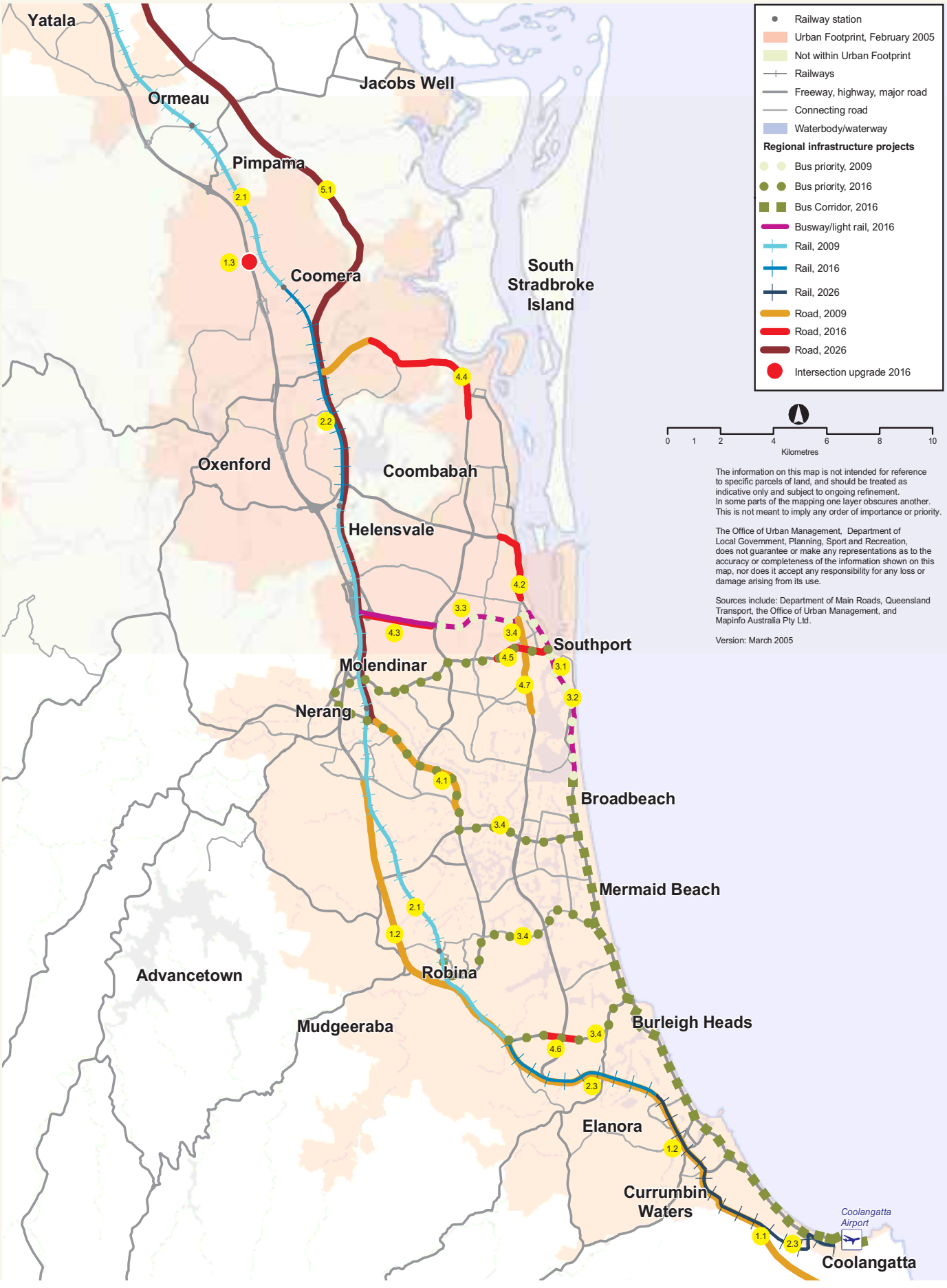


Table 4: Future Gold Coast transport infrastructure

Map ref.	Gold Coast	Estimated total cost $million	Period covering 2005-06 to 2008-09	2009-10 to 2014-15	2015-16 to 2025-26
Pacific Motorway					
1.1	Tugun Bypass	360	■		
1.2	Nerang to Stewart Road: additional traffic lanes and interchanges	530	■	■	
1.3	Coomera interchange	130	■	■	
Gold Coast rail line					
2.1	Additional track and upgrades: Ormeau to Coomera, Helensvale to Robina, Salisbury to Kuraby	265	■		
2.2	Additional tracks: Coomera to Helensvale, Kuraby to Kingston, Salisbury to Park Road	310	■	■	■
2.3	Southern extension of rail line: Robina to Elanora	280	■	■	
2.3a	Southern extension of rail line: Elanora to Coolangatta	500			■
2.4	New passenger rail stock	265	■		
Gold Coast public transport					
3.1	Bus priority on Gold Coast Highway plus bus stations	15	■		
3.2	Quality public transport corridor (Helensvale/Parkwood to Broadbeach to Coolangatta)	490	■	■	■
3.3	Bus priority on Smith Street: Olsen Avenue to Gold Coast Highway	5	■		
3.4	Bus priority/high occupancy vehicle program	50	■	■	
3.5	TransLink sub-regional station upgrade	25	■	■	
Walking and cycling					
3.6	Sub-regional cycle network	50	■	■	■
Gold Coast major road network					
4.1	Nerang-Broadbeach Road: additional lanes from Allambe Gardens to Nielsens Road	60	■	■	
4.2	Gold Coast Highway: additional lanes from Robert Street to Stevens Street to Government Road	60	■	■	
4.3	Smith Street: additional lanes from Pacific Motorway to Olsen Avenue	50	■	■	
4.4	Hope Island Road: additional lanes from Pacific Motorway to Santa Barbara Road to Columbus Drive to Lae Drive	100	■	■	
4.5	Southport-Nerang Road: additional lanes from Minnie Street to Queen Street	30	■	■	
4.6	Burleigh Connection Road: additional lanes from Mattocks Road to Kortum Drive	30	■	■	
4.7	Southport-Burleigh Road: intersection upgrades	75	■	■	■
Future transport corridors					
5.1	Intra-regional transport corridor: Nerang to Stapylton	1,600	■	■	■
Total		**5,280**			

Footnote:

1. Estimated project costs are in 2005 dollars to ensure price consistency over a 20-year time frame. Project cost estimates in State Budget and other public documents may differ, as they will incorporate project costs which reflect anticipated changes in input prices between 2005 and time of construction.
2. Where funding is required from other levels of government, their estimated costs have been included. Where projects are part of (or connect to) the *AusLink National Transport Network*, these projects are subject to negotiation with the Australian Government.

Sunshine Coast

The Sunshine Coast sub-region is defined here as the Shires of Noosa, Maroochy and Caloundra. The Principal Activity Centre for this sub-region is Maroochydore, which accommodates the key business, service and retail uses. Other Major Centres in the region are Caloundra, Nambour and Noosa. There are Emerging Centres at Kawana Waters and Sippy Downs.

The SEQ Regional Plan actively supports consolidating and containing travel within the Sunshine Coast area. As the resident population and employment activity on the Sunshine Coast increases, transport connections to and between the Activity Centres located on the Coast will become busier. The projected population growth to 2026 of more than 150,000 people will generate traffic demand in excess of an additional 500,000 trips per day.

Road connections between centres in the sub-region and to Brisbane will always be important. However, the Sunshine Coast is now at a stage where public transport must play a much greater role.

Table 5 outlines a transport infrastructure investment program for the Sunshine Coast. The package addresses the following strategic transport needs:

- establishing a trunk public transport system linking key centres;
- increasing use of the north coast rail line;
- protecting the role of the Bruce Highway as a national link; and
- developing convenient east-west road and public transport connections between coastal Activity Centres and other centres along the rail line.

The first phase of this Infrastructure Plan (2005-06 to 2008-09) addresses five major issues:

- **Providing a quality bus system between Caloundra and Maroochydore**

  This system will be developed to provide a quality public transport network between Caloundra and Maroochydore. It will be further enhanced with improved services and connections to the University of the Sunshine Coast at Sippy Downs.

- **Initiating a rail service between Beerwah and Maroochydore**

  Planning and land acquisition will be undertaken for a rail service between Beerwah and Maroochydore along the CAMCOS *(Caboolture to Maroochydore Corridor Study)* corridor. This system will be integrated with the bus system between Caloundra and Maroochydore.

- **Improving the north coast rail line**

  Major upgrades are planned between Caboolture and Landsborough to increase passenger and freight capacity.

- **Upgrading of the Bruce Highway between Brisbane and Gympie/Curra**

  The Australian Government has already funded major upgrading works closer to Brisbane.

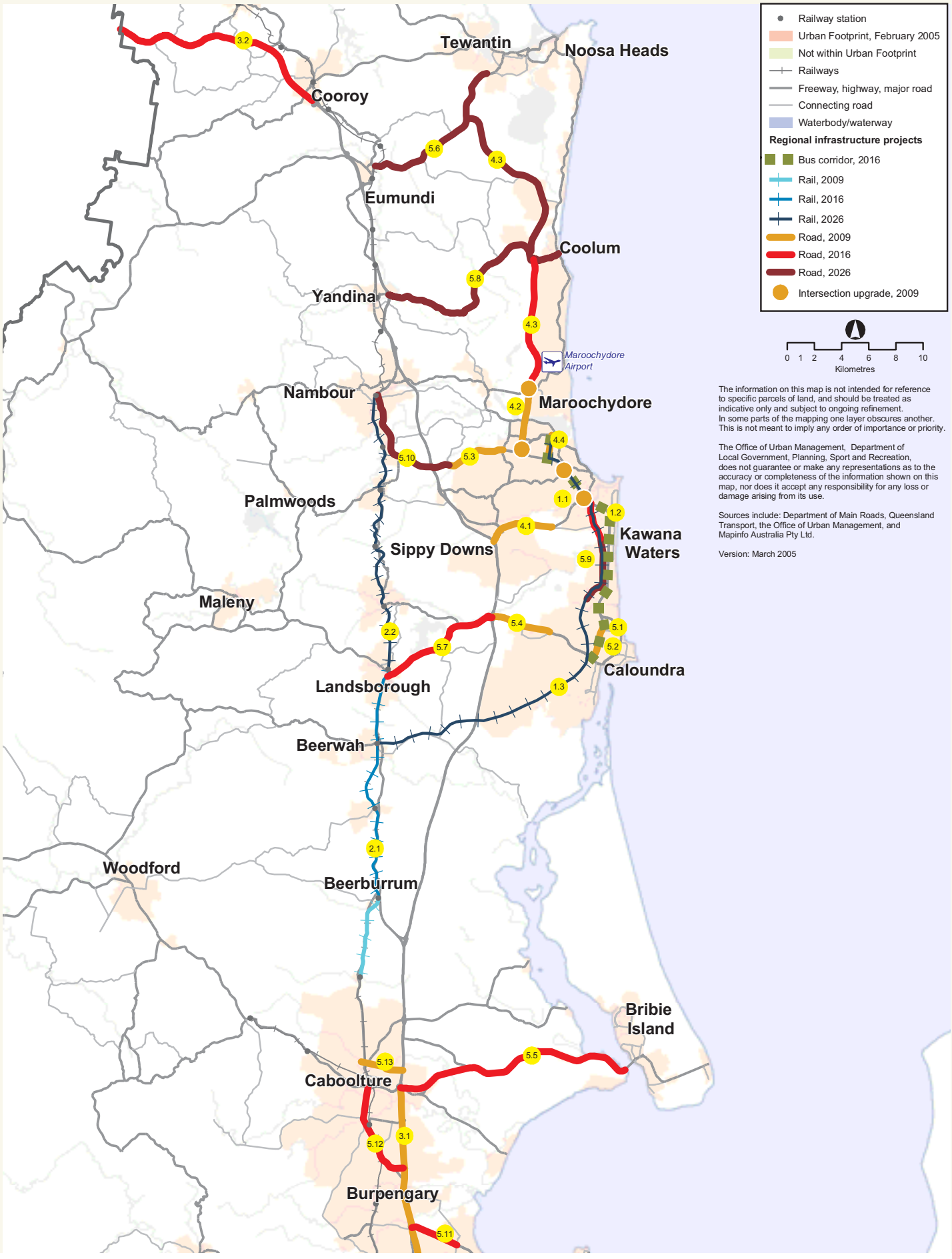
- **Upgrading of the Sunshine Motorway**

  This will ensure a convenient road link between the main Activity Centres on the Sunshine Coast. Current construction work will ease traffic congestion on the more heavily used sections of the Motorway and also provide better access via upgraded interchanges to growth areas. Future construction work on the Motorway and local road network will serve the growth areas between Maroochydore and Caloundra.

Subsequent phases of the Infrastructure Plan will build on existing projects.

"Road connections between centres in the sub-region and to Brisbane will always be important. However, the Sunshine Coast is now at a stage where public transport must play a much greater role."

Map 4: Proposed transport infrastructure – Sunshine Coast 2005-2026



The information on this map is not intended for reference to specific parcels of land, and should be treated as indicative only and subject to ongoing refinement. In some parts of the mapping one layer obscures another. This is not meant to imply any order of importance or priority.

The Office of Urban Management, Department of Local Government, Planning, Sport and Recreation, does not guarantee or make any representations as to the accuracy or completeness of the information shown on this map, nor does it accept any responsibility for any loss or damage arising from its use.

Sources include: Department of Main Roads, Queensland Transport, the Office of Urban Management, and Mapinfo Australia Pty Ltd.

Version: March 2005

Table 5: Future Sunshine Coast transport infrastructure

Map ref.	Sunshine Coast	Estimated total cost $million	Period covering		
			2005-06 to 2008-09	2009-10 to 2014-15	2015-16 to 2025-26
Public transport connections					
1.1	Bus priority/high occupancy vehicle program	36			
1.2	Caloundra to Maroochydore quality bus corridor and public transport stations	125			
1.3	CAMCOS rail: Beerwah to Maroochydore	1,000			
1.4	TransLink sub-regional station upgrade program	10			
Walking and cycling					
1.5	Sub-regional cycle network	50			
North coast rail line					
2.1	Additional rail line: Caboolture to Beerburrum to Landsborough (pending finalisation of study)	480			
2.2	Additional rail line: Landsborough to Nambour	500			
Bruce Highway					
3.1	Additional lanes: Boundary Road to Caboolture	210			
3.2	Additional lanes and improved alignment: Cooroy to Gympie/Curra	1,000			
Sunshine Motorway					
4.1	Additional lanes: Sippy Downs to Kawana Arterial including new Sippy Downs interchange	40			
4.2	Additional lanes: Maroochydore Road to Pacific Paradise including interchange upgrades	180			
4.3	Additional lanes: Pacific Paradise to Yandina-Coolum Road and to Eumundi-Noosa Road	400			
4.4	Service roads and local road network improvements	100			
Sunshine Coast major road network (including bus priority as required)					
5.1	*Kawana Transport Infrastructure Agreement* (KTIA) Caloundra-Mooloolaba Road: new road link from Caloundra Road to Creekside Boulevard	55			
5.2	KTIA Nicklin Way: additional lanes from Caloundra Road to Beerburrum Street	7			
5.3	Maroochydore Road: Additional lanes from Bruce Highway to Martins Creek	90			
5.4	Caloundra Road: additional lanes from Bruce Highway to Pierce Avenue	80			
5.5	East-west links: Caboolture-Bribie Island Road	170			
5.6	East-west links: Eumundi-Noosa Road	120			
5.7	East-west links: Glass House Mountains Road	120			
5.8	East-west links: Yandina-Coolum Road	50			
5.9	KTIA Caloundra-Mooloolaba Road: new link from Creekside Boulevard to Sunshine Motorway	800			
5.10	Nambour Connection Road and Maroochydore Road improvements	90			
5.11	Deception Bay Road: additional lanes from Bruce Highway to Lipscombe Road	75			
5.12	Burpengary-Caboolture Road: additional lanes from Bruce Highway to Gaffield Street	70			
5.13	Caboolture Northern Bypass	70			
Total		**5,928**			

Footnote:

1. Estimated project costs are in 2005 dollars to ensure price consistency over a 20-year time frame. Project cost estimates in State Budget and other public documents may differ, as they will incorporate project costs which reflect anticipated changes in input prices between 2005 and time of construction.
2. Where funding is required from other levels of government, their estimated costs have been included. Where projects are part of (or connect to) the *AusLink National Transport Network*, these projects are subject to negotiation with the Australian Government.

Regional infrastructure priorities and projects continued...

Freight

Freight across Queensland is forecast to double by 2020. This is also expected to be the case in SEQ with the rapidly expanding import and export activities of the Port of Brisbane. This has significant impacts on the road and rail transport corridors that service the Australia TradeCoast area. The challenge is to improve transport system efficiency so road space is shared effectively between heavy vehicles, passenger vehicles and cyclists, with both passengers and freight sharing railway space.

Map 5 identifies the key existing and future freight connections or proposed investigations necessary for the optimum freight movement within and through SEQ.

The map shows Priority One and Priority Two freight routes. Priority One routes facilitate high volume, business-to-business freight movements. Priority Two freight routes allow freight to be distributed from factories or distribution centres to retail outlets or warehouses.

The Infrastructure Plan identifies a number of initiatives to improve freight movement in SEQ and best cater for growth. Many of these are subject to ongoing negotiation with the Australian Government for funding under the *AusLink* program.

For rail freight, key initiatives include:

- expanding capacity of the Acacia Ridge rail terminal by grade separating the intersection of the rail line with Beaudesert Road;
- increasing rail capacity through the metropolitan network to the Port of Brisbane with signalling upgrades and passing loops;
- increasing capacity on the northern line by duplicating the rail line north of Caboolture; and
- increasing capacity on the western line by an upgrade from Gowrie to Grandchester.

"Freight across Queensland is forecast to double by 2020."

For road freight, key initiatives include:

- supporting economic development in the western parts of the region by upgrading the Ipswich Motorway and Cunningham Highway; improving the connection between the Cunningham and Warrego Highways; trialling free truck travel at night on the Logan Motorway; selective upgrading of the Brisbane Urban Corridor; and the second Toowoomba range crossing;
- improving freight flows around the Australia TradeCoast by duplicating the Gateway Bridge, upgrades to the Gateway Motorway and the next stage of the Port of Brisbane Motorway; and
- improving road freight connections to the north and south by building the Tugun Bypass and adding capacity to the Pacific Motorway and Bruce Highway.

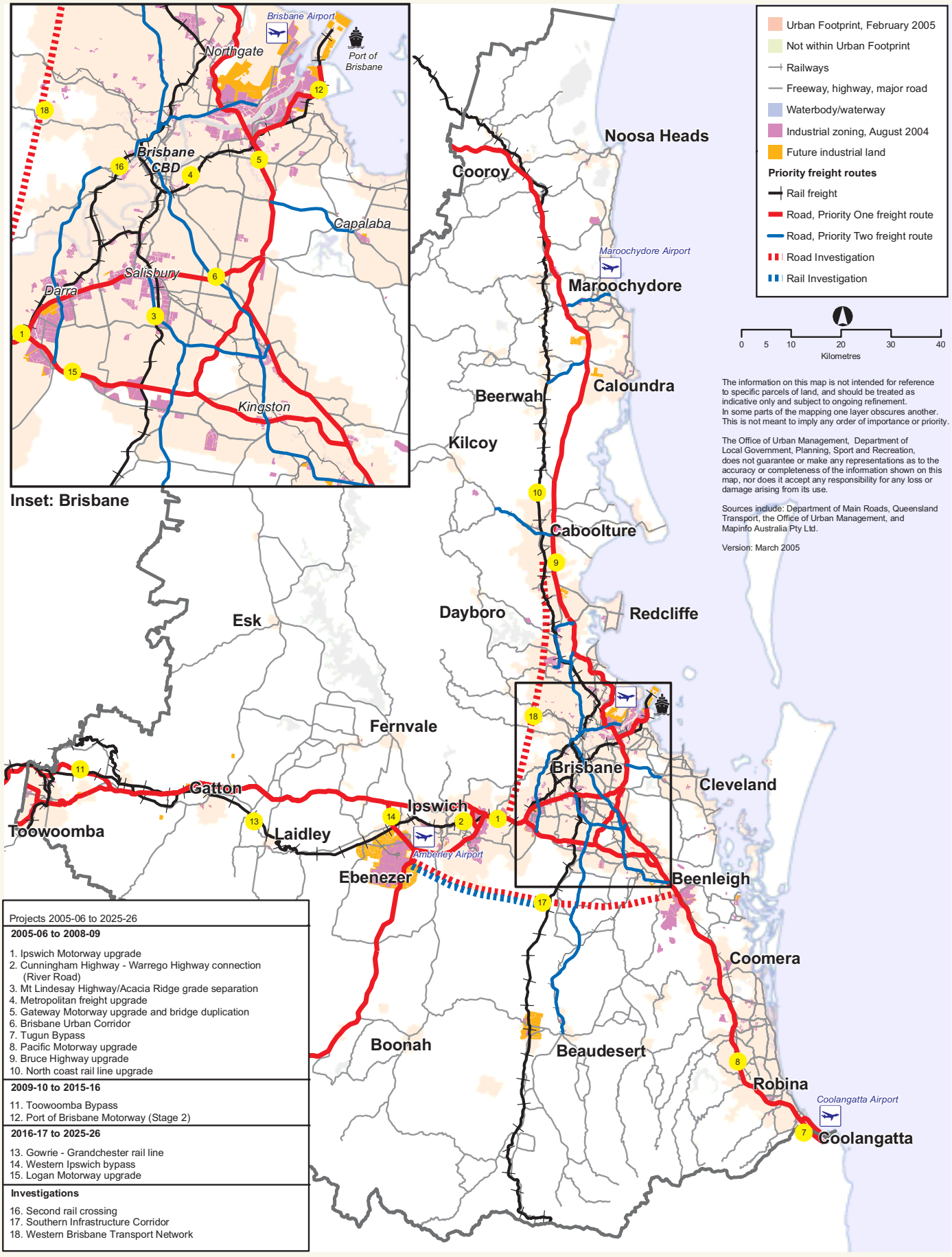
Investigation of a Southern Infrastructure Corridor between Ebenezer and Yatala, including the critical intersection with the standard gauge rail line is also proposed. This corridor will provide for long-term development of dedicated rail freight links and a possible connection to the proposed inland rail network.

The importance of managing the impact of freight traffic in urban areas, particularly along the Brisbane Urban Corridor, is also recognised. Options for new policy, better planning and future investment need to be considered to reduce the social impact.

Other Queensland Government initiatives for delivering optimal freight movement include:

- identifying priority freight routes;
- working collaboratively with Australian and local governments to protect freight transport corridors;
- integrating planning for economic uses and freight transport;
- managing access, priority and operation of the routes to ensure they meet industry needs for freight movement;
- supporting strategic investment in priority freight routes for effective movement of general freight, dangerous goods and goods that exceed normal size or loads;
- land use planning strategies to maintain residential amenity and manage noise and environmental impacts of heavy vehicles; and
- applying new technologies including fibre optic communications, satellite tracking of heavy vehicles and traffic signal timing to provide greater efficiencies in freight movement through urban areas.

Map 5: Freight routes in SEQ



Regional infrastructure priorities and projects continued...

Water

The SEQ Regional Plan identifies an integrated approach to water cycle management as a key principle underpinning sustainability. This means managing the total water available from all sources to achieve a more ecologically sustainable system.

Existing water infrastructure in SEQ is sufficient to meet present demands. Additional urban and industrial water supplies will be required, however, to meet the future needs of the region. These supplies will be gained through better use of existing available water; demand management; recycling; new dams and weirs; and alternative sources.

The Queensland Government is responsible for regulating water service providers; allocating and managing water resources; and facilitating strategic water supply infrastructure. Providing most other water infrastructure, including operating and managing water storages; potable water treatment, distribution and reticulation networks; and wastewater treatment and recycling schemes, rests with local governments or water service providers such as SEQWater and SunWater.

"The SEQ Regional Plan identifies an integrated approach to water cycle management as a key principle underpinning sustainability. This means managing the total water available from all sources to achieve a more ecologically sustainable system."

SEQ councils collectively intend to invest approximately $2 billion in water and sewerage services and water recycling projects over the next five years. This will be financed from a number of sources, including state subsidies; revenue from water and sewerage charges; infrastructure charges on developments; and borrowings. The Queensland Government, via its subsidy schemes, will contribute more than $380 million over the next five years towards these projects.

The Queensland Government, in partnership with SEQROC and other stakeholders, is preparing the *SEQ Regional Water Supply Strategy* (RWSS), which aims to balance water demands and supplies in this region. The RWSS will be finalised by the end of 2006 and will provide the basis for a comprehensive policy framework and further investment priorities for SEQ.

Strategic priorities

The Queensland Government's strategic priorities for water include:

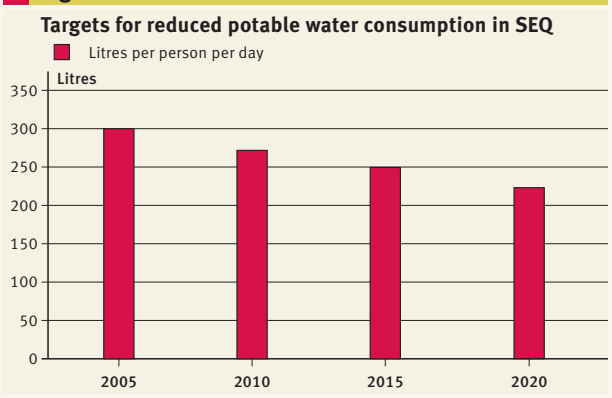
- increasing the supply of water to accommodate growth in the region;
- diversifying water supplies to address climate variability, climate change and other supply risks;
- ensuring more efficient management and use of water;
- providing policy frameworks and subsidies to support more sustainable and integrated water cycle management systems; and
- reviewing institutional arrangements to ensure efficient, sustainable and equitable delivery of bulk water supply and treatment services.

Water and sewerage subsidy schemes

The Queensland Government supports local governments with water infrastructure through the statewide *Local Government Bodies' Capital Works Subsidy Scheme* (LGBCWSS) and *Smaller Communities Assistance Program* (SCAP). Maximum subsidy rates under the LGBCWSS are currently 40 per cent for major water and sewerage projects and 50 per cent for water recycling projects. Since July 1996, the Queensland Government has committed subsidies of more than $255 million to local government water and sewerage projects across SEQ.

LGBCWSS and SCAP subsidies will be supplemented with a new *Environmental Infrastructure Program* (commencing 2008). The new program will provide subsidies towards a broader range of local government projects including solid waste, stormwater and erosion control initiatives, all of which promote more sustainable and integrated water management.

Figure 2



Making best use of the available supplies

The SEQ Regional Plan seeks to improve water use efficiency and reduce waste by setting targets for significant reductions in residential reticulated drinking (potable) water use. The current average residential water use across the region of 300 litres per person per day (l/p/d) is to be reduced to 270 l/p/d by 2010, 250 l/p/d by 2015 and to 230 l/p/d by 2020. The RWSS will translate these regional targets for each local government area and also set targets for reduced water system distribution losses. These targets will be used by government agencies for water supply planning purposes and financial assessment purposes.

A strategic urban water management policy and regulatory framework will be implemented to assist with the wider application of demand management, water recycling and use of other water sources. This framework will be supported through development of an urban water accounting system to ensure accurate and consistent accounting for water use throughout the region.

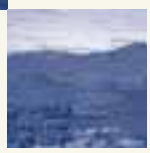
Pressure reduction and leakage management has the potential to significantly reduce wastage of water in some urban water systems. These projects will be encouraged through state subsidies.

Reducing non-residential water use will be achieved by extending the successful industrially-focused *EcoBiz* program to the commercial sector, and by promoting widespread take-up of water efficient devices, water recycling and use of 'fit-for-purpose' water.

Opportunities for rural agriculture will be realised through improved water use efficiency and potentially greater use of recycled water. Rural water use efficiency initiatives such as more efficient irrigation equipment and better irrigation scheduling will reduce use or increase the value of production. The Queensland Government is also preparing water resource plans to introduce water trading, a key measure in improving efficiency of water use.

Treatment and distribution of available supplies

Additional pipelines will be required to convey water from water sources to areas of high growth. A *Southern Regional Pipeline Strategy* has been developed to supply water from the Mt Crosby Treatment Plant to Ipswich, the Western Corridor, Beaudesert and the Gold Coast to ensure future diversity and security of supply. Stage one of this strategy will be implemented by 2008-09. The Northern Regional Pipeline conveying water from Mt Crosby to the Pine Rivers Shire and beyond; Sunshine Coast trunk mains; and the Mt Crosby Treatment Plant are also likely to require upgrading by 2010. These local government projects continue to be eligible for state subsidies.



"The SEQ Regional Plan seeks to improve water use efficiency and reduce waste by setting targets for significant reductions in residential reticulated drinking (potable) water use."

Regional infrastructure priorities and projects continued...

Water continued...

Water recycling

Better use of recycled water through reticulation to industrial, commercial, residential and rural users will relieve pressure on potable supplies and bring environmental benefits by reducing effluent discharge to waterways and out into Moreton Bay.

Best practice projects in water recycling help demonstrate benefits and resolve implementation issues for the wide-scale introduction of Integrated Urban Water Management (IUWM) and water recycling schemes. SEQ councils are responding to this challenge by developing a number of significant recycling and IUWM projects including the Pimpama-Coomera IUWM project; Rochedale IUWM project; *Western Corridor Recycled Water Scheme*; *Australia TradeCoast Recycled Water Scheme* and the *Toowoomba Water Futures* recycling project. These projects will continue to be eligible for state subsidies and may attract support from the Australian Government's *Australian Water Fund*.

The Queensland Government is currently preparing the *South East Queensland Water Recycling Action Plan* to coordinate the state's involvement in water recycling as a key element of IUWM.

Supplies from alternative sources

IUWM schemes typically incorporate rainwater tanks, stormwater reuse and water recycling to provide valuable supplementary sources of supply. The Queensland Government is reviewing relevant legislation to ensure there are no impediments to installing rainwater tanks, dual reticulation and other IUWM initiatives.

In parts of the region, groundwater aquifers provide useful water supplies. There may be opportunities for further use of some of these sources. The Queensland Government will undertake studies to determine the available resource and, where appropriate, suitable extraction regimes and facilities. Opportunities for aquifer storage and recovery will also be pursued.

Water supplies produced by seawater desalination are currently much more expensive than those from conventional sources. However, future scarcity of the resource and advances in technology may make desalination plants more cost effective. In the short-term, suitable sites for future plants will be identified and secured while they are available and affordable.

Additional supplies from dams and weirs

Even after allowing for better use of water and possible use of alternative water sources, additional water supply from dams and weirs will be required to accommodate growth in SEQ. The raising and upgrading of some existing dams has potential to provide additional cost-effective supplies. Dams being considered for upgrading include the:

- Hinze Dam (Gold Coast);
- Wappa Dam (Sunshine Coast);
- Ewen Maddock Dam (Sunshine Coast); and
- Borumba Dam (Mary River).

Opportunities for the development of new dams in the region are scarce. Given the long lead times prior to new dams becoming operational, the Queensland Government will progress planning for new dams and weirs immediately. Projects for investigation, protection and potential land acquisition include the:

- Cedar Grove Weir on the Logan River;
- weir and a major storage on the Mary River;
- Wyaralong Dam (Logan River Basin); and
- Glendower Dam (Logan River Basin).

The need, timing and sequencing of these projects and related water supply infrastructure will be finalised as part of the *SEQ Regional Water Supply Strategy*.

Water quality

Recent water quality assessments of SEQ waterways and Moreton Bay indicate the imperative for all new developments to incorporate best practice measures to reduce pollution. Integrated urban water management will result in improved water quality by reducing the quantity and raising the standard of effluent discharges to waterways.

The Queensland Government is currently working with the Moreton Bay Waterways and Catchments Partnership to develop and implement an enhanced catchment management and monitoring regime to improve the quality of discharges to storages and regional waterways.

Upgrading wastewater treatment plants to improve environmental performance will continue to be supported through state subsidy schemes.

Governance

Management of water resources, planning for infrastructure and managing assets is the responsibility of a wide range of Queensland Government, local government and quasi-government entities. As regional water demands increase and water supplies and operations become more complex, it is important the planning and management of bulk water supply assets is well-coordinated and efficient in meeting needs across the region.

The Queensland Government, in consultation with stakeholders, is considering a review of the governance arrangements for water supply in SEQ.

"Integrated urban water management will result in improved water quality by reducing the quantity and raising the standard of effluent discharges to waterways."

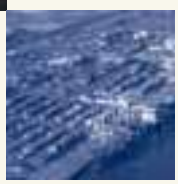


Table 6: Future strategic water projects in SEQ

Projects	Project sponsor	Est. state government costs $m	Period covering		
			2005-06 to 2008-09	2009-10 to 2014-15	2015-16 to 2025-26
Dams and weirs		266			
Local government dams	Local government	23			
- Raising of Hinze Dam (minor)					
- South Maroochy storage upgrade (including Wappa Dam)					
- Ewen Maddock Dam upgrade					
New weir on Logan River	State Government	12			
New weir on Mary River	State Government	16			
Mary River water storage improvements	State Government	62			
Wyaralong Dam	State Government	149			
Glendower Dam: investigations/land acquisitions	State Government	4			
Making best use of available resources		79			
Urban water accounting system	State Government	4			
Urban water conservation initiatives	State Government	23			
IUWM framework	State Government	17			
Pressure reduction and leakage management	Local government	20			
Rural water use efficiency	State Government	15			
Treatment and distribution	Local government	399			
Southern Regional Pipeline (Stage one)					
Northern Regional Pipeline					
Treatment plants, mains and other projects					
Water recycling	Local government	107			
Gold Coast and Brisbane integrated water management					
Australia TradeCoast Recycled Water Scheme					
Toowoomba Water Futures project					
Western Corridor Recycled Water Scheme					
Other reuse projects					
Alternate sources of supply	State Government	4			
Groundwater aquifers: investigations		2			
Desalination: investigations/potential site acquisition		2			
Water quality initiatives	State Government	6			
Catchment control/monitoring		3			
Water quality improvement strategy		3			
Total		**861**			

Footnote:

1. Project costs are estimated costs to the Queensland Government in 2005 dollars, including estimated subsidies for local government projects. State subsidies towards local government projects will be assessed in accordance with guidelines in place at the time.
2. Major infrastructure proposals are subject to the outcomes of further investigation and approval processes.

"Over the past ten years, Queensland has experienced a 53 per cent increase in electricity consumption and an 8 per cent per annum increase in peak load growth."

Energy

Queensland is the second-largest energy consuming state in Australia. Over the next ten years, energy growth is forecast to continue to outstrip that of its southern counterparts. While a pleasing sign of a booming economy and population, managing the energy needs of Australia's fastest-growing, most decentralised and energy-intensive state presents challenges.

In the medium term, Queensland's energy needs will not be achieved through a single fuel source, nor a single technology solution. It will require a comprehensive transition path, applying appropriate technologies to coal, gas and renewable sources. It will also require Queenslanders to play their part by managing demand, especially during Queensland's summer peak periods, by choosing energy-efficient appliances and engaging in energy-saving behaviours.

Much of the information provided in this energy section relates to the Queensland energy sector, not simply the south-east corner. This is mainly due to large-scale energy assets being located outside this corner for locality and commercial reasons. Energy is then transported to the load centres within the region via transmission networks.

Electricity

By far the greatest challenge faced by the Queensland electricity industry in recent years has been the significant increase in electricity demand. Over the past ten years, Queensland has experienced a 53 per cent increase in electricity consumption and an 8 per cent per annum increases in peak load growth. These increases have been caused by an energy-intensive economy, population growth, increases in disposable income, poor housing design and the increasing use of domestic airconditioning. Electricity demand in SEQ is now more than for the entire state of South Australia.

This growth in demand is expected to continue over the coming two decades. To meet this demand, the Queensland Government is further investing in the state's generation capacity and in the electricity transmission and distribution networks for SEQ.

Generation capacity

Since 1998, $4.7 billion, or 75 per cent of new generation investment in the National Electricity Market (NEM) has occurred in Queensland. This investment has largely been in coal-fired base load power stations, including the Millmerran Power Station and the Kogan Creek Power Station, which is currently under construction.

While current and committed electricity generation capacity is expected to meet projected electricity demand until 2010, the Queensland Government must ensure investment in generation will meet electricity demand after this date.

By 2015, more than $12 billion will be invested in around than 10,000 megawatts (MW) of new generation capacity across the NEM. Given the high quality and low cost of Queensland fuel sources and their proximity to load growth, a significant proportion of this investment is expected to occur in this state.

The Queensland Government is aware of substantial private sector interest in providing future generating capacity in Queensland. Projects currently under consideration by private sector and Government Owned Corporations include:

- Spring Gully (Roma): Origin Energy is seeking development approval for a 1,000 MW gas-fired power station to be located adjacent to the gas plant.
- Braemar gas-fired power station (Dalby): Wambo Power Ventures Pty Ltd is constructing the 450 MW Braemar gas-fired power station, planned for commercial load in mid-June 2006.
- Braemar gas-fired base-load power development: Wambo Power Ventures Pty Ltd is planning a 480 MW base-load gas-fired power station on the Braemar site. The project is subject to verifying adequate recoverable gas reserves, with an expected service date of 2008.

A number of additional generation projects are also being considered by the private sector, though these are yet to proceed to feasibility.

The Queensland Government will continue to support niche renewable projects where they are commercially viable and meet electricity market needs.

Network

The Queensland network entities, Powerlink (transmission) and ENERGEX and Ergon Energy (distribution), have faced numerous demand challenges in recent years. In order to meet increasing electricity demand, new network infrastructure must be constructed. Investing in new network infrastructure, however, is likely to raise public concerns regarding site acquisition and construction.

The Queensland Government, in consultation with the energy industry and the public, is currently addressing these issues through processes such as the community designation process provided in the *Integrated Planning Act 1997*.

Queensland's transmission network has a history of intensive capital investment, with approximately $1.3 billion of the $4.6 billion (28 per cent) invested in transmission across the NEM since 1998 having occurred in Queensland. This is set to continue, with Powerlink having approximately $300 million in major transmission projects currently underway in Queensland and an estimated additional $1.4 billion to be spent in the state over the next six years.

Data in tables 7 and 8 only cover the period 2005-06 to 2009-2010, as network entities are regulated. Their capital investment plans are set in accordance with their five-year programs and are approved by a national regulator.

Map 6: Existing/proposed substations

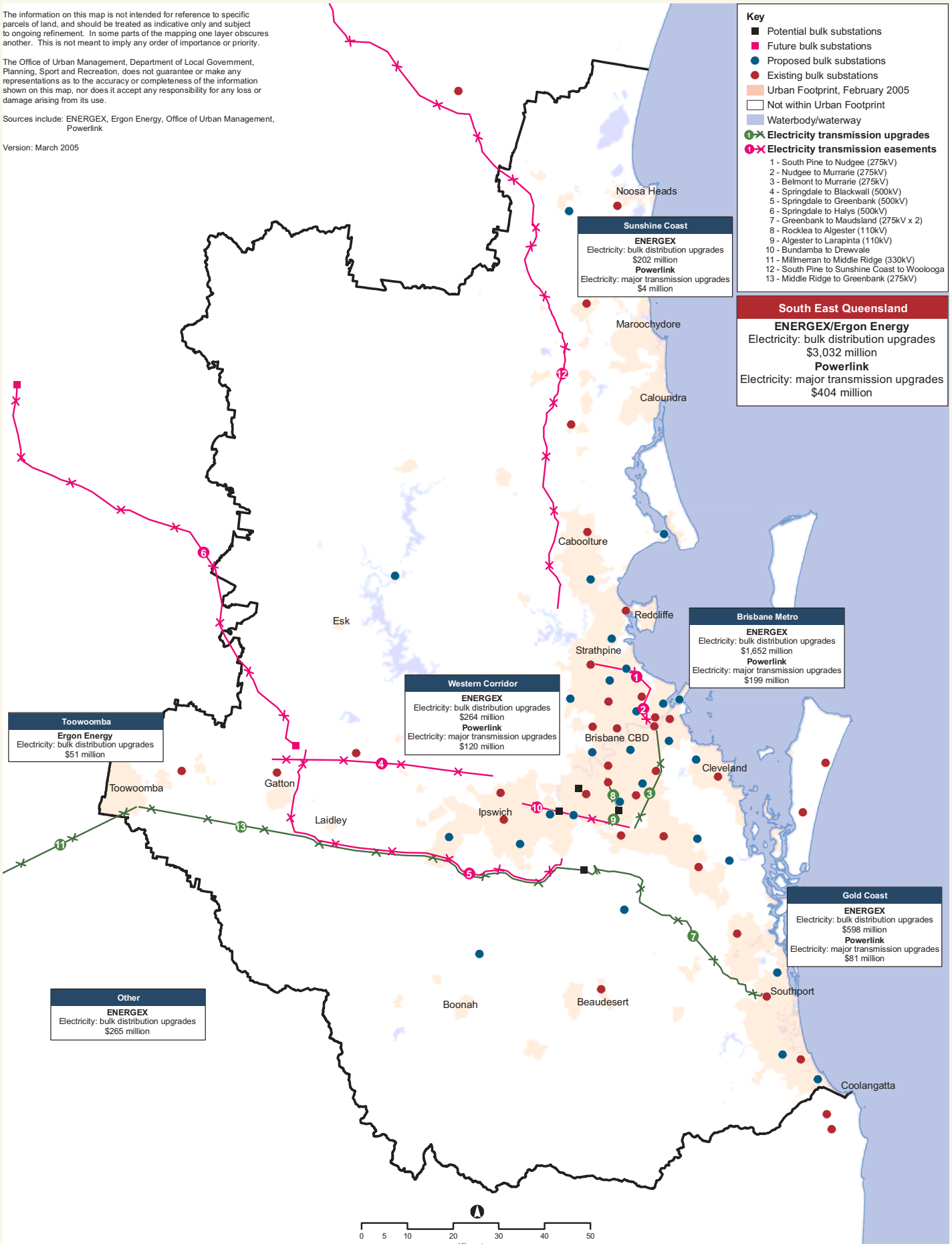


Table 7: Future major transmission upgrades in SEQ

Electricity: major transmission upgrades	Estimated total cost $million	Period covering						
		2005-06 to 2009-10					2010-11 to 2014-15	2015-16 to 2025-26
Brisbane Metropolitan:	199	67	56	57	16	3		
Belmont to Murrarie (275kV)								
South Pine to Nudgee (275kV)								
Greenbank substation								
Algester substation								
Goodna substation (275/110/33kV)								
Sumner substation (110/33kV)								
Metro area bulk supply substations								
Nudgee to Murrarie (275kV)								
Rocklea to Algester (110kV)								
Algester to Larapinta (110kV)								
West Darra substation (275kV)								
Western Corridor	120	4	25	80	11			
Middle Ridge to Greenbank (275kV)								
Swanbank substation refurbish (275/110kV)								
Swanbank industrial area (110kV)								
Springdale to Blackwall (500kV)								
Springdale to Greenbank (500kV)								
Springdale to Halys (500kV)								
Halys 500/275kV substation								
Sunshine Coast	4		1	2	1			
Palmwoods substation (275/110kV)								
Gold Coast	81	57	12	9	3			
Greenbank to Maudsland (275kV)								
Molendinar substation (275/110kV)								
Southern Gold Coast bulk supply (110kV)								
Total	404	128	94	148	31	3		

Footnote:

1. Projects shown in italics have not been costed in estimates and are generally expected to occur beyond 2010. However, it is necessary to identify and protect easements for future transmission line projects.
2. Splitting major transmission upgrades into zones is arbitrary as high voltage transmission lines supply bulk electricity. For example, a transmission line proposed between Middle Ridge (near Toowoomba) and Greenbank may supply loads back into the Western Corridor, Gold Coast and metropolitan areas.
3. Future investments will depend on demand. Expenditure will be adjusted as necessary to ensure the SEQ transmission network is able to meet demand, whilst also meeting mandated reliability requirements.
4. Energy authorities budget on a five-year basis.
5. kV = Kilovolt.

Regional infrastructure priorities and projects continued...

Energy continued...

Table 8: Future bulk distribution upgrades in SEQ

Electricity: bulk distribution	Estimated total cost $million	Period covering						
		2005-06 to 2009-010					2010-11 to 2014-15	2015-16 to 2025-26
Brisbane metropolitan (ENERGEX)	1,652	325	338	353	327	309		
Western Corridor (ENERGEX)	264	55	50	36	49	74		
Sunshine Coast (ENERGEX)	202	46	27	27	35	67		
Gold Coast (ENERGEX)	598	92	151	160	127	68		
Other (ENERGEX)	265	64	43	33	61	64		
Toowoomba (Ergon Energy)	51	15	1			35		
Total	**3,032**	597	610	609	599	617		

Footnote:

1. Energy authorities budget on a five-year basis. Projects beyond that period are not identified, as capital works programs are set in light of regulatory determinations.

ENERGEX will also invest heavily in its network, with a capital budget nearly $3 billion programmed over the next five years to increase network capacity and reduce network utilisation levels.

This program is expected to:

- satisfy forecast demand growth;
- improve network security and reduce the amount of electricity load at risk;
- improve overall reliability; and
- renew older assets to maintain network reliability and improve network security.

The Queensland Government also supports Demand Side Management (DSM) programs aimed at reducing the effect of peak electricity demand on the network. Current DSM programs shift large consumption electricity loads, such as sewage treatment and water storage compressors and domestic hot water systems, from peak to off-peak periods (for example, after 8pm and before 6am weekdays).

Regulatory tests

Before committing to new electricity infrastructure, transmission and distribution entities must pass regulatory tests imposed by the Australian Competition and Consumer Commission (ACCC) and the Queensland Competition Authority (QCA) respectively. (Note: the Ministerial Council on Energy is developing a national framework for electricity distribution, which will be implemented by the newly established Office of the Australian Energy Regulator.)

Essentially, a regulatory test is an economic, environmental and social cost-benefit analysis of all the options available to fully or partially meet the demonstrated need for the infrastructure. It includes all non-network investment such as DSM opportunities, as well as local generation.

As such, although estimates for investment in new electricity infrastructure are current as at May 2005, they are subject to these regulatory authorities' determinations of capital expenditure forecasts. Figures will be amended annually in accordance with the capital programs of ENERGEX, Ergon Energy and Powerlink.

DSM programs will be further enhanced by Queensland Government energy efficiency initiatives including:

- supporting amendments to the national Building Code of Australia to make all buildings more efficient;
- working with builders and developers to improve housing design;
- investigating a range of energy and water saving measures for housing;
- supporting renewable energy technology;
- offering solar hot water rebates;
- promoting energy-efficient air conditioning; and
- promoting the use of off-peak electricity tariffs.

Going green

The success of the Queensland Government's energy efficiency programs is evident. For example, since 1998, the Queensland Government's *Solar Hot Water Rebate Scheme* has provided rebates to more than 35,000 home-owners, more than doubling the number of houses with solar hot water systems and saving 1.6 million tonnes of greenhouse gas emissions over the life of the hot water systems.

Queensland also leads Australia in participating in the green energy power market, with almost 49,000 ENERGEX and Ergon Energy customers opting to have their electricity purchased from a 'green' energy source.

Gas

Gas is an important energy resource for Queensland, playing an increasingly significant role as a fuel source for electricity generation, industrial processes, business and residential consumers.

Nationally, Queensland is a small gas consumer, but gas demand is increasing by 4.3 per cent per year, compared to the national average growth rate of 3.8 per cent. Demand is dominated by two market segments, electricity generation and minerals processing, which together comprise more than 80 per cent of the state's gas demand.

The largest user of gas in Queensland is SEQ, comprising mainly residential and small commercial and industrial customers. The challenges for the gas industry in this region include:

- the ability of transmission infrastructure to keep pace with future demand requirements and changing customer usage patterns, especially in the domestic, commercial and small industrial sectors;
- the need to expand and optimise the use of gas distribution networks;
- maintaining growth in exploring and producing gas; and
- providing a sound legislative and regulatory base for future growth of competitive gas markets.

Of all Australian states with gas distribution networks, SEQ has the lowest level of residential customer use. This is due in part to the limited demand for space heating in Queensland homes. The Queensland Government is currently investigating the potential for all new residential developments to use gas appliances (for example, gas hot water systems) as an alternative to electricity.

"Queensland's gas demand is increasing by 4.3 per cent per year, compared to the national average growth rate of 3.8 per cent. Demand is dominated by two market segments, electricity generation and minerals processing, which together comprise more than 80 per cent of the state's gas demand."

The *Queensland Energy Policy*, which has a strong gas focus, has been successful in diversifying the state's energy mix towards the greater use of gas. In particular, the policy's requirement that at least 13 per cent of electricity sold in Queensland be from gas-fired generation has encouraged exploring for gas and underpinned a number of new gas field developments. Of particular note is the development of the coal seam methane gas industry. These fields and production facilities are well located to serve the SEQ gas market and since 1998 this industry has developed rapidly and taken significant market share.

The increasing level of gas-fired generation and the major role gas can play in a greenhouse context, means the future of Queensland gas markets is inextricably linked to Queensland's future electricity supply and economic growth.

Regional infrastructure priorities and projects continued...

Information and communication technology

Telecommunications is a major facilitator of economic and social development. The widespread availability of affordable, very high-speed broadband services to residents and businesses in SEQ is necessary to support and encourage continued economic growth and community development.

The Australian Government has principal responsibility for the policy and regulatory environment of the telecommunications industry. State and local governments are constrained in the range of actions available to them to influence investment in telecommunications infrastructure. In recent years, the policy environment has been progressively deregulated.

While a more competitive marketplace for infrastructure has developed, the incumbent infrastructure provider is still the main supplier of the 'last mile' - the connection to the individual or end user, mainly using existing copper wire connections. There is duplicated access to advanced fibre optic telecommunications in many metropolitan areas, but gaps in most outlying and more remote areas. The optimal technology to provide the next generation broadband is fibre optical cable, but other technologies such as Asymmetric Digital Subscriber Line (ADSL), wireless and Broadband over Power Line (BPL) technology will also be used in particular situations to satisfy demand, particularly in multistorey buildings and outlying and remote areas.

Better telecommunications infrastructure will support other regional planning objectives by:

- promoting opportunities for economic development, particularly through small, medium and home-based enterprises;
- supporting community development; and
- enabling tele-working arrangements which reduce demand for and usage of transport infrastructure.

Key projects currently being undertaken to assist in building better telecommunications infrastructure and associated services in SEQ are:

- **Updating and finalising the draft *Brisbane and South East Queensland Telecommunications Infrastructure Strategy (2002)***

  This strategy defines a vision for telecommunications in the south-east corner and outlines a series of strategies and projects at the state and local government levels.

- **Reducing barriers to infrastructure provision**

  The Queensland Government is consulting with local governments over improvements to the statutory planning regime under the *Integrated Planning Act 1997*. It is expected that this, together with other possible measures such as mandating the provision of conduits/ optic fibre in new developments, multi-tenanted buildings and major infrastructure projects, will reduce time delays and the cost of providing telecommunications infrastructure and services across the state and region.

- **Assisting the regional centres of SEQ to secure improved telecommunications services**

  This will be achieved using demand stimulation and demand aggregation techniques. The *Regional Self Help Program* has already commenced in some areas and will be expanded to address the remaining regional areas across SEQ.

- **Developing options for engagement with the private sector**

  This will include influencing private sector investment to ensure timely delivery of high-speed telecommunications infrastructure and services in the region.

Social and community infrastructure

Social and community infrastructure is important to the quality of life that the community of SEQ values so highly. Our overall well-being as a community is supported by a range of services and facilities, including education; health; policing and justice; housing; and community support.

The Queensland Government will be required to provide additional social and community infrastructure to meet community needs in the region as the population grows and changes. Some of the key strategies for meeting the social and community infrastructure needs are:

- ensuring affordable housing is provided in redevelopment areas and greenfield sites;
- providing social and community infrastructure in an efficient, timely and coordinated way that supports the preferred pattern of development;
- providing social and community infrastructure in centres and other locations to maximise accessibility to services;
- providing social and community services and infrastructure in areas of high need, predominately in urban fringes, rural areas and urban areas of social disadvantage; and
- taking advantage of opportunities to co-locate and integrate community facilities.

The population projections upon which the SEQ Regional Plan is based provide planning data for a range of social and economic services provided by the Queensland Government. These projections will be updated regularly.

Health

High population growth, an ageing population and improvements in medical technology are leading to increasing demands on primary health care. In recent years, the Queensland Government has invested heavily in upgrades to hospitals throughout the region, improving their ability to deal with a range of pressures on the public health system.

The Queensland Government will continue to provide health services at a high standard, in part through refurbishment of existing health care facilities.

The key priorities for investment in health projects to meet the growing needs in this region include:

- the development of additional intensive health care facilities where growing demands warrant them; and
- Health Hubs - where government and private services such as health clinics and General Practitioners are encouraged to locate in close proximity, together with other service providers such as community services.

The first phase of this Infrastructure Plan will deliver two priority initiatives to address these strategic needs:

- **Developing Health Hubs in high growth areas**

  Health Hubs will provide flexible and responsive public and private sector services, co-located in a central area.

- **Expanding current health services at Caloundra Hospital**

  This will meet needs in the fast growing area of the Sunshine Coast.

Table 9 shows the approximate timing and cost of projects that are expected to meet the proposed population growth and support the preferred settlement pattern.

"Our overall well-being as a community is supported by a range of services and facilities, including education; health; policing and justice; housing; and community support."

Regional infrastructure priorities and projects continued...

Social and community infrastructure continued...

Education

Adequate provision of school services is a critical factor in achieving the preferred pattern of growth in SEQ. The Queensland Government will plan schools using the population projections outlined in the SEQ Regional Plan, and new school sites will be prioritised based on reviews of demographic trends as part of the ongoing development of the SEQ Regional Plan.

The Queensland Government, through *State Infrastructure Agreements*, will require developers to contribute to infrastructure provision such as school sites, in certain circumstances.

Where possible, the Queensland Government will acquire school sites in identified growth areas ahead of need, to encourage the preferred pattern of development.

Table 10 shows the anticipated number of schools (63) and capital expenditure on school infrastructure in the four SEQ sub-regions from 2005 to 2026 according to current service provision formulas and population projections.

Infrastructure for rural development

The SEQ Regional Plan encourages the growth of rural areas of SEQ through additional population in and around existing towns and villages, rather than through further rural residential development. To support this process the Queensland Government will:

- modify guidelines and increase the funding available through subsidy schemes administered by the Department of Local Government, Planning, Sport and Recreation to provide water and sewerage infrastructure subsidies to support and encourage this growth;
- continue subsidy schemes which provide funding for social, community and cultural facilities for rural towns; and
- maintain the funding available for rural areas through the *Roads Alliance* program administered by Main Roads.

Changes to subsidy schemes will be implemented as part of the current review.

Activity Centre renewal and Transit Oriented Developments

A key focus of the SEQ Regional Plan is to encourage infill in existing areas, particularly through redevelopment of brownfield areas and areas around Activity Centres and public transport nodes.

The role of the Queensland Government is to facilitate development of these areas by coordinating planning, infrastructure and state activities. The Queensland Government may also play a role in purchasing land and providing infrastructure, with the goal of achieving attractive, viable mixed-use development. It is anticipated the process will provide a revenue stream to the Queensland Government to offset its investment, as well as achieve specific outcomes.

This Infrastructure Plan includes indicative funding to support Queensland Government involvement in these projects, beginning in 2006-07. The Queensland Government has committed $45 million over three years for this purpose.

"The SEQ Regional Plan encourages the growth of rural areas of SEQ through additional population in and around existing towns and villages, rather than through further rural residential development."

Table 9: Future health projects in SEQ

Sub-regions	Estimated total cost $million	Period covering		
		2005-06 to 2008-09	2009-10 to 2014-15	2015-16 to 2025-26
Western Corridor	**290**			
Health Hubs x 2: in areas such as Springfield or Ipswich	40		■	
Ipswich Hospital redevelopment	250		■	■
Greater Brisbane	**84.5**			
Prince Charles Hospital: upgrade to General Hospital	84.5	■		
Gold Coast	**539.5**			
Gold Coast: new hospital	500		■	
Browns Plains Health Hub	13.5	■		
Robina Health Hub	26	■		
Sunshine Coast	**607**			
Sunshine Coast Health Hub	14.7	■		
Northlakes Health Hub	22.3	■		
Sunshine Coast: new hospital	500		■	
Caloundra: expansion of existing facilities	50	■		
Caboolture Health Hub	20	■		
Total	**1,521**			

Footnote:
1. Estimated project costs are in 2005 dollars to ensure price consistency over a 20-year time frame.
2. Where funding is required from other levels of government, their estimated costs have been included.

Table 10: Future schools in SEQ

Sub-regions	Estimated total cost $million	Number of schools		
		Period covering		
		2005-06 to 2008-09	2009-10 to 2014-15	2015-16 to 2025-26
Western Corridor	315	3	2	8
Greater Brisbane	177	3	2	2
Gold Coast	508	3	6	11
Sunshine Coast	791	8	5	10
Total	**1,791**	**17**	**15**	**31**

Footnote:
1. Estimated project costs are in 2005 dollars to ensure price consistency over a 20-year time frame.
2. Where funding is required from other levels of government, their estimated costs have been included.

Part C

Investigation of potential infrastructure investments

This Infrastructure Plan is the first of an annual series, intended to support the objectives of the SEQ Regional Plan.

Future growth will require the development of additional capacity and new transport corridors to service new developments and to connect centres. Thorough investigations into these new projects are required early, so projects can be planned and corridors preserved ahead of development.

The following projects are either already underway or proposed. The outcome of these investigations as well as future investigations will be detailed in future Infrastructure Plans.

Western Corridor

Ipswich Motorway alternative northern corridor

The traffic problems on the Ipswich Motorway are well documented and upgrading capacity along that corridor is a high priority. Works to upgrade the Logan Motorway/ Ipswich Motorway interchange will commence shortly. An investigation is also being undertaken, at the request of the Australian Government, into a possible alternative route north of the existing Motorway between Dinmore and the Logan Motorway. The outcomes of this investigation will determine the next stages of the Motorway upgrade.

Southern Infrastructure Corridor

This investigation examines the options for road and rail linkages for both freight and people movement between Ebenezer/Swanbank and the area around Yatala/Ormeau.

The investigation will be integrated with planning for the Ripley Valley, Swanbank and Ebenezer areas and with the investigation of the Mt Lindesay/North Beaudesert area.

Investigation of the Southern Infrastructure Corridor will include examination of:

- a freight transport network serving the Western Corridor, including a connection from Ebenezer and other industrial areas to the Australia TradeCoast region, via the standard gauge rail;
- road and rail networks for the Ripley Valley and Mt Lindesay/North Beaudesert areas; and
- electricity corridors from the Western Corridor to the Gold Coast.

Greater Brisbane

Western Brisbane Transport Investigation

There are a range of transport issues in the west and north-west of Brisbane which require further investigation, including increasing traffic congestion within the area, insufficient road connectivity, poor orbital road networks and insufficient public transport spines.

The Western Brisbane Transport Investigation will be a major study that will examine the future transport needs for this area. It will include consideration of how existing relevant transport corridors (held in reserve by the Queensland Government) might be used.

Major transport corridors held in reserve

A number of major transport corridors have been identified and are protected for future use. The Kenmore-Moggill Pocket corridor; Moggill Road-Warrego Highway connection; and the Samford bypass and Ferny Grove connectors will be retained and protected pending resolution of the Western Brisbane Transport Investigation. The north-western transport corridor from Stafford through Everton Park to Aspley will be retained and protected, pending investigation of future transport needs.

Gateway extension south of Browns Plains

An investigation will look at the need to extend the Gateway Motorway beyond the intersection with the Logan Motorway South. This extension will potentially link with the proposed Southern Infrastructure Corridor, providing improved road freight connections between emerging industrial areas and the Australia TradeCoast.

Salisbury to Flagstone/Greenbank passenger rail

The Queensland Government has already announced the start of a study into the technical feasibility of running passenger rail services along the standard gauge rail corridor from Salisbury to Flagstone/Greenbank. The results of this study will be coordinated with the broader investigation into the Mt Lindesay/North Beaudesert area, currently underway.

Further TransApex investigations

Brisbane City Council is investigating a series of cross-city tunnels referred to as TransApex. Proposals include:

- **The North-South Bypass Tunnel**
  In-principle support for this project is included in the first phase of the Infrastructure Plan.
- **Airport Link**
  Support for the full feasibility study for this link is included in the first phase of the Infrastructure Plan.
- **Northern Link**
  A link between the Toowong roundabout and the Inner City Bypass is a priority for investigation. This link has the potential to ease traffic congestion on the western city corridors of Coronation Drive and Milton Road.

Increased rail capacity in inner Brisbane

Given existing demand growth, service increases and proposed extensions to the rail network, rail services through inner Brisbane will be significantly constrained by the capacity of the Merivale Bridge and the existing CBD rail tunnels by 2016. There are opportunities to increase rail capacity in the inner areas and to create additional stations in areas of high demand through the development of an underground rail system. These issues and options need to be examined through a study of the rail system in inner Brisbane.

Sunshine Coast

Sunshine Coast bus and high occupancy vehicle network study

The Infrastructure Plan recognises the need for public transport to play a much greater role on the Sunshine Coast. While rail and/or bus corridors will provide significant capacity in the medium to long term, bus priority and high occupancy vehicle initiatives are shorter-term solutions. This study will examine network constraints and identify key areas where bus priority and/or high occupancy vehicle treatments, such as transit lanes, will increase corridor capacity.

CAMCOS extension studies

Planning and acquisition for the CAMCOS rail corridor from Beerwah to Caloundra to Maroochydore has been identified in the Infrastructure Plan as a priority for the 2005-06 to 2008-09 period, with construction to commence in the following period. This study will examine the benefits of extending the rail, initially to Maroochy Airport.

Sunshine Motorway extension (Mooloolah River to Kawana Way)

This study will investigate a new link from the Mooloolah River interchange to the Kawana Way.

Bells Creek connection (Bruce Highway to Caloundra Road)

This study will examine the route and timing to extend the Sunshine Motorway further south from Caloundra Road.

Map 7: Investigations for future transport infrastructure

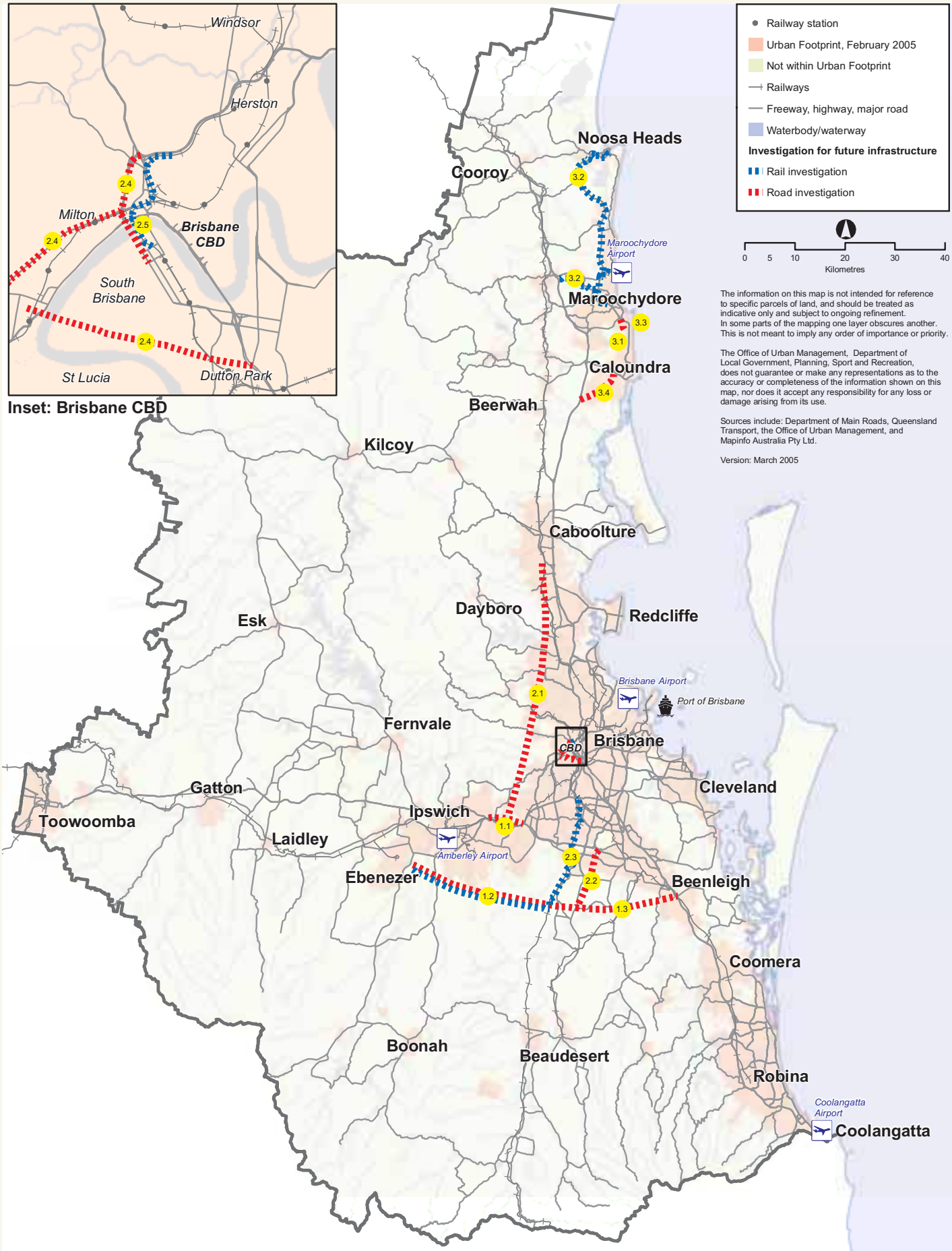


Table 11: SEQ transport investigations

Map ref.	Investigations	Estimated total cost $million	Period covering		
			2005-06 to 2008-09	2009-10 to 2014-15	2015-16 to 2025-26
Western Corridor					
1.1	Ipswich Motorway alternative northern corridor	2	■		
1.2	Southern Infrastructure Corridor (Rail: Ebenezer to interstate standard gauge rail)	2	■		
1.3	Southern Infrastructure Corridor (Road: Yatala to Cunningham Highway)	10		■	
Greater Brisbane					
2.1	Western Brisbane Transport Investigation	10	■		
2.2	Gateway extension south of Browns Plains	5		■	
2.3	Salisbury to Flagstone/Greenbank passenger rail	0.5	■		
2.4	Further TransApex investigations	21	■		
2.5	Increased rail capacity in inner Brisbane	5	■		
Sunshine Coast					
3.1	Bus and high occupancy vehicle network study	6	■		
3.2	CAMCOS extension studies	6	■		
3.3	Sunshine Motorway extension (Mooloolah River to Kawana Way)	3	■		
3.4	Bells Creek connection (Bruce Highway to Caloundra Road)	2			■
Total		72.5			

Footnote:

1. Estimated project costs are in 2005 dollars to ensure price consistency over a 20-year time frame. Project cost estimates in State Budget and other public documents may differ, as they will incorporate project costs which reflect anticipated changes in input prices between 2005 and time of construction.
2. Where funding is required from other levels of government, their estimated costs have been included.

Appendix

Western Corridor

Project type and description		
2005-06 to 2008-09	**2009-10 to 2014-15**	**2015-16 to 2025-26**
Public transport		
1.1a Adding a third rail track between Corinda and Darra for additional passenger services	1.1b Completing works commenced in the previous phase	
	1.1c Adding a third rail track between Darra and Redbank for additional passenger services	
1.2a Extending the passenger rail network by building a new rail line and stations between Darra and Springfield	1.2b Completing works commenced in the previous phase	
1.3a Upgrading public transport stations in line with TransLink plans	1.3b Upgrading public transport stations in line with TransLink plans	
Walking and cycling		
1.4a Implementing priority sections of the sub-regional cycle network	1.4b Implementing priority sections of the sub-regional cycle network	1.4c Implementing priority sections of the sub-regional cycle network
Major road network		
2.1a Upgrading the Ipswich Motorway. The Australian Government is considering a new bypass route as an alternative to an upgrade of a section of the existing road	2.1b Completing works commenced in the previous phase	
2.2 Commencing Ipswich Motorway works not dependent on the Australian Government decision, including a rebuild of the Logan Motorway/Ipswich Motorway interchange		
2.3a Providing a new connection between the Cunningham and Warrego Highways as per outcomes of the *River Road Study*	2.3b Completing a new connection between the Cunningham and Warrego Highways as per outcomes of the *River Road Study*	
2.4 Constructing the Centenary Highway extension from Springfield to Ripley and Ripley to Yamanto		
2.5 Completing the Centenary Highway/ Boundary Road underpass		
2.6a Designing the Centenary Highway two lanes each way from the Ipswich Motorway to Springfield	2.6b Making the Centenary Highway two lanes each way from the Ipswich Motorway to Springfield	
2.7a Designing bus priority measures between Ipswich Motorway and Toowong in accordance with a transit lane strategy for the Centenary Highway	2.7b Introducing bus priority measures between Ipswich Motorway and Toowong in accordance with a transit lane strategy for the Centenary Highway	2.7c Constructing the Centenary Highway transit lanes between Springfield and Toowong after resolution of TransApex Northern Link
		2.8 Constructing the Western Ipswich Bypass in line with development at Ebenezer and Amberley
	2.9a Upgrading the Cunningham Highway to four lanes between Ripley Road, Yamanto and Ebenezer	
Toowoomba		
3.1 Upgrading the Warrego Highway Plainlands intersection		
	3.2 Constructing the Warrego Highway Toowoomba Bypass	
		3.3 Constructing the Gowrie to Grandchester rail upgrade for additional freight capacity
3.4 Constructing the Warrego Highway/ Brisbane Valley Highway interchange		

Greater Brisbane

Project type and description		
2005-06 to 2008-09	**2009-10 to 2014-15**	**2015-16 to 2025-26**
Public transport connections		
1.1a Staged construction of inner city sections of and new bus stations along the Inner Northern Busway	1.1b Completing works commenced in the previous phase	
1.2a Planning the Northern Busway and commencing construction		
1.2b Staged construction of a Northern Busway between Enoggera Creek and Aspley	1.2c Staged construction of a Northern Busway between Aspley and Bracken Ridge	
1.3a Planning an eastern Busway and commencing construction		
1.3b Staged construction of an eastern Busway between Buranda and Carindale	1.3c Extending bus priority measures to Cleveland	
1.4a Constructing the first stage of an eastern Busway, between the Green Bridge and Buranda integrated with the Boggo Road redevelopment	1.4b Completing the first stage of an eastern Busway to the Green Bridge	
1.5 Extending the SE Busway to Springwood		
1.6a Constructing transit lanes on the Pacific Motorway from the Gateway Motorway to the Logan Motorway	1.6b Continuing transit lanes on the Pacific Motorway from the Gateway Motorway to the Logan Motorway	
1.7a Constructing staged bus priority measures between Petrie and Redcliffe		
1.7b Continuing staged bus priority measures between Petrie and Redcliffe	1.7c Continuing staged bus priority measures between Petrie and Redcliffe	
1.8a Duplicating the rail line from Mitchelton to Keperra to allow additional passenger services on the Ferny Grove Line	1.8b Duplicating the rail line from Keperra to Ferny Grove to allow additional passenger services	
		1.9 Implementing bus priority measures in Redlands in line with the TransLink Network Plan
		1.10 Constructing a third track from Lawnton to Petrie to provide for passenger and freight capacity
1.11a Upgrading public transport stations in line with TransLink plans	1.11b Upgrading public transport stations in line with TransLink plans	
Walking and cycling		
1.12a Constructing priority sections of the sub-regional cycle network	1.12b Constructing priority sections of the sub-regional cycle network	1.12c Constructing priority sections of the sub-regional cycle network
1.13a Building the Millennium Precinct pedestrian/cycle bridge	1.13b Plan and construct additional cross river CBD pedestrian/cycle bridges including to Kangaroo Point	
3.7 Completing the Pacific Motorway cycleway		

Continued over page

Greater Brisbane continued...

Project type and description		
2005-06 to 2008-09	**2009-10 to 2014-15**	**2015-16 to 2025-26**
Orbital road network		
2.1a Commencing construction of the Gateway Motorway northern and southern bridge approaches including a new link through to the Brisbane Airport	2.1b Continuing works commenced in the previous phase	
2.2a Commencing construction of duplicate Gateway Bridge	2.2b Continuing works commenced in the previous phase	
	2.3 Upgrading Gateway Motorway to six lanes between Mt Gravatt-Capalaba Road and the Pacific Motorway	
2.4 Upgrading the Pacific Motorway and Loganlea Road interchange		
2.5 Starting construction of the North-South Bypass Tunnel pending private sector interest		
2.6a Commencing the Airport Link from the northern end of the North-South Bypass Tunnel to the Airport pending private sector interest	2.6b Completing the Airport Link from the northern end of the North-South Bypass Tunnel	
Improving road connections		
		3.1 Commencing upgrade of Logan Motorway to six lanes
3.2a Commencing improvements to the Brisbane Urban Corridor	3.2b Continuing upgrades to the Brisbane Urban Corridor	
3.3a Continuing Mt Lindesay Highway upgrades	3.3b Continuing Mt Lindesay Highway upgrades	
3.4a Commencing the Houghton Highway duplication and bus priority	3.4b Completing the Houghton Highway duplication and bus priority	
3.5a Designing construction of stage two of the Port of Brisbane Motorway from Lytton Road to the Port of Brisbane	3.5b Commencing construction of stage two of the Port of Brisbane Motorway from Lytton Road to the Port of Brisbane	
	3.6 Constructing the North-South Arterial through Mango Hill	
3.8a Commencing four lanes on the Redland Sub-Arterial Road between Mt Gravatt-Capalaba Road and Tingalpa Creek	3.8b Continuing four lanes on the Redland Sub-Arterial Road between Mt Gravatt-Capalaba Road and Tingalpa Creek	
3.9a Designing four lanes on Cleveland-Redland Bay Road between South Street and Boundary Road	3.9b Constructing four lanes on Cleveland-Redland Bay Road between South Street and Boundary Road	
3.10a Designing four lanes on Redland Bay Road between Tingalpa Creek and Taylor Road	3.10b Constructing four lanes on Redland Bay Road between Tingalpa Creek and Taylor Road	
3.11 Completing the Linkfield Connection Road between Gympie Arterial Road and South Pine Road at Brendale		
Freight rail network improvements		
4.1 Grade separating Mt Lindesay Highway/ Acacia Ridge rail crossing and increasing the capacity of the Acacia Ridge freight facility		
4.2a Increasing rail freight capacity between the Acacia Ridge freight terminal and the Port of Brisbane with improved signalling and passing loops	4.2b Continuing to increase rail freight capacity to the Port of Brisbane	
4.3a Commencing a program to eliminate grade level crossings where there are significant safety benefits	4.3b Continuing program commenced in the previous phase	4.3c Continuing program commenced in the previous phase

Gold Coast

Project type and description		
2005-06 to 2008-09	**2009-10 to 2014-15**	**2015-16 to 2025-26**
Pacific Motorway		
1.1 Commencing the Tugun Bypass. The Tugun Bypass is a major joint undertaking between the Australian, Queensland and New South Wales Governments		
1.2a Constructing six lanes from Stewarts Road to Nerang including upgrades to interchanges	1.2b Completing six lanes from Stewarts Road to Nerang	
1.3a Designing the Coomera interchange	1.3b Building the Coomera interchange	
Gold Coast rail line		
2.1 Completing provision of additional rail tracks Ormeau-Coomera, Helensvale-Robina, Salisbury-Kuraby		
2.2a Commencing upgrading with additional tracks, Coomera-Helensvale, Kuraby-Kingston and Salisbury-Park Road, so service quality on the Gold Coast line can be maintained	2.2b Completing works commenced in the previous phase	2.2c Completing works commenced in the previous phase
2.3a Extending the rail line south to Reedy Creek to provide more rail station options on the Gold Coast	2.3b Extending the line further south to Elanora	2.3c Extending the line further south from Elanora to Tugun and Coolangatta Airport
2.4 Purchasing additional rolling stock for more frequent rail services		
Public transport		
3.1 Commencing the Gold Coast public transport spine by developing bus priority measures in key locations along the Gold Coast Highway and building bus stations at Broadbeach and Southport		
3.2a Commencing the Gold Coast's public transport spine (either Busway or light rail) connecting Parkwood to Broadbeach	3.2b Continuing the Gold Coast's public transport spine (either Busway or light rail) connecting Parkwood to Broadbeach	3.2c Extending the Busway/light rail corridor south to Coolangatta
3.3, 3.4a Complementing the public transport spine by additional bus priority measures on the local road network as identified for implementation in a bus priority and high occupancy vehicle study	3.4b Completing works commenced in the previous phase	
3.5a Upgrading public transport stations in line with TransLink plans	3.5b Upgrading public transport stations in line with TransLink plans	

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Gold Coast continued..

Project type and description		
2005-06 to 2008-09	**2009-10 to 2014-15**	**2015-16 to 2025-26**
Walking and cycling		
3.6a Constructing priority sections of the sub-regional cycle network	3.6b Constructing priority sections of the sub-regional cycle network	3.6c Constructing priority sections of the sub-regional cycle network
Gold Coast major road network		
4.1a Adding traffic lanes (with bus priority) on Nerang to Broadbeach Road	4.1b Completing works commenced in the previous phase	
4.2a Upgrading Gold Coast Highway (Robert Street to Stephens Street) to service key developing areas	4.2b Further upgrading the Gold Coast Highway from Stephens Street to Government Road	
4.3a Commencing construction of additional traffic lanes on Smith Street between Pacific Motorway and Olsen Avenue	4.3b Continuing additional traffic lanes on Smith Street between Pacific Motorway and Olsen Avenue	
4.4a Upgrading Hope Island Road to provide a future network to service key developing areas of Coomera	4.4b Completing works commenced in the previous phase	
4.5a Adding traffic lanes (with bus priority) to Southport-Nerang Road	4.5b Completing works commenced in the previous phase	
4.6a Designing additional traffic lanes (with bus priority) to Burleigh Connection Road	4.6b Adding traffic lanes (with bus priority) to Burleigh Connection Road	
4.7a Designing upgraded intersections on the Southport to Burleigh Road to improve north-south connections	4.7b Upgrading intersections on the Southport to Burleigh Road to improve north-south connections	4.7c Continuing works commenced in the previous phase
Future transport IRTC corridor preservation		
5.1a Acquiring land for the future Nerang to Coomera River corridor in line with development	5.1b Completing land acquisition	5.1c Constructing the intra-regional transport corridor

Sunshine Coast

Project type and description		
2005-06 to 2008-09	**2009-10 to 2014-15**	**2015-16 to 2025-26**
North coast trunk public transport		
1.1a Changing traffic flow along the Nicklin Way to accommodate bus priority between Maroochydore and Caloundra	1.1b Continuing works commenced in the previous phase	
1.2a Constructing public transport stations at Maroochydore and Caloundra. Elements of the CAMCOS corridor, between Caloundra and Maroochydore, will be utilised for improving the reliability and convenience of bus services	1.2b Completing works commenced in the previous phase	
1.3a Planning and acquisition for the CAMCOS as a rail corridor	1.3b Planning and acquisition for the CAMCOS as a rail corridor	1.3c Implementing CAMCOS as a rail corridor
1.4a Upgrading public transport stations in line with TransLink plans	1.4b Completing works commenced in the previous phase	
Walking and cycling		
1.5a Constructing priority sections of the sub-regional cycle network	1.5b Constructing priority sections of the sub-regional cycle network	1.5c Constructing priority sections of the sub-regional cycle network
North coast rail line		
2.1a Completing upgrade of the north coast rail link between Caboolture and Landsborough. This will improve the speed and reliability of passenger and freight services	2.1b Completing upgrade of the north coast rail line between Caboolture and Landsborough	
2.2a Planning and acquisition for the north coast rail line from Landsborough to Nambour	2.2b Planning and acquisition for the north coast rail line from Landsborough to Nambour	2.2c Upgrading the north coast rail line from Landsborough to Nambour
Bruce Highway		
3.1 Constructing three lanes each way between Boundary Road and Uhlmann Road, Burpengary and to Caboolture		
3.2a Commencing improvement of the alignment of the Highway and making it two lanes each way between Cooroy and Gympie/Curra	3.2b Completing works commenced in the previous phase	
Sunshine Motorway		
4.1 Upgrading the southern section of the Sunshine Motorway to two lanes each way between Sippy Downs and the Kawana Arterial		
4.2 Upgrading the Sunshine Motorway between Maroochydore Road and Pacific Paradise to two lanes each way and making major improvements to the Pacific Paradise and Maroochydore Road interchanges		
	4.3a Constructing additional lanes: Pacific Paradise interchange to Yandina-Coolum Road	4.3b Constructing additional lanes: Yandina-Coolum Road to Eumundi-Noosa Road
	4.4a Adding complementary connections and service roads to the local road network	4.4b Completing works commenced in the previous phase

Continued over page

Sunshine Coast continued...

Project type and description		
2005-06 to 2008-09	**2009-10 to 2014-15**	**2015-16 to 2025-26**
Sunshine Coast major road network		
5.1 Building a new two-lane road on the south-west of the coast, between Caloundra Road and Creekside Boulevard to accommodate new development areas		
5.2 Constructing additional lanes on Nicklin Way from Caloundra Road to Beerburrum Street		
5.3 Constructing four new lanes including deviation on Maroochydore Road from Bruce Highway to Martins Creek		
5.4 Constructing additional lanes on Caloundra Road from Bruce Highway to Pierce Avenue		
5.5a Designing an upgrade for the key east-west link: Caboolture to Bribie Island Road	5.5b Upgrading a key east-west link: Caboolture to Bribie Island Road	
		5.6 Upgrading a key east-west link: Eumundi to Noosa Road
5.7a Commencing improvements to the Glass House Mountains Road	5.7b Completing works commenced in the previous phase	
		5.8 Upgrading the Yandina-Coolum Road
	5.9a Continuing improvements outlined in the KTIA	5.9b Completing works commenced in the previous phase
		5.10 Upgrading the Nambour Connection and Maroochydore Roads
5.11a Designing additional lanes on Deception Bay Road between Bruce Highway and Lipscombe Road	5.11b Constructing additional lanes on Deception Bay Road between Bruce Highway and Lipscombe Road	
5.12a Commencing additional lanes on the Burpengary to Caboolture Road	5.12b Continuing works commenced in the previous phase	
5.13 Constructing the Caboolture Northern Bypass		

Images courtesy of:	Brisbane City Council, Boonah Shire Council, Caboolture Shire Council, Caloundra City Council, Gatton Shire Council, Ipswich City Council, Logan City Council, Maroochy Shire Council, Redcliffe City Council, Toowoomba City Council, Centre for Subtropical Design, Department of Communities, Department of Main Roads, Department of State Development and Innovation, Tourism Queensland, Michael Aird, Jemina Dunn, Darren Jew.

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South East Queensland

Infrastructure Plan and Program 2006-2026

Queensland **the Smart State**

Queensland Government
Office of **Urban Management**
The **Coordinator-General**

Published May 2006
ISBN: 0 9758444 7 4

South East Queensland

Infrastructure Plan and Program 2006-2026

Foreword

South East Queensland is the fastest-growing metropolitan region in Australia. Around 1000 people move to the region every week. By 2026, this corner of the world will be home to almost four million people. Although this new growth brings opportunities, it also brings its own challenges.

The Queensland Government, in partnership with local governments of the region, has confronted these challenges head on by releasing the *South East Queensland Regional Plan 2005-2026* in June 2005. Designed to sustainably manage growth over the next two decades, this plan protects more than 80 per cent of the region from future urban development - ensuring South East Queensland remains one of the most liveable urbanised areas in the world, while catering for strong population growth and future prosperity. Key to achieving these outcomes, however, is the strategic long-term planning of infrastructure provision throughout the region.

First launched in April 2005, the *South East Queensland Infrastructure Plan and Program* was the most ambitious infrastructure plan since Federation. This commitment to infrastructure was vital in providing certainty to state agencies, local governments, the private sector and the general community about the priorities and timing for major infrastructure investment in South East Queensland.

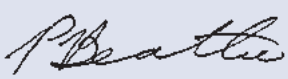
However, the Infrastructure Plan was not a once-off publication. To ensure it remains on track and relevant to the region's needs, the Queensland Government tracks implementation of the plan as a key priority, ensuring projects meet their objectives and are delivered on time and on budget.

The Infrastructure Plan itself is also updated annually. Released now as the 2006 edition, the *South East Queensland Infrastructure Plan and Program 2006-2026* increases the Queensland Government's estimated investment by $5.1 billion, including $1.1 billion for additional projects and two new infrastructure categories: vocation employment and training and regional sport and recreation.

In total, this Infrastructure Plan envisions approximately $66 billion of infrastructure over the coming 20 years, including almost $28 billion in road and public transport projects, $90 million to investigate another possible $14 billion worth of road and public transport projects, $5 billion in social and community infrastructure, an expected $5 billion in water infrastructure projects, $4 billion spending on energy networks (over the next five years), and $10 billion in expected outlays on energy networks (beyond the first five years).

Building on the previous edition, this plan notes progress on various projects and investigations over the preceding 12 months. Specifically, it highlights significant progress on new transport infrastructure such as the Eastern Busway, Northern Busway, Airport Link and Gateway Motorway upgrade and bridge duplication. It also outlines the impacts of key initiatives such as the *Regional Drought Strategy*, the Health Mini-Budget and the *Queensland Skills Plan*.

The Infrastructure Plan is integral to ensuring the SEQ Regional Plan delivers a sustainable future for South East Queensland. Together, these documents are at the forefront of regional planning in Australia and are fine examples of smart state planning.



The Honourable Peter Beattie MP
Premier of Queensland

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Highlights

A major program such as the *South East Queensland Infrastructure Plan and Program 2006-2026* (the Infrastructure Plan) requires extensive planning and management to ensure implementation is effective and well-coordinated. The Queensland Government has drawn together the resources of major infrastructure agencies, under the direction of The Coordinator-General, to ensure projects are delivered when and where they are needed.

Since the first Infrastructure Plan was released in April 2005, State and local governments have made significant progress with delivery of projects. Highlights include:

Project implementation

- Tenders are currently being assessed for the Gateway Upgrade Project. This project involves duplication of the Gateway Bridge and upgrades to 20 kilometres of the existing motorway.
- Tenders seeking private sector involvement to develop the North-South Bypass Tunnel closed in December 2005. Brisbane City Council announced the successful tenderer in April 2006.
- A preliminary concept design has been developed for the Airport Link and Northern Busway and community consultation is underway.
- Planning and design for the Eastern Busway (Buranda to Boggo Road) is well-advanced with construction to commence in mid-2006. Community consultation has commenced on the Buranda to Capalaba section.
- Construction of the inner city section of the Inner Northern Busway has commenced with delivery on schedule for completion by 2008.
- Construction has commenced on an additional track and upgrades to the Gold Coast rail line between Ormeau and Coomera.
- Design and land acquisition for the *Western Corridor Recycled Water Scheme* is underway. The Scheme will pipe recycled water from Oxley, Wacol, Goodna and Bundamba to the Swanbank and possibly Tarong power stations.
- Land acquisition for the Cedar Grove Weir is underway with construction scheduled for completion in 2007-08.
- A program to reduce water pressure, better manage system leakages and install water saving devices is being implemented in partnership with local governments of the region.
- Construction is well underway to establish a new Southbank Institute of Technology with completion scheduled for mid-2008. The project is a Public Private Partnership between TAFE Queensland and Axiom Consortium.
- ENERGEX and Ergon Energy have invested approximately $652 million in electricity distribution infrastructure in South East Queensland.

- Powerlink has invested approximately $140 million in transmission upgrades in South East Queensland.
- Construction is underway on an expansion of the Prince Charles Hospital to provide a full-scale emergency department, an increase in operating theatres and renal dialysis facilities, and an additional 120 beds. Completion is scheduled for the end of 2006.

Major new initiatives

- The Queensland Government will construct two new dams, one at Traveston on the Mary River and the other on the Logan River. The Government is also working with SEQWater, SunWater and local governments throughout South East Queensland to develop and implement a *Regional Drought Strategy*. Released in mid-2005 and updated regularly, the *Regional Drought Strategy* includes a range of initiatives to make the best use of existing supplies, implement new sources and better manage the existing system.
- The Queensland Government released the *Queensland Skills Plan* in March 2006. This plan will result in substantial increases in trades and higher-level training places throughout South East Queensland. Significant infrastructure related to this plan includes a new Trade and Technical Skills Institute with campuses at Acacia Ridge and Eagle Farm, as well as significant modernisation of existing TAFE campuses.

Organisational improvements

- The Office of Urban Management was brought under the direction of The Coordinator-General in December 2005 to better integrate planning and implementation of the South East Queensland Regional Plan and Infrastructure Plan.
- The Program Management Office was established as part of The Coordinator-General in January 2006 to coordinate implementation of the Infrastructure Plan and to ensure the best value for money regarding major infrastructure projects.
- Several agencies, including Queensland Transport, the Department of Main Roads and Queensland Rail have reorganised their project delivery processes to deliver Infrastructure Plan projects more effectively.
- The Queensland Government is establishing the Queensland Water Commission which will have statutory responsibility for water supply and security planning, implementation and compliance.

What's new in this Infrastructure Plan

The following things are new or have changed in this version of the Infrastructure Plan:

- Project costs have been updated to reflect costs in 2006 dollars.
- Progress highlights have been added for each investment category.
- Projects that are already underway have been identified in the tables. Completed projects have been noted.
- Organisational changes made by the Queensland Government to improve delivery of the Infrastructure Plan have been outlined (page 13).
- Funding for new transport investigations has been included (page 42).
- Investment in water infrastructure in South East Queensland has been updated to reflect the Queensland Government's commitment to the *Regional Drought Strategy* and the *South East Queensland Regional Water Supply Strategy* (page 44).
- Investment in vocational education and training infrastructure in South East Queensland has been included (page 63).
- Investment in regional sport and recreation infrastructure in South East Queensland has been included (page 65).
- A table of relevant website addresses has been included to help provide further information on Infrastructure Plan projects (page 69).

Part A
Context

Introduction

South East Queensland (SEQ) is experiencing the fastest growth rate of any urban region in Australia. By 2026, the population is expected to reach around 3.9 million people – an increase of more than one million people over two decades.

About the SEQ Regional Plan

To manage this growth and associated change, the Queensland Government, in partnership with local governments of the region, released the *South East Queensland Regional Plan 2005-2026* (the SEQ Regional Plan) in draft form in October 2004. Finalised after four months of consultation, the SEQ Regional Plan was released in its final form on 30 June 2005.

The SEQ Regional Plan sets out the future pattern of development for the region. It outlines the preferred urban structure that will guide development; protect the environmental values and liveability of the region; and support economic development. In doing so, the SEQ Regional Plan helps ensure a sustainable future for SEQ.

The SEQ Regional Plan also establishes a range of implementation and review processes, including a series of sustainability indicators. These indicators will be monitored on a five-year basis - linked to a review of the SEQ Regional Plan itself. By including these indicators, the SEQ Regional Plan will measure how successful the region is at becoming more sustainable in the long term. As part of this process, a land and housing monitoring program has been established in partnership between State and local governments and the development industry to track land availability and housing production on an annual basis.

The SEQ Regional Plan will be reviewed on a five-year cycle to ensure that the plan remains relevant to managing the region's long-term development. The next review will take place in 2010.

The Office of Urban Management

The Office of Urban Management was established by the Queensland Government in April 2004 to develop plans to manage expected population growth in SEQ over the coming decades. The Office prepared the first Infrastructure Plan in April 2005 and the SEQ Regional Plan in June 2005. These documents provide the link between strategic land use planning and infrastructure planning in SEQ. The Office of Urban Management is part of The Coordinator-General.

About the region

Centred around the capital city of Brisbane, SEQ is already a vibrant, prosperous and very liveable sub-tropical and world-class region. As a future home to around 3.9 million people, this region will be expected to exhibit a series of essential characteristics:

- a compact, well-serviced and efficient urban form that minimises impacts on natural resources and environmental values;
- a diverse range of housing to meet existing and future community needs;
- well-designed activity centres focused around public transport hubs;
- modern, integrated, efficient, fast, frequent and reliable public transport;
- freight routes servicing an expanding economic base created by identifying and preserving new routes and corridors ahead of time;
- a safe road network providing for inter-regional, intra-regional and local trips, complementing the region's public transport system;
- reliable water and energy supplies, increasingly based on recycled and renewable sources and supported by demand management and consumer behaviour changes;
- community infrastructure and services that are carefully planned and which support strong and sustainable communities;
- a high-quality natural environment, including protected natural areas, waterways and beaches; and
- environmental infrastructure, including public open space, national, state and regional parks and opportunities for outdoor recreation.

Infrastructure priorities in the SEQ Regional Plan

Through its regional land use pattern and desired regional outcomes, the SEQ Regional Plan establishes priorities for infrastructure investment across SEQ. Key strategic directions in the SEQ Regional Plan include:

- *A more compact urban form*

  Accommodating a higher proportion of population growth within existing urban areas will achieve the most efficient use of land, infrastructure and services. In particular, the SEQ Regional Plan seeks to increase population density around transport nodes and in Activity Centres, assisted through appropriate urban renewal and infill developments. This will not only assist with a more compact urban form, but also aid the provision of better public transport services.

- *Development in the Western Corridor*

  Many of the opportunities for major developments are in the Western Corridor, which includes the greater Ipswich area, extending generally from Wacol through Ipswich City to Amberley and including Ebenezer, Swanbank, Ripley Valley and Springfield. An increase in development is supported by the corridor's potential for major industrial uses, its capacity to support employment growth, and the availability of affordable and relatively unconstrained land.

- *Sub-regional self-containment*

  The SEQ Regional Plan seeks to reduce traffic and limit congestion on the road system by encouraging communities to access goods and services, jobs and leisure within their sub-regional or local areas, wherever possible. This will strengthen communities across the region and reduce environmental impacts.

The South East Queensland Infrastructure Plan and Program

The *South East Queensland Infrastructure Plan and Program 2006-2026* (the Infrastructure Plan) outlines the Queensland Government's infrastructure priorities to support the SEQ Regional Plan. It establishes priorities for regionally significant infrastructure over the next ten years, but also considers the longer-term planning horizon of the SEQ Regional Plan.

The Infrastructure Plan gives direction and momentum to Queensland Government infrastructure and services investment in the SEQ region up until 2026. In developing the Infrastructure Plan, the Queensland Government is ensuring:

- the SEQ Regional Plan priorities are reflected in the Queensland Government budget process;
- the SEQ Regional Plan priorities are included in the infrastructure and services planning of key state agencies;
- the annual investment cycle is adequately informed by data on economic, demographic and development industry performance;
- there is effective coordination, planning and service provision by relevant state agencies and Government-owned corporations; and
- there is effective coordination of planning and infrastructure investment with local governments and Sub-regional Organisations of Councils (Sub-ROCs) across the region.

The Infrastructure Plan is based on the principle that strategically focused infrastructure investment will help to lead and support the preferred pattern of development and achieve better policy outcomes in the region. In some instances, this means implementation ahead of existing need.

Updating the Infrastructure Plan

The Infrastructure Plan is updated each year to reflect new developments in SEQ. As development in SEQ progresses and more detailed planning is undertaken, additional projects may be identified in the Infrastructure Plan and subsequently delivered. The annual process for updating the Infrastructure Plan has three major phases:

- *Planning phase*

  From June to November of each year, state agencies responsible for providing infrastructure and services review their infrastructure priorities against the SEQ Regional Plan using updated Budget information and information about progress on the SEQ Regional Plan.

- *Review phase*

  In October/November of each year, state agencies review progress of the Infrastructure Plan in supporting the SEQ Regional Plan, using data on economic, demographic and development industry performance; investment intentions; and the SEQ Regional Plan's sustainability indicators. Decisions about relative priorities for future investment may also be informed by Local Growth Management Strategies. Currently being prepared by local governments of the region, these strategies are a tool to assist local government to implement the SEQ Regional Plan at the local level - to plan for projected growth in their respective areas, in consultation with local communities. The SEQ Regional Plan requires these strategies to be complete by 30 June 2007.

- *Budget phase*

  From December each year, the Queensland Government develops a consistent view about the relative priority of future infrastructure investment in SEQ, within the context of the total State Budget. Once the Budget is finalised, state agencies adjust their agency planning documents (for example, the *Roads Implementation Program* will be reviewed by Main Roads).

To ensure coordination with local governments in SEQ, Queensland Government representatives meet regularly with infrastructure planners and local government sub-regional coordinators. These meetings are in addition to other state and local government infrastructure processes in place such as the *Main Roads and Local Government Road Management and Investment Alliance 2002-2007* (the Roads Alliance).

Figure 1: Annual process for updating the Infrastructure Plan

Relationship between the Infrastructure Plan and the State Infrastructure Plan

The State Infrastructure Plan (SIP) is a five-year plan, identifies infrastructure that supports economic development at a state and regional level. The SIP was first published in 2001.

For the SEQ region, the Infrastructure Plan provides the primary reference for state infrastructure commitments. However, the SIP covers a wider breadth of infrastructure issues.

Some aspects of SIP that are outside the scope of this Infrastructure Plan include:

- statewide infrastructure issues, including those impacting on SEQ;
- specific emphasis on the provision of land for industrial and economic development;
- inter-regional connectivity;
- infrastructure delivery for private purposes; and
- economic drivers such as innovation; skills development; and research and development to promote economic progression of sub-regions.

Funding the Infrastructure Plan

The two main sources by which the Queensland Government funds infrastructure are through operating cash flows and borrowings. In the past, high levels of operating cash flow, generated through the State Budget, have funded the bulk of the Queensland Government's annual infrastructure program. This will continue, however, a higher level of borrowing together with private sector involvement will be required to fund the increase in infrastructure investment set out in the Infrastructure Plan - together with the infrastructure investment required elsewhere in Queensland. Some funding will be provided through State Infrastructure Agreements with developers.

Options for funding and delivery of projects in the Infrastructure Plan are evaluated, where appropriate, through the Queensland Government's Value for Money Framework (VfM Framework). In this way, priorities and solutions can be assessed to promote innovation and ensure maximum effectiveness of the Queensland Government's investment. A partnership between the public and private sector is a key component of the VfM Framework, ensuring the respective skills of each sector are best used to deliver effective infrastructure and services in a timely manner. The VfM Framework also describes the tasks involved in implementing Queensland's Public Private Partnerships (PPP) policy.

State Infrastructure Agreements

The Infrastructure Plan represents a significant commitment to additional expenditure by the Queensland Government. In some instances, expenditure on infrastructure will be used to lead development to achieve specific outcomes in SEQ. This will provide clear benefits to some sections of the community. In these instances, the Queensland Government considers it reasonable for beneficiaries to bear some of the cost of this additional infrastructure provision.

Where the Queensland Government is providing new infrastructure to lead development in the region and it is ahead of full anticipated demand, land owners and developers of new areas who stand to benefit significantly will be required to contribute to infrastructure provision through a State Infrastructure Agreement.

Partnerships with the private sector

The Queensland Government will work in conjunction with the private sector to deliver major projects where appropriate. The following projects have been identified for possible joint delivery with the private sector:

- Airport Link
- Toowoomba Range bypass
- Darra to Springfield road and rail corridor
- Gold Coast mass transit project
- Sunshine Coast schools
- Western Corridor schools
- Gold Coast hospital.

The Queensland Government is in a strong financial position, which it is committed to maintain. The *Charter of Social and Fiscal Responsibility* details the Government's approach to capital investment; that borrowings or other financial arrangements will be undertaken only for capital investments and only where these can be serviced within the operating surplus, consistent with maintaining an AAA credit rating.

The annual State Budget papers will provide updated estimates of infrastructure spending and levels of borrowing to reflect all state infrastructure investments. The recurrent cost of these investments is fully incorporated in future budget planning.

The Australian Government has a role in funding infrastructure in SEQ, including transport projects through the AusLink program, and water projects through the Australian Water Fund.

Very large capital investment is currently taking place in Australia and overseas, by governments and private industry. As such, investment included in the Infrastructure Plan may challenge the capacity of industry and government to deliver on time and budget. However, it is hoped the commitments outlined in the Infrastructure Plan will encourage industry to invest in additional capacity and enable it to develop innovative approaches to planning, designing and delivering projects. To this end, the Infrastructure Plan has been developed with a focus on outcomes, not prescriptive solutions.

Summary of infrastructure investment

This Infrastructure Plan identifies an estimated $37.4 billion of infrastructure projects to support regional planning outcomes in SEQ over 20 years, as indicated in Table 1. Planning, design or construction is underway for 125 projects. The estimated investment includes $242 million for transport, water, energy and education projects that have been completed.

Estimated transport investment includes contributions from the Queensland Government, the Australian Government and Brisbane City Council. The Queensland Government's estimated investment in transport in this Infrastructure Plan amounts to $19.9 billion and a further $70 million for transport investigations.

Estimated water investment includes projects being undertaken by the Queensland Government and funding assistance for projects being undertaken by local governments and water service providers.

Estimated electricity transmission and distribution investment is indicated through to 2009-10. Investment beyond this has not been identified as capital works programs need to take account of growth in electricity demand and regulatory determinations.

Investment in infrastructure for electricity generation, gas reticulation and information and communication technology is not included. These are competitive markets for which private sector investment cannot be forecast. Despite this, this Infrastructure Plan provides details of current Queensland Government initiatives.

Major investigations and strategies detailed in this Infrastructure Plan may identify the need for additional future investment.

Table 1: Estimated investment identified in this Infrastructure Plan

Asset class	Estimated investment 2005-2026 ($million)
Transport (including investigations)	27,735
Water	1,340
Energy	3,702
Information communication technology	(see notes)
Social and community infrastructure (including health; education; vocational education and training; and sport and recreation)	4,662
Total	**37,439**

Notes:

1. Estimated investments are in 2006 dollars. Cost estimates in the State Budget and other public documents may differ, as they may incorporate project costs which reflect anticipated changes in input prices between initial planning and the time of construction. Estimated investment includes funds already expended on projects.
2. The information and communication technology section of this Infrastructure Plan provides details of current Queensland Government initiatives. However, this is a competitive market in which private sector investment to 2026 cannot be forecast.
3. Infrastructure projects have been indexed to account for inflation and expected increases in construction costs. Estimated costs of projects programmed for delivery beyond 2009-10 have been rounded. Refer to 'Cost estimates used in this Infrastructure Plan' in Part B (page 16).

Delivering the Infrastructure Plan

State and local governments are responsible for delivering the projects outlined in the Infrastructure Plan. To ensure these projects are delivered effectively, some state agencies have undertaken recent restructuring arrangements:

- The Coordinator-General has established the Program Management Office to coordinate delivery of Infrastructure Plan projects across the Queensland Government.
- Queensland Transport has established the Infrastructure Program Office to manage the department's infrastructure program.
- The Department of Main Roads has introduced a new structure to improve its delivery capability.
- The transport portfolio is establishing a Major Projects Office (located in Main Roads) to undertake delivery of the capital program for Queensland Transport and Main Roads.
- Queensland Rail has established the SEQIPP Rail Office, which is improving procurement arrangements for the delivery of rail infrastructure projects.
- The Queensland Water Commission is being established to coordinate regional water planning, implementation and operations.

Overall delivery of the Infrastructure Plan is coordinated through the Program Management Office of The Coordinator-General. The Program Management Office works in close collaboration with the Office of Urban Management in developing and implementing the annual Infrastructure Plan.

Program Management Office

The Program Management Office has been established within The Coordinator-General to coordinate delivery of Infrastructure Plan projects across the Queensland Government. It will monitor progress with projects, identifying trends, issues and opportunities and will provide solutions and strategies to address them in collaboration with agencies and stakeholders. New ways of delivering projects are being developed to ensure investment takes place when it is needed, without overheating the economy or otherwise increasing investment costs.

The Program Management Office includes a mix of public and private sector staff, who contribute their knowledge, experience and skills in planning and delivering the large scale infrastructure program being undertaken by the Queensland Government.

Monitoring and review

Queensland Treasury plays a key role in providing advice to the Queensland Government about expenditure and progress with key infrastructure projects. It also monitors the State Capital Program on an ongoing basis, which includes projects in the Infrastructure Plan.

Part B
Regional infrastructure priorities and projects

Infrastructure issues and challenges

The projected increase in population in SEQ, combined with the continuing trend towards smaller households will require an estimated 575,000 new dwellings by 2026. There will also be a greater demand for a diversity of housing form to match the changing household structures, particularly the increase in one- and two-person households.

The increased population in SEQ is expected to generate demand for around 425,000 new jobs by 2026. Many of these jobs will be in traditional industries, responding to increased levels of consumption. However, others will be new kinds of jobs, related to the emergence of new technologies and markets and the Queensland Government's objective of strengthening and diversifying the Queensland economy.

Increased population and employment, together with new ways of producing and delivering goods and services, will increase the need for new infrastructure in the region. Strategic investments in infrastructure will influence the pattern and rate of development across the region. Therefore, infrastructure investments must be planned carefully.

By creating certainty about the location for new and well-serviced developments, the Infrastructure Plan, together with the SEQ Regional Plan, will assist the affordability of land for future housing and planned communities. The SEQ Regional Plan recognises the importance of managing infrastructure demand, coordinating its provision, as well as and planning and securing future corridors and sites.

Challenges for the future - project costs

Costs for developing and constructing infrastructure are rising world-wide. This will have a significant impact on the 20-year program included in the Infrastructure Plan in future years. Some adjustment to project priorities and timelines may be necessary in future versions of the Infrastructure Plan as cost impacts become more evident.

Almost all the projects in this Infrastructure Plan have retained the original cost estimates included in the 2005 version, adjusted by a factor that accounts for inflation and a component of the increase in material and construction costs. This cost base (adjusted each year in future versions of the Infrastructure Plan) will be used until such time as a business case for each project is approved by the Queensland Government.

Part B

Infrastructure Plan structure and timing

The following section describes the structure of this Infrastructure Plan, including proposed timelines for delivery of the projects.

Sections in this Infrastructure Plan are organised into asset classes. The transport section is further divided into sub-regional categories and a freight section. Within each section, there is discussion of the critical priorities; a schedule of indicative timing and estimated cost of each project; and a map.

The Infrastructure Plan is based on the planning timeline included in the SEQ Regional Plan, which provides the framework for managing growth, land use and development in SEQ to 2026. A formal review of the SEQ Regional Plan will be undertaken every five years and any changes are expected to be reflected in subsequent versions of the Infrastructure Plan. The first formal review of the SEQ Regional Plan will be undertaken in 2010.

This Infrastructure Plan is presented in three time periods over the period to 2026:

- *First phase*
  From 2006-07 to 2009-10: this stage represents the four-year Forward Estimates period of the State Budget. It shows a specific government commitment to funding for the nominated infrastructure projects in 2006 dollars and the timing for delivery of the projects.
- *Second phase*
  From 2010-11 to 2014-15: this phase commits infrastructure investments to meet the strategic objectives for the region over this period, with estimated costs in 2006 dollars.
- *Third phase*
  From 2015-16 to 2025-26: this phase includes infrastructure which is likely to be required in the longer term and will need to be considered in future versions of the Infrastructure Plan. Projects are estimated in 2006 dollars.

Cost estimates used in this Infrastructure Plan

The cost estimates provided in this Infrastructure Plan represent the best information presently available. To enable comparison across the 20-year period of the Infrastructure Plan, cost estimates are provided in real 2006 dollars.

The level of detailed planning that underpins the cost estimates varies with each project. Where detailed investigations have been completed and funding approved by the Queensland Government, estimates in the Infrastructure Plan reflect that approved funding. Estimates for projects programmed for delivery beyond 2009-10 have not undergone detailed evaluation, however the costs have been escalated to reflect the movement in prices in the relevant industries.

The index used to escalate estimates from 2005 to 2006 dollars is the *National Price Index for the Non-Residential Construction Sector* published by the Australian Bureau of Statistics in *Producer Price Indexes Australia, December Quarter 2005* (6427.0). Estimated project costs have been escalated by 5.2 per cent, except where projects are investigations or where detailed costs have been approved. Energy cost estimates have been indexed by the relevant Government-owned corporations with regard to regulatory determinations.

The national price index provides a general indicator of price pressures across the industries relevant to this Infrastructure Plan. Cost pressures in particular industries may vary, sometimes significantly, from general indices. These cost pressures will be examined in detail during evaluations of individual projects.

In addition, costs for construction projects beyond 2009-2010 have been rounded upwards after this index is applied. The extent of rounding varies according to the size of the project, reflecting the increasing uncertainty of estimates for large projects delivered in future years.

The Infrastructure Plan identifies key regional infrastructure investments by Queensland Government agencies. It also refers to some Australian and local government projects relevant to the SEQ Regional Plan. Where projects involve a subsidy payment to local government (for example, in the water sector), the expected state funds involved is indicated in this Infrastructure Plan, pending agreement with local governments on timing and implementation.

The Infrastructure Plan includes key infrastructure projects where funding is expected from the Australian Government (under the AusLink program) and Brisbane City Council. The timing and the delivery of these projects is not under the control of the Queensland Government. However, estimated funding from these other governments has been included in the Queensland Government's preferred timelines.

Progress with projects

This Infrastructure Plan includes progress highlights for selected projects in each investment category. These highlights are designed to give a general indication of progress in that category rather than a specific report on each project.

Tables 2 to 12 identify the delivery timeframe for each infrastructure project. Where a minimum of $0.5 million was expended in 2005-06 on planning, design, site acquisition, materials procurement or construction, these projects have been identified separately.

Specific progress on each project is monitored by state agencies, the Office of Urban Management, Queensland Treasury and the Program Management Office. The Program Management Office will produce regular newsletters highlighting achievements and progress on Infrastructure Plan projects. The Coordinator-General's website (www.coordinatorgeneral.qld.gov.au) will also be updated regularly to provide key information.

Transport

Investment in transport infrastructure is essential for achieving the preferred SEQ future land use pattern and regional economic and social objectives. Supporting this, the Infrastructure Plan outlines a balanced program of investment between transport modes. The future transport system for the region will have a greater focus on public transport, to provide more travel choices. Walking and cycling will also be important, with further investment funded across the region. A range of policy and travel behaviour measures, funded by both State and local governments, will also support infrastructure improvements.

All levels of government have a role in managing and developing the transport system in SEQ. Cooperative planning and investment partnerships (such as the alliance between Main Roads and local government) are already in place. It is envisaged that the Australian Government will continue to direct investment towards a strategic network of transport corridors in SEQ, including major rail links, under its AusLink program.

TransLink

The Queensland Government created TransLink in 2003 to deliver an integrated public transport network across SEQ. TransLink is part of Queensland Transport and works in partnership with Brisbane City Council, Brisbane Transport, QR Citytrain and private bus operators.

TransLink released the *Draft TransLink Network Plan* in May 2005, a three-year program to deliver improved public transport services across SEQ. It includes integrated ticketing and standardised fares; a coordinated network of routes and services across public transport modes; and a single marketing and passenger information system.

Brisbane City Council has a significant role in transport in SEQ as it manages a large part of the urban road network and delivers much of the public transport system in urban areas. Brisbane City Council is currently investigating a series of cross-city transport projects (known as TransApex), with the goal of reducing traffic congestion in the inner areas of Brisbane. The Queensland Government has provided in-principle support to the North-South Bypass Tunnel and is directly involved in planning arrangements for the Airport Link.

AusLink

In 2005, the Australian Government changed its approach to funding national land transport infrastructure. The new approach bases Australian Government investment around an *AusLink National Transport Network* involving land transport corridors of national importance.

Key transport corridors in SEQ of interest to AusLink are the:

- Brisbane Urban Corridor;
- Bruce Highway;
- Cunningham Highway;
- Gateway Motorway and Bridge;
- Ipswich Motorway;
- Logan Motorway;
- north coast rail line;
- Pacific Motorway/Pacific Highway;
- Port of Brisbane Motorway;
- proposed inland rail freight corridor (incorporating Gowrie-Grandchester);
- Sydney to Brisbane Railway; and
- Warrego Highway.

The SEQ Regional Plan emphasises the importance of reserving and protecting strategic corridors for future transport and other infrastructure needs. Early identification of these corridors ensures better land use planning and more efficient infrastructure provision in the future.

The strategic directions for regional transport investment in SEQ over the next 20 years are:

- ensuring public transport and roads support the preferred pattern of development;
- increasing public transport infrastructure to encourage greater use; and
- supporting economic development, including improved freight links and a greater emphasis on rail freight.

Smart Travel Choices for SEQ: A Transport Green Paper

Smart Travel Choices for SEQ: A Transport Green Paper was released for consultation in December 2005. The paper canvasses a package of transport policy initiatives for SEQ to reduce dependence on travel by private car. The measures are aimed at cleaner and less congested travel in SEQ.

Western Corridor

The Western Corridor extends generally from Wacol through Ipswich City to Amberley and includes Ebenezer, Swanbank, Ripley Valley and Springfield. Development in the Western Corridor is a key feature of the SEQ Regional Plan and the timely provision of infrastructure to lead development is vital in supporting this growth.

Table 2 outlines a transport infrastructure investment program for the Western Corridor. To support population and employment opportunities around the centres of Ipswich, Springfield and Ripley, the program focuses on upgrading existing and constructing new roads and public transport facilities. The program also recognises the strategic importance of the freight links in the Western Corridor.

The first phase of this Infrastructure Plan (2006-07 to 2009-10) addresses three major issues in the Western Corridor:

- *Dealing with traffic on the Ipswich Motorway*

  The Ipswich Motorway is the main road connecting Ipswich and other areas west of Brisbane. There is an urgent need to improve this link and to provide for future traffic growth associated with development in the Western Corridor and interstate links. As the Motorway is part of the AusLink network, funding is subject to negotiation with the Australian Government.

- *Improving passenger rail services on the Ipswich line*

  This line needs improvement to cater for the public transport needs of existing and future residents in the Western Corridor.

- *Improving road and public transport links to service growing population centres at Springfield and Ripley*

  The passenger rail line from Darra needs to be extended to Springfield to provide a viable public transport option for this growing centre. The road network also needs to be developed by extending the Centenary Highway through Ripley to Yamanto; and by planning for duplication of the Centenary Highway between the Ipswich Motorway and Springfield.

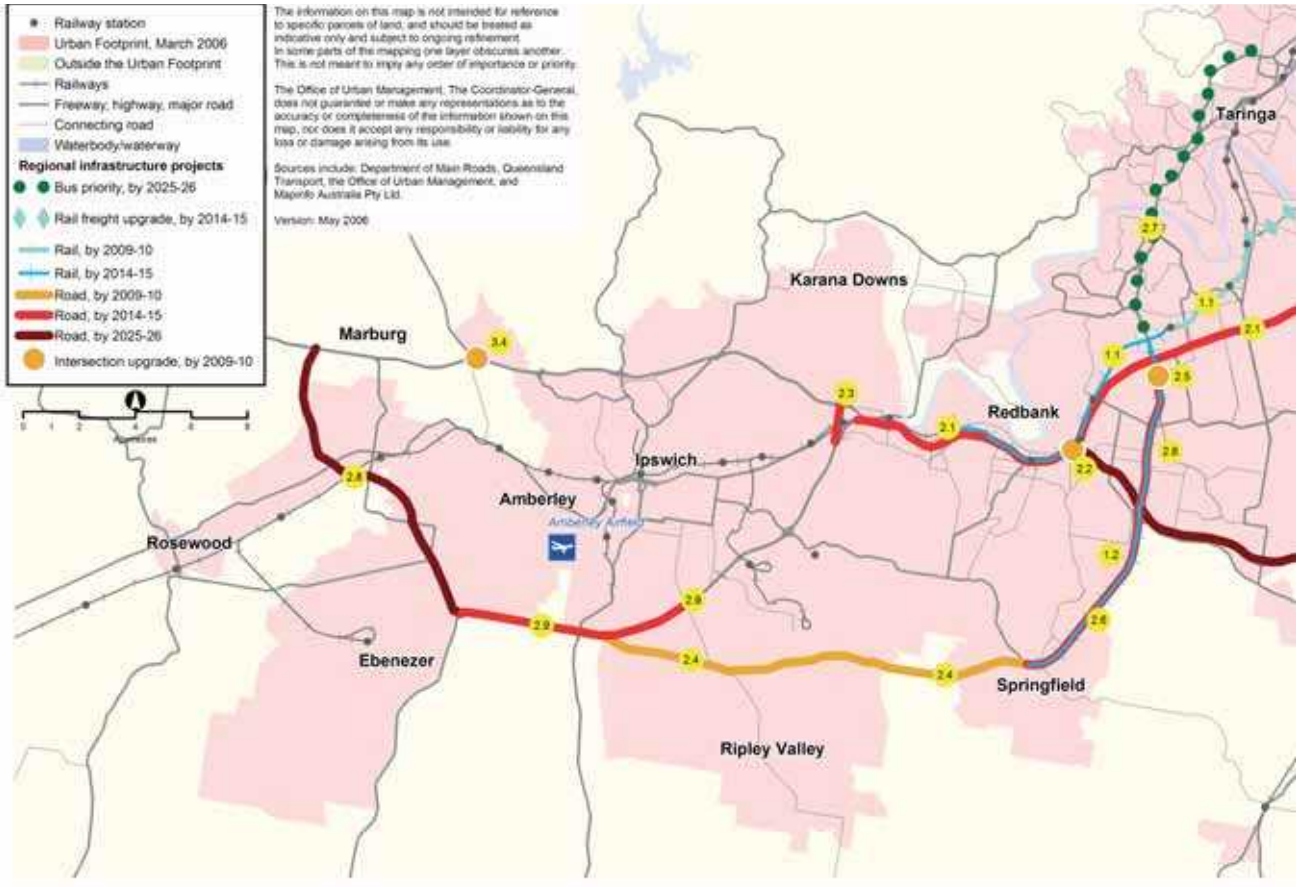
The second phase of this Infrastructure Plan concentrates on completing key projects commenced in phase one, as well as providing additional roads and public transport to cater for the expected growth in Springfield and the Ripley Valley.

The third phase covers the period past 2014-15. The sequence and timing of projects continue to support the area's role as a major freight transport hub.

Progress on transport projects in the Western Corridor during 2005-06

- Operational modelling has commenced on the Corinda to Darra third track of the Ipswich rail line. The preliminary alignment design is currently under review.
- A joint planning team for the Centenary Highway four lanes from Ipswich Motorway to Springfield and the Springfield passenger rail line was established. Expressions of Interest for a planning study were called in February 2006, for the study to commence mid-2006.
- In November 2005, the Australian Government announced an allocation of $320 million under AusLink to upgrade the section of the Ipswich Motorway east of Goodna to six lanes. A further $10 million was allocated for an investigation into a Goodna Bypass between the Warrego Highway and Logan Motorway interchanges.
- Preliminary design works for an upgrade of the Ipswich Motorway and Logan Motorway interchange at Gailes have been completed. A new bridge over Woogaroo Creek to carry Ipswich Motorway traffic during redevelopment was completed in March 2006. Construction of the new interchange is expected to be complete by late 2008.
- The preferred alignment for the Cunningham Highway to Warrego Highway connection was announced in March 2006.
- Planning for the two-lane Centenary Highway extension from Springfield to Ripley is completed, and prequalification of tenders for construction closed in May 2006.
- The Plainlands interchange on the Warrego Highway was completed in February 2006.

Map 1a: Western Corridor transport infrastructure



Map 1b: Western Corridor transport infrastructure

Table 2: Western Corridor transport infrastructure

Map reference	Project	Estimated total cost $m	Delivery timeframe		
			2006-07 to 2009-10	2010-11 to 2014-15	2015-16 to 20025-26
Public transport connections					
1.1	Ipswich rail line Corinda-Darra, Darra-Redbank third rail track	310			
1.2	Springfield passenger rail line	320		Planning underway	
1.3	Translink sub-regional station upgrade program	30			
Walking and cycling					
1.4	Sub-regional cycle network	25			
Major road network					
2.1	Ipswich Motorway upgrade (pending Goodna Bypass investigation)	950		Design underway Wacol-Darra	
2.2	Logan Motorway/Ipswich Motorway interchange	168	Tenders being assessed		
2.3	Cunningham Highway to Warrego Highway connection	75			
2.4	Centenary Highway two lanes: Springfield-Ripley, Ripley-Yamanto	231	Design Stage 1 completed		
2.5	Centenary Highway/Boundary Road underpass (joint Brisbane City Council and Main Roads project)	30	Construction underway		
2.6	Centenary Highway four lanes: Ipswich Motorway to Springfield	470			
2.7	Centenary Highway bus priority/transit lanes Ipswich Motorway to Toowong	270			
2.8	Western Ipswich Bypass	210			
2.9	Cunningham Highway four lanes: Ripley Road to Yamanto, Yamanto to Ebenezer	95			
Toowoomba					
3.2	Toowoomba Bypass: four lanes, including new range crossing	750			
3.3	Gowrie to Grandchester rail line	1200			
3.4	Warrego Highway/Brisbane Valley Highway interchange	53	Planning underway		
Total		5,187			
3.1	Warrego Highway: Plainlands interchange	14	Completed		

Notes:

1. The table identifies the delivery timeframe for each infrastructure project. Projects that are underway with a minimum expenditure of $0.5 million in 2005-06 on planning, design, site acquisition, materials procurement or construction are identified in yellow.
2. Estimated project costs are in 2006 dollars. Cost estimates in the State Budget and other public documents may differ, as they may incorporate project costs which reflect anticipated changes in input prices between initial planning and the time of construction. Estimated investment includes funds already expended on projects.
3. Completed projects represent the estimated cost of projects as documented in the 2005 Infrastructure Plan.
4. Where funding is required from other levels of government, their estimated costs have been included. Where projects are part of (or connect to) the AusLink National Transport Network, these projects are subject to negotiation with the Australian Government.

Greater Brisbane

The Greater Brisbane sub-region is defined in this Infrastructure Plan as the cities of Brisbane, Logan and Redcliffe and the shires of Redland, Pine Rivers and Caboolture.

Greater Brisbane is expected to accommodate the majority of the infill development proposed for SEQ. This infill will mainly occur around existing Activity Centres, public transport nodes and brownfield redevelopment sites.

Table 3 outlines a transport infrastructure investment program for the Greater Brisbane area. Strategic transport needs in this area include:

- quality public transport connections between Principal Activity Centres;
- better transport links to industrial and logistics centres, particularly to the Australia TradeCoast; and
- orbital road networks that link centres outside the inner city, reduce traffic congestion and provide a sound basis for future traffic management.

The first phase of this Infrastructure Plan (2006-07 to 2009-10) addresses four major issues in the Greater Brisbane area:

- *Extending and improving public transport infrastructure*

  Public transport infrastructure such as railways and busways needs to be expanded and upgraded to encourage population growth in the areas preferred in the SEQ Regional Plan. This practice is already in place with the CityTrain Network and sections of the Brisbane Busway Network. Busways now need to be expanded along northern, southern and eastern spines to support a greater role for public transport in these corridors.

- *Improving freight transport links to the Australia TradeCoast*

  The expected growth in container traffic through the Port of Brisbane and passenger numbers through Brisbane Airport will require significant improvements to both road and rail networks. The Gateway Upgrade Project is a major initiative to support this growth.

- *Supporting active transport choices*

  Active transport choices such as cycling and walking are being encouraged in this Infrastructure Plan. Two new pedestrian and cycle bridges, including one from the Millennium Arts precinct to the inner city, will build on the success of the Goodwill Bridge. The sub-regional cycle network will continue to be improved.

- *Improving road infrastructure*

  While a certain amount of congestion on the road network in large urban areas is inevitable, bypass routes for more congested road links and areas are needed. This Infrastructure Plan provides in-principle support for the North-South Bypass Tunnel and Airport Link, as well as investigations to improve orbital and bypass road networks in Western Brisbane.

Subsequent phases of the Infrastructure Plan will build on existing projects.

Progress on transport projects in the Greater Brisbane area during 2005-06

- Detailed designs have been completed for the Queen Street to Roma Street section of the Inner Northern Busway. Construction is due to commence shortly.
- Draft Terms of Reference and corridor options for the Eastern Busway between Buranda and Capalaba were announced in November 2005. A Concept Design and Impact Management Plan is currently being prepared and community consultation is underway.
- Planning and design for Stage 1 of the Boggo Road section of the Eastern Busway is well advanced. Community consultation on the proposal is continuing, and construction is expected to commence in mid-2006.
- An update of the *SEQ Integrated Regional Cycle Network Plan* is underway, in consultation with local authorities.
- Tenders are currently being assessed for the Gateway Upgrade Project. Once the preferred tenderer is announced, construction should commence shortly after.
- The successful tenderer to develop the North-South Bypass Tunnel was announced in April 2006.

- Work is progressing on Brisbane's Green Bridge linking Dutton Park parklands to the St Lucia campus of the University of Queensland. Brisbane City Council's Green Bridge is expected to be open to bus services, pedestrians and cyclists from early 2007. The Council is working with TransLink on new integrated bus services for routes across the bridge.
- Planning for the Northern Busway (Enoggera Creek to Aspley) is underway, to ensure integration with planning for Airport Link. The preferred alignment for Airport Link was announced in March 2006.
- In March 2006, work started on service roads to the Stoney Camp Road/Mt Lindesay Highway interchange.
- Designs for a new three-lane duplication of the Houghton Highway bridge, including a shared pedestrian and cycle path, went on public display in October 2005. Community consultation and detailed planning and design are due to be finalised by late 2006, with the bridge expected to be complete by late 2009.
- Construction has commenced on six-laning the Bruce Highway between Boundary Road and Uhlmann Road (south of Burpengary). Completion of this section is expected by mid-2007.
- Works on the new 2.2 kilometre Linkfield Road Connection between Gympie Road and South Pine Road were completed in February 2006.
- The Australian Government announced that it will contribute $25 million towards construction of a grade separation at the intersection of the Mt Lindesay Highway with the rail line at Acacia Ridge.
- Consultation with potentially affected property owners is underway for the Caboolture-Bribie Island Road and additional lanes on Deception Bay Road and Burpengary-Caboolture Road.
- Construction work commenced in March 2006 on the western end of the Caboolture Northern Bypass. Also in March, tenders were called for works on the eastern end.

Map 2: Greater Brisbane transport infrastructure

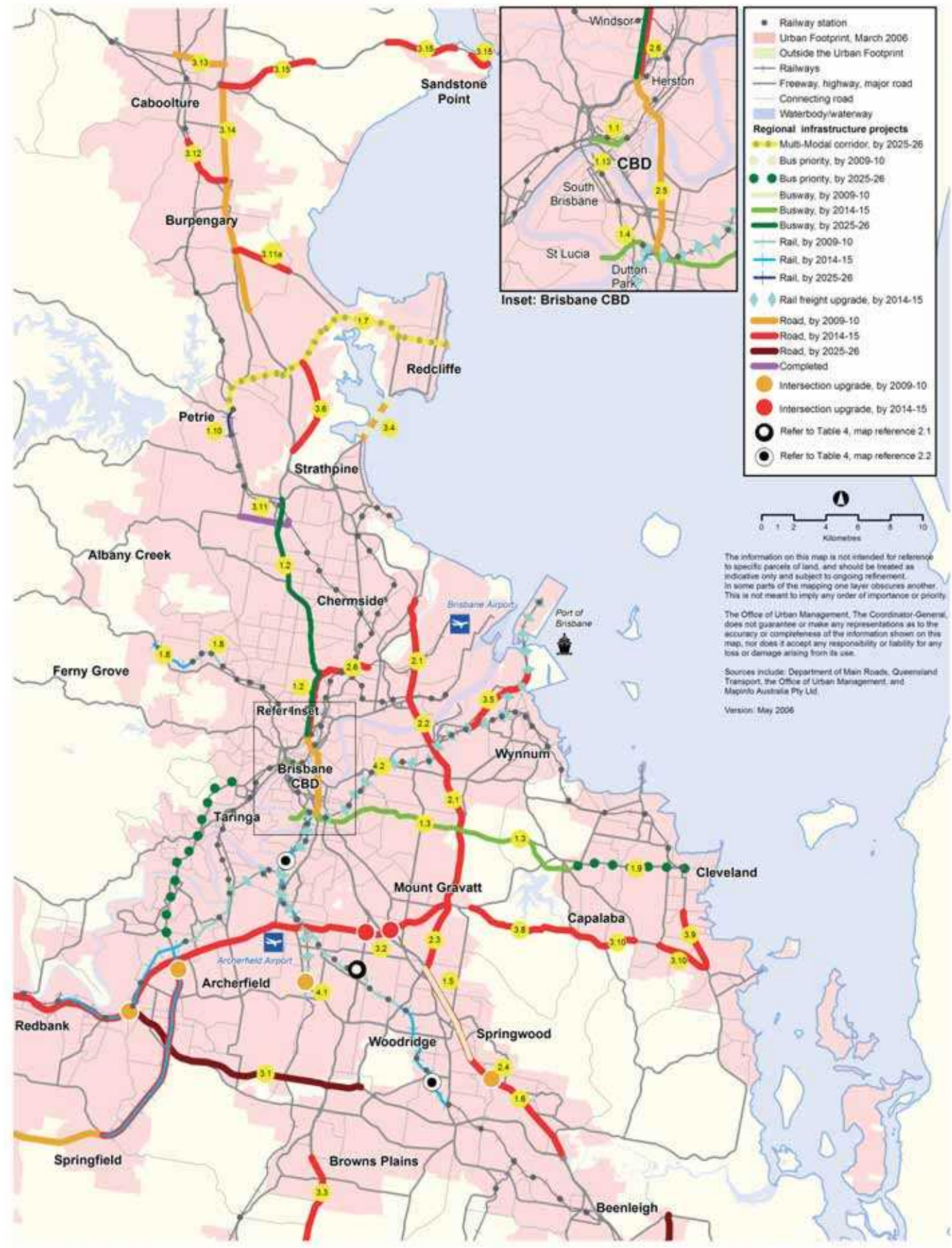


Table 3: Greater Brisbane transport infrastructure

Map reference	Project	Estimated total cost $m	Delivery timeframe		
			2006-07 to 2009-10	2010-11 to 2014-15	2015-16 to 20025-26
Public transport connections					
1.1	Inner Northern Busway improvements and new Busway stations	490		Stages 3-5 completed	
1.2	Northern Busway: Enoggera Creek to Aspley to Bracken Ridge	600			
1.3	Eastern Busway: Buranda to Capalaba	600		Corridor options announced	
1.4	Eastern Busway: Buranda to Boggo Road to Green Bridge	180		Stages 1 design completed	
1.5	South East Busway extension to Springwood	26	Concept design completed		
1.6	Pacific Motorway transit lanes from Gateway Motorway to Logan Motorway	410		Planning underway	
1.7	Petrie to Redcliffe multi-modal corridor	230			
1.8	Mitchelton to Keperra to Ferny Grove track duplication	55		Detailed design commenced	
1.9	Redlands bus priority measures	110			
1.10	Lawnton to Petrie third rail track	30			
1.11	Translink sub-regional station upgrade program	70			
1.12a	New passenger rail stock	236			
Walking and cycling					
1.12	Sub-regional cycle network	85			
1.13	Pedestrian/cycle bridges in the CBD	130			
3.7	Pacific Motorway Bikeway	15	Staged construction underway		
Orbital road network					
2.1	Gateway Motorway Upgrade: Mt Gravatt-Capalaba Road to Nudgee Road	1000		Tenders being assessed	
2.2	Gateway Bridge duplication	550		Tenders being assessed	
2.3	Gateway Motorway upgrade: six lanes Mt Gravatt-Capalaba Road to Pacific Highway	50			
2.4	Pacific Motorway: Loganlea Road interchange	42	Planning underway		
2.5	North-South Bypass Tunnel	2000	Preferred proponent announced		
2.6	Airport Link	1300		Corridor announced	
Improving road connections					
3.1	Logan Motorway six lanes	210			
3.2	Brisbane Urban Corridor (Griffith Arterial)	240		Staged construction underway	
3.3	Mt Lindesay Highway four lane upgrade: Green Road to Rosia Road to Jimboomba	320		Planning/design underway	
3.4	Houghton Highway duplication and bus priority	132		Design underway	
3.5	Port of Brisbane Motorway	160			
3.6	North-South Arterial Mango Hill	270			
3.8	Redland sub-arterial road from Mt Gravatt-Capalaba Rd to Tingalpa Creek	160			
3.9	Cleveland-Redland Bay Road from South Street to Boundary Road	60			
3.10	Redland Bay Road from Tingalpa Creek to Cleveland-Redland Bay Road	70			
3.11a	Deception Bay Road: additional lanes from Bruce Highway to Lipscombe Road	80			
3.12	Burpengary to Caboolture Road: additional lanes from Bruce Highway to Gaffield Street	80			
3.13	Caboolture Northern Bypass	74	Staged construction underway		
3.14	Bruce Highway: additional lanes from Boundary Road to Caboolture	230	Staged construction underway		
3.15	East-west links: Caboolture to Bribie Island Road	180			

Freight rail network improvements			
4.1	Grade separation of Mt Lindesay Highway/Acacia Ridge rail	53	
4.2	Metropolitan freight capacity upgrades	70	
4.3	Rail crossing grade separations	160	
Total		**10,758**	
3.11	Linkfield Connection Road	30	Completed

Notes:

1. The table identifies the delivery timeframe for each infrastructure project. Projects that are underway with a minimum expenditure of $0.5 million in 2005-06 on planning, design, site acquisition, materials procurement or construction are identified in yellow.
2. Estimated project costs are in 2006 dollars. Cost estimates in the State Budget and other public documents may differ, as they may incorporate project costs which reflect anticipated changes in input prices between initial planning and the time of construction. Estimated investment includes funds already expended on projects.
3. Completed projects represents the estimated cost of projects as documented in the 2005 Infrastructure Plan.
4. Where funding is required from other levels of government, their estimated costs have been included. Where projects are part of (or connect to) the AusLink National Transport Network, these projects are subject to negotiation with the Australian Government.
5. At the time of printing, Brisbane City Council was negotiating with the preferred tenderer for the North-South Bypass Tunnel (project 2.5). The estimated cost of the project as listed in this document may vary from the price ultimately announced.
6. The Pacific Motorway Bikeway project (project 3.7) has received additional funding in this Infrastructure Plan.

Part B

Gold Coast

The Gold Coast sub-region extends from Yatala in the north, to the border with New South Wales in the south. Significant population and activity growth in this area will challenge the capability of the local transport system. Improvements to the road system are only part of the solution, with public transport to play an increasing role in moving people efficiently. Quality public transport links are required to connect major centres and developing areas on the Gold Coast.

Table 4 outlines the transport infrastructure investment program for the Gold Coast. Strategic transport needs in this area include:

- establishing a public transport spine linking the main centres;
- increasing the use of the south coast rail line; and
- improving local road and bus links east-west across the sub-region.

The first phase of this Infrastructure Plan (2006-07 to 2009-10) addresses four major issues in the Gold Coast area:

- *Constructing a public transport spine*

  A high-quality public transport corridor will link Helensvale/Parkwood to Broadbeach.

- *Increasing trips on the south coast rail line*

  Sections of track will be duplicated and the rail line extended to Reedy Creek and later to Elanora. This investment and new passenger rail stock will improve capacity on the rail line.

- *Upgrading the Pacific Motorway*

  The Pacific Motorway is a critical link for the SEQ region and its use for inter-regional and intra-regional trips must be preserved. Additional lanes between Nerang and Tugun and improved local transport connections are essential investments.

- *Improving the east-west road and public transport links within the Gold Coast*

  Improved road and public transport links between existing and emerging Activity Centres will support continued economic growth and make best use of the passenger rail line.

Subsequent phases of the Infrastructure Plan will build on these investments.

Progress on transport projects in the Gold Coast area during 2005-06

- In February 2006, the Queensland Government announced it would proceed with the Tugun Bypass, following Australian Government approvals. Construction of the bypass commenced in March 2006, with completion expected in 2008. The design will accommodate the future extension of the rail line from Robina to the Gold Coast Airport.
- Construction works commenced on the Ormeau to Coomera track duplication in November 2005. Project completion is expected in October 2006.
- Public consultation on the draft Environmental Planning Study for the Helensvale to Robina track duplication was completed in mid-2005. Design work is progressing.
- Property acquisitions for the Salisbury to Kuraby third track are nearing completion. Design tenders have been awarded. Early track works have been completed.
- Site studies and preliminary station designs for the Robina to Reedy Creek track extension are nearing completion.
- Design work for upgrades to the Gold Coast Highway between Robert Street and Stevens Street is completed. Consultation is underway on the Government Road to Robert Street section.
- Consultation has begun on upgrades to the Hope Island Road between Gracemere Street and the Hope Island Bridge.

Map 3: Gold Coast transport infrastructure

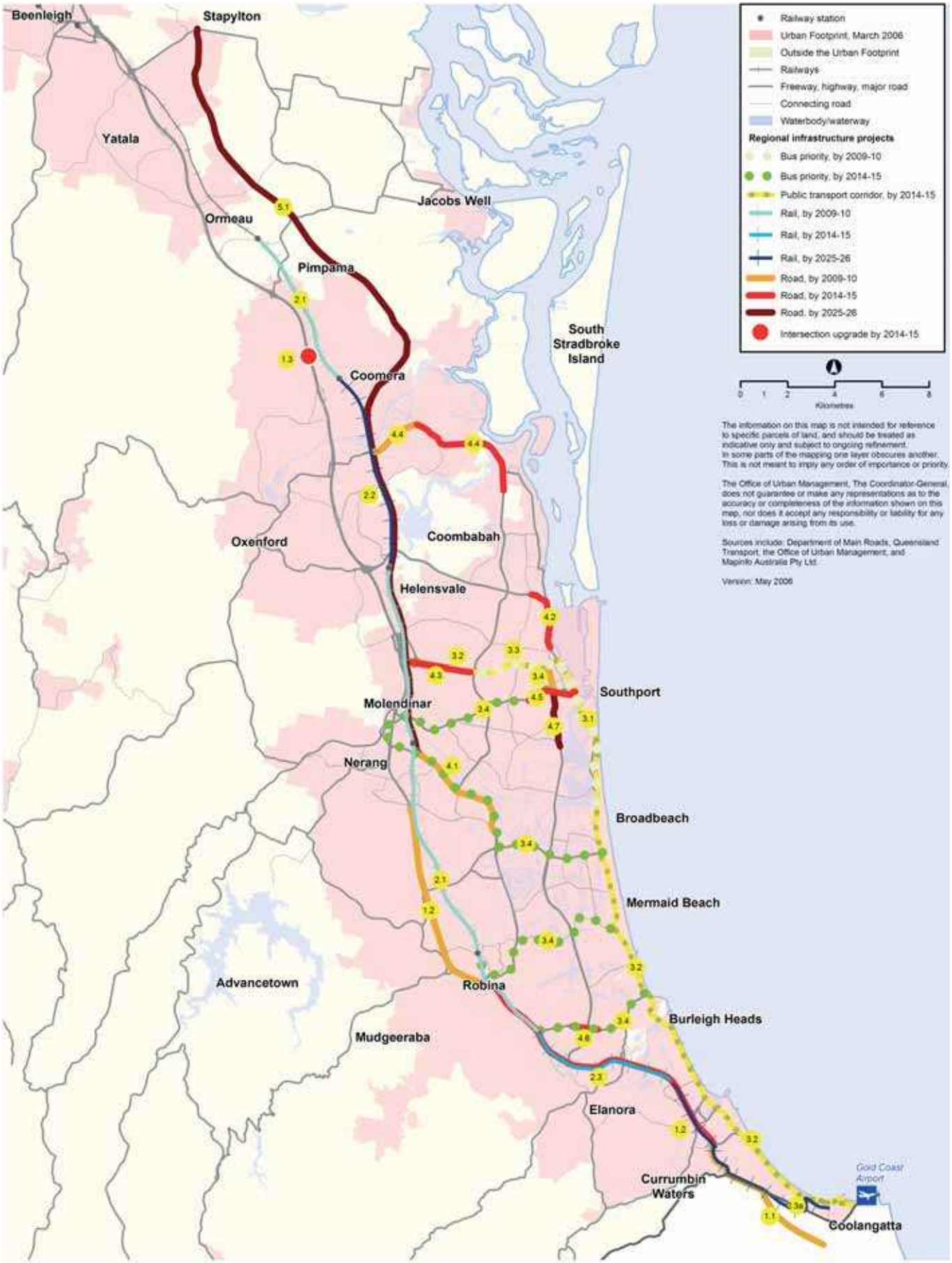


Table 4: Gold Coast transport infrastructure

Map reference	Project	Estimated total cost $m	Delivery timeframe		
			2006-07 to 2009-10	2010-11 to 2014-15	2015-16 to 20025-26
Pacific Motorway					
1.1	Tugun Bypass	543	Staged construction underway		
1.2	Additional traffic lanes and interchanges: Nerang to Stewart Road	560		Planning underway	
1.3	Coomera interchange	140			
Gold Coast rail line					
2.1	Ormeau to Coomera, Helensvale to Robina, Salisbury to Kuraby: additional track and upgrades	279	Construction underway		
2.2	Coomera to Helensvale, Kuraby to Kingston, Salisbury to Park Road: additional tracks	330			
2.3	Southern extension of rail line: Robina to Elanora	300		Preliminary design underway	
2.3a	Southern extension of rail line: Elanora to Coolangatta	550			
2.4	New passenger rail stock	279	Construction commenced		
Gold Coast public transport					
3.1	Gold Coast Highway bus priority and bus stations	16			
3.2	Quality public transport corridor: Parkwood to Broadbeach to Coolangatta	550			
3.3	Bus priority on Smith Street: Olsen Avenue to Gold Coast Highway	5			
3.4	Bus priority/high-occupancy vehicle program	55			
3.5	TransLink sub-regional station upgrade	30			
Walking and cycling					
3.6	Sub-regional cycle network	55			
Gold Coast major road network					
4.1	Nerang-Broadbeach Road: additional lanes from Allambe Gardens to Neilsens Road	63		Staged construction underway	
4.2	Gold Coast Highway: additional lanes from Government Road to Robert Street to Stevens Street	65		Planning/design underway	
4.3	Smith Street: additional lanes from Pacific Motorway to Olsen Avenue	55			
4.4	Hope Island Road: additional lanes from Pacific Motorway to Santa Barbara Road to Columbus Drive	110		Planning/design underway	
4.5	Southport-Nerang Road: additional lanes from Minnie Street to Queen Street	35			
4.6	Burleigh Connection Road: additional lanes from Mattocks Road to Kortum Drive	35			
4.7	Southport-Burleigh Road: intersection upgrades	80			
Future transport corridor preservation					
5.1	Intra-Regional Transport Corridor: Nerang to Staplyton	1700	Corridor preservation underway		
Total		**5,835**			

Notes:

1. The table identifies the delivery timeframe for each infrastructure project. Projects that are underway with a minimum expenditure of $0.5 million in 2005-06 on planning, design, site acquisition, materials procurement or construction are identified in yellow.
2. Estimated project costs are in 2006 dollars. Cost estimates in the State Budget and other public documents may differ, as they may incorporate project costs which reflect anticipated changes in input prices between initial planning and the time of construction. Estimated investment includes funds already expended on projects.
3. Where funding is required from other levels of government, their estimated costs have been included. Where projects are part of (or connect to) the AusLink National Transport Network, these projects are subject to negotiation with the Australian Government.
4. Tugun Bypass (project 1.1) is listed in out-turn dollars (not 2006 dollars).
5. Early structural works for the Gold Coast rail line (project 2.3a) will be carried out as part of the Tugun Bypass project in 2006-07. This will assist future excavation for the extended Gold Coast Airport runway.

Sunshine Coast

The Sunshine Coast sub-region is defined here as the Shires of Noosa, Maroochy and Caloundra. The Principal Activity Centre for this sub-region is Maroochydore, which accommodates the key business, service and retail uses. Other major centres in the region are Caloundra, Nambour and Noosa. There are emerging centres at Kawana Waters and Sippy Downs.

The SEQ Regional Plan actively supports consolidating and containing travel within the Sunshine Coast area. As the resident population and employment activity on the Sunshine Coast increases, transport connections to and between the Activity Centres located on the Coast will become busier. The projected population growth to 2026 of more than 150,000 people will generate traffic demand in excess of an additional 500,000 trips each day.

Road connections between centres in the sub-region and connecting Brisbane will always be important. However, the Sunshine Coast is now at a stage where public transport must play a much greater role.

Table 5 outlines a transport infrastructure investment program for the Sunshine Coast. Strategic transport needs in this area include:

- establishing a trunk public transport system linking key centres;
- increasing use of the north coast rail line;
- protecting the role of the Bruce Highway as a national link; and
- developing convenient east-west road and public transport connections between coastal Activity Centres and other centres along the rail line.

The first phase of this Infrastructure Plan (2006-07 to 2009-10) addresses five major issues in the Sunshine Coast area:

- *Providing a quality bus system between Caloundra and Maroochydore*

  This system will be developed to provide a quality public transport network between Caloundra and Maroochydore. It will be further enhanced with improved services and connections to the University of the Sunshine Coast at Sippy Downs.

- *Initiating a rail service between Beerwah and Maroochydore*

  Planning and land acquisition will be undertaken for a rail service between Beerwah and Maroochydore on the CAMCOS (*Caboolture to Maroochydore Corridor Study*) alignment. This service will be integrated with the bus system between Maroochydore and Caloundra.

- *Improving the north coast rail line*

  Major upgrades are planned between Caboolture and Landsborough to increase passenger and freight capacity.

- *Upgrading of the Bruce Highway between Cooroy and Curra*

  The Australian Government has provided funding to investigate a new motorway-standard highway north of Cooroy to Curra. A new road is needed to address safety, capacity and other deficiencies of the existing highway.

- *Upgrading of the Sunshine Motorway*

  An upgraded Sunshine Coast Motorway will ensure a convenient road link between the main Activity Centres on the north coast. Once complete, current construction work will ease traffic congestion on heavily used sections of the Motorway and provide better access to growth areas through upgraded interchanges. Future work on the Motorway and local road networks will better service growth areas between Maroochydore and Caloundra.

Subsequent phases of the Infrastructure Plan will build on existing projects.

Progress on transport projects in the Sunshine Coast area during 2005-06

- The Caloundra-Maroochydore quality bus corridor project team has been formed and a planning study is underway.
- Work is progressing on the additional rail line from Caboolture to Beerburrum to Landsborough:
  - The preferred alignment for the Caboolture to Beerburrum section was announced in

August 2005 and consultation regarding land acquisition is continuing. The Queensland Government has sought construction alliance partners.

›› Community consultation on the preferred corridor for the section from Beerburrum to Landsborough was completed in October 2005 and the planning study is ongoing.

›› Scoping is underway for preliminary investigations on the Landsborough to Nambour section. Completion of the additional rail line will provide capacity to serve the future rail link to Maroochydore (CAMCOS).

- Potential alignments for upgrades to the Cooroy to Curra section of the Bruce Highway were publicly presented in September 2005. Based on public feedback,alternative options are being investigated.
- Land resumptions have been completed for the KTIA (Kawana Transport Infrastructure Agreement) Caloundra-Mooloolaba Road upgrade and the additional lanes on Caloundra Road from the Bruce Highway to Pierce Avenue.
- Additional lanes on Nicklin Way between Caloundra Road and Beerburrum Street were completed in November 2005.
- In October 2005, construction commenced on the four lane upgrade of Maroochydore Road through Kunda Park. This project is expected to be complete by December 2006. A second project to construct a four lane deviation from the Bruce Highway to Pike Street in Kunda Park is expected to commence in April 2006 and be finalised by mid-2008.

Map 4: Sunshine Coast transport infrastructure

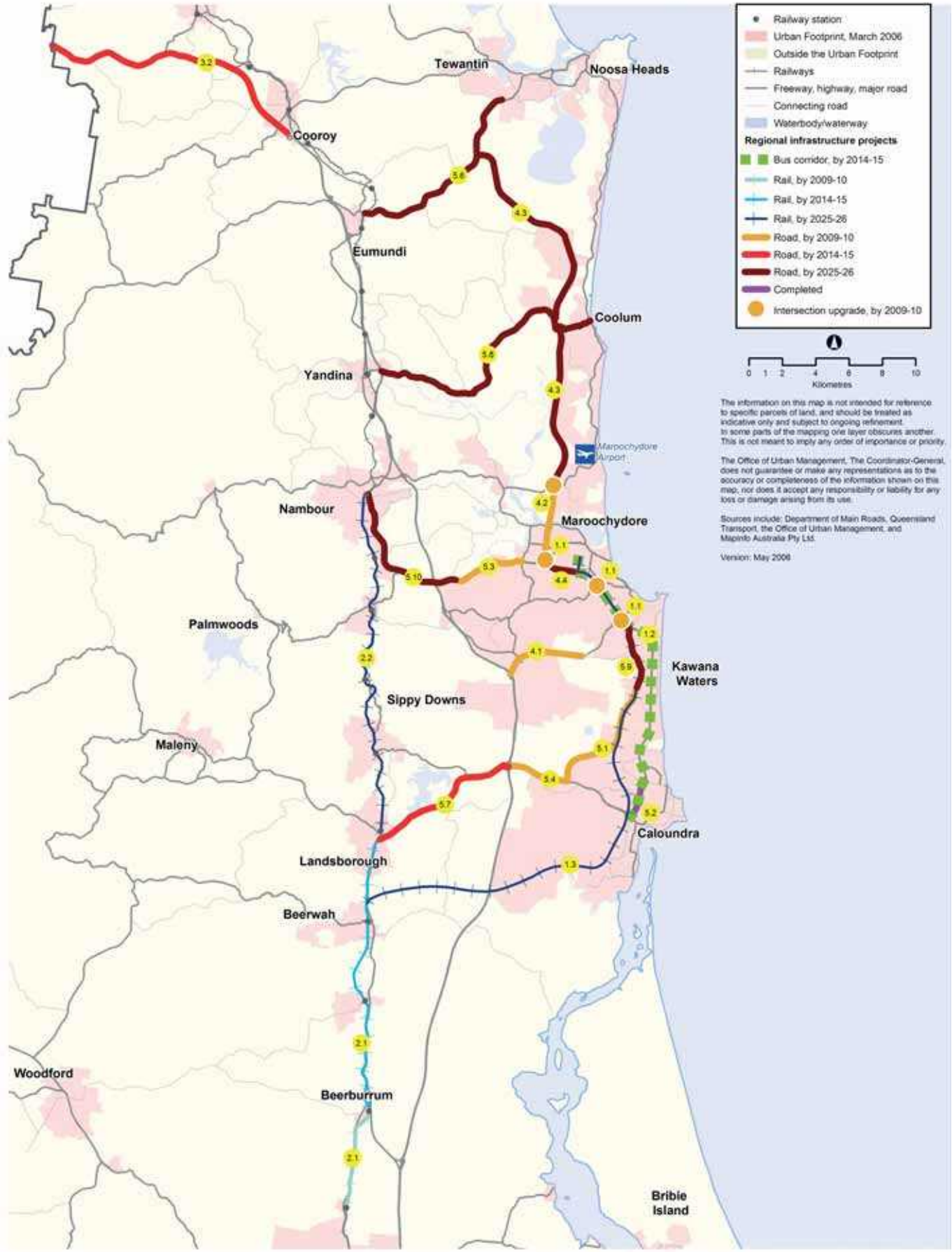


Table 5: Sunshine Coast transport infrastructure

Map reference	Project	Estimated total cost $m	Delivery timeframe		
			2006-07 to 2009-10	2010-11 to 2014-15	2015-16 to 20025-26
North coast trunk public transport					
1.1	Bus priority/high-occupancy vehicle program	40			
1.2	Caloundra to Maroochydore quality bus corridor and public transport stations	140			
1.3	CAMCOS rail: Beerwah to Maroochydore	1100			
1.4	TransLink sub-regional station upgrade program	11			
Walking and cycling					
1.5	Sub-regional cycle network	55			
North coast rail line					
2.1	Caboolture to Beerburrum to Landsborough: additional rail line	550		Alliance partners selected	
2.2	Landsborough to Nambour: additional rail line	550			
Bruce Highway					
3.2	Cooroy to Curra: additional lanes and improved alignment	1100		Planning underway	
Sunshine Motorway					
4.1	Sippy Downs to Kawana Arterial, including new Sippy Downs interchange: additional lanes	42	Tenders being assessed		
4.2	Maroochydore Road to Pacific Paradise, including interchange upgrades: additional lanes	189	Planning/design underway		
4.3	Pacific Paradise to Yandina-Coolum Road and to Eumundi to Noosa Road: additional lanes	430			
4.4	Improvements to service roads and local road network	110			
Sunshine Coast major road network (including bus priority as required)					
5.1	KTIA Caloundra-Mooloolaba Road: new road link from Caloundra Road to Creekside Boulevard	58	Staged construction underway		
5.3	Maroochydore Road: additional lanes from Bruce Highway to Martins Creek	95	Construction underway		
5.4	Caloundra Road: additional lanes from Bruce Highway to Pierce Avenue	84	Design underway		
5.6	East-west links: Eumundi to Noosa	130			
5.7	East-west links: Glasshouse Mountains Road	130			
5.8	East-west links: Yandina to Coolum	55			
5.9	KTIA Caloundra-Mooloolaba Road: new road link from Creekside Boulevard to Sunshine Motorway	850			
5.10	Improvements to Nambour Connection Road and Maroochydore Road	95			
Total		**5,814**			
5.2	KTIA Nicklin Way: additional lanes	7	Completed		

Notes:

1. The table identifies the delivery timeframe for each infrastructure project. Projects that are underway with a minimum expenditure of $0.5 million in 2005-06 on planning, design, site acquisition, materials procurement or construction are identified in yellow.
2. Estimated project costs are in 2006 dollars. Cost estimates in the State Budget and other public documents may differ, as they may incorporate project costs which reflect anticipated changes in input prices between initial planning and the time of construction. Estimated investment includes funds already expended on projects.
3. Completed projects represents the estimated cost of projects as documented in the 2005 Infrastructure Plan.
4. Where funding is required from other levels of government, their estimated costs have been included. Where projects are part of (or connect to) the AusLink National Transport Network, these projects are subject to negotiation with the Australian Government.
5. Projects 3.1, 5.2, 5.5, 5.11, 5.12, 5.13 previously listed in the 2005 Infrastructure Plan are now listed in Table 3 and Map 2 for the Greater Brisbane section.

Freight

Freight across Queensland is forecast to double by 2020. This is also expected to be the case in SEQ with the rapidly expanding import and export activities of the Port of Brisbane. This has significant impacts on the road and rail transport corridors that service the Australia TradeCoast area. The challenge is to improve transport system efficiency so road space is shared effectively between heavy vehicles, passenger vehicles and cyclists, with both passengers and freight sharing railway space.

Map 5 identifies the key existing and future freight connections, as well as proposed investigations necessary for the optimum freight movement within and through SEQ.

The map shows priority one and priority two freight routes. Priority one routes facilitate high-volume, business-to-business freight movements. Priority two freight routes allow freight to be distributed from factories or distribution centres to retail outlets or warehouses.

This Infrastructure Plan identifies a number of initiatives to improve freight movement in SEQ and best cater for growth. Many of these are subject to ongoing negotiation with the Australian Government for funding under the AusLink program.

For rail freight, key initiatives include:

- expanding capacity of the Acacia Ridge rail terminal by grade separating the intersection of the rail line with Beaudesert Road;
- increasing rail capacity through the metropolitan network to the Port of Brisbane with signalling upgrades and passing loops;
- increasing capacity on the northern line by duplicating the rail line north of Caboolture; and
- increasing capacity on the western line by an upgrade from Gowrie to Grandchester.

For road freight, key initiatives include:

- supporting economic development in the western parts of the region by upgrading the Ipswich Motorway and Cunningham Highway; improving the connection between the Cunningham and Warrego Highways and progressing the second Toowoomba range crossing;
- improving freight flows around the Australia TradeCoast by duplicating the Gateway Bridge, upgrades to the Gateway Motorway and the next stage of the Port of Brisbane Motorway; and
- improving road freight connections to the north and south by building the Tugun Bypass and adding capacity to the Pacific Motorway and Bruce Highway.

Investigation of a Southern Infrastructure Corridor between Ebenezer and Yatala, including the critical intersection with the standard gauge rail line is also continuing. This corridor will provide for long-term development of dedicated rail freight links and a possible connection to the proposed inland rail network.

The importance of managing the impact of freight traffic in urban areas, particularly along the Brisbane Urban Corridor, is also recognised. Options for new policy, better planning and future investment need to be considered to reduce the social impact of freight traffic.

Other Queensland Government initiatives for delivering optimal freight movement include:

- working collaboratively with the Australian Government and local governments to protect freight transport corridors;
- integrating planning for freight transport;
- managing access, priority and operation of the routes to ensure they meet industry needs for freight movement;
- supporting strategic investment in priority freight routes for effective movement of general freight, dangerous goods and goods that exceed normal size or loads;
- land use planning strategies to maintain residential amenity and manage noise and environmental impacts of heavy vehicles; and
- applying new technologies, including fibre-optic communications, satellite tracking of heavy vehicles and traffic signal timing to provide greater efficiencies in freight movement through urban areas.

Progress on freight projects during 2005-06

Rail freight projects

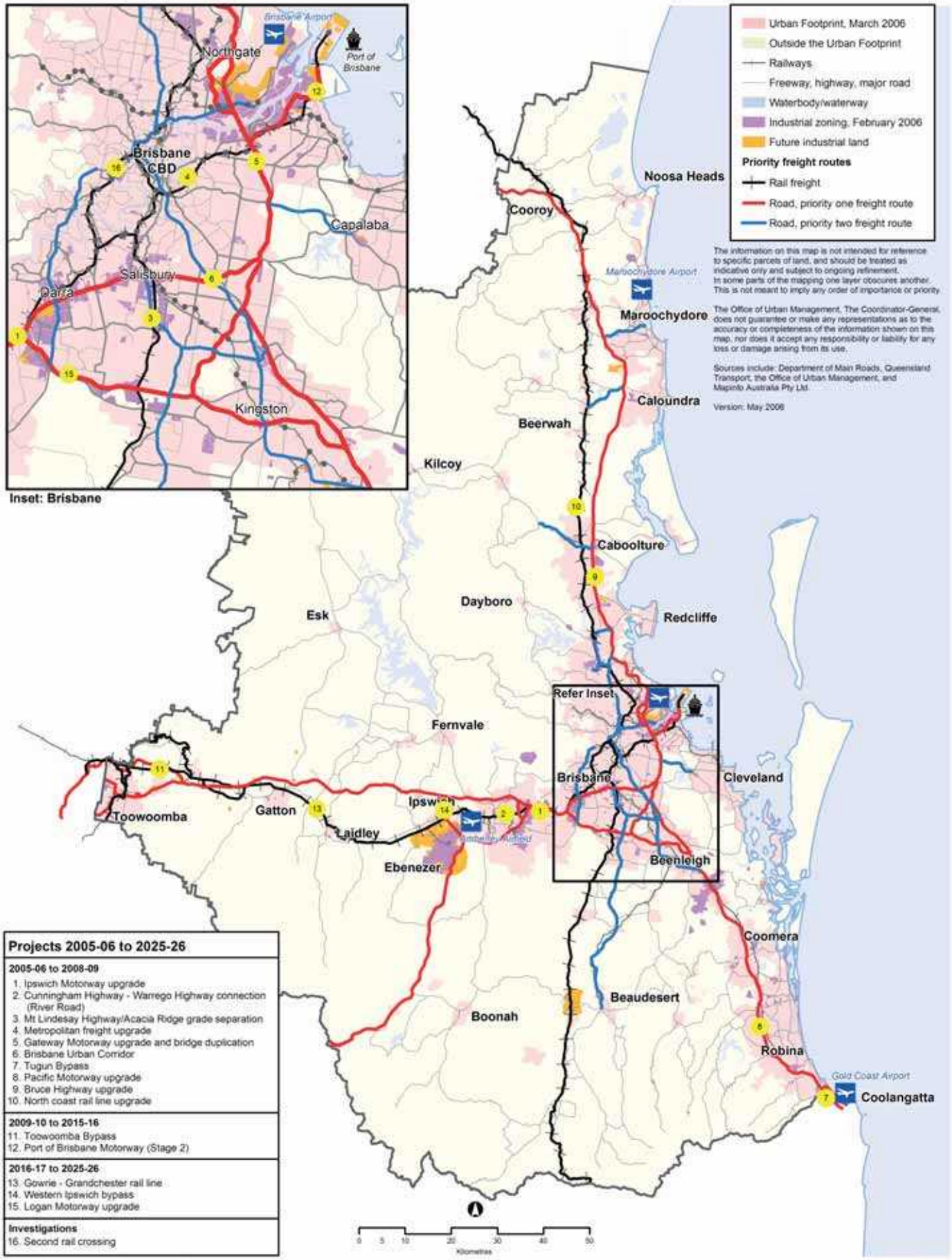
- Concept designs are underway on alignments for the Murarrie, Lytton Junction to Fisherman's Island, Greenbank and Clapham passing loops.
- Estimates and programs are currently being prepared for concrete re-sleepering between Roma Street and Park Road, and Park Road and Lytton Junction.

Road freight projects

- The Australian Government announced an allocation of $320 million to upgrade the section of the Ipswich Motorway east of Goodna to six lanes. An additional $10 million has been allocated for an investigation into a Goodna Bypass between the Warrego Highway and Logan Motorway interchanges.
- Tenders are currently being assessed for the Gateway Upgrade Project. Once the preferred tenderer is announced, construction should commence in late 2006.
- Preliminary construction work on the Tugun Bypass has commenced following the granting of the necessary environmental and planning approvals. All work is expected to be complete by late 2008.
- Construction is underway on six-laning of the Bruce Highway between Boundary Road and Caboolture. Completion of this section is expected by mid-2007.
- A monitoring program began in February 2005 regarding use of the Kessels Road-Mt Gravatt section of the Brisbane Urban Corridor by heavy vehicles. A night time trial is continuing for toll-free use of the Logan Motorway by trucks.

Released in March 2006, the *Mt Lindesay/North Beaudesert Study Report* identified the need to undertake a detailed transport investigation into the Mt Lindesay/North Beaudesert area. Amongst other transport issues, this study should identify the need for road and rail freight infrastructure in the area. The need for potential new roads and rail facilities to support freight, including the Southern Infrastructure Corridor and the Gateway Motorway Extension, will also be considered during the investigation.

Map 5: Regional freight infrastructure



Investigation of potential transport infrastructure investments

Future growth will require new transport corridors and capacity improvements to service new developments and connect centres. Thorough investigations into these new projects are required early, so projects can be planned and corridors preserved ahead of development.

The following transport investigations are either underway or proposed.

Western Corridor

Ipswich Motorway alternative northern corridor

Traffic problems on the Ipswich Motorway are well known, with a capacity upgrade along that corridor a high priority for the Queensland Government.

An investigation was undertaken in 2005, at the request of the Australian Government, into a possible alternative route north of the existing Motorway between Dinmore and the Logan Motorway. The Australian Government has allocated $10 million of AusLink funds for a more detailed investigation of the alternative northern route (also referred to as the Goodna Bypass within this Infrastructure Plan) between the Warrego Highway and Logan Motorway interchanges.

Southern Infrastructure Corridor

The Southern Infrastructure Corridor investigation examines the options for road and rail linkages for both freight and passenger movement between Ebenezer/Swanbank and the area around Yatala/Ormeau. Investigation of the Southern Infrastructure Corridor will examine:

- a freight transport network serving the Western Corridor, including a connection from Ebenezer and other industrial areas to the Australia TradeCoast region, via the standard gauge rail line;
- road and rail networks for the Ripley Valley and Mt Lindesay/North Beaudesert areas; and
- electricity corridors from the Western Corridor to the Gold Coast.

Preliminary work was undertaken during 2005 to identify potential rail routes between Ebenezer and the Interstate Rail Corridor, which could primarily service rail freight traffic. This study indicated that a number of route options were feasible, subject to operational and other constraints on the route. Further investigations are continuing.

Greater Brisbane

There are a range of transport issues in the west and north-west of Brisbane which require further investigation, including increasing traffic congestion within the area, insufficient road connectivity, poor orbital road networks and insufficient public transport spines.

Western Brisbane Transport Network Investigation

The Western Brisbane Transport Network Investigation is a major study that will examine the future transport needs for this area. It will look at ways to maintain and improve accessibility, as well as address transport system issues in the west and north-west of Brisbane, including the needs of freight and passenger transport. It will consider how existing relevant transport corridors (held in reserve by the Queensland Government) might be used. A consultant has been selected and work is expected to start in the first half of 2006.

Major transport corridors held in reserve

A number of major transport corridors have been identified and protected for future use. The Kenmore-Moggill Pocket corridor; Moggill Road-Warrego Highway connection; the Samford bypass and Ferny Grove connectors will be retained and protected, pending resolution of the Western Brisbane Transport Network Investigation. The north-western transport corridor from Stafford through Everton Park to Aspley will also be retained and protected, pending investigation of future transport needs.

Gateway Motorway extension south of Browns Plains

An investigation will look at the need to extend the Gateway Motorway beyond the intersection with the Logan Motorway South. This extension will potentially link with the proposed Southern Infrastructure Corridor, providing improved road freight connections between emerging industrial areas and the Australia TradeCoast.

Released in March 2006, the *Mt Lindesay/North Beaudesert Study Report* highlighted the need for more detailed investigation into the strategic transport network of this area, including road, public transport and freight links. The potential extension of the Gateway Motorway south of Browns Plains will also be included in this investigation.

Salisbury to Flagstone/Greenbank passenger rail

The Queensland Government commissioned a study into the technical feasibility of running passenger rail services along the standard gauge rail corridor from Salisbury to Flagstone/Greenbank. The feasibility study has been completed and the draft report is currently being reviewed.

Further TransApex investigations

Brisbane City Council is investigating a series of cross-city tunnels referred to as TransApex. Proposals include:

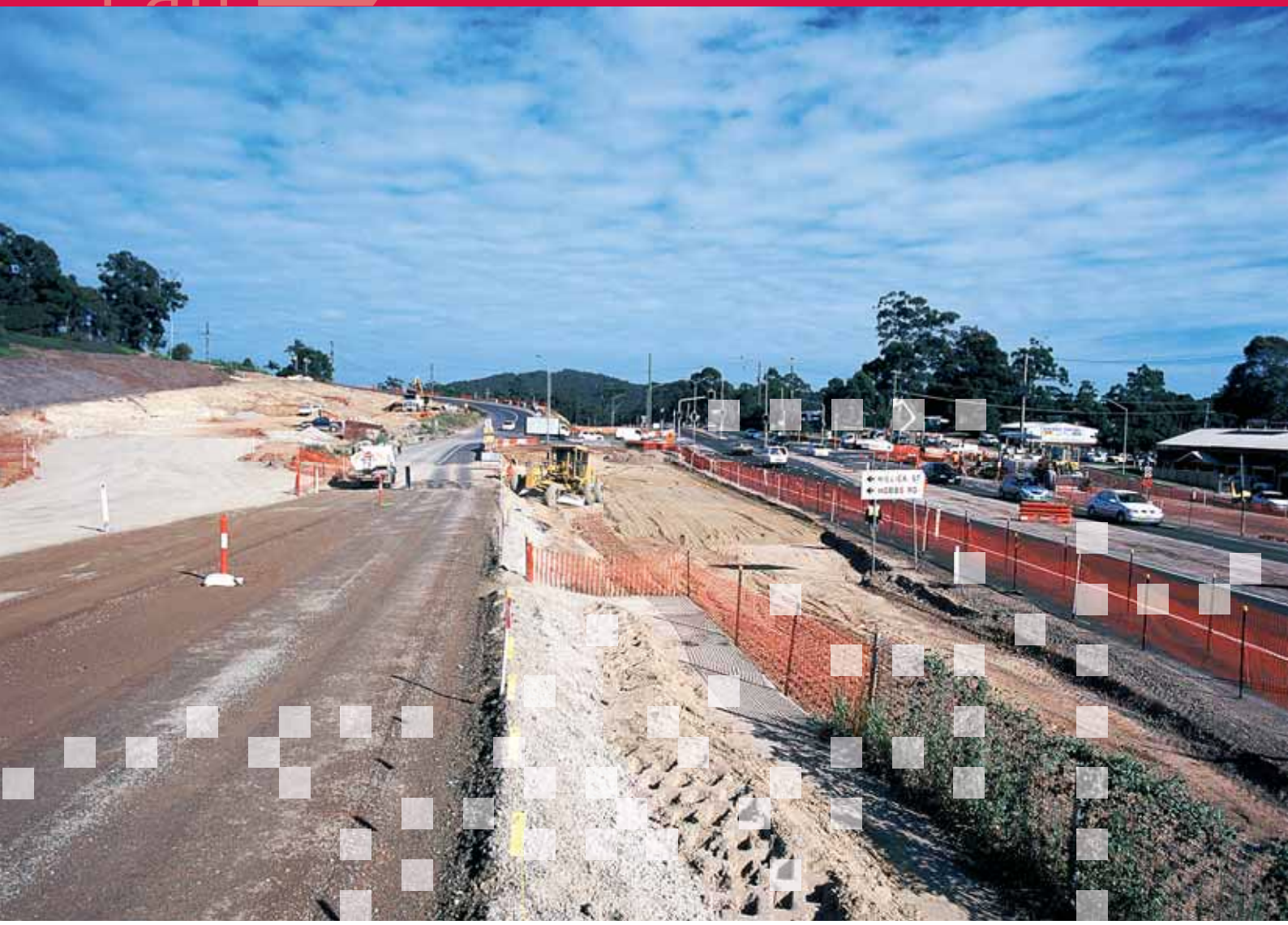
- *The North-South Bypass Tunnel*
  In-principle support for this project is included in this Infrastructure Plan. Bids for the Tunnel, linking Woolloongabba and Kangaroo Point with Bowen Hills, closed in December 2005, with the Brisbane City Council announcing the successful tenderer in April 2006.
- *Airport Link*
  Support for the full feasibility study for this link is included in this Infrastructure Plan. Released for public consultation in November 2005, Airport Link is proposed as a mainly underground toll road connecting Brisbane's northern arterials to the Inner City Bypass and proposed North-South Bypass Tunnel at Bowen Hills.
- *Northern Link*
  A potential link between the Toowong roundabout and the Inner City Bypass is yet to be investigated. If feasible, this link has the potential to ease traffic congestion on the western city corridors of Coronation Drive and Milton Road.

Increased rail capacity in inner Brisbane

Given the existing growth in demand, service increases and proposed extensions to the rail network, rail services through inner Brisbane will be significantly constrained by the capacity of the Merivale Bridge and the existing CBD rail tunnels by 2016. There are opportunities to increase rail capacity in the inner areas and to create additional stations in areas of high demand through the development of an underground rail system. These issues and options will be examined through a study of the rail system in inner Brisbane.

Inner City Bus Access Capacity Study

Rising patronage levels are placing pressure on critical inner city bus infrastructure, particularly on the inner approaches and junctions of the South East Busway, North Quay, Riverside (Creek Street), Adelaide Street and the Queen Street Bus Station. Expansion of the busway network (Northern and Eastern Busways, Inner Northern Busway and Boggo Road links) will add additional pressure. Urgent planning work is required to ensure additional busway services can operate efficiently throughout the CBD. Additional cross-river connections and underground bus lanes and platforms will be investigated as part of this the study.



Sunshine Coast

Sunshine Coast bus and high-occupancy vehicle network study

There is a recognised need for public transport to play a much greater role on the Sunshine Coast. While rail and/or bus corridors will provide significant capacity in the medium to long term, bus priority and high-occupancy vehicle initiatives are shorter-term solutions. This study will examine network constraints and identify key areas where bus priority and/or high-occupancy vehicle treatments, such as transit lanes, will increase corridor capacity.

Funding for a bus and high-occupancy vehicle network study on the Sunshine Coast is included in projects 1.1 and 1.2 in Table 5 (page 33). This study is currently underway.

Sunshine Motorway extension (Mooloolah River to Kawana Way)

This study will investigate a new link from the Mooloolah River interchange to Kawana Way.

NNAMCOS study (previously named CAMCOS extension studies)

Planning and acquisition for the rail corridor from Beerwah to Caloundra to Maroochydore (CAMCOS) is identified as a priority for the first period of this Infrastructure Plan, with construction to commence in the following period. The NNAMCOS study (*Noosa-Nambour and Maroochydore Corridor Options Study*) will examine the benefits of extending the rail line initially to Maroochy Airport, and ultimately to Noosa.

The NNAMCOS project proposal and plan for Phase 1 (concept analysis) has been completed. Contractor briefs for initial data collection have been finalised.

Bells Creek connection (Bruce Highway to Caloundra Road)

This study will examine the potential route and timing to extend the Sunshine Motorway further south from Caloundra Road. The study is programmed for the period 2015-16 to 2025-26.

Map 6: Investigations for transport infrastructure in SEQ

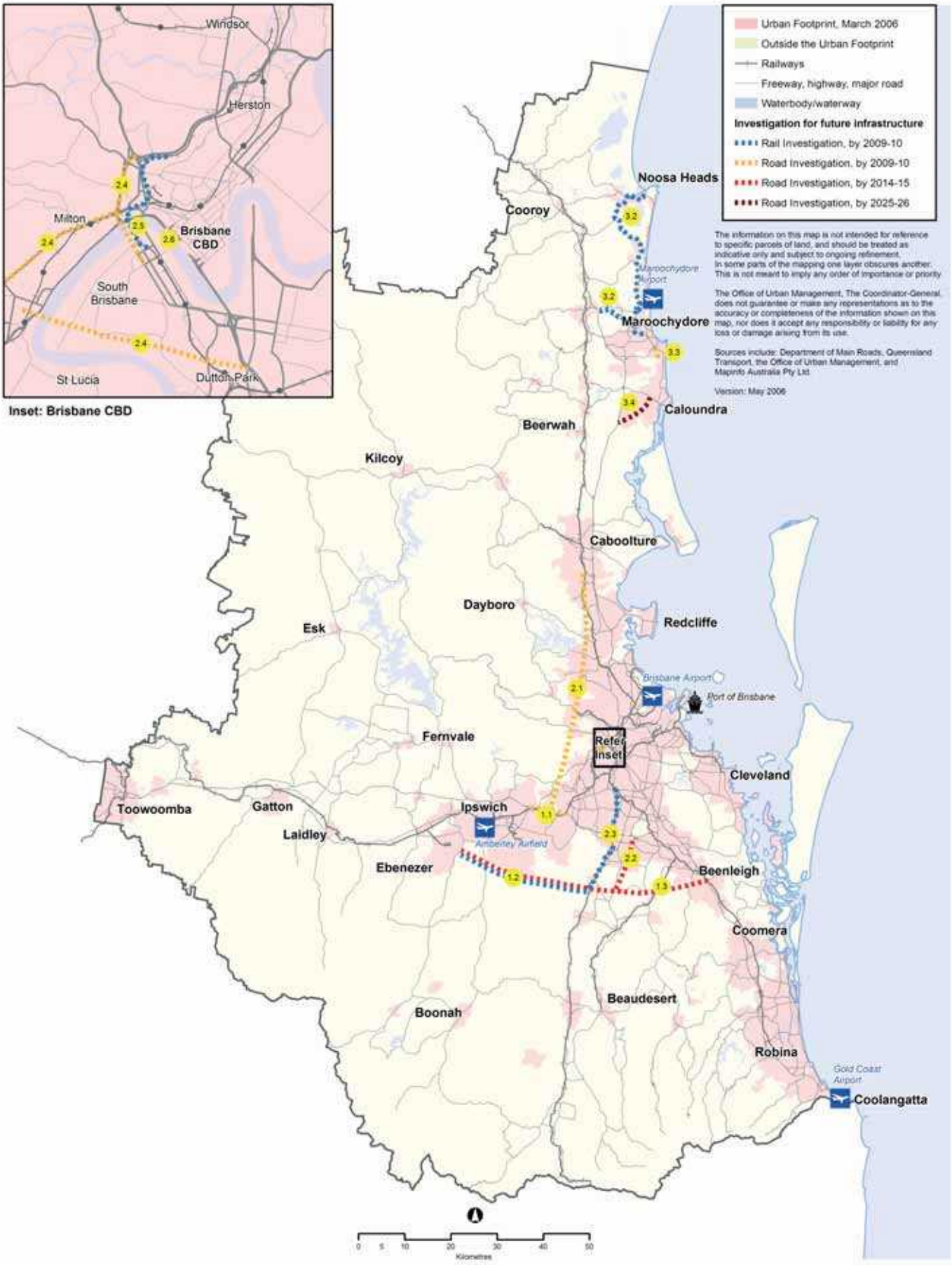


Table 6: Investigations for transport infrastructure in SEQ

Map reference	Project	Estimated total cost $m	Delivery timeframe		
			2006-07 to 2009-10	2010-11 to 2014-15	2015-16 to 20025-26
Western Corridor					
1.1	Ipswich Motorway alternative northern corridor	10			
1.2	Southern Infrastructure Corridor (Rail: Ebenezer to interstate standard gauge rail)	3.5	Preliminary appraisal completed		
1.3	Southern Infrastructure Corridor (Road: Yatala to Cunningham Highway)	10			
Greater Brisbane					
2.1	Western Brisbane Transport Network Investigation	17	Study commenced		
2.2	Gateway extension south of Browns Plains	5			
2.3	Salisbury to Flagstone/Greenbank passenger rail	0.5			
2.4	Further TransApex investigations	26	Airport Link corridor announced		
2.5	Increased rail capacity in inner Brisbane	5			
2.6	Inner City Bus Access Capacity Study	2			
Sunshine Coast					
3.1	Deleted	(see note 5)			
3.2	NNAMCOS studies	6			
3.3	Sunshine Motorway extension: Mooloolah River to Kawana Way	3			
3.4	Bells Creek connection: Bruce Highway to Caloundra Road	2			
Future investigations					
4.1	As listed on page 43	(see note 6)			
Total		**90**			

Notes:

1. The table identifies the delivery timeframe for each infrastructure project. Projects that are underway with a minimum expenditure of $0.5 million in 2005-06 on planning, design, site acquisition, materials procurement or construction are identified in yellow.
2. Estimated project costs are in 2006 dollars. Cost estimates in the State Budget and other public documents may differ, as they may incorporate project costs which reflect anticipated changes in input prices between initial planning and the time of construction. Estimated investment includes funds already expended on projects.
3. Subject to a contribution from the Australian Government, funding for the Western Brisbane Transport Network Investigation (project 2.1) will increase from $10 million as identified in 2005.
4. Funding for further TransApex investigations will be provided jointly by the Queensland Government, Brisbane City Council and the project teams for Airport Link and the Northern Link (project 2.4). This was noted in error as $21 million in 2005.
5. Funding for a bus and high-occupancy vehicle network study on the Sunshine Coast (project 3.1) has been included in projects 1.1 and 1.2 in Table 5 (page 34).
6. Initial funding in 2006-07 will be provided from existing Transport Portfolio budgets; with further funding to be considered by the Queensland Government in future.

Future transport investigations

Whilst preparing this Infrastructure Plan, a number of further transport investigations were identified in SEQ. These studies will be initiated during 2006.

(Note: studies are not shown on Map 6).

Southern Transport Network Investigation

Released in March 2006, the Mt Lindesay/North Beaudesert Study Report highlighted the need for more detailed investigation into the strategic transport network of this area, including road, public transport and freight links, including the Cunningham Highway, Logan Motorway, the Pacific Motorway and the interstate rail corridor. The potential extension of the Gateway Motorway south of Browns Plains will also be included in this investigation.

Springfield to Ipswich public transport corridor planning

Investigations are proposed to determine whether new or modified public transport corridors between Springfield and Ipswich (and particularly through the Ripley Valley) are required to support transport development in the area, as well as their integration with existing and proposed land uses. A key goal is to improve public transport services to major centres including the Ipswich University campus. This could include identifying opportunities for transit oriented developments at Redbank Plains, Ripley town centre and within the existing urban area of Ipswich. Preliminary corridor identification studies have commenced.

Australia TradeCoast Transport Study

Ongoing development of the Australia TradeCoast precinct has significant impacts on the transport network in SEQ. Further investigations to identify the transport needs necessary to support future development of the Australia TradeCoast are proposed. The study will investigate the required corridors for public transport, freight and other modes, including cycling and walking, so the corridors can be preserved and the infrastructure ultimately funded.

North Moreton Transport Network Study

The population of Caboolture, Pine Rivers and Redcliffe Shires is expanding steadily, putting pressure on the transport network in the area. An investigation into the existing and future transport network requirements in the area is proposed, including roads and public transport. The study will also investigate the opportunities for a multi-modal corridor between Petrie and Redcliffe as part of the preserved rail corridor and consider potential rail options.

Hamilton/Eagle Farm Transport Investigation

The Hamilton/Eagle Farm area in Brisbane is changing from an area with previously high concentrations of industrial activity to mixed-use and is the site of current and proposed significant medium-density residential development along the river shore. This study will investigate public transport needs and the possible extension of the passenger rail network in this growth area.

Water

The Queensland Government is committed to ensuring that water supplies in SEQ are sufficient to meet demand and are managed on a sustainable and integrated basis, consistent with the SEQ Regional Plan.

Supporting this, the Queensland Government is preparing the *SEQ Regional Water Supply Strategy* (SEQRWSS) in partnership with the Council of Mayors (SEQ) and other stakeholders. Due for release by the end of 2006, the SEQRWSS will provide a comprehensive policy framework and further investment priorities for water supply in SEQ. The *SEQRWSS Stage 1 Report*, completed in 2004, provided important baseline information. The *SEQRWSS Stage 2 Interim Report*, released in January 2006 provides an overview of short-term commitments and possible medium- and long-term initiatives.

While refining medium and long-term planning, responses to the short-term challenges presented by the region's worst drought on record are already underway. To ensure adequate supplies are maintained, the Queensland Government is working with SEQWater, SunWater and 13 local governments throughout SEQ to develop and implement the *Regional Drought Strategy*. Released in mid-2005 and updated regularly, the *Regional Drought Strategy* includes a range of short-term initiatives to make the best use of existing supplies and implement new sources. It also includes planning for contingency measures should the drought continue.

The total estimated cost of water infrastructure required over the next 10 to 20 years is expected to be up to $5 billion, excluding the two new South East Queensland dams and connecting infrastructure – the final costings for which are under detailed investigation. This includes the potential to bring forward recycling, desalination and other options to respond to the current drought. Business case assessments are currently underway to determine viability and total cost of the available options.

The Queensland Government's estimated contribution to water infrastructure is currently $1.3 billion. Pending the finalisation of drought contingency planning, the SEQRWSS and the level of investment by local governments, this estimated contribution has the potential to be revised.

Strategic priorities

Beyond the immediate challenges of the drought, the Queensland Government's strategic priorities for water include:

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

Consistent with the SEQ Regional Plan, the Queensland Government is also committed to ensuring all water planning in the region reflects the principles of total water cycle management. These include considering all water sources, including wastewater and stormwater, using all water sources sustainably, and integrating water use and natural water processes. Total water cycle management will relieve pressure on potable supplies and bring environmental benefits by reducing effluent discharge to waterways and out into Moreton Bay.

Response to the drought

SEQ is experiencing the worst drought on record. The Wivenhoe, Somerset and North Pine dams that supply more than 70 per cent of regional demand south of Caloundra were below 31 per cent of capacity in May 2006. Dams servicing Toowoomba and surrounding areas are less than 25 per cent full and strict water restrictions are in place.

If the drought continues, these regional supplies have enough water to last for at least two and a half years if carefully managed. The Queensland Government is nevertheless committed to a range of projects that will ensure that adequate supplies are maintained if the current conditions continue well beyond the length of the worst drought on record. These projects are consistent with longer-term planning, with most being undertaken earlier than scheduled or on a larger scale due to the drought.

Western Corridor Recycled Water Scheme

The proposed *Western Corridor Recycled Water Scheme* has been expanded and brought forward. Stage 1 of this scheme is being fast-tracked to be operational in March 2008, taking recycled water from the Oxley, Wacol, Goodna and Bundamba Wastewater Treatment Plants to the power stations at Swanbank and possibly Tarong - saving up to 110 million litres per day from Wivenhoe Dam. Stage 2 may include a connection to wastewater treatment plants at Luggage Point and Gibson Island near the mouth of the Brisbane River. The scheme is a partnership between the Queensland Government, SEQWater, Brisbane City Council and Ipswich City Council. The Queensland Government has committed $20 million over 2005-06 and 2006-07 towards design, easement acquisition and business case development, as well as $100 million for an initial order of pipes.

The Queensland Government is also working with Tarong Power Station to put in place interim arrangements to reduce the demand on Wivenhoe Dam supplies.

Making best use of available supplies

The Queensland Government has expanded its commitment to the pressure reduction and leakage management program. These initiatives will potentially save between 50 and 75 million litres per day across SEQ. In early 2006, the amount available from Queensland Government subsidies was increased by 60 per cent from $20 million to $32 million to assist local governments complete their upgrades within three years.

At the same time, the Queensland Government also made available $20 million to support local government initiatives to cut water use. It is intended that residents will be able to request an inspection which will check for leaks; inspect all taps and cisterns; and have water-saving showerheads, tap flow limiters and cistern weights installed; and leaks fixed. Residents will pay a small contribution, with the State and local governments sharing the remainder of the cost. Commercial and industrial water efficiency will also be addressed, with major water users encouraged, and perhaps required, to prepare water management plans and implement cost-effective water reduction measures. The Queensland Government will help pay for this work.

Commercial and industrial demand will also be reduced through the successful ecoBiz program.

ecoBiz

ecoBiz is the Environmental Protection Agency's signature partnership program with Queensland business and industry aiming to achieve cost savings through improved environmental performance. Under this program, Southport Steam Laundry received $150,000 to reduce potable water consumption by 100 million litres per year. This funding has helped the business install a new tunnel washing system, which recycles water during the washing cycle, ensuring potable water is required only for the final rinse. The new system also reduces chemical use by 40 per cent and energy use by 10 per cent.

Cedar Grove Weir

The Queensland Government has brought forward construction of the Cedar Grove Weir on the Logan River to be complete by 2008. Costing $13 million, the weir will deliver around 11 million litres per day of additional water to the rapidly growing urban areas around Beaudesert and represents stage one of the proposed upgrades to water storage infrastructure in the Logan River catchment. The Environmental Impact Statement has been completed and land acquisition is underway.

Distribution projects

The Queensland Government is committed to developing a regional water distribution grid with the capacity to transport water to locations of greatest need.

The *Southern Regional Water Pipeline* proposal has been declared a significant project, with The Coordinator-General managing the approval process and the Queensland Government contributing 40 per cent of design and corridor acquisition costs.

The proposal involves construction of up to 120 kilometres of pipe with connection points to the Cedar Grove Weir and other major storages in the Logan River Basin. The project is expected to cost $250 million, with initial stages supporting the key growth areas of Ripley Valley and Swanbank in the Western Corridor.

Local governments in SEQ are also planning a range of other distribution projects to ensure adequate water supply. These projects may be eligible for Queensland Government subsidy.

Alternative water sources

Seawater desalination as a contingency for drought management and for long-term water supply security has been actively considered by most capital cities in Australia over the past five years.

Investigating desalination as a possible source of water for SEQ has become a priority due to the current drought. Gold Coast City Council, in association with SEQWater, has already commenced a detailed investigation into desalination facilities as a possible contingency measure for the Gold Coast. The Queensland Government has committed $14 million towards this investigation to determine whether these desalination facilities can be expanded from 55 to 120 megalitres per day to provide greater regional benefits. A further $1 million has been committed to redesign the Southern Regional Water Pipeline to enable desalinated water to be transferred to areas north of the Gold Coast. The Government will continue investigations and potential site acquisition for desalination plants elsewhere in SEQ.

Groundwater sources are another possible contingency option for water supplies in SEQ. A number of sources are currently being investigated, including sites at Toowoomba, south-west Brisbane and Landsborough. In partnership with local government, the Queensland Government is undertaking studies to determine available resources and, where appropriate, suitable extraction regimes and facilities. Longer-term, opportunities for aquifer storage and recovery will also be pursued.

Additional water supplies from dams are also being investigated as a priority, but are not considered to be drought contingencies given the long lead times to new dams becoming operational.

Toowoomba Water Futures

Toowoomba City Council has developed the Water Futures project to secure the supply of water to Toowoomba and surrounding areas. The project includes a range of initiatives, including making rainwater tanks compulsory for all new buildings, implementing enhanced demand management initiatives and seeking additional water supply from the artesian basin. Water Futures also includes an innovative proposal to use recycled water to augment existing supplies in Cooby Dam. The Queensland Government will subsidise 33 per cent of the project cost, subject to an equivalent contribution from the Australian Government. Funding from the Australian Government is conditional on a majority of voters in Toowoomba voting in favour of the proposal at a referendum to be held no later than 30 September 2006.

Medium- and long-term initiatives

The *SEQRWSS Stage 2 Interim Report*, released in November 2005 provides an overview of short-term commitments and possible medium- and long-term initiatives to deal with water supplies in SEQ. To be finalised by December 2006, the SEQRWSS will provide a comprehensive policy framework and further investment priorities for water supply in SEQ. It will make recommendations regarding water demand management, additional supplies from dams and weirs, interconnection of the regional water grid and rural water use, and will look further at supply sources being considered as part of the *Regional Drought Strategy*.

Water demand management

The SEQ Regional Plan sets targets for significant reductions in residential reticulated potable water use. Across the region, current average residential water use of 300 litres per person per day (l/p/d) is to be reduced to 230 l/p/d by 2020. The SEQRWSS will specify targets for each local government area and recommend appropriate responses. Figure 2 illustrates the impact of this on total demand.

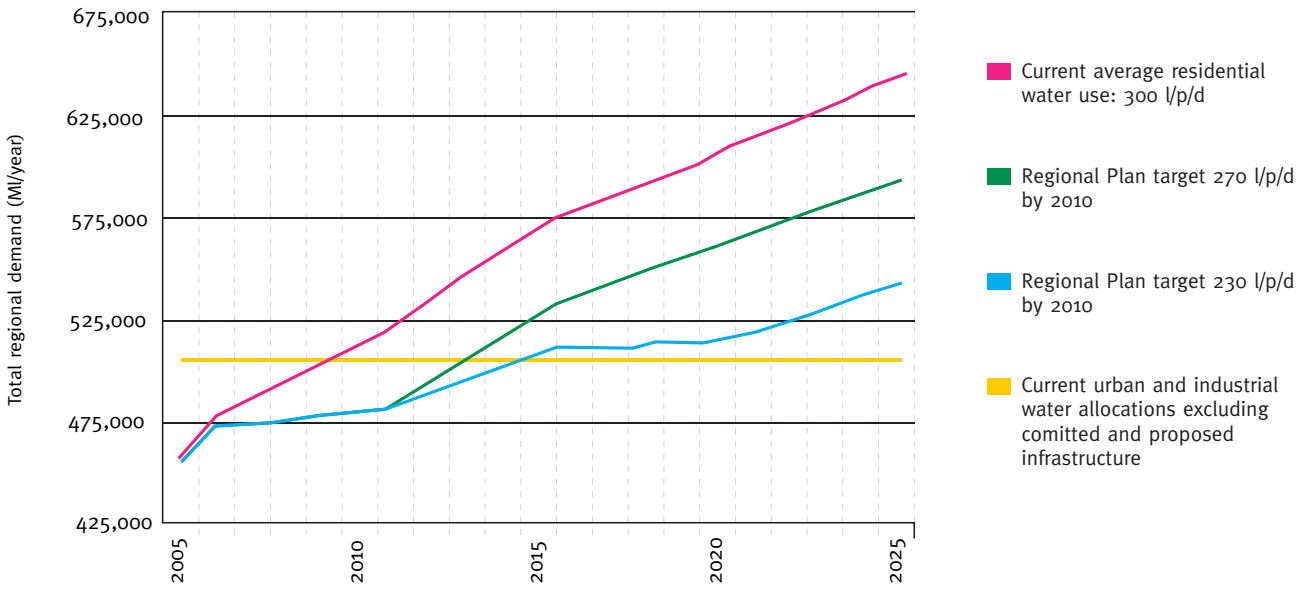
Sustainable living

The *Sustainable Housing Code* that came into effect on 1 March 2006 will ensure that all new houses in Queensland use water and energy more efficiently. The Code will result in new houses using 33 per cent less water by requiring:

- AAA rated shower roses;
- dual flush toilets; and
- water pressure limiting devices that restrict maximum water pressure.

The Code also promotes the use of rainwater tanks. Councils have the option to amend their planning scheme to mandate rainwater tanks for use inside the home, after taking into account local factors such as rainfall. Councils also have the option to allow homeowners to use waste water generated from the bath, shower, washbasin and laundry on lawns and gardens.

Figure 2: Forecast demand for water in SEQ



Source: *SEQRWSS Stage 2 Interim Report,* November 2005.

Additional supplies from dams and weirs

Additional water supply from dams and weirs will be required to maintain SEQ water supplies over the next two decades.

In April 2006, the Queensland Government announced it will build a new dam on the Mary River in the Traveston district in Gympie, and bring forward construction of the new dam proposed for the upper reaches of the Logan River. Both dams will be completed by the end of 2011. Two options for the dam on the Logan River - the existing proposal for the Wyaralong Dam and a new dam site identified at Tilleys Bridge - are being investigated to confirm the preferred location. A preliminary estimate of the Queensland Government's contribution of $490 million is included. This comprises the $200 to $300 million allocated in the Queensland Future Growth Fund to accelerate the construction of these dams, in addition to the provisions included in the 2005 version of the Infrastructure Plan. Investigations currently underway will determine total costings of these dams and connecting infrastructure.

The raising and upgrading of some existing dams (for example, Hinze Dam on the Gold Coast) also has potential to provide additional cost-effective supplies.

Rural water use

Rural water use efficiency initiatives such as more effective irrigation equipment and better irrigation scheduling will reduce water use and increase the value of production. The Queensland Government has announced the South East Queensland Irrigation Futures program, which is intended to achieve a reduction in irrigation water use of up to 10 per cent across the region by 2009. The program will address better irrigation management and off-farm impacts from irrigation. It will also include system efficiency assessments, field trials and workshops and where appropriate, financial incentives to assist irrigators to achieve reduced water use. The program is being implemented in partnership with key stakeholder organisations.

The Queensland Government is also preparing Water Resource Plans for the various SEQ catchments to introduce water trading, a key measure in improving the efficiency of water use and facilitating the movement of water from lower to higher value uses.

Governance

The Queensland Government, in conjunction with local government and other industry stakeholders, is reviewing the arrangements in SEQ relating to planning for water supply security, water sharing, cost sharing and aggregation of bulk water assets.

To coordinate long-term planning, the Queensland Government is establishing the Queensland Water Commission, which will initially focus on SEQ. The key functions of the Commission will be:

- providing advice to the government on options for achieving regional water security;
- facilitating and implementing regional water security programs approved and published by the Minister;
- ensuring that relevant parties comply with a regional water security program approved and published by the Minister; and
- setting restrictions on usage in circumstances where the Commission considers it necessary in the interests of ensuring security of water supply.

The Water Commission will not own or operate water infrastructure. Local governments and water service providers such as SEQWater and SunWater will continue to own and operate infrastructure with Queensland Government support.

Water and sewerage subsidy schemes

The Queensland Government supports local governments and water service providers through statewide subsidy programs. From 30 June 2006, subsidies will be available through the *Water and Sewerage Program* and the *Smaller Communities Assistance Program*. Since July 1996, the Queensland Government has committed subsidies of more than $245 million to local government projects across SEQ. In 2005/06, subsidies of $29 million have been approved, with payments to local governments reaching around $17 million.

Commencing in 2008, subsidies will also be available from a new *Environmental Infrastructure Program*. This new program will provide subsidies towards a broader range of local government projects, including solid waste, stormwater and erosion control initiatives that promote more sustainable and integrated water management.

Through these schemes, the Queensland Government will continue to provide funding assistance to local governments for projects that adopt total water cycle management principles, such as the Australia TradeCoast Recycled Water scheme.

Progress on water projects during 2005-06

- In April 2006, the Queensland Government announced it will build a new dam on the Mary River in the Traveston district in Gympie by the end of 2011. $50 million has been allocated in 2005-06 and 2006-07 to begin acquiring land.
- Construction of the new dam proposed for the upper reaches of the Logan River will be brought forward to be operational by the end of 2011.
- Land acquisition for the Cedar Grove Weir is underway with construction scheduled for completion in 2007-08.
- Subsidies for local government pressure reduction and leakage management programs have been brought forward and expanded. This initiative is expected to save between 50 and 75 million litres per day across the region.
- The *Western Corridor Recycled Water Scheme* has been brought forward and expanded. Stage 1 may be operational by 2008, saving up to 90 million litres per day from Wivenhoe Dam.
- The Queensland Government has made $20 million available in 2005-06 to support local government initiatives to cut water use.
- The Queensland Water Commission is being established to coordinate regional water planning, implementation and operation.

Table 7: Regional water infrastructure

Project	Project sponsor	Estimated State Government costs $m	Delivery timeframe		
			2006-07 to 2009-10	2010-11 to 2014-15	2015-16 to 20025-26
Dams and weirs		**528**			
New weir on Logan River	State Government	13	Land acquisition underway		
Local government dams	Local government	25			
• Raising of Hinze Dam					
• South Maroochy Storage upgrade					
• Ewen Maddock Dam upgrade					
New dams on Logan River and Mary River [7]	State Government	490		Preliminary investigations underway	
Making best use of available supplies		**111**			
Pressure reduction and leakage management program	Local government	32	Construction underway		
Internal retrofit water saving program [8]	Local government	20	Planning underway		
Urban water accounting system	State Government	4	Planning underway		
Urban water conservation initiatives	State Government	23	Planning underway		
Integrated Urban Water Management Framework	State Government	17		Planning underway	
Rural water use efficiency	State Government	15			
Treatment and distribution	Local government	**408**			
Southern Regional Water Pipeline			Land acquisition underway		
Northern Regional Pipeline					
Treatment plants, mains and other projects					
Water recycling	Local government	**238**			
Western Corridor Recycled Water Scheme (stage one)			Land acquisition underway		
Toowoomba Water Futures Project					
Australia Trade Coast Recycled Water Scheme				Planning underway	
Gold Coast and Brisbane Integrated Water Management					
Other reuse projects					
Alternative sources of supply		**32**			
Groundwater investigations and development	State and local government			Planning underway	
Desalination investigations and potential site acquisition	State and local government		Planning underway		
Recycling investigations	State Government		Planning underway		
Distribution investigations	State and local government		Planning underway		
Water quality initiatives	State Government	**6**			
Catchment control/monitoring		3		Planning underway	
Water quality improvement strategy		3		Planning underway	
Total		**1,323**			
Subsidies paid for completed local government projects		17	Completed		

Notes:

1. The table identifies the delivery timeframe for each infrastructure project. Projects that are underway with a minimum expenditure of $0.5 million in 2005-06 on planning, design, site acquisition, materials procurement or construction are identified in yellow.
2. Estimated project costs are in 2006 dollars. Cost estimates in the State Budget and other public documents may differ, as they may incorporate project costs which reflect anticipated changes in input prices between initial planning and the time of construction. Estimated investment includes funds already expended on projects.
3. Local government projects include estimated State Government subsidies only. Actual subsidies towards local government projects will be assessed in accordance with guidelines in place at the time.
4. State Government projects will require negotiation with key partners and proponents, mainly local governments.
5. All major infrastructure proposals are subject to further investigation and approval processes.
6. Many of these projects have been included in the *Regional Drought Strategy* and may be undertaken earlier or on a larger scale than identified in the 2005 Infrastructure Plan.
7. New dams on the Logan River and Mary River will be complete by the end of 2011. A preliminary estimate of the Queensland Government's contribution of $490 million is included. This comprises the $200 to $300 million allocated in the Queensland Future Growth Fund to accelerate the construction of these dams, in addition to the provisions included in the 2005 version of the Infrastructure Plan. Investigations currently underway will determine total costings of these dams and connecting infrastructure.
8. Through the internal retrofit water saving program, the Queensland Government will provide up to $20 million to local governments in 2005-06 to support initiatives to cut water use in domestic and commercial premises. These initiatives will be largely implemented over 2005-06 and 2006-07.

Energy

Queensland is currently the second-largest energy consuming state in Australia and, over the next ten years, energy growth in Queensland is forecast to outstrip all other states in the National Electricity Market. While a booming economy and growing population is a positive outcome for the state, managing the energy needs of Australia's fastest-growing, most decentralised and energy-intensive state presents challenges.

The Queensland Government will meet these challenges by diversifying its energy sources and encouraging competition in energy markets. In the medium-term, Queensland's energy needs will not be achieved through a single fuel source, nor a single technology solution. Queenslanders must also play their part by managing demand, especially during peak summer periods, through increased awareness and use of more energy-efficient appliances or appliances which use alternative fuel sources. By managing demand across industrial, commercial and residential properties, the increase in Queensland's greenhouse gas emissions levels will slow.

Much of the information related to energy in SEQ extends beyond this regional boundary. This is mainly due to large-scale energy assets being located outside of SEQ for locality and commercial reasons, including proximity to fuel sources and major industry. Energy is then transported to the demand centres within SEQ via transmission networks.

Electricity

By far the greatest challenge faced by the Queensland electricity industry is expected growth in demand. Over the past ten years, Queensland has experienced a 53 per cent increase in electricity consumption and a 8 per cent per annum increase in peak loads. This growth is expected to continue over the timeframe of the Infrastructure Plan with consumption forecast to increase at approximately 3.2 per cent per annum and peak demand by 3.9 per cent per annum over the next ten years. Demand growth will continue to be driven by energy-intensive industrial development and rapid population growth, along with an increase in use of domestic air-conditioning.

Industry structure

The electricity infrastructure industry is comprised of three distinct, yet interconnected sectors: generation, transmission and distribution.

- *Generation*

  Most electricity in Queensland is generated by coal-fired power stations, located mainly in central and southern parts of the state close to major coal fuel sources. However, an increasing amount of energy is being produced from natural gas and renewable sources, such as hydro, wind and biomass. Biomass energy comes from organic materials, including sugar cane, woodchips and methane from landfill.

  Government-owned corporations own many of the larger power stations, but the number of partially or fully privately owned power stations is increasing. Currently about 40 per cent of Queensland's generation capacity is privately owned.

National Energy Market

Queensland is a member of the National Electricity Market (NEM), a wholesale market for the supply of electricity to retailers and end-users in Queensland, New South Wales, the Australian Capital Territory, Victoria, South Australia and Tasmania. Almost $7 billion of electricity is traded annually in the NEM to meet the demand of almost eight million end-users.

- *Transmission*

  Powerlink Queensland's high-voltage transmission network transports electricity from power stations to distribution networks in regional Queensland and SEQ and directly to large customers, such as aluminium smelters. Powerlink operates 11,000 kilometres of high-voltage transmission lines.

- *Distribution*

  Most business and residential customers are supplied electricity via an electricity distribution system, which is connected to the high-voltage transmission system. ENERGEX supplies most customers in SEQ and operates a network that includes 46,000 kilometres of powerlines. Ergon Energy supplies Toowomba and rural and regional Queensland and operates a network of 140,000 kilometres of powerlines.

Through its Government-owned corporations, the Queensland Government owns and maintains electricity assets worth more than $18.7 billion, comprising $8 billion in generation, $2.9 billion in transmission and $7.8 billion in distribution. These Government-owned corporations include CS Energy, Stanwell, Tarong Energy and Enertrade (generation), Powerlink Queensland (transmission), ENERGEX and Ergon Energy (distribution).

Generation capacity

The electricity generation industry in Queensland is well-placed to meet increasing demand, with sufficient generating capacity to meet average demand even under extreme weather conditions.

Queensland currently has a generation capacity of more than 10,000 megawatts (MW), with $5 billion of new generation investment since 1998. This represents 75 per cent of the total generation investment across the National Electricity Market. Recent investment includes the Millmerran coal-fired power station, Swanbank E gas-fired power station at Ipswich and Townsville gas-fired power station. An increasing number of renewable energy projects have also been commissioned, including the Wivenhoe Small Hydro and Rocky Point Cogeneration plants in SEQ.

By 2015, more than $12 billion will be invested in 10,000 MW of new generation capacity across the National Electricity Market. Given the high quality and low cost of Queensland fuel sources and their proximity to load growth, a significant proportion of this investment is expected to occur in this state.

Projects currently under construction include:

- The 450 MW gas-fired Braemar power station at Dalby, due to commence operation in August 2006. The Braemar power station is being developed by a joint venture between ERM Power and Babcock & Brown at an estimated cost of $340 million.
- The 750 MW coal-fired Kogan Creek power station near Chinchilla, due to commence operation in September 2007. The Kogan Creek power station is being developed by CS Energy at a cost of $1.2 billion.

Projects currently under consideration include:

- An additional 480 MW base-load gas-fired power station on the Braemar site. The project is subject to verifying adequate recoverable gas reserves, with an expected service date of 2008.
- A 370 MW gas-fired power station in Townsville, currently planned to commence in 2009. Australian Gas Light Company has announced plans to develop the power station.
- A 1000 MW gas-fired power station on the Spring Gully gas field, 80 kilometres north-east of Roma. Origin Energy is currently seeking development approval.

A number of other generation projects are also under consideration, but are yet to proceed to feasibility study stage.

The Queensland Government will continue to support renewable energy projects where they are commercially viable and meet electricity market needs.

Electricity network

In order to meet increased electricity demand, new transmission and distribution network infrastructure must be constructed. Powerlink has approximately $1 billion in major electricity transmission projects currently underway in Queensland and more than $2 billion (subject to regulatory approval) to be spent in the state over the next five years.

ENERGEX is also investing heavily in its electricity distribution network, with a five-year capital budget in excess of $3 billion. This program is expected to:

- satisfy forecast demand growth;
- improve network security and reduce the amount of electricity load at risk;
- improve overall reliability; and
- renew older assets to maintain network reliability and improve network security.

The Queensland Government also supports demand side management programs aimed at reducing the effect of peak electricity demand on the network. Current demand side management programs shift large consumption electricity loads, such as sewage treatment, water storage pumps and domestic hot water systems, from peak to off-peak periods (for example, after 8pm and before 6am weekdays).

Additional initiatives by the Queensland Government which support efficient use of energy include:

- supporting amendments to the national *Building Code of Australia* to make all buildings more energy efficient;
- working with builders and developers to improve housing design;
- trialling new technologies to control appliances other than electric water heaters;
- trialling new technologies to provide more frequent feedback to customers on energy use and cost;
- investigating a range of energy and water saving measures for housing;
- supporting renewable energy technology;
- promoting energy-efficient airconditioning;
- promoting the use of off-peak electricity tariffs; and
- participating in the national minimum energy performance scheme for appliances.

Regulatory tests

Before committing to new electricity infrastructure, transmission and distribution entities must pass regulatory tests imposed by the Australian Electricity Regulator (AER) and the Queensland Competition Authority (QCA) respectively.

Although estimates for investment in new electricity infrastructure are current as at May 2006, they are subject to these regulatory authorities' determinations of capital expenditure forecasts, which have a five-year outlook. Estimates will be amended annually in accordance with the capital programs of ENERGEX, Ergon Energy and Powerlink.

Sustainable Housing Code

The Sustainable Housing Code that came into effect on 1 March 2006 requires all new houses in Queensland to be more sustainable, ensuring they use water and energy more efficiently. The Code will result in new houses using 33 per cent less electricity by requiring:

- energy efficient lighting in at least 40 per cent of the house; and
- greenhouse efficient hot water systems such as solar, heat pump or gas hot water.

Table 8: Major transmission upgrades in SEQ

Project	Estimated total cost $m	Delivery timeframe		
		2005-06 to 2009-10	2010-11 to 2014-15	2015-16 to 20025-26
Western Corridor	**129**			
Middle Ridge to Greenbank (330/275kV) Abermain substation (275/110kV)		Construction underway		
Springdale to Blackwall (500kV) Springdale to Greenbank (500kV) Springdale to Halys (500kV)				
Brisbane metropolitan	**129**			
Belmont to Murarrie (275kV) South Pine to Sandgate (275/110kV) Greenbank substation (275kV) Algester substation (110/33kV) Goodna substation (275/110/33kV) Sumner substation (110/11kV)		Construction underway		
Sandgate to Nudgee (275kV) Nudgee to Murarrie (275kV) Rocklea to Algester (110kV) Larapinta to Algester (110kV) Future substation (load dependent)				
Gold Coast	**67**			
Greenbank to Maudsland (275kV) Molendinar substation (275/110kV)		Construction underway		
Southern Gold Coast bulk supply (110kV) Future substations (load dependent)				
Sunshine Coast				
Northern Sunshine Coast transmission reinforcement (load dependent)				
Total	**325**			

Notes:

1. The table identifies the delivery timeframe for each infrastructure project. Projects that are underway with a minimum expenditure of $0.5 million in 2005-06 on planning, design, site acquisition, materials procurement or construction are identified in yellow.
2. Estimated project costs are in 2006 dollars. Cost estimates in other public documents may differ, as they may incorporate project costs which reflect anticipated changes in input prices between initial planning and the time of construction. Estimated investment includes funds already expended on projects.
3. Future investments will depend on demand. Expenditure will be adjusted as necessary to ensure the SEQ transmission network is able to meet demand, whilst also meeting mandated reliability requirements.
4. Energy authorities budget on a five-year basis. Projects beyond that period are not identified, as capital works programs are set in light of regulatory determinations. The current regulatory determination is for 2005-06 to 2009-10.
5. Projects have been reallocated between sub-regions following more detailed planning and in response to actual demand growth.
6. kV = Kilovolt.

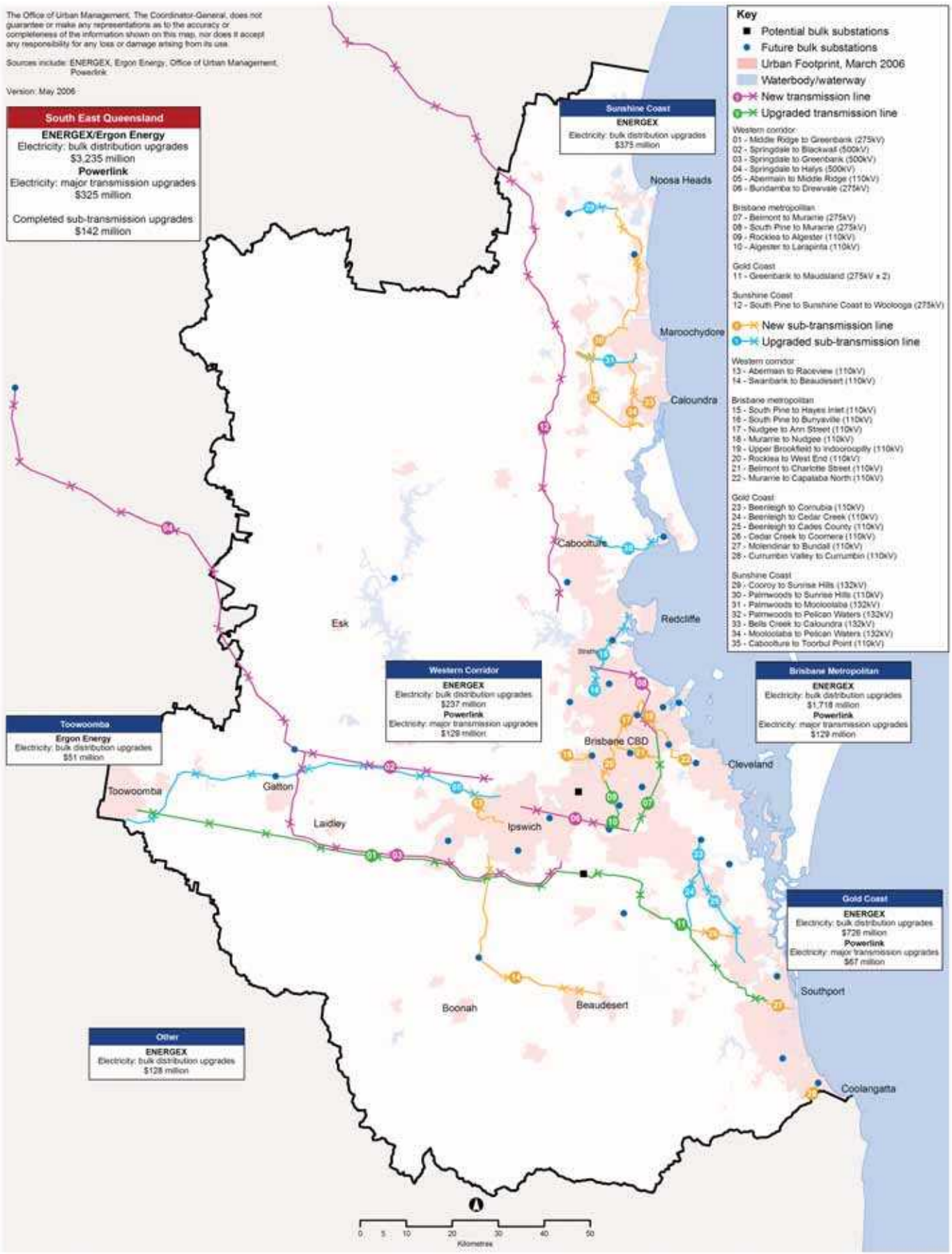
Table 9: Sub-transmission and distribution network upgrades in SEQ

Sub-region	Estimated total cost $m	Delivery timeframe		
		2005-06 to 2009-10	2010-11 to 2014-15	2015-16 to 20025-26
Western Corridor (ENERGEX)	237	Construction underway		
Brisbane metropolitan (ENERGEX)	1,718	Construction underway		
Gold Coast (ENERGEX)	726	Construction underway		
Sunshine Coast (ENERGEX)	375	Construction underway		
Other (ENERGEX)	128	Construction underway		
Toowoomba (Ergon Energy)	51	Construction underway		
Total	**3,235**			
Completed sub-transmission upgrades	142	Completed		

Notes:

1. The table identifies the delivery timeframe for each infrastructure project. Projects that are underway with a minimum expenditure of $0.5 million in 2005-06 on planning, design, site acquisition, materials procurement or construction are identified in yellow.
2. Estimated project costs are in 2006 dollars. Cost estimates in other public documents may differ, as they may incorporate project costs which reflect anticipated changes in input prices between initial planning and the time of construction. Estimated investment includes funds already expended on projects.
3. Projects have been reallocated between sub-regions following more detailed planning and in response to actual demand growth.
4. Energy authorities budget on a five-year basis. Projects beyond that period are not identified, as capital works programs are set in light of regulatory determinations. The current regulatory determination is for 2005-06 to 2009-10.
5. ENERGEX's project cost estimates are preliminary only as they are not approved by the ENERGEX Board.
6. ENERGEX projects have been reallocated between sub-regions following more detailed planning and in response to actual demand growth.
7. Estimated total cost ($m) includes 2005-06 expenditure and estimated expenditure for 2006-07 to 2009-10.

Map 7: Electricity transmission and distribution infrastructure in SEQ



Gas

Gas is an important energy resource for Queensland. Due to its low greenhouse emissions relative to other fossil energy sources, it will play an increasingly significant role as a fuel source for electricity generation, industrial processes, business and residential consumers. Total gas consumption is expected to triple over the period 2003-04 to 2029-30 with strong growth in the residential sector due to the requirement for greenhouse efficient hot water systems in new homes from 1 March 2006. Gas hot water is well-positioned to increase its share of the residential market as it is inexpensive, efficient, reliable and convenient.

The *Queensland Energy Policy* has been successful in diversifying the state's energy mix towards the greater use of gas. In particular, the policy's requirement that at least 13 per cent of electricity sold in Queensland be from gas-fired generation has encouraged the development of new gas sources and infrastructure in Queensland.

Within SEQ, natural gas is reticulated for domestic, commercial and industrial purposes by ENERGEX and Origin Energy.

Progress on energy projects during 2005-06

- The $340 million, 450 MW gas-fired Braemar Power Station at Dalby is scheduled to commence operation in June 2006.
- ENERGEX and Ergon Energy invested approximately $652 million in electricity distribution infrastructure in SEQ, including:
  - completing 32 major sub-transmission projects at a total estimated cost of $142 million;
  - increasing transformer capacity in the ENERGEX distribution network by 10 per cent; and
  - reinforcing supply to Central Brisbane at a total cost of $139 million through ENERGEX's CityGrid project.
- Powerlink invested approximately $140 million on transmission upgrades in SEQ. The following regionally significant projects are on schedule for completion by late 2006:
  - Construction of a transmission line between Greenbank (Beaudesert Shire) and Maudsland (Gold Coast City) to augment the network supplying the Gold Coast area. This is the final stage of Powerlink's Gold Coast Transmission Reinforcement project.
  - Construction of a 275kV substation at Greenbank in association with the Gold Coast Transmission Reinforcement.
  - Construction of a transmission line between Belmont and Murarrie (Brisbane City) that will augment and reinforce the network supplying the Brisbane Central Business District, the Australia TradeCoast precinct and eastern suburbs of Brisbane.

Information and communication technology

Information and communication technology is a major facilitator of economic and social development. The widespread availability of affordable, high-speed telecommunications (broadband) infrastructure and services is critical to support the continued growth of SEQ and to realise the Smart State vision for a 'Connected Queensland'.

The optimal technology for high-speed telecommunications is fibre optic cable, but its widespread deployment is expensive. Currently only a relatively small proportion of the region, primarily key business centres, is well-serviced with fibre optic cable. Carriers rely heavily on Asymmetric Digital Subscriber Line (ADSL) using existing copper networks, wireless (including Wi-Fi and WiMax) and Broadband over Power Lines (BPL) to deliver broadband services. Most of the metropolitan area has access to broadband services, however there are service gaps in outlying suburbs and more remote parts of the region.

Under the Australian Constitution, telecommunications is the responsibility of the Australian Government. Services and infrastructure are provided by commercial entities (for example, Telstra and Optus). State and local governments have a limited role and are constrained in the range of actions available to influence telecommunications infrastructure investment and deployment.

Despite this, the Queensland Government is actively promoting increased investment in telecommunications infrastructure across the state, to improve access to and availability of broadband services and to enhance service delivery.

Progress on information and communication technology projects during 2005-06

- The *Queensland Telecommunications Strategic Framework 2005-08* was released, providing the key strategies and actions for government, industry and community groups to advance the provision of telecommunications services.
- The Queensland Government launched an online telecommunications information portal (*www.enable.qld.gov.au*) for business and communities. The portal provides a comprehensive single access point for local government, industry providers and consumers to find and share useful information on telecommunications in Queensland. It forms part of broader efforts to reduce the barriers to the rollout of telecommunications infrastructure and services.
- A demand stimulation and aggregation project commenced. This project aims to increase awareness of the advantages of broadband for business and residents and profile telecommunications infrastructure. By seeking out the demand for broadband in SEQ, the Queensland Government aims to attract improved telecommunications infrastructure and suppliers to the region.
- Amendments to the *Queensland Development Code* were drafted to mandate capacity for broadband infrastructure in new multi-tenanted buildings; and a new *Integrated Development Assessment System* Code was prepared for telecommunications facilities. These initiatives will reduce time delays and the cost of providing telecommunications infrastructure and services across the state and region.
- The Queensland Government investigated partnerships with the private sector to improve telecommunications infrastructure, including the potential for State and local government assets (such as electricity poles, pits, pipes, road and rail easements) to be used to assist the timely delivery of infrastructure and services.
- The development of an ultra high-speed broadband infrastructure network in the Brisbane Local Government Area was examined through a partnership with the private sector. The business model is currently being finalised. There is potential that the proposed delivery model, if successful, could be replicated in other parts of SEQ and then the rest of the state.

Social and community infrastructure

Social and community infrastructure is important to ensure the quality of life that the community of SEQ values so highly. Our overall well-being as a community is supported by a range of services and facilities, including health; education; emergency services; policing and justice; housing; and individual and community support.

Social and community infrastructure is provided by both government and non-government agencies. As the population grows and changes, provision of these services needs to change to meet community needs in the region. For example, an ageing population will require innovative service responses to meet changing needs. Some of the key strategies for meeting social and community infrastructure needs are:

- providing social and community infrastructure in an efficient, timely and coordinated way to support the preferred pattern of development;
- providing social and community infrastructure in centres and other locations to maximise accessibility to services;
- providing social and community services and infrastructure in areas of high need, predominately in urban fringes, rural areas and urban areas experiencing social disadvantage;
- taking advantage of opportunities to co-locate and integrate community facilities; and
- ensuring affordable housing is provided in redevelopment areas and greenfield sites.

The population projections in the SEQ Regional Plan provide data to assist in planning for a range of social and community services provided by the Queensland Government. These projections are updated regularly.

Health

High population growth and an increase in the proportion of the population aged over 65 years is leading to increased demands for health care. This is accentuated by improvements in medical technology that enhance care options and increase life expectancy, but generally require additional resources.

The Queensland Government is committed to providing high standard health services through the expansion and refurbishment of existing health care facilities, as well as through new facilities. Many challenges in the health system are associated with the shortage of a skilled workforce rather than health infrastructure. This is being addressed through significant additional funding allocations for health services and staffing announced as part of the October 2005 Mini-Budget, rather than capital infrastructure projects.

In recent years, the Queensland Government has invested heavily in upgrades to hospitals throughout the region. In the 10 years to 2005, more than $3 billion was spent upgrading major hospitals throughout the state. A number of hospitals in SEQ were significantly upgraded, including the Royal Brisbane, Royal Brisbane Women's, Logan, Princess Alexandra, Redland, Ipswich and Prince Charles Hospitals and Wolston Park Hospital (now the Park Centre for Mental Health). This investment provides a foundation to respond to future health needs in SEQ.

The key health infrastructure priorities to meet the growing needs in the SEQ region include:

- the development of additional acute health care capacity where required; and
- the development of Health Hubs in high-growth areas. Health Hubs provide the community with improved access to health services by clustering a variety of public and private community-based services.

Table 10 shows the approximate timing and cost of projects that are expected to meet the proposed population growth and support the preferred settlement pattern. These projects do not reflect the full range of health infrastructure required for SEQ to 2026. Effective responses to the demands of population growth, along with emerging technologies, new models of care and new diseases, will require many other solutions. Therefore, additional projects will be identified and delivered as development progresses and further detailed planning is undertaken.

October 2005 Mini-Budget

The Queensland Government's October 2005 Mini-Budget made a significant commitment to the expansion of health services and staffing in Queensland over the next decade. Health services in the SEQ region will benefit from $153 million in additional funding for 2005-06 and an additional $1.189 billion over the five-year period, 2005 to 2011. This increase in funding relates primarily to the provision of health services and staff rather than infrastructure.

Progress on health projects during 2005-06

- Construction at the Prince Charles Hospital commenced to convert the facility from a specialist hospital to a broader-focused general hospital. Stage 1 of this project is expected to be complete by December 2006.
- Following the master planning of health services and consultation with the community, possible sites for the new Gold Coast University hospital have been identified in the Parkwood and Southport areas.
- Strategic planning of health services for the Sunshine Coast region is complete and preliminary consultation is underway.
- Preliminary planning of health services for the Robina Health Hub is underway and a site identified.
- Planning of health services for the Browns Plains Health Hub is complete and a site acquired at Hillcrest. Project plans are currently being developed.
- Planning of health services for the Northlakes Health Hub is complete. A site has been acquired within North Lakes and project plans are currently being developed.

Table 10: Regional health infrastructure

Sub-region	Estimated total cost $m	Delivery timeframe		
		2006-07 to 2009-10	2010-11 to 2014-15	2015-16 to 20025-26
Western Corridor	**315**			
Health Hubs x 2: in areas such as Springfield or Ipswich	45			
Ipswich Hospital: redevelopment	270			
Greater Brisbane	**172**			
Prince Charles Hospital: upgrade to general hospital	109	Construction underway		
Browns Plains Health Hub	17	Site acquired		
Northlakes Health Hub	26	Site acquired		
Caboolture Health Hub	20			
Gold Coast	**556**			
New hospital	530			
Robina Health Hub: ambulatory and community centre	26	Planning underway		
Sunshine Coast	**625**			
Sunshine Coast Health Hub	45	Planning underway		
New hospital	530			
Caloundra: expansion of existing facilities	50			
Total	**1,668**			

Notes:

1. The table identifies the delivery timeframe for each infrastructure project. Projects that are underway with a minimum expenditure of $0.5 million in 2005-06 on planning, design, site acquisition, materials procurement or construction are identified in yellow.
2. Estimated project costs are in 2006 dollars. Cost estimates in the State Budget and other public documents may differ, as they may incorporate project costs which reflect anticipated changes in input prices between initial planning and the time of construction. Estimated investment includes funds already expended on projects.
3. Where funding is required from other levels of government, their estimated costs have been included.

Education

The adequate and timely provision of education services is a critical factor in achieving the preferred pattern of growth in SEQ. Primary and secondary education services are provided by the Queensland Government through both Education Queensland and the Office of Non-State Schooling. More than 70 per cent of Queensland school students access the state school system, with Education Queensland operating and maintaining around 590 schools and environmental education centres in the SEQ region.

Education Queensland uses a number of models for the delivery of quality education services across the state. These models tailor school requirements to the particular characteristics and forecast population of an area. Education Queensland also explores innovative options for providing and maintaining education facilities, including partnerships with local governments for joint use.

State schools in SEQ are planned using a set of statewide standards, combined with the population projections outlined in the SEQ Regional Plan and other detailed socio-demographic data. The provision of school facilities is then staged to ensure an appropriate match with the growth that is occurring, whilst still guaranteeing viability of the new school and other schools in close proximity.

Local Growth Management Strategies and Structure Plans will provide direction in the identification, and where possible, the securing of future school sites. This will help ensure communities have access to educational services that are well-located with respect to transport infrastructure and other community services.

In addition to the construction of new schools, Education Queensland is currently engaged in a major capital works program to provide new and refurbished facilities to accommodate Preparatory Year. It is anticipated this program will expend around $100 million across Queensland by June 2006.

Preparatory Year

Children who turn five in the first half of 2007 will be eligible to attend a non-compulsory, full-time Preparatory Year of education prior to Year 1 (Prep Year). While the new Prep Year replaces preschool, community kindergartens and other early childhood education and care providers will continue to offer programs for children not enrolled in Prep Year. Prep Year is currently being phased in at 97 state schools in preparation for full implementation in all state primary schools in 2007.

Table 11 shows the anticipated number of schools (64) and capital expenditure on state school infrastructure in SEQ from 2006 to 2025-26. It is based on current demographic forecasts and service provision models.

Progress on education projects during 2005-06

- During 2005, Education Queensland spent more than $32 million establishing Stage One of two new Prep Year to Year 12 (P-12) school campuses in SEQ:
  - Meridan State College on the Sunshine Coast opened for the 2006 school year with 278 students from Prep to Year 6. Stage One was completed at an estimated cost of $15.2 million and provided prep and primary accommodation, general learning areas, a resource centre, administration centre, tuckshop, amenities, covered area, sports oval, play space and internal/external road infrastructure. In 2012, the college will be a fully operational P-12 campus.
  - Stretton State College opened for the 2006 school year with 330 students from Prep to Year 7. Stage One was completed at an estimated cost of $16 million and provided similar facilities to those provided at Meridan State College, plus a Special Education Unit. In 2007, Years 8 and 9 will become operational and by 2010 the college will be a fully operational P-12 campus.

Table 11: Regional state school infrastructure

Sub-region	Estimated total cost $m	Number of schools			
		Opening 2006	Opening 2007 to 2009	Opening 2010 to 2014	Opening 2015 to 2026
Western Corridor	500		1	7	6
Greater Brisbane	550	1	3	3	8
Gold Coast	850		4	5	12
Sunshine Coast	600	1	2	6	5
Total	**2,500**	**2**	**10**	**21**	**31**
Completed	32				

Notes:

1. Estimated project costs are in 2006 dollars. Cost estimates in the State Budget and other public documents may differ, as they may incorporate project costs which reflect anticipated changes in input prices between initial planning and the time of construction. Estimated investment includes funds already expended on projects.
2. Estimated total costs include land and construction costs. Construction costs are indicative based on medium-sized schools. Land costs are based on average urban land costs.
3. Provision of schools is dependant on population thresholds being met and may be adjusted to reflect changing demand.
4. Greater Brisbane includes the Local Government Areas of Brisbane, Logan, Redland, Redcliffe, Pine Rivers and Caboolture.

Vocational education and training

To ensure continued economic success, SEQ must develop and sustain a workforce with high-level skills in relevant areas. However, Queensland's labour market is undergoing significant change. Some of this change is linked to cyclical patterns in worker demands for certain industries, other changes are permanent - driven by advances in technology, social trends and global market forces.

In March 2006, the Queensland Government released its *Queensland Skills Plan*. This plan sets out a comprehensive policy framework for Queensland's vocational education and training system, ensuring it better matches the supply of skilled labour to industry's needs and the economy's demands.

The *Queensland Skills Plan* represents the most significant change to the vocational education and training system and the structure of TAFE Institutes in more than 40 years. It will result in substantial reform of TAFE Institutes and the development of a more sophisticated approach to managing and supporting the entire Queensland training system. The *Queensland Skills Plan* will result in substantial increases in trades and higher level training places throughout the state.

Key elements of the new training system include:

- Establishing a new statewide Trade and Technical Skills Institute to lead product development and delivery in key trades areas (automotive, building and construction, manufacturing and engineering, electrical/electronics). The Institute will develop close links with industry and centres of excellence to ensure that training programs and qualifications address employer needs.
- Establishing the Southbank Institute of Technology as the lead institute responsible for technological and high-level skills training and education.
- Establishing key TAFE institutes to lead product development and coordination across the state in designated fields.
- Developing collaborative partnerships with industry and private providers, thereby ensuring access to the best possible training services for clients using publicly funded training.

The new training system will be underpinned by a major seven-year capital works investment program to modernise existing TAFE infrastructure and construct new leading-edge training facilities. This will involve building new facilities and disposing of land and buildings not required for training delivery. It will also involve significant investment in information and communication technology ($20 million over five years) to provide for more flexible student access, accelerated skills acquisition, and greater resource sharing between trainers.

Southbank Institute of Technology

Construction is well underway on the new Southbank Institute of Technology - Queensland's first Public Private Partnership (PPP) project. This is a partnership between the Queensland Government (TAFE Queensland) and private sector consortium, Axiom Education Queensland.

The project involves construction of 11 new buildings and renovation of another four buildings on the Southbank campus for an estimated capital cost of $230 million.

Once complete, Axiom will be responsible for providing facilities management services over a 30-year period, including facilities maintenance, cleaning, grounds and security services. This PPP will provide a fully serviced and maintained world-class education facility equipped with state of the art technology.

Investment in SEQ

Key SEQ projects outlined in the *Queensland Skills Plan* include:

- Establishing major new Trade and Technical Skills Institute campuses at Acacia Ridge and Eagle Farm in Brisbane.
- Upgrading major trade training centres at the Gold Coast, Bundamba (Bremer), the Sunshine Coast (Nambour) and Toowoomba.
- Amalgamating parts of Yeronga, Moreton and Logan TAFE's to create the Brisbane South Institute of TAFE, to become a lead institute for programs in aged care, small business, fashion, textiles, clothing and footwear, and vocational trainer training.
- Amalgamating the Open Learning Institute with the Brisbane North Institute of TAFE - lead institute for business, finance, information technology, property services, government and horticulture.
- A comprehensive redevelopment of the former Southbank TAFE site to establish the Southbank Institute of Technology - lead institute for health, sport and recreation, arts and entertainment, and postgraduate programs for professionals and para-professionals.
- Establishing a new campus for the Gold Coast TAFE at Coomera.
- Modernising TAFE campuses at Mt Gravatt, Alexandra Hills, Chelmer, Loganlea, Nambour, and Toowoomba to provide improved teaching and student facilities.

Table 12: Regional vocational education and training infrastructure

Sub-region	Estimated total cost $m	Delivery timeframe		
		2006-07 to 2009-10	2010-11 to 2014-15	2015-16 to 20025-26
Western Corridor				
Campus modernisation: Bundamba	18			
Greater Brisbane				
Southbank Institute of Technology	230	Construction underway		
Trade and Technical Skills Institute: new campuses at Acacia Ridge and Eagle Farm	135	Sites acquired		
Campus modernisation: Mt Gravatt, Alexandra Hills, Chelmer, Loganlea	21			
Gold Coast				
New Gold Coast TAFE campus: Coomera	30			
Sunshine Coast				
Campus modernisation: Nambour	25			
Toowoomba				
Campus modernisation: Toowoomba	3			
Total	**462**			

Notes:

1. The table identifies the delivery timeframe for each infrastructure project. Projects that are underway with a minimum expenditure of $0.5 million in 2005-06 on planning, design, site acquisition, materials procurement or construction are identified in yellow.
2. Estimated project costs are in 2006 dollars. Cost estimates in the State Budget and other public documents may differ, as they may incorporate project costs which reflect anticipated changes in input prices between initial planning and the time of construction. Estimated investment includes funds already expended on projects.

Regional sport and recreation

SEQ's climate, outstanding natural features and network of sport and recreation facilities supports a diverse range of recreational activities. These activities generate significant health, social, economic and cultural benefits that are critical to the wellbeing and lifestyle of the community.

The responsibility for providing sport and outdoor recreation infrastructure is shared by State and local government, community organisations and the private sector. The Queensland Government provides infrastructure of state significance such as major stadiums and specialist sport facilities; as well as national parks, which protect areas with significant environmental and cultural heritage values.

Local government has primary responsibility for sport and recreation infrastructure that serves local or municipal needs.

The Queensland Government supports local government and community organisations to provide local sport and recreation facilities through a number of grant programs administered by the Department of Local Government, Planning, Sport and Recreation. Each year, the Queensland Government provides in excess of $50 million in grants towards sport and recreation throughout Queensland. In 2005-06, the Queensland Government committed more than $12 million to establish and/or upgrade major sport and recreation facilities in SEQ.

Sport and active recreation

The Queensland Government is committed to providing new and improved opportunities for Queenslanders to participate in sport and active recreation, from the grassroots to the elite level.

The Department of Local Government, Planning, Sport and Recreation delivers a range of programs and services to encourage increased participation in sport and recreation. The Department works in partnership with other state agencies (for example, Education Queensland and Queensland Health), local government, and community organisations to develop strategies and infrastructure to foster increased participation in sport and active recreation and ensure those facilities are accessible and used effectively.

Queensland Government grant programs provide funding assistance to local government and community organisations for the construction of sport and active recreation facilities and preparation of recreation plans to foster improved utilisation and management of facilities. In addition the Queensland Government is supporting the development of regionally significant projects such as:

- the State Softball Centre, Ormiston (in partnership with Redland Shire Council, state funding of $1.24 million);
- improvements to the Queensland Sport and Athletics Centre, Nathan (state funding of $11.5 million);
- the Cricket Centre of Excellence, Albion (in partnership with Queensland Cricket, state funding of $2.5 million);
- the completion of the Brisbane Cricket Ground (state funding of $50 million);
- the State Tennis Centre, Tennyson (in partnership with the private sector, total project $540 million); and
- the Gold Coast Football Stadium, Robina (state funding of $160 million).

Outdoor recreation

The opportunity to undertake a broad range of outdoor recreation activities is highly valued by SEQ residents and visitors, and is an important factor in the region's liveability and attraction. Popular activities include bushwalking, horse riding, walking with dogs, sailing, mountain biking, camping, surfing, cycling, boating, canoeing, trail bike riding and four-wheel driving.

As the population grows, major outdoor recreation areas, including beaches, waterways, national parks, state forests and urban bushland come under increasing pressure from more and more visitors. The Queensland Government is preparing the *SEQ Regional Outdoor Recreation Strategy* to coordinate the delivery of outdoor recreation services within SEQ and identify regional recreation priorities. Priority projects will be delivered in partnership with local government and the community and private sectors.

SEQ Regional Outdoor Recreation Strategy

The *SEQ Regional Outdoor Recreation Strategy* will inform, guide, and coordinate investment in securing, developing and managing open space and the necessary built facilities for outdoor recreation. The Strategy will assist state agencies, local governments, private enterprise and the community sector to:

- respond to diverse current and emerging recreation demands;
- enhance regional liveability and the health of residents;
- establish solutions to outdoor recreation issues;
- develop built facilities which support participation in outdoor recreation; and
- identify, protect and manage regional landscape values and assets.

The Strategy is scheduled for completion in December 2006.

The Queensland Government is developing a significant network of horse riding trails within SEQ. More than 660 kilometres of horse riding trails have recently been established, or are currently being planned in consultation with riders and local governments. Further trails are currently under development for the Bellthorpe/Caboolture and Mapleton areas.

Noosa-Tewantin Trail Network

In December 2005 the Queensland Government established a 225-kilometre horse riding trail network in the Noosa hinterland. The network includes 159 kilometres of new trails - 115 kilometres are now ready to ride with a further 22 kilometres under construction. The trails pass through a range of diverse landscapes and provide for safe, pleasurable riding experiences.

The Queensland Government provides a range of facilities to support recreation activities in national parks and on other state lands. This infrastructure includes walking tracks, camping areas, visitor centres, public amenities and picnic facilities. As part of its $10 million Great Walks of Queensland project, the Queensland Government is establishing two Great Walks in SEQ. In April 2006, the 58-kilometre Sunshine Coast Hinterland Great Walk through the Blackall Range was officially opened. Planning for a 54-kilometre Gold Coast Hinterland Great Walk is well underway to link Lamington National Park with Springbrook National Park via the Numinbah Valley. These initiatives cater for walkers of all ages, fitness levels and experience and can be used for short strolls through to long-distance walks of several days duration – an experience previously unavailable in SEQ.

The Queensland Government also provides funding to local government and community organisations to support a range of outdoor recreation activities.

In 2005-06, the Queensland Government approved $2.36 million in grants to SEQ local governments and community organisations for recreation trail projects such as cycleways, walkways and walking tracks.

Boating is another highly popular recreational activity in SEQ. Since 2005, the Queensland Government has invested more than $4 million to improve boating infrastructure such as dredged channels; boat ramps and pontoons; and buoys, beacons and other aids to navigation. Local governments also provide boating resources and facilities for residents and visitors to SEQ, including parking, lighting and security for boat ramps; cleaning and maintenance for boat ramps, jetties and pontoons; and toilets and other public facilities at boating sites.

Infrastructure for rural development

The SEQ Regional Plan encourages the growth of rural areas in SEQ by encouraging existing towns and villages to accommodate additional population, rather than allowing further rural residential development.

To support rural areas, the Queensland Government will continue to provide funding for water, sewerage, social, community and cultural facilities in rural shires through established grant and subsidy programs. Funding assistance for roads will also be maintained through the *Roads Alliance* program administered by Main Roads.

The Queensland Government established a Rural Futures Committee in 2006 to assist in developing a *Rural Futures Strategy* for the SEQ. This strategy will form the basis of an integrated rural planning framework in SEQ that will seek to balance the competition for land and natural environmental resources, the needs of rural landowners, rural communities and impacts of regional population growth. Due for completion by late 2007, it is anticipated that the strategy will identify infrastructure critical to the long-term sustainability of the region's rural communities. Infrastructure identified through this process will be considered for inclusion in future updates of the Infrastructure Plan.

Water is recognised as an important issue for rural areas in SEQ. Rural water issues are being considered as part of the *SEQ Regional Water Supply Strategy*, which will be complete by the end of 2006.

Part B

This Infrastructure Plan includes the rural water use efficiency program, which supports initiatives to reduce water use and increase the value of production. The Queensland Government is also preparing Water Resource Plans for the various SEQ catchments to introduce water trading.

Activity Centre renewal and transit oriented development

A key focus of the SEQ Regional Plan is to encourage infill in existing areas, particularly through redevelopment of brownfield areas and areas around Activity Centres and public transport nodes.

The Queensland Government's key role in facilitating development of these areas is through coordinating planning, infrastructure and relevant state activities. The Queensland Government may also play a role in purchasing land and providing infrastructure, with the goal of achieving attractive, viable mixed-use development and best practice land use and transport integration. It is anticipated the process will provide a revenue stream to the Queensland Government to offset its investment, as well as achieve appropriate community outcomes.

This Infrastructure Plan includes $45 million committed over three years to support Queensland Government involvement in these projects, beginning in 2006-07. Recommendations on criteria for allocating this funding will be made by the Transit Oriented Development Taskforce.

Progress on Activity Centre renewal and transport oriented developments during 2005-06

- *Implementation Guideline No. 2: Local Growth Management Strategies was released in February 2006. Local Growth Management Strategies* are a key tool for implementing transit oriented development policy in SEQ.
- *Implementation Guideline No.4: Structure Plans* was released in April 2006 for consultation. This Guideline details how local governments prepare structure plans and master plans, as they apply to detailed local planning for transit oriented communities and regional activity centres.
- In October 2005, the Office of Urban Management joined with the University of Queensland to initiate an Urban Housing Capacity Template research project. This project is one of several being undertaken by the Queensland Government to assist better land use and transport integration designed to assist local governments in SEQ to more accurately assess capacity to accommodate future housing development.
- An Urban Development Monitoring Report and Program was initiated in November 2005 to monitor progress towards infill and total dwelling targets.

Transit Oriented Development Taskforce

The Transit Oriented Development Taskforce was established in 2005 to assist in identifying priority transit oriented development projects requiring government intervention and to undertake the development of a transit oriented development 'Best Practice Guideline'. The Taskforce will also make recommendations on criteria for distributing the funds that have been allocated through this Infrastructure Plan. The Taskforce is comprised of representatives from State and local governments, academia and the development industry.

Useful websites

The following websites provide further information on the scope and status of infrastructure projects included in this Infrastructure Plan.

Project	Website	
Regional planning and infrastructure projects		
SEQ Regional Plan	www.oum.qld.gov.au	
Major projects and SEQ infrastructure	www.coordinatorgeneral.qld.gov.au	
Transport and Main Roads		
Queensland Transport	www.transport.qld.gov.au	
Main Roads	www.mainroads.qld.gov.au	
Airport Link	www.brisbane.qld.gov.au/airportlink	
Northern Busway	www.translink.com.au/northernbusway	
North-South Bypass Tunnel	www.brisbane.qld.gov.au/nsbt	www.nsbt-eis.com
Caboolture to Landsborough Rail Upgrade Study	www.arup.com.au/clrs	
Caloundra-Mooloolaba Road	www.mainroads.qld.gov.au	
Gowrie to Grandchester Rail Corridor Study	www.transport.qld.gov.au/ggrcs	
Rail upgrades	www.qr.com.au/seqipp	
Water		
SEQ Regional Water Supply Strategy	www.seqwaterstrategy.qld.gov.au	
Regional Drought Strategy	www.waterforever.com.au	
Sustainable Housing Code	www.lgp.qld.gov.au/sustainableliving	
Energy generation		
National Electricity Market	www.nemmco.com.au	
Australian Gas Light	www.agl.com.au	
CS Energy	www.csenergy.com.au	
Stanwell	www.stanwell.com	
Tarong Energy	www.tarongenergy.com.au	
Energy transmission and distribution		
ENERGEX	www.energex.com.au	
Ergon Energy	www.ergon.com.au	
Powerlink Queensland	www.powerlink.com.au	
Gas		
ENERGEX	www.energex.com.au	
Origin Energy	www.originenergy.com.au	
Information and communication technology		
Queensland Telecommunications Strategic Framework	www.governmentict.qld.gov.au	
Project En@ble - telecommunications portal	www.enable.qld.gov.au	
Education		
School upgrades and Prep Year	www.education.qld.gov.au	
Vocational training		
Queensland Skills Plan	www.trainandemploy.qld.gov.au	
Sport and recreation		
Sport and recreation funding programs	www.sportrec.qld.gov.au	www.dlgpsr.qld.gov.au
Horse trails and Great Walks	www.epa.qld.gov.au/parks_and_forests	


Platform
2
Outbound
From City
351
VI51
OLVO

Images courtesy of Brisbane City Council; Boonah Shire Council; Caboolture Shire Council; Caloundra City Council; Carlton United Breweries; CS Energy; ENERGEX; ERM Power, Ergon Energy; Gatton Shire Council; Ipswich City Council; Logan City Council; Maroochy Shire Council; Redcliffe City Council; Toowoomba City Council; Centre for Subtropical Design; Department of Communities; Department of Employment and Training; Department of Main Roads; Department of State Development, Trade and Innovation; Education Queensland; Powerlink, SEQ Water; Sport and Recreation Queensland; The Coordinator-General, Tourism Queensland; Michael Aird; Jemina Dunn; Darren Jew; Phil Stay and Olivia Martin-McGuire.

Office of Urban Management

Website www.oum.qld.gov.au
Freecall 1800 021 818
Email enquiries@oum.qld.gov.au

South East Queensland

Infrastructure Plan and Program 2007-2026

Queensland **the Smart State**

Queensland Government
Office of **Urban Management**
Department of **Infrastructure**

Published May 2007
ISBN: 978 0 646 47594 3

Foreword

It is well documented that by 2026, South East Queensland (SEQ) will be home to almost four million people. Possibly the greatest challenge facing the Queensland Government in meeting the state's infrastructure needs is simply keeping up with this burgeoning growth.

Fortunately, Queensland is in an enviably strong financial position to deliver the infrastructure necessary to meet the needs of a booming population.

The Queensland Government is delivering the state's most ambitious infrastructure program, not only in SEQ but across the state. It's fair to say that infrastructure provision in Queensland is in overdrive at present, but the Queensland Government is delivering the projects as scheduled and is on track to deliver the remainder.

Since it launched the first *South East Queensland Infrastructure Plan and Program* (SEQ Infrastructure Plan) in April 2005, the Queensland Government has kept its promise of delivering projects, investment and certainty and will continue to meet its commitments as outlined in this updated Infrastructure Plan.

In partnership with local governments of the region and the private sector, the Queensland Government is ensuring the SEQ Infrastructure Plan becomes reality.

This updated *South East Queensland Infrastructure Plan and Program 2007-2026,* increases the Queensland Government's estimated investment in infrastructure by $16 billion.

This updated Infrastructure Plan sees this increased investment for additional projects, a new infrastructure category (Justice Services), the inclusion of Port of Brisbane Corporation activities and new Queensland Government commitments to SEQ water infrastructure.

Further details are provided on the key infrastructure projects the government is providing to ensure all of SEQ has access to a secure water supply for the long term.

Total government investment identified in this Infrastructure Plan is $82 billion over the next 20 years, including $35 billion in road, rail and public transport projects, $78 million to investigate another possible $15 billion worth of road and public transport projects, $8 billion in social and community infrastructure, an expected $7.5 billion in water infrastructure projects, $5 billion spending on energy networks (over five years), and $11 billion in expected outlays on energy networks (beyond the first five years).

This is an infrastructure program that is focused on building and shaping the state for our next generation of Queenslanders.

To drive the delivery of this massive infrastructure program, the Department of Infrastructure was established in January 2007. The Department incorporates the Coordinator-General's office, the Office of Urban Management and the SEQ Regional Water Supply projects.

To ensure the delivery of the billions of dollars of critical infrastructure in Queensland over the next two decades, cross-government coordination is essential. The Program Management Office, within the Department of Infrastructure, is coordinating infrastructure delivery sequenced with the pace and pattern of development planned for the region.

In this way, the Queensland Government is ensuring that it's supporting the desired outcomes for the region as outlined in the *South East Queensland Regional Plan 2005-2026* (SEQ Regional Plan) – the blueprint for future growth and prosperity of the state.

The SEQ Regional Plan and SEQ Infrastructure Plan are significant achievements for Queensland. For the first time in history, the Queensland Government has made a 10-year commitment to fund the necessary infrastructure that supports growth in SEQ. At the same time, the Infrastructure Plan identifies infrastructure requirements for the next 10-year period. No government in Australian has ever done this.

While the Queensland Government is moving at a phenomenal pace to deliver on its regional planning and infrastructure commitments, it is aware of the challenges and is implementing smart strategies to overcome them and deliver on its commitment to building a sustainable future for SEQ.

The Honourable Anna Bligh MP
Deputy Premier
Treasurer and Minister for Infrastructure

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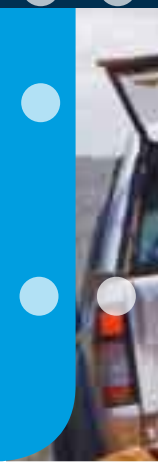

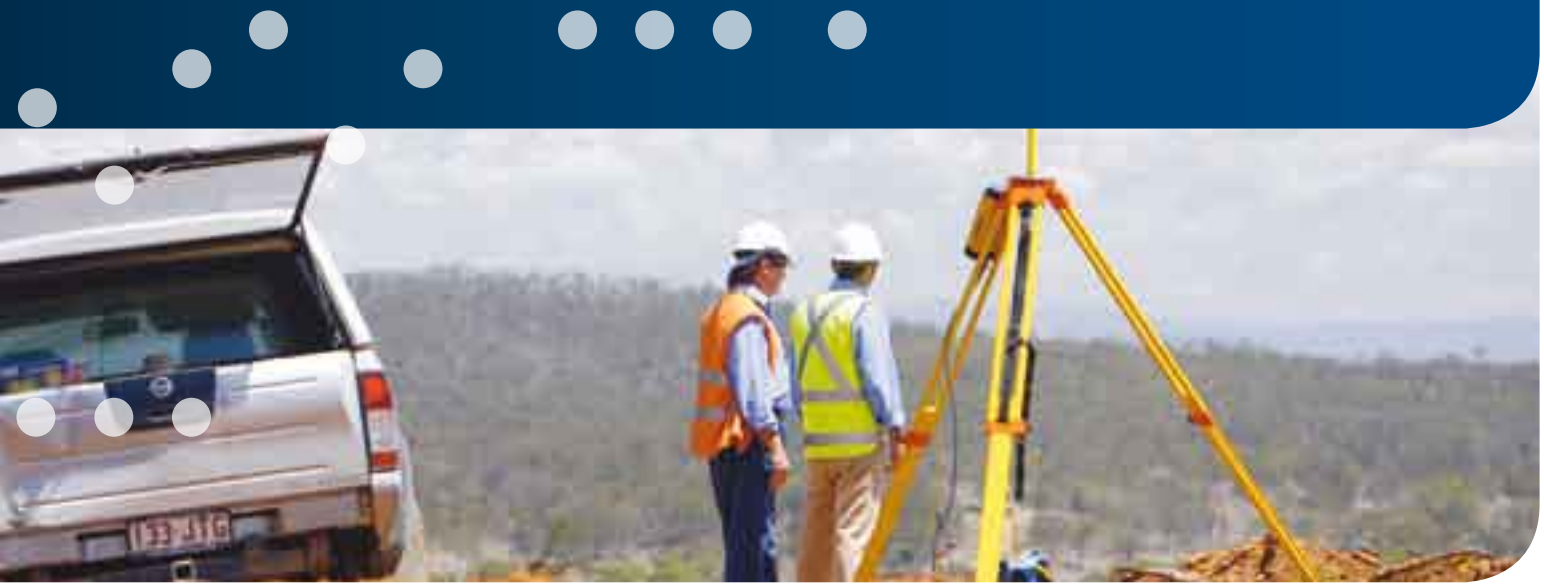

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Highlights

The Queensland Government is committed to ensuring the *South East Queensland Infrastructure Plan and Program 2007-2026* (SEQ Infrastructure Plan) is delivered on time and on budget. This landmark plan now includes more than 350 projects covering transport, water, energy, health, education and recreation infrastructure. It is designed to support the *South East Queensland Regional Plan 2005-2026* (SEQ Regional Plan) – a framework to sustainably manage growth in one of the fastest-growing regions in Australia.

Investment identified in this Infrastructure Plan represents more than one-third of the state's total investment in

infrastructure. Expenditure on infrastructure in South East Queensland (SEQ) has increased significantly over the past two years and industry and agencies have geared up to deliver on the Queensland Government's commitment.

Expenditure is expected to grow further throughout 2007-08 and then level out. Infrastructure projects identified through current investigations are likely to result in the investment pattern remaining stable over the life of the program.

The size and scope of the infrastructure program is also encouraging innovative approaches to planning and the delivery of projects. In particular, integrated delivery of projects is occurring across all levels of government in Queensland.

Since 2005, state agencies and local governments have made significant progress with the delivery of projects; total expenditure on completed projects and those currently underway totalled $3.25 billion at 31 December 2006. Expenditure on projects has been ramping up significantly to deliver Queensland Government commitments, particularly in the areas of water, transport and health.

Project implementation

- Construction has started on Queensland's largest road and bridge construction project, the $1.88 billion Gateway Upgrade Project, with completion scheduled for mid-2011.
- Construction has commenced on the Queen Street to Roma Street section of the Inner Northern Busway and is due to be completed in mid-2008.
- Construction of the Tugun Bypass is expected to be finished ahead of schedule in mid-2008.
- Upgrading of the Sunshine Motorway from Maroochydore Road to the David Low Way is underway and is due to be completed by the end of 2008.
- Construction has commenced on the Boggo Road Busway linking the Eastern Busway to the Eleanor Schonell Bridge and is scheduled for completion by mid-2009.
- Construction is well underway on the first stage of the Mitchelton to Ferny Grove railway track duplication. The new track is expected to be operational between Mitchelton and Keperra by late 2007.
- Construction of the Western Corridor Recycled Water Project, the largest recycled water project in Australia, is well underway. The first stage of the project will be commissioned in August 2007.
- Construction commenced on the South East Queensland (Gold Coast) Desalination Facility. The plant is being jointly developed by the Queensland Government and Gold Coast City Council and will be operational by the end of 2008.
- The Queensland Government announced it will develop two new dams to service SEQ at Traveston Crossing and Wyaralong. Preparation of Environmental Impact Statements is underway and more than 40 per cent of the land required has been voluntarily acquired.
- Stage 1 of the $81.6 million Trade and Technician Skills Institute at Acacia Ridge – the first of its kind in Australia – officially opened in December 2006.
- Construction of the $230 million Southbank Institute of Technology – Queensland's first Public Private

Partnership (PPP) project – will be completed in mid-2008. The partnership is successfully delivering a world-class education facility on budget and ahead of schedule.

- Planning is underway for the Gold Coast University Hospital, to be located adjacent to Griffith University at Parklands. It will be a 750-bed tertiary hospital with strong links to medical education and research and is due to open in 2012.
- Planning is underway for the Sunshine Coast Hospital, to be located at Kawana; planning has also commenced for the expansion of facilities in Caloundra and Nambour.
- The 450 MW gas-fired Braemar power station was commissioned in August 2006 and supplies electricity to the expanding SEQ energy market.

Major new initiatives

- The Queensland Government commenced construction of the SEQ Water Grid in 2006. The Water Grid comprises a network of two-way connections between existing and new water supplies and key areas of demand, allowing water to be moved across the region to where it is most needed. It will allow water supplies to be operated more efficiently, minimising costs and maximising security of supply. The Queensland Government will invest approximately $4 billion over the next two years to establish the Water Grid.
- Planning for a new Queensland Children's Hospital is underway. The hospital will be established adjacent to the Mater Hospital in South Brisbane at an estimated cost of $704 million. It is due to be opened in progressive stages from 2011 to 2014.
- In January 2007, the Queensland Government announced it will invest $8.8 million over the next five years to develop three regional recreation trails in SEQ; planning for the trails has commenced in partnership with local government.
- The Queensland Government announced it will establish a major corrective-services precinct near Gatton. Acquisition of a 600-hectare site is underway.

Organisational improvements

- The Queensland Government established the Department of Infrastructure in January 2007 to manage the significant program of infrastructure projects across the state. The Department brings together key government agencies, including the Office of Urban Management, the Program Management Office and Coordinator-General, to focus on regional infrastructure planning and delivery in SEQ and across Queensland.
- The Queensland Water Commission was established in 2006 to provide a centralised approach to managing the region's water supply into the future. The Commission is responsible for regional drought strategies and development of the SEQ Regional Water Supply Strategy, due to be released in mid-2007.

What's new in this Infrastructure Plan

The previous SEQ Infrastructure Plan was released in May 2006. The following things are new or have changed in this 2007 version of the Infrastructure Plan:

- Project costs have been updated to reflect costs in 2007 dollars.
- Investments in infrastructure are classified into four types depending on the level of investigation, approval and/or progress.
- Projects that are already underway have been identified in the tables. Completed projects have been noted.
- Port of Brisbane Corporation activities have been included.
- Investment in SEQ water infrastructure has been updated to reflect new Queensland Government commitments.
- A new social infrastructure category – Justice Services – has been included.

Part A

Context – SEQ Regional Plan Framework

Part A

South East Queensland (SEQ) continues to experience the fastest growth rate of any urban region in Australia. By 2026, the population is expected to reach around four million people – an increase of more than one million people over two decades.

About the SEQ Regional Plan

The *South East Queensland Regional Plan 2005-2026* (SEQ Regional Plan) was released in June 2005. The SEQ Regional Plan provides a statutory framework to sustainably manage growth and change in the region, sets up processes to ensure implementation from the ground up, and establishes the basis for an infrastructure plan, with relevant timeframes and budgets to ensure the timely delivery of infrastructure supporting the region's growth.

A range of implementation and review processes were established under the SEQ Regional Plan aimed at ensuring sustainability of the region. Many of these processes have commenced, including the preparation of Local Growth Management Strategies (LGMSs) by local government, structure planning for Major Development Areas (MDAs) and the monitoring of a series of sustainability indicators under the State of the Region reporting framework. Implementation of the SEQ Regional Plan is coordinated through the Office of Urban Management within the Department of Infrastructure.

SEQ planning concepts

As a future home to around four million people, the SEQ region will be expected to exhibit a series of essential characteristics:

- a compact, well-serviced and efficient urban form that minimises impacts on natural resources and environmental values;
- a diverse range of housing to meet existing and future community needs;
- well-designed Activity Centres focused around public transport nodes and corridors;
- modern, integrated, efficient, fast, frequent and reliable public transport;
- freight routes servicing an expanding economic base created by identifying and preserving new routes and corridors ahead of time;
- a safe road network providing for inter-regional, intra-regional and local trips, complementing the region's public transport system;
- reliable water and energy supplies, increasingly based on recycled and renewable sources and supported by demand management and consumer behaviour changes;
- community infrastructure and services which are carefully planned and support strong and sustainable communities;
- a high-quality natural environment, including protected natural areas, waterways and beaches; and
- environmental infrastructure, including public open space, national, state and regional parks and opportunities for outdoor recreation.

Infrastructure priorities in the SEQ Regional Plan

The SEQ Regional Plan defines the regional land use pattern and desired regional outcomes, and establishes priorities for infrastructure investment across SEQ. Key strategic directions in the SEQ Regional Plan include:

- *A more compact urban form*
  Accommodating a higher proportion of population growth within existing urban areas will achieve the most efficient use of land, infrastructure and services. In particular, the SEQ Regional Plan seeks to increase population density around transport nodes and in Activity Centres, assisted through appropriate urban renewal and infill developments. This will not only assist with a more compact urban form, but also aid the provision of better public transport services to a greater share of the population.
- *Development in the Western Corridor*
  Many of the opportunities for major developments are in the Western Corridor, which includes the greater Ipswich area, extending generally from Wacol through Ipswich City to Amberley and including Ebenezer, Swanbank, Ripley Valley and Springfield. This increase in development is supported by the corridor's potential for major industrial uses, its capacity to support employment growth, and the availability of affordable and relatively unconstrained land.
- *Sub-regional self-containment*
  The SEQ Regional Plan seeks to reduce traffic and limit congestion on the road system by encouraging communities to access goods and services, jobs and leisure within their sub-regional or local areas, wherever possible. This will strengthen communities across the region and reduce environmental impacts.

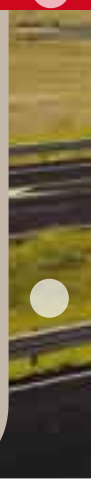
The SEQ Infrastructure Plan and Program

The SEQ Infrastructure Plan outlines the Queensland Government's infrastructure priorities to support the SEQ Regional Plan. Regionally significant infrastructure projects are listed with associated timeframes and budgets. These are based on immediate priorities, with appropriate consideration for the long-term future sustainability of the region and its infrastructure needs.

The SEQ Infrastructure Plan has been developed to support growth of the SEQ region. In some cases, infrastructure will be delivered during early stages of urban development to influence development activity and regional growth. Early provision of selected projects will also assist the growing regional population to develop sustainable patterns in their use of infrastructure and services, such as public transport, water supply and local community facilities.

The SEQ Infrastructure Plan is linked to the annual State Budget process and is the principal mechanism for identifying, prioritising and delivering infrastructure projects to support the SEQ Regional Plan outcomes. It also assists the coordination of infrastructure and services provided by state agencies and Government-owned corporations, as well as local government and the private sector.

By providing greater certainty on the nature and timing of regional infrastructure projects and through improved coordination processes, the SEQ Infrastructure Plan will also assist the development of well-planned communities and improved housing affordability.



Updating the SEQ Infrastructure Plan

The SEQ Infrastructure Plan is updated each year to reflect new developments in the region. As development in SEQ progresses and more detailed planning is undertaken, additional projects may be identified in the SEQ Infrastructure Plan and subsequently delivered. The annual process for updating the SEQ Infrastructure Plan has three major phases:

Planning phase

- From June to November each year, state agencies responsible for providing infrastructure and services review their infrastructure priorities against the SEQ Regional Plan using updated Budget information and information about progress on the SEQ Regional Plan. Decisions about relative priorities for future investment may also be informed by investigations and local government priorities.

Review phase

- In October/November each year, state agencies review progress of the Infrastructure Plan in supporting the SEQ Regional Plan.

Budget phase

- From December each year, the Queensland Government develops a consistent view about the relative priority of future infrastructure investment in SEQ, within the context of the total State Budget.

To ensure coordination with local governments in SEQ, Queensland Government representatives meet regularly with infrastructure planners and local government sub-regional coordinators.

Funding the SEQ Infrastructure Plan

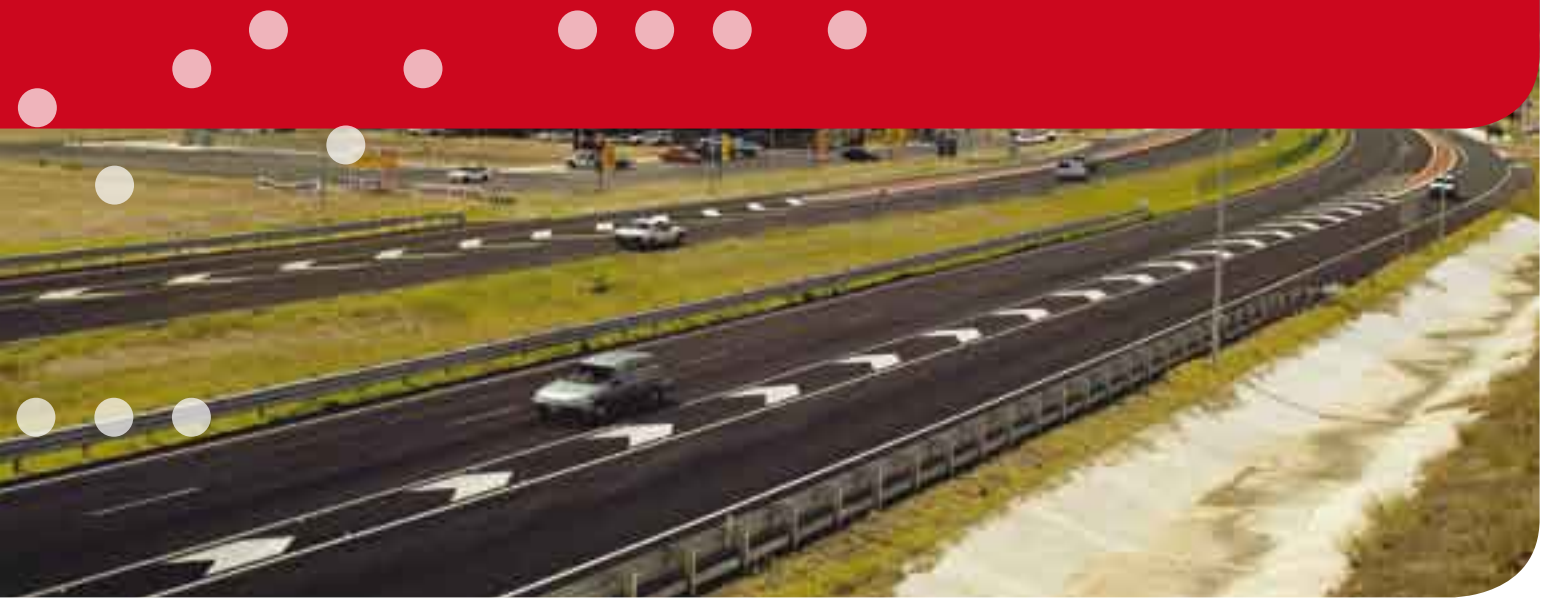
The main sources by which the Queensland Government funds infrastructure are cash flows, borrowings and alignment of the government's capital portfolio. Some funding for regionally significant infrastructure will be provided through State Infrastructure Agreements with developers in Major Development Areas.

Options for funding and delivery of projects in the SEQ Infrastructure Plan are evaluated, where appropriate, through the Queensland Government's Value for Money Framework (VfM Framework). In this way, priorities and solutions can be assessed to promote innovation and ensure maximum effectiveness of the Queensland Government's investment. A partnership between the public and private sector is a key component of the VfM Framework, ensuring the respective skills of each sector are best used to deliver effective infrastructure and services in a timely manner. The VfM Framework also describes the tasks involved in implementing Queensland's Public Private Partnerships (PPP) policy.

Partnerships with the private sector

The Queensland Government will work in conjunction with the private sector to deliver major projects where appropriate. The following SEQ projects have been identified for possible joint funding and/or delivery with the private sector:

- Airport Link
- Toowoomba Bypass
- Gold Coast Rapid Transit project
- Regional hospitals
- Selected state schools



The Queensland Government is in a strong financial position, which it is committed to maintain. The *Charter of Social and Fiscal Responsibility* details the Government's approach to capital investment – that borrowings or other financial arrangements will be undertaken only for capital investments and only where these can be serviced within the operating surplus, consistent with maintaining an AAA credit rating.

The annual State Budget papers will provide updated estimates of the Queensland Government's capital program. Estimates of the recurrent cost of the capital program, including borrowings, are also fully incorporated into the Budget.

Contributions for funding projects come from all three levels of government, with various projects having a sub-regional, regional or national interest. The Australian Government has a role in funding infrastructure in SEQ, including transport projects through the AusLink program, and water projects through the Australian Water Fund. Local government is also providing funding support in areas such as transport and water supply.

State Infrastructure Agreements

The SEQ Infrastructure Plan represents a significant commitment to additional expenditure by the Queensland Government. In some instances, expenditure on infrastructure will be used to lead development to achieve specific outcomes in SEQ. This will provide clear benefits to some sections of the community. In these instances, the Queensland Government considers it reasonable for beneficiaries to bear some of the cost of this additional infrastructure provision.

Where the Queensland Government is providing new infrastructure to lead development in the region, and it is ahead of full anticipated demand, landowners and developers of new areas who stand to benefit significantly will be required to contribute to infrastructure provision through a State Infrastructure Agreement.

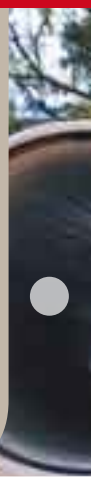
Delivering the SEQ Infrastructure Plan

The SEQ Infrastructure Plan comprises more than 350 projects over the next 20 years to lead and support growth in the region. The Queensland Government recognises the SEQ Infrastructure Plan has been developed at a time when there are emerging shortages of skills and capacity to plan, design and build regionally significant infrastructure, coupled with increasing costs of raw materials. This challenges industry and government to deliver the SEQ Infrastructure Plan on time and within budget.

However, it is believed the commitments outlined in this Infrastructure Plan will encourage industry to invest in additional capacity and enable it to develop innovative approaches to planning, designing and delivering projects. To this end, the SEQ Infrastructure Plan has been developed with a focus on outcomes, not prescriptive solutions.

The Queensland Government has implemented a number of strategies to assist with implementing the SEQ Infrastructure Plan:

- creating the Department of Infrastructure that brings together the planning, facilitation and coordination capabilities of the Coordinator-General and the Office of Urban Management, as well as capability to deliver critical infrastructure, particularly the SEQ Water Grid;
- establishing the Program Management Office to oversee implementation of the SEQ Infrastructure Plan projects;
- establishing alliances and partnerships with the private sector, where appropriate, to deliver major projects;
- increasing agency capacity to implement infrastructure projects, including establishing units within key state agencies that are focused on the delivery of SEQ Infrastructure Plan projects;
- enhancing monitoring and review processes across state agencies to track progress in implementing projects; and
- preparing precinct master plans to ensure infrastructure investment is coordinated across delivery agencies and reflects desired regional outcomes; for example, ensuring new hospitals are integrated with public transport and other community facilities.



Driving delivery of the SEQ Infrastructure Plan

Located within the Department of Infrastructure, the Program Management Office (PMO) was established in 2006 to coordinate implementation of the SEQ Infrastructure Plan, identify smart ways to help deliver the program of projects, and resolve issues that may affect delivery of key projects.

The PMO works with industry and across state agencies to monitor implementation of the program and track project milestones. This helps sequence the program of infrastructure work to ensure there is a continuous flow of projects to the market. This not only assists in making better use of the skilled labour force, but also helps manage the impacts on industry and the community, while ensuring value for money for the Queensland Government.

PMO initiatives include:

- **Developing project pipelines to map when projects are in procurement and construction phases.** Updated every six months, these pipelines provide state agencies and industry with a clear understanding of work flows associated with the infrastructure program.
- **Establishing the SEQ Infrastructure Industry Taskforce.** The Taskforce creates a key link between senior government, industry and union representatives. Established in October 2006, this Taskforce focuses on:
  - streamlining infrastructure procurement processes;
  - developing strategies to ensure agencies and industry are appropriately resourced to deliver the program; and
  - ensuring that skills training programs are matched to specific project delivery outcomes.
- **Working across industry and government to support innovative procurement models.** This includes support for different delivery models (ranging from design and construct through to PPPs and alliances), streamlining the bidding processes, supporting early contractor involvement and the multi-staging of projects.
- **Monitoring and assessing skills and resources in the marketplace and developing strategies for their improvement.**
- **Monitoring and assessing regional and interstate competition for construction resources.**
- **Developing and maintaining a Community Engagement Index.** This is a database of community engagement activities, planning and infrastructure delivery activity by state agencies and local government. The index will help state agencies and councils coordinate their community consultation activities, and promote sharing of experiences and resources in community consultation.

Summary of infrastructure investment

This SEQ Infrastructure Plan identifies an estimated $56.1 billion of infrastructure projects to support regional planning outcomes in SEQ to 2026. Estimated investment expenditure in each infrastructure class is provided in Table 1. Total expenditure to the end of 2006 was $3.25 billion.

The SEQ Infrastructure Plan is updated annually to provide an up-to-date assessment of the region's infrastructure program. This 2007 edition outlines an investment increase of approximately $16 billion on the 2006 Infrastructure Plan. The additional investment has arisen through the inclusion of new projects arising from investigations, particularly in the areas of transport and water supply, indexation of costs to 2007 dollars, and the inclusion of additional infrastructure categories including the Port of Brisbane and Justice Services.

Estimated transport investment includes contributions from the Queensland Government, the Australian Government and Brisbane City Council. The total also includes investment by the Port of Brisbane Corporation, a Queensland Government-owned corporation, for infrastructure to service the port's growing import/export trade.

Estimated water investment includes projects being undertaken by the Queensland Government and funding assistance for projects being undertaken by local government and water service providers. The program also includes funding assistance from the Australian Government for the Western Corridor Recycled Water Project.

Estimated electricity transmission and distribution investment is indicated through to 2010-11. Investment beyond this time has not been identified as capital works programs need to take account of growth in electricity demand and regulatory determinations.

Social infrastructure investment incorporates three new regional hospital facilities, new corrective service facilities at Gatton and continuing commitments to education and training facilities.

Investment in infrastructure for electricity generation, gas reticulation, and information and communication technology is not included. These are competitive markets for which private sector investment cannot be forecast. Despite this limitation, this SEQ Infrastructure Plan provides details of current Queensland Government initiatives, mainly through its energy-related Government-owned corporations.

Table 1: Estimated investment identified in this Infrastructure Plan

Infrastructure class	Estimated investment 2007-2026 ($million)
Transport (including investigations)	35,299
Water	7,582
Energy (up to 2010–11)	5,077
Health	3,939
Education	2,848
Vocational educational and training	466
Regional sport and recreation	269
Justice Services	633
TOTAL	**56,113**

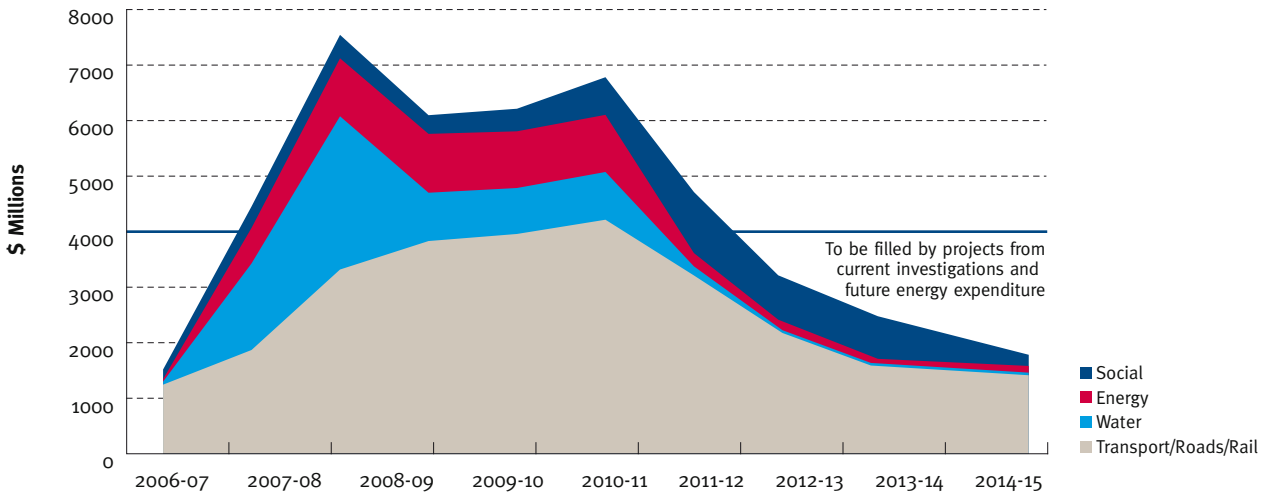
Notes:

1. Estimated investment is in 2007 dollars (where appropriate with the inclusion of several projects in out-turn dollars). Cost estimates in the State Budget and other public documents may differ, as they may incorporate project costs which reflect anticipated changes in input prices between initial planning and the time of construction. Estimated investment includes funds already spent on projects.
2. Infrastructure projects have been indexed to account for inflation and expected increases in construction costs. Refer to 'Cost estimates used in this Infrastructure Plan' on page 18.
3. Where funding is required from other levels of government, their estimated costs have been included. Where projects are part of (or connect to) the AusLink National Transport Network, these projects are subject to negotiation with the Australian Government.

In addition to this investment, energy projects between 2010-11 and 2025-26 are expected to require a further investment of approximately $11 billion. Transport projects arising from identified investigations may require investment of approximately $15 billion. Inclusion of this investment will result in an estimated $82.1 billion infrastructure program over the next 20 years.

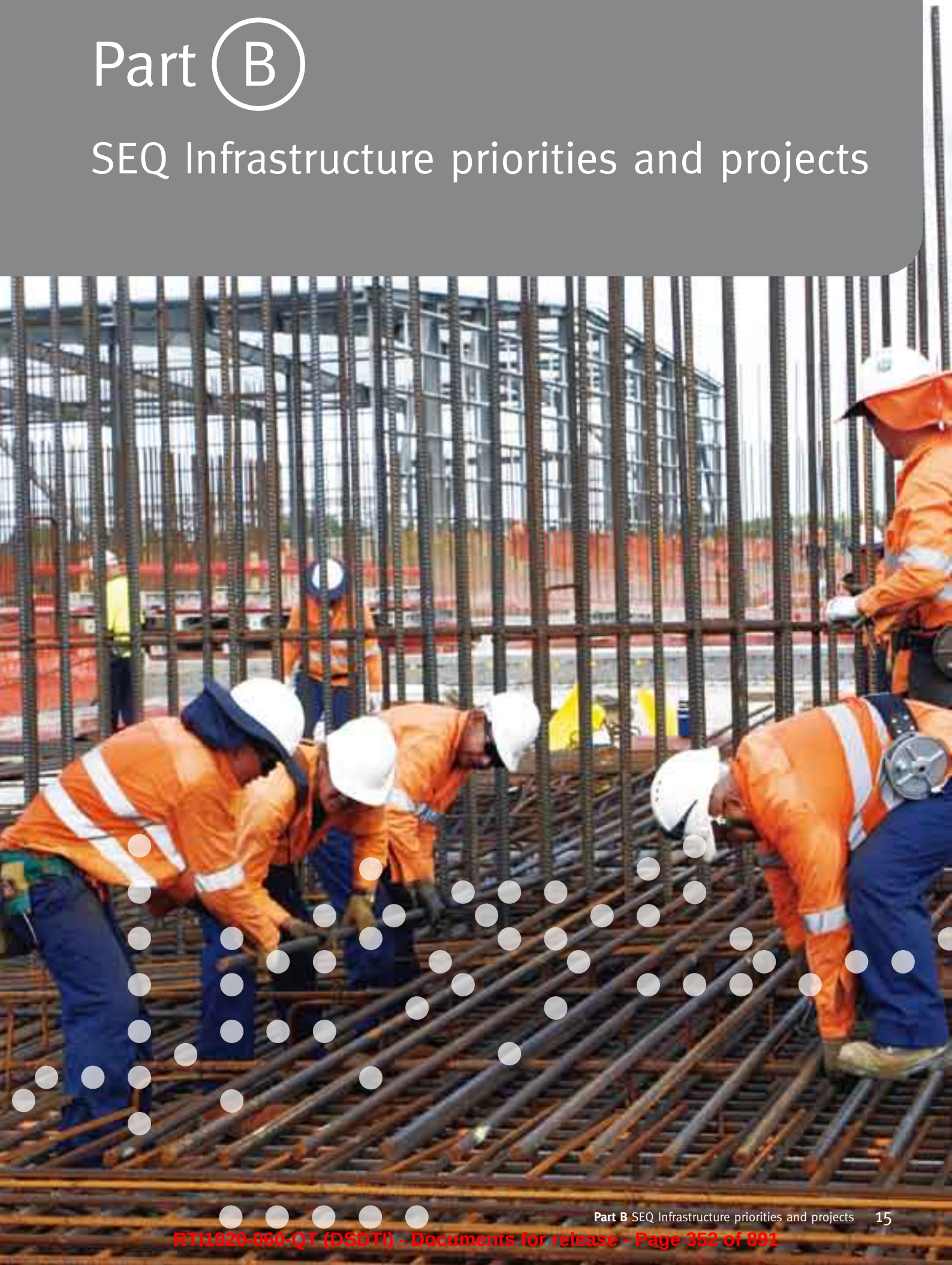
Figure 1 shows the predicted investment program. Expenditure on SEQ infrastructure has increased significantly over the past two years and will peak around 2007 to 2008 before levelling and remaining stable over the life of the program. Government agencies and industry have geared up to deliver this sustained program.

Figure 1: SEQ Infrastructure Plan activity 2007–2015

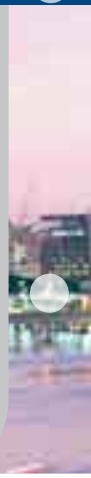


Part B

SEQ Infrastructure priorities and projects



Part B SEQ Infrastructure



Infrastructure issues and challenges

SEQ has experienced high and sustained population growth since the 1980s, growing at an average of 55,300 people each year between 1986 and 2004. The estimated population of the region in 2006 was around 2.8 million people. This is expected to increase to around four million people by 2026.

The projected increase in population in SEQ, combined with the continuing trend towards smaller households, will require an estimated 575,000 new dwellings by 2026. There will also be a greater demand for a diversity of housing form to match changing household structures, particularly the increase in one- and two-person households.

This population increase is expected to generate demand for around 425,000 new jobs by 2026. Many of these jobs will be in traditional industries, responding to increased levels of consumption. However, others will be new types of jobs, related to the emergence of new technologies and markets and the Queensland Government's objective of strengthening and diversifying the Queensland economy.

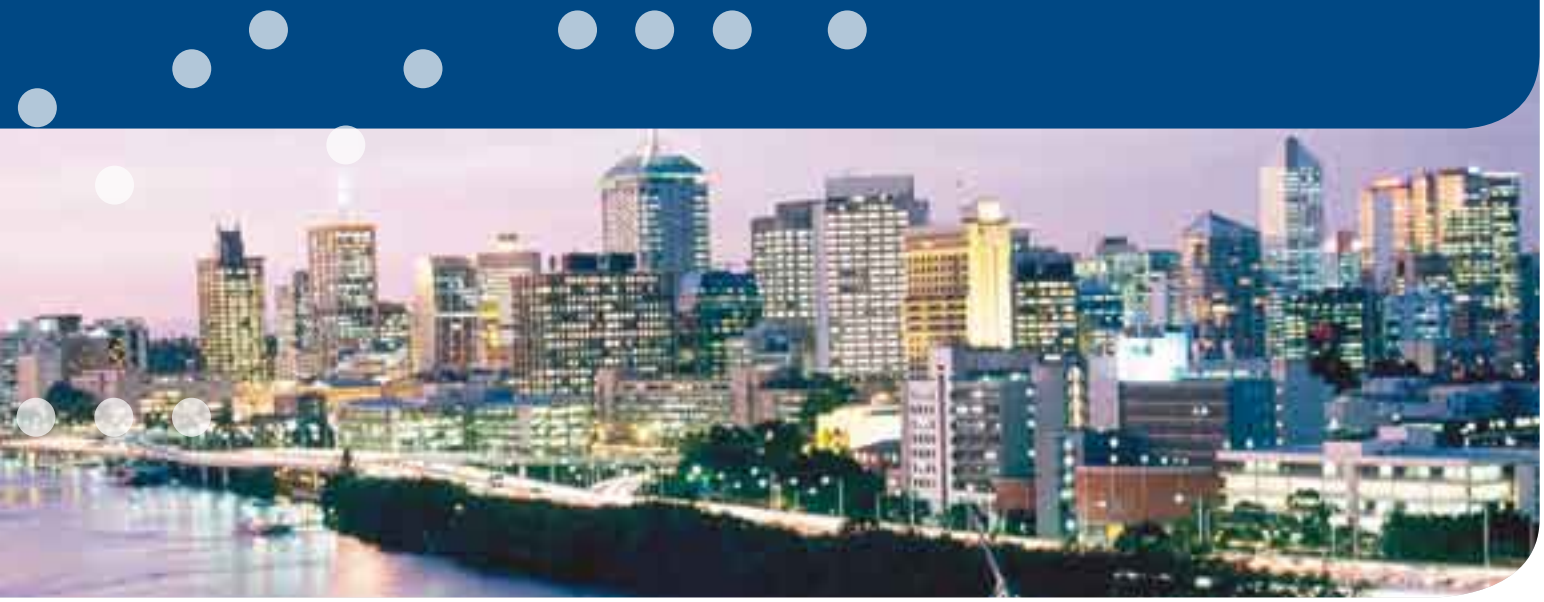
Increased population and employment, together with new ways of producing and delivering goods and services, will increase the need for new infrastructure in the region. Strategic investment in infrastructure will influence the pattern and rate of development across the region. Therefore, infrastructure investment must be planned carefully.

By creating certainty about the location for new and well-serviced developments, the SEQ Infrastructure Plan, together with the SEQ Regional Plan, will also assist the Queensland Government address issues of housing affordability. The SEQ Regional Plan recognises the importance of managing infrastructure demand, coordinating its provision, as well as planning and securing corridors and sites for future infrastructure developments.

Challenges for the future – project costs

Infrastructure costs are rising around the world. This will have a significant impact on the SEQ Infrastructure Plan in future years. Some adjustment to project priorities and timelines may be necessary in future versions of the SEQ Infrastructure Plan as cost impacts become evident over time.

Many of the projects in this Infrastructure Plan have retained the original investment estimates included in the 2005 edition, adjusted by a factor that accounts for inflation and some increases in material and construction costs. This approach will be used until such time as a business case for each project is approved by the Queensland Government.



SEQ Infrastructure Plan structure and timing

The SEQ Infrastructure Plan is organised by asset class. The transport section is further divided into sub-regional categories. Within each section, there is a description of the critical priorities, a schedule of indicative timing, and an estimated investment for each project.

The SEQ Infrastructure Plan is based on the planning horizon included in the SEQ Regional Plan, which provides the framework for managing growth, land use and development in SEQ to 2026. A formal review of the SEQ Regional Plan will be undertaken every five years and any changes are expected to be reflected in subsequent versions of the Infrastructure Plan. The first formal review of the SEQ Regional Plan is scheduled for release in 2010.

This Infrastructure Plan is presented in three time periods over the period to 2026:

First phase

From 2007-08 to 2010-11: this phase represents the four-year Forward Estimates period of the State Budget. It shows projects that have specific funding commitments in the Budget (with the exception of several projects that are noted in out-turn dollars where this information is available).

Second phase

From 2011–12 to 2014–15: this phase commits infrastructure investments to meet the strategic objectives for the region over this period, with estimated investment in 2007 dollars. This phase reflects the balance of the 10-year infrastructure commitment made by the Queensland Government in the 2005 SEQ Infrastructure Plan.

Third phase

From 2015-16 to 2025-26: this phase includes infrastructure which is likely to be required in the longer term and will need to be considered in future versions of the SEQ Infrastructure Plan. Projects are estimated in 2007 dollars.

The Queensland Government is in the third year of its 10-year commitment to SEQ infrastructure made in 2005. The SEQ Infrastructure Plan identifies key regional infrastructure investments by state agencies. It also refers to some Australian and local government projects relevant to the SEQ Regional Plan. Where projects involve a subsidy payment to local government (for example, in the water sector), the expected Queensland Government funding allocation involved is outlined, pending agreement with local government on timing and implementation.

The SEQ Infrastructure Plan includes some infrastructure projects where funding contributions are expected from the Australian Government and Brisbane City Council. In these cases, the timing and the delivery of the project are not under the control of the Queensland Government.

Cost estimates used in this Infrastructure Plan

The cost estimates provided in this Infrastructure Plan represent the best information presently available. To enable comparison across the 20-year period of the SEQ Infrastructure Plan, cost estimates are provided in real 2007 dollars (with the exception of several projects that are noted in out-turn dollars[1] where this information is available).

The level of detailed planning that underpins the cost estimates varies with each project. Where detailed investigations have been completed and funding approved by the Queensland Government, estimates in this Infrastructure Plan reflect that approved funding. Estimates for projects scheduled for delivery beyond 2010-11 have not undergone detailed evaluation. Most estimated investment has been indexed to reflect the price movements currently occurring in the relevant industries.

The indices used to escalate estimates from 2006 to 2007 dollars are based on the *Australian Bureau of Statistics National Accounts, State Details, December Quarter 2006* (5206.0), released 7 March 2007, as follows:

- For non-residential construction in Queensland (such as schools and hospitals), the annual growth index (seasonally adjusted) was 8.5 per cent in December quarter 2006.
- For engineering construction in Queensland (including roads, rail, ports), the annual growth index (seasonally adjusted) was 7.5 per cent in December quarter 2006.

Cost estimates have been escalated by these factors, except where projects are investigations or where detailed costs have been approved by the Queensland Government. Energy costs have been indexed by the relevant Government-owned corporations with regard to regulatory determinations.

These indices provide a general indicator of price pressures across relevant industries. Cost pressures in particular industries may vary, sometimes significantly, from general indices. These cost pressures will be examined during detailed evaluation of individual projects.

In addition, unless a new business case has been approved during 2006-07, cost estimates for construction projects have been rounded upwards after this index is applied. The extent of rounding varies according to the size of the project, thus reflecting the increasing uncertainty of estimates for large projects delivered in future years.

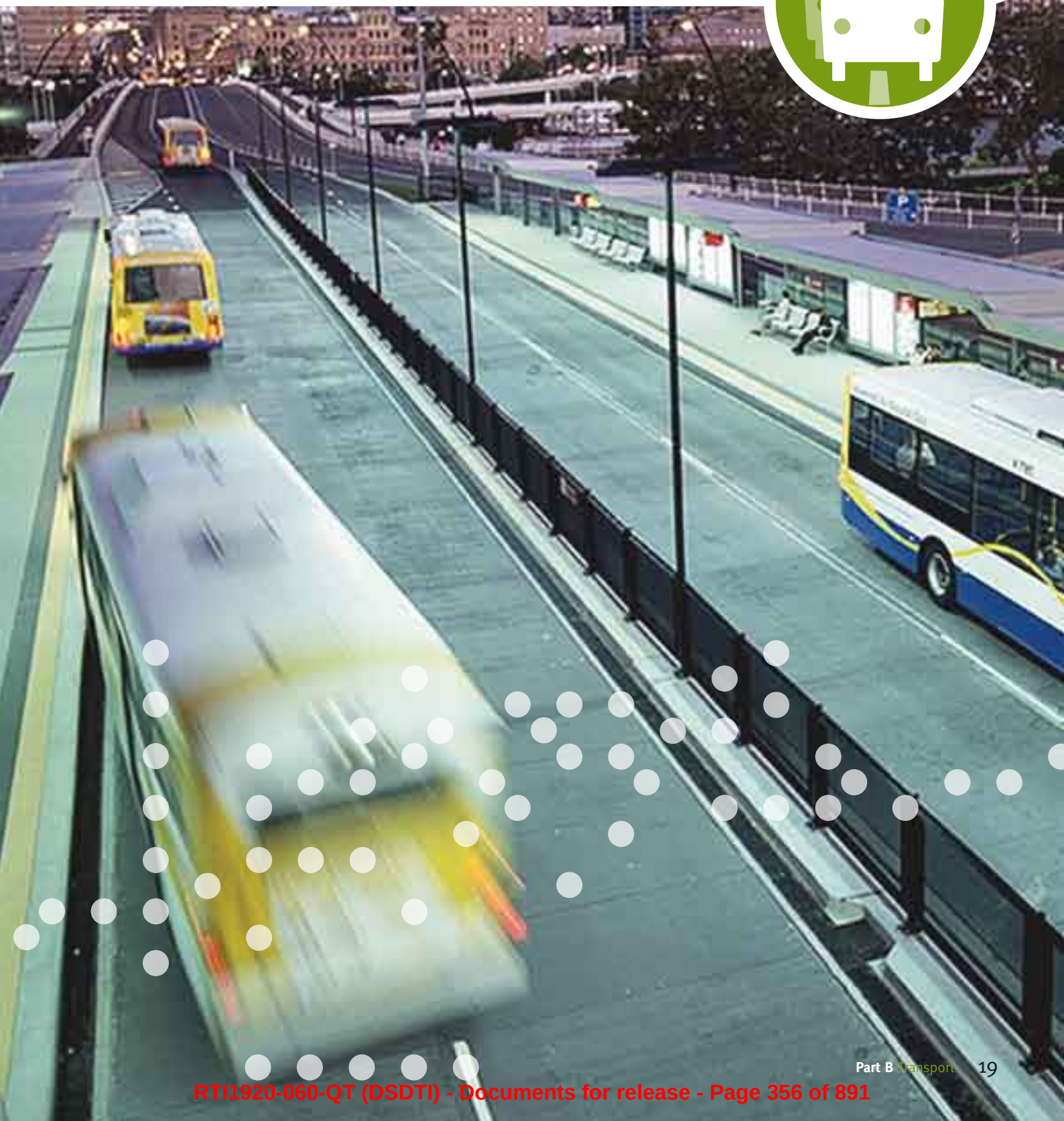
1 Project costs are typically estimated in current-day dollars and expressed, for example, as 2007 dollars. The timing of the project's delivery and the degree of cost escalation that is predicted to occur over the construction timeframe need to be added to the current-day estimate to provide the out-turn cost. Budget funding is provided for the estimated out-turn of the project.

Infrastructure investment is classified into four types depending on the level of investigation, approval and progress as follows:

- **Type 1** = Preliminary estimate: the earliest estimate for a project that is typically in its initial planning stages. This estimate is usually based on a preliminary concept design.
- **Type 2** = Pre-market estimate: the estimate based on a more detailed review of scope and requirements. This estimate is determined after the government has assessed the costs and benefits of a project.
- **Type 3** = Market price: the price agreed with the contractor. It is no longer an estimate nor is it a cost since it has not been incurred.
- **Type 4** = Completed project cost: the total cost of the project, which will normally consist of the market price plus any variations.

Large projects comprising a number of sub-projects may fall under two or more of the investment categories.

Part B Transport



Transport

Planning and investing in the region's transport system will facilitate development of the preferred SEQ future land use pattern and associated regional economic and social objectives. The SEQ Infrastructure Plan outlines a balanced program of investment between transport modes, including a specific focus on public transport, walking and cycling. A range of policy and travel behaviour measures, funded by state and local government, will support these investments and the efficient use of existing infrastructure.

SEQ's growing population relies heavily on the region's transport network for its own mobility and for movement of a vast range of goods and services, and their providers, to meet its needs. From commuters accessing their workplaces, children travelling to school or weekend sports, shopping trips and leisure outings, our society places an enormous demand on the transport system to move people in a safe, timely, efficient and environmentally friendly manner.

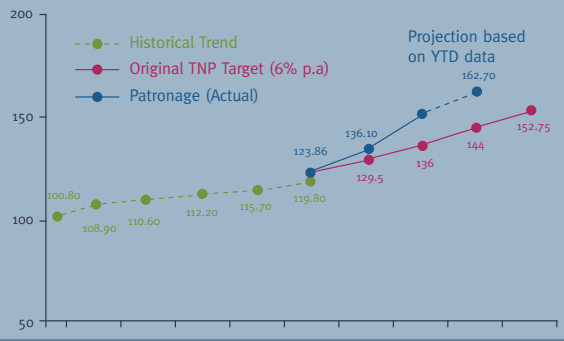
This Infrastructure Plan aims to provide a greater number of travel options by enhancing and extending public transport networks and operations using rail or bus. It will achieve this by upgrading the trunk and regional road network, and encouraging healthy and sustainable modes of transport such as walking and cycling by investing in expanded pedestrian and cycling paths.

Public transport patronage growth

Through the *TransLink Network Plan*, TransLink has made significant improvements to public transport services across SEQ. As a result, there has been significant growth in public transport use across SEQ.

In the 2005-06 financial year more than 150 million passenger journeys were made across the TransLink system – an increase of 16 million journeys from the previous year. This figure is projected to grow to 162.7 million in 2006-07.

Figure 2: Public transport patronage trend for SEQ



Patronage increases for this period were around 14 per cent for Greater Brisbane, 13 per cent for Ipswich, 10 per cent for the Gold Coast and 14 per cent for the Sunshine Coast. Logan was notable with a 29 per cent increase. Patronage on Queensland Rail Citytrain services grew by 10 per cent and Brisbane City Council ferries by 13 per cent.

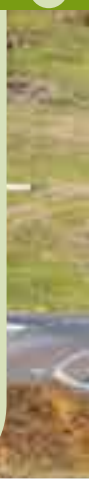
The Queensland Government is responding to this growth by providing additional public transport services, new buses and railway rollingstock and investment in infrastructure outlined in this Infrastructure Plan.

The introduction of smart card ticketing in late 2007 will make public transport even easier to use. Passengers will simply touch on and touch off for each trip and the correct fare will be automatically calculated and deducted from the passenger's smart card. The system is currently being piloted and smart card equipment is being rolled out across SEQ.

However, there is more to the transport system in SEQ than moving people. Transportation of goods and services is vital to the region's economic growth. Freight tonnage across all of Queensland is forecast to double by 2020. This is also expected to be the case in SEQ with the rapidly expanding import and export activities of the Port of Brisbane being a key driver. This has significant impacts on the road and rail transport corridors that service the Australia TradeCoast area (which principally includes the Brisbane Airport and Port of Brisbane). The challenge is to improve transport system efficiency so that road space is shared effectively between heavy vehicles, passenger vehicles and cyclists, with passengers and freight sharing railway space.

This Infrastructure Plan identifies a number initiatives to improve freight movement in SEQ.

In addition, various transport investigations are taking place in future growth areas in SEQ to ensure that transport networks will sufficiently cater for the increase in freight needed to service growing communities.



Western Corridor

A significant share of the region's growth will be situated in the Western Corridor, which extends generally from Wacol through Ipswich City to Amberley and includes Ebenezer, Swanbank, Ripley Valley and Springfield. Development in the Western Corridor is a key feature of the SEQ Regional Plan to encourage urban development away from the coast; therefore, the timely provision of infrastructure to lead development in the Western Corridor will be vital.

Table 2 outlines a transport infrastructure investment program for the Western Corridor. To support population and employment opportunities around the centres of Ipswich, Springfield and Ripley Valley, the program focuses on upgrading existing and constructing new roads and public transport facilities. The program also recognises the strategic importance of freight links in the Western Corridor, as well as the need to identify future transport needs through investigations.

The first phase of this Infrastructure Plan (2007–08 to 2010–11) addresses three major issues in the Western Corridor:

- *Improving traffic congestion on the Ipswich Motorway*

  The Ipswich Motorway is the main road connecting Ipswich and areas further west of Brisbane, and is an important section of the AusLink national network. In early March 2007, the Australian Government announced funding of $2.3 billion for the six-lane Goodna Bypass from Dinmore to the Logan Motorway at Gailes, to be built by 2012.

- *Improving passenger rail services on the Ipswich line*

  Planning is underway to upgrade the Ipswich line to provide additional line capacity to cater for the public transport needs of existing and future residents in the Western Corridor. Detailed design is progressing on the Corinda to Darra section.

- *Improving road and public transport links to service growing population centres at Springfield and Ripley Valley*

  Design and early works are underway for a passenger rail line from Darra to Springfield to provide an additional public transport option for this growing centre. The road network is being further developed by extending the Centenary Highway through the Ripley Valley to Yamanto, and by planning for duplication of the Centenary Highway between Ipswich Motorway and Springfield.

The second phase of this Infrastructure Plan concentrates on completing key projects commenced in phase one, as well as providing additional roads and public transport to cater for the expected growth in Springfield and Ripley Valley. Of particular note is that the preferred public transport corridor through Ripley Valley from Springfield to Ipswich has now been identified.

The third phase covers the period past 2014–15. The sequence and timing of projects will continue to support the area's role as a major freight transport hub.

Transport investigations

- *Ipswich Motorway alternative northern corridor*

  Traffic problems along the Ipswich Motorway are well documented, with a capacity upgrade along that corridor a high priority for the Queensland Government. In March 2007, the Australian Government announced its decision to construct the alternative northern corridor (Goodna Bypass) between Dinmore and the Logan Motorway.

- *Springfield to Ipswich public transport corridor planning*

  Investigations are underway to determine the optimum future public transport corridor between Springfield and Ipswich (and particularly through Ripley Valley) that links the key Activity Centres of the area, including the University of Queensland Ipswich Campus, and maximises the opportunities for transit oriented development along the corridor. A key goal is to improve public transport services between the major centres by linking the Ipswich City Centre, the University of Queensland, future Yamanto Centre, future Ripley Valley Town Centre, Swanbank Business Park, Redbank Plains South and

Springfield Town Centre, and to integrate the corridor with existing and proposed land uses. Opportunities for transit oriented developments may arise at Redbank Plains, Ripley Valley Town Centre and within the existing urban area of Ipswich. A review of environmental factors has identified the preferred corridor alignment for further environmental impact assessment.

- *Southern Infrastructure Corridor (rail)*

  The Queensland Government is investigating the provision of a dedicated freight corridor to connect emerging industrial precincts in the Ipswich area, particularly Ebenezer, with the standard-gauge interstate rail line in the vicinity of Bromelton (Beaudesert Shire). These sites have been identified as being strategically located to take advantage of this next phase of industrial development. Preliminary planning has identified a viable rail corridor. Detailed planning and an impact study will commence in mid-2007 to finalise a corridor for a dual-gauge freight rail line linking these two future transport hubs.

- *Logan Motorway Upgrade investigations*

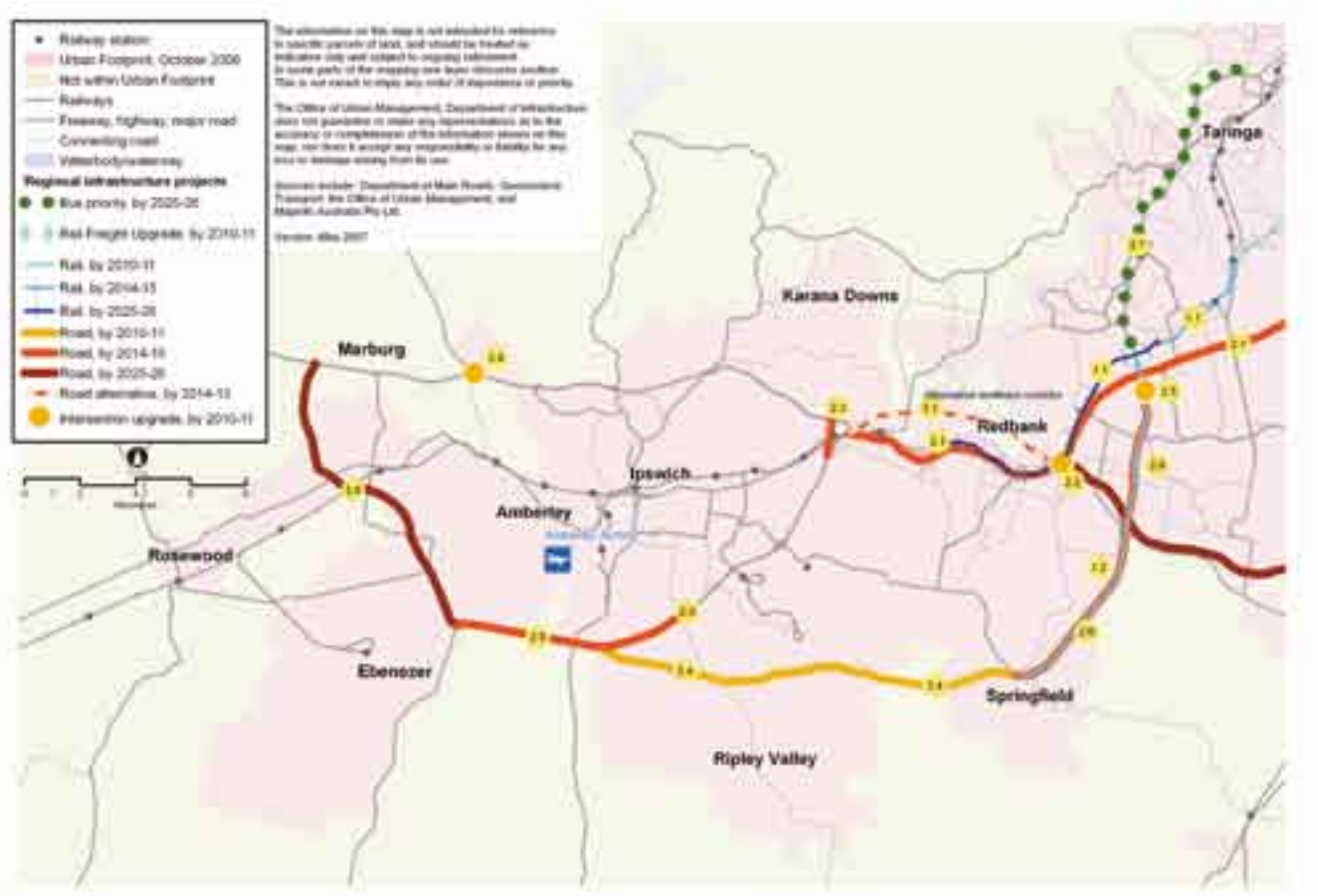
  An investigation will look at the need to progress upgrading of the Logan Motorway to six lanes to accommodate rapid population growth and economic activity in the area, as well as capacity improvements on the Ipswich Motorway and Gateway Motorway.

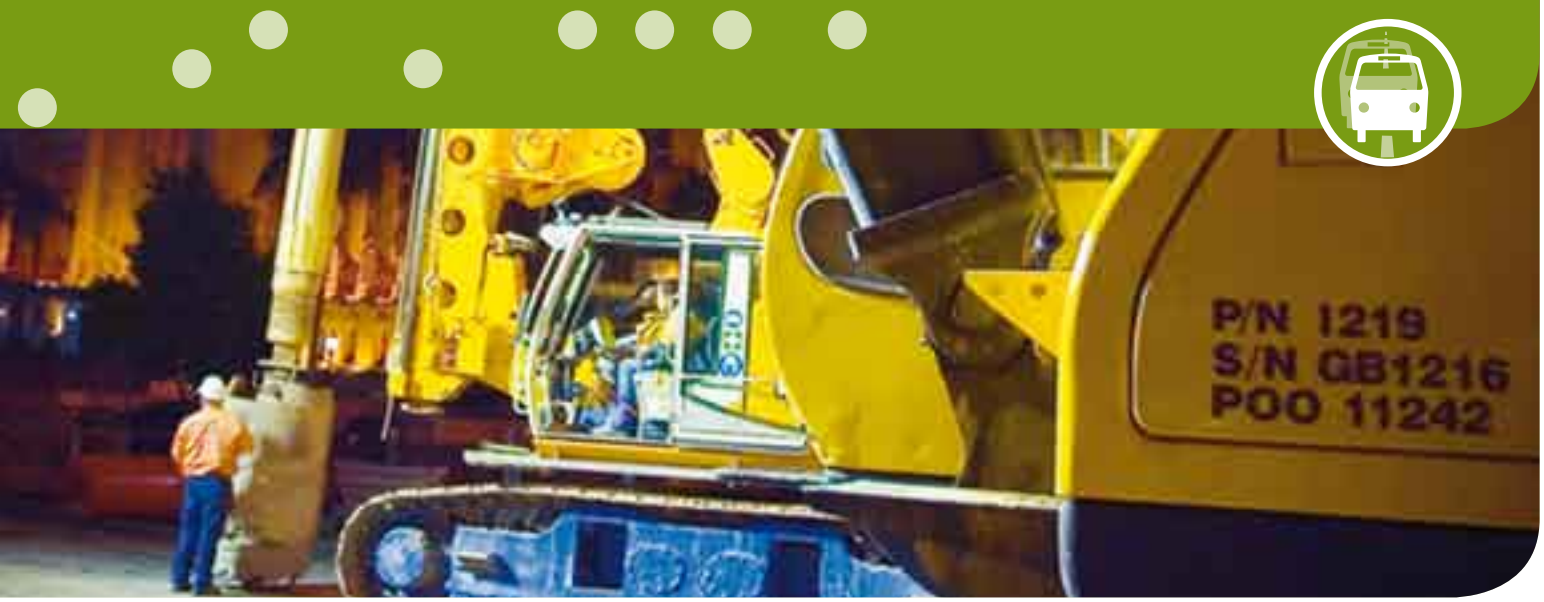
In addition, various transport investigations are taking place in future growth areas in the Western Corridor to ensure that transport networks will sufficiently cater for the increase in freight needed to service growing communities.

Progress on transport projects in the Western Corridor during 2006-07

- Preliminary design has been completed and the preferred alignment has been selected for the third track from Corinda to Darra on the Ipswich rail line.
- Investigations into a dual-carriage road and a rail connection for the Springfield transport corridor are underway, to provide a four-lane extension of the Centenary Highway from the Ipswich Motorway to Springfield and a new rail line between Darra and Springfield.
- The Ipswich to Springfield Public Transport Corridor Study's Review of Environmental Factors (REF) has been completed. An environmental impact assessment of the preferred alignment has commenced. The study is anticipated to be completed in June 2007.
- Reconstruction of the Ipswich Motorway/Logan Motorway interchange and a 2-kilometre stretch of the Ipswich Motorway between Goodna and Gailes started in February 2007 and is expected to take about two years to construct. Design of the adjacent section between Wacol and Darra is progressing with construction expected to commence in the second half of 2007.
- Construction is underway on the two-lane extension of the Centenary Highway from Springfield to Yamanto with completion expected in mid-2009. In April 2007, tenders were called for construction of the South Deebing to Yamanto section.
- Main Roads is developing a business case to determine the feasibility of providing the Toowoomba Bypass project through joint delivery with the private sector. This project is part of the AusLink national network and is funded by the Australian Government.

Map 1a – Western Corridor transport infrastructure





Map 1b – Western Corridor transport infrastructure

Table 2: Western Corridor transport infrastructure

Map reference	Project	Estimated investment $m	Type of estimate (see note 4)	Delivery timeframe		
				2007-08 to 2010-11	2011-12 to 2014-15	2015-16 to 2025-26
Public transport connections						
1.1	Ipswich rail line Corinda to Darra, Darra to Redbank third rail track	330	1	Detailed design		
1.2	Springfield passenger rail line	340	1	Detailed design underway		
1.3	Translink sub-regional station upgrade program	30	1 & 2	Planning underway		
Walking and cycling						
1.4	Sub-regional cycle network	25	3	Planning underway		
Major road network						
2.1	Ipswich Motorway upgrade (including Alternative Northern Corridor)	2600	1	Design underway – Wacol to Darra		
2.2	Logan Motorway/Ipswich Motorway interchange	#255	3	Construction underway		
2.3	Cunningham Highway to Warrego Highway connection	80	1	Planning underway		
2.4	Centenary Highway two lanes: Springfield to Ripley, Ripley to Yamanto	345	2 & 3	Construction underway		
2.5	Centenary Highway/Boundary Road underpass (joint Brisbane City Council and Main Roads project)	#43	3	Construction underway		
2.6	Centenary Highway four lanes: Ipswich Motorway to Springfield	500	1	Planning/design underway		
2.7	Centenary Highway bus priority/transit lanes Ipswich Motorway to Toowong	290	1	Preliminary planning underway		
2.8	Western Ipswich Bypass	230	1			
2.9	Cunningham Highway four lanes: Ripley Road to Yamanto, Yamanto to Ebenezer	110	1			
Toowoomba						
3.2	Toowoomba Bypass: four lanes, including new range crossing	800	1	Planning underway		
3.3	Gowrie to Grandchester rail line	1200	1			
3.4	Warrego Highway/Brisbane Valley Highway interchange	60	1	Planning underway		
Investigations for transport infrastructure (refer Map 6)						
WC4.1	Ipswich Motorway alternative northern corridor investigation	10	3	Preferred corridor announced		
WC4.2	Southern Infrastructure Corridor (rail: Ebenezer to interstate standard-gauge rail)	4	3	Study underway		
WC4.3	Sourhern Infrastructure Corridor (road: Yatala to Cunningham Highway)	10	1			
WC4.4	Ipswich to Springfield Public Transport Corridor Study	1	3	Study underway, preferred corridor identified		
Total		**7263**				
3.1	Warrego Highway: Plainlands interchange	14	4	Completed in 2005–06		

WC = Western Corridor

Notes:

1. The table identifies the delivery timeframe for each infrastructure project. Projects that are underway with a cumulative minimum expenditure of $0.5 million to 2006-07 on planning, design, site acquisition, materials procurement or construction are identified in yellow.
2. Estimated investment is in 2007 dollars (with the exception of projects marked '#' which are in out-turn dollars). Cost estimates in the State Budget and other public documents may differ, as they may incorporate project costs which reflect anticipated changes in input prices between initial planning and the time of construction. Estimated investment includes funds already expended on projects.
3. Where funding is required from other levels of government, their estimated costs have been included. Where projects are part of (or connect to) the AusLink National Transport Network, these projects are subject to negotiation with the Australian Government.
4. For an explanation on the types of estimates, refer to page 18.

Greater Brisbane

The Greater Brisbane sub-region is defined in this Infrastructure Plan as the cities of Brisbane, Logan and Redcliffe and the shires of Redland, Pine Rivers and Caboolture.

Greater Brisbane is expected to accommodate a large proportion of development proposed for SEQ. In outer areas, such as Pine Rivers and Caboolture Shire, most of this development will occur on greenfield sites. Within Brisbane City, an increasing amount of development will occur around existing Activity Centres, public transport nodes and infill development sites.

Table 3 outlines a transport infrastructure investment program for the Greater Brisbane area. Strategic transport needs in this area include:

- quality public transport connections between Activity Centres including the Central Business District (CBD);
- better transport links to industrial and logistics centres, particularly to the Australia TradeCoast (ATC); and
- orbital road networks that link centres outside the inner city and provide a sound basis for future traffic management.

The first phase of this Infrastructure Plan (2007-08 to 2010-11) addresses four major issues in the Greater Brisbane area:

- *Extending and improving public transport infrastructure*

  Public transport infrastructure, such as railways and busways, is being expanded and upgraded in areas where the SEQ Regional Plan encourages growth. Busways are now being planned and expanded along northern, southern and eastern spines to enable public transport to have a greater role in these corridors.

- *Improving freight transport links to the Australia TradeCoast*

  The expected growth in container traffic through the Port of Brisbane, and air freight and passenger movements through Brisbane Airport, will require significant improvements to road and rail networks. The Gateway Upgrade Project is a major initiative which will support this growth.

- *Supporting active transport choices*

  Active transport choices such as cycling and walking are being encouraged in this Infrastructure Plan. Two new pedestrian and cycle bridges, including one from the Millennium Arts precinct (on Brisbane's south bank) to the inner city, will build on the success of the Goodwill Bridge. The sub-regional cycle network will continue to be expanded.

- *Improving road infrastructure*

  This Infrastructure Plan incorporates the North–South Bypass Tunnel, Airport Link and the Hale Street Link, as well as investigations into road networks in western Brisbane.

  Subsequent phases of the SEQ Infrastructure Plan will build on existing projects.

Transport investigations

A number of significant transport investigation studies are underway to provide for future development of the Greater Brisbane area, including:

- *Western Brisbane Transport Network Investigation*

  The Western Brisbane Transport Network Investigation is a major study examining the future transport needs for the area west of the Brisbane CBD. It is looking at ways to maintain and improve accessibility, as well as address transport systems issues in the west and north-west of Brisbane, including the needs of freight and passenger transport. The study is expected to be completed by mid-2008.

- *Further TransApex investigations*

  Brisbane City Council (BCC) has commenced a pre-feasibility study of the Northern Link proposal as part of its TransApex plan. Northern Link is a proposed tunnel and road project, approximately 4.5 kilometres long, linking the Western Freeway at the Toowong roundabout to the Inner City Bypass at Kelvin Grove. There is currently no funding commitment to this link.

- *Increased rail capacity in inner Brisbane*

  Given the existing growth in demand, service increases and proposed extensions to the rail network, rail services through inner Brisbane will be significantly constrained by the limited capacity of the Merivale Bridge and the existing CBD rail tunnels by 2016. The Inner City Rail Capacity Study is investigating opportunities to increase rail capacity in inner areas and to create additional stations in areas of high demand through the development of an underground rail system. The key output of this study will be an Inner City Rail Masterplan, which will identify upgrades to the existing rail network as well as a new rail network, including river crossings, required to support growth in rail services.

- *Inner City Bus Access Capacity Study*

  Rising patronage levels are placing pressure on critical inner city bus infrastructure, particularly on the inner approaches and junctions of the South East Busway, North Quay, Riverside (Creek Street), Adelaide Street and the Queen Street Bus Station. In parallel with the expansion of the busway network (Northern and Eastern Busways, Inner Northern Busway and Boggo Road links), this investigation aims to ensure additional busway services can operate efficiently throughout the CBD. The study is examining future inner city bus operating scenarios and the necessary additional infrastructure required to support these operations. Stage 2 of the *Inner City Bus Access Capacity Study* is underway with a working paper expected in late 2007.

- *Australia TradeCoast Transport Study*

  Ongoing development of the ATC precinct has significant impacts on the transport network in SEQ. Queensland Transport, in collaboration with the ATC partners, is undertaking the *Australia TradeCoast Transport Study* to identify transport infrastructure required to support future development of the ATC. The study will lead to the development of an integrated transport and land use strategy, which will outline preferred land use outcomes and a joint agency implementation plan covering transport infrastructure and services. It will investigate options for the integration of transport and land use over a 20-year time period. The study is due for completion by late October 2007.

- *Gateway Motorway (Nudgee Road – Bruce Highway)*

  Ongoing development of the ATC, as well as north–south transport movements through Brisbane City, will continue to increase travel demand on the Gateway Motorway. A study is urgently required to identify transport needs necessary to improve safety and efficiency of the transport network, focusing on the Gateway Motorway from Nudgee Road to the Bruce Highway.

- *Hamilton/Eagle Farm Transport Investigation*

  The Hamilton/Eagle Farm Transport Investigation is nearing completion, with the aim of determining a preferred public transport solution to service proposed developments in the area. The investigation will assess the feasibility of establishing connections across various modes of public transport. The study is expected to be completed by late 2007.

- *Mt Lindesay/Beaudesert Strategic Transport Network Investigation*

  Detailed investigations are underway into the longer-term strategic transport network needs of the Mt Lindesay/Beaudesert area, including road, public transport and freight links. The study area is generally bounded by the Cunningham Highway, Logan Motorway and the Pacific Highway to the NSW border. The study will provide recommendations on priority corridors which need to be preserved and will confirm the strategic need for new transport corridors including the Gateway Motorway extension and Southern Infrastructure Corridor. The study will also consider the Interstate Rail Corridor and other important road, rail, public transport and cycle infrastructure corridors. The study is expected to be completed by late 2007.

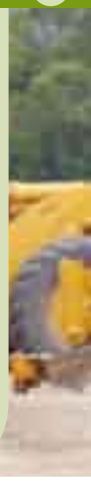
- *Salisbury to Flagstone/Greenbank Passenger Rail*

  The Interstate Rail Corridor Technical Feasibility Study, undertaken to examine the existing corridor's capability to accommodate passenger services while having regard to freight requirements, is complete. This work is considered an important input into the Mt Lindesay/Beaudesert Strategic Transport Network Investigation.

- *North Moreton Transport Network Study*

  The North Moreton area (comprising Caboolture and Pine Rivers shires and Redcliffe City) is experiencing rapid population growth. In response to this growth, the SEQ Infrastructure Plan includes more than $1.2 billion of transport projects in this area by 2026. The North Moreton Transport Network Study will address transport issues and provide a framework for more detailed transport planning by state and local government. This project will assist in integrating and coordinating land use and transport investment to achieve the best integrated transport outcomes for the North Moreton community.

Part B Transport



Progress on transport projects in the Greater Brisbane area during 2006-07

- Construction of the Queen Street to Roma Street section of the Inner Northern Busway is progressing on schedule and is due for completion in mid-2008.
- The preferred alignment for the Eastern Busway between Buranda and Capalaba has been identified. The final Concept Design and Impact Management Plan are currently under review. Construction of the initial stages is expected to commence in mid-2008.
- BCC opened the Eleanor Schonell Bridge in early 2007, providing a new cross-river link between Dutton Park and the St Lucia campus of the University of Queensland. The link provides access for buses, cyclists and pedestrians.
- Major construction commenced on the Boggo Road Busway linking the Eastern Busway to the Eleanor Schonell Bridge and is scheduled for completion by mid-2009.

Supporting cycling in Greater Brisbane

The SEQ Integrated Regional Cycle Network Plan was completed in consultation with local government, with significant grants provided to local government to commence construction. Construction is almost complete on the Normanby Pedestrian and Cycle Link and plans are being finalised for the Inner Northern Busway Brisbane Cycle Centre at King George Square (in consultation with Brisbane City Council). This will provide a premier cycling facility within the Brisbane CBD.

The Smart Travel Centre - Queensland was established in 2006 to influence more sustainable transport choices, particularly walking, cycling and using public transport. Amongst other sustainable transport initiatives, the centre provides grants to local government in SEQ for cycling infrastructure.

- The preferred design and construction managing contractor for the Tank Street pedestrian and cycle bridge was announced on 5 March 2007. Construction is expected to commence in the second half of 2007 and be completed in mid-2009.
- The Airport Link project comprises a 5-kilometre tunnel from Bowen Hills to Kedron with a connection to Sandgate Road. Expressions of Interest seeking private sector involvement in the project have been invited. Construction is expected to commence in 2008, subject to the findings of the Environmental Impact Statement process.
- Planning for the Northern Busway (Royal Children's Hospital (RCH) to Kedron) is complete and the final Concept Design and Impact Management Plan have been approved. The 3-kilometre section of the Northern Busway between Windsor and Kedron will be constructed concurrently with Airport Link. The section of busway between the RCH and Windsor will be delivered as an alliance between the Queensland Government and the private sector. Construction is expected to commence in early 2008.
- Preliminary planning and design works have commenced on the Petrie to Redcliffe multi-modal corridor. A Concept Design and Impact Management Plan will be completed in late 2007.
- Construction is well underway on the first stage of the Mitchelton to Ferny Grove track duplication. The new track is anticipated to be operational between Mitchelton and Keperra by late 2007.
- A new passenger rail rollingstock contract has been awarded to construct an additional 20 three-car sets with delivery to proceed after completion of the current order.
- Construction of the grade-separated Mt Lindesay Arterial/interstate standard gauge rail line crossing at Acacia Ridge will commence in mid-2007. An alliance contractor has been engaged and detailed design is currently being finalised.

- Construction has started on Queensland's largest road and bridge construction project, the $1.88 billion Gateway Upgrade Project, with completion expected by mid-2011. The project includes duplication of the Gateway Bridge and upgrade of 20 kilometres of motorway. New work associated with the upgrade will be opened progressively including:
- Construction of a second Gateway Bridge, 50 metres downstream (east) of the existing bridge. Following opening of the new bridge (six lanes southbound) in August 2010, the existing bridge will be refurbished (maintaining three lanes of northbound traffic). Refurbishment will be completed by mid-2011.
- A new six-lane deviation through the old and existing airport sites from the Gateway Bridge to a new airport interchange, then four lanes to Nudgee Road. Four lanes will open by mid-2009 with all lanes open by late 2010.
- Upgrade from Wynnum Road to Lytton Road from four lanes to eight lanes, with two of the additional lanes between the Port of Brisbane Motorway and Wynnum Road opening in late 2007. All lanes will be open by late 2009.
- Upgrade from Mt Gravatt-Capalaba Road to Wynnum Road from four to six lanes with all lanes open to traffic by late 2009.
- The Houghton Highway duplication and bus priority project is progressing with the design nearing completion.
- Construction of the Caboolture Northern Bypass is well advanced with completion by late 2007.
- Extension of the six lanes on the Bruce Highway to Caboolture is continuing with the section between Boundary Road and Deception Bay Road completed in September 2006; all six lanes south of Uhlmann Road opened to traffic at the end of February 2007. Construction of the interchange connection with the Caboolture Bypass commenced in September 2006 with completion forecast for late 2007. The final section between Uhlmann Road and Caboolture is to start in late 2007 and be completed by December 2008.
- Tenders have been called to upgrade the Mt Lindesay Highway from Green Road to Rosia Road.
- Construction of BCC's North–South Bypass Tunnel has started. As part of Council's TransApex program, the tunnel will provide a direct cross-river link between Woollongabba and Bowen Hills. The project is due for completion in 2010.
- BCC has also approved construction of its Hale Street Link project. Construction is expected to begin in mid-2007 and be completed in mid-2010.

Port of Brisbane

The Port of Brisbane is Australia's third largest and fastest-growing container port and a key driver of economic growth throughout SEQ.

World-class port

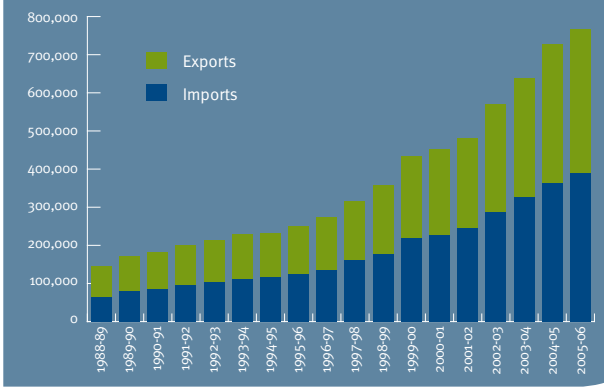
Managed by the Port of Brisbane Corporation, a Queensland Government-owned corporation, the port provides world-class cargo-handling and warehousing facilities.

Progressively developed on a greenfield site since 1976, the port is a modern, purpose-built 750-hectare facility at the mouth of the Brisbane River, just 24 kilometres from Brisbane's CBD. Unlike the southern competitor ports of Sydney and Melbourne, it is unencumbered by urban encroachment and associated operational restrictions.

Average annual container growth over the past 10 years has been 12 per cent. In 2005-2006, container trade reached 766,300 TEU* and, within the next 20 years, at projected average annual growth rates of between 7 and 9 per cent, is forecast to reach more than 3.7 million TEU. Motor vehicle imports are expected to increase by about 150 per cent over the next 20 years and movements of other goods through the port (such as dry and liquid bulk goods) are also expected to approximately double.

* (TEU = twenty foot equivalent unit)

Figure 3:
Port of Brisbane Corporation ContainerThroughput (TEUs)



Given the rapid growth of the port's operations, an ability to expand its quayline and terminal space is vital. Within the next seven years, three new container berths will be completed and 80 hectares of terminal space developed.

The capacity to continue meeting the demands of the burgeoning container trade has been assured through the extension of the port by constructing a 4.5-kilometre seawall to enclose an additional 230 hectares. This will enable the construction of up to four new berths and backup land for terminals and other port related uses.

The port is well connected to major road infrastructure and improvements to transport corridors are designed to keep pace with the ongoing provision of port-related infrastructure. The Queensland Government works closely with the Port of Brisbane Corporation and the Australian Government in this regard.

Map 2 – Greater Brisbane transport infrastructure

Table 3 – Greater Brisbane transport infrastructure

Map reference	Project	Estimated investment $m	Type of estimate (see note 4)	Delivery timeframe		
				2007-08 to 2010-11	2011-12 to 2014-15	2015-16 to 2025-26
Public transport connections						
1.1	Inner Northern Busway improvements and new Busway stations	#493	1, 3 & 4	Stage 1 - 2 construction underway		
1.2	Northern Busway: RCH to Kedron to Bracken Ridge	750	1 & 2	Stage 1 detailed design underway		
1.3	Eastern Busway: Buranda to Capalaba	600	1	Preferred alignment finalised		
1.4	Eastern Busway: Buranda to Boggo Road to Eleanor Schonell Bridge	200	1 & 3	Staged construction underway		
1.5	South East Busway extension to Springwood	30	1	Detailed design underway		
1.6	Pacific Motorway transit lanes from Gateway Motorway to Logan Motorway including Loganlea Road interchange	490	1	Planning complete from Gateway Motorway to Daisy Hill with planning on balance in progress		
1.7	Petrie to Redcliffe multi-modal corridor	240	1	Planning underway		
1.8	Mitchelton to Keperra to Ferny Grove track duplication	60	1 & 3	Construction underway		
1.9	Redlands bus priority measures	120	1			
1.10	Lawnton to Petrie third rail track	30	1			
1.11	Translink sub-regional station upgrade program	75	1 & 2	Planning underway		
1.12a	New passenger rail stock	#294	3	Contract negotiated		
Walking and cycling						
1.12	Sub-regional cycle network	90	3	Construction commenced		
1.13a	Tank Street pedestrian/cycle bridge	#63	3	Design complete		
1.13b	Additional pedestrian/cycle bridge in the CBD	100	1			
3.7	Pacific Motorway Bikeway	16	1	Staged construction underway		
Orbital road network						
2.1	Gateway Motorway Upgrade: Mt Gravatt-Capalaba Road to Nudgee Road, including Gateway Bridge duplication	#1883	3	Construction underway		
2.2	Project has been amalgamated into 2.1					
2.3	Gateway Motorway Upgrade: six lanes Mt Gravatt-Capalaba Road to Pacific Highway	55	1			
2.4	Project has been amalgamated into 1.6					
2.5	North–South Bypass Tunnel (BCC project)	2000	3	Construction underway		
2.6	Airport Link	2500	1	EIS finalised		
2.7	Hale Street Bridge (BCC project)	225	2	Construction approved		
Improving road connections						
3.1	Logan Motorway: six lanes	230	1			
3.2	Brisbane Urban Corridor (Griffith Arterial)	260	1	Staged construction underway		
3.3	Mt Lindesay Highway four lane upgrade: Green Road to Rosia Road to Jimboomba.	340	1 & 2	Tenders called for Green Road to Rosia Road. Planning/design underway on balance.		
3.4	Houghton Highway duplication and bus priority	#315	3	Design underway		
3.5	Port of Brisbane Motorway	170	1	Planning underway (Stage 2)		
3.6	North–South Arterial, Mango Hill	290	1			
3.8	Redland sub-arterial road from Mt Gravatt-Capalaba Road to Tingalpa Creek	170	1	Planning underway		
3.9	Cleveland-Redland Bay Road from South Street to Boundary Road	60	1	Planning underway		
3.10	Redland Bay Road from Tingalpa Creek to Cleveland-Redland Bay Road	70	1	Planning underway		

Table 3 continued – Greater Brisbane transport infrastructure

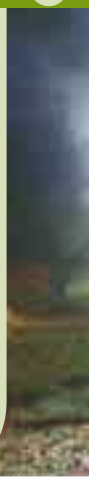
Map reference	Project	Estimated investment $m	Type of estimate (see note 4)	Delivery timeframe		
				2007-08 to 2010-11	2011-12 to 2014-15	2015-16 to 2025-26
Improving road connections cont.						
3.11a	Deception Bay Road: additional lanes from Bruce Highway to Lipscombe Road	85	1	Planning underway		
3.12	Burpengary to Caboolture Road: additional lanes from Bruce Highway to Gaffield Street	80	1	Planning underway		
3.13	Caboolture Northern Bypass	#89	3	Construction well advanced		
3.14	Bruce Highway: additional lanes from Boundary Road to Caboolture	250	1 & 3	Staged construction underway		
3.15	East–west links: Caboolture to Bribie Island Road	200	1	Planning underway		
Freight rail network improvements						
4.1	Grade separation of Mt Lindesay Highway/interstate rail, Acacia Ridge	#110	2	Design underway		
4.2	Metropolitan freight capacity upgrades	75	1	Construction commenced		
4.3	Rail crossing grade separations (Note 7)	120	1	Planning underway		
Investigations for transport infrastructure (refer Map 6)						
GB5.1	Western Brisbane Transport Network Investigation	#16	3	Study commenced		
GB5.2	Mt Lindesay/Beaudesert Strategic Transport Network Investigation	1	3	Study commenced		
GB5.2(a)	Gateway extension south of Browns Plains	5	1			
GB5.3	Australia TradeCoast Transport Study	1	3	Study commenced		
GB5.4	Further TransApex investigation – Northern Link	5	1	Airport link business case complete		
GB5.5	Increased rail capacity in inner Brisbane	5	3			
GB5.6	Inner City Bus Access Capacity Study	2	3	Study commenced		
GB5.7	Hamilton/Eagle Farm Transport Investigation	0.2	3	Study being finalised		
GB5.8	North Moreton Transport Network Study	1	1			
GB5.9	Gateway Motorway (Nudgee Road - Bruce Highway) Planning Study	6	1	Planning underway		
Port of Brisbane infrastructure (Note 5)						
6.1	Port expansion – preparing land for development, including reclamation and surcharging works	760	1			
6.2	Other estates – preparing land for development (365 ha)	70	1			
6.3	Wharves					
	General purpose berth	45	3			
	Container berths and wharves	790	1			
6.4	Terminal development	350	1			
Total		**15,285**				

3.11	Linkfield Connection Road	30	Completed in 2005–06
GB5.2b	Salisbury to Flagstone/Greenbank passenger rail investigation	0.5	Completed in 2006–07
GB5.4 (part of)	Further TransApex investigation – Airport Link	21	Completed in 2006–07

GB = Greater Brisbane

Notes:

1. The table identifies the delivery timeframe for each infrastructure project. Projects that are underway with a cumulative minimum expenditure of $0.5 million to 2006-07 on planning, design, site acquisition, materials procurement or construction are identified in yellow.
2. Estimated investment is in 2007 dollars (with the excepti on of projects marked '#' which are in out-turn dollars). Cost estimates in the State Budget and other public documents may differ, as they may incorporate project costs which reflect anticipated changes in input prices between initial planning and the time of construction. Estimated investment includes funds already expended on projects.
3. Where funding is required from other levels of government, their estimated costs have been included. Where projects are part of (or connect to) the AusLink National Transport Network, these projects are subject to negotiation with the Australian Government.
4. For an explanation on the types of estimates, refer to page 18.
5. For Port of Brisbane: these figures do not include substantial investment in a range of other infrastructure areas including augmentation of critical surface transport infrastructure, reticluated services and business partnering investments with existing and likely future port tenants. Projects are based on demand due to predicted levels of freight growth
6. The cost for Airport Link is based on the construction costs from the Environmental Impact Statement (EIS). The final cost for Airport Link will not be known until the completion of the competitive tender process currently underway. It is envisaged that this project will be delivered as a PPP and these costs do not include the costs of financing the project.
7. $50 million transferred from Project 4.3 to Project 4.1



Gold Coast

The Gold Coast sub-region extends from Yatala in the north to the border with New South Wales in the south. Significant population and activity growth in this area will challenge the capability of the existing local transport system. Improvements to the road system are only part of the solution, with public transport to play an increasing role in moving people efficiently. Quality public transport links are required to connect major centres and developing areas on the Gold Coast.

Table 4 outlines the transport infrastructure investment program for the Gold Coast. Strategic transport needs in this area include:

- establishing a major public transport spine linking the railway to the existing university, new hospitals and major coastal Activity Centres;
- increasing the capacity of the Gold Coast rail line; and
- improving local road and bus links east–west across the sub-region.

The first phase of this Infrastructure Plan (2007–08 to 2010–11) addresses four major issues in the Gold Coast area:

- *Constructing the Gold Coast Rapid Transit System*

  A high-quality public transport corridor will link Helensvale railway station to Broadbeach and Coolangatta by 2015.

- *Increasing capacity and patronage on the Gold Coast rail line*

  Sections of track are being duplicated and extension of the rail line from Robina to Varsity Lakes is proposed. This investment and new passenger rollingstock will improve capacity on the rail line.

- *Upgrading the Pacific Motorway*

  The Pacific Motorway is a critical link for the SEQ region and its use for inter-regional and intra-regional trips must be preserved. Additional lanes between Nerang and Tugun, and improved local transport connections, are essential investments.

- *Improving the east–west road and public transport links within the Gold Coast*

  Improved road and public transport links between existing and emerging Activity Centres will support continued economic growth and make best use of the passenger rail line.

  Subsequent phases of the SEQ Infrastructure Plan will build on these investments.

Progress on transport projects in the Gold Coast area during 2006-07

- Ormeau to Coomera rail track duplication was completed in September 2006.
- Construction is well underway on rail track duplication from Helensvale to Robina.
- Construction is underway on the Salisbury to Kuraby third rail track, with the new track expected to be operational by early 2008.
- Planning and design continues on the Robina to Varsity Lakes rail extension. Planning is underway for transit oriented development of Queensland Government-owned land at the proposed Varsity Lakes station.
- The Robina to Tugun Rail Impact Assessment Study Part B is to be completed in 2007.
- The first of 24 new passenger rail rollingstock three-car sets have been delivered, with further units to be delivered progressively until early 2009.
- Planning has commenced on the Gold Coast Rapid Transit Project (formerly Quality Public Transport Corridor) from Parkwood/Helensvale to Broadbeach, in consultation with local government and the community. A project office has been established on the Gold Coast and selection of the preferred transport mode and procurement method is expected in late 2007.
- Construction has commenced on the public transport facilities at Robina Station to service the Gold Coast Stadium when it opens in early 2008. Planning and design works continue on other locations for the TransLink sub-regional station upgrade program.
- Construction of the Tugun Bypass is anticipated to be finished ahead of schedule in mid-2008.
- Planning for upgrading of the Pacific Motorway from Nerang to Stewart Road is progressing.
- Construction of the Nerang–Broadbeach Road to four lanes from Allambie Gardens to Neilsens Road is progressing and is expected to be completed by September 2007.
- The Gold Coast Highway from Robert Street to Stevens Street is being widened to four lanes with completion expected by February 2008.

Map 3 – Gold Coast transport infrastructure

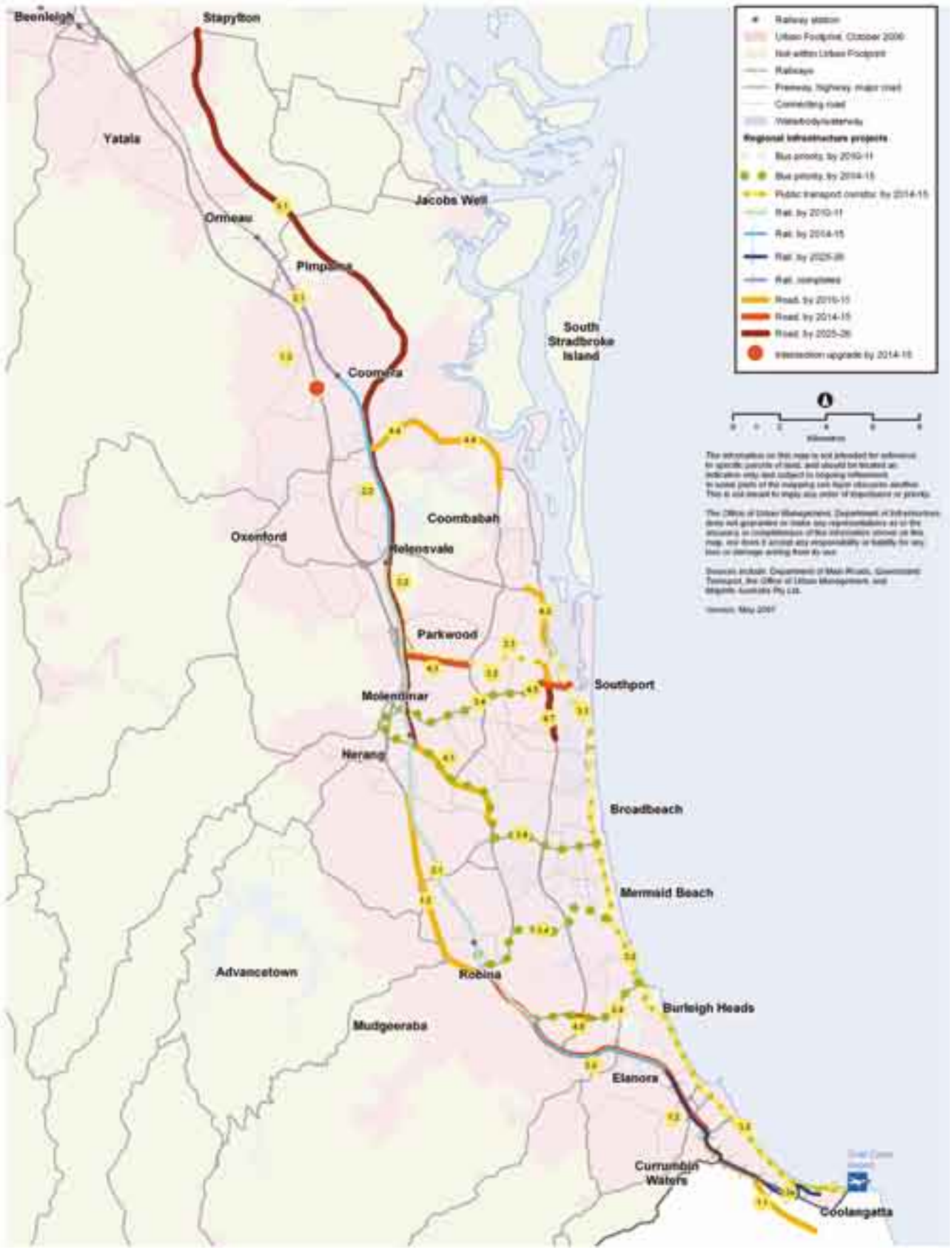


Table 4 – Gold Coast transport infrastructure

Map reference	Project	Estimated investment $m	Type of estimate (see note 4)	Delivery timeframe		
				2007-08 to 2010-11	2011-12 to 2014-15	2015-16 to 2025-26
Pacific Motorway						
1.1	Tugun Bypass	#543	3	Construction underway		
1.2	Additional traffic lanes and interchanges: Nerang to Stewart Road	600	1	Planning underway		
1.3	Coomera interchange	150	1	Planning underway		
Gold Coast rail line						
2.1	Helensvale to Robina, Salisbury to Kuraby: additional track and upgrades	#327	3	Construction underway		
2.2	Coomera to Helensvale, Kuraby to Kingston, Salisbury to Park Road: additional tracks	360	1			
2.3	Southern extension of rail line: Robina to Elanora	320	1	Preliminary design underway		
2.3a	Southern extension of rail line: Elanora to Coolangatta	600	1			
2.4	New passenger rail stock	#289	3	Progressive delivery commenced		
Gold Coast public transport						
3.1	Gold Coast Highway bus priority and bus stations	#21	2 & 3	Staged construction underway		
3.2	Gold Coast Rapid Transit Project: Parkwood/Helensvale to Broadbeach to Coolangatta	600	1	Planning underway		
3.3	Bus priority on Smith Street: Olsen Avenue to Gold Coast Highway	#7	2 & 3	Staged construction underway		
3.4	Bus priority/high-occupancy vehicle program	60	1	Planning underway		
3.5	TransLink sub-regional station upgrade	30	1 & 2	Construction underway		
Walking and cycling						
3.6	Sub-regional cycle network	60	3	Planning underway		
Gold Coast major road network						
4.1	Nerang-Broadbeach Road: additional lanes from Allambie Gardens to Neilsens Road	70	2 & 3	Staged construction underway		
4.2	Gold Coast Highway: additional lanes from Government Road to Robert Street to Stevens Street	70	1 & 3	Staged construction underway		
4.3	Smith Street: additional lanes from Pacific Motorway to Olsen Avenue	60	1	Planning underway		
4.4	Hope Island Road: additional lanes from Pacific Motorway to Santa Barbara Road to Columbus Drive	120	1 & 3	Staged construction underway		
4.5	Southport-Nerang Road: additional lanes from Minnie Street to Queen Street	35	1			
4.6	Burleigh Connection Road: additional lanes from Mattocks Road to Kortum Drive	35	1			
4.7	Southport-Burleigh Road: intersection upgrades	85	1			
Future transport corridor preservation						
5.1	Intra-regional transport corridor: Nerang to Stapylton	1900	1	Corridor preservation only		
Total		**6342**				
2.1	Ormeau to Coomera track duplication	20	Completed in 2006–07			

Notes:

1. The table identifies the delivery timeframe for each infrastructure project. Projects that are underway with a cumulative minimum expenditure of $0.5 million to 2006-07 on planning, design, site acquisition, materials procurement or construction are identified in yellow.
2. Estimated investment is in 2007 dollars (with the exception of projects marked '#' which are in out-turn dollars). Cost estimates in the State Budget and other public documents may differ, as they may incorporate project costs which reflect anticipated changes in input prices between initial planning and the time of construction. Estimated investment includes funds already expended on projects.
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4. For an explanation on the types of estimates, refer to page 18.

Sunshine Coast

The Sunshine Coast sub-region is defined as the shires of Noosa and Maroochy and the City of Caloundra. The Principal Activity Centre for this sub-region is Maroochydore, which accommodates the key business, service and retail enterprises. Other major centres in the region are Caloundra, Nambour and Noosa. There are emerging centres at Kawana Waters and Sippy Downs.

The SEQ Regional Plan actively supports consolidating and containing travel within the Sunshine Coast area. As the resident population and employment activity on the Sunshine Coast increases, transport connections to and between the Activity Centres located on the Coast will become busier. The projected population of more than 473,000 people by 2026 will generate traffic demand in excess of an additional 500,000 trips each day.

Road connections between centres in the sub-region and connecting to Brisbane will always be important. However, the Sunshine Coast is now at a stage where public transport must play a greater role.

Table 5 outlines a transport infrastructure investment program for the Sunshine Coast. Strategic transport needs in this area include:

- establishing a trunk public transport system linking key centres;
- increasing the capacity of the north coast rail line;
- protecting the role of the Bruce Highway as a national link; and
- developing convenient east–west road and public transport connections between coastal Activity Centres and other centres along the north coast rail line.

The first phase of this Infrastructure Plan (2007–08 to 2010–11) addresses five major issues in the Sunshine Coast area:

- *Providing a quality bus system between Caloundra and Maroochydore*

  This system will be developed to provide a quality public transport network between Caloundra and Maroochydore. It will be further enhanced with improved services and connections to the University of the Sunshine Coast at Sippy Downs.

- *Planning for a rail service between Beerwah and Maroochydore*

  Planning and land acquisition are being undertaken for a rail service between Beerwah and Maroochydore on the CAMCOS (Caboolture to Maroochydore Corridor Study) alignment. This service will be integrated with the bus system between Maroochydore and Caloundra.

- *Improving the north coast rail line*

  Major upgrades are underway between Caboolture and Landsborough and planning is progressing for further improvement in alignment and duplication of the track between Landsborough and Nambour, to increase passenger and freight capacity.

- *Upgrading of the Bruce Highway between Cooroy and Curra*

  The Australian Government has provided funding to investigate a new motorway-standard highway north of Cooroy to Curra. A new road is needed to address safety, capacity and other deficiencies of the existing highway.

- *Upgrading of the Sunshine Motorway*

  An upgraded Sunshine Motorway will relieve traffic congestion and provide a convenient and safe road link between the main Activity Centres while also providing better access to growth areas.

Transport investigations

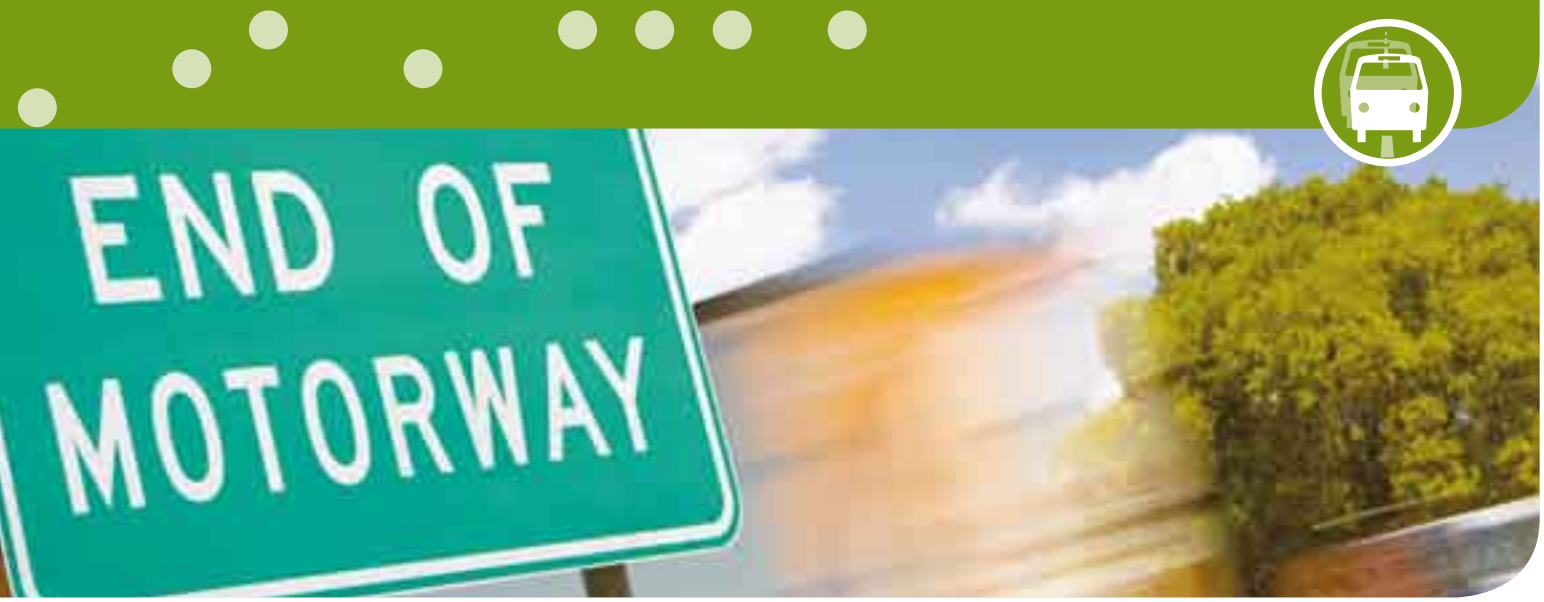
A number of significant investigations are underway or proposed to assist future transport infrastructure planning and delivery for the Sunshine Coast:

- *Sunshine Motorway extension (Mooloolah River to Kawana Way)*

  This study will investigate a new link from the Mooloolah River interchange to Kawana Way.

- *Beerwah to Caloundra to Maroochydore (CAMCOS) rail corridor*

  Planning and land acquisition for the rail corridor from Beerwah to Caloundra and Maroochydore (CAMCOS) is identified as a priority for the first period of this Infrastructure Plan, with construction to commence in the following period. Preliminary planning has been



completed but some refinements are being investigated in Caloundra South, at the Caloundra aerodrome site and in Maroochydore.

- *Nautilus study (previously named NNAMCOS)*

  Beyond Maroochydore, the Nautilus project will investigate options for public transport corridors and nodes that will accommodate efficient infrastructure to link Noosa, Nambour and Maroochydore. The objective of the Nautilus project is to provide the Queensland Government with recommendations on optimum public transport corridors to meet the long-term public transport demand of residents and visitors to the northern part of the Sunshine Coast for the 2026-50 timeframe.

- *Bells Creek connection (Bruce Highway to Caloundra Road)*

  This study will examine the potential route and timing to extend the Sunshine Motorway further south from Caloundra Road; the study is programmed for the period 2015–16 to 2025–26.

- *General Aviation Strategy*

  The first stage of this study has looked at the general aviation needs of the SEQ region. Stage 2, to commence in late 2007, will look at the aviation needs of the Sunshine Coast in particular, including a strategy for relocation of services from the existing Caloundra Airport.

Progress on transport projects in the Sunshine Coast area during 2006-07

- The pre-feasibility study has been completed for the Caloundra to Maroochydore bus corridor. Preparation of the Concept Design and Impact Management Plan has commenced and will determine potential staging opportunities and timing of delivery. This is expected to be completed by early 2008.
- Preliminary planning has been completed for the final alignment and station locations on the CAMCOS rail corridor (Beerwah to Maroochydore). Detailed planning and impact assessment of the alignment at Caloundra and Maroochydore are due to be finalised late 2007.
- Construction is well underway on duplication of the rail line between Caboolture and Landsborough. Construction commenced on the first stage from Caboolture to Beerburrum in early 2007 for completion in early 2009. Preliminary planning has commenced on the second stage from Beerburrum to Landsborough.
- Initial planning for a major realignment and widening of the Landsborough to Nambour section of the North Coast Line has commenced to reduce travel times and accommodate extra rail capacity. An Environmental Impact Statement to finalise the corridor and obtain planning and environmental approvals will commence in mid-2007.
- The Cooroy to Curra highway planning study has identified a preferred alignment of the future highway, which is being refined with input from the local community.
- Construction of an additional two lanes on the Sunshine Motorway from Sippy Downs to the Kawana Arterial will be completed in mid-2007. Construction of the new interchange at Dixon/Claymore Roads in Sippy Downs is expected to start mid-2007 with a 12-month construction timeframe.
- Upgrading the Sunshine Motorway from Maroochydore Road to the David Low Way is under construction with completion expected by the end of 2008. Design of the adjoining section to Pacific Paradise is well advanced with construction scheduled to start late 2007 and also be completed by the end of 2008.
- Construction of the new Caloundra Road to Creekside Boulevard road link is on schedule to be completed by mid-2008.
- Maroochydore Road, through Kunda Park, has been upgraded to four lanes. The adjoining section from the Bruce Highway to Kunda Park is under construction for completion by mid-2008.
- Construction work on Caloundra Road between the Bruce Highway and Pierce Avenue started in October 2006 and is scheduled to be completed by late 2008.
- The Southern Access to Maroochydore centre is under construction to improve connectivity with the Sunshine Coast's Principal Activity Centre.

Map 4 – Sunshine Coast transport infrastructure

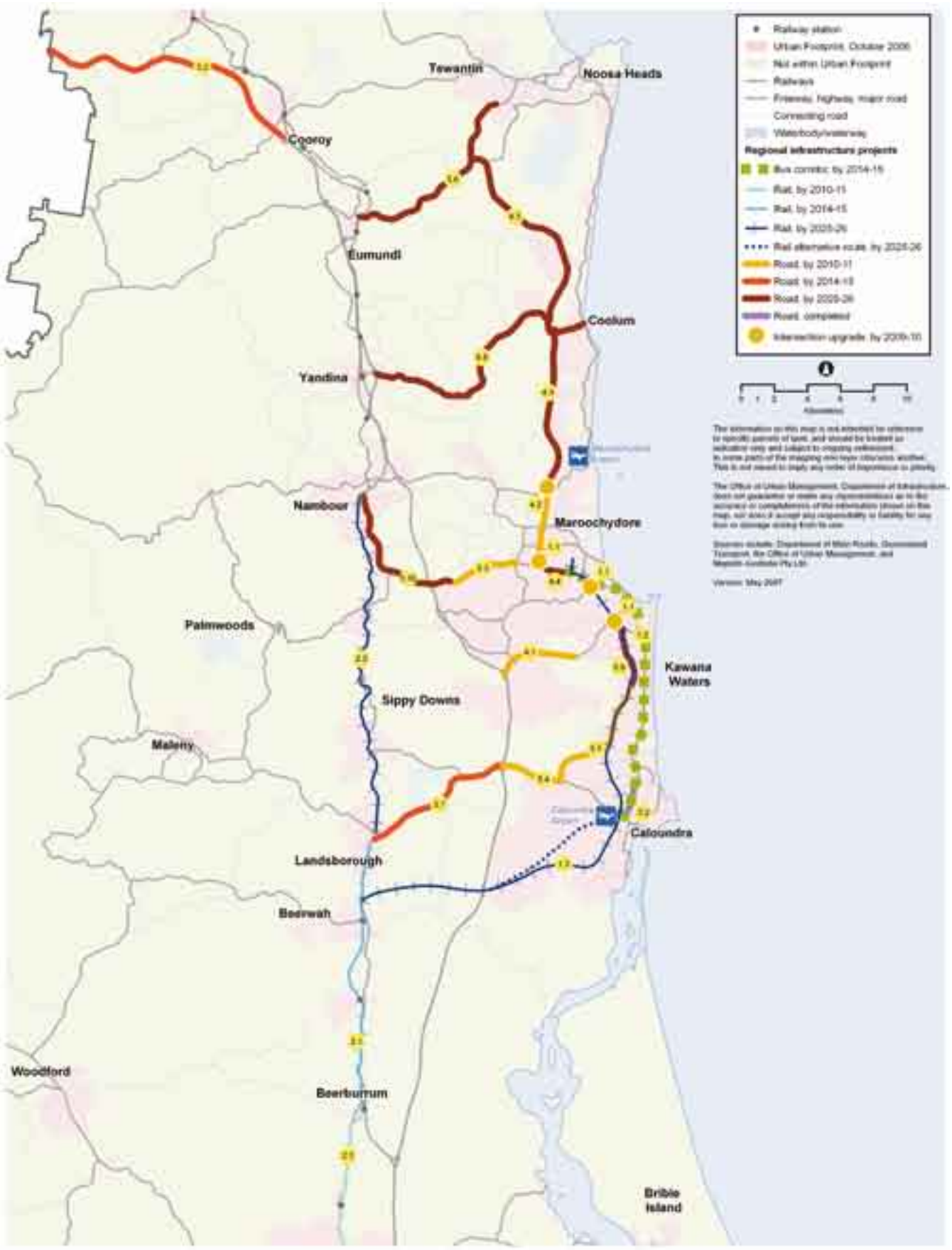


Table 5 – Sunshine Coast transport infrastructure

Map reference	Project	Estimated investment $m	Type of estimate (see note 4)	Delivery timeframe		
				2007-08 to 2010-11	2011-12 to 2014-15	2015-16 to 2025-26
North coast trunk public transport						
1.1	Bus priority/high occupancy vehicle program	45	1	Planning underway		
1.2	Caloundra to Maroochydore quality bus corridor and public transport stations	160	1	Planning underway		
1.3	CAMCOS rail: Beerwah to Maroochydore	1200	1	Land acquisition commenced		
1.4	Translink sub-regional station upgrade program	12	1 & 2	Planning underway		
Walking and cycling						
1.5	Sub-regional cycle network	60	3	Planning underway		
North Coast rail line						
2.1	Caboolture to Beerburrum to Landsborough: additional rail line	600	1 & 3	Stage 1 construction underway		
2.2	Landsborough to Nambour: additional rail line	600	1			
Bruce Highway						
3.2	Cooroy to Curra: additional lanes and improved alignment	1200	1	Planning advanced		
Sunshine Motorway						
4.1	Sippy Downs to Kawana Arterial including new Sippy Downs interchange: additional lanes	#66	1 & 3	Staged construction underway		
4.2	Maroochydore Road to Pacific Paradise, including interchange upgrades: additional lanes	210	1 & 3	Staged construction underway		
4.3	Pacific Paradise to Yandina-Coolum Road and Eumundi to Noosa Road: additional lanes	460	1	Planning underway		
4.4	Improvements to service roads and local roads	120	1	Planning underway		
Sunshine Coast major road network						
5.1	KTIA Caloundra-Mooloolaba Road: new road link from Caloundra Road to Creekside Boulevard	#75	3	Construction underway		
5.3	Maroochydore Road: additional lanes from Bruce Highway to Martins Creek	#109	3	Construction underway		
5.4	Caloundra Road: additional lanes from Bruce Highway to Pierce Avenue	#80	3	Construction underway		
5.6	East–west links: Eumundi to Noosa	140	1			
5.7	East–west links: Glasshouse Mountains Road	140	1	Planning underway		
5.8	East–west links: Yandina to Coolum	60	1			
5.9	KTIA Caloundra-Mooloolaba Road: new road link from Creekside Boulevard to Sunshine Motorway	950	1	Planning underway		
5.10	Improvements to Nambour Connection Road and Maroochydore Road	110	1			
Investigations for transport infrastructure (refer Map 6)						
SC6.1	Nautilus Study	6	3	Study commenced		
SC6.2	Sunshine Motorway extension: Mooloolah River to Kawana Way	4	1			
SC6.3	Bells Creek connection: Bruce Highway to Caloundra Road	2	1			
Total		**6409**				
5.2	KTIA Nicklin Way: additional lanes	7	4	Completed in 2005–06		

SC = Sunshine Coast

Notes:

1. The table identifies the delivery timeframe for each infrastructure project. Projects that are underway with a cumulative minimum expenditure of $0.5 million to 2006-07 on planning, design, site acquisition, materials procurement or construction are identified in yellow.
2. Estimated investment is in 2007 dollars (with the exception of projects marked '#' which are in out-turn dollars). Cost estimates in the State Budget and other public documents may differ, as they may incorporate project costs which reflect anticipated changes in input prices between initial planning and the time of construction. Estimated investment includes funds already expended on projects.
3. Where funding is required from other levels of government, their estimated costs have been included. Where projects are part of (or connect to) the AusLink NationalTransport Network, these projects are subject to negotiation with the Australian Government.
4. For an explanation on the types of estimates, refer to page 18.

Freight

Freight across Queensland is forecast to double by 2020. This has significant impacts on the road and rail transport corridors, in particular those that service the Australia TradeCoast area. The challenge is to improve transport system efficiency so road space is shared effectively between heavy vehicles, passenger vehicles and cyclists, with passengers and freight sharing railway space.

This Infrastructure Plan identifies a number of initiatives to improve freight movement in SEQ. Key initiatives for each sub-regional area are outlined in the respective sections within this Infrastructure Plan.

Map 5 identifies the key existing and future freight connections, as well as proposed investigations necessary for the optimum freight movement within and through SEQ.

Freight Strategy

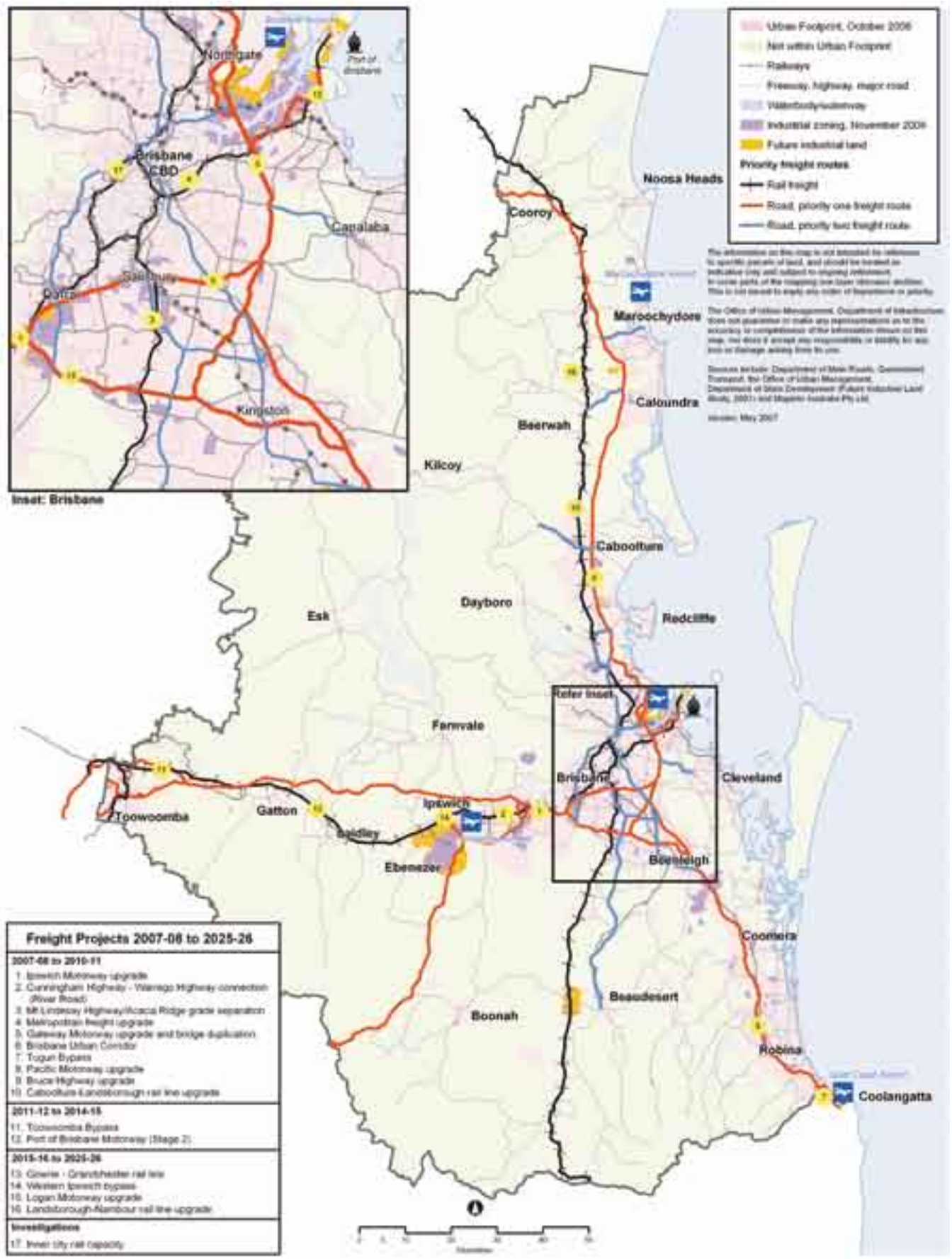
To support the SEQ Regional Plan, Queensland Transport and Main Roads have developed the *South East Queensland Regional Freight Network Strategy 2007 - 2012* (the Strategy) to manage the impact of freight and to drive the level of investment and policy making necessary to sustain the freight task.

The Strategy aims to facilitate moving freight efficiently across the transport network in a manner that enhances economic development, safety, quality of life and environmental sustainability. To ensure this occurs, the Strategy:

- describes the existing freight demands and freight network;
- examines the region's future demands and challenges; and
- provides direction for future policy, planning, infrastructure design, operations and institutional arrangements to encourage the effective and efficient end-to-end delivery of freight.

More specifically, it identifies the movement of freight throughout the region and focuses on developing and encouraging better integration and utilisation of the existing road and rail freight routes. The Strategy has a five-year horizon (2007-2012) and will be monitored and reviewed within this timeframe to ensure the achievement of the SEQ Regional Plan's broad vision for freight.

Map 5 – Regional freight infrastructure



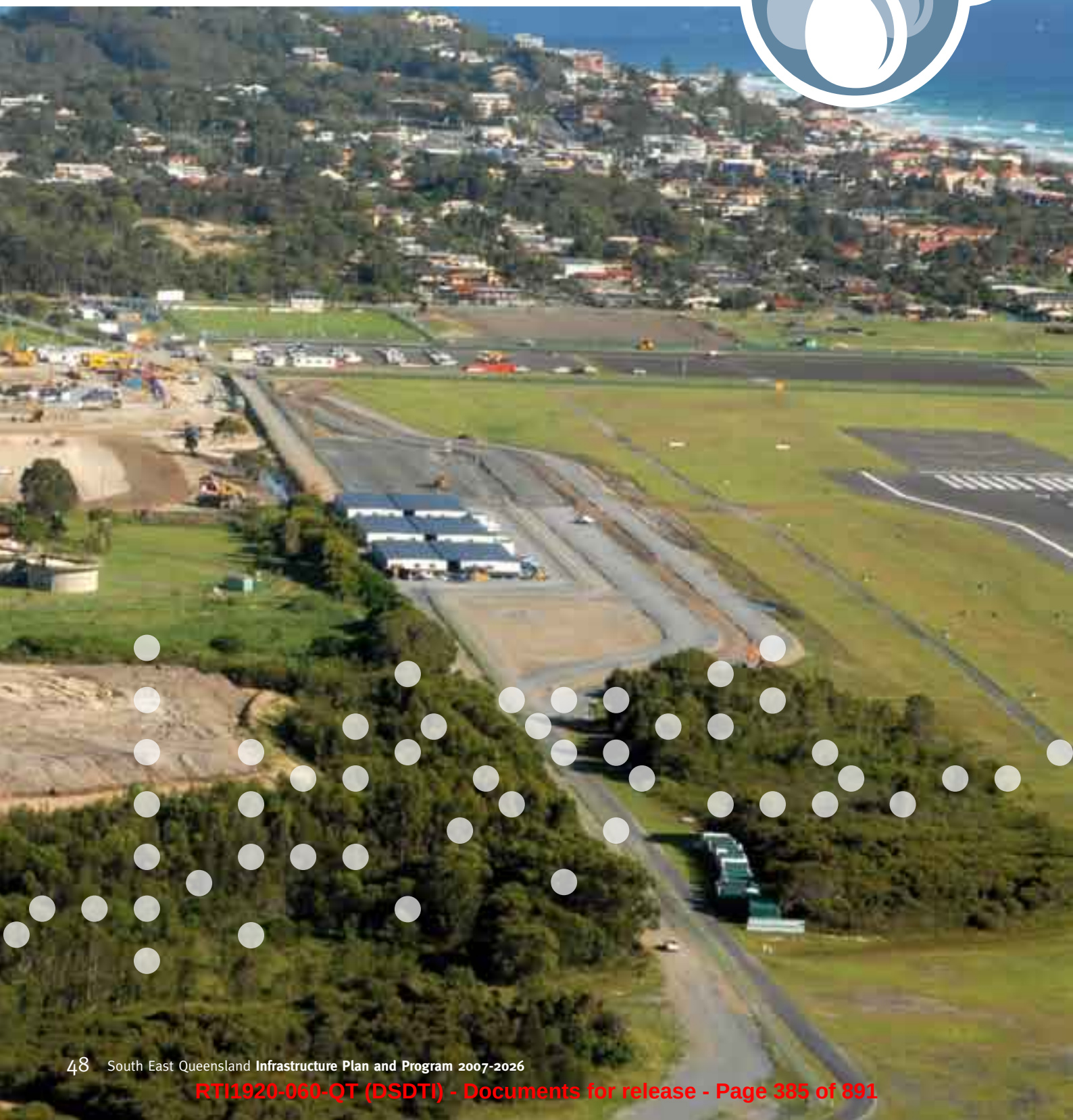
Investigation of potential transport infrastructure investments

Future growth will require new transport corridors and capacity improvements to service new developments and connect centres. Thorough investigations into these new projects are required early, so projects can be planned and corridors preserved ahead of development.

Current or proposed major transport investigation projects are listed under the individual sub-regional sections in this Infrastructure Plan. Map 6 provides a regional overview of the major investigation locations.

Map 6 – Investigations for transport infrastructure in SEQ

Part B Water



Water

SEQ is experiencing the worst drought in recorded history. As at May 2007, dam levels in SEQ were below 20% and Level 5 water restrictions were in place across much of the region. In addition to introducing water restrictions, the Queensland Government has responded to the drought by introducing pressure and leakage management and water-efficiency measures, as well as by developing new supply initiatives.

Some of the supply measures the Queensland Government is adopting will ensure that adequate supplies are maintained if the drought continues. Beyond the current drought, these and a range of other projects will contribute to providing for future growth and economic development of the region.

Water authorities also need to plan for and provide appropriate water supply infrastructure to meet existing and future demands for urban, industry and rural needs. For SEQ, this requires providing for a population of around four million people by 2026 and potential growth beyond this period.

This Infrastructure Plan outlines the Queensland Government's commitment of more than $7.5 billion to water-related projects. This investment will increase to more than $9 billion with the completion of Traveston Crossing Dam Stage 2 and connecting infrastructure. This represents a significant increase on the commitment contained in the 2006 Infrastructure Plan, due primarily to refinements of the scope of key projects.

Strategic priorities

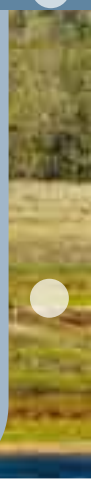
In addition to its drought-specific response, the Queensland Government is addressing water planning and investment via the following strategic priorities:

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

Queensland Water Commission

In June 2006, the Queensland Government established the Queensland Water Commission. The Commission is an independent statutory authority responsible for achieving safe, secure and sustainable water supplies in SEQ and other designated regions.

The Commission is currently working with state agencies and local governments of the region to develop the *SEQ Regional Water Supply Strategy*, manage water demand, and provide advice regarding reform of the water industry.



SEQ Regional Water Supply Strategy

The Queensland Government is committed to ensuring that increased demand for water arising from regional growth is managed on a sustainable and integrated basis, consistent with the SEQ Regional Plan.

To ensure this occurs, the Queensland Water Commission is preparing the *SEQ Regional Water Supply Strategy* (SEQ Water Strategy) in partnership with the Queensland Government and Council of Mayors (SEQ). The SEQ Water Strategy will provide a comprehensive policy framework and identify further investment priorities for water supply in SEQ; the Strategy is scheduled for release in mid-2007.

Water for South East Queensland – A long-term solution, released in August 2006, presents the rationale and background information behind the Queensland Government decision to develop new dams and other water infrastructure. It draws extensively on material developed for the SEQ Water Strategy.

Establishing a water-efficient community

The Queensland Government has implemented a range of initiatives to ensure that the best use is made of available water supplies, both as part of the drought response and a longer-term strategy.

Business and industry

In consultation with stakeholders, the Queensland Water Commission has implemented a package of measures to deliver long-term savings for businesses while minimising risks to economic production and employment.

Water-intensive businesses are required to prepare Water Efficiency Management Plans to demonstrate that their business uses water efficiently or how it plans to reduce its business water consumption by a minimum of 25 per cent in the near future.

The Queensland Government has established a $40 million Business Water Efficiency Program to assist business implement water-saving measures. By May 2007, this program yielded water savings of approximately eight million litres per day. This is forecast to increase to savings of 20 million litres per day by May 2008.

Residents

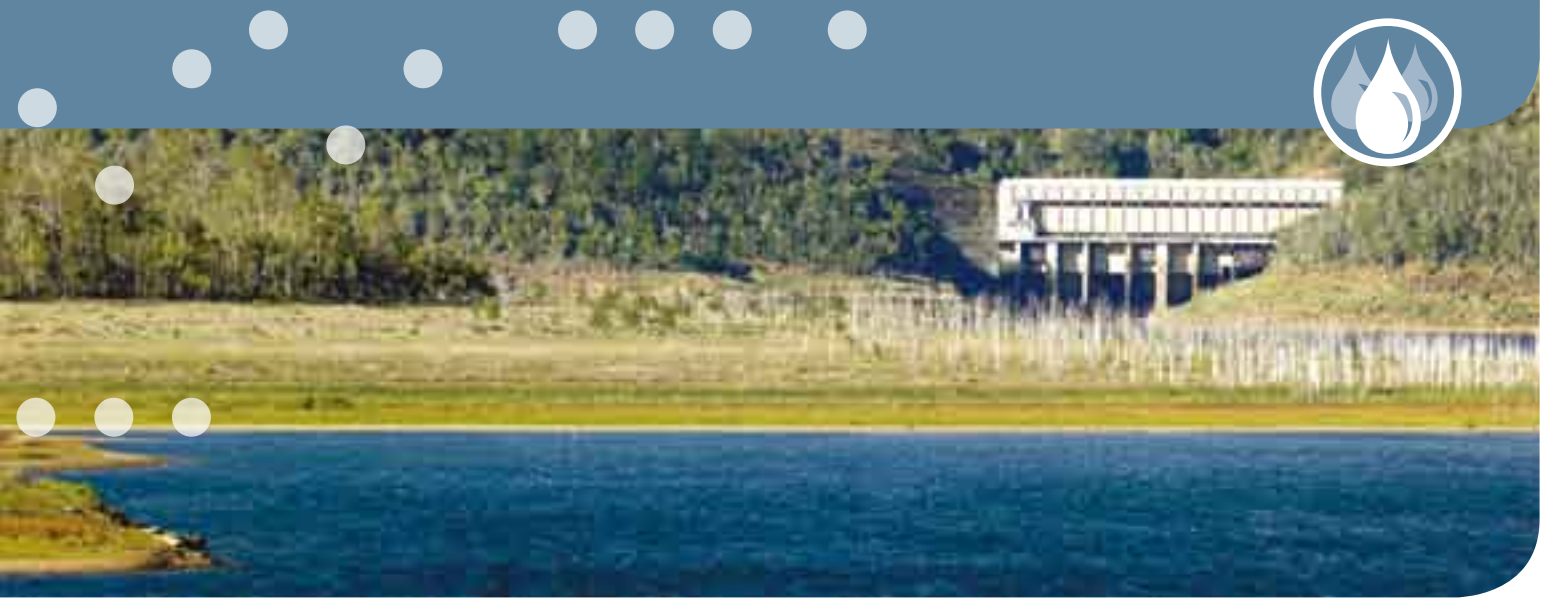
In August 2006, the Queensland Government, in partnership with local government, established the Home WaterWise Service. Under this program, a licensed plumber will visit a resident's home and install water-efficient devices such as showerheads, repair minor leaks and advise residents about other water-saving strategies; the cost of the service to residents is $20. By May 2007, more than 75,000 homes had been retrofitted with water-efficient devices, yielding water savings of more than four million litres per day.

By July 2008, it is anticipated more than 200,000 homes will have been retrofitted, saving up to 12 million litres per day. The Queensland Government has committed $30.6 million and local government $7.5 million to this program.

Water-saving targets for new homes

Since 1 January 2007, all new homes in SEQ must meet mandatory water efficiency targets. Options to achieve these targets include provision of rainwater tanks, dual reticulation recycled water systems, communal rainwater tanks or stormwater reuse. Most new homes will now use rainwater to supply toilet cisterns and washing machines, taking pressure off the SEQ Water Grid.

A water-efficient house has the potential to reduce water consumption by 70,000 litres per year. Terrace houses and townhouses can achieve savings of 42,000 litres per year.



In June 2006, the Queensland Government launched a series of rebate schemes to promote the take-up of water-saving appliances. Rebates are available for a range of products including up to $1000 for water tanks, $200 for four-star or-higher-rated-washing machines, and $150 for dual-flush toilets. In December 2006, a separate rebate scheme was introduced for defined garden products which contribute to water savings. The Queensland Government will also provide a one-off, 50 per cent rebate on the cost of approved plants and garden products up to $50. In total, the Queensland Government has committed more than $56 million to rebate programs targeting water savings.

Pressure and leakage management

Significant water savings can be achieved by reducing water loss resulting from leaking and burst water mains and pipes. The Queensland Government has expanded its subsidies to local government to accelerate the implementation of the Pressure and Leakage Management Program by councils. The Queensland Government will contribute a subsidy of 40 per cent of capital costs up to $32 million and has paid out $9.5 million to May 2007.

Connecting our water supplies

Construction of the SEQ Water Grid is well underway. The Grid comprises a network of two-way connections between existing and new water supplies and key areas of demand, allowing water to be moved across the region to where it is most needed. The Grid will allow water supplies to be operated more efficiently, minimising costs and maximising security of supply.

Key projects to establish the SEQ Water Grid include:

- The Southern Regional Water Pipeline, comprising approximately 100 kilometres of large diameter pipe, numerous pump stations and three new reservoirs, which will allow up to 130 million litres of water per day to be transferred between the Gold Coast and Brisbane. The pipeline is capable of two-way flow. When completed, the Sourthern Regional Water Pipeline will enable the key growth areas of Ipswich, Beaudesert and Logan to be serviced by a range of sources, including the desalination facility at Tugun on the Gold Coast. The pipeline is on schedule for completion by the end of 2008.
- The Northern Pipeline Interconnector, which will transfer up to 65 million litres per day between the Sunshine Coast and Caboolture, Pine Rivers and the northern suburbs of Brisbane City. The pipeline is scheduled for completion by the end of 2008. A second stage will deliver water from the proposed Traveston Crossing Dam as far as North Pine Dam and is scheduled to be completed by the end of 2012. The pipeline will be designed for two-way flow.
- The Eastern Pipeline Interconnector, which will transfer up to 22 million litres per day from a new bore field on North Stradbroke Island to upgraded reservoirs in Redlands Shire and Logan City, will be completed by the end of 2008.
- A 47-kilometre pipeline between Wivenhoe Dam and Perseverance Dam, which will secure water supplies for Toowoomba and surrounding areas.

Part B Water

Diversifying our water supplies

The construction of new water supply sources, such as recycled water projects, a desalination plant, dams and groundwater bore fields, is underway to diversify and thereby secure water supply for SEQ.

The region's urban water supply comes from a variety of sources, primarily the Wivenhoe and Somerset Dam system; North Pine, Baroon Pocket and Hinze Dams; and the Stradbroke Island aquifers. Water for irrigation is supplied from these and the region's other water storages, waterways and groundwater sources.

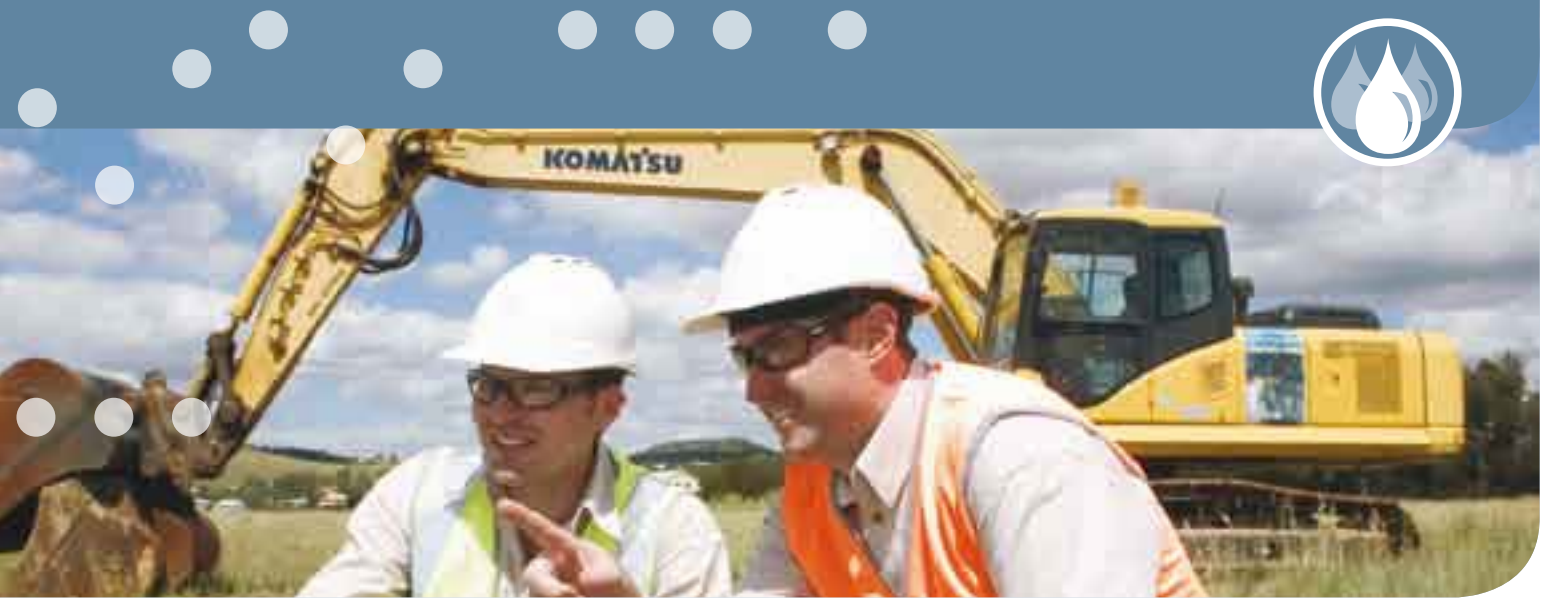
Western Corridor Recycled Water Project

The Queensland Government has committed $1.7 billion to establish the Western Corridor Recycled Water Project, which includes three wastewater treatment plants and approximately 200 kilometres of pipeline – the largest recycled water project in Australia and one of the largest advanced recycled water schemes in the world. The project is on track to be completed by the end of 2008.

The first of three stages will provide the capacity to supply purified recycled water to the Swanbank Power Station by the end of August 2007. The second stage will provide the capacity to supply purified recycled water to the Tarong Power Station by mid-2008.

The final stage will be completed by the end of 2008. It will comprise construction of advanced water treatment plants at Luggage Point and Gibson Island and an 80-kilometre pipeline connecting to the Bundamba advanced water treatment plant in Ipswich. During the drought, the actual volumes of recycled water produced depend on the available effluent at wastewater treatment plants, which are impacted by demand management measures.

Brisbane City Council (BCC) is undertaking a separate project to supply about 15 million litres of recycled water to existing industrial and commercial customers in Australia TradeCoast by the end of March 2008. Other councils are undertaking a range of small projects to supply recycled water for industrial purposes and some residential uses.



South East Queensland (Gold Coast) Desalination Facility

The $1.2 billion South East Queensland (Gold Coast) Desalination Facility is on schedule to produce drinking water from late November 2008, increasing to full production of 125 million litres per day in January 2009. Site establishment has been completed and construction of the marine tunnel is underway. Construction of a pipeline connecting to the Southern Regional Water Pipeline has also commenced.

New dams

In 2006, the Queensland Government announced it would establish two new dams in the Mary and Logan River catchments.

Stage one of the Traveston Crossing Dam in the Mary River catchment is due to be constructed by the end of 2011. It will supply 70,000 million litres per year at an estimated cost of $1.7 billion. By 2025, Borumba Dam will be raised at an estimated cost of $250 million and, around 2035, the second stage of Traveston Crossing Dam will be constructed. These upgrades will increase the yield to 150,000 million litres of water per year.

In July 2006, the Queensland Government announced that Wyaralong Dam was the preferred site for a new dam in the upper reaches of the Logan River. Wyaralong Dam will be constructed by the end of 2011 at an estimated cost of $500 million. In combination with smaller water storages at Cedar Grove and Bromelton, it will supply about 26,000 million litres per year. The cost of water treatment plants and connecting infrastructure for the two new dams is being finalised.

The Queensland Government will contribute towards the cost of upgrading Hinze Dam to increase its yield and flood storage. Water harvesting from adjacent creeks is also being investigated.

Reactivating old dams

Lake Manchester (Brisbane Forest Park) and Enoggera Dams are being reactivated, providing up to 38 million litres of water per day.

A new $30 million water treatment plant, funded by AquaGen and the Queensland Government, will be constructed at Ewen Maddock Dam on the Sunshine Coast, to increase treatment capacity and provide contingency supply for the Sunshine Coast.

Other sources of supply

Caboolture Shire Council is undertaking work to supply five million litres per day of additional groundwater from Bribie Island; the estimated cost is about $43.5 million.

BCC is also undertaking a range of groundwater projects that will supply about 20 million litres per day for residential and business use. The estimated cost of these projects is about $75 million.

The Queensland Government will subsidise both projects.

Rural water

The South East Queensland Irrigation Futures Program aims to achieve a reduction in irrigation water use of up to 10 per cent across SEQ by 2009. More than 20 per cent of irrigators in SEQ have been involved in field trials, research and development.

Part B Water

Governance

The Queensland Government is reviewing arrangements for the ongoing planning and management of the SEQ Water Grid.

The Queensland Water Commission has recommended establishing a new statutory body – the SEQ Water Grid Manager – to be responsible for coordinating bulk water supply operations, including transfers between catchment areas. Further investigations are underway into a range of issues in relation to the acquisition and control of assets and other matters. Decisions regarding the institutional arrangements for water supply will be made in mid-2007.

Under the National Water Initiative, the cost of the SEQ Water Grid will be met by Grid customers. At present, the Queensland Government is considering a number of options around water pricing.

Research and development

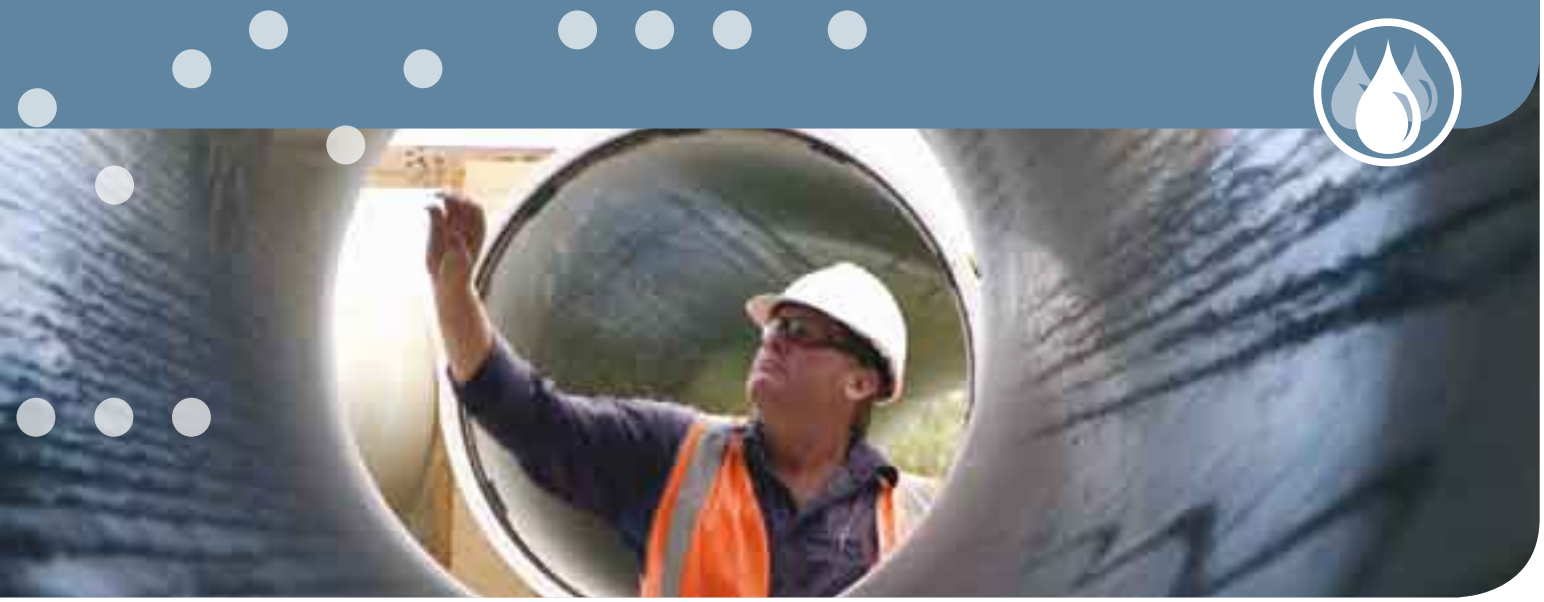
In early 2007, the Queensland Government launched two key research initiatives to ensure that water planning and management is based on the best available information:

Urban Water Security Research Alliance

An alliance between the Queensland Government and the CSIRO, University of Queensland and Griffith University will undertake applied research to directly improve urban water management in SEQ over the short to medium term. The Queensland Government has committed $25 million to the project over five years. Alliance partners will contribute $20 million of in-kind support over the same period.

Queensland Climate Change Centre of Excellence

In March 2007, the Queensland Government established the Queensland Climate Change Centre of Excellence as a specialist unit within the Department of Natural Resources and Water. The Centre will provide policy advice and scientific information on climate change and its impact on the community, economy and environment.



Progress on water projects during 2006-07

Significant progress has been made on all drought contingency projects since the 2006 SEQ Infrastructure Plan was released, including:

- Construction of the Western Corridor Recycled Water Project is underway with Stage 1A – for supply of recycled water to Swanbank power station – due to be commissioned by the end of August 2007.
- The South East Queensland (Gold Coast) Desalination Facility is on track to be completed by the end of December 2008; site works and construction of the marine tunnels is underway.
- For Traveston Crossing and Wyaralong Dams, land is being acquired and the Environmental Impact Statements are being developed. A considerable area of land required for each dam has been voluntarily acquired.
- Construction of the 100-kilometre Southern Regional Water Pipeline is well advanced and on track for completion by the end of 2008.
- Environmental studies, route selection and design is underway for the Northern Pipeline Interconnector and notices of entry have been issued to 330 landholders affected by route investigations.
- Environmental studies and route selection is underway for the Eastern Pipeline Interconnector
- Construction of Cedar Grove Weir has commenced, with the project due for completion by December 2007.
- The site for the Bromelton Offstream Storage has been selected and preconstruction work has commenced; the project is due for completion by March 2009.
- Approximately 75,000 homes have been retrofitted with water-efficient devices, providing savings of more than four million litres of water per day.
- Since June 2006, the Queensland Government has paid $50 million in rebates for water-efficient appliances in SEQ; rebates have been paid for 32,000 washing machines, 44,000 water tanks and 7000 dual-flush toilets.
- The Business Water Efficiency Program has yielded water savings of approximately eight million litres per day.

Map 7 – SEQ Water Grid infrastructure

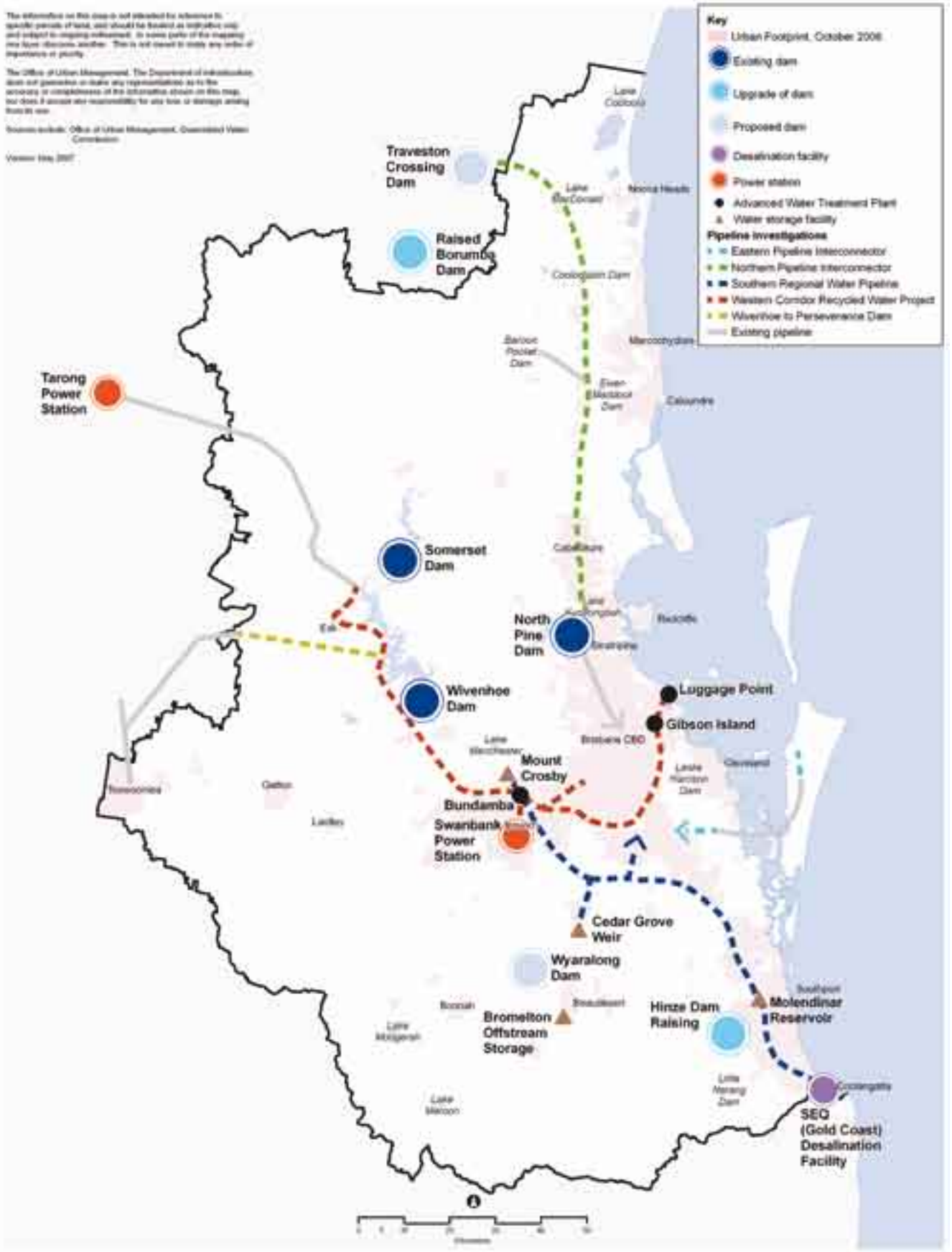


Table 6 – Regional water infrastructure

Project	Project Supplier	Estimated investment $m	Type of estimate (see note 9)	Delivery timeframe		
				2007-08 to 2010-11	2011-12 to 2014-15	2015-16 to 2025-26
Dams and weirs		**2705**				
Cedar Grove Weir	Queensland Government	15	2	Construction underway		
Bromelton Storage	Queensland Government	40	2	Planning underway		
Traveston Crossing Dam Stage 1	Queensland Government	1700	2	EIS and land acquisition underway		
Wyaralong Dam and waste water treatment plant	Queensland Government	540	2	Land acquisition underway		
Borumba Dam Stage 3	Queensland Government	250	1			
Local government dams	Local Government	160	G			
• Mt Crosby Weir raising						
• Ewen Maddock Dam						
• Raising of Hinze Dam				Alliance engaged		
• South Maroochy Storage upgrade						
Making best use of available supplies		**217**				
Pressure Reduction and Leakage Management Program	Local Government	32	G	Construction underway		
Home WaterWise retrofit service	Queensland Government and Local Government	30	G	Retrofit services operating		
Home WaterWise Rebate Scheme[6]	Queensland Government	56	G	Retrofit services operating		
Business Water Efficiency Program	Queensland Government	40	G	Subsidy scheme operational		
SEQ Irrigation Futures	Queensland Government	15	G	Implementation underway		
Urban water accounting system	Queensland Government	4	G	Implementation underway		
Urban water conservation initiatives	Queensland Government	23	G	Initiatives underway		
Integrated Urban Water Management Framework	Queensland Government	17	G	Development underway		
Treatment and distribution		**1586**				
Southern Regional Water Pipeline	Queensland Government and Local Government	900	3	Construction underway		
Northern Pipeline Inter-connector[7]	Queensland Government	300	1	Planning underway		
Eastern Pipeline Inter-connector	Queensland Government and Local Government	40	1	Planning underway		
Gold Coast to Logan alternative supply	Queensland Government and Local Government	17	1	Planning underway		
Treatment plants, mains and other projects	Local Government	329	G			
Water recycling		**1821**				
Western Corridor Recycled Water Project	Queensland Government	1700	2	Construction underway		
Local government recycling initiatives	Local Government	121	G			
• Australia TradeCoast Recycled Water Scheme				Construction underway		
• Gold Coast and Brisbane				Construction underway		
• Other reuse projects						

Table 6 continued – Regional water infrastructure

Project	Project Supplier	Estimated investment $m	Type of estimate (see note 9)	Delivery timeframe		
				2007-08 to 2010-11	2011-12 to 2014-15	2015-16 to 2025-26
Alternative sources of supply		**1247**				
South East Queensland (Gold Coast) Desalination Facility[8]	Queensland Government and Local Government	1200	3	Construction underway		
Local government actions	Local Government	47	G			
• Bribie Island Groundwater Project						
• Brisbane Aquifer Project				Investigation underway		
Water quality initiatives		**6**				
Catchment control/monitoring	Queensland Government	3	G	Planning underway		
Water quality improvement strategy	Queensland Government	3	G	Planning underway		
Total		**7582**				

Subsidies paid for completed local government projects	25	Completed in 2006-07
Recycling investigations	7	Completed in 2006-07
Desalination investigations	1	Completed in 2006-07
Groundwater investigations	4	Completed in 2006-07

Notes:

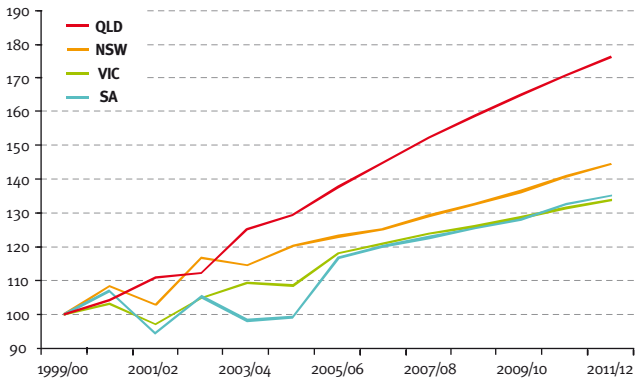
1. The table identifies the delivery timeframe for each infrastructure project. Projects that are underway with a minimum expenditure of $0.5 million in 2006-07 on planning, design, site acquisition, materials procurement or construction are identified in yellow.
2. Estimated investment is in 2007 dollars. Cost estimates in the State Budget and other public documents may differ, as they may incorporate project costs which reflect anticipated changes in input prices between initial planning and the time of construction. Estimated investment includes funds already expended on projects.
3. Local government projects include estimated Queensland Government subsidies only. Actual subsidies towards local government projects will be assessed in accordance with guidelines in place at the time.
4. Queensland Government projects will require negotiation with key partners and proponents, mainly local government.
5. All major infrastructure proposals are subject to further investigation and approval processes.
6. Total funding commitment across Queensland.
7. Preliminary cost estimate being revised to reflect the change in project scope to provide drought contingency supplies.
8. Includes $188 million of equity funding from Gold Coast City Council.
9. For an explanation on the types of estimates, refer to page 18 (G = Government grant, subsidy or program).
10. Does not include water treatment plants and connecting infrastructure.

Part B Energy

Energy

Electricity demand in Queensland is growing at twice the rate of other states (see figure 4). The Queensland gas market is also growing rapidly, with demand having doubled since 2000. Managing the energy needs of Australia's fastest-growing, most decentralised and energy-intensive state, while at the same time reducing greenhouse emissions, presents challenges.

Figure 4: Growth in peak summer demand for electricity



The Queensland Government will meet these challenges by diversifying its energy sources towards gas and renewable sources, as well as by encouraging competition in energy markets. Queenslanders must also play their part by managing demand, especially during peak summer periods, through increased awareness and use of more energy-efficient appliances or appliances that use alternative fuel sources.

Much of the infrastructure critical to meeting the energy demands of SEQ is located outside the region for locality and commercial reasons, including proximity to fuel sources and major industry. Energy is then transported to the demand centres within SEQ via transmission networks.

Electricity

High growth is expected to continue over the timeframe of the SEQ Infrastructure Plan, with electricity consumption forecast to increase at approximately 3.4 per cent per annum and peak summer demand by 3.9 per cent per annum over the next 10 years. Demand will continue to be driven by energy-intensive industrial development and rapid population growth, along with increases in use of domestic air-conditioning. Substantial electricity demand will rise and work is required for the delivery of other water, transport and community projects.

Community dependence on electricity and increased expectations for a reliable electricity network are an increasing challenge that will be addressed by refurbishment of ageing network assets, providing more facilities and the implementation of modern technologies.

Industry structure

The electricity industry comprises three distinct, yet interconnected, sectors: generation, transmission and distribution.

- *Generation*

  Most electricity in Queensland is generated by coal-fired power stations, located mainly in central and southern parts of the state, close to major coal sources. However, an increasing amount of energy is being produced from natural gas and renewable sources, such as hydro, wind and biomass. Government-owned corporations own most of the larger power stations, but the number of partially or fully privately-owned power stations is increasing. Currently about 45 per cent of Queensland's generation capacity is privately-owned.

- *Transmission*

  Powerlink Queensland's high-voltage transmission network transports electricity from power stations to distribution networks in regional Queensland and SEQ, and to some large customers connected directly to the transmission network, such as aluminium smelters. Powerlink operates more than 17,000 kilometres of high-voltage transmission lines throughout Queensland.

- *Distribution*

  Most business and residential customers are supplied electricity via an electricity distribution system connected to the high-voltage transmission system. ENERGEX delivers electricity to most of SEQ and operates a network that includes 46,000 kilometres of powerlines. Ergon Energy distributes electricity to Toowoomba and rural and regional Queensland and operates a network of 140,000 kilometres of powerlines throughout the state.

Through its Government-owned corporations, the Queensland Government owns and maintains electricity generation, transmission and distribution assets worth more than $18.7 billion. These Government-owned corporations include CS Energy, Stanwell, Tarong Energy and Enertrade (generation), Powerlink Queensland (transmission), ENERGEX and Ergon Energy (distribution).

Full retail competition

Full retail competition in Queensland's electricity and gas markets will commence on 1 July 2007. This means most domestic and small business customers will be able to choose their electricity and gas supplier.

The Queensland Government still owns the infrastructure which delivers the electricity supply to Queensland consumers. Government-owned corporations (Powerlink, ENERGEX and Ergon Energy) will continue to own, monitor, maintain and invest in the state's transmission and distribution networks.

Generation capacity

Queensland currently has a generation capacity of more than 10,500 megawatts (MW), with more than $6 billion of investment in new generation infrastructure since 1998. Major investments include the privately owned Millmerran coal-fired power station, Braemar and Townsville gas-fired power stations, and the joint-venture Callide-C coal-fired power station. A number of renewable energy projects have also been commissioned, including a 68 MW bagasse-fired generator at Pioneer Sugar Mill and a second bagasse-fired generator of 25 MW at Isis Sugar Mill. The electricity generation industry in Queensland is well placed to meet increasing demand, with sufficient generating capacity to meet average demand even under extreme weather conditions.

Projects currently planned or under construction include:

- the 750 MW coal-fired Kogan Creek power station near Chinchilla is under construction and due to commence operation in late 2007. This power station is being developed by CS Energy at a cost of $1.2 billion;
- an additional 480 MW gas-fired power station is under investigation for the Braemar site near Dalby. The project is subject to verifying adequate recoverable gas reserves; and
- a 1000 MW gas-fired power station on the Spring Gully gas field, 80 kilometres north-east of Roma is under investigation by Origin Energy.

These projects all contribute to electricity supply in SEQ via the electricity grid, but are not included in this Infrastructure Plan because they are located outside SEQ.

The Queensland Government will continue to support renewable energy projects where they are commercially viable and meet electricity market needs.

Electricity network

To meet increasing electricity demand, new transmission and distribution network infrastructure must be constructed. Powerlink has approximately $1.5 billion in major electricity transmission projects currently underway in Queensland and more than $2.5 billion (subject to regulatory approval) expected to be spent on capital projects in Queensland over the next five years.

ENERGEX is also investing heavily in its electricity distribution network, with a five-year capital budget in SEQ in excess of $4 billion. This program is expected to:

- increase network capacity to meet forecast demand and peak demand growth;
- improve network security and reduce the amount of electricity load at risk;
- improve overall reliability; and
- renew older assets to maintain network reliability and improve network security.

Proposed transmission and distribution network upgrades in SEQ are shown in Table 7 and Table 8.

The Queensland Government also supports demand management programs aimed at reducing the effect of peak electricity demand on the network and programs which support efficient use of energy, such as:

- working with builders and developers to implement sustainable housing design;
- supporting a range of energy- and water-saving measures for households;
- promoting energy-efficient air-conditioning; and
- improving energy efficiency in government buildings via the Government Energy Management Strategy.

Electricity for infill development

The SEQ Regional Plan encourages more efficient use of urban land by redeveloping older and underutilised areas.Targets for infill development will result in higher local population densities. This means more electricity infrastructure, such as sub-stations, will need to be built in these urban communities. Perceived concerns about visual amenity, property values and health impacts of this infrastructure are being taken into account by electricity providers, but must be balanced with the practical aspects of electricity supply.

Progress on electricity projects during 2006-07

- The 450 MW gas-fired Braemar Power Station near Dalby was officially commissioned in August 2006. It was developed through a joint venture between ERM Power and Babcock & Brown at an estimated cost of $340 million.

ENERGEX invested approximately $540.7 million (July 2006 – March 2007) in electricity distribution infrastructure in SEQ, including:

- completing 17 major sub-transmission projects at an estimated cost of $91.6 million;
- commissioning six new substations and increasing capacity at nine existing substations; and
- upgrading 116 feeders to cater for load growth and to improve reliability.

In 2006-07, Powerlink invested approximately $207 million in transmission upgrades in SEQ. Major transmission upgrades completed in 2006-07 include:

- construction of a transmission line between Belmont and Murarrie (Brisbane) to augment and reinforce the network supplying the Brisbane CBD, Australia TradeCoast precinct and the eastern suburbs of Brisbane;
- construction of a transmission line between Greenbank (Beaudesert) and Maudsland (Gold Coast) to augment the network supplying the Gold Coast area (the final stage of Powerlink's Gold Coast Transmission Reinforcement project); and
- construction of major sub-stations at Molendinar, Algester, Goodna and Sumner.

Table 7 – Major transmission upgrades in SEQ

Project	Estimated investment $m	Type of estimate (see note 6)	Delivery timeframe		
			2007-08 to 2010-11	2011-12 to 2014-15	2015-16 to 2025-26
Western Corridor	**154**				
Middle Ridge to Greenbank (330/275kV) Aberman substation (275/110kV)		3	Construction underway		
Springdale to Blackwall (500kV) Springdale to Greenbank (500kV) Springdale to Halys (500kV)					
Brisbane metropolitan	**134**				
South Pine to Sandgate (275/110kV) Greenbank substation (275kV) Larapinta to Algester (110kV)		3	Construction underway		
Sandgate to Nudgee (275kV) Nudgee to Murarrie (275kV) Bundamba to Drewvale (275kV) Future substations (load dependent)					
Gold Coast					
Southern Gold Coast bulk supply (110kV) Future substations (load dependent)					
Sunshine Coast					
Northern Sunshine Coast transmission reinforcement (load dependent)					
Total	**288**				
Completed 2006–07	207				

Notes:

1. The table identifies the delivery timeframe for each infrastructure project. Projects that are underway with a minimum expenditure of $0.5 million in 2006-07 on planning, design, site acquisition, materials procurement or construction are identified in yellow.
2. Estimated investment is in 2007 dollars. Cost estimates in other public documents may differ, as they may incorporate project costs which reflect anticipated changes in input prices between initial planning and the time of construction. Estimated investment includes funds already expended on projects.
3. Future investments will depend on demand. Expenditure will be adjusted as necessary to ensure the SEQ transmission network is able to meet demand, while also meeting mandated reliability requirements.
4. Energy authorities budget on a five-year basis. Projects beyond that period are not identified as capital works programs are set in light of regulatory determinations. The current regulatory determination is for 2006-07 to 2010-11.
5. kV = Kilovolt.
6. For an explanation on the types of estimates, refer to page 18.

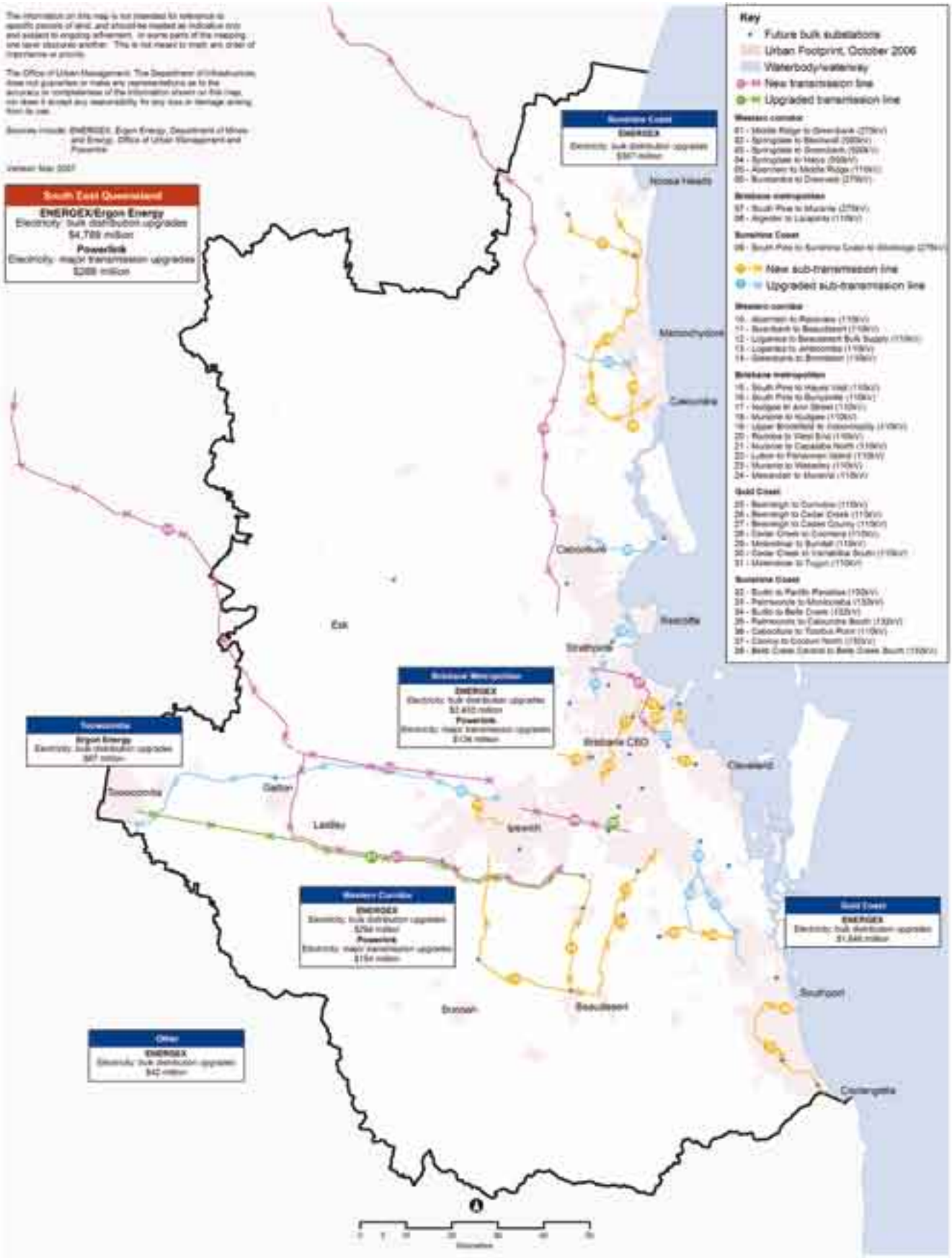
Table 8 – Sub-transmission and distribution network upgrades in SEQ

Sub-region	Estimated investment $m	Type of estimate (see note 5)	Delivery timeframe		
			2006-07 to 2010-11	2011-12 to 2014-15	2015-16 to 2025-26
Western Corridor (ENERGEX)	294		Construction underway		
Brisbane metropolitan (ENERGEX)	2433		Construction underway		
Gold Coast (ENERGEX)	1646		Construction underway		
Sunshine Coast (ENERGEX)	307		Construction underway		
Other (ENERGEX)	42		Construction underway		
Toowoomba (Ergon Energy)	67		Construction underway		
Total	**4789**				
Completed 2005–06	142				
Completed 2006–07	541				

Notes:

1. The table identifies the delivery timeframe for each infrastructure project. Projects that are underway with a minimum expenditure of $0.5 million in 2006-07 on planning, design, site acquisition, materials procurement or construction are identified in yellow.
2. Estimated investment is in 2007 dollars. Cost estimates in other public documents may differ, as they may incorporate project costs which reflect anticipated changes in input prices between initial planning and the time of construction. Estimated investment includes funds already expended on projects.
3. Estimated total investment ($m) is the total estimated network capital expenditure for the period 2006-07 to 2010-11.
4. Energy authorities budget on a five-year basis. Projects beyond that period are not identified, as capital works programs are set in light of regulatory determinations.
5. Projects in the period 2006-07 to 2007-08 have been allocated to respective sub-regions. Investment in the period 2008-09 to 2010-11 has been allocated to sub-regions on a proportional basis only.
6. For an explanation on the types of estimates, refer to page 18.

Map 8 – Electricity transmission and distribution infrastructure in SEQ



Gas

Natural gas will play an increasingly significant role as a fuel source for Queensland's electricity generation, industrial processes, business and residential consumers. Total natural gas consumption in Queensland is expected to triple over the period to 2030.

Unlike other states, Queensland is not a single gas market, but a series of markets in different locations. SEQ is the state's single biggest market for natural gas, with an annual consumption of around 50 petajoules (PJ) a year – almost 40 per cent of Queensland's overall gas consumption.

Transmission and distribution

Gas infrastructure, like that of electricity, consists of major transmission lines (pipelines) and localised distribution networks. Queensland has more than 4500 kilometres of high-strength steel gas transmission pipelines, which move gas from gas-producing regions to customers. This infrastructure is owned by the private sector and is not included in this Infrastructure Plan.

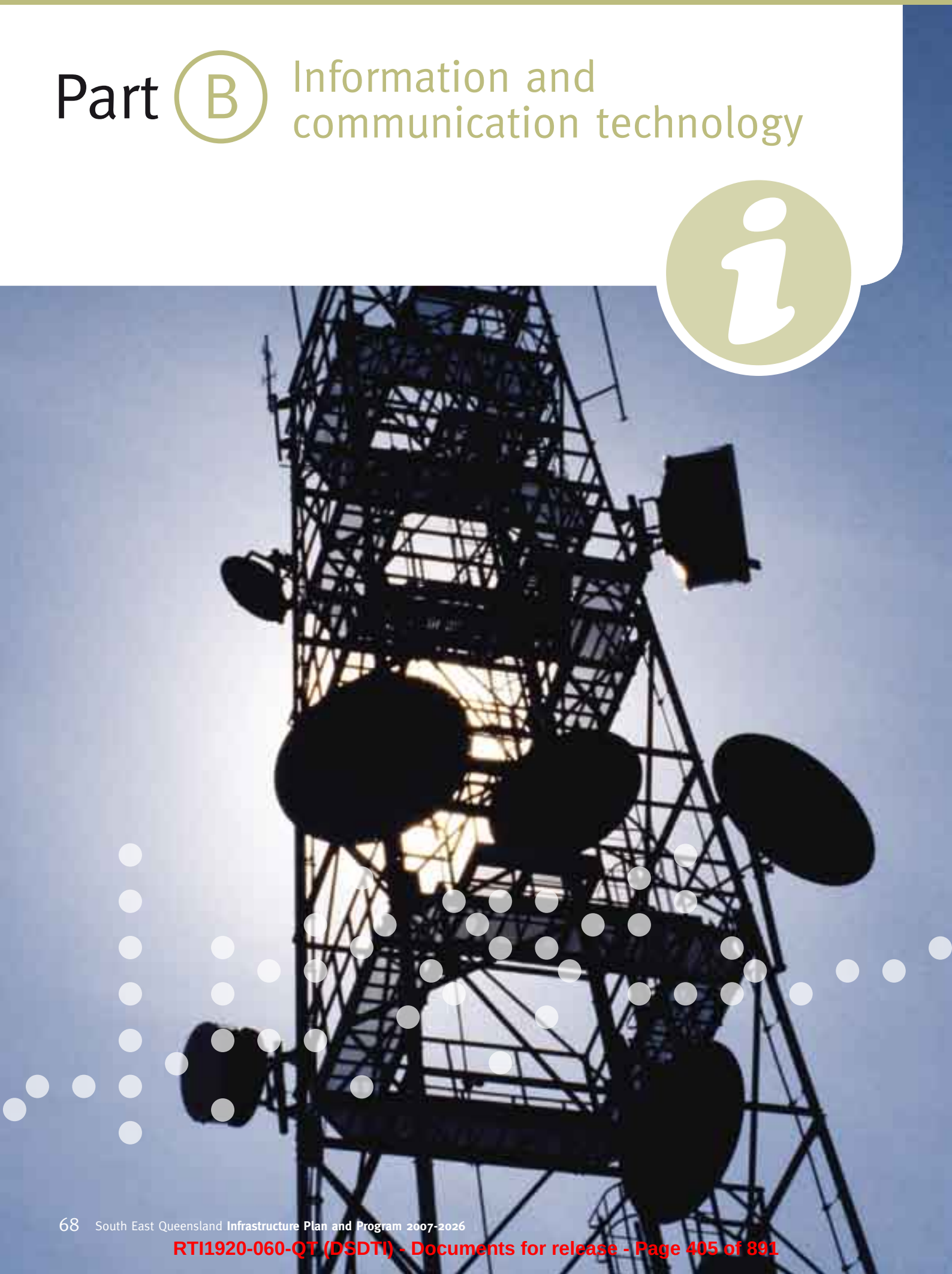
The 440-kilometre Wallumbilla (Roma) to Brisbane gas transmission pipeline (RBP) is the sole transporter of gas from the gas fields to the growing SEQ market. The owners of the RBP, Australian Pipeline Trust (APA), are actively investigating a potential increase in capacity of the pipeline (through the installation of additional compressor capacity) to meet increasing customer demand for gas. Also under consideration by APA is construction of a transmission pipeline connecting the RBP at Gatton to Gympie. The proposed pipeline would enable delivery of gas to the expanding Sunshine Coast market.

Within SEQ, gas is reticulated for domestic, commercial and industrial purposes by APA (Brisbane South and Gold Coast) and Envestra (Brisbane North and Ipswich). Envestra is undertaking a staged expansion of its natural gas reticulation network to supply gas to around 5000 new homes. APA is also expanding its network to supply a number of small residential projects around Brisbane and the Gold Coast.

Market development

The *Queensland Energy Policy* has been successful in diversifying the state's energy mix towards the greater use of gas. In particular, the policy's requirement that at least 13 per cent of electricity sold in Queensland be from gas-fired generation has encouraged the development of new gas sources, in particular coal seam gas. The commissioning in 2006 of the 450 MW Braemar Power Station, west of Dalby, brought Queensland's gas-fired power station capacity to more than 2000 MW, and there is more than 1700 MW of gas-fired generating capacity under active development.

Part B Information and communication technology



Information and communication technology

Information and communication technology is a major enabler of economic, social and community development. Widespread availability of affordable, competitively priced, high-speed telecommunications (broadband) infrastructure and services is critical to support the continued growth of SEQ and to realise the Queensland Government's vision of a 'Connected Queensland'.

The geography and demography of SEQ necessitates the use of multiple information and communication technologies. Broadband infrastructure needs to cover high-density urban areas as well as sparsely populated areas and challenging terrain. The optimal technology for high-speed telecommunications in most areas of SEQ is fibre-optic cable, but its widespread deployment is expensive.

Currently only a relatively small proportion of the region, primarily key business centres, is serviced with fibre-optic cable. The majority of business and domestic customers receive broadband services via Asymmetric Digital Subscriber Line (ADSL) using existing copper cable networks and wireless networks (including Wi-Fi and WiMax). Most of the metropolitan area has access to broadband services; however, there are service gaps in some isolated suburban areas, outlying suburbs and more remote parts of the region due to technology limitations.

Under the Australian Constitution, the regulation of telecommunications is the responsibility of the Australian Government. Services and infrastructure are provided by commercial entities (such as Telstra and Optus). State and local government can play a significant role in stimulating the effective use of broadband for economic and social development and facilitating the deployment of infrastructure. The main instruments are:

- demand aggregation;
- market awareness;
- project facilitation;
- access to facilities and assets;
- telecommunications spend allocation; and
- planning and development regulation.

The Queensland Government is actively promoting increased investment in telecommunications infrastructure across the state to improve access to and availability of broadband services and to enhance service delivery.

Progress on information and communication technology projects during 2006–07

- The *Queensland Telecommunications Strategic Framework 2005-08* continues to be implemented and updated, providing key strategies and actions for government, industry and community groups to advance the provision of modern telecommunications infrastructure and services.
- The Queensland Government continues to provide an online telecommunications information portal (www.enable.qld.gov.au) for business and communities. The portal provides a comprehensive single access point for local government, industry providers and consumers to find and share useful information on telecommunications in Queensland. It forms part of broader efforts to reduce barriers to the rollout of telecommunications infrastructure and services.

- *Project Vista*

  The Queensland Government is investigating private sector involvement in the development of an ultra-high-speed broadband infrastructure network in Brisbane City. Options include the potential for state and local government assets (such as electricity poles, pits, pipes, road and rail easements) to be used to assist the timely delivery of infrastructure and services. The Queensland Government is reviewing expressions of interest from the private sector to deliver the project. There is potential for the proposed delivery model to be replicated in other parts of SEQ and the rest of the state.

- *Connect Australia*

  In 2006-07, the Australian Government introduced its $1.1 billion *Connect Australia* program. The Queensland Government has supported funding bids for infrastructure, service and support under the program worth in excess of $115 million. The Australian Government has yet to announce the successful bidders.

  In June 2006, the Queensland Government established a Connect Australia Steering Committee to develop a strategic solution for Queensland and oversee funding bids.

- *ConnectSEQ*

  The Council of Mayors (SEQ) is seeking funding under Connect Australia to support deployment of a broadband backbone optical fibre network linking the 18 SEQ councils. Known as ConnectSEQ, the initiative has been developed in partnership with the Queensland Government with the objective of providing a region-wide, open access optic fibre and wireless network.

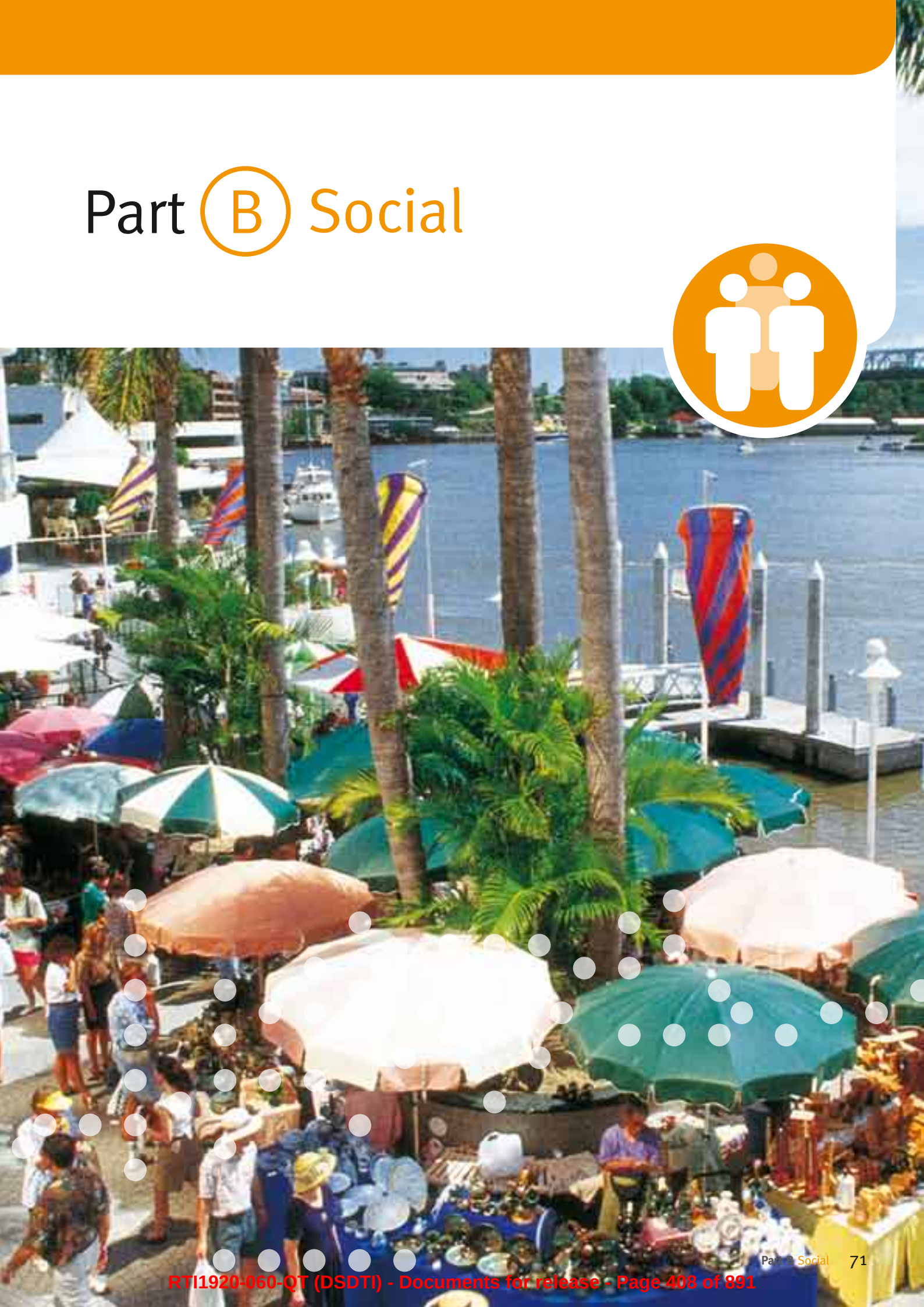
- *Demand aggregation*

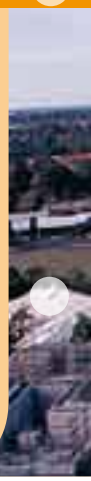
  The Queensland Government is continuing to support demand aggregation – the process of stimulating, quantifying and marketing demand for regional broadband services that have not been identified and met by telecommunications suppliers.

  Aggregating demand across both commercially viable towns and less commercially attractive areas has brought new broadband infrastructure and services to parts of the Gold Coast and Sunshine Coast.

  As the delivery of information and communication capital services are not provided by the Queensland Government they are not included in the SEQ Infrastructure Plan.

Part B Social





Health

Queensland is experiencing the highest rate of population growth in the country, including in older age groups. The impact of a growing and ageing population is already being felt in the hospital system, with increasing demand for health services. Over the next 15 years, the number of hospitalisations in Queensland is projected to double as a result of changes in the population and the increasing burden of chronic disease.

In addition to growing our hospital services, Queensland Health will need to invest further in services outside of the hospital system to more appropriately meet the needs of a growing and ageing population.

The Queensland Government will meet its commitment of providing high standard health services through the provision of new facilities, where appropriate, and the refurbishment and expansion of existing facilities and services.

While a number of hospitals will undergo substantial upgrades or expansion, such as the Ipswich Hospital and the Emergency Department of the Princess Alexandra Hospital, the development of major new facilities such as the Queensland Children's Hospital, the Gold Coast University Hospital and the Sunshine Coast Hospital will be key health infrastructure priorities to meet the growing needs of SEQ.

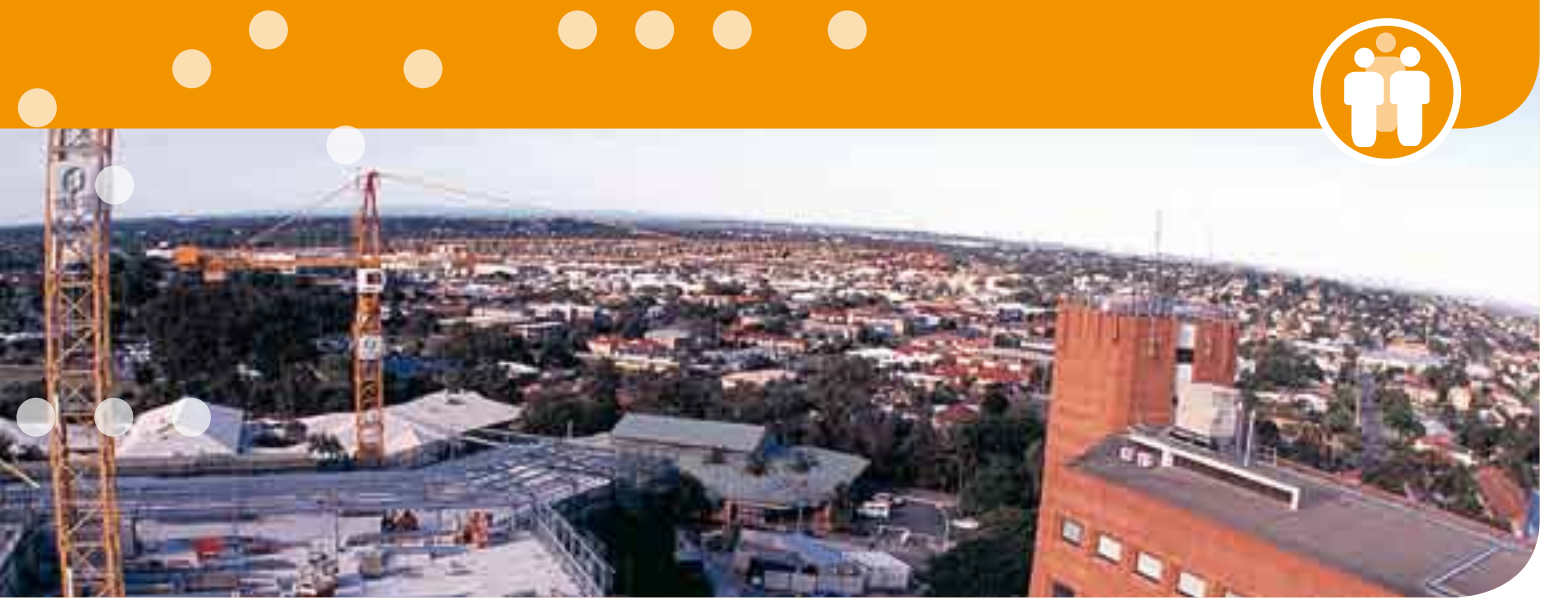
Additional acute health care capacity will be supplemented by the development of Health Precincts (formerly known as Health Hubs) to provide the community with improved access to services by clustering a variety of public and private community-based services together.

The Queensland Government's significant commitment of $1.19 billion to the expansion of health services and staffing over the five-year period 2005 to 2011 will complement the proposed infrastructure program.

Table 9 outlines the estimated investment and approximate timing of major health projects that are expected to meet the proposed population growth and settlement pattern in SEQ. These projects do not reflect the full range of health infrastructure required for SEQ to 2026. Additional projects may be identified and implemented as development progresses and further detailed planning is undertaken, particularly at the local level.

Progress on health projects during 2006–07

- Stage 1 of the conversion of The Prince Charles Hospital from a specialist hospital to a broader-focused general hospital will be completed in 2007. The project includes construction of a new Emergency Department and substantial refurbishment of existing buildings.
- Joint agency master planning for the new Gold Coast University Hospital at Parklands is underway.
- A draft service plan is now in place for all Sunshine Coast health facilities with a final service plan anticipated by mid-2007. Acquisition of land for the new Sunshine Coast Hospital at Kawana, and site selection for the Sunshine Coast Health Precinct, is underway. Planning has commenced for the expansion of facilities at Caloundra and Nambour hospitals.
- Planning and site selection is underway for the Robina Health Precinct.
- Service and master planning for the Robina Hospital expansion has commenced.
- The Browns Plains Health Precinct design phase has been completed and contract documentation is being developed.
- Strategic planning of health services for the new Queensland Children's Hospital to be located adjacent to the Mater Health Services site in South Brisbane is underway.
- Planning for a Translational Research/Smart Therapies Institute on the Princess Alexandra Hospital site is well advanced. The Institute will house researchers from leading research institutes, research facilities and a new pilot pharmaceutical manufacturing and testing facility.
- Planning and design of Princess Alexandra Hospital Emergency Department expansion and redevelopment has commenced.
- Detailed design of the North Lakes Health Precinct has been completed and contract documentation is being developed.



New University Hospital for the Gold Coast

A $1.23 billion hospital will open at Parklands on the Gold Coast in 2012. The 750-bed tertiary hospital, located adjacent to Griffith University, will have strong links to medical education and research. The new facility will complement existing health services in the Gold Coast sub-region.

New Queensland Children's Hospital

The new Queensland Children's Hospital will open in progressive stages from 2011 to 2014. The 400-bed hospital will be built adjacent to the Mater Hospital in South Brisbane. It will provide facilities that are among the best in the world, bring together specialist paediatric staff from various hospitals and become the centre for education and research in paediatrics in Queensland.

New tertiary hospital for the Sunshine Coast

On the Sunshine Coast, a $940 million tertiary hospital will be built at Birtinya near Kawana Waters. It will have 650 beds when completed and the first stage of 450 beds will open by 2014. The new hospital will provide the cornerstone of a major health expansion of health services on the Sunshine Coast.

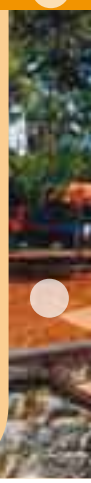


Table 9 – Regional health infrastructure

Sub-region	Estimated investment $m	Type of estimate (see note 4)	Delivery timeframe		
			2007-08 to 2010-11	2011-12 to 2014-15	2015-16 to 2025-26
Western Corridor					
Health Precincts x 2: Ipswich area	45	1	Planning underway		
Ipswich Hospital: redevelopment	270	1	Planning to commence		
Greater Brisbane					
The Prince Charles Hospital: upgrade to general hospital	134	3	Construction underway		
Browns Plains Health Precinct	24	1	Planning and design completed		
North Lakes Health Precinct	52	1	Planning and design completed		
Caboolture Health Precinct	20	1			
Queensland Children's Hospital	704	1	Planning underway		
Translational Research/Smart Therapies Institute	100	1	Planning underway		
Princess Alexandra Hospital Emergency Department: expansion and redevelopment	50	1	Planning underway		
Gold Coast					
Gold Coast University Hospital	1230	1	Planning underway		
Robina Health Precinct	26	1	Planning underway		
Robina Hospital: expansion	220	1	Planning underway		
Sunshine Coast					
Sunshine Coast Health Precinct	45	1	Site selection underway		
Sunshine Coast Hospital	940	1	Planning underway		
Sunshine Coast: expansion of existing facilities	79	1	Planning underway		
Total	**3939**				

Notes:

1. The table identifies the delivery timeframe for each infrastructure project. Projects that are underway with a minimum expenditure of $0.5 million in 2006-07 on planning, design, site acquisition, materials procurement or construction are identified in yellow.
2. Estimated investment is in 2007 dollars. Cost estimates in the State Budget and other public documents may differ, as they may incorporate project costs which reflect anticipated changes in input prices between initial planning and the time of construction. Estimated investment includes funds already expended on projects. Health Precinct investment has not been indexed.
3. Where funding is required from other levels of government, their estimated costs have been included.
4. For an explanation on the types of estimates, refer to page 18.

Education

The adequate and timely provision of education services is a critical factor in servicing the region's existing and future communities. Primary and secondary education services are provided by the Queensland Government through Education Queensland and the Office of Non-State Schooling. More than 70 per cent of Queensland school students access the state school system, with Education Queensland operating and maintaining around 590 schools and environmental education centres in the SEQ region.

New school provision in SEQ presents an ongoing challenge. Strong population growth, the requirement to identify optimum opening dates of new schools (to ensure their viability and that of existing schools) and the decreasing availability of appropriate land to locate new schools require innovative solutions to meet government and community needs and expectations.

The Department's standards for new school provision provide for transparency of decision making, equity in provision, value for money, accessibility and viability for new and existing schools across the state. These standards provide those undertaking the master planning of large tracts of urban residential land with an appreciation of what is achievable within the principles of accessibility and viability.

The availability of quality information for planning new school provision, including Local Growth Management Strategies, Structure Plans and State Infrastructure Agreements, assists the Queensland Government to explore alternative avenues for new school provision, including Public Private Partnerships (PPP) and Joint Development Agreements with state and local government agencies. PPPs are being investigated for the delivery of schools in the Western Corridor and on the Sunshine Coast.

Table 10 shows the anticipated number of schools (71) and capital expenditure on state school infrastructure in SEQ from 2007 to 2025-26. It is based on current demographic forecasts and service provision models and includes additional schools in the Western Corridor.

As part of its Smart State agenda, the Queensland Government has also developed the Queensland Academies to provide an opportunity for the State's brightest Year 10 and Year 11 high school students to experience an educational environment characterised by challenge and innovation. Two Academies are in Brisbane and a third will open on the Gold Coast in early 2008.

The Queensland Academy for Science, Mathematics and Technology is located at Toowong and is linked to the University of Queensland. The Queensland Academy for Creative Industries is located at Kelvin Grove and has links with the Queensland University of Technology. The third Academy, under construction at Parklands on the Gold Coast, will be the Queensland Academy for Health Sciences and will have links with Griffith University.

Co-location of community facilities

Co-location of services and facilities on and adjacent to new school sites, including child care centres, indoor sporting centres, sporting fields and cultural facilities, can provide benefits to students and the general community. The utilisation of existing school land for the provision of community facilities, such as aquatic centres and Early Years Hubs (where the Department of Communities provides services such as counselling to parents and families), reduces the impost of travel on parents and assists government to provide a diverse range of community facilities.

Progress on education projects during 2006-07

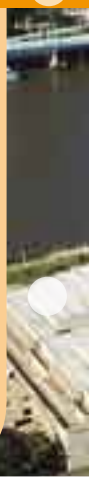
- Stage 1 of Springfield Lakes State School (P–7) opened in January 2007 with 400 student enrolments from Prep to Year 7. Stage 2 construction will commence during 2007 to meet the steady growth in student numbers anticipated over the next few years. The Springfield Lakes community has embraced the school, as reflected in the strong initial intake of students. This new school in the Western Corridor will provide significant relief for Woodcrest State College (P–12).
- Burpengary Meadows State School (P–7) opened in January 2007 with 288 student enrolments from Prep to Year 7. This new school in Greater Brisbane was a welcome addition to the area as nearby Burpengary State School reached capacity with 1130 students enrolled.
- Stage 1 of the Stretton State College secondary campus opened in January 2007. The addition of years 8 and 9 has seen the College (opened in January 2006) double its enrolments from an initial P–7 intake of 350 students to 700 students. This facility will provide significant relief for Calamvale State College, which had more than 2000 students in 2006. An additional secondary year level will be added each year until 2010, when it will become a fully operational P–12 campus.

Table 10 - Regional state school infrastructure

Sub-region	Estimated investment $m	Type of estimate (see note 9)	Number of schools			
			Opening 2007	Opening 2008 to 2009	Opening 2010 to 2014	Opening 2015 to 2026
Western Corridor	795	1–3	1	0	6	14
Greater Brisbane	795	1–3	2	2	5	8
Gold Coast	821	1–3	0	5	4	13
Sunshine Coast	437	1–3	0	1	3	7
Total	**2848**		**3**	**8**	**18**	**42**
Completed 2005–06	32					
Completed 2006–07	37					

Notes:

1. Estimated investment is in 2007 dollars. Cost estimates in the State Budget and other public documents may differ, as they may incorporate project costs which reflect anticipated changes in input prices between initial planning and the time of construction.
2. Estimated total costs include land and construction costs. Calculations are based on $35 million for primary school provision and $61 million for secondary school provision.
3. The table incorporates additional primary and secondary school provision in Ripley Valley in the period covering 2010 to 2026.
4. Greater Brisbane includes the local government areas of Brisbane, Logan, Redland, Pine Rivers and Caboolture.
5. Sunshine Coast includes local government areas of Caloundra, Maroochy and Noosa.
6. Western Corridor includes local government areas of Ipswich, Esk, Laidley, Gatton, and Toowoomba.
7. Gold Coast includes the local government areas of the Gold Coast and Beaudesert. Cost estimates do not include the new Queensland Academy for Health Sciences.
8. Provision of schools is dependent upon population thresholds being met and timing of delivery may be adjusted to reflect changing demand.
9. For an explanation on the types of estimates, refer to page 18.



Vocational education and training

To ensure improved economic success, SEQ must continue to develop and sustain a workforce with high-level skills in relevant areas. However, Queensland's labour market is undergoing significant change. Some of this change is linked to cyclical patterns in worker demands for certain industries, while other changes are systemic, driven by advances in technology, social trends and global market forces.

In March 2006, the Queensland Government released the Queensland Skills Plan. This plan established a comprehensive policy framework for Queensland's vocational education and training system and ensures that it better matches the supply of skilled labour to industry's needs and the economy's demands.

The Queensland Skills Plan represents the most significant change to the vocational education and training system and the structure of TAFE Institutes in more than 40 years. It is implementing substantial reform of TAFE Institutes and the development of a more sophisticated approach to managing and supporting the entire Queensland training system. The Plan will result in substantial increases in trade training places and higher-level training places throughout the state to address trade skills shortages in Queensland.

Key elements of the Queensland Skills Plan include:

- the establishment of SkillsTech Australia as a new statewide trade and technician skills institute to lead product development and delivery in key trades areas (automotive, building and construction, manufacturing and engineering, electrical/electronics). SkillsTech Australia is developing close links with industry and centres of excellence to ensure that training programs and qualifications address employer needs;
- the Southbank Institute of Technology as the lead institute responsible for technological and high-level skills training and education is now well progressed with major new facilities soon to be operational;
- lead institutes have been established to champion product development and coordination across the state in designated fields;
- collaborative partnerships with industry and private providers, thereby ensuring access to the best possible training services for clients using publicly funded training; and
- provision of additional trade training places as part of the commitment to provide an additional 17,000 places over four years.

The new training system is underpinned by a major six-year $300 million capital works investment program to modernise existing TAFE infrastructure and construct new training facilities. It will also involve significant investment in information and communication technology ($25 million over five years) to provide for more flexible student access, accelerated skills acquisition and greater resource sharing between trainers.

Progress on vocational education and training projects during 2006-07

The Queensland Skills Plan is being implemented with construction or planning having commenced on many projects including:

- major new SkillsTech Australia trade training campuses at Acacia Ridge and Eagle Farm in Brisbane;
- upgrading of trade training facilities at Nambour (Sunshine Coast Institute of TAFE) and Toowoomba (Southern Queensland Institute of TAFE);
- modernising the Metropolitan South Institute of TAFE facilities to become a lead institute for programs in aged care, small business, fashion, textiles, clothing and footwear (amalgamating parts of Yeronga, Moreton and Logan Institutes); and
- comprehensive redevelopment of the former Southbank TAFE site at South Brisbane to establish the Southbank Institute of Technology – the lead institute for health, sport and recreation, arts and entertainment, and postgraduate programs for professionals and para-professionals.

Southbank Institute of Technology PPP

Construction of the new Southbank Institute of Technology, Queensland's first PPP project, is ahead of schedule. The project is a partnership between the Queensland Government (the Department of Education, Training and the Arts) and a private sector consortium, Axiom Education Queensland.

The project involves construction of 11 new buildings and renovation of another four buildings on the Southbank campus at an estimated capital cost of $234 million. Once complete, Axiom will be responsible for providing facilities management services over a 30-year period, including facilities maintenance, cleaning, grounds and security services.

The Institute's first new teaching facilities opened ahead of schedule in January 2007. Other facilities will progressively open until the redevelopment is complete in mid-2008.

Table 11 – Regional vocational education and training infrastructure

Map reference	Project	Estimated investment $m	Type of estimate (see note 3)	Delivery timeframe		
				2007-08 to 2010-11	2011-12 to 2014-15	2015-16 to 2025-26
Western Corridor						
	Campus modernisation: Bundamba	18	1			
Greater Brisbane						
	Southbank Institute of Technology	234	3	Construction underway		
	SkillsTechAustralia: new campus at Acacia Ridge	82	2	Construction underway		
	SkillsTechAustralia: new campus at Eagle Farm	53	1	Planning underway		
	Campus modernisation: Mt Gravatt, Alexandra Hills, Chelmer,	21	1			
Gold Coast						
	New Gold Coast TAFE campus: Coomera	30	1			
Sunshine Coast						
	Campus establishment: Kawana	8	2	Planning underway		
	Campus modernisation: Sunshine Coast	17	1			
Toowoomba						
	Automotive trade training facility: Toowoomba	3	1			
Total		466				

Notes:

1. The table identifies the delivery timeframe for each infrastructure project. Projects that are underway with a minimum expenditure of $0.5 million in 2006-07 on planning, design, site acquisition, materials procurement or construction are identified in yellow.
2. Estimated investment is in 2007 dollars. Cost estimates in the State Budget and other public documents may differ, as they may incorporate project costs which reflect anticipated changes in input prices between initial planning and the time of construction. Estimated investment includes funds already expended on projects. Estimated investment for TAFE infrastructure has not been indexed.
3. For an explanation on the types of estimates, refer to page 18.

Regional sport and recreation

SEQ's climate, outstanding natural landscapes and network of sport and recreation facilities support a diverse range of recreational opportunities. These activities generate significant health, social, economic and cultural benefits that are critical to the wellbeing and lifestyle of the community.

The responsibility for providing sport and outdoor recreation infrastructure is shared by state and local government, community organisations and the private sector. The Queensland Government provides sports facilities infrastructure of state and regional significance such as major stadiums. In addition, the Queensland Government provides a range of public open space in the region which is available for some type of outdoor recreation. This public open space includes marine parks, national parks, state forests and recreation areas. However, in all these areas, outdoor recreation is a secondary use permitted only to the extent that it does not interfere with the primary uses or values of those areas or contravene relevant laws.

Local government has primary responsibility for sport and recreation infrastructure that serves local or council-wide needs.

The community sector (primarily volunteer-based not-for-profit organisations) owns, builds, operates and maintains land and facilities for sport and recreation activities and also provides a range of ancillary recreation services such as search and rescue, first aid, skills training and activity supervision.

The private sector provides outdoor recreation services including off-road vehicle parks, camping areas, guiding services and equipment sales and hire.

Sport and recreation

The Queensland Government is committed to providing new opportunities for Queenslanders to participate in sport and recreation, from grassroots to elite level.

The Department of Local Government, Planning, Sport and Recreation (DLGPSR) delivers a range of programs and services to encourage increased participation in sport and active recreation. State agencies work collaboratively, and engage with local government and community organisations, to develop strategies and infrastructure to foster increased participation in sport and active recreation and ensure facilities are accessible and used effectively.

Progress on sport and recreation projects during 2006-07

Queensland Government grant programs provide funding assistance to local government and community organisations for the construction of sport and recreation facilities and preparation of recreation plans to foster improved utilisation and management of facilities. During 2006-07 the Queensland Government constructed, or worked in partnership with local government and community organisations to complete, the following regionally significant projects:

- State Softball Centre, Ormiston (state contribution of $1.24 million);
- Centre of Cricket Excellence, Albion (state contribution of $2.5 million);
- Brisbane Cricket Ground, Woolloongabba stadium upgrade ($50 million); and
- Queensland Sport and Athletics Centre, Nathan stadium upgrade ($1.5 million).

Construction is also well underway on:

- State Tennis Centre, Tennyson (estimated value $77 million). The centre will include 23 international-standard courts, including three Grand Slam surfaces – grass, clay and acrylic. The centre court will seat 5500 people and be suitable for state, national and international tennis events. The project is being delivered in partnership with the private sector as part of an integrated $540 million sport, recreation and residential precinct and the first stage including the Tennis Centre will be completed in December 2008.
- Gold Coast Football Stadium, Robina ($160 million). The new 25,000-seat stadium will be the home ground for the Gold Coast Titans National Rugby League team. Grandstand structures and the concourse surrounding the ground are now in place and the stadium will be completed in February 2008.

Community use of school sport and recreation facilities

In March 2007, the Department of Education, Training and the Arts and DLGPSR signed a Memorandum of Understanding to collaboratively plan, fund, develop and manage community sport and recreation facilities on state school land.

This arrangement will assist the Queensland Government to provide a diverse range of sport and recreation facilities for use by students and the general community. Already three SEQ communities have been announced as receiving funding for this initiative with the provision of new shared facilities such as sports fields, multi-use sports courts, tennis courts and a multi-purpose indoor sports centre/gymnasium.

Outdoor recreation

The opportunity to undertake a broad range of outdoor recreation activities is highly valued by SEQ residents and visitors, and is an important factor contributing to the region's liveability and attraction. Popular activities include bushwalking, horse riding, walking with dogs, sailing, mountain biking, camping, surfing, cycling, boating, canoeing, trail bike riding and four-wheel driving. Participation surveys consistently show that outdoor recreation activities – particularly walking, surf activities, swimming in creeks, rivers and lakes, and cycling – contribute to more than half of all participation in outdoor physical activity.

The Queensland Government is preparing the *SEQ Regional Outdoor Recreation Strategy* to coordinate the delivery of outdoor recreation services within SEQ and identify regional outdoor recreation priorities. Priority projects will be delivered in partnership with local government, the community and private sector.

In January 2007, the Queensland Government announced it will invest $8.8 million over the next five years (commencing 2007-08) to develop three regional recreation trails in SEQ. These Active Trails will be established as pilot projects for an annual SEQ Outdoor Recreation infrastructure program linked to the SEQ Regional Outdoor Recreation Strategy. The first trail projects include:

- *Brisbane Valley Rail Trail* – a 140-kilometre trail following the decommissioned Brisbane Valley railway line between Ipswich and Blackbutt. The trail passes through Fernvale, Lowood, Esk, Toogoolawah, Harlin, Moore and Linville, exposing users to spectacular scenery and important agricultural landscapes. The trail will cater for families, bicycle tourists, mountain bike riders, historical enthusiasts, horse riders and walkers. The project includes track construction, road and gully crossings, user amenities and directional and interpretive signage.
- *Boonah to Ipswich Trail* – a 76-kilometre trail linking Ipswich to the proposed Wyaralong Dam and the Boonah district. The trail traverses wooded hills and farmlands and will cater for walkers, mountain bikers and horse riders. The project includes constructing 60 kilometres of new track, establishing a new camping area, user amenities, sleeping shelters, trail head facilities and directional and interpretive signage.
- *Maroochy River Canoe Trail* – a 28-kilometre trail from near Yandina to Maroochydore passing through scenic natural and agricultural landscapes. The project will cater for canoeists and kayakers and include riverside parking areas, water access pontoons and ramps, user amenities, and directional and interpretive signage.

The trails will significantly enhance outdoor recreation opportunities for a range of user groups and will also help achieve many other Queensland Government priorities addressing tourism, obesity, healthy lifestyles and rural economic development.

As part of this funding commitment, the Queensland Government has allocated $1 million to promote and market associated outdoor recreation opportunities and develop arrangements to integrate planning, delivery and management issues between state agencies, local government and community organisations.

The Queensland Government is also developing a significant network of horse riding trails within SEQ. Since 2005, a significant length of horse trails has been established or planned in consultation with riders and local governments. Further trails are currently under development for the Bellthorpe/Caboolture and Mapleton areas.

The Queensland Government provides a range of facilities to support outdoor recreation activities in national parks and on other state lands. Infrastructure includes walking tracks, camping areas, visitor centres, public amenities and picnic facilities. The Queensland Government spends approximately $15 million per year on visitor facilities in SEQ national parks.

Queensland Parks and Wildlife Service (QPWS) established a 58-kilometre Sunshine Coast Hinterland Great Walk through the Blackall Range, and construction of a 54-kilometre Gold Coast Hinterland Great Walk linking the Lamington and Springbrook national parks is well underway. In late 2006, the Premier announced more than $5.5 million for the development of four new Great Walks, two of which will be located in SEQ (one in Noosa and the other in the Conondale Range).

Tamborine National Park was the first national park declared in Queensland. QPWS will spend more than $2 million upgrading facilities in the Tamborine, Springbrook and Lamington national parks in the lead-up to the Centenary of National Parks in 2008.

The Queensland Government also provides funding to local government and community organisations to support a range of outdoor recreation activities. In 2006-07, the Queensland Government approved more than $4 million in grants for outdoor recreation projects such as cycleways, walkways and walking tracks in SEQ.

Boating is another extremely popular outdoor recreational activity in SEQ. In 2006-07, the Queensland Government invested more than $5 million to improve SEQ boating infrastructure such as dredged channels, boat ramps and pontoons, buoys, beacons and other aids to navigation. This will complement local government's contribution to boating resources and facilities for residents and visitors to SEQ, which include parking, lighting and security for boat ramps, cleaning and maintenance for boat ramps, jetties and pontoons, toilets and other public facilities at boating sites.

SEQ Regional Outdoor Recreation Strategy

Planning, provision and management of outdoor recreation is complex due to the many stakeholders, complicated legal issues and need to avoid adverse impacts on the primary uses and values of areas where outdoor recreation occurs while meeting the needs of participants.

The *SEQ Regional Outdoor Recreation Strategy* will establish formal processes and institutional structures by which outdoor recreation service providers coordinate and collaborate to address high-priority outdoor recreation issues. These processes and institutional arrangements will provide the strategic leadership and direction to maintain and increase the quality, quantity, diversity, safety and sustainability of outdoor recreation opportunities in SEQ within the context of other regional landscape values and functions.

The Strategy will include:

- a regional trails strategy which provides a long-term strategic approach to trail planning, development and management;
- mechanisms to facilitate collaboration and coordination including standardised classification of activities, inventory systems and spatial information;
- detailed descriptions of the outdoor recreation roles and responsibilities of state agencies, local government, the community sector and private enterprise;
- links with other relevant initiatives; and
- policies and planning approaches for difficult-to-locate activities, such as trail bike riding, four-wheel driving, use of personal water craft and mountain biking.

A discussion paper on the Strategy was released for public comment between January and March 2007. The Strategy will be developed from the more than 400 responses received, other relevant information and further targeted consultation with key interest groups prior to being finalised in late 2007.

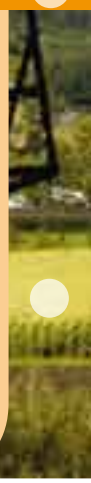


Table 12 – Regional sport and recreation infrastructure

Project	Estimate investment ($m)	Type of estimate (see note 3)	Delivery timeframe		
			2007-08 to 2010-11	2011-12 to 2014-15	2015-16 to 20 25-26
Western Corridor					
Clive Berghofer Stadium : Toowoomba upgrade*	2	G			
Gatton Aquatic Centre	2.5	1			
Brisbane Valley Rail Trail	3.6	1			
Boonah to Ipswich Trail	2.4	1			
Greater Brisbane					
Qld Sport and Athletics Centre: Nathan upgrade	10	1			
Aquatic Centre upgrades: Balmoral, Mt Gravatt, Runcorn, Redcliffe*	6	G			
Queensland Tennis Centre, Tennyson #	77	2			
Gold Coast					
New Gold Coast Football Stadium, Robina	160	3			
Lamington – Springbrook Great Walk	2.4	2			
Sunshine Coast					
Maroochy River Canoe Trail	0.5	1			
Noosa / Cooloola Great Walk	1.4	1			
Conondale Range Great Walk	1.4	1			
Total	**269**				

State Softball Centre, Ormiston	1.24	Completed in partnership with Redland Shire Council
Qld Sport and Athletics Centre, Nathan	1.5	Completed
Cricket Centre of Excellence, Albion	2.5	Completed in partnership with Queensland Cricket
Brisbane Cricket Ground, Woolloongabba	50	Completed

*Partnership with local government / community organisations
# Partnership with private sector. $77M represents estimated value of State Tennis Centre delivered by the private sector via partnership arrangements with Government.
G = Government grant, subsidy or program

Notes:

1. The table identifies the delivery timeframe for each infrastructure project. Projects that are underway with a minimum expenditure of $0.5 million in 2005-06 on planning, design, site acquisition, materials procurement or construction are identified in yellow.
2. Estimated investment is in 2007 dollars. Cost estimates in the State Budget and other public documents may differ, as they may incorporate project costs which reflect anticipated changes in input prices between initial planning and the time of construction. Estimated investment includes funds already expended on projects.
3. For an explanation on the type of estimates, refer to page 18.

Infrastructure for rural development

The SEQ Regional Plan supports the growth of rural areas in SEQ by encouraging existing towns and villages to accommodate additional residents, rather than allowing further rural residential development.

To support rural areas, the Queensland Government will continue to provide funding for water, sewerage, social, community and cultural facilities in rural shires through established grant and subsidy programs. Funding assistance for roads will also be maintained through the Roads Alliance program administered by Main Roads.

The Queensland Government established a Rural Futures Committee in 2006 to assist in developing a Rural Futures Strategy for SEQ. The Strategy will form the basis of an integrated rural planning framework in SEQ that will seek to balance the competition for land and natural resources, the needs of rural landowners, rural communities and the impacts of regional population growth. Due for completion by late 2007, it is anticipated that the Strategy will identify infrastructure critical to the long-term sustainability of the region's rural communities. Infrastructure identified through this process will be considered for inclusion in future updates of the SEQ Infrastructure Plan.

A number of projects to identify the infrastructure needs of rural areas are underway and scheduled for completion in mid-2007. These include an assessment of the social infrastructure needs of the Lockyer and Brisbane Valley areas, and an assessment of the community transport facilities in rural areas that currently service education, health and emergency services needs.

Water is a critical issue for agriculture and rural towns and villages, particularly during the current drought. Rural water issues are being considered as part of the SEQ Regional Water Supply Strategy, to be released mid-2007.

Activity Centre renewal and transit oriented development

A key focus of the SEQ Regional Plan is to encourage infill in existing areas, particularly through redevelopment of areas around Activity Centres and public transport nodes. To deliver this, the SEQ Regional Plan promotes the integration of urban development, transport infrastructure, community services and employment as a key strategy for creating vibrant livable communities and achieving more efficient use of urban land.

The SEQ Regional Plan intends that transit oriented development principles be applied as part of detailed planning for all regional Activity Centres and land in close proximity to high-capacity, high-frequency public transport nodes and corridors. The Office of Urban Management provides advice on best practice transit oriented development and leads its implementation in SEQ.

The Queensland Government's key role in facilitating development of these areas is through coordinating planning, infrastructure delivery and relevant state activities. The Queensland Government may also play a role in purchasing land and providing infrastructure, with the goal of achieving attractive, viable mixed-use development and best practice land use and transport integration.

This Infrastructure Plan includes $45 million committed over three years to support Queensland Government involvement in these projects, beginning in 2007-08.

Progress on Activity Centre renewal and transport oriented development during 2006-07

- *Implementation Guideline No.4: Structure Plans* was released in October 2006. This Guideline details how local governments prepare structure plans and master plans, as they apply to detailed local planning for significant infill and greenfield development including transit oriented communities and Regional Activity Centres.
- *The Urban Housing Capacity Template* methodology, prepared by the University of Queensland in conjunction with the Office of Urban Management, was released in October 2006 as a tool available for use by councils to enable an accurate assessment of localities' capacity to accommodate future higher-density development.

The Transit Oriented Development Taskforce:

- is compiling a *Transit Oriented Development Resource Manual*, including best practice guidelines;
- prepared *Interim Transit Oriented Development Location Selection Criteria* to assist local government in the selection of locations suitable for transit oriented development;
- advised the regional planning Minister on transit oriented development funding criteria;
- recommended institutional arrangements for implementation of transit oriented development policy in SEQ; and
- released transit oriented development fact sheets via the Office of Urban Management website (www.oum.qld.gov.au).

Transit Oriented Development Taskforce

The Transit Oriented Development Taskforce was established in 2005 to provide leadership and advice on matters relating to transit oriented development. The Taskforce comprises representatives from state and local government, academia and the development industry.

Priorities for the Taskforce over the next 12 months include:

- finalising the Transit Oriented Development Resource Manual;
- advising on issues emerging from Local Growth Management Strategies;
- researching the cost/benefit of transit oriented development, market feasibility and private sector benefits, and economics and employment within transit oriented development; and
- establishing a transit oriented development database to measure transit oriented development performance over time.

Justice Services

The Queensland Government provides a range of infrastructure to support the justice system, including an extensive network of police stations, courthouses and correctional facilities. Many of these are not regionally significant in their own right, but are critical to maintaining a safe, just and supportive society.

Justice Services infrastructure currently being constructed in SEQ includes:

- a $110 million Ipswich Courthouse in the Ipswich CBD. The project includes 12 courtrooms for the District Court and Magistrates Court, as well as a watchhouse and police station. Construction will commence mid-2007;
- a new Pine Rivers Courthouse at Strathpine incorporating three Magistrates' courtrooms, as well as a watchhouse. The total project cost is $18 million. Construction is underway with completion anticipated in early 2008; and
- a $4.7 million Sandgate Courthouse is under construction. The project includes a Magistrates' courtroom, ancilliary meeting facilities and a secure link to the adjacent police station. The project will be completed late 2007.

Planning is also underway for a major new Supreme Court and District Court complex in the Brisbane CBD. The project will incorporate approximately 47 courtrooms and state-of-the-art technology.

SEQ corrective services precinct

In November 2006, the Queensland Government announced it would establish a major corrective services precinct at Spring Creek near Gatton. The precinct will be developed in stages and incorporate a number of correctional centres. The precinct may have an ultimate capacity of approximately 3000 beds.

Acquisition of a 600-hectare site is currently underway. The Queensland Government has made an initial commitment of $500 million for Stage 1A of the project.

Useful websites

The following websites provide further information on the scope and status of infrastructure projects included in this Infrastructure Plan:

Project	Website
Regional planning and infrastructure projects	
SEQ Regional Plan	www.oum.qld.gov.au
Major projects and SEQ infrastructure	www.infrastructure.qld.gov.au
Program Management Office	www.SEQuence.qld.gov.au
Transport and Main Roads	
Queensland Transport	www.transport.qld.gov.au
Main Roads	www.mainroads.qld.gov.au
Bus and busway projects	www.translink.qld.gov.au
Airport Link	www.brisbane.qld.gov.au/airportlink
North – South Bypass Tunnel	www.brisbane.qld.gov.au/nsbt
	www.nsbt-eis.com
	www.rivercitymotorway.net.au
Rail upgrades	www.qr.com.au/seqipp
Water	
Queensland Water Commission	www.qwc.qld.gov.au
SEQ Regional Water Supply Strategy	www.seqwaterstrategy.qld.gov.au
Home WaterWise Service	www.homewaterwise.com.au
Traveston Crossing and Wyaralong dams	www.qldwi.com.au
Water Saving Rebate Schemes	www.nrw.qld.gov.au/water/saverscheme
Sustainable Housing Code	www.lgp.qld.gov.au/sustainableliving
Energy	
CS Energy	www.csenergy.com.au
Dept of Mines and Energy	www.dme.qld.gov.au
ENERGEX	www.energex.com.au
Ergon Energy	www.ergon.com.au
National Electricity Market Management Company (NEMMCO)	www.nemmco.com.au
Origin Energy	www.originenergy.com.au
Powerlink Queensland	www.powerlink.com.au
Tarong Energy	www.tarongenergy.com.au
Information and communication technology	
Queensland Telecommunications Strategic Framework	www.qgcio.qld.gov.au
Project En@ble telecommunications portal	www.enable.qld.gov.au
Social	
Queensland Health	www.health.qld.gov.au
Queensland Children's Hospital	www.health.qld.gov.au/childrenshospital
Dept of Education, Training and the Arts	www.education.qld.gov.au
Queensland Skills Plan	www.trainandemploy.qld.gov.au
Sport and recreation funding programs	www.sportrec.qld.gov.au
	www.dlgpsr.qld.gov.au
Horse trails and Great Walks	www.epa.qld.gov.au/parks_and_forests
SEQ Regional Outdoor Recreation Strategy	www.oum.qld.gov.au
Courthouse upgrades	www.justice.qld.gov.au
SEQ corrective services precinct	www.correctiveservices.qld.gov.au

Images courtesy of Baulderstone Hornibrook; Department of Local Government, Planning, Sport and Recreation; Department of Main Roads; Department of Public Works; Education Queensland; Les Dixon; Michael Cranfield; Mick Capelin; Port of Brisbane Corporation; Queensland Rail; Queensland Transport; Stu Riley

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South East Queensland

Infrastructure Plan and Program 2008–2026

Queensland **the Smart State**

Queensland Government
Department of Infrastructure and Planning

Published June 2008

ISBN: 978-0-9804831-3-0

South East Queensland

Infrastructure Plan and Program

2008–2026

Foreword

Queensland welcomes about 1700 new people each week—that's one person every five minutes. About 60 per cent of these people move to South East Queensland.

Over the next 20 years South East Queensland's population is expected to increase to around four million people. One of the greatest challenges facing the Queensland Government in meeting the state's infrastructure needs is keeping up with this growth.

The *South East Queensland Infrastructure Plan and Program 2008–2026* (SEQ Infrastructure Plan) has undergone a major review to keep pace with the changing needs of the region. The review involved a comprehensive analysis of the previous plan, integrating input from local government and industry, and considering impacts on industry and the implications of other emerging issues.

The reviewed plan increases Queensland Government estimated investment in infrastructure to $107 billion.

The government is working to achieve a balance between delivering infrastructure to support growth and showing fiscal restraint, given the current economic environment. This year sees the program mature from its establishment phase, marked by a significant period of growing investment and gear-up by both industry and government, into a stabilisation phase of steady and sustained delivery of infrastructure over the term of the plan.

The SEQ Infrastructure Plan needs to accommodate shifts in priorities to meet changing requirements, particularly in times of drought. The review has set a framework to review and prioritise the plan to suit the changing needs of South East Queensland, so people living in the region can maintain their quality of life.

The *South East Queensland Regional Plan 2005–2026* (SEQ Regional Plan) is also currently under review with a draft to be released later this year and final plan to be released in 2009.

Since the first SEQ Infrastructure Plan was released in 2005, the 20-year plan has been in overdrive, delivering the state's most ambitious infrastructure program, exceeding all expectations.

Only three years into the program, more than 160 projects have been completed, another 290 projects are underway and over $8.5 billion have been invested.

The Queensland Government is currently delivering a $9 billion South East Queensland Water Grid to help manage the drought and the $1.88 billion Gateway Upgrade Project. Construction will start later this year on the Airport Link and Northern Busway tunnel, while the Tugun Bypass and Inner Northern Busway are already complete—both ahead of schedule.

This reviewed SEQ Infrastructure Plan document comprises about 300 identifiable projects for the remainder of the plan and hundreds of sub projects.

Government and industry have both played a big part in planning and delivering infrastructure projects since the plan's inception in 2005. However, the current infrastructure boom has placed huge pressures on industry, creating significant increases in construction costs and ongoing shortages of skills and materials.

As part of the review, the government has taken account of increased construction costs and implications from the current economic market into updated project estimated costs.

It is important that the government continues to work with industry to ensure the right skills and resources are available to deliver the reviewed SEQ Infrastructure Plan program on time and on budget.

In partnership with other levels of government and the private sector, the Queensland Government is ensuring the SEQ Infrastructure Plan becomes a reality.

The recently formed Department of Infrastructure and Planning will work actively with government agencies to drive the infrastructure projects from the planning stages through to the delivery and reporting stages.

The Queensland Government is delivering an ambitious program of infrastructure across South East Queensland, while developing smart strategies to deal with the ever-changing challenges the region faces.

We are making progress in delivering infrastructure but more needs to be done. The Queensland Government will continue to plan, review and implement the SEQ Infrastructure Plan.

The Honourable Paul Lucas MP
Deputy Premier
Minister for Infrastructure and Planning

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The Queensland Government is committed to delivering the *South East Queensland Infrastructure Plan and Program 2008–2026* to support the changing needs of the region.

Highlights

The SEQ Infrastructure Plan outlines the Queensland Government's ambitious program of infrastructure and major projects to support the *South East Queensland Regional Plan 2005–2026* (SEQ Regional Plan).

It includes projects covering transport, water, energy, health, education, vocational education and training, regional sport and recreation, infrastructure for rural development, justice services, activity centres and transit oriented development, community safety, and industry development.

Investment identified in this infrastructure plan represents more than one-third of the state's total investment in infrastructure. Total government investment identified in this year's SEQ Infrastructure Plan is $107 billion until 2026. This includes $83.5 billion in road, rail and public transport projects including investigations, over $12 billion in social and community infrastructure, $8 billion in water infrastructure and $3.5 billion spending on energy.

Since the first SEQ Infrastructure Plan was released in 2005, the 20-year plan has been in overdrive, with more than 160 projects completed at a cost of $3.3 billion.

The first three years of delivery have seen a massive response from both industry and government to deliver nearly three times the infrastructure provided at the beginning of the decade. This provides industry with the long-term security to deliver a sustained level of project activity.

The SEQ Infrastructure Plan and Program 2008–2026 presents the stabilisation phase, which will see the steady and sustained delivery of infrastructure over the life of the plan.

In order to deal with emerging issues—drought, project refinement and the needs of the region—the plan has shifted priorities. This means some projects will be timed differently to ensure that the quality of life for people living in the region is maintained.

There has already been significant progress:

- Construction is underway on Queensland's largest road and bridge construction project. The Gateway Upgrade Project is scheduled for completion in mid 2011.
- Construction of the Airport Link road tunnel is expected to commence in 2008.
- Construction is complete on the Inner Northern Busway and is well underway on the Boggo Road Busway.
- Construction is well underway on the Gold Coast Desalination Project with the project expected to be fully operational by January 2009.
- Construction of the Western Corridor Recycled Water Project, the largest recycled water project in Australia, is well underway. The project is expected to be completed in December 2008.
- Construction of the Queensland Tennis Centre at Tennyson is expected to be completed by December 2008.
- Construction on the North–South Bypass Tunnel is well underway with the project expected to be completed by November 2010.
- The Tugun Bypass opened for traffic in June 2008, six months ahead of schedule.
- The Tank Street pedestrian and cycle bridge is expected to be completed by October 2009.

What's new in this SEQ Infrastructure Plan?

The previous SEQ Infrastructure Plan was released in May 2007. The following factors are new or have changed in this version of the plan:

- The SEQ Infrastructure Plan has undergone a major review.
- There are 60 new projects in the reviewed plan.
- The program has undergone a re-sequencing process to make delivery more efficient and to address emerging priorities that will ensure quality of life in the region is maintained. While this means that many projects have had changes to either their commencement or completion date, overall the program is progressing as expected.
- Project costs have been updated to reflect costs in 2008 dollars.
- In order to support stronger alignment with federal funding processes an additional estimate classification has been included (type 0: pre-concept estimate). This means that investments in infrastructure are now classified into five types from type 0 to type 4 depending on the level of investigation, approval and progress.
- The SEQ Infrastructure Plan is presented in three updated time periods with the first phase from 2008–09 to 2011–12, the second phase from 2012–13 to 2018–19 and the third phase from 2019–20 to 2025–26.
- Social infrastructure has been broken up into separate infrastructure classes of health, education, vocational education and training, regional sport and recreation, infrastructure for rural development, activity centres and transit oriented developments, community safety and justice services.
- A new infrastructure class for industry development has been included.

Map 1—South East Queensland region

Project achievements

For the past three years the SEQ Infrastructure Plan has been in overdrive, with real benefits for the community already being realised.

Since the first SEQ Infrastructure Plan was released in 2005, more than 160 projects have been completed and more than 290 projects are underway. Expenditure to date is already more than $8.5 billion.

In completing such a large number of projects already, the government and industry have demonstrated a successful working relationship to manage growth and enhance access to services and facilities in South East Queensland.

The projects completed to date are diverse and far reaching and include road, busway and rail transport, water, energy, schools and health projects. The completion of these projects demonstrates the government's commitment to providing a better future for South East Queensland.

Note:
Figure 1 outlines some of the projects delivered since the first SEQ Infrastructure Plan was released in 2005.

Figure 1—Delivered projects pipeline

Note: this figure does not include completed subtransmission and distribution network upgrades in South East Queensland.

Introduction of SEQ infrastructure Plan

2004–2006

- Pacific Motorway – Stewart Road Currumbin Interchange (Tugun Bypass)
- Warrego Highway: Plainland interchange
- Linkfield Connection Road
- KTIA Nicklin Way: additional lanes
- Stretton State College; Meridan State College

2006–2007

- Ormeau to Coomera: track duplication
- Springfield Lakes State School; Burpengary Meadows State School; Stretton State College further stages
- Construction of major substations at Molendinar (Gold Coast), Algester (Brisbane), Goodna (Ipswich) and Sumner (Brisbane)
- Gold Coast Transmission Reinforcement (Greenbank–Maudsland)
- Construction of a new transmission line between Belmont and Murarrie (Brisbane)
- Queensland Sport and Athletics Centre, Nathan
- State Softball Centre, Ormiston
- Cricket Centre of Excellence, Albion
- Brisbane Cricket Ground, Woolloongabba
- Salisbury to Flagstone/Greenbank passenger rail investigation
- Further TransApex Investigation—Airport Link
- Subsidies paid for completed local government projects
- Recycling, desalination and groundwater investigations and preliminary studies

2007–2008

- Inner Northern Busway improvements and new Busway stations
- Pacific Motorway: Tugun Bypass
- Centenary Highway–Boundary Road underpass (joint Brisbane City Council and Main Roads project)
- Ipswich Motorway alternative northern corridor investigation
- Ipswich to Springfield Public Transport Corridor Study
- Caboolture Northern Bypass
- Hamilton–Eagle Farm Transport investigation
- Australia TradeCoast Transport Study
- Bus priority on Smith Street: Olsen Avenue to Gold Coast Highway
- Bribie Island Groundwater Project
- Caltex Brisbane Recycled Water Project
- Lamington–Springbrook Great Walk
- Gold Coast Football Stadium, Robina (Skilled Park)
- Queensland Sport and Athletics Centre, Nathan: Hydrotherapy Centre upgrade
- Sandgate Courthouse
- Coomera Springs State School; Park Lake State School
- Cedar Grove Weir
- Brisbane Aquifier Project
- Bromelton Off-Stream Storage

There were more than 100 subtransmission and distribution network upgrades completed in SEQ over the period 2005/06 to 2007/08.

Figure 2—Indicative activity of SEQ Infrastructure Plan to 2026

Note: Figure 2 shows how the program will mature from its establishment phase, marked by a significant period of growing investment and gear-up by both industry and government, especially in delivering the South East Queensland Water Grid, into a stabilisation phase of steady and sustained delivery of infrastructure over the term of the plan. This represents total funds from all sources and is presented in 2008 dollars.

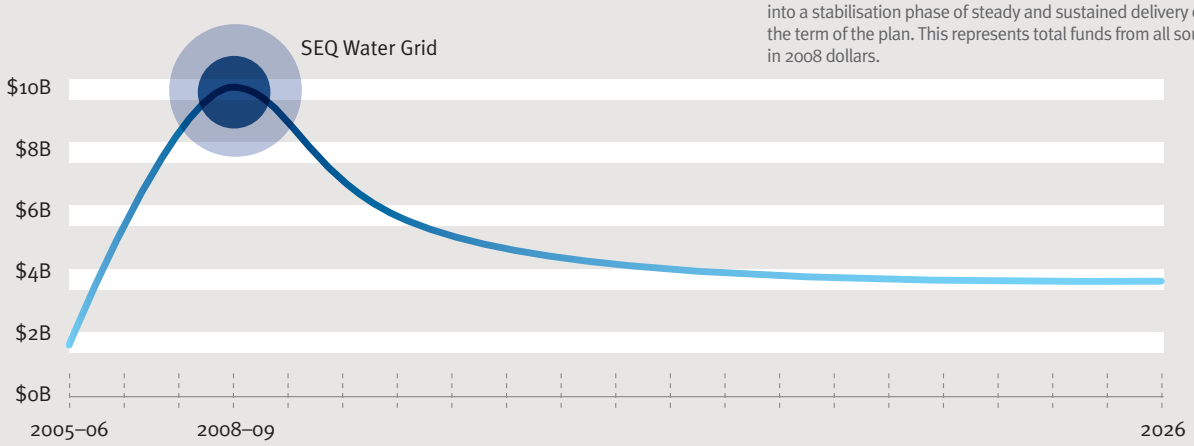
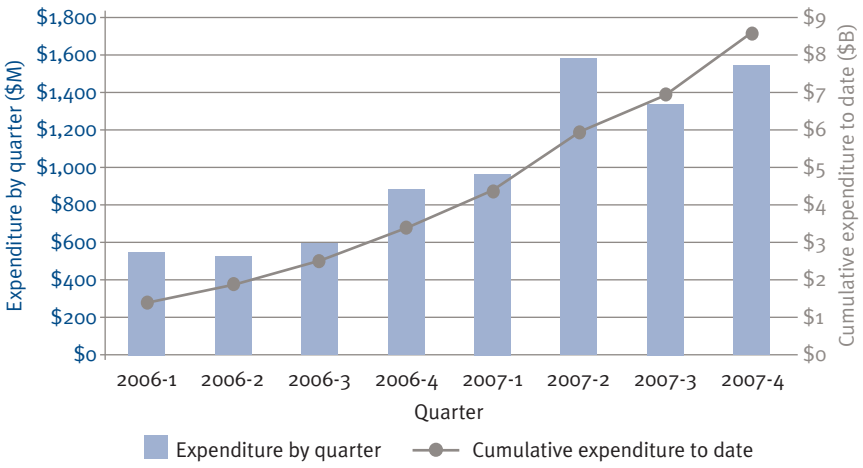


Figure 3—Program expenditure to date



Note: Figure 3 outlines the actual expenditure by quarter and a cumulative view of the expenditure to date.

Project delivery

Some of the major projects completed since the plan was first released in 2005 are outlined below.

Transport

- The $276 million rail program on the Gold Coast line, delivering additional rail tracks was completed (Ormeau to Coomera, Salisbury to Kuraby). It allows for more express trains between Brisbane and the Gold Coast.
- The $493 million Inner Northern Busway linking Queen Street bus station to Upper Roma Street was completed in May 2008. This project was delivered ahead of time and budget and represents significant public transport infrastructure through the Brisbane CBD.
- The $43 million Centenary Highway–Boundary Road underpass at Richlands was completed in August 2007. Since completion, the underpass has enhanced transport efficiency and reduced congestion in the area.
- Construction of additional lanes on the Nerang–Broadbeach Road from Allambie Gardens to Neilsens Road at Carrara was completed in September 2007 at a cost of $42 million. This upgrade has been in use since October 2007, five months ahead of schedule.

- The $89 million Caboolture Northern Bypass was completed in December 2007. Completing this connection of the D'Aguilar Highway to the Bruce Highway has significantly reduced congestion through Caboolture.
- The $13.3 million bus station program, as part of the Inner Northern Busway, delivered the Royal Children's Hospital and Normanby bus stations. Since completion the two bus stations have significantly enhanced the accessibility and connectivity of these key areas.

Water

- Construction of the Western Corridor Recycled Water Project, the largest recycled water project in Australia, had its first stage commissioned in August 2007. When complete, the project will be capable of supplying up to 232 megalitres/day of purified recycled water.
- Cedar Grove Weir was completed in the Logan River catchment. Other projects nearing completion on the $9 billion South East Queensland Water Grid include the Southern Regional Water Pipeline and the Gold Coast Desalination Plant, which are due for completion at the end of 2008.

Education

- The first stage of the Acacia Ridge TAFE opened in December 2006. The campus's first students started in the faculties of carpentry, floor laying/finishing and roof tiling. Other faculties are due to open in phases throughout 2008 and 2009.
- Meridan State College opened its doors to 269 students in January 2006. Framed by rainforest, the college services Caloundra's western suburbs and caters for students from Prep to Year 6.
- Burpengary Meadows State School opened its doors to 280 Prep to Year 7 students in January 2007 and has already grown to include approximately 350 children. The first stage will meet the needs of the rapidly growing Burpengary–Narangba area.
- Construction of Springfield Lakes State School was also completed in time for the 2007 school year. With 16 classrooms, the school is an integral part of a newly developing suburb that attracts many families with young children.

Health

- The first stage of the Prince Charles Hospital redevelopment was completed in February 2007 at a cost of $135 million. This stage includes a new emergency department, surgical wards, two operating theatres, medical wards and three nine-bed intensive care unit pods. This project forms part of a major investment in the health sector.

Justice

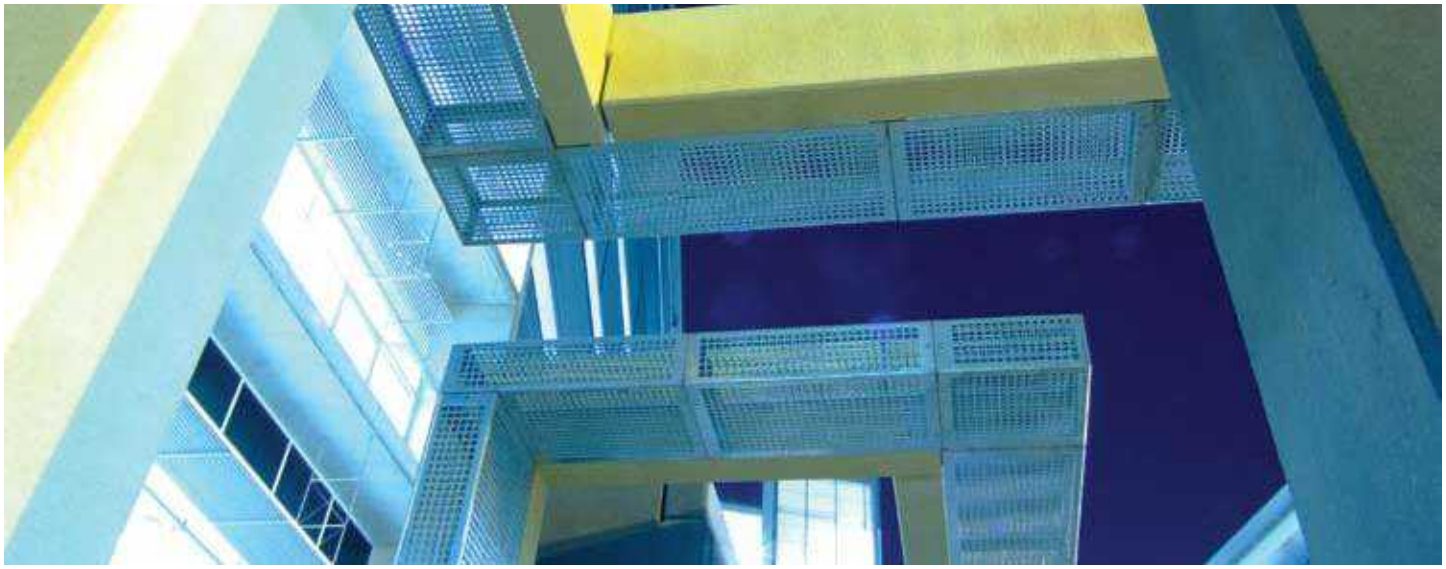
- The Sandgate Courthouse was completed in September 2007 at a cost of $4.4 million. Just six months after the main foundation was poured, Sandgate's new courthouse opened its doors for business. In addition to the magistrate's court, the complex provides a mediation room, registry office, interview rooms, public waiting rooms and a secure link to the adjacent police station for the transfer of prisoners.

Regional sport and recreation

- A section of the Brisbane Valley Rail Trail from Linville to Moore opened in November 2007. Based on the disused Brisbane Valley Railway line, this new section extends the existing 23-kilometre section from Blackbutt to Linville by an additional seven kilometres. Once completed in 2012, the multi-use recreational trail will be the longest in Australia.
- The Gold Coast Football Stadium at Robina was completed in December 2007 at a cost of $160 million. With seating for 25 000 spectators, the new home of the Gold Coast Titans provides an ideal venue for sporting and entertainment events.

Part A

Context of the SEQ Infrastructure Plan



About the SEQ Infrastructure Plan

The SEQ Infrastructure Plan outlines the government's infrastructure priorities to support the SEQ Regional Plan to 2026 and represents an unprecedented long-term commitment to capital works in South East Queensland. The SEQ Infrastructure Plan was first released in 2005 and is updated annually to reflect and align with the latest planning and budget commitments. It sets relevant timeframes and budgets to ensure the timely delivery of infrastructure supporting the region's growth.

The SEQ Infrastructure Plan is linked to the annual state budget process and is the principal mechanism for identifying, prioritising and delivering infrastructure projects. It also assists the coordination of infrastructure and services provided by state agencies, government-owned corporations, local government and the private sector.

By providing greater certainty about the nature and timing of regional infrastructure projects and through its improved coordination processes, the SEQ Infrastructure Plan will assist the development of a well-planned region.

Review of the South East Queensland Infrastructure Plan and Program 2008–2026

Three years after its initial release, a major review of the SEQ Infrastructure Plan was undertaken for 2008 to reflect new priorities and emerging issues in the region.

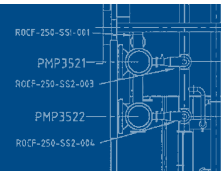
As more detailed planning was undertaken, new priorities, including projects to deal with drought, were added to the plan. Similarly, some projects in the initial 2005 version of the plan have either been delivered or re-sequenced to gain delivery efficiencies and to accommodate emerging projects that will ensure that people in the region can maintain their quality of life.

The 2008 major review of the SEQ Infrastructure Plan involved a comprehensive analysis of infrastructure estimates, priorities and sequencing. It also involved:

- analysing the progress and effectiveness of the 2007 SEQ Infrastructure Plan
- re-evaluating individual projects
- considering input from other levels of government and industry
- taking into account implications of other emerging issues, such as demands on industry and the drought
- evaluating financial and physical capacity to deliver projects to ensure value for money and lifestyle for residents.

The review of the SEQ Infrastructure Plan has involved a whole-of-government approach by agencies to manage a complex program of infrastructure works that support the SEQ Regional Plan. The achievements of the review include:

- greater alignment between the program elements of the SEQ Infrastructure Plan and the four-year planning horizon of the Queensland Government
- greater coordination between agencies where project interdependencies exist between agencies delivering different infrastructure classes
- updating cost estimates for projects based on more contemporary project information allowing greater certainty on program elements within the state budget four-year estimates period
- development of a framework to prioritise and sequence projects to support delivery of planning and programming objectives
- more detailed consideration of infrastructure priorities that support SEQ Regional Plan objectives.



SEQ Regional Plan

The South East Queensland Regional Plan 2005–2026 (SEQ Regional Plan) was first released in June 2005. It provides a statutory framework for the sustainable management of growth and change in the region. Key strategic directions in the SEQ Regional Plan include urban consolidation, development in the Western Corridor and subregional self-containment. The SEQ Regional Plan establishes the basis for an infrastructure plan. A formal review of the SEQ Regional Plan is currently underway, with release of the draft expected later this year and the final reviewed SEQ Regional Plan to be released in 2009.

Infrastructure priorities

The SEQ Regional Plan defines the regional land use pattern and desired regional outcomes, and is the basis on which priorities for infrastructure investment across South East Queensland are established. In establishing infrastructure priorities, factors that support quality of life and community wellbeing are also considered.

This SEQ Infrastructure Plan takes account of the Queensland Government priorities for 2008 including building on economic success, embracing growth in cities and regions, fostering healthy individuals and communities, strengthening educational outcomes, managing climate change and protecting the environment, strengthening Indigenous communities and modernising the federation, and delivering accountable government.

The strategic outcomes for the SEQ Infrastructure Plan, derived from the SEQ Regional Plan, are listed below.

- *Infrastructure shapes growth patterns*

  By accommodating a higher proportion of population growth within the urban footprint, the most efficient use of land, infrastructure and services will be achieved. Public transport will support urban renewal and developments that focus on population and employment density around transport nodes and activity centres. Greenfield development sites (or large areas of undeveloped land) will be contained within the urban footprint by supplying infrastructure to support priority areas such as the Western Corridor. Further, the SEQ Regional Plan seeks to reduce traffic and limit congestion on the roads by encouraging residents where possible to make use of goods and services, jobs and leisure within their local areas. This will strengthen communities across the region and reduce environmental impacts.

- *Efficient resource use*

  The SEQ Regional Plan recognises the importance of South East Queensland's rich and diverse natural environment and its contribution to the regional economy and way of life. The SEQ Infrastructure Plan seeks to maximise the use of existing infrastructure and ensure that the associated planning, development and operation of new projects minimise the demand they make on resources particularly water, energy supplies, minerals and aggregates. Projects will also maximise system integration and reduce the waste they generate, the carbon emissions they cause and the impact they have on natural areas.

- *Liveability and community wellbeing*

  Safe, healthy, accessible and inclusive communities are underpinned by well-planned and well-serviced infrastructure. This goal is supported by the timely and adequate provision of quality infrastructure and services relative to the economic, social and environmental needs of the region. This will include economic infrastructure (transport, water and energy), social infrastructure (education, health, emergency services and corrective services) and environmental infrastructure (natural areas, open space and recreational opportunities).

- *Economic activity*

  Central to the promotion of regional economic activity is the provision of infrastructure that supports diverse economic and employment opportunities in priority industries and regional activity centres. The SEQ Infrastructure Plan supports economic development initiatives associated with Smart State initiatives, knowledge industries, service sectors and freight activity.

Funding the SEQ Infrastructure Plan

The main sources from which the Queensland Government funds infrastructure are government cash flows, borrowings and alignment of the government's capital portfolio.

The Queensland Government is in a strong financial position, which it is committed to maintain. The Charter of Social and Fiscal Responsibility details the government's approach to capital investment—that borrowings or other financial arrangements will be undertaken only for capital investments and only where these can be serviced within the operating surplus, consistent with maintaining a AAA credit rating.

Options for funding and delivering projects in the SEQ Infrastructure Plan are evaluated, where appropriate, through the Queensland Government's Value for Money Framework (VfM Framework) and Project Assurance Framework (PAF). In this way, priorities and solutions can be assessed to promote innovation and ensure the maximum effectiveness of the Queensland Government's investment. A partnership between the public and private sectors is a key component of the VfM Framework, ensuring the respective skills of each sector are best used to deliver effective infrastructure and services in a timely manner. The VfM Framework also describes the tasks involved in implementing Queensland's public private partnerships (PPP) policy.

Contributions for funding projects come from all three levels of government, with various projects having a subregional, regional or national interest. The federal government has a role in funding infrastructure in South East Queensland including transport projects through the AusLink program, and water projects through the Australian Water Fund. Local government is also providing funding in areas such as transport and water supply.

Partnerships

In delivering infrastructure in South East Queensland, the Queensland Government is a participant in a variety of partnership arrangements with the private sector and with other levels of government.

The government's experience in working with the private sector has been positive with the Tugun Bypass and Inner Northern Busway both completed ahead of schedule, the South East Queensland Water Grid progressing on schedule and the Southbank Institute of TAFE redevelopment ahead of schedule.

Alliance contracts are used in the delivery of some road and rail projects, and special purpose vehicles have been established for the delivery of major water infrastructure and road projects. See 'Working together with industry' on the following page for more details on delivering projects with industry.

AusLink

The AusLink National Land Transport Network is a defined network of nationally important road and rail infrastructure links and their intermodal connections for which federal and state governments share planning and funding responsibility. The AusLink program was a major reform of previous funding arrangements, and has led to increased investment in the nation's transport infrastructure.

Transport infrastructure investment through AusLink is currently being reformed with the development of Infrastructure Australia and a move to increased transparency and industry involvement in funding for nationally significant infrastructure.

Delivering the SEQ Infrastructure Plan

Driving delivery of the SEQ Infrastructure Plan

The planning and delivery of the SEQ Infrastructure Plan is coordinated by the recently formed Department of Infrastructure and Planning. The role of this department is to lead local, regional and statewide infrastructure initiatives to ensure planning and infrastructure essential to the state's prosperous future is developed and delivered.

Working together with industry

The SEQ Infrastructure Plan comprises infrastructure projects until 2026 to support growth and deal with emerging issues in the region.

The Queensland Government has identified a number of issues in delivering such a large infrastructure program. These include shortages of materials and skills, and rising construction costs. The government will continue to work with industry to ensure the right skills and resources are available to deliver the reviewed SEQ Infrastructure Plan on time and on budget.

Work undertaken since 2005 to support the successful collaboration of government and industry in delivering the program includes:

- the South East Queensland Infrastructure Industry Taskforce—a joint government, industry and union taskforce designed to develop closer working relationships and ensure the smooth delivery of the SEQ Infrastructure Plan. The taskforce develops principles to encourage agreement between government and industry on infrastructure procurement. It also creates strategies to build the capacity to deliver the program and aims to achieve more effective training outcomes by ensuring that training programs are matched to specific project delivery outcomes
- the production of procurement and construction pipelines, detailing the projects that will be coming to market and reaching construction on a quarterly basis for the next two years and on a half-yearly basis for the following two years. These tools are updated every six months and provide industry with a sequenced program of infrastructure work. They will also assist in planning for delivery.

Government and industry are also working closely to provide innovation in delivery models and procurement for projects within the SEQ Infrastructure Plan. These include:

- the Southbank Institute of TAFE Redevelopment Project—Queensland's first public private partnership—which in 1997 was awarded Best Global Project by the international Public Private Finance Awards. It is due for completion in late 2008. The project involves the construction of 11 new buildings and renovation of another four buildings on the South Bank campus
- the South East Queensland Schools project, where seven new schools in the region are proposed to be built and maintained through a public private partnership. All seven schools are due to be open for students by 2011. This public private partnership will be the first of its kind in Australia to be delivered under the supported debt model, which will innovatively use a combination of public and private funds to improve value for money
- the Airport Link tunnel, which is currently one of Australia's largest road tunnel public private partnerships. This tunnel will link the North–South Bypass Tunnel, Inner City Bypass and local road networks in the city's north-east. It will include two parallel, seven-kilometre tunnels—under several inner northern suburbs, including Wooloowin and Clayfield—and is set to open in mid 2012
- the Gateway Upgrade project, which is currently the largest road and bridge infrastructure project in Queensland's history. Queensland Motorways Limited (a government-owned company) is delivering the project through a 30-year franchise agreement and has awarded the design, construction and maintenance contract to a private sector partner
- three new major hospitals in South East Queensland—Sunshine Coast Tertiary Hospital, Gold Coast Tertiary Hospital and Queensland Children's Hospital.

For the first time in Queensland's history, three hospitals are being constructed concurrently. The Gold Coast and Children's hospitals have been planned using traditional delivery models, while the Sunshine Coast Hospital is being considered as a potential public private partnership. These different delivery models will provide a unique opportunity to benchmark infrastructure delivery models and determine the individual strengths of each model

- the South East Queensland Water Grid, which employs more than 3500 workers across more than 45 sites. The workers are employed by a number of alliances, multiple state government agencies, local government agencies and companies established under the *Corporations Act 2001* to deliver infrastructure
- four rail projects through an alliance between numerous key players in the civil construction industry and Queensland Rail. These projects will enable considerable savings in time and cost. Two of the projects involve straightening and duplicating the rail line between Caboolture and Landsborough on the North Coast line. The remaining two involve extending the rail line from Robina to Varsity Lakes and providing a third track between Corinda and Darra to increase capacity for passenger and freight services on that line
- several road projects including the Maroochy River bridge duplication and upgrade of the Bruce Highway from Uhlmann Road to Caboolture to six lanes. In these projects, the government has adopted a new approach called 'early contractor involvement'. Early involvement of the contractor and the supply chain by the Department of Main Roads has resulted in a number of benefits including more scope for innovation, improved risk management and better forward planning of resource requirements.

Improving government processes

Not only has the Queensland Government significantly increased infrastructure spending in South East Queensland, it has introduced new processes to ensure that the additional funds are used efficiently and that the impact of construction on the community is managed. The following initiatives are examples of better processes introduced over the life of this plan.

- Developing and maintaining a Community Engagement Index. This index is a database of community engagement activities, planning and infrastructure delivery activity by state agencies and local government. The index will help state agencies and local councils to coordinate their community consultation activities, and promote the sharing of experiences and resources in community consultation.
- Developing and rolling out models for best practice project governance to ensure focus on service delivery outcomes and better project decision making.
- Establishing the Gateway Review process, an independent peer review process undertaken at key project milestones. This process will help project owners by ensuring that their investment funds are well spent, and that the project meets its strategic objectives and achieves value-for-money outcomes.
- Establishing a program designed to enhance project director capability across the state government agencies responsible for owning and delivering the SEQ Infrastructure Plan.
- Developing corporate governance tools for companies established under the *Corporations Act 2001* to deliver infrastructure.
- Monitoring and assessing regional and interstate competition for construction resources.

New regional approach to respond to South East Queenslanders' needs

South East Queensland residents will benefit from the new regional approach to managing the road network adopted by the Department of Main Roads. Regions will align with the new local government boundaries to improve coordination and planning across government. Each region will be supported by several district offices to retain and reinforce the department's long history of decentralised delivery and local decision making. New district offices in the growth areas in the region will ensure that new development is supported by suitable road infrastructure.

The new Main Roads Metropolitan region will cover Brisbane, Redland and Ipswich city councils and Lockyer Valley Regional Council. These local governments will be serviced by the existing Brisbane office and a new office to be established in Ipswich.

A new office—to be established in the Moreton Bay Regional Council area—will support Moreton Bay and Somerset regional councils and a new region based on the Sunshine Coast.

Logan City Council will become part of the South Coast region, which will also include Gold Coast City Council and Scenic Rim Regional Council. These local governments will be serviced by the Gold Coast office at Nerang and a new office to be established in Logan.

Transitional arrangements will be in place by 1 July 2008.

Summary of infrastructure investment

The SEQ Infrastructure Plan identifies an estimated $107 billion of infrastructure projects to support regional planning outcomes in South East Queensland to 2026.

The 2008–26 edition outlines an investment increase of approximately $50 billion on the 2007–26 Infrastructure Plan. The additional investment has arisen through the indexation of costs to 2008 dollars; inclusion of additional infrastructure projects due to emerging issues; rising construction costs; better cost estimates on planned projects through the review process; and inclusion of projects arising from investigations, particularly in the area of transport.

Estimated transport investment includes contributions from the state and federal governments, Brisbane City Council and tolling companies. The total also includes investment by the Port of Brisbane Corporation Limited, a Queensland Government-owned corporation, for infrastructure to service the port's growing import and export trade.

Projects subject to AusLink funding from the federal government have been identified in the preferred delivery timeframes, but delivery is subject to the timing of federal funding.

Estimated water investment includes projects being undertaken by the Queensland Government and funding assistance for projects being undertaken by local government and water service providers. The program also includes funding assistance from the federal government for the Western Corridor Recycled Water Project.

Estimated electricity transmission and distribution investment is indicated through to 2010–11. Investment beyond this time has not been identified, as capital works programs need to take account of growth in electricity demand and regulatory determinations.

Table 1—Estimated investment identified in this infrastructure plan

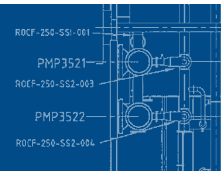
Infrastructure class	Estimated investment 2008–26 ($ million)
Transport (including investigations)	83,711
Industry development	176
Water	7978
Energy (up to 2011–12)	3435
Health	5215
Education	3036
Vocational education and training	497
Justice services	3295
Regional sport and recreation	111
Total	107,454

Notes

A. Estimated investment is in 2008 dollars. Cost estimates in the state budget and other public documents may differ, as they may incorporate project costs that reflect anticipated changes in input prices between initial planning and the time of construction. Estimated investment includes funds already spent on projects.

B. Infrastructure projects have been indexed to account for inflation and expected increases in construction costs. Refer to 'Cost estimates used in this infrastructure plan'.

C. Where funding is required from other levels of government, their estimated costs have been included. Where projects are part of (or connect to) the AusLink National Transport Network, these projects and their timing are subject to negotiation with the federal government.



How to read the SEQ Infrastructure Plan

The SEQ Infrastructure Plan outlines significant infrastructure projects to support the SEQ Regional Plan. There are other government plans and reports to address matters that do not fall under this category.

The SEQ Infrastructure Plan is organised by infrastructure class (see Table 1). The transport section is further divided on a subregional basis, with additional coverage of freight activities, the Port of Brisbane and transport investigations across the region. For each infrastructure class, there is a text description of the government priorities in this area. Additionally, for each infrastructure class there is a program table, which reports the infrastructure projects that support the SEQ Regional Plan, their indicative delivery timeframe and an estimated investment. This is the section that is tracked and measured by the Queensland Government.

Many projects described and listed in the SEQ Infrastructure Plan comprise a number of subprojects, each representing a separate component or stage of the overall project, and generally with varying delivery timeframes (overlapping, sequential or separated in time). In some cases, component subprojects have been bundled for delivery. For conciseness of presentation, these are represented as a single project and timeline.

The SEQ Infrastructure Plan is based on the planning horizon included in the SEQ Regional Plan, which provides the framework for managing growth, land use and development in South East Queensland. It is presented in three time periods:

- *First phase*

  From 2008–09 to 2011–12: this phase represents the four-year forward estimates period of the state budget. It shows current funding commitments for the nominated infrastructure projects in 2008 dollars and the timing for delivery of the projects.

- *Second phase*

  From 2012–13 to 2018–19: this phase complements the first phase and forms a seven-year planning period that aims to meet the strategic infrastructure objectives for the region over this period, with estimated investment in 2008 dollars.

- *Third phase*

  From 2019–20 to 2025–26: this phase represents an indication of the longer term planning horizon of the SEQ Regional Plan. It includes infrastructure that is currently projected to be required over this period, which will be confirmed in future versions of the SEQ Infrastructure Plan. Project costs are estimated in 2008 dollars.

The SEQ Infrastructure Plan identifies key regional infrastructure investments by state agencies and government-owned corporations. It also refers to some federal and local government projects relevant to the SEQ Regional Plan. Where funding contributions are expected to be provided by the federal government and local government, these are noted. However, the timing and the delivery of these projects are not under the control of the Queensland Government. Where projects involve a subsidy payment to local government (for example, in the water sector), the expected Queensland Government funding allocation involved is outlined, pending agreement with local government on timing and implementation.

Cost estimates used in this SEQ Infrastructure Plan

As a key task in the major review process, all cost estimates provided in the SEQ Infrastructure Plan have been re-examined to represent the best information available at present. To enable program-level assessment and comparison across the remaining 17-year period of the SEQ Infrastructure Plan, cost estimates are provided in 2008 dollars.

Rounding has been applied to projects with a pre-project or concept cost estimate (type 0 or 1).

The level of detailed planning that underpins the cost estimates varies with each project. Where detailed investigations have been completed and funding approved by the Queensland Government, estimates in the SEQ Infrastructure Plan reflect that approved funding. Estimates for projects scheduled for delivery beyond the first phase of the plan are unlikely to have undergone detailed evaluation and generally include a contingency margin to reflect various project uncertainties. It is likely that the upward price movements currently occurring in the construction sector generally will continue in the short-to-medium term.

Infrastructure investment is classified into five types depending on the level of investigation, approval and progress as follows:

- Type 0 = Pre-project estimate: the earliest estimate of project cost and is undertaken before a concept design. It is generally based on the cost of similar projects plus a contingency.
- Type 1 = Concept estimate: typically undertaken in the initial planning stages, and based on a concept design.
- Type 2 = Pre-market estimate: based on a more detailed review of scope and requirements. This estimate is determined after the government has assessed the costs and benefits of a project.
- Type 3 = Market price: the price agreed with the contractor. It is no longer an estimate nor is it a cost, since it has not been incurred.
- Type 4 = Completed project cost: the total cost of the project, which will normally consist of the market price plus any variations.

Large projects comprising a number of subprojects may fall under two or more of the investment categories.

Part B

Infrastructure classes

Transport

The region's transport system is under significant pressure due to rapid population growth, increasing private vehicle use and growing freight movements resulting in worsening peak hour traffic congestion and overcrowding of passenger transport services. Climate change and escalating fuel, construction and maintenance costs are also driving the need for a new approach to delivery of the South East Queensland transport system.

Tackling urban congestion

The Queensland Government has placed a high priority on managing growth in congestion and demand for transport. An Urban Congestion Taskforce has been established to address traffic congestion issues across South East Queensland. The team will work closely with Queensland Transport, Main Roads and other government infrastructure agencies.

Across government, extensive planning and investigations have set the scene for a broad and balanced range of initiatives to address urban congestion. These initiatives are based on the following five core elements.

1. Land use and planning

Creating the right development patterns across South East Queensland that reduce the need for travel through integrated corridor planning of major arterials and provide support for transit orientated developments.

2. Pricing and travel demand

Creating incentives for more efficient use of the existing network through travel demand management measures that encourage less private vehicle travel, particularly during peak congestion periods.

3. Travel options

Creating a public transport and active transport network that is accessible, frequent and reliable through more cycling facilities and more public transport, including buses and new three-car rail sets.

4. Efficiency

Maximising the efficiency of existing infrastructure investments through controlled motorways and arterials.

5. Capacity

Building on additional infrastructure investment through major and arterial road construction projects, new tunnels and more public transport infrastructure, including rail upgrades and extensions, busways, bus priority measures and station upgrades.

Key to this plan's approach is smarter delivery of transport infrastructure:

- to manage travel demand and alleviate traffic congestion and freight bottlenecks
- to contribute to the government's climate change response strategy such as updating road design standards and reducing the need to travel
- to provide for and promote the use of more sustainable transport (public transport, walking and cycling) as convenient, accessible and reliable alternatives to many private vehicle travel trips
- by balancing infrastructure provision with enhanced service levels and policy initiatives to deliver better value for money outcomes
- by using technology, such as intelligent transport systems, to better manage the transport network and improve efficiency of the existing infrastructure
- by using best practice project costing and assessment methods to reliably prioritise transport system investments and ensure value for money in a tightening fiscal environment
- through alternative funding and project delivery approaches including increased use of public private and intergovernmental partnerships.

Meeting transport challenges will increasingly require different levels of government and the private sector to work in partnership. The state will continue to work in partnership with the federal government through the AusLink program to improve relevant road and rail corridors, and looks forward to working with Infrastructure Australia, a new Commonwealth agency, to resolve priority infrastructure issues including urban traffic congestion.

The Queensland Government has acknowledged the threat of possible climate change impacts in considering transport decisions, such as creating road design standards and choosing vehicle fleets. For example, the new Houghton Highway bridge is designed to withstand a one-in-2000-year storm event, reflecting on lessons learned after Hurricane Katrina in 2005. The duplicate Houghton Highway bridge will be approximately four metres higher than the existing bridge and, therefore, above any possible storm surge. This ensures Redcliffe will keep this vital link to Brisbane in the aftermath of any severe storm. Similarly, the government's public transport and heavy vehicle fleets are increasingly being converted to more efficient, lower emission vehicles.

Given growth and development in the region, the government recognises the importance of securing transport corridors to meet long-term requirements. The SEQ Infrastructure Plan includes a number of strategic and corridor investigations to assess future transport needs, identify corridors that need to be preserved and commence land acquisition.

These include the Western Brisbane Transport Network Investigation, which recently released its report for public consultation. The report identified options for new tunnels and road upgrades to address future urban transport needs. New to this plan is the Brisbane – Gold Coast Transport Network Investigation, which will evaluate the long-term transport needs between Brisbane, the Gold Coast and other southern destinations to support the continuing economic development of the region.

Supporting cycling in South East Queensland

In November 2007 the government released the South East Queensland Principal Cycle Network Plan (PCNP) for South East Queensland. The PCNP provides a framework for future cycle network planning in the region. Queensland Transport prepared the PCNP in consultation with the Department of Main Roads and local governments throughout South East Queensland. It will guide the development of a comprehensive cycle network across the region. Key projects are:

- The Normanby Pedestrian and Cycle Link, which was officially opened in September 2007. This link is providing an important active transport connection for journeys to and from the CBD.
- The King George Square Cycle Centre, which became operational in May 2008, providing a premier cycling facility within the Brisbane CBD.
- The Toowong Cycle and Pedestrian Overpass connecting Mt Coot-tha Road to the Bicentennial Bikeway near the Toowong roundabout.
- Queensland Transport is progressing a concept design for a cycleway link between the Pacific Motorway and Eleanor Schonell Bridge as part of the Boggo Road Busway.
- The Gateway Upgrade project and the combined Airport Link and Northern Busway project include cycling infrastructure.

Public transport initiatives

Release of *go card*

An exciting new phase in the evolution of public transport in South East Queensland began in January 2008 when the *go card* commenced regional rollouts to residents across the TransLink network. The *go cards* allow passengers to board trains, buses and ferries more quickly and provide greater convenience for travellers. Passengers simply touch their *go card* over an electronic card reader at the start and conclusion of their journey to pay their fare.

TransLink Transit Authority

Public transport in South East Queensland will benefit from the creation of one new authority to manage all public transport services in the region. The new TransLink Transit Authority will make it easy for customers, offering a one-stop-shop for scheduling, customer needs and complaints. The authority will be accountable to the needs of customers and have greater control over service delivery. The authority, which will commence operation on 1 July 2008, will coordinate the 17 public transport service providers that currently service the region.

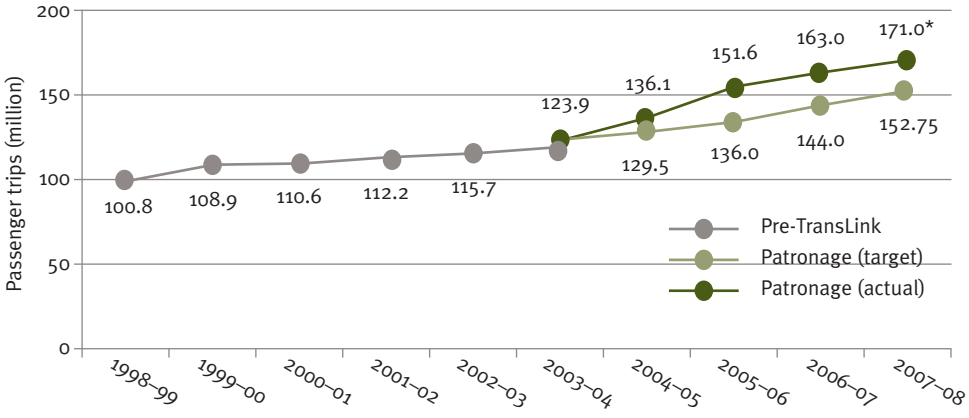
TransLink Network Plan

TransLink has commenced preparation of the next version of the TransLink Network Plan (2008 TNP) to cover the 10-year planning period from 2008–09 to 2018–19, and incorporating a four-year works program from 2008–09 to 2011–12. The 2008 TNP will include the latest strategic thinking on efficient public transport network design and apply TransLink's policy position for all elements of the public transport journey from decision to destination (for example, the park and ride policy). This plan reflects the government's commitment to fighting urban congestion and addressing climate change.

Public transport patronage

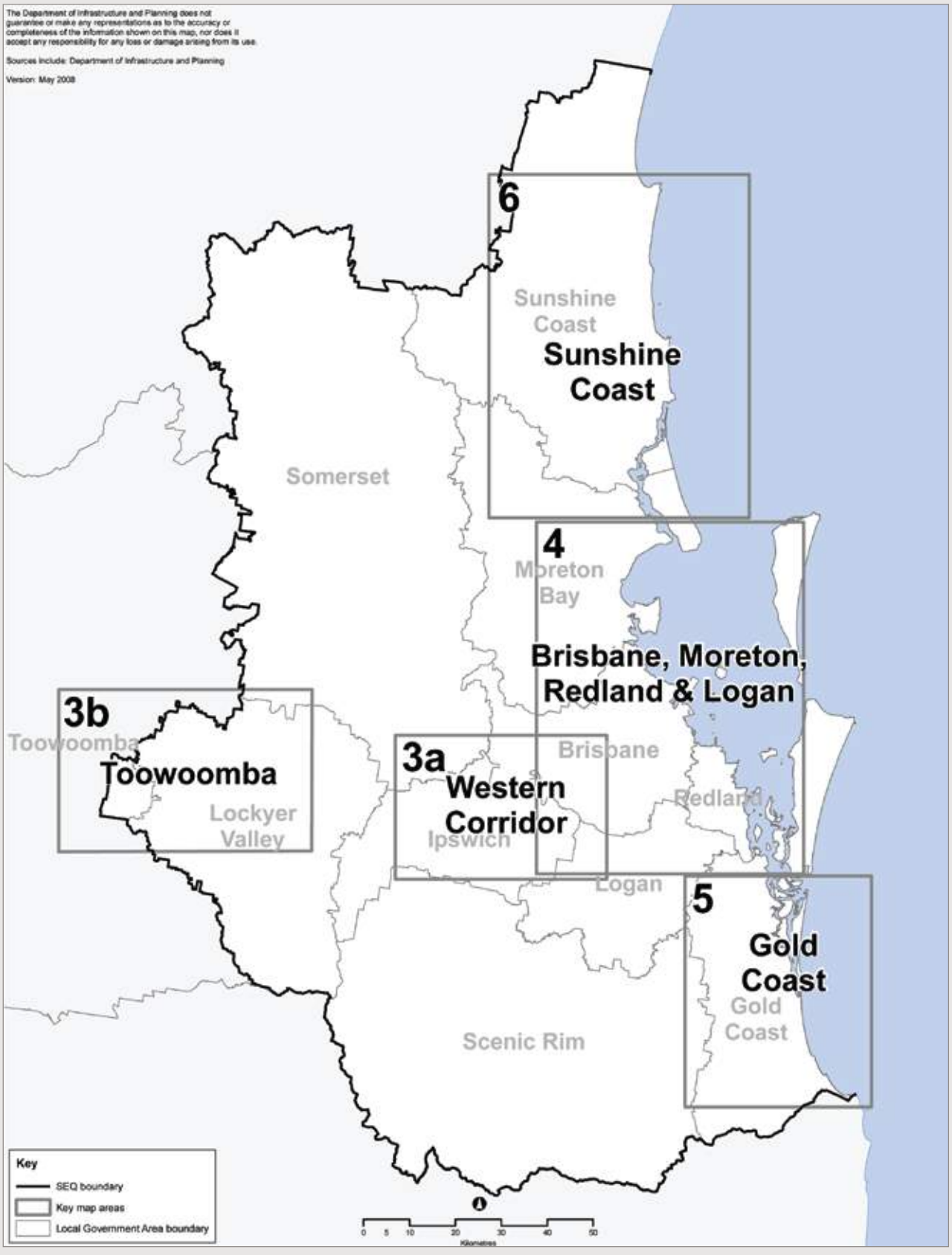
Growth in public transport usage across the region has continued the trend of recent years, with the number of passenger trips on the TransLink network projected to increase to 171 million in 2007–08, up from 163 million during 2006–07. See Figure 4 below.

Figure 4—Public transport patronage



*forecast for 2007–08

Map 2—Transport infrastructure subregions



Western Corridor

The Western Corridor subregion is defined in this plan as the City of Ipswich, the Scenic Rim Council, the Lockyer Valley and Somerset Regional Councils and the part of the Toowoomba Regional Council formerly identified as Toowoomba City. A significant share of the region's population growth will occur in the Western Corridor from Wacol through Ipswich City to Amberley and including Ebenezer, Swanbank, Ripley Valley and Springfield. This corridor will also be a focus for new industrial development. Development in the Western Corridor is a key feature of the SEQ Regional Plan to encourage urban development away from the coast; therefore, the timely provision of transport infrastructure to support development in the Western Corridor will be vital.

Table 2 outlines a transport infrastructure investment program for the Western Corridor. To support population and employment opportunities around the centres of Ipswich, Springfield and Ripley Valley, the program focuses on:

- reducing traffic congestion, upgrading capacity and improving safety on existing key links, especially the Ipswich Motorway
- improving and providing new roads and public transport facilities to service growing population centres
- accelerating the development of the Principal Cycle Network
- investigating the long-term transport requirements of the subregion and preserving transport corridors to cater for future growth.

Priority infrastructure projects

The first phase of this Infrastructure Plan (2008–09 to 2011–12) continues the vital work, started in the previous infrastructure programs, of addressing priorities for the Western Corridor. The work outlined below is scheduled to commence before 2011–12.

- *Reducing traffic congestion, upgrading capacity and improving safety on existing key links, especially the Ipswich Motorway*

  The efficiency and safety of the Ipswich Motorway is paramount. It is a key interstate and inter-regional commuter and freight route linking the Western Corridor to the rest of South East Queensland. A partnership between the Queensland and federal governments is aiming to deliver the $1 billion Dinmore to Gailes section by 2012–13 although the timing is subject to federal contributions.

- *Improving the Ipswich rail line to provide more services for the growing population*

  The Ipswich line is being upgraded with additional line capacity to cater for the public transport needs of existing and future residents in the Western Corridor.

- *Improving and providing new road and public transport links to service growing population centres*

  New public transport infrastructure is needed to link the Ipswich city centre with recently developed and emerging centres such as The University of Queensland Ipswich Campus and Springfield Town Centre, and the future Yamanto and Ripley Valley town centres, Swanbank Business Park and Redbank Plains South. A corridor has been identified to service these centres in the future.

  As the first integrated road and rail project ever delivered in Queensland, construction of the first stage of a three-stage development of the rail and four-lane road to access Springfield is about to start. The works include rail to a new station at Richlands and a four-lane extension of the Centenary Highway to north of the Logan Motorway. Ultimately, the project will deliver a four-lane extension of the Centenary Highway from the Ipswich Motorway to Springfield, including a new Logan Motorway interchange, and a new rail line between Darra and Springfield.

- *Supporting active transport modes*

  Cycling infrastructure continues to be planned and delivered in the subregion.

Progress on transport projects in the Western Corridor in 2007–08

- Works are underway on the $255 million Logan Motorway–Ipswich Motorway interchange and on the $870 million upgrade of the Wacol to Darra section of the Ipswich Motorway with completions expected in 2009 and 2010 respectively.
- The Ipswich rail line is being upgraded to cater for the public transport needs of existing and future residents in the Western Corridor. Construction has commenced on the third track from Corinda to Darra with completion expected in 2010.
- Early works have commenced on the dual track and stations from Darra to Richlands (Stage 1 of the Darra to Springfield rail project) and on formation works from Richlands to the Logan Motorway. Full construction of Stage 1 is expected to commence in July 2008 and be completed by 2011. Construction of a pedestrian and cycle bridge near Woodcrest College, over the road–rail corridor, commenced in November 2007.
- To provide access to the future Ripley Valley community and emerging industry at Yamanto, a two-lane extension of the Centenary Highway from Springfield to Yamanto is progressing well: the section from Springfield to Ripley Valley is five months ahead of schedule.
- Construction is underway on the Brassall Bikeway Connection, a 2.9-kilometre off-road bikeway linking the Ipswich city centre with Brassall. It is expected that construction will be completed in September 2008.

Transport investigations

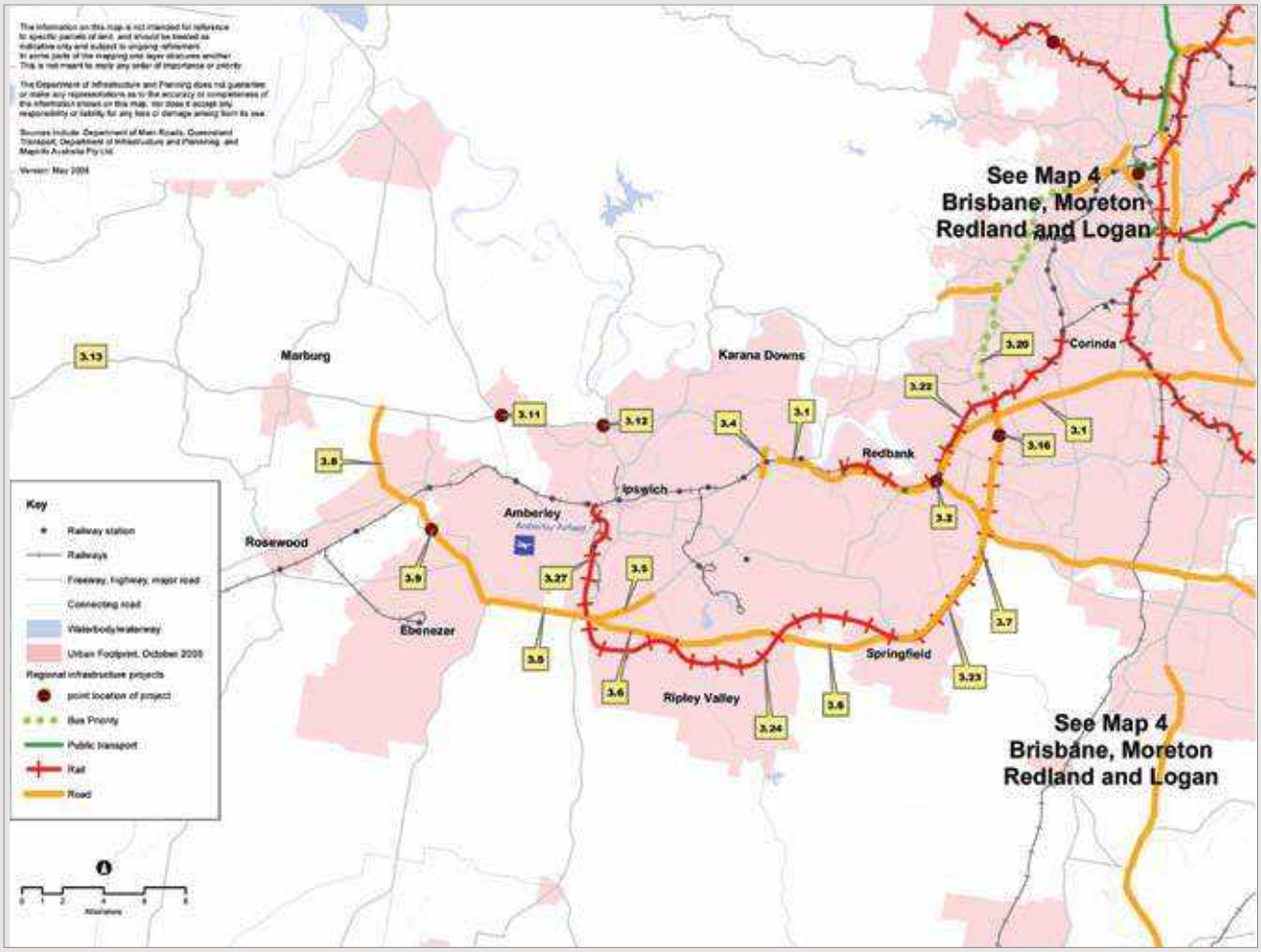
To provide certainty, preserve corridors and inform other planning, the following strategic transport investigations and corridor identification projects are underway.

- *Southern Freight Rail Corridor*

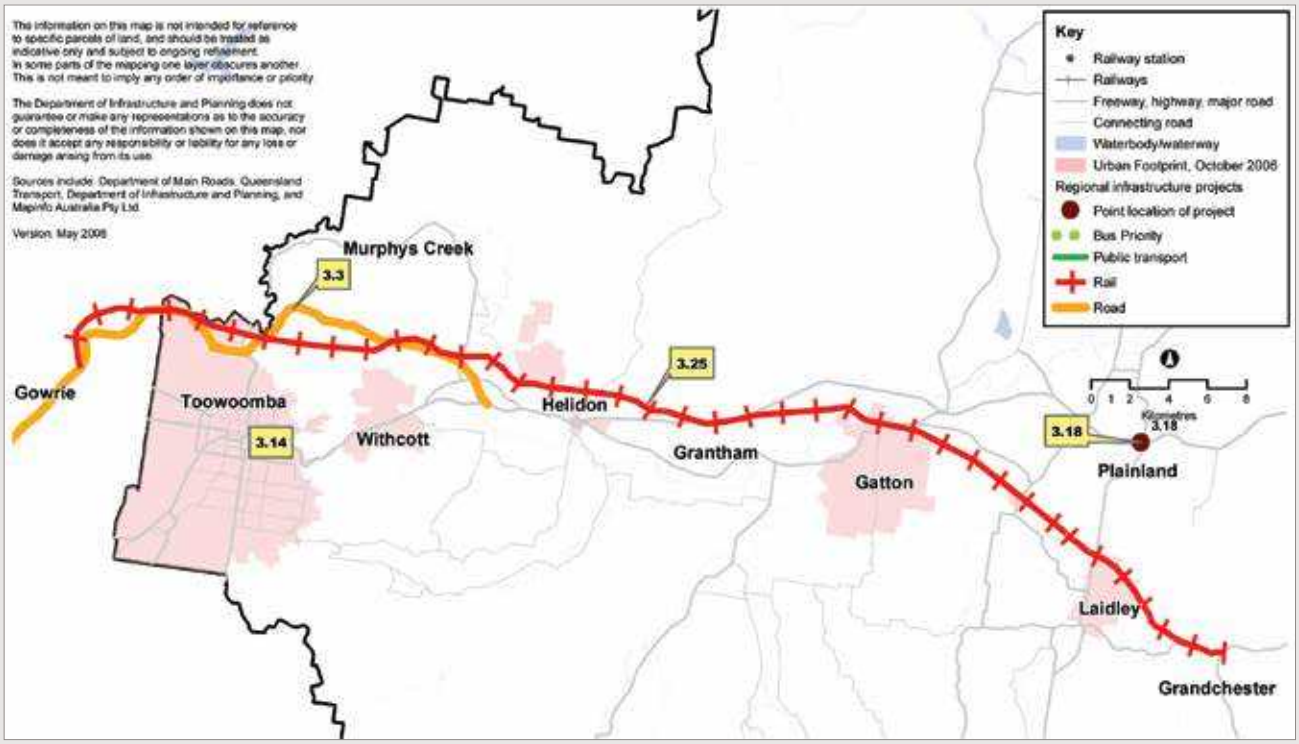
  To boost future rail freight capacity in the region, and separate the freight task from sensitive residential areas, a study is being finalised to identify a preferred alignment for a dedicated freight-only corridor. This corridor would connect emerging industrial precincts in the Ipswich area, particularly Ebenezer, with the standard-gauge interstate rail line in the vicinity of the Bromelton Enterprise Precinct. These sites have been identified as being strategically located to take advantage of this next phase of industrial development. The study has identified a preferred dual-gauge freight rail line alignment linking the two future transport hubs.
- *Logan Motorway Upgrade investigations*

  Upgrades to the Logan Motorway will be required to accommodate forecast travel demand, service emerging logistics hubs and integrate with capacity improvements that are currently under construction on, or scheduled for, the Ipswich and Gateway motorways. An investigation is underway to identify the upgrades that will be essential to meet these needs.

Map 3a—Western Corridor transport infrastructure



Map 3b—Toowoomba transport infrastructure



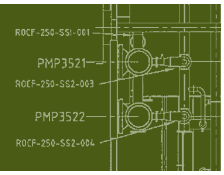


Table 2—Western Corridor and Toowoomba transport infrastructure

Maps 3a and 3b ref	Project	Estimated investment $M	Estimate category (see note D)	Completed projects $M	Delivery timeframe		
					2008–09 to 2011–12	2012–13 to 2018–19	2019–20 to 2025–26
Motorways, highways, major roads							
3.1	Ipswich Motorway upgrade: Dinmore to Darra to Rocklea	3100	0 & 3		Timing subject to federal contributions		
3.2	Ipswich Motorway upgrade: Logan Motorway interchange	255	3				
3.3	Toowoomba Bypass	1357	2 & 4		Timing subject to federal contributions Planning completed		
3.4	Cunningham Highway to Warrego Highway connection	127	1 & 4		Timing subject to federal contributions Planning completed		
3.5	Cunningham Highway four lanes: Ripley Road to Ebenezer	900	0 & 1		Timing subject to federal contributions		
3.6	Centenary Highway two lanes: Springfield to Yamanto	366	3				
3.7	Centenary Highway four lanes: Ipswich Motorway to Springfield	1170	2 & 3				
3.8	Western Ipswich Bypass: new road and interchange	550	1		Timing subject to federal contributions		
3.9	Western Ipswich Bypass: five-mile bridge	55	0		Timing subject to federal contributions		
3.10	Southern Infrastructure Corridor (road: Yatala to Cunningham Highway) Study	65	0				
3.11	Warrego Highway–Brisbane Valley Highway interchange	254	1 & 4		Timing subject to federal contributions Planning completed		
3.12	Warrego Highway: Muirlea interchange and service roads	210	0		Timing subject to federal contributions		
3.13	Warrego Highway: safety improvements Ipswich to Gatton	45	0		Timing subject to federal contributions		
3.14	Warrego Highway: Toowoomba intersection upgrades	85	0		Timing subject to federal contributions		
3.15	Intelligent Transport Systems (to manage congestion)	80	0				
3.16	Centenary Highway–Boundary Road underpass (joint Brisbane City Council and Main Roads project)		4	43	Completed in 2007–08		
3.17	Ipswich Motorway alternative northern corridor investigation		4	10	Completed in 2007–08		
3.18	Warrego Highway: Plainland interchange		4	14	Completed in 2005–06		
Walking and cycling							
3.19	Subregional cycle network	55	2				
Busways and bus priority							
3.20	Centenary Highway bus priority/transit lanes Ipswich Motorway to Toowong	310	0				
3.21	TransLink subregional station upgrade program	125	2				
Rail infrastructure							
3.22	Ipswich rail line Corinda to Darra, Darra to Redbank third rail track	493	1 & 3				
3.23	Springfield passenger rail line	872	2 & 3				
3.24	Ipswich to Springfield rail line	1400	1				
3.25	Gowrie to Grandchester rail line	1300	1				
3.26	Southern Freight Rail Corridor Study (Rail: Ebenezer to interstate standard gauge rail)	4	3				
3.27	Ipswich to Springfield Public Transport Corridor Study		4	4	Completed in 2007–08		
Total		13,178		71			

Construction started

Notes

A. The table identifies the expected delivery timeframe for each infrastructure project. The darker shade represents projects that are under construction at 1 July 2008.

B. Estimated investment is in 2008 dollars except where projects have progressed to contract stage, in which case they are in out-turn dollars. Cost estimates in the state budget and other public documents may differ, as they may incorporate project costs that reflect anticipated changes in input prices between initial planning and the time of construction. Estimated investment includes funds already expended on projects.

C. Where funding is required from other levels of government, their estimated costs have been included. Where projects are subject to federal funding, it is noted as timing of these projects is subject to negotiation with the federal government.

D. For an explanation of estimate categories, refer to page 16.

E. Where a project has been completed it is noted in the table.

Greater Brisbane

The Greater Brisbane subregion is defined in this infrastructure plan as the cities of Brisbane, Logan and Redland and the Moreton Bay Regional Council.

Greater Brisbane is expected to accommodate a large proportion of development proposed for South East Queensland. In outer areas, such as Caboolture and Redland, most of this development will occur on greenfield sites. Within Brisbane city, an increasing amount of redevelopment will occur around existing activity centres (such as the CBD, Chermside and Indooroopilly), public transport nodes and infill development sites (sites intended for development).

Table 3 outlines a transport infrastructure investment program for the Greater Brisbane area. Strategic transport needs in this area include:

- providing quality public transport infrastructure and services along key routes linking activity centres with the CBD
- building and maintaining a high-standard, orbital motorway system
- managing congestion and travel demand
- accelerating development of the Principal Cycle Network
- increasing road capacity to cater for growth
- investigating the long-term transport requirements of the subregion and preserving transport corridors to cater for future growth.

Priority infrastructure projects

The first phase of the SEQ Infrastructure Plan (2008–09 to 2011–12) continues vital work started in the previous infrastructure programs and addresses priorities for the Greater Brisbane area. The plan includes the following projects.

- *Providing quality public transport infrastructure and services to link activity centres with the CBD*

  Public transport infrastructure, such as railways and busways, are being expanded and upgraded in areas where the SEQ Regional Plan encourages growth.

  Plans are underway to build new and expand existing busways along northern, southern and eastern transport corridors. Priority busway projects include the Northern Busway (Royal Children's Hospital – Windsor and Windsor–Kedron), continuing work on the Boggo Road Busway and Eastern Busway (Princess Alexandra Hospital – Buranda) and starting the Eastern Busway (Buranda – Mains Avenue section).

  Rail infrastructure capacity is also an immediate focus. The rail line between Mitchelton to Ferny Grove is being duplicated and an additional 20, three-car sets are being provided for the rail network services.

- *Building and maintaining a high-standard, orbital motorway system*

  A quality orbital road network is necessary to link centres outside the inner city, particularly the Australia TradeCoast, and to preserve mobility for inter-regional freight.

  Construction is progressing on Queensland's largest road and bridge project, the $1.88 billion Gateway Upgrade Project, with completion expected by mid 2011. The project includes duplication of the Gateway Bridge and an upgrade of 20 kilometres of motorway.

  Advanced technology, including intelligent transport systems, will be installed to better manage the Greater Brisbane motorway system.

- *Managing congestion and travel demand*

  Upgrading the intersections of Beatty Road and Balham Road with Granard Road, and grade separation of the Mains Road–Kessels Road intersection, will reduce traffic congestion and social impacts on the Brisbane Urban Corridor.

  The new North–South Bypass Tunnel and Airport Link projects will help relieve congestion in Brisbane. Construction of Brisbane City Council's North–South Bypass Tunnel, which will provide a direct cross-river link between Woolloongabba and Bowen Hills, is due for completion in 2010.

The Airport Link toll road is seven kilometres long and includes a 5.7-kilometre tunnel. It will connect the North–South Bypass Tunnel, Inner City Bypass and local road network at Bowen Hills to the northern arterials of Gympie Road and Stafford Road at Kedron and Sandgate Road and the East–West Arterial in the north-east. Construction is expected to commence at the end of 2008 and be completed by 2012.

- *Accelerating development of the Principal Cycle Network*

  Active transport choices, such as cycling and walking, are being encouraged in this plan. The completion of the Normanby Pedestrian and Cycle Link was an important step in responding to the need for more high-quality active transport access into the Brisbane CBD.

  The new Tank Street pedestrian and cycle bridge is currently under construction. It will provide an essential link from the Roma Street Parkland, the proposed Queensland Place Precinct and North Bank to the Millennium Arts Precinct at the Queensland Cultural Centre.

  The subregional cycle network will continue to be expanded through the rollout of the Cycle Network Program. Queensland Transport has a range of capital works projects in progress, some in cooperation with local governments through a dollar-for-dollar capital grants program.

- *Increasing road capacity to cater for growth*

  Construction has commenced on the Houghton Highway bridge duplication and bus priority project. The project features three traffic lanes, a pedestrian and cycle path and a dedicated fishing platform, and is scheduled for completion in 2011.

  The upgrade of the Pine Rivers to Caboolture section of the Bruce Highway to six lanes is scheduled for completion in 2009. The Uhlmann Road to Caboolture leg will be the final section to be completed.

  Upgrading the Mt Lindesay Highway from Green Road to Rosia Road is underway with completion expected in late 2009.

  Preliminary work towards construction of transit lanes on the Pacific Motorway from Springwood to Daisy Hill, including work on the Loganlea interchange, has commenced.

Progress on transport projects in Greater Brisbane in 2007–08

- The Inner Northern Busway was officially opened in May 2008. The busway, which links Queen Street to Upper Roma Street via a tunnel and includes new bus stations, was completed on time and within budget.
- Construction commenced on the Northern Busway (Royal Children's Hospital to Windsor) in March 2008.
- Section 1 of the Eastern Busway between Princess Alexandra Hospital (PAH) and Buranda is under construction and is due for completion by August 2009.
- The Boggo Road Busway (Eleanor Schonell Bridge to PAH) is progressing on schedule and is due for completion by mid 2009.
- The rail line between Mitchelton and Ferny Grove is being duplicated to accommodate additional peak hour services. The first stage between Mitchelton and Keperra was completed in February 2008.
- The Salisbury to Kuraby third rail track was officially opened in March 2008 and will provide extra capacity for more services.
- Significant progress has been achieved on the Gateway Upgrade Project. Piers for the new bridge have been erected and several bridge sections are in place. Earthworks for the Gateway Motorway deviation north of the river, and motorway widening south of the river are well advanced.
- Tunnelling works for Brisbane City Council's North–South Bypass Tunnel are progressing.
- Construction has commenced on the grade separation of Beaudesert Road and the interstate rail line at Acacia Ridge. This project will eliminate waiting times for motorists and provide options for future expansion of the rail–road inter-modal terminal at Acacia Ridge.
- The Caboolture Northern Bypass opened to traffic in December 2007.

Transport investigations

The following transport investigation studies will provide for future development of the Greater Brisbane area.

- *Western Brisbane Transport Network Investigation*

  The Western Brisbane Transport Network Investigation is a major study guiding the development of the transport network across western Brisbane for the next 20 years and beyond. A range of long-term options for possible corridors was released in April 2008 for public comment. Information on the options is available at www.wbtni.net.au

- *East–West Arterial Planning Study and Corridor Preservation*

  The SEQ Infrastructure Plan includes a planning study and corridor preservation for Stafford Road from Gympie Road to South Pine Road in Everton Park. The final outcomes of the Western Brisbane Transport Network Investigation will guide the scope of this study.

- *Brisbane – Gold Coast Transport Network Investigation*

  The Brisbane – Gold Coast Transport Network Investigation is a major study that will evaluate the long-term transport needs between Brisbane and the Gold Coast, including east–west connections, to support the region's continuing economic development. Like other recent studies, it will examine the contribution that can be made by all transport modes across this highly urbanised and rapidly growing area.

- *Further TransApex investigations*

  Brisbane City Council has commenced a detailed feasibility study of the Northern Link proposal as part of its TransApex plan. Northern Link is a proposed tunnel and toll road project, approximately 4.5 kilometres long, linking the Western Freeway at the Toowong roundabout to the Inner City Bypass at Kelvin Grove. The federal government has committed partial funds to this link if it proceeds.

- *Increased rail capacity in inner Brisbane*

  Brisbane's inner city rail network is the 'hub' of the rail network in South East Queensland. Its capacity limits the number of additional trains that can be introduced on the lines servicing the region. Given the existing growth in demand, service increases and proposed extensions to the rail network, by 2016 the limited capacity of the Merivale Bridge and the existing CBD rail tunnels will significantly constrain rail services through inner Brisbane.

  The Inner City Rail Capacity Study commenced in August 2007. It identifies and assesses the options for the future development of the inner city rail network, including support for an integrated inner city transport network and for future expansion of the CBD and inner city. The study will consider underground rail line options, as the intensive development in the inner city and the need to cross the Brisbane River heavily constrain the opportunities for above-ground upgrades to the rail network.

- *Increased bus capacity for inner Brisbane*

  In parallel with the expansion of the busway network, (Northern and Eastern Busways, Inner Northern Busway and Boggo Road links), the Inner City Bus Access Capacity Study aims to ensure additional busway services can operate efficiently throughout the CBD. The study is examining future inner city bus operating scenarios and the necessary additional infrastructure required to support these operations. Stage 2 of the study is underway with a report expected in 2008.

- *Gateway Motorway (Nudgee Road – Bruce Highway)*

  Ongoing development of the Australia TradeCoast and north–south transport movements through Brisbane city will continue to increase travel demand on the Gateway Motorway. A study is underway to identify the transport activities necessary to improve safety and efficiency of the transport network, focusing on the Gateway Motorway from Nudgee Road to the Bruce Highway.

- *Mt Lindesay – Beaudesert Strategic Transport Network Investigation*

  The Mt Lindesay – Beaudesert Strategic Transport Network Investigation is considering the pedestrian, cyclist, public transport, freight and road infrastructure requirements for the study area.

  The investigation will include new development areas, such as Yarrabilba, Flagstone, Greenbank, Park Ridge and the Bromelton Enterprise Precinct.

  To support population growth in the Mt Lindesay – Beaudesert area, a further study will consider an alignment for the extension of the Gateway Motorway, south of the Logan Motorway, to connect with the planned Southern Infrastructure Corridor linking Yatala and Ebenezer.

- *Salisbury to Beaudesert Passenger Rail Study*

  The Salisbury to Beaudesert Passenger Rail Study will identify and preserve rail corridor land suitable for possible future passenger rail infrastructure. The study will identify engineering feasibility, including rail station locations that integrate with the proposed urban pattern of development.

- *Northshore Hamilton and Australia TradeCoast North Public Transport Study*

  A study has identified the need to service future growth in employment and urban development with high-quality public transport in the Australia TradeCoast. This investigation will identify and preserve land required for a public transport corridor linking the Northshore urban centre with Doomben and Eagle Farm. It will also identify bus priority requirements to service the Australia TradeCoast precinct and identify requirements for future public transport interchanges at Eagle Farm and Number 1 Airport Drive.

- *Moreton Bay Integrated Transport Study*

  The Moreton Bay Regional Council area is experiencing rapid population growth. The Moreton Bay Integrated Transport Study will integrate and coordinate land use and planned transport investment to 2026 to achieve the best integrated transport outcomes for the area.

- *Western and North Western public transport corridor studies and Gympie Road Transit Study*

  This investigation will include detailed planning for three projects: bus rapid transit between Kenmore and the Brisbane CBD via Moggill Road and Coronation Drive corridors, an extension of bus rapid transit from the Northern Busway at Kedron towards Bracken Ridge in the Gympie Road corridor and public transport priority from the north-western suburbs to the Brisbane CBD.

- *South East Queensland High Occupancy Vehicle (HOV) Network Plan*

  Regional High Occupancy Vehicle (HOV) network strategies and plans will be developed and implemented to promote efficient priority vehicle movement, and to ensure a consistent planning approach across all subregions. HOV planning has strong linkages with the state government's congestion management objectives: it aims to move more people on the transport system with fewer vehicles and achieve greater benefits through public transport use.

Map 4–Brisbane, Moreton, Redland and Logan transport infrastructure

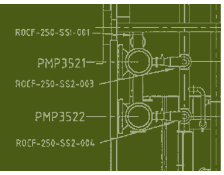


Table 3 – Brisbane, Moreton, Redland and Logan transport infrastructure

Map 4 ref	Project	Estimated investment $M	Estimate category (see note D)	Completed projects $M	Delivery timeframe		
					2008–09 to 2011–12	2012–13 to 2018–19	2019–20 to 2025–26
Motorways, highways, major roads							
4.1	Gateway Motorway upgrade: Mt Gravatt–Capalaba Road to Nudgee Road including Gateway Bridge duplication	1883	3				
4.2	Gateway Motorway upgrade: Mt Gravatt–Capalaba Road to Pacific Motorway	1100	0		Timing subject to federal contributions		
4.3	Gateway Motorway upgrade: Nudgee to Bruce Highway	2600	0		Timing subject to federal contributions		
4.4	Pacific Motorway transit lanes from Gateway Motorway to Logan Motorway including Loganlea Road interchange	1900	0 & 1		Timing subject to federal contributions		
4.5	Pacific Motorway upgrade: Juliette Street to Klumpp Road	85	0				
4.6	North–South Bypass Tunnel (BCC project)	2088	3				
4.7	Airport Link[F]	3400	3				
4.8	Northern Link: Toowong to Kelvin Grove (BCC project)	1800	0		Timing subject to federal contributions		
4.9	Hale Street Link (BCC project)	307	2				
4.10	Logan Motorway upgrade: Ipswich Motorway to Pacific Motorway	3600	0				
4.11	East–West Arterial upgrade: Airport Link to Gateway Motorway	326	3		Timing subject to federal contributions		
4.12	Kenmore Bypass: Western Freeway to Moggill Road	320	0				
4.13	Brisbane Urban Corridor (Granard Road & Kessels Road) intersection upgrades	991	0, 1 & 2		Timing subject to federal contributions		
4.14	Mt Lindesay Highway upgrade: Green Road to Jimboomba	511	0, 1, 3 & 4				
4.15	Port of Brisbane Motorway	1300	0 & 1		Timing subject to federal contributions		
4.16	North–South Arterial: Mango Hill	320	0				
4.17	Redland sub-arterial road upgrade: Mt Gravatt-Capalaba Road to Tingalpa Creek	196	2				
4.18	Cleveland–Redland Bay Road upgrade: South Street to Boundary Road	62	2				
4.19	Redland Bay Road upgrade: Tingalpa Creek to Cleveland–Redland Bay Road	73	2				
4.20	Deception Bay Road upgrade: Bruce Highway to Lipscombe Road	90	1				
4.21	Burpengary–Caboolture Road upgrade: Bruce Highway to Gaffield Street	115	2				
4.22	East–west links: Caboolture to Bribie Island Road additional lanes	310	0 & 1				
4.23	Bruce Highway intersection upgrades: Pumicestone Road, Boundary Road and Bribie Island Road	210	0		Timing subject to federal contributions		
4.24	Houghton Highway duplication and bus priority	315	3				
4.25	Logan Road intersection upgrade: Miles Platting Road–Padstow Road	10	0				
4.26	Bruce Highway: additional lanes from Boundary Road to Caboolture	411	3 & 4				
4.27	Intelligent Transport Systems (to manage congestion)	110	0		1 or more stages completed		
4.28	Caboolture Northern Bypass		4	89	Completed 2007–08		
4.29	Linkfield Connection Road		4	30	Completed 2005–06		
Walking and cycling							
4.30	Subregional Cycle Network	223	2				
4.31	Tank Street pedestrian/cycle bridge	63	3				
4.32	Additional pedestrian/cycle bridge in the CBD	90	0				
4.33	Pacific Motorway Bikeway	16	2, 3 & 4				
4.34	Subregional Walking Network Program	160	0				
Busways and Bus Priority							
4.35	Northern Busway: Royal Children's Hospital to Kedron to Bracken Ridge	2530	1 & 3				
4.36	Eastern Busway: Buranda to Capalaba	3079	1 & 3				
4.37	Eastern Busway: Buranda to Princess Alexandra Hospital to Boggo Road to Eleanor Schonell Bridge	358	3				
4.38	South East Busway: extension to Springwood	365	1 & 2				

Table 3 continued – Brisbane, Moreton, Redland and Logan transport infrastructure

Map 4 ref	Project	Estimated investment $M	Estimate category (see note D)	Completed projects $M	Delivery timeframe		
					2008–09 to 2011–12	2012–13 to 2018–19	2019–20 to 2025–26
Busways and Bus Priority cont.							
4.39	Brisbane Cross River Bus Access	420	0				
4.40	SEQ HOV Network Program	750	1				
4.41	Translink subregional station upgrade	311	2				
4.42	Redland bus priority measures	130	1				
4.43	Inner Northern Busway improvements and new busway stations		4	493	Completed 2007–08		
Rail infrastructure							
4.44	Mitchelton to Keperra to Ferny Grove track duplication	87	1 & 4		1 or more stages completed		
4.45	Lawnton to Petrie third rail track	80	1				
4.46	Petrie to Redcliffe Multi Modal Corridor	550	1				
4.47	New passenger rail stock (78 x three-car sets)	972	2 & 3				
4.48	Grade separation of Mt Lindesay Highway and interstate rail, Acacia Ridge	113	3				
4.49	Metropolitan freight capacity upgrades	98	1 & 3				
4.50	Ferny Grove Rail Corridor upgrades	20	0 & 1				
4.51	Inner City Rail Capacity	7300	1				
4.52	Cleveland Rail Corridor upgrades	180	1				
4.53	Sandgate to Shorncliffe rail duplication	40	1				
4.54	Train Servicing Depot	220	1				
Port of Brisbane infrastructure							
4.55	Port infrastructure	800	1				
4.56	Land development	1000	1				
4.57	Property development	650	1				
Transport Investigations							
4.58	Western Brisbane transport network investigation	19	3				
4.59	Mt Lindesay–Beaudesert strategic transport network investigation	1	3				
4.60	Northern Link: Toowong to Kelvin Grove tunnel investigation	5	3				
4.61	Inner City Bus Access Capacity Study	2	3				
4.62	Gympie Arterial investigation and preservation: Stafford Road to Roghan Road	55	0				
4.63	Stafford Road investigation and preservation: Gympie Road to South Pine Road	60	0				
4.64	Brisbane–Gold Coast transport network investigation	20	1				
4.65	Acacia Ridge intermodal access: road network investigations	2	1				
4.66	Gateway Motorway: Nudgee Road to Bruce Highway Planning Study	6	3				
4.67	Gateway Motorway extension south of Logan Motorway investigation and preservation	55	0				
4.68	New investigations: including Salisbury to Beaudesert Passenger Rail Study, North Shore Hamilton & Australian Trade Coast North Public Transport Study, Moreton Bay Integrated Transport Network Study	18	2				
4.69	Public Transport corridor preservation	110	0				
4.70	Hamilton–Eagle Farm transport investigation		4	0.2	Completed 2007–08		
4.71	Australia TradeCoast Transport Study		4	1	Completed 2007–08		
4.72	Further TransApex investigation: Airport Link		4	21	Completed 2006–07		
4.73	Salisbury to Flagstone–Greenbank passenger rail investigation		4	0.5	Completed 2006–07		
Total		45,391		635			

Construction started

Notes

A. The table identifies the expected delivery timeframe for each infrastructure project. The darker shade represents projects that are under construction at 1 July 2008.
B. Estimated investment is in 2008 dollars except where projects have progressed to contract stage, in which case they are in out-turn dollars. Cost estimates in the state budget and other public documents may differ as they may incorporate project costs which reflect anticipated changes in input prices between initial planning and the time of construction. Estimated investment includes funds already expended on projects.
C. Where funding is required from other levels of government, their estimated costs have been included. Where projects are subject to federal funding it is noted, as timing of these projects is subject to negotiation with the Federal Government.
D. For an explanation of estimate categories, refer to page 16.
E. Where a project has been completed or a stage of a project completed, it is noted in the table.
F. Estimated investment reflects design and construction cost.

Port of Brisbane

The Port of Brisbane is Australia's third largest and fastest growing container port. It is a key driver of economic growth throughout South East Queensland.

World-class port

Managed by the Port of Brisbane Corporation Limited, a Queensland Government-owned corporation, the port provides world-class cargo-handling and warehousing facilities.

Progressively developed on a greenfield site since 1976, the port is a modern, purpose-built 750-hectare facility at the mouth of the Brisbane River, just 24 kilometres from Brisbane's CBD. Unlike its competitor ports in Sydney and Melbourne, the Port of Brisbane is unencumbered by urban encroachment and associated operational restrictions.

Average annual container growth over the past 10 years has been 12 per cent. In 2006–07, container trade reached 875 000 twenty-foot containers (or equivalent units) and, within the next 20 years, at projected average annual growth rates of between seven and nine per cent, is forecast to reach more than 3.7 million twenty-foot containers (or equivalent units). Motor vehicle imports are expected to increase by about 150 per cent over the next 20 years and movements of other goods through the port (such as dry and liquid bulk goods) are also expected to approximately double.

Given the rapid growth of the port's operations, an ability to expand its quay-line and terminal space is vital. Within the next seven years, three new container berths will be completed and 80 hectares of terminal space developed.

The capacity to continue meeting the demands of the burgeoning container trade has been assured through the construction of a 4.5-kilometre seawall to enclose an additional 230 hectares. This will enable the construction of up to four new berths and provide backup land for terminals and other port-related uses.

The port is well connected to major road infrastructure and improvements to transport corridors are designed to keep pace with the ongoing provision of port-related infrastructure. The Queensland Government works closely with the Port of Brisbane Corporation Limited and the federal government in this regard.

Gold Coast

The Gold Coast subregion extends from Yatala in the north to the New South Wales border in the south. Significant population and activity growth in this area will challenge the capability of the existing local transport system. Public transport will need to play an increasing role in moving people efficiently within the Gold Coast. The Gold Coast subregion is also South East Queensland's gateway to the rest of Australia for road and rail freight, so the government must continue to preserve and build capacity for this function.

The emphasis in this plan is on expansion of public transport infrastructure and services to relieve traffic congestion and provide more travel options for residents. Quality public transport links are required to connect major centres and developing areas on the Gold Coast. Road projects will support the investment in public transport by providing both additional corridor space for public transport within the Gold Coast and increased capacity for inter-regional travel demand, particularly for road freight.

Key priorities include:

- linking major destinations and major coastal activity centres with improved public transport services
- improving passenger rail services on the Gold Coast rail line
- upgrading the Pacific Motorway and other roads to alleviate congestion
- accelerating the development of the Principal Cycle Network
- preserving transport corridors to cater for future growth.

Priority infrastructure projects

The first phase of this infrastructure plan (2008–09 to 2011–12) continues vital work started in the previous infrastructure plans to address the following priorities.

- *Linking major destinations and coastal activity centres with improved public transport services*

  Various east-west road projects will support continued economic growth and make best use of the passenger rail line and expanding rail services by providing additional capacity for public transport and alleviating traffic congestion between existing and emerging activity centres.

  Smith Street will be upgraded with additional lanes between the Pacific Motorway and Parklands Drive to assist access to the new Gold Coast hospital. New access to the hospital will be provided off Smith Street.

- *Improving passenger rail services on the Gold Coast rail line*

  Sections of track are being duplicated and the rail line extended from Robina to Varsity Lakes, with a proposed extension south of Varsity Lakes in the longer term.

  Planning is underway for transit oriented development of Queensland Government-owned land at the site of the Varsity Lakes station. The Varsity Station Village project was launched in November 2007 with the release of the Village Vision. A site master plan is due to be released in September 2008 and early stages of land development will commence when the Varsity Lakes Rail Station opens in 2010.

- *Upgrading the Pacific Motorway and other roads to alleviate congestion*

  The Pacific Motorway is part of the AusLink National Network and its importance as a freight route is growing. Upgrading the motorway between Nerang and Tugun, and improving local transport connections, are essential investments. Interchanges will be upgraded to improve safety and capacity.

  Planning for upgrading of the Pacific Motorway from Nerang to Stewart Road is progressing. Construction on the Nerang south interchange has commenced as the first stage of this complex upgrade.

Following completion of the Tugun Bypass, the Terminal Drive to Bilinga interchange section of the Gold Coast Highway will be upgraded to cater for the expected change in traffic flows.

In Labrador, the Gold Coast Highway will be widened to four lanes from Government Road to Robert Street.

Upgrading of Hope Island Road will continue with the Oxenford to Santa Barbara section expected to be opened to traffic in August 2008. The next sections, to Columbus Drive and then Lae Drive, will follow.

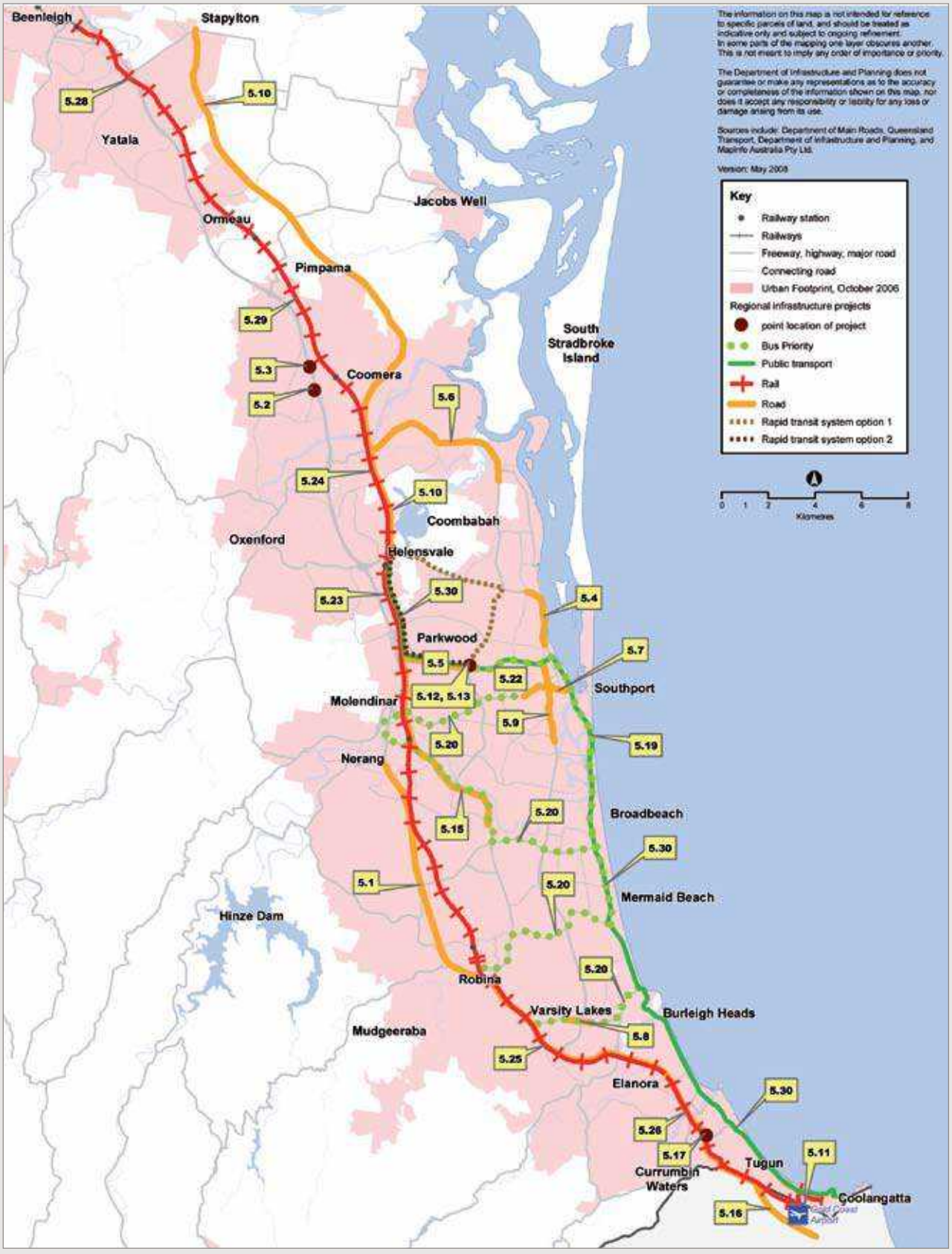
- *Preserving the inter-regional transport corridor between Nerang and Stapylton*

  Preservation of this corridor provides options to meet future north–south travel demand within the Gold Coast and improve access to growth areas around Coomera.

Progress on transport projects on the Gold Coast in 2007–08

- The $543 million Tugun Bypass is now finished. It was opened to traffic on 2 June 2008, six months ahead of schedule. Traffic modelling shows about 46 000 vehicles will use the bypass each day, reducing existing traffic along the Gold Coast Highway by up to 55 per cent, and cutting travel time between Currumbin and Tweed Heads to five minutes.
- Sections of the Gold Coast rail line are being duplicated and the line extended from Robina to Varsity Lakes. Construction is well underway on rail track duplication from Helensvale to Robina and is expected to be completed in August 2008. Construction began on the Robina to Varsity Lakes rail extension in August 2007.
- Sixteen new passenger rail rollingstock three-car sets have been commissioned and put into service. Another eight units will be delivered progressively until early 2009.
- The recently completed $15 million extension to Robina Rail Station provides improved bus and rail interchange facilities for events at Skilled Park stadium. During non-event days the facility will provide commuters with 250 additional park'n'ride spaces.
- Planning has continued on the Gold Coast Rapid Transit Project from Parkwood–Helensvale to Broadbeach, taking into account the results of consultation with local government and the community.
- Construction of the Nerang–Broadbeach Road to four lanes from Allambie Gardens to Neilsens Road was completed in September 2007.
- Widening of the Gold Coast Highway from Robert Street to Stevens Street opened to traffic on 5 March 2008.

Map 5—Gold Coast transport infrastructure



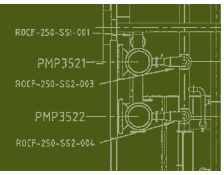


Table 4—Gold Coast transport infrastructure

Map 5 ref	Project	Estimated investment $M	Estimate category (see note D)	Completed projects $M	Delivery timeframe		
					2008–09 to 2011–12	2012–13 to 2018–19	2019–20 to 2025–26
Motorways, highways, major roads							
5.1	Pacific Motorway: additional lanes and interchange upgrades: Nerang to Stewart Road	3200	1		Timing subject to federal contributions		
5.2	Pacific Motorway: Coomera interchange (Foxwell Road)	160	1		Timing subject to federal contributions		
5.3	Pacific Motorway: additional Coomera interchange	110	0		Timing subject to federal contributions		
5.4	Gold Coast Highway: additional lanes from Government Road to Stevens Street	146	3 & 4				
5.5	Smith Street: additional lanes from Pacific Motorway to Olsen Avenue	65	0				
5.6	Hope Island Road: additional lanes from Pacific Motorway to Columbus Drive	125	3 & 4		1 or more stages completed		
5.7	Southport–Nerang Road: additional lanes from Minnie Street to Queen Street	85	1				
5.8	Burleigh Connection Road: additional lanes from Mattocks Road to Kortum Drive	40	0				
5.9	Southport–Burleigh Road: intersection upgrades	90	0				
5.10	Intra-regional Transport Corridor (corridor preservation): Nerang to Stapylton	25	1				
5.11	Gold Coast Airport access upgrade	30	0				
5.12	Gold Coast University Hospital access	120	0				
5.13	Gold Coast Knowledge Precinct access	150	0				
5.14	Intelligent Transport Systems (to manage congestion)	60	0				
5.15	Nerang–Broadbeach Road upgrades: Bus lanes and intersection upgrade	75	2 & 4				
5.16	Pacific Motorway: Tugun Bypass		4	543	Completed 2007–08		
5.17	Pacific Motorway: Stewart Road Currumbin interchange (Tugun Bypass)		4	17	Completed 2004–05		
Walking and cycling							
5.18	Subregional cycle network	139	2				
Busways and bus priority							
5.19	Gold Coast Highway: bus priority and bus stations	25	1				
5.20	Bus priority/high-occupancy vehicle program	87	2				
5.21	TransLink subregional station upgrade	125	2 & 4				
5.22	Bus priority on Smith Street: Olsen Avenue to Gold Coast Highway		4	7	Completed 2007–08		
Rail infrastructure							
5.23	Helensvale to Robina, Salisbury to Kuraby: additional track and upgrades	328	3 & 4		1 or more stages completed		
5.24	Coomera to Helensvale, Kuraby to Kingston: additional tracks	330	1				
5.25	Southern extension of rail line: Robina to Elanora	1159	1 & 3				
5.26	Southern extension of rail line: Elanora to Coolangatta	650	0				
5.27	New passenger rail stock: (24 x 3-car sets)	289	3				
5.28	Beenleigh to Gold Coast Corridor: additional track and upgrades	95	0				
5.29	Ormeau to Coomera: track duplication		4	20	Completed 2006–07		
Public transport infrastructure							
5.30	Gold Coast Rapid Transit Project: Parkwood–Helensvale to Broadbeach to Coolangatta	1670	2				
Total		9378		587			

Construction started

Notes

A. The table identifies the expected delivery timeframe for each infrastructure project. The darker shade represents projects that are under construction at 1 July 2008.

B. Estimated investment is in 2008 dollars except where projects have progressed to contract stage, in which case they are in out-turn dollars. Cost estimates in the state budget and other public documents may differ, as they may incorporate project costs that reflect anticipated changes in input prices between initial planning and the time of construction. Estimated investment includes funds already expended on projects.

C. Where funding is required from other levels of government, their estimated costs have been included. Where projects are subject to federal funding, it is noted as timing of these projects is subject to negotiation with the federal government.

D. For an explanation of estimate categories, refer to page 16.

E. Where a project has been completed or a stage of a project completed, it is noted in the table.

Sunshine Coast

The Sunshine Coast subregion comprises the area administered by the Sunshine Coast Regional Council, and incorporates the former shires of Noosa and Maroochy and the City of Caloundra. The principal activity centre for this subregion is Maroochydore, which accommodates the key business, service and retail enterprises. Other major centres in the region are Caloundra, Nambour and Noosa. There are emerging centres at Beerwah, Kawana Waters and Sippy Downs and a future major activity centre at Caloundra South.

As the resident population expands, particularly in the emerging areas of Sippy Downs and Caloundra South, and employment activity increases, transport demand will increase and its focus will change.

To support private travel, public transport and freight movement, the road network must mature to provide adequate access between key community facilities, emerging residential areas and the existing coastal activity centres. Upgrading of the north–south and east–west grid road network needs to occur to alleviate congestion. The Bruce Highway's important role as the gateway to the rest of the state must be preserved.

Table 5 outlines a transport infrastructure investment program for the Sunshine Coast. To support greater self-containment of travel and economic growth within the Sunshine Coast, the program focuses on:

- providing improved access between Maroochydore and Caloundra and emerging population centres, including improved public transport
- increasing the capacity of the North Coast Rail line and upgrading connections between the rail line and coastal activity centres
- enhancing the safety and efficiency of the Bruce Highway, a national transport link
- accelerating development of the Principal Cycle Network
- investigating the long-term transport requirements in the subregion and preserving transport corridors to cater for future growth.

Priority infrastructure projects

The first phase of this infrastructure plan (2008–09 to 2011–12) continues vital work started in the previous infrastructure plans to address major issues in the Sunshine Coast area. The following projects are key components in the plan's implementation.

- *Providing improved access between Maroochydore and Caloundra and emerging population centres, including improved public transport*

  The CoastConnect project is being developed to provide a quality public transport network between Caloundra and Maroochydore. Corridor options have been identified and potential staging opportunities and timing of delivery are being investigated.

  Construction of a bus station and dedicated bus access road at the University of the Sunshine Coast, Sippy Downs, is scheduled to commence shortly.

  A priority is to extend the Sunshine Motorway south from the Mooloolah River Interchange to Caloundra Road within an existing Multi Modal Transport Corridor (MMTC), which is designed to cater for future road and public transport infrastructure. The southern most section of this new motorway between Caloundra Road and Creekside Boulevard is under construction. This new motorway link will provide improved road access to the emerging population centre and a new Sunshine Coast hospital at Kawana while reducing congestion on Nicklin Way, thus enabling the delivery of CoastConnect.

- *Increasing the capacity of the North Coast Rail line and upgrading connections between the rail line and coastal activity centres*

  The North Coast Rail line is being upgraded between Caboolture and Landsborough with the construction of about 30 kilometres of new track. This will reduce travel times between these centres by up to 30 per cent.

  Further improvements in the track's alignment and duplication are being planned between Landsborough and Nambour.

  Steve Irwin Way, from the Mooloolaba Connection Road to the Bruce Highway, will be duplicated to cater for the increasing traffic volumes between the coastal areas and the hinterland.

- *Enhancing the safety and efficiency of the Bruce Highway, a national transport link*

  A section of the Bruce Highway from Federal to Traveston will be inundated by the lake formed by the Traveston Dam. Replacing this section of the highway is a high priority.

Progress on transport projects on the Sunshine Coast in 2007–08

- The development of corridor options has been completed for the CoastConnect Project (Caloundra to Maroochydore bus corridor). The preparation of the concept design and impact management plan will determine the staging and timing of delivery.
- The North Coast Rail line is being upgraded between Caboolture and Beerburrum. The construction of 14 kilometres of track and upgrade of two existing stations are expected to be completed by mid 2009.
- Preliminary planning is complete on the approved alignment and station locations on the CAMCOS rail corridor (Beerwah to Maroochydore). Detailed planning and impact assessment of the alignment at Caloundra South and Maroochydore are due to be finalised by November 2008.
- Upgrade of the Sunshine Motorway's Sippy Downs to Kawana Way section to four lanes has finished. Construction of the new interchange at Dixon–Claymore Roads in Sippy Downs will be completed in July 2008.
- Upgrading the Sunshine Motorway from Maroochydore Road to Pacific Paradise is under construction with completion expected by the end of 2008. The new bridge over the Maroochy River was completed ahead of schedule and opened to traffic in November 2007.
- Construction of the new Caloundra Road to Creekside Boulevard road link is expected to be completed by the end of 2008.
- Maroochydore Road, through Kunda Park, has been upgraded to four lanes. The adjoining section from the Bruce Highway to Kunda Park is under construction and is expected to be completed in mid to late 2008. This work will complete the upgrade of Maroochydore Road to four lanes.
- Construction work on Caloundra Road between the Bruce Highway and Pierce Avenue started in October 2006 and is scheduled to be completed by mid 2009. This will complete the upgrade of Caloundra Road to four lanes.
- Construction commenced in March 2008 on the grade separation of the North Coast rail line at the intersection of Roberts Road and Peachester Road at Beerwah. This project, which will improve safety at the intersection and ease traffic congestion, will be completed by mid 2009.

Transport investigations

To assist future transport infrastructure planning and delivery for the Sunshine Coast, the following investigations are either underway or proposed.

- *Multi Modal Transport Corridor (MMTC) to improve access to emerging communities*

  Investigations are underway for the Multi Modal Transport Corridor (MMTC) between Caloundra Road and Maroochydore. These investigations largely centre on an extension of the Sunshine Motorway south from the Mooloolah River Interchange to Creekside Boulevard and the Caboolture to Maroochydore Corridor Study (CAMCOS). Included in this investigation is an extension of Nicklin Way through the Mooloolah River Interchange and extending north into Maroochydore.

  The Bells Creek connection study will examine extending the Creekside Boulevard to Caloundra Road link further south to Bells Creek. The study, which will look at the potential route and project timing, is programmed for 2009–2013.

  The Sunshine Motorway Study for the section from the Kawana Way Interchange to the Mooloolah River Interchange will determine the infrastructure requirements needed to complete the duplication of the Sunshine Motorway's east–west section and to support the MMTC.

- *Beerwah to Caloundra to Maroochydore Public Transport Corridor—part of CAMCOS*

  Planning and land acquisition will continue for an integrated public transport corridor between Beerwah and Maroochydore on the CAMCOS alignment. Refinements to the alignment are being investigated at Caloundra South, at the Caloundra aerodrome site, at Kawana and into the Maroochydore central business centre.

- *Nautilus study*

  The Nautilus project has investigated options for public transport corridors and nodes that will accommodate efficient infrastructure to link Maroochydore to Nambour and also Maroochydore to Noosa via the Sunshine Motorway and David Low Way.

- *Bruce Highway from Caboolture to Sunshine Motorway*

  These studies will determine the transport needs for the Bruce Highway from Caboolture to the Sunshine Motorway at Tanawha. The studies will focus on protecting the role of the Bruce Highway as part of the AusLink national network and determining alternative routes for trips that would be better served by local roads. It will improve safety by removing all remaining at-grade intersections (where two or more roads either meet or cross at the same level) and reviewing existing interchanges. The study will guide future AusLink investment by the federal and Queensland governments.

- *General Aviation Strategy*

  The first stage of this study has looked at the general aviation needs of the region. Stage 2, commencing in 2008, will look at the aviation needs of the Sunshine Coast in particular, including a strategy for relocation of services from the existing Caloundra and Caboolture aerodromes to a new facility.

Map 6—Sunshine Coast transport infrastructure

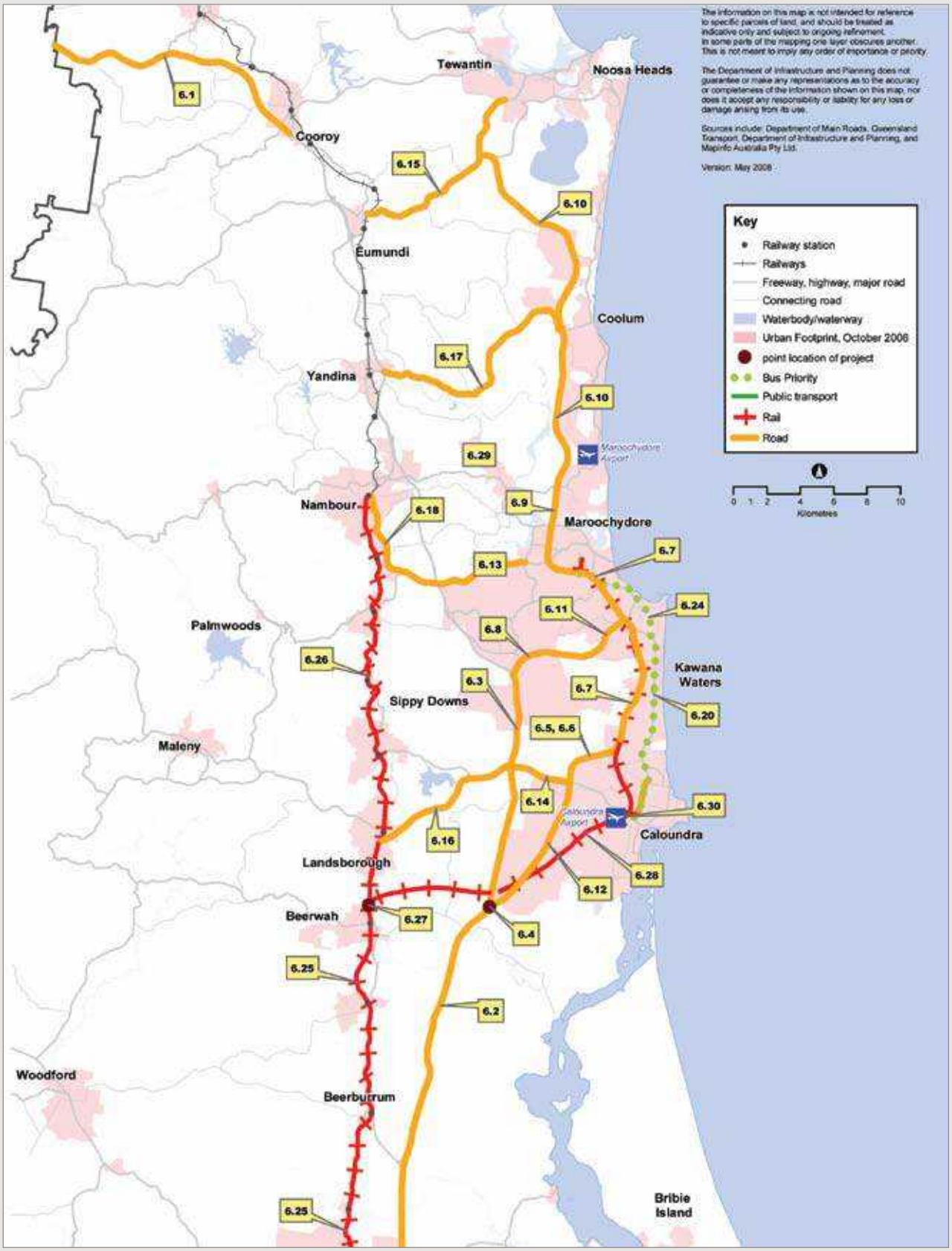


Table 5—Sunshine Coast transport infrastructure

Map 6 ref	Project	Estimated investment $M	Estimate category (see note D)	Completed projects $M	Delivery timeframe		
					2008–09 to 2011–12	2012–13 to 2018–19	2019–20 to 2025–26
Motorways, highways, major roads							
6.1	Bruce Highway upgrade: Cooroy to Gympie	3300	0		Timing subject to federal contributions		
6.2	Bruce Highway upgrade: corridor preservation Caboolture to Caloundra Road	10	0		Timing subject to federal contributions		
6.3	Bruce Highway upgrade: Caloundra Road to Sunshine Motorway	420	0		Timing subject to federal contributions		
6.4	Bruce Highway interchanges: Johnstone Road to Bells Creek Road	110	0		Timing subject to federal contributions		
6.5	MMTC: Caloundra–Mooloolaba Road (new two-lane road): Caloundra Road to Creekside Boulevard	75	3				
6.6	MMTC: Caloundra–Mooloolaba Road duplication: Caloundra Road to Creekside Boulevard	85	0				
6.7	MMTC: Creekside Boulevard to Maroochy Boulevard (including Mooloolah River Bridge)	3100	0				
6.8	Sunshine Motorway: Sippy Downs to Kawana Arterial	66	3				
6.9	Sunshine Motorway upgrade: Maroochydore Road to Pacific Paradise (including Maroochy River Bridge)	235	3 & 4		1 or more stages completed		
6.10	Sunshine Motorway upgrade: Pacific Paradise to Doonan	1600	0				
6.11	Sunshine Motorway extension: Mooloolah River to Kawana Way	140	0				
6.12	Bells Creek connection: Bruce Highway to Caloundra Road	650	0		Timing subject to developer contributions		
6.13	Maroochydore Road: additional lanes from Bruce Highway to Martins Creek	109	3				
6.14	Caloundra Road: additional lanes from Bruce Highway to Pierce Avenue	80	3				
6.15	East–West links: Eumundi to Noosa Road upgrade	150	0				
6.16	East–West links: Steve Irwin Way (Glasshouse Mountains Road) upgrade	106	2				
6.17	East–West links: Yandina to Coolum	65	0				
6.18	Nambour Connection Road upgrades	210	0				
6.19	Intelligent Transport Systems to manage congestion	65	0				
6.20	KTIA Nicklin Way: additional lanes		4	7	Completed in 2005–06		
Walking and cycling							
6.21	Subregional cycle network	139	2				
Busways and bus priority							
6.22	Bus priority/high-occupancy vehicle program	42	2				
6.23	TransLink subregional station upgrade	61	2				
6.24	CoastConnect: Caloundra to Maroochydore quality bus corridor	297	2				
Rail infrastructure							
6.25	Caboolture to Beerburrum to Landsborough: additional rail line	652	1 & 3				
6.26	Landsborough to Nambour: additional rail line	804	2				
6.27	Rail crossing grade separation: Beerwah	70	3				
Public transport infrastructure							
6.28	CAMCOS: Beerwah to Maroochydore	3116	2				
6.29	Nautilus Study	6	3				
Aviation							
6.30	General Aviation Strategy: Caloundra Aerodrome Study	1	3				
Total		15,764		7			

Construction started

Notes

A. The table identifies the expected delivery timeframe for each infrastructure project. The darker shade represents projects that are under construction at 1 July 2008.

B. Estimated investment is in 2008 dollars except where projects have progressed to contract stage, in which case they are in out-turn dollars. Cost estimates in the state budget and other public documents may differ, as they may incorporate project costs that reflect anticipated changes in input prices between initial planning and the time of construction. Estimated investment includes funds already expended on projects.

C. Where funding is required from other levels of government, their estimated costs have been included. Where projects are subject to federal funding, it is noted as timing of these projects is subject to negotiation with the federal government.

D. For an explanation of estimate categories, refer to page 16.

E. Where a project has been completed or a stage of a project completed, it is noted in the table.

Freight

Transportation of goods and services is vital to the region's economic development and growth. The freight task in Queensland has accelerated rapidly from 2000 and forecast data suggests it will more than double in South East Queensland by 2020.

In South East Queensland demand for freight is expected to be driven by strong population growth and economic activity. This is likely to place increasing demand on key road and rail corridors, particularly those supporting the Port of Brisbane's rapidly expanding import and export activities. The challenge is to continue to deliver an integrated transport system that is safe and efficient and promotes the movement of freight.

The SEQ Infrastructure Plan identifies a number of initiatives to improve freight movement in South East Queensland. Key initiatives for each subregional area are outlined in the respective sections within the plan.

A quality orbital road network is necessary to link centres outside the inner city, particularly the Australia TradeCoast, and preserve mobility for inter-regional freight. Construction is progressing on the Gateway Upgrade Project and Ipswich Motorway and Bruce Highway upgrades. In addition, investigations are occurring into an upgrade of the Logan Motorway and an extension to the southern end of the Gateway Motorway.

Current investigations of rail network capacity, particularly through the inner city (between Mayne and Fairfield), are taking into account future activity and growth for both passenger and rail freight tasks.

Various transport investigations are also taking place in South East Queensland's future growth areas to ensure transport networks will sufficiently cater for the increase in freight needed to service growing communities.

Map 7 identifies the key existing and future freight connections and the proposed investigations necessary for optimum freight movement within and through South East Queensland.

Investigations for transport infrastructure investments

Future growth will require new transport corridors and capacity improvements to service new developments and connect centres. Thorough investigations into these needs are required early, so that corridors for roads, rail and busways can be preserved for future use ahead of development.

Current or proposed major transport investigation projects are listed under the individual subregional sections in this Infrastructure Plan. Figure 5 provides a regional overview of the major investigation locations.

Map 7—Regional freight infrastructure

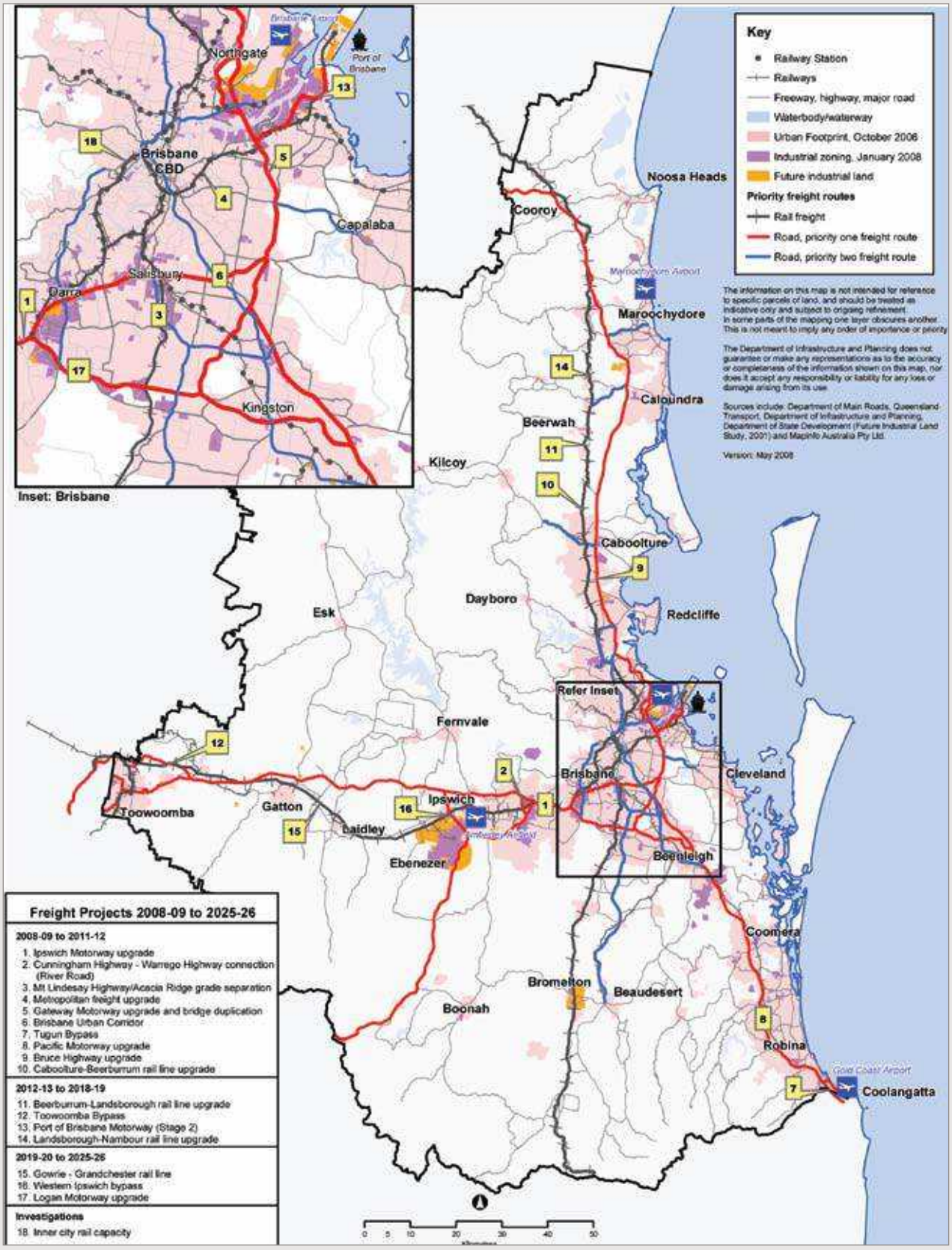
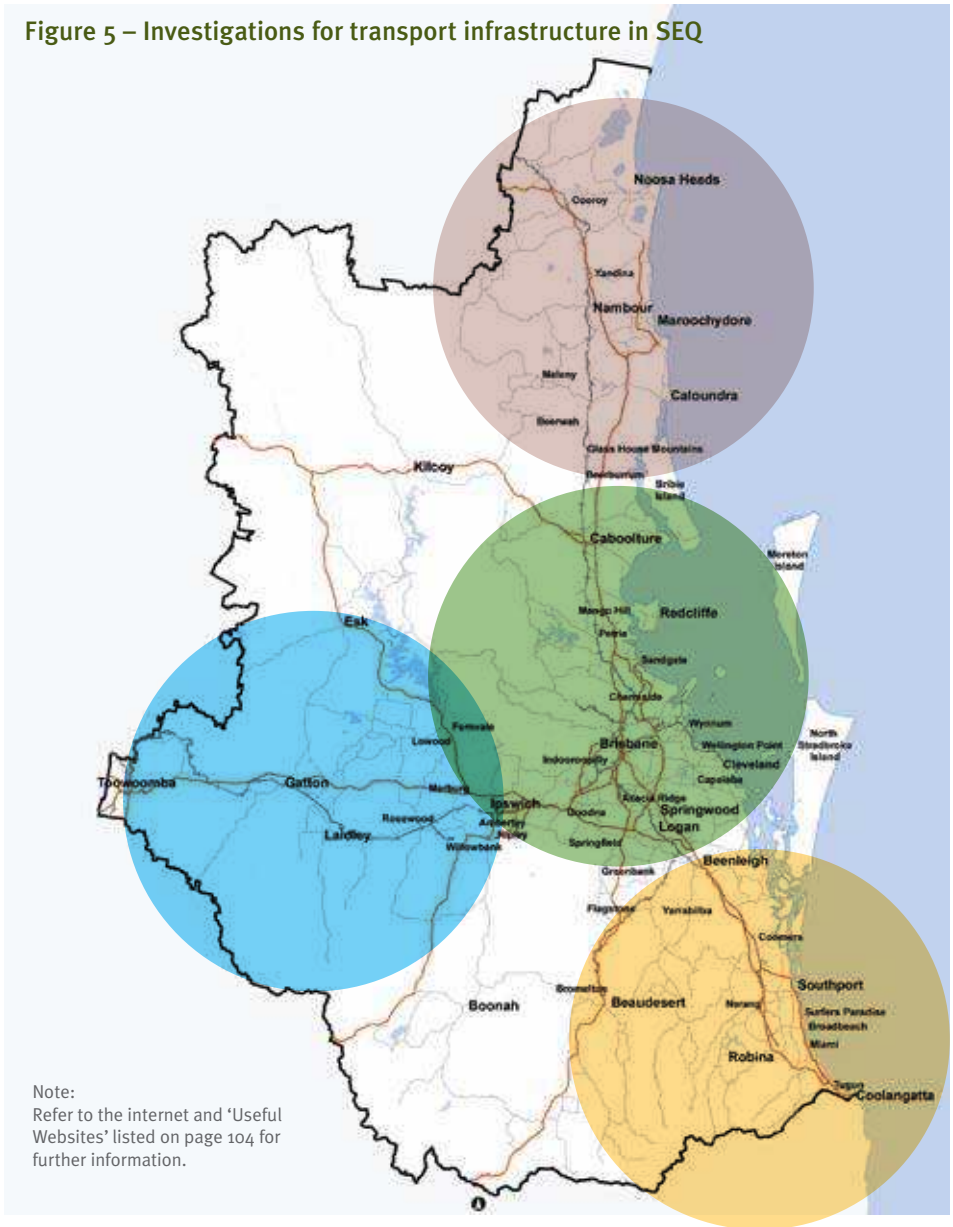


Figure 5 – Investigations for transport infrastructure in SEQ



Note:
Refer to the internet and 'Useful Websites' listed on page 104 for further information.

Sunshine Coast
- Multi Modal Transport Corridor (MMTC)
- Nautilus Study
- Caloundra Aerodrome study
- Bruce Highway corridor preservation: Caboolture to Sunshine Motorway
- CAMCOS

Brisbane, Moreton, Redland and Logan
- Mt Lindesay–Beaudesert Strategic Transport Network Investigation
- Inner city rail capacity study
- Inner city bus access study
- Gateway extension south of Browns Plains study
- Acacia Ridge intermodal access: road network investigations
- Salisbury to Beaudesert passenger rail study
- Northshore Hamilton and ATC North public transport study
- Moreton Bay integrated transport study
- Western and North Western public transport studies
- Stafford Road investigation: Gympie Road to South Pine Road
- Western Brisbane Transport Network Investigation (WBTNI)
- Gympie Arterial Investigation: Stafford Road to Roghan Road
- North–South Arterial (Boundary Road to Bribie Island Road) planning
- Brisbane–Gold Coast Transport Network Investigations
- Northern Link: Toowong to Kelvin Grove

Gold Coast
- Gold Coast Rapid Transit Project
- Intra-regional transport corridor: Nerang to Stapylton planning

Western Corridor and Toowoomba
- Southern Infrastructure Corridor (Road: Yatala to Cunningham Highway
- Southern Freight Rail Corridor study (Rail: Ebenezer to interstate standard gauge rail)

Activity centre renewal and transit oriented development

A key focus of the SEQ Regional Plan is to encourage infill in existing areas, particularly through redevelopment of areas around activity centres and public transport nodes. To deliver this, the SEQ Regional Plan promotes the integration of urban development, transport infrastructure, community services and employment as a key strategy for creating vibrant communities and achieving more efficient use of urban land.

The SEQ Regional Plan intends that transit oriented development principles be applied as part of detailed planning for all regional activity centres and land in close proximity to high-capacity, high-frequency public transport nodes and corridors. The Department of Infrastructure and Planning provides advice on best practice transit oriented development and leads its implementation in South East Queensland.

The Queensland Government's key role in facilitating development of these areas is through coordinating planning, infrastructure delivery and relevant state activities. The Queensland Government may also play a role in purchasing land and providing infrastructure with the goal of achieving attractive, viable mixed-use development, and best-practice land use and transport integration.

The Queensland Government will focus on achieving transit oriented development outcomes in three priority areas:

- major transport nodes and state landholdings within a 10-kilometre radius of the Brisbane CBD
- key regional activity centres identified in the SEQ Regional Plan
- major new state public transport infrastructure.

Transit Oriented Development Taskforce

The Transit Oriented Development Taskforce, which was established in 2005 and comprises representatives from state and local government, academia and the development industry, continues to provide leadership and advice on matters relating to transit oriented development implementation.

In 2007, the taskforce instigated a project to assess the opportunities and priorities for transit oriented development in South East Queensland. Queensland Transport and the Transit Oriented Development Coordination Unit are reviewing opportunities for potential transit oriented development at existing and planned busway stations, rail stations and other proposed transit corridors throughout the South East Queensland public transport network. This review will culminate in a report providing a prioritised and categorised list of transit oriented development opportunities in South East Queensland. This work will inform the review of the SEQ Regional Plan and assist with setting government priorities for involvement and funding of projects.

Progress on activity centre renewal and transit oriented development in 2007–08

- The Queensland Government is working actively with developers, local government and the Urban Land Development Authority to pave the way for transit oriented communities to be established in a range of locations, including Southbank, Buranda, Bowen Hills, Fitzgibbon, Hamilton Northshore, Coomera, Gold Coast University Hospital and sites along the proposed Eastern Busway.
- The Queensland Government has announced funds for the construction of a landbridge as part of the Albion Mill development to improve pedestrian connections to the railway station.
- The Queensland Government is finalising a master plan for Varsity Station Village for release in late 2008. Construction of the Varsity Station Village will start in 2010, in line with the opening of the Varsity Lakes train station.

- Site works have commenced on the transit oriented community, Boggo Road Urban Village.
- The Queensland Government has carried out concept plans and master planning for the station precinct at Bowen Hills and prepared an Interim Land Use Plan for the Bowen Hills Urban Development Area. This planning will guide the delivery of a transit oriented development precinct. The development scheme for the Bowen Hills Urban Development Area is currently being prepared.
- The Queensland Government has been involved in multiple state and private sector projects to ensure the projects align with transit oriented development policy. Some of these projects include:
  - Gold Coast University Hospital, Gold Coast
  - Maroochy Town Centre, Maroochydore
  - South Point, South Bank
  - Yeerongpilly Landing Development, Yeerongpilly
  - The Mill Albion, Albion
  - Union, Milton.
- The Queensland Government is currently developing a range of opportunities for transit oriented development at existing and planned busway stations, rail stations and other proposed transit corridors throughout the South East Queensland public transport network.
- Work on a transit oriented development demonstration project at Woolloongabba will commence in late 2008.

Urban Land Development Authority

The Urban Land Development Authority (ULDA) was established in November 2007 as a major outcome of the Queensland Housing Affordability Strategy. The ULDA was established under the *Urban Land Development Authority Act 2007* as a statutory authority with initial funding of $25 million over three years. The ULDA is a key vehicle to deliver the government's transit oriented development projects throughout the state.

The ULDA is the planning and development control agency for sites declared by the government as urban development areas. The ULDA will plan for future land use and infrastructure delivery, provide land to market and regulate development within these areas to deliver government development expectations. The ULDA will enable the government to be more effective and proactive in providing land for urban development, particularly through strategic infill and redevelopment sites.

The priorities for the Urban Land Development Authority for the next 12 months are to take carriage of the five initial sites identified in the Queensland Housing Affordability Strategy: Bowen Hills, Northshore Hamilton, Fitzgibbon, Woolloongabba and Mackay Showgrounds. This will include for each area:

- preparing interim land use plans to protect future development opportunities (plans will apply for up to 12 months)
- preparing development schemes including a land use plan, infrastructure plan and implementation strategy.

Industry development

Table 6—Industry development

* For project locations, see map 10 on page 103.

Map 10 ref*	Project	Estimated investment $M	Estimate category (see note D)	Completed projects $M	Delivery timeframe		
					2008–09 to 2011–12	2012–13 to 2018–19	2019–20 to 2025–26
Brisbane, Moreton, Redland and Logan							
7.1	Brisbane Convention and Exhibition Centre expansion	136	3				
Gold Coast							
7.2	Gold Coast Convention and Exhibition Centre extension	40	3				
Total		176					

Notes

A. The table identifies the expected delivery timeframe for each infrastructure project. The darker shade represents projects that are under construction at 1 July 2008.
B. Estimated investment is in 2008 dollars except where projects have progressed to contract stage, in which case they are in out-turn dollars. Cost estimates in the state budget and other public documents may differ, as they may incorporate project costs that reflect anticipated changes in input prices between initial planning and the time of construction. Estimated investment includes funds already expended on projects.
C. Where funding is required from other levels of government, their estimated costs have been included. Where projects are subject to federal funding, it is noted as timing of these projects is subject to negotiation with the federal government.
D. For an explanation of estimate categories, refer to page 16.

Construction started

Queensland's strong economic growth is supported by strategic investments in infrastructure, efficient management of the state's assets and sound financial management.

The Queensland Government's Smart State Strategy identifies industry sectors that are essential contributors to the progression of Queensland's economy into a modern, globally competitive and future-focused economy. A number of projects in the SEQ Infrastructure Plan support the establishment and operation of emerging knowledge precincts identified in the Smart State Strategy.

The convention and conference market is a significant contributor to the Queensland economy. Convention bureaus are recognised worldwide as promoting destinations both for business investment and visitation. They contribute to the overall development of tourism by:

- providing a further channel to attract new visitors
- facilitating expenditure from business travel
- contributing to local employment and training opportunities.

The Queensland Government is investing in major upgrades of existing convention centres in Brisbane and the Gold Coast.

Additionally, it is essential that sites for future industrial development are protected to allow opportunities which give Queensland businesses a strategic competitive advantage. Such sites should be developed in response to market demand and supported with infrastructure and services delivered in a coordinated and timely manner.

Brisbane Convention and Exhibition Centre expansion

The Brisbane Convention and Exhibition Centre expansion is a $136 million project designed to enable the centre to meet increasing international and national demand for facilities for conventions of up to 600 delegates. The expansion design incorporates five levels of boutique convention and event space, including two new auditoriums. An additional 23 000 square metres of space in the expansion the Brisbane Convention and Exhibition Centre will allow capacity comparable to the new Melbourne Convention Centre.

The new expanded facility will be the only convention venue in Australia to have three stand-alone plenary halls covering meetings from 400 to 8000, two ballrooms, three speakers' presentation centres and six executive boardrooms.

Design development was completed in February 2008. The expansion is due for completion in 2010.

Gold Coast Convention and Exhibition Centre—Stage 2 extension

The extension of the Gold Coast Convention and Exhibition Centre will enable the centre to host larger national and international events by allowing for seating of up to 6000 patrons and doubling the space in the exhibition hall to 6000 square metres.

The extension fulfils a commitment to increase the available convention and exhibition space on the Gold Coast to meet growing demands and changing trends.

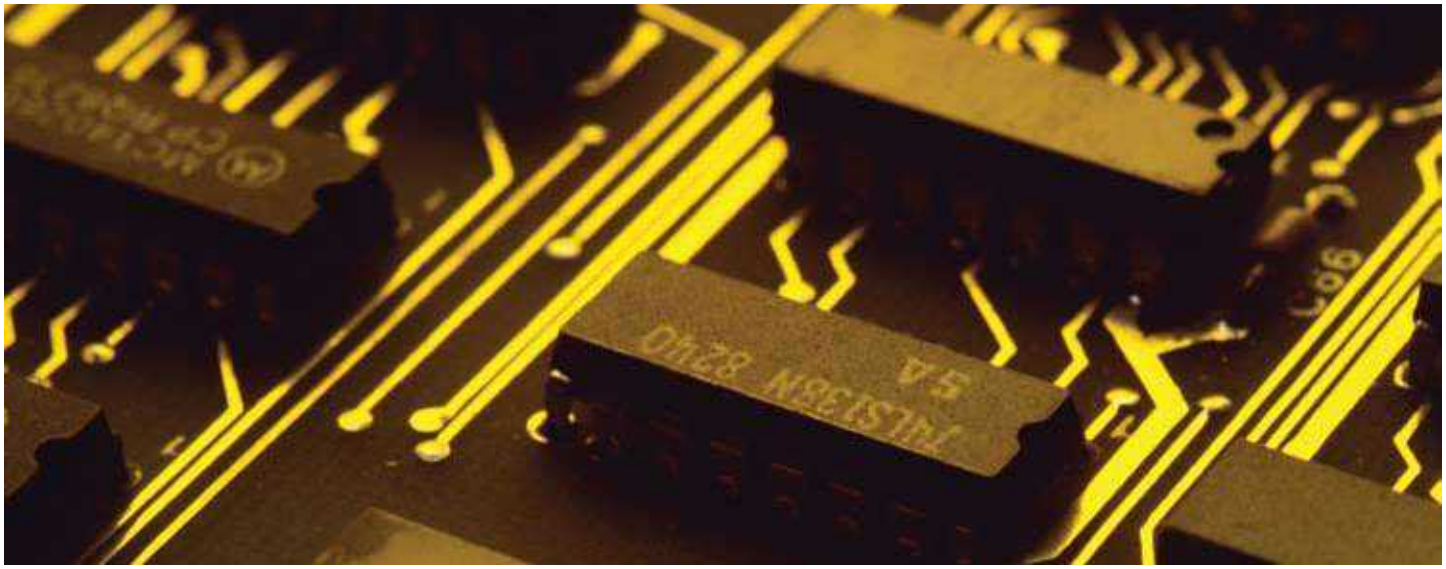
The successful contractor for the Stage 2 extension has been appointed and the project is currently scheduled for completion in December 2008.

Land for industry and commerce

To support growth within South East Queensland, the Queensland Government is undertaking a range of initiatives to ensure sufficient supply of suitably located and serviced industrial land and supporting infrastructure. Current initiatives include:

- industrial land supply and demand analysis—investigating the location and amount of industrial land; the supply and servicing of infrastructure to support these locations including road, rail, power and water; and the nature of market demand for industrial land including location and operational criteria and timing of land requirements. Industrial land supply and demand studies are being undertaken in the Ipswich-Western Corridor and the Moreton Bay region (Caboolture, Pine Rivers, Redcliffe and northern Brisbane)
- industry sector studies and projects including Smart State industry sectors such as aviation and marine. One major aviation project underway is the replacement aerodrome study for Caloundra and Caboolture aerodromes. Current studies are investigating marine industry activities and marine infrastructure
- planning and design of strategic infrastructure corridors and facilities to support economic growth and regional connectivity, such as the Southern Freight Rail Corridor between Rosewood and Beaudesert, and investigations for future intermodal (road/rail) freight facilities at Bromelton and Purga
- site identification and land use planning of strategic employment-generating projects such as the Amberley Aerospace Park and Special Industry Estates Study.

Information and communication technology



Information and communication technology (ICT) is essential to the successful delivery of the Smart State agenda through the state's research establishments, business, industry, government, community and individuals. Such a catalyst for business growth leads to increased investment and positions Queensland to be more globally competitive in critical areas of commerce, industry, enterprise and skills development.

Widespread availability of world standard, affordable, competitively priced, high-speed telecommunications (broadband) infrastructure and services are critical to support and advance the continued growth of South East Queensland and to realise the Queensland Government's vision of a 'Connected Queensland'.

Fibre-optic cable is the optimal technology for high-speed broadband telecommunications. However, multiple information and communication technologies will be necessary to deliver services economically. Continued investment in the establishment and upgrading of broadband infrastructure and services will be necessary to underpin economic development and growth in South East Queensland.

While investment in telecommunications infrastructure is mainly undertaken by the private sector, governments will increasingly influence and stimulate such investment through policies, programs and the regulatory environment.

The federal government has primary responsibility for telecommunications policy and regulation. In recognition of the importance of telecommunications to the state economy, the Queensland Government actively engages with the federal government to guide and influence its broadband and telecommunications policies, programs and initiatives as they relate to Queensland.

Instruments used by the Queensland Government include:

- leveraging national telecommunications initiatives including the National Broadband Network, the Digital Education Revolution, Clever Networks and e-Health
- contributing to policy development, such as Smart Industry Policy, Regional Telecommunications Independent Review Commission, National Broadband Network and the role of ICT in climate change
- special purpose grants such as Building Information Technology Industries (BITI)
- stimulating competition through leveraging Queensland Government spending and investments
- supporting industry excellence through recognition programs such as the Premier's Smart Awards.

Flagship Queensland Government activities include:

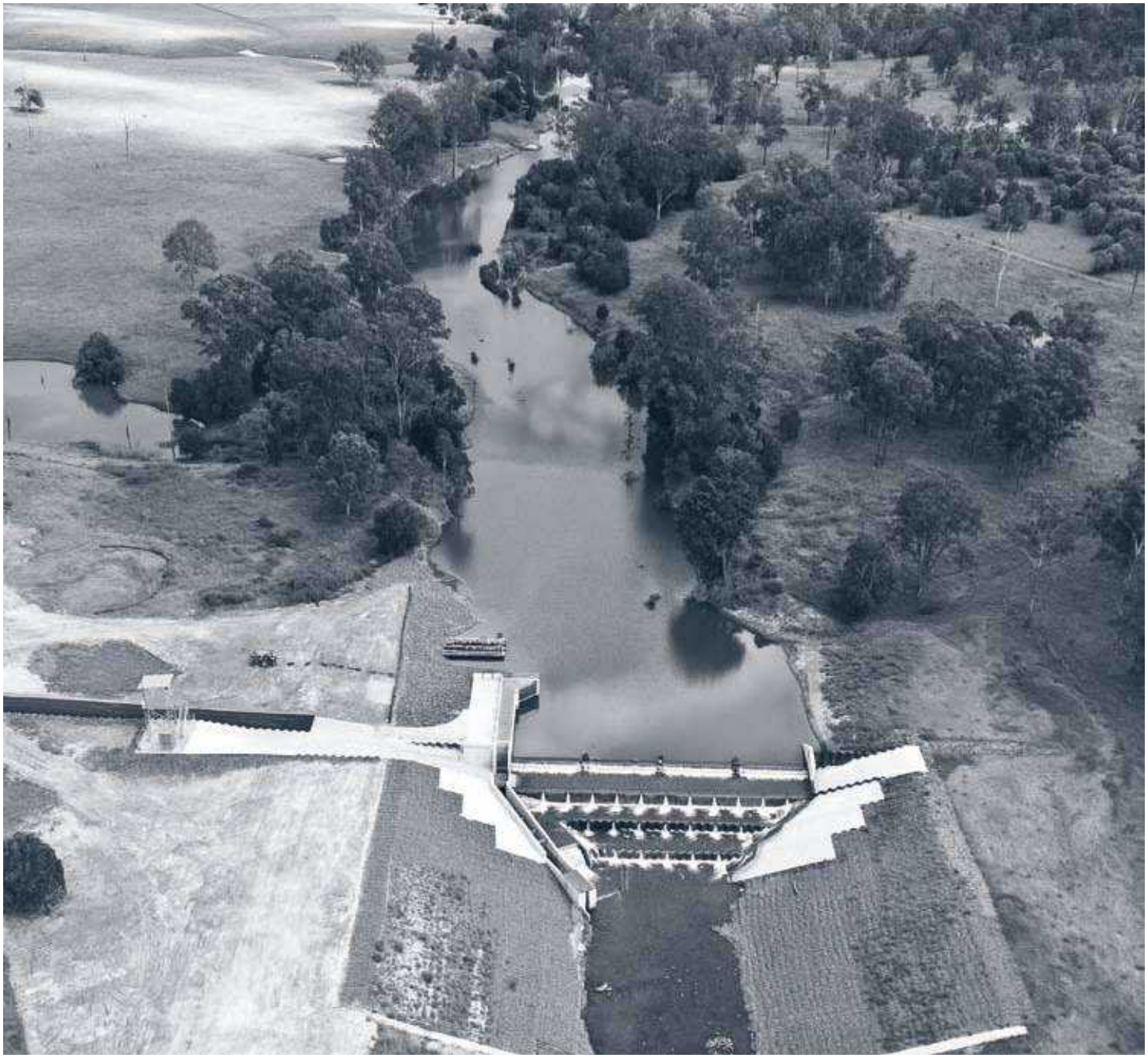
- transitioning Queensland to a Smart State economy by assisting the development of the ICT industry through enhancing product development, productivity improvement and technology diffusion
- managing, coordinating and promoting state-based Commonwealth programs by advising and facilitating the work of economic development organisations, local government and community groups

- providing guidance on all aspects of telecommunications for the state through the Queensland Telecommunications Steering Committee, with a strong focus on broadband to ensure that Queensland benefits from emerging federal initiatives
- defining the key strategies and actions for government, industry and community groups to advance the provision of modern telecommunications infrastructure and services through the Queensland Telecommunications Strategic Framework 2005–08
- 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
- progressing the Service Delivery and Performance Commission recommendation on rationalising government networks and internet services through CITEC.

Specific initiatives include the following projects funded under the Federal Government's *Connect Australia* program:

- On 31 July 2007, $4.9 million in funding was received from the Federal Government for a Department of Education, Training and the Arts (DETA) project to provide enhanced access to the Learning Place, DETA's e-learning environment for schools. The project provides enhanced broadband infrastructure for more than 7000 students across 128 schools in regional and remote Queensland.
- On 30 July 2007, $5 million in funding was received from the federal government for Queensland Health to establish the Cooeenet@qld project. Developed in partnership with the Department of Emergency Services and e-Health Research Centre, the project provides high-capacity broadband services to support health care and emergency services to communities in remote North Queensland.

Water



South East Queensland is experiencing its worst drought in recorded history. The Millennium Drought, so named because it began at the turn of the millennium, moved into its eighth year in 2008.

In response to the drought, the government is delivering the $9 billion South East Queensland Water Grid.

A range of projects has already been completed at a cost of $184 million. Those completed in 2007–08 include the Cedar Grove Weir and the first stage of the Western Corridor Recycled Water Project. Expenditure on the total watergrid as at end of April 2008 was around $3.5 billion with around 60 per cent of the pipeline complete.

Major progress on a range of other regionally significant projects has also ensured that they remain on schedule for completion by the end of 2008. These projects include the first purified recycled water scheme in Australia, the first major desalination facility on the east coast, and about 450 kilometres of interconnecting pipelines.

Detailed planning is underway for a range of other projects, including Traveston Crossing Dam Stage 1, Wyaralong Dam and another 100 kilometres of interconnecting pipelines.

The Queensland Water Commission publishes a monthly report outlining progress on each of these projects, which is available at www.qwc.qld.gov.au.

Combined with the community's outstanding achievements in reducing water consumption, the measures that the Queensland Government is adopting will ensure that adequate supplies are maintained if the drought continues.

Beyond the current drought, combined with the planning framework outlined in the draft South East Queensland Water Strategy, these projects should ensure that residents of South East Queensland never again experience extreme (Level 6) water restrictions.

Strategic priorities

In addition to its drought-specific response, the Queensland Government's strategic priorities in addressing water planning and investment are:

- 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 systems for water-cycle management
- ensuring institutional arrangements provide efficient, sustainable and equitable delivery of bulk water supply and treatment services.

South East Queensland Water Strategy

The Millennium Drought has changed the way that residents of South East Queensland think about water—awareness has grown that every drop is precious. The draft South East Queensland Water Strategy, which was released in March 2008, is a plan for meeting South East Queensland's water supply requirements for the next 50 years. It is designed to deliver a new standard of water security in Australia's fastest growing region. The Queensland Water Commission developed the strategy using a new planning methodology and a

comprehensive water balance model that, as far as possible, considers climate change, climate variability, population growth and other regional factors affecting supply and demand.

The strategy seeks to ensure that South East Queensland will never go back to the water-wasting ways of the past. It proposes an ambitious demand-management program that is forecast to reduce the demand for grid water by about 24 per cent compared with pre-drought trends. The average residential consumption target will be 230 litres per person per day.

The strategy highlights that, with this reduction in demand, additional sources of supply will not be required until at least 2028, except as part of the response to another severe drought. Therefore, some projects that were identified in previous versions of the SEQ Infrastructure Plan have been deferred or reduced in scope.

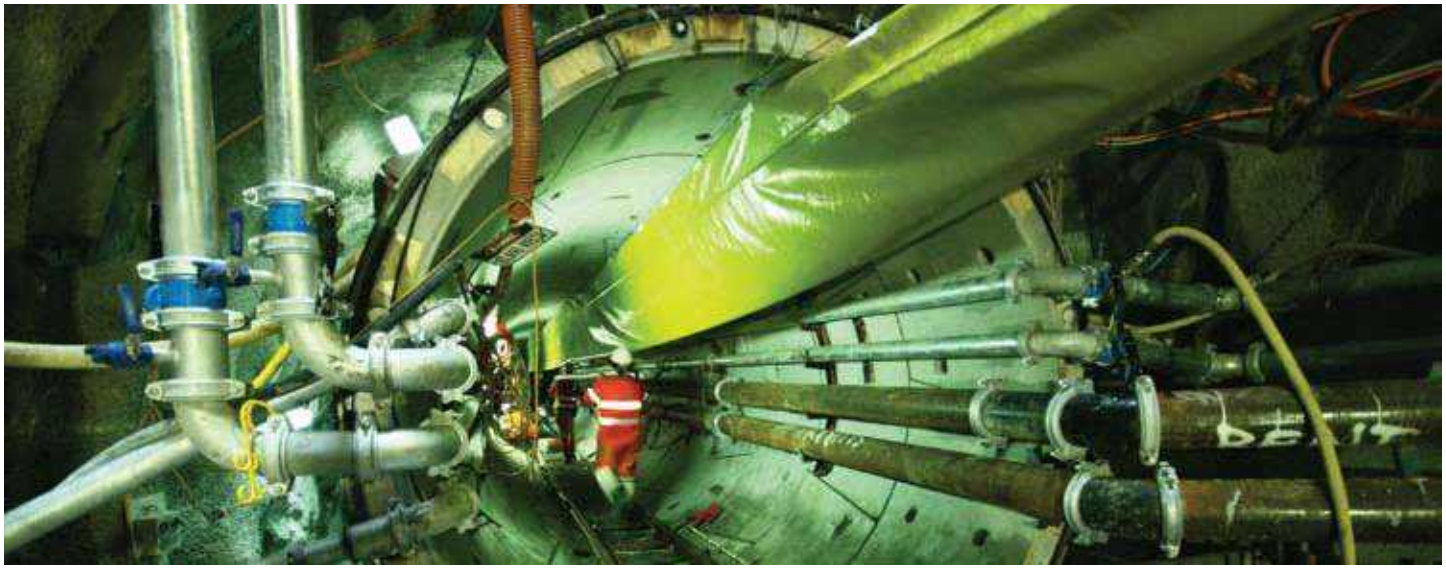
The strategy identifies a number of potential sources of supply for detailed investigation, including desalination plants and purified recycled water schemes.

Drought exit strategy

The Queensland Water Commission announced the Drought Exit Strategy in February 2008. The first relaxation of general restrictions will occur when combined dam levels reach 40 per cent of capacity. At this point, extreme-level restrictions will be replaced by high-level restrictions and a new residential target of 170 litres per person per day will be set (Target 170).

The Queensland Water Commission has also advised the government that it can now indefinitely defer any consideration of a decision to construct emergency infrastructure, including mobile desalination facilities. However, planning and design should be finalised to a degree that will ensure they could be reinitiated if required.

Permanent water conservation measures will be implemented when combined storage levels reach 60 per cent.



The water supply guarantee

The Queensland Water Commission's vision is that there will be sufficient water to support a comfortable, sustainable and prosperous lifestyle while meeting the needs of urban, industrial, and rural growth, and the environment.

Known as the *Water Supply Guarantee*, this water security vision will be achieved by:

- balancing community expectations of water security, quality and cost
- embedding water efficiency throughout the water supply and demand chain
- managing water security through diversified and integrated water supplies and drought preparedness
- improving environmental outcomes, including healthier waterways, through integrated strategic planning and catchment management.

Establishing a water-efficient community

The Queensland Government has implemented a range of initiatives to ensure that the best use is made of available water supplies, both as part of the drought response and as a longer term strategy.

Business and industry

In consultation with stakeholders, the Queensland Water Commission has implemented a package of measures to deliver long-term savings for businesses while minimising risks to economic production and employment.

Water-intensive businesses are required to prepare water-efficiency management plans to demonstrate that they use water efficiently, or to show how they plan to reduce their water consumption by a minimum of 25 per cent in the near future.

The Queensland Government has established a $43 million Business Water Efficiency Program to help businesses make sustainable water savings in excess of the target 12 million litres a day (ML/day). A diverse range of businesses will benefit from this incentive program, with water-saving projects ranging from refits of water-efficient toilet suites, tap ware and showerheads, through to the installation of large-scale water recycling systems and desalination plants.

Residents

In June 2006 the Queensland Government launched a series of Home WaterWise rebate schemes to promote the take-up of water-saving appliances. Residents were offered rebates for a range of products including up to $1500 for internally plumbed water tanks of 3000 litres or greater, $200 for washing machines rated four stars or higher, and $150 for dual-flush toilets.

In August 2006 the state government, in partnership with local government, established the Home WaterWise Service. Under this program, a licensed plumber will visit a resident's home and install water-efficient devices such as showerheads, repair minor leaks, and give advice on other water-saving strategies. The cost of the service to residents is $20.

In December 2006 the government introduced a separate rebate scheme for defined garden products that contribute to water savings, offering a one-off, 50 per cent rebate on the cost of approved plants and garden products up to $50.

By July 2008 it is anticipated that more than 200 000 homes will have been retrofitted, saving up to 11.5 million litres of water per day. The Queensland Government has committed $34.5 million to this program and local governments $7.5 million.

By the end of April 2008 residents of South East Queensland had received $230 million in rebates.

Case study—Fourex Brewery

Brisbane's iconic Fourex Brewery will slash its consumption of drinking water by 1.1 ML/day as part of the Business Water Efficiency Program.

Castlemaine Perkins is building a $16 million water recycling plant at its historic Milton Road Brewery, bringing the operation into line with world's best practice and reducing by almost half (to less than 2.2 litres) the amount of drinking water needed to make a litre of beer.

The recycled water will be used to clean packaging lines, lubricate the conveyor chain and flush toilets.

The Queensland Government will contribute $5.3 million to the project through the Business Water Efficiency Program.

Pressure and leakage management

Significant water savings can be achieved by reducing water loss from leaking and burst water mains and pipes. The Queensland Government has increased its subsidies to local government so that councils can implement the Pressure and Leakage Management Program more quickly. The government will contribute a subsidy of 40 per cent of capital costs up to $32 million, and has paid out $16.8 million to March 2008.

Connecting and diversifying our water supplies

South East Queensland Water Grid

Construction of the South East Queensland Water Grid is well underway. The grid is a network of two-way pipes to transport water from areas of water surplus to areas facing a shortfall. It will allow the coordinated use of all major bulk water sources in the region.

The project includes more than 450 kilometres of pipeline, two new dams, upgrades of existing dams, a desalination plant and three advanced water treatment plants.

Key projects to establish the water grid are outlined below.

Western Corridor Recycled Water Project

Construction on the $2.4 billion Western Corridor Recycled Water Project, Australia's largest recycled water project and one of the largest advanced water treatment projects in the world, is well underway.

The project includes about 205 kilometres of pipeline and three advanced water treatment plants at Bundamba, Gibson Island and Luggage Point. It will have the capacity to provide up to 232 ML/day of purified recycled water to the region's supply.

The project will provide purified recycled water to Swanbank and Tarong power stations, industry and agriculture, and to Wivenhoe Dam to supplement the region's drinking water supplies.

Construction is expected to be completed in December 2008.

Gold Coast Desalination Project

The South East Queensland (Gold Coast) Desalination Project is a $1.2 billion joint initiative between the Queensland Government and Gold Coast City Council to construct the first large-scale water desalination plant on the eastern seaboard.

The project, located at Tugun, will provide up to 125 ML/day of new fresh drinking water to South East Queensland.

The project includes construction of a desalination plant, a 2.2-kilometre marine intake tunnel, a 2-kilometre outlet tunnel, and a 24.9-kilometre pipeline to connect the plant to the South East Queensland Water Grid.

Construction, which is about three-quarters complete, is on schedule to be finished in November 2008 and fully operational by January 2009.

Southern Regional Water Pipeline

Construction is well underway on the Southern Regional Water Pipeline, which is a 100-kilometre, two-way pipeline that will move water between the Gold Coast, Logan, Ipswich and Brisbane.

The $900 million pipeline will be able to move up to 130 ML/day, ensuring water is distributed to the most drought affected areas in the region.

New water sources, such as Wyaralong Dam and the Cedar Grove Weir will be incorporated into this network when complete, with additional connecting pipework to Kuraby by 2011. The pipeline is expected to be fully operational by the end of November 2008.

Northern Pipeline Interconnector

Stage 1 of the Northern Pipeline Interconnector is a 47-kilometre pipeline that has the capacity to transport up to 65 ML/day between the Sunshine Coast and Brisbane.

Construction of Stage 1 is underway, connecting Lander's Shute Water Treatment Plant west of Caloundra to the Morayfield reservoirs, where it will link with the Caboolture and Brisbane water networks.

The planning and approval phase for Stage 2 of the pipeline is continuing. This involves approximately 50 kilometres of pipeline extending north from Lander's Shute to access water from water treatment plants at Image Flat and Lake MacDonald near Cooroy.

Development of a system capable of two-way flow will enable water to be directed to the Sunshine Coast, if needed.

Eastern Pipeline Interconnector

The Eastern Pipeline Interconnector is a bulk water transfer network with the potential to transport up to 22 ML/day between Redland and Brisbane.

The project connects Redland to the water grid via Logan. Early works are progressing.

New and upgraded dams

Construction of the Hinze Dam upgrade began in January 2008. Scheduled to be completed by the end of 2010 at an estimated cost of about $395 million, the upgrade will increase the full supply level of Hinze Dam by 12.3 metres to 94.5 metres. The upgrade will also provide flood mitigation benefits.

The South East Queensland Water Grid includes two proposed dams currently in planning stages: Traveston Crossing Dam Stage 1 and Wyaralong Dam.

The proposed Traveston Crossing Dam Stage 1 is located about 16 kilometres south of Gympie in the Mary River catchment and could deliver up to an additional 70 000 ML/year (192 ML/day).

The proposed Wyaralong Dam located on Teviot Brook, approximately 14 kilometres north-west of Beaudesert in the Logan River catchment, is expected to supply 26 000 ML/year (58 ML/day), when operated in conjunction with Cedar Grove Weir and the Bromelton Offstream Storage.

If approved, both dams are expected to be complete by the end of 2011.

Projects delivered in the Logan catchment

The recently completed Cedar Grove Weir, near Beaudesert, began supplying additional water to the region in early 2008.

The $18.5 million weir now has the capacity to provide 3000 ML/year to improve water supply during drought. It will also help accommodate growing demand in the Beaudesert area and provide additional supply to the water grid.

The weir is the first of three projects in the Logan catchment, which collectively will provide an additional 26 000 ML/year to South East Queensland.

Bromelton Offstream Storage, also near Beaudesert, is nearing completion and will be delivered in mid 2008, well ahead of its original March 2009 deadline. It will provide water storage after major rainfall events, such as those experienced from December 2007 to February 2008. The water can then be released back into the Logan River and onto Cedar Grove Weir when flows are low.

The third project, the $333 million Wyaralong Dam, is currently progressing through the environmental approval process. It is proposed to construct the dam on the Teviot Brook, about 14 kilometres north-west of Beaudesert.

Other water supply projects

Reactivating old dams

Lake Manchester and Enoggera dams have been reactivated, providing up to 30 ML/day.

A new $40 million water treatment plant is being constructed at Ewen Maddock Dam on the Sunshine Coast, to increase treatment capacity and provide contingency supply for the Sunshine Coast.

Aquifers

Construction of the Bribie Island Aquifer project was completed in early 2008 for a total cost of $43.5 million. The project has the capacity to provide additional supply of up to 5 ML/day.

In December 2007 Brisbane City Council completed a range of groundwater extraction and treatment facilities that are supplying up to about 20 ML/day for residential and business use. The total cost of this project was $70 million.

The Queensland Government has acquired both projects as part of the water grid.

It has also committed $6.5 million over four years, commencing 2007–08, to identify potential sources of groundwater in South East Queensland, and to undertake studies to determine available resources and suitable extraction regimes.

Toowoomba Pipeline

The government has brought forward a feasibility study and business case examining a proposal to supply additional water to Toowoomba. This would be achieved via a pipeline linking Wivenhoe Dam to Toowoomba's dam storages.

A preliminary business case prepared in December 2007 recommended a pipeline from Lake Wivenhoe to Lake Cressbrook as the preferred option.

To meet Toowoomba's immediate and long-term water supply requirements, the government has committed $20 million in funding to complete a detailed business case and other necessary preliminary design and investigative works to enable this project to be delivered by the end of December 2009.

Other recycled water projects

Brisbane City Council has begun work on a project to supply 4.5 ML/day to the Caltex refinery, and approximately 4 ML/day to other customers and commercial tankers.

The supply to the Caltex refinery is scheduled for completion by June 2008 at a cost of about $35 million. The Queensland Government will contribute about $12 million towards the cost of this project.

Other councils are assessing substitution opportunities to supply recycled water to industrial users. The most notable is Moreton Bay Regional Council, which is currently scheduled to commence supplying 4 ML/day to the Amcor paper mill at Murrumba Downs by September 2008.

Rural water

The South East Queensland Irrigation Futures Program aims to reduce irrigation water use by up to 10 per cent across the region by 2009. More than 30 per cent of irrigators in South East Queensland have been involved in field trials, research and development. The Department of Natural Resources and Water will work in partnership with five major irrigation industry groups including Queensland Dairyfarmers' Organisation, Growcom, the Nursery and Garden Industry of Queensland, Queensland Turf Producers Association and the Flower Association of Queensland to deliver the program. South East Queensland Catchments Limited, the natural resource management group for the region, will also be a partner.

Governance

Since 2005 the Queensland Government and councils have been engaged in improving institutional and regulatory arrangements. In May 2007 the Queensland Water Commission delivered a report to the government recommending a restructure of the water sector in South East Queensland to ensure that, in the face of climate change and massive population growth, water supplies and wastewater services will be sustainable and efficient.

The arrangements will facilitate implementation of the Regional Water Security Plan and the System Operating Plan to ensure water security for South East Queensland. The key features for the new arrangements at the bulk level are to establish:

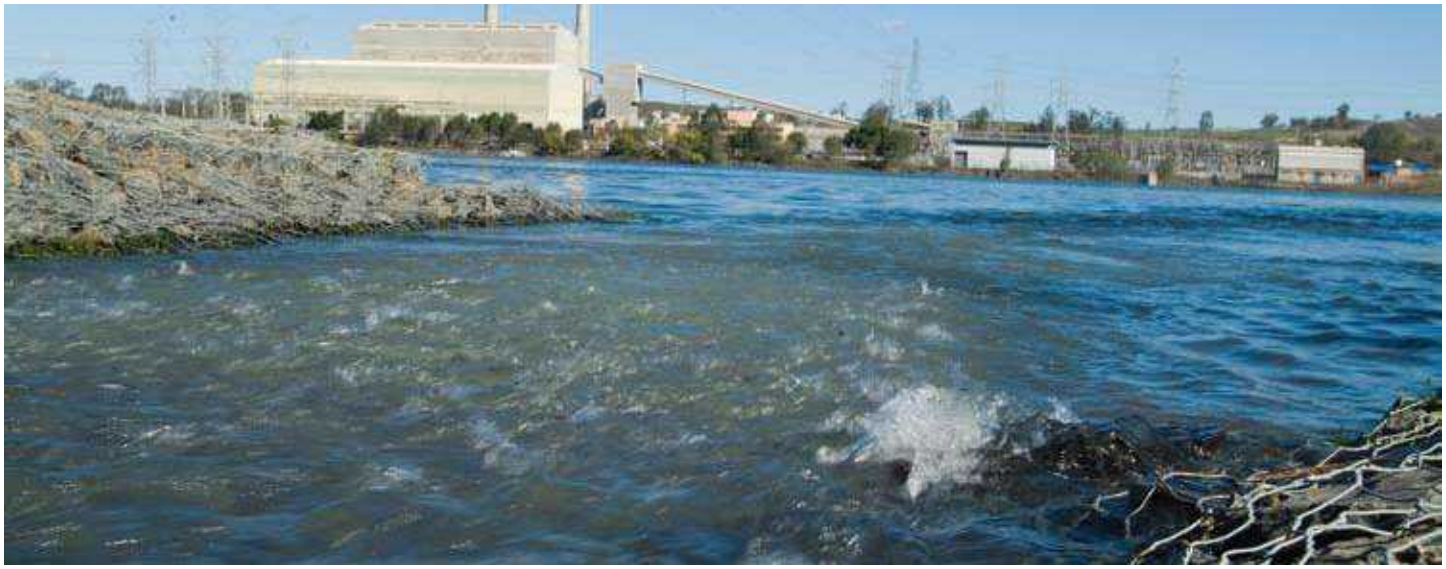
- the Queensland Bulk Water Supply Authority, which will own all dams, groundwater infrastructure and water treatment plants in South East Queensland
- the Queensland Manufactured Water Authority, which will own the desalination plant at the Gold Coast and the Western Corridor Recycled Water Project
- the Queensland Bulk Water Transport Authority, which will own all major pipelines in South East Queensland (including the eastern and northern pipeline interconnectors)
- the position of South East Queensland Water Grid Manager.

SEQ Water Grid Manager

The SEQ Water Grid Manager will maintain regional water security and ensure enough water supplies are maintained throughout South East Queensland by:

- overseeing the efficient management of the South East Queensland Water Grid under a new System Operating Plan
- delivering water to customers in accordance with their contracts
- coordinating water supply by identifying and directing water from preferred sources
- monitoring demand and supply trends to ensure the water balance is maintained
- issuing monthly grid instructions to water service providers
- reporting on the operation of the water grid and the water security position to the Queensland Water Commission and community
- facilitating risk management across the water grid.

The SEQ Water Grid Manager will commence operation on 1 July 2008.



Below this level, the key features of the new arrangements are:

- to consolidate retail businesses from 17 to between three and 10, with councils to submit a consolidated proposal to the government on the final number
- to establish a single, distribution business owned by local government that will own all the water reticulation, service pipes, meters and sewerage reticulation in the region.

Reform at bulk level is well underway, starting with the *South East Queensland Water (Restructuring) Act 2007*, which commenced in November 2007. The reforms at retail and distribution level are to occur no later than July 2010.

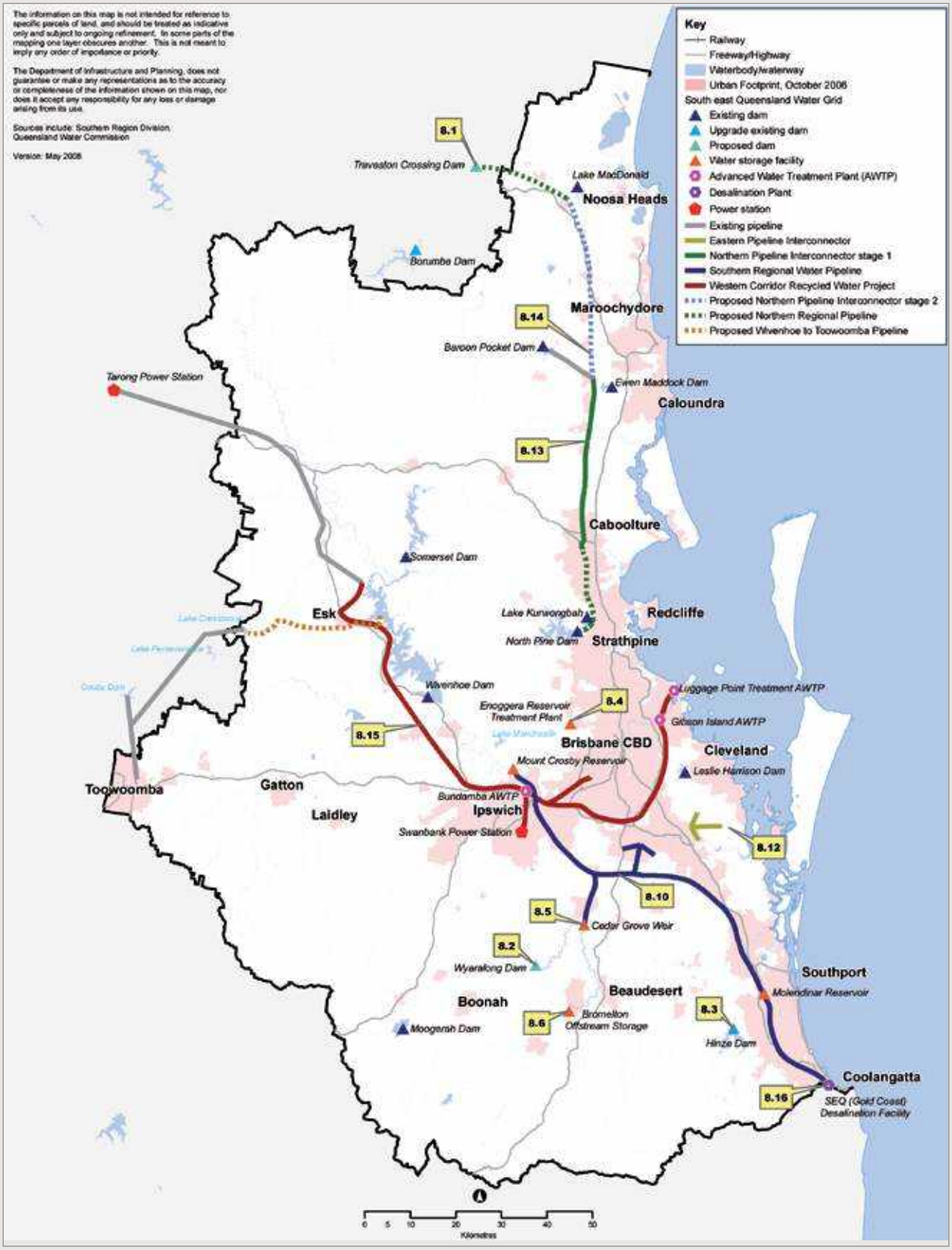
The Queensland Water Commission and new bulk water supply entities will review the need for additional capital expenditure on water treatment and bulk transport infrastructure. Within the timeframe of the SEQ Infrastructure Plan, a range of new and upgraded water treatment plants and pipelines will be required.

Progress on water projects in 2007–08

Significant progress has been made on all drought contingency projects since the 2007 SEQ Infrastructure Plan was released, including:

- Construction of the Western Corridor Recycled Water Project is progressing according to schedule. Stage 1A (first stage of the Bundamba Advanced Water Treatment Plant) was commissioned in August 2007, and has been providing up to 13 ML/day of recycled water to Swanbank power station. Completion of Stage 1B is expected by June 2008, allowing recycled water to be delivered to the Tarong Power Station.
- The South East Queensland (Gold Coast) Desalination Plant was over 70 per cent complete as of April 2008. It remains on track to deliver first water by the end of November 2008, and be fully operational by mid January 2009. Construction of inlet and outlet tunnels is complete, and construction on the network integration pipeline is well underway.
- Construction of the 100-kilometre Southern Regional Water Pipeline is well advanced with over 80 kilometres of pipe laid by the end of April 2008. The project is on track for completion by the end of November 2008.
- Construction is underway on Stage 1 of the Northern Pipeline Interconnector, with over half of the pipeline completed by April 2008, and works scheduled for completion by the end of December 2008.
- The Cedar Grove Weir began storing water in December 2007, and is now supplying up to 8 ML/day.
- The Bromelton Offstream Storage is on schedule to be completed by 30 June 2008, ahead of the previous 2009 delivery timeframe.
- Construction of the Hinze Dam upgrade commenced in January 2008, and is on schedule for completion by the end of 2010.
- Environmental assessment processes for the proposed Traveston Crossing and Wyaralong dams are well advanced. Public consultation on the environmental impact statement reports has been completed, and supplementary reports are currently being prepared.
- The Home WaterWise domestic retrofit service is on track to achieve the final target of 218 000 retrofits by the end of 2008, saving about 12 ML/day. Over 190 000 retrofits had been completed as at April 2008.
- As at March 2008 the Queensland Government had paid almost $245 million in rebates for water-efficient appliances in South East Queensland, including rainwater tanks, washing machines and dual-flush toilets.
- The Business Water Efficiency Program will yield water savings in excess of the regulation target 12 ML/day. The Queensland Government will contribute about $43 million in subsidies.

Map 8—South East Queensland Water Grid



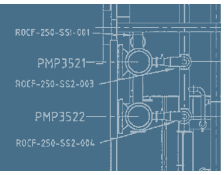


Table 7—Regional Water Infrastructure

Map 8 ref	Project	Estimated investment $M	Estimate category (see note D)	Completed projects $M	Delivery timeframe		
					2008–09 to 2011–12	2012–13 to 2018–19	2019–20 to 2025–26
Water storages							
8.1	Traveston Crossing Dam: Stage 1 and water treatment plant[F]	1662	2				
8.2	Wyaralong Dam and water treatment plant[G]	348	2				
8.3	Raising of Hinze Dam: Stage[H]	395	3				
8.4	Enoggera Reservoir water treatment plant[H]	14	3				
8.5	Cedar Grove Weir		4	19	Completed 2007–08		
8.6	Bromelton Off-Stream Storage		4	40	Completed 2007–08		
Groundwater sources							
8.7	Brisbane Aquifer Project[H]		4	70	Completed 2007–08		
8.8	Bribie Island Groundwater Project[H]		4	43	Completed 2007–08		
Making best use of available supplies							
8.9	Pressure Reduction and Leakage Management Program	32	–				
Interconnection							
8.10	Southern Regional Water Pipeline	901	3				
8.11	Southern Regional Water Pipeline extension: Greenbank to Kuraby	35	0				
8.12	Eastern Pipeline interconnector	39	3				
8.13	Northern Pipeline interconnector: Stage 1 and Ewen Maddock water treatment plant	350	2				
8.14	Northern Pipeline interconnector: Stage 2 and additional works[I]	500	0				
Manufactured water							
8.15	Western Corridor Recycled Water Project[J]	2493	3				
8.16	South East Queensland (Gold Coast) Desalination Facility[K]	1209	3				
8.17	Caltex Brisbane Recycled Water Project[L]		4	12	Completed 2007–08		
Total		7978		184			

Construction started

Notes

A. The table identifies the expected delivery timeframe for each infrastructure project. The darker shade represents projects that are under construction at 1 July 2008.

B. Estimated investment is in 2008 dollars except where projects have progressed to contract stage, in which case they are in out-turn dollars. Cost estimates in the state budget and other public documents may differ, as they may incorporate project costs that reflect anticipated changes in input prices between initial planning and the time of construction. Estimated investment includes funds already expended on projects.

C. Where funding is required from other levels of government, their estimated costs have been included. Where projects are subject to federal funding, it is noted as timing of these projects is subject to negotiation with the federal government.

D. For an explanation of estimate categories, refer to page 16.

E. Where a project has been completed or a stage of a project completed, it has been noted in the table.

F. The environmental impact statement released in October 2007 states that the total project capital cost is $1,592 million, including mitigation measures, infrastructure relocation and pipeline connections. This estimate has been indexed to 2008 dollars, consistent with other projects contained in the infrastructure plan.

G. The environmental impact statement released in October 2007 states that the total project capital cost is $333 million, including mitigation measures, infrastructure relocation and pipeline connections. This estimate has been indexed to 2008 dollars, consistent with other projects contained in the infrastructure plan.

H. Local governments are the proponents for these projects. Ownership of the assets is being transferred to the Queensland Government as part of the review of institutional arrangements for bulk water supply. As such, the cost estimate represents total project cost. Previous versions of the SEQ Infrastructure Plan included estimated Queensland Government subsidies.

I. Includes augmentation to Brisbane supply network.

J. Since 2007 the project scope has increased significantly to accommodate additional recycling opportunities.

K. Includes cost of connection to Southern Regional Water Pipeline.

L. This project was included in last year's table under the heading local government recycling initiatives.

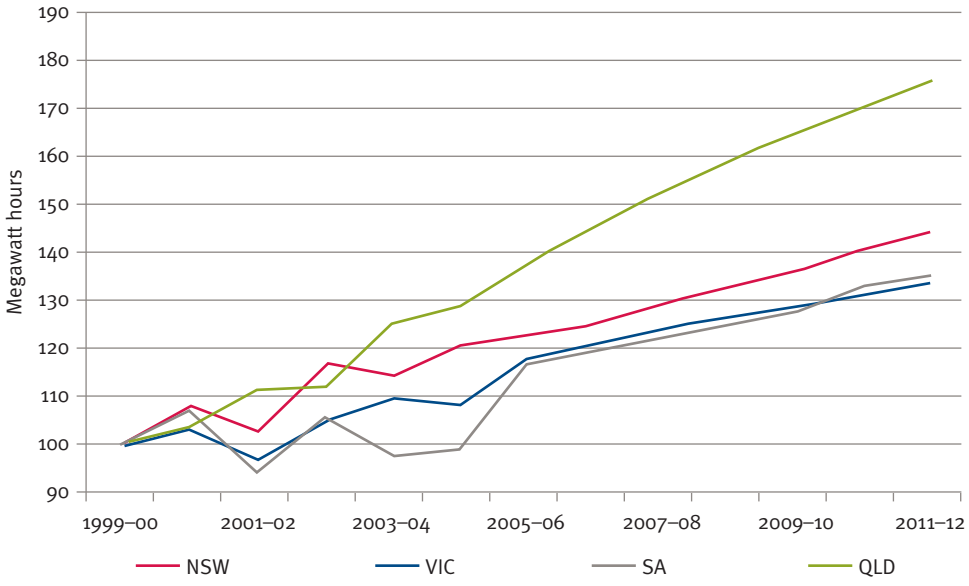
M. Projects in the 2008 SEQ Infrastructure Plan have been rationalised from previous years to reflect the Draft South East Queensland Water Strategy and to focus on strategic capital infrastructure only.

N. WaterWise retrofit service extended statewide.

Energy

Electricity demand in Queensland is growing at twice the rate of that in other states (see Figure 6), with investment in the South East Queensland electricity network rising at a commensurate rate. The Queensland gas market is also growing rapidly, with demand having doubled since 2000. Managing the energy needs of Australia's fastest growing, most decentralised and energy-intensive state, while at the same time reducing greenhouse emissions, presents challenges.

Figure 6—Growth in peak summer demand for electricity



Note: Peak summer demand is the maximum total demand (in megawatt hours) on the electricity system over a 30-minute period during the summer months.

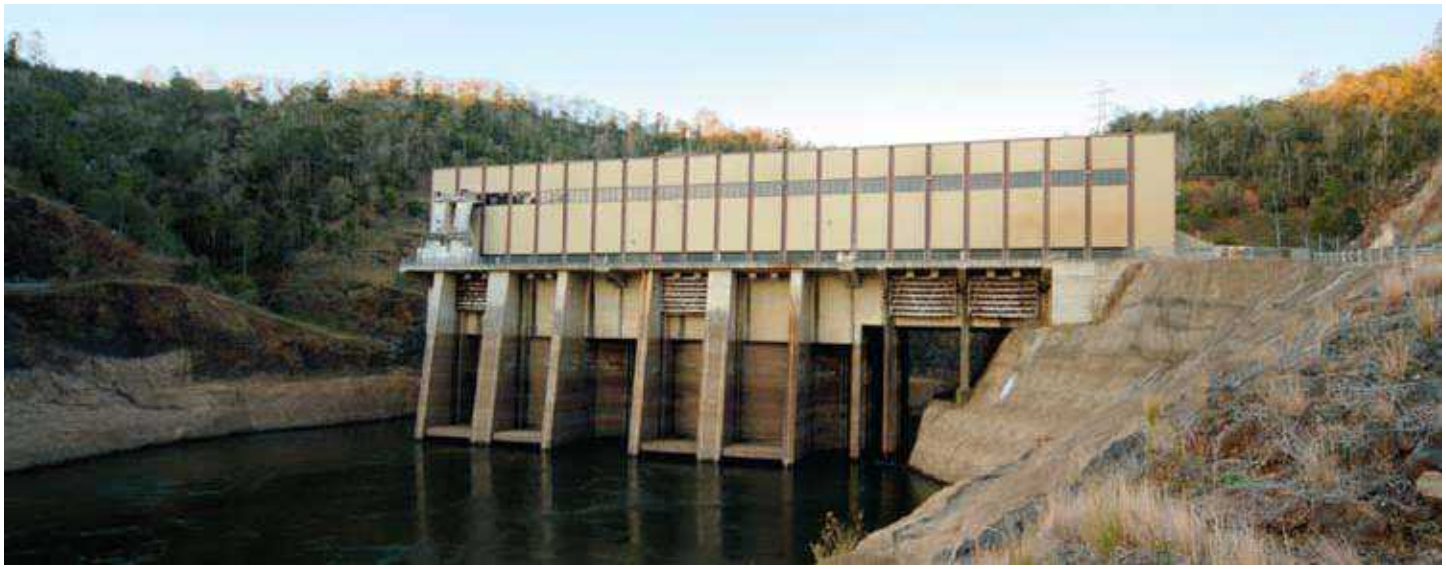
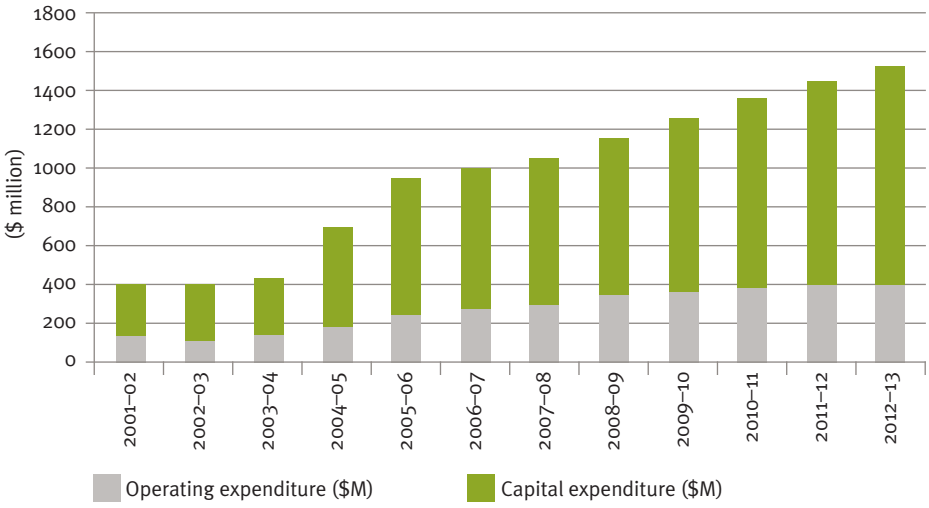


Figure 7—ENERGEX capital and operating expenditure, actual and forecast, 2001–02 to 2012–13



The Queensland Government will meet these challenges by diversifying its energy sources towards gas and renewable sources, as well as by encouraging competition in energy markets. Queenslanders must also play their part by managing demand, especially during peak summer periods, through increased awareness and use of more energy-efficient appliances, or appliances that use alternative fuel sources.

Much of the infrastructure critical to meeting the energy demands of South East Queensland is located outside the region for locality and commercial reasons, including proximity to fuel sources and major industry. Energy is then transported to the demand centres within South East Queensland via transmission networks.

Electricity

High growth is expected to continue over the timeframe of the SEQ Infrastructure Plan, with electricity consumption forecast to increase at approximately 3.8 per cent per year, and peak summer demand by 3.9 per cent per year over the next 10 years. Demand will continue to be driven by energy-intensive industrial development and rapid population growth, along with increases in use of domestic air-conditioning. Delivering other water, transport and community projects will also substantially increase the demand for electricity.

Community dependence on electricity and increased expectations for a reliable electricity network create challenges that will be addressed by refurbishing ageing network assets, providing more facilities, and employing modern technologies.

Industry structure

The electricity industry comprises three distinct, yet interconnected sectors: generation, transmission and distribution.

- *Generation*

  Most electricity in Queensland is generated by coal-fired power stations, located mainly in central and southern parts of the state, close to major coal sources. However, an increasing amount of energy is being produced from natural gas, including coal seam methane, and from renewable sources such as hydro and biomass. Government-owned corporations own most of the larger power stations, but the number of partially or fully privately owned power stations is increasing. Currently about 42 per cent of Queensland's generation capacity is privately owned.

- *Transmission*

  Powerlink Queensland's high-voltage transmission network transports electricity from power stations to distribution networks in regional and South East Queensland, and to some large customers, such as aluminum smelters, connected directly to the transmission network. Powerlink operates more than 12 000 circuit kilometres of high-voltage transmission lines throughout Queensland.

- *Distribution*

  Most business and residential customers are supplied with electricity via a distribution system connected to the high-voltage transmission system. ENERGEX delivers electricity to most of South East Queensland and operates a network that includes 50 000 kilometres of powerlines. Ergon Energy distributes electricity to Toowoomba and rural and regional Queensland, and operates a network of 150 000 kilometres of powerlines throughout the state.

$100 million invested in smart energy programs

The Queensland Renewable Energy Fund and the Smart Energy Savings Fund, worth $50 million each, were launched in February 2008. Both funding programs are key Smart Energy Policy initiatives outlined in the Queensland Government's ClimateSmart 2050 strategy to address climate change.

The Smart Energy Savings Fund, allocated through bi-annual competitive funding rounds, offers grants and secured concessional loans to Queensland businesses to use energy-efficient technologies in buildings, appliances and industrial processes.

The Queensland Renewable Energy Fund, allocated through annual competitive funding rounds, offers grants and concessional loans to support the deployment of proven, innovative renewable energy technologies in the state.

Through its government-owned corporations, the Queensland Government owns and maintains electricity generation, transmission and distribution assets worth more than $26 billion. These corporations include CS Energy, Stanwell and Tarong Energy (generation), Powerlink Queensland (transmission), ENERGEX and Ergon Energy (distribution).

Generation capacity

Queensland currently has a generation capacity of more than 11 000 megawatts (MW), with more than $4.5 billion of investment in new generation infrastructure since 1998. Major investments include the privately owned Millmerran coal-fired power station, Braemar and Townsville gas-fired power stations, the joint-venture Callide-C coal-fired Power Station, and the government-owned Kogan Creek Power Station. A number of renewable energy projects have also been commissioned, including a 68 MW bagasse-fired generator at Pioneer Sugar Mill and a second bagasse-fired generator of 25 MW at Isis Sugar Mill. The electricity generation industry in Queensland is well placed to meet increasing demand, with sufficient generating capacity to meet average demand even under extreme weather conditions.

Projects currently committed or under construction include:

- the 450 MW Braemar 2 gas-fired Power Station adjacent to the existing 450 MW Braemar Power Station approximately 40 kilometres west of Dalby in Southern Queensland
- the 140 MW coal seam gas-fired Condamine Power Station
- the 630 MW Darling Downs Power Station which will be the biggest combined-cycle power station in Australia.

These projects all contribute to electricity supply in South East Queensland via the electricity grid, but are not included in this plan because they are located outside the region and are privately funded.

The Queensland Government will continue to support renewable energy projects where they are commercially viable and meet electricity market needs. In February 2008 the government launched the first round of the $50 million Queensland Renewable Energy Fund (QREF), a key initiative of its Smart Energy Policy as outlined in *ClimateSmart 2050*. The QREF supports the development and deployment of renewable energy generation technologies in Queensland that are beyond proof-of-concept.

Electricity network

To meet increasing electricity demand, new transmission and distribution network infrastructure must be constructed. Powerlink invested $583 million in capital works in Queensland during 2006–07 and more than $2.6 billion (subject to regulatory approval) is expected to be spent on capital projects in Queensland over the next five years.

ENERGEX is also investing heavily in its electricity distribution network, with a five-year capital budget in South East Queensland of up to $5 billion. This program is expected to:

- increase network capacity to meet forecast demand and peak demand growth
- improve network security and reduce the amount of electricity load at risk
- improve overall reliability
- renew older assets to maintain network reliability and improve network security.

Table 8 and Table 9 show proposed transmission and distribution network upgrades in South East Queensland.

Electricity sector activity

Figures released recently by ENERGEX reveal that in the December quarter (October to December 2007) a record 11 403 additional homes and businesses were connected to the South East Queensland power network, equivalent to 180 new connections each working day, or one every eight minutes. These are new connections and are in addition to more than 5600 reconnections (mostly for people moving from one property to another) recorded in the same quarterly period.

Reliability of the South East Queensland electricity grid was the best on record, with electricity interruptions having dropped by 300 per cent between July 2004 and December 2007, and average total lost power time reduced to well below the target set by the Queensland Government.

Electricity delivered to ENERGEX customers rose from 18 993 GWh (Gigawatt hours) in 2003–04 to 22 250 GWh in 2006–07.

ENERGEX has installed more than 4400 kilometres of underground electricity cable in South East Queensland in the past five years.

The Queensland Government also supports demand management programs aimed at reducing the effect of peak electricity demand on the network, and programs which support efficient use of energy, such as:

- working with builders and developers to implement sustainable housing design
- supporting a range of energy- and water-saving measures for households
- promoting energy-efficient air-conditioning
- improving energy efficiency in government buildings, government-owned corporations and statutory authorities via the Government Energy Management Strategy and the Strategic Energy Efficiency Program.

Progress on electricity projects in 2007–08

- ENERGEX invested more than $572 million in improvements to and maintenance of its electricity network and supporting infrastructure during 2007–08, up to the end of February 2008.
- During the past five years, increases in network capacity have been achieved through a strong program of works that has seen ENERGEX's total zone substation capacity rise by over 65 per cent from 5201 megavolt amperes (MVA) in 2001–02 to 8632 MVA at the end of February 2008.
- Powerlink Queensland completed construction of the $138 million Middle Ridge (near Toowoomba) to Greenbank transmission line and substation project to provide continued reliability of electricity supply for the Logan and Gold Coast region, and to reinforce the electricity network supplying South East Queensland.

  This new project, together with other upgrades at existing substations in South East Queensland, should cater for the region's bulk electricity transmission needs for the next five years.
- In late 2007 the government-owned CS Energy commissioned the coal-fired Kogan Creek Power Station, which can generate up to 750 MW of electricity. Located in the western Darling Downs near Chinchilla, the power station provides baseload electricity into the national grid via a 28-kilometre transmission line to power almost one million homes. By using dry cooling technology, the station uses 90 per cent less water than a conventional wet-cooled power station.

Solar Bonus Scheme

The Premier announced the Queensland Government Solar Bonus Scheme on 11 March 2008. It will apply to small solar systems in households and businesses.

The solar bonus is a feed-in tariff of 44 cents per kilowatt hour (kWh) that will be paid for electricity fed into the grid at times when the solar system generates more than the household or business is using.

The solar bonus will be paid to consumers by the electricity retailer that supplies them with grid-connected electricity.

It is anticipated that the solar bonus will be available from electricity retailers by mid 2008. The scheme is designed to make solar power more affordable for Queenslanders, stimulate the solar power industry and encourage energy conservation.

Map 9—Powerlink and ENERGEX infrastructure

Table 8—Powerlink upgrades in South East Queensland

Project	Estimated investment $M	Estimate category (see note D)	Delivery timeframe		
			2008–09 to 2011–12	2012–13 to 2018–19	2019–20 to 2025–26
Western Corridor and Toowoomba					
Abermain Substation (275/110 kV)	23	3			
Springdale to Blackwall line (500 kV)					
Springdale to Greenbank line (500 kV)					
Springdale to Halys line (500 kV)					
Brisbane, Moreton, Redland and Logan					
South Pine to Sandgate (275/110 kV)	58	3			
Greenbank Substation	35	3			
South Pine Substation	36	3			
Larapinta Substation to Algester (110 kV)					
Sandgate to Nudgee line (275 kV)					
Nudgee to Murarrie line (275 kV)					
Bundamba to Drewvale line (275 kV)					
Future substations (load dependent)					
Gold Coast					
Southern Gold Coast bulk supply					
Future substations (load dependent)					
Sunshine Coast					
Woolooga to Cooroy South line (275 kV)					
Future substations (load dependent)					
Total	152				
Major transmission upgrades completed 2006–07 Construction of a new transmission line between Belmont and Murarrie (Brisbane) Construction of a new transmission line between Greenbank (Logan) and Maudsland (Gold Coast) Construction of major substations at Molendinar (Gold Coast), Algester (Brisbane), Goodna (Ipswich) and Sumner (Brisbane).	207				
Major transmission upgrades completed 2007–08 Construction of a new transmission line between Middle Ridge (Toowoomba) and Greenbank (Logan).	137.5				
Total investment since 2005	344.5				

Construction started

Notes

A. The table identifies the expected delivery timeframe for each infrastructure project. The darker shade represents projects that are under construction at 1 July 2008.
B. Estimated investment is in 2008 dollars except where projects have progressed to contract stage, in which case they are in out-turn dollars. Cost estimates in the state budget and other public documents may differ, as they may incorporate project costs that reflect anticipated changes in input prices between initial planning and the time of construction. Estimated investment includes funds already expended on projects.
C. Where funding is required from other levels of government, their estimated costs have been included. Where projects are subject to federal funding, it is noted as timing of these projects is subject to negotiation with the federal government.
D. For an explanation of estimate categories, refer to page 16.
E. Where a project has been completed, it is noted in the table.
F. Timing of future investments will depend on demand. Expenditure will be adjusted as necessary to ensure the South East Queensland transmission network is able to meet demand, while also meeting mandated reliability requirements.
G. Energy authorities budget on a five-year basis. Project costs beyond that period are not included.
H. kV = Kilovolt.
I. Map 9 is indicative of long-term energy planning and does not reflect all information in Tables 9 and 10.

Table 9—ENERGEX network upgrades in South East Queensland

Project	Estimated investment $M	Delivery timeframe		
		2008–09 to 2011–12	2012–13 to 2018–19	2019–20 to 2025–26
Western Corridor and Toowoomba	294			
Wacol South: establish a new zone substation to boost network capacity ($10M)				
High reliability line to Warwick ($30M)				
Brisbane, Moreton, Redland and Logan	2148			
Annerley: replace underground cables nearing end of life with new larger cables ($11M)				
Crestmead/Browns Plains: install underground subtransmission cables between Crestmead and Browns Plains North substations ($12M)				
Holland Park: establish a new zone substation to increase network capacity and improve reliability ($10M)				
Myrtletown: establish a bulk supply substation to boost network capacity ($42M)				
North Springwood: install new transformer to boost network capacity ($11M)				
Sandgate: establish a bulk supply substation to boost network capacity ($18M)				
Toowong–Ashgrove: install a new powerline between Toowong and Ashgrove to boost network capacity and improve reliability ($13M)				
Gold Coast	494			
Beenleigh: upgrade two transformers and 33 kV switchgear to boost network capacity ($11M)				
Merrimac: install two transformers to boost network capacity ($20M)				
Southport: increase substation capacity by installing third transformer ($10M)				
Sunshine Coast	347			
Currimundi: establish new substation to boost network capacity and improve reliability ($10M)				
Caboolture–Toorbul Point: install a new powerline between Caboolture and Toorbul Point to improve network reliability and capacity ($10M)				
Total	3283			
Completed projects 05–06	142			
Completed projects 06–07	541			
Completed projects 07–08	479			
Total investment since 2005	1162			

Construction started

Notes:

A. The table identifies the expected delivery timeframe for each infrastructure project. The darker shade represents projects that are under construction at 1 July 2008.
B. Estimated investment is in 2008 dollars except where projects have progressed to contract stage, in which case they are in out-turn dollars. Cost estimates in the state budget and other public documents may differ, as they may incorporate project costs that reflect anticipated changes in input prices between initial planning and the time of construction. Estimated investment includes funds already expended on projects.
C. Where funding is required from other levels of government, their estimated costs have been included. Where projects are subject to federal funding, it is noted as timing of these projects is subject to negotiation with the federal government.
D. For an explanation of estimate categories, refer to page 16.
E. Where projects have been completed, it is noted in the table.
F. ENERGEX's capital works program, up to 30 June 2010, is covered by the current regulatory determination. The capital works program for the next regulatory period, starting 1 July 2010, will be included in ENERGEX's proposal to the national regulator, the Australian Energy Regulator.
G. Projects in the period 2008–09 to 2009–10 have been allocated to respective subregions. Investment in the period 2010–11 to 2011–12 has been allocated to subregions on a proportional basis only.
H. Energy authorities budget on a five-year basis. Project costs beyond that period are not included.
I. Timing of future investments will depend on demand. Expenditure will be adjusted as necessary to ensure the South East Queensland distribution network is able to meet demand, while also meeting mandated reliability requirements.
J. Specific projects in this table reflect strategic infrastructure investment within the overall capital investment. As part of the National Electricity Market, projects valued at more than $10 million are submitted to the market for regulatory testing.
K. kV = Kilovolt.

Gas

Natural gas will play an increasingly significant role as a fuel source for Queensland's electricity generation, industrial processes, business and residential consumers. Total natural gas consumption in Queensland is expected to triple over the period to 2030.

Unlike other states, Queensland is not a single gas market, but a series of markets in different locations. South East Queensland is the state's single biggest market for natural gas, with an annual consumption of around 50 petajoules (PJ) a year—almost 40 per cent of Queensland's overall gas consumption.

Transmission and distribution

Gas infrastructure, like that of electricity, consists of major transmission lines (pipelines) and localised distribution networks. Queensland has more than 4500 kilometres of high-strength steel gas transmission pipelines, which move gas from gas-producing regions to customers. This infrastructure is owned by the private sector and is not included in the SEQ Infrastructure Plan.

The 440-kilometre Wallumbilla (Roma) to Brisbane gas transmission pipeline (RBP) is the sole transporter of gas from the gas fields to the growing South East Queensland market. The owners of the RBP, Australian Pipeline Trust (APA), are investigating increasing the capacity of the pipeline (by increasing compressor capacity) to meet growing customer demand for gas. APA is also considering constructing a transmission pipeline connecting the RBP at Gatton to Gympie, enabling them to deliver gas to the expanding Sunshine Coast market.

In South East Queensland APA reticulates gas for domestic, commercial and industrial purposes in Brisbane South and Gold Coast, and Envestra does so for Brisbane North and Ipswich. Envestra is expanding its natural gas reticulation network in stages to supply gas to around 5000 new homes. APA is also expanding its network to supply a number of small residential projects around Brisbane and the Gold Coast.

Market development

The Queensland Energy Policy has been successful in increasing the use of gas in the state's energy mix. In particular, the policy requirement that at least 13 per cent of electricity sold in Queensland be from gas-fired generation has encouraged the development of new gas sources, in particular coal seam gas. The commissioning in 2006 of the 450 MW Braemar Power Station, west of Dalby, brought Queensland's gas-fired power station capacity to more than 2000 MW, and there is more than 2000 MW of gas-fired generating capacity under active development.

Health

All Queenslanders have a right to quality, safe and sustainable health services. The Queensland Government is ensuring that Queenslanders have access to good health services and programs that effectively maintain and improve their overall health and wellbeing, and provide them with a good quality of life.

However, the state is experiencing the highest rate of population growth in the country, including in older age groups, and the health care system is already feeling the impact of this with increased demand for health services. Over the next 15 years, it is projected that the number of hospitalisations in Queensland will double as a result of changes in the population and the increasing burden of chronic disease.

As well as increasing hospital services to meet these needs, it is also necessary to deliver services outside the hospital system. This includes community-based health prevention and early intervention services to address the increasing incidence of preventable chronic diseases.

In October 2005 through the action plan: Building a better health service for Queensland, the government committed to major reforms to build a better health system. It will continue to meet this commitment by providing new facilities, where appropriate, and refurbishing and expanding existing facilities and services.

A number of hospitals will be substantially upgraded or expanded, and the Prince Charles Hospital upgrade is already well underway. The delivery of three major new facilities—the Queensland Children's Hospital, the Gold Coast University Hospital and the Sunshine Coast Hospital—are significant health infrastructure priorities to meet the growing needs of the region.

The development of Health Precincts (formerly known as Health Hubs) is supplementing the capacity for acute health care. Co-locating and integrating the services of a variety of public and private ambulatory and community-based services is a more effective way of delivering health services to the community.

The Queensland Government's significant commitment of $1.9 billion to the expansion of health services and staffing over the period 2005 to 2011 through the action plan complements the proposed infrastructure program.

Table 10 outlines the estimated investment and approximate timing of major strategic health projects to support the proposed population growth and settlement pattern in South East Queensland. These projects do not reflect the full range of health infrastructure required for the region to 2026, and additional projects may be identified and implemented as development progresses and further detailed planning is carried out, particularly at the local level.

Progress on health projects in 2007–08

- Stage 1 of the conversion of the Prince Charles Hospital from a specialist hospital to a broader-focused general hospital with a new emergency department was completed in 2007. Since 2005 an additional 146 beds have been made available at this hospital. Contract documentation has been finalised for the next stage of additional beds and the refurbishment of existing buildings.
- In August 2007 a site in Parklands Drive was selected for the Gold Coast University Hospital. The site is strategically located adjacent to Griffith University Gold Coast campus, Queensland Academy for Health Sciences, (one of the three Smart State Academies), and other planned infrastructure. In early 2008 the Queensland Government completed a coordinated plan, the Gold Coast Hospital and Knowledge Precinct Master Plan, to provide a blueprint for linking the different developments in a community and business centre. Design development has begun and is due for completion in 2009. Construction is due to be completed in 2012.
- The Health Services Plan for the new Queensland Children's Hospital has been prepared. The business case for this project is currently being developed, and development of the schematic design stage will begin in 2008.

- In June 2007 a site on Kawana Way was acquired for the new Sunshine Coast Hospital, and the site master plan was completed in February 2008. Work is progressing on the business case, which is scheduled for completion by late 2008. As part of this process, the hospital is being assessed for its potential as a public private partnership project.
- The Robina Hospital Services Plan for a 179-bed expansion of the existing facility has been completed. A further review of the master plan for the site is well advanced.
- Construction for expanding facilities at Caloundra and Nambour hospitals is in progress. Services planning for the Sunshine Coast Health Precinct was finalised in 2007, and detailed planning is progressing and due for completion by mid 2008.
- Construction of the Browns Plains Health Precinct is progressing and is scheduled for completion in late 2008.
- Construction of the new North Lakes Health Precinct began in October 2007. Completion is scheduled for 2009.
- The suitability assessment of the Ipswich Hospital site to determine how an additional 84 beds can be accommodated was completed in September 2007.
- Detailed design is progressing for the Translational Research/Smart Therapies Institute on the Princess Alexandra Hospital site. This institute will house researchers from leading research centres, research facilities and a new pilot pharmaceutical manufacturing and testing facility.

Health precincts

Health precincts are a new service approach designed to provide a convenient and flexible response to the need for access to a range of community and ambulatory health services in major urban and regional growth areas. Seven precincts have been identified for the growing areas of Sunshine Coast, Caboolture, North Lakes, Gold Coast, Browns Plains, and two in the Ipswich area. These are at varying stages of planning or construction.

The model involves co-locating a range of health services to integrate them and improve local service delivery by establishing partnerships and developing the required infrastructure.

This enables safe and sustainable care to be located closer to where people live, improves coordination between service providers and, by improving preventative care and early disease management, reduces the demand on hospitals. Comprehensive and well-coordinated, community-based services can improve the health of the general population by providing access to improved services and cost-effective, high-quality care.

Table 10—Regional health infrastructure

* For project locations, see map 10 on page 103.

Map 10 ref*	Project	Estimated investment $M	Estimate category (see note D)	Completed projects $M	Delivery timeframe		
					2008–09 to 2011–12	2012–13 to 2018–19	2019–20 to 2025–26
Western Corridor							
11.1	Ipswich Hospital: redevelopment	290	0				
11.2	Health Precincts x 2: Ipswich area	50	0				
Brisbane, Moreton, Redland and Logan							
11.3	Browns Plains Health Precinct	23	3				
11.4	North Lakes Health Precinct	52	3				
11.5	Caboolture Health Precinct	25	0				
11.6	Queensland Children's Hospital	1100	1				
11.7	The Prince Charles Hospital: upgrade to general hospital	135	3				
11.8	Translational Research/Biopharmaceuticals Australia	100	1				
11.9	Princess Alexandra Hospital Emergency Department: expansion and redevelopment	55	1				
Gold Coast							
11.10	Gold Coast University Hospital	1600	1				
11.11	Robina Hospital: expansion	240	1				
11.12	Robina Health Precinct	30	0				
Sunshine Coast							
11.13	Sunshine Coast Health Precinct	15	0				
11.14	Sunshine Coast Hospital	1300	1				
11.15	Sunshine Coast: expansion of existing facilities	200	1				
Total		5215					

Construction started

Notes

A. The table identifies the expected delivery timeframe for each infrastructure project. The darker shade represents projects that are under construction at 1 July 2008.

B. Estimated investment is in 2008 dollars except where projects have progressed to contract stage, in which case they are in out-turn dollars. Cost estimates in the state budget and other public documents may differ, as they may incorporate project costs that reflect anticipated changes in input prices between initial planning and the time of construction. Estimated investment includes funds already expended on projects.

C. Where funding is required from other levels of government, their estimated costs have been included. Where projects are subject to federal funding, it is noted as timing of these projects is subject to negotiation with the federal government.

D. For an explanation of estimate categories, refer to page 16.

Primary and secondary education

The adequate and timely provision of education services is a critical factor in servicing the region's existing and future communities. The Queensland Government, through Education Queensland and the Office of Non-State Schooling, provides primary and secondary education services. More than 70 per cent of Queensland school students access the state school system, with Education Queensland operating and maintaining around 590 schools and environmental education centres in South East Queensland.

Providing new schools in South East Queensland presents an ongoing challenge. Strong population growth, the need to identify optimum opening dates of new schools (to ensure their viability and that of existing schools) and the decreasing availability of appropriate land on which to locate new schools require innovative solutions if government and community needs and expectations are to be met.

When providing for new schools the government is transparent in its decision making, seeks value for money, and maintains high standards of equity and accessibility for new and existing schools across the state. These standards provide those undertaking the master planning of large tracts of urban residential land with an appreciation of what is achievable within the principles of accessibility and viability.

Queensland Smart State Academies

As part of its Smart State agenda, the Queensland Government has developed three academies to provide an opportunity for the state's brightest Year 10, 11 and 12 students to experience an educational environment characterised by challenge and innovation.

- The Queensland Academy for Science, Mathematics and Technology is located at Toowong and is linked to The University of Queensland.
- The Queensland Academy for Creative Industries is located at Kelvin Grove and has links with the Queensland University of Technology.
- The Queensland Academy for Health Sciences opened in early 2008, is located at Parklands on the Gold Coast, and is linked to Griffith University.

Set in a climate of collaboration and internationalism, the Queensland academies are underpinned by an ethos of challenge, innovation, creativity and enterprise. Through the study of the International Baccalaureate (IB) Diploma Program, students are given a global focus to their learning and discoveries.

Each academy is committed to ensuring their high-achieving students are supported to maximise their potential. The teaching model allows subjects to be studied through a blend of lecture, practical research and small-group tutorials. Using the lecture mode to deliver content, other sessions are focused around design, analysis and evaluation, and creating innovative solutions and prototypes.

The availability of quality information, robust planning stategies, master plans and State Infrastructure Agreements, helps the Queensland Government to explore alternative avenues when providing for new schools. These avenues include public private partnerships (PPPs) and joint development agreements with state and local government agencies.

The government has approved the request for binding bids for the provision of up to seven new schools by public private partnership in the Western Corridor, Greater Brisbane and Sunshine Coast. These schools are expected to open in 2010 and 2011.

Table 11—Regional state school infrastructure

Subregion	Estimated investment $M	Estimate category (see note D)	Completed projects $M	Delivery timeframe		
				2008–09 to 2011–12	2012–13 to 2018–19	2019–20 to 2025–26
Western Corridor and Toowoomba	957	0–3		5 schools	8 schools	8 schools
Brisbane, Moreton, Redland and Logan	948	0–3		3 schools	10 schools	9 schools
Gold Coast	620	0–3		4 schools	8 schools	6 schools
Sunshine Coast	511	0–3		2 schools	6 schools	3 schools
Completed 2007–08		4	27			
Completed 2006–07		4	37			
Completed 2005–06		4	32			
Total	3036		96	14	32	26

Notes

A. The table identifies the expected delivery timeframe for each infrastructure project.

B. Estimated investment is in 2008 dollars except where projects have progressed to contract stage, in which case they are in out-turn dollars. Cost estimates in the state budget and other public documents may differ, as they may incorporate project costs that reflect anticipated changes in input prices between initial planning and the time of construction. Estimated investment includes funds already expended on projects.

C. Where funding is required from other levels of government, their estimated costs have been included. Where projects are subject to federal funding, it is noted as timing of these projects is subject to negotiation with the federal government.

D. For an explanation of estimate categories, refer to page 16.

E. Where projects have been completed, it is noted in the table.

F. Estimated total costs include land and construction costs. Calculations are based on $37 million for primary school provision and $64 million for secondary school provision.

G. The table incorporates additional primary and secondary school provision in Ripley Valley in the period covering 2010 to 2026.

H. Gold Coast cost estimates do not include the new Queensland Academy for Health Sciences.

I. Provision has been made for the following emergent or newly clarified growth areas: Logan (Park Ridge, Flagstone, etc); Palmview (tentative); Oxley Wedge (tentative); Ripley.

J. Provision of schools is dependent upon population thresholds being met and timing of delivery may be adjusted to reflect changing demand.

Progress on education projects in 2007–08

- Stage 1 of Coomera Springs State School (P–7) opened in January 2008 with 151 students from Prep to Year 7. Stage 2 construction will occur during 2008 to meet the growth in student numbers anticipated over the next few years. This new school on the Gold Coast will provide significant relief for Upper Coomera State College (P–12).
- Park Lake State School (P–7) opened in January 2008 with 212 students from Prep to Year 7. This new school is in the Pacific Pines area of the Gold Coast and will provide relief to Pacific Pines State School.
- The Queensland Academy of Health Sciences, located at Parkland on the Gold Coast, opened in early 2008 with 171 students.
- Tenders have been let for a new primary school in Ormeau and for a new primary school in Oxenford, in the northern Gold Coast area. Planning has also commenced for a new primary school in outer northern Brisbane. All schools are planned to open in 2009.

Vocational education and training

The availability of a skilled workforce is critical if the initiatives within the SEQ Infrastructure Plan are to be successfully implemented. Many areas in Queensland are experiencing record low levels of unemployment and sustained economic growth with skill and labour shortages across several industries. Therefore, the need to focus on developing and harnessing the skills of the state's workforce has never been greater.

With this need in mind, the Queensland Government released the Queensland Skills Plan, establishing a comprehensive policy framework for Queensland's vocational education and training system. This framework will ensure that the supply of skilled labour is better matched to industry's needs and the economy's demands.

The Queensland Skills Plan represents the most significant change to the vocational education and training system and the structure of TAFE institutes in more than 40 years. Its implementation will substantially reform TAFE institutes and develop a more sophisticated approach to managing and supporting the entire Queensland training system. The plan will result in substantial increases in trade training places and higher-level training places throughout the state to address trade and related skills shortages.

Key elements of the Queensland Skills Plan include:

- establishing SkillsTech Australia as a new statewide trade and technician skills institute to lead product development and delivery in key trade areas (automotive, building and construction, manufacturing and engineering, electrical/electronics). SkillsTech Australia continues to develop close links with industry and centres of excellence to ensure that training programs and qualifications meet employer needs
- supporting the Southbank Institute of Technology as the leading institute responsible for technological and high-level skills training and education, with major new facilities now operational and other facilities being constructed or refurbished
- establishing collaborative partnerships with industry and private providers, thereby ensuring access to the best possible training services for clients using publicly funded training
- offering additional trade training places.

The new training system is underpinned by a major capital works investment program. Through a major six-year capital works investment program, in excess of $350 million will be spent to modernise existing TAFE infrastructure and construct new training facilities. The new training system will also involve significant investment in information and communication technology to provide for more flexible student access, accelerated skills acquisition and greater resource sharing between trainers.

Progress on vocational education and training projects in 2007–08

The Queensland Skills Plan capital works program is underway with planning and construction occurring on many projects including:

- The plumbing, foundry and patternmaking elements within the construction and engineering training facilities of the SkillsTech Australia trade training campus at Acacia Ridge in Brisbane are due for completion in 2008.
- Master planning is in progress for the upgrade of trade training facilities at the Sunshine Coast Institute of TAFE in Nambour.
- Construction of the automotive facility at Southern Queensland Institute of TAFE in Toowoomba will be completed in July 2008.
- Refurbishment of the Metropolitan South Institute of TAFE Mt Gravatt facilities is continuing. This TAFE will become a leading institute for programs in aged care, small business, fashion, textiles and clothing.
- Redevelopment of the former Southbank TAFE site at South Brisbane is underway. This will establish the Southbank Institute of Technology as the leading institute for health, sport and recreation, arts and entertainment, and postgraduate programs for professionals and para-professionals.

Southbank Institute of Technology PPP

Construction of the new Southbank Institute of Technology, Queensland's first PPP project continues ahead of schedule. The project is a partnership between the Queensland Government (the Department of Education, Training and the Arts) and a private sector consortium.

The project involves constructing 11 new buildings and renovating four existing buildings on the Southbank campus at an estimated capital construction cost of $234 million. Once complete, Axiom will be responsible for providing facilities management services over a 34-year period, including facilities maintenance, cleaning, grounds maintenance and security services.

The institute's first new teaching facilities opened ahead of schedule in January 2007. Other facilities will open progressively and the redevelopment is expected to be completed by late 2008.

Table 12—Regional vocational education and training infrastructure

* For project locations, see map 10 on page 103.

Map 10 ref*	Project	Estimated investment $M	Estimate category (see note D)	Completed projects $M	Delivery timeframe		
					2008–09 to 2011–12	2012–13 to 2018–19	2019–20 to 2025–26
Western Corridor and Toowoomba							
13.1	Campus modernisation: Bundamba	16	1				
13.2	Automotive trade training facility: Toowoomba	3	3				
Brisbane, Moreton, Redland and Logan							
13.3	Southbank Institute of Technology	234	3				
13.4	SkillsTech Australia: new campus at Acacia Ridge	100	3				
13.5	SkillsTech Australia: new campus at Eagle Farm	50	1				
13.6	Campus modernisation: Mt Gravatt, Alexandra Hills, Loganlea	38	3				
Gold Coast							
13.7	New Gold Coast TAFE campus: Coomera	31	2				
Sunshine Coast							
13.8	Campus establishment: Kawana	8	2				
13.9	Campus modernisation: Sunshine Coast	17	2				
Total		497					

Construction started

Notes

A. The table identifies the expected delivery timeframe for each infrastructure project. The darker shade represents projects that are under construction at 1 July 2008.

B. Estimated investment is in 2008 dollars except where projects have progressed to contract stage, in which case they are in out-turn dollars. Cost estimates in the state budget and other public documents may differ, as they may incorporate project costs that reflect anticipated changes in input prices between initial planning and the time of construction. Estimated investment includes funds already expended on projects.

C. Where funding is required from other levels of government, their estimated costs have been included. Where projects are subject to federal funding, it is noted as timing of these projects is subject to negotiation with the federal government.

D. For an explanation of estimate categories, refer to page 16.

Community safety

Queensland Police Service

The functions of the Police Service are to preserve peace and good order, protect the community, prevent crime, detect offenders, uphold the law, ensure the fair and efficient administration of law, and provide services in emergency situations.

Rapid population growth in South East Queensland has continued to increase demand for policing services and presents a significant challenge for the Queensland Police Service into the future. In response, the Police Service is working closely with other agencies including local government to ensure the safety and security of communities and to be able to respond to future demographic and technological changes.

Establishing and maintaining appropriate infrastructure is an essential component of the Police Service's approach to delivering high-quality policing services. Appropriate infrastructure is also necessary for maintaining high-visibility policing, easy access by the community and for delivering timely and appropriate responses to calls for police assistance.

In 2007–08 the Queensland Government provided $102.3 million to progress a number of projects detailed in the Police Service's Capital Investment Strategic Plan. This funding has allowed the development of infrastructure plans to support policing in South East Queensland. Key projects within the region planned for the next few years include:

- new or replacement police stations at Burpengary, Camp Hill/Carina, Crestmead/Marsden, Carseldine, Holland Park, Mango Hill/North Lakes, Reedy Creek, Sippy Downs, Surfers Paradise and Springfield
- upgrades to police stations at Beenleigh and The Gap
- refurbishment of the Upper Mt Gravatt District Headquarters complex
- new police beats at Broadwater, East Brisbane/Kangaroo Point and Logan Village
- a new district office at Coomera and district office functions at Burpengary
- a replacement water police facility for the Sunshine Coast District Water Police, previously located at Kawana Waters police station.

Projects currently under construction within South East Queensland include:

- a replacement police station and watch-house at Ipswich
- a replacement police station at Fortitude Valley
- an upgrade of Bribie Island police station
- a replacement police station at Woodford
- an upgrade of the Mudgeeraba police station.

Emerging communities

The Police Service is continuing to develop new plans and strategies in consultation with other government agencies including councils to address the policing needs of emerging communities in South East Queensland. These plans will use new technologies, particularly in information management systems, a broad range of service delivery options and a commitment to protecting the community.

Emergency services

The Department of Emergency Services (DES) is responsible for ensuring Queensland communities are supported by, and benefit from, a broad range of essential emergency services. Its operational arms include the Queensland Fire and Rescue Service (QFRS), the Queensland Ambulance Service (QAS) and Emergency Management Queensland (EMQ). These in turn support volunteer organisations ranging from the Rural Fire Service to Volunteer Marine Rescue and the State Emergency Service.

As well as the essential front line services (fire, ambulance, search and rescue), DES also provides for the planning, coordination and facilitation needed to build community capacity to be prepared for and respond to a range of predictable disasters and possible emergencies.

However, emergency services in South East Queensland are facing two main challenges—rapid population growth and increasing high-density urbanisation. These challenge the government's capacity to deliver essential services and will be exacerbated by the effects of gradual changes in climate—an increase in the frequency and intensity of drought, heatwave, storm surge, flood and cyclonic activity.

At a strategic level, the Queensland Government addresses these challenges, in part, by providing an extensive network of emergency services infrastructure. New fire and ambulance stations are procured in direct response to current and projected service delivery needs—reduced response times to all types of emergency calls being a paramount requirement.

To help meet the challenge of increased demand and maintain service standards, the Queensland Government has developed an asset strategic plan. This document identifies funding priorities for physical infrastructure—land, buildings, vehicles, plant and equipment, and communication technology. The plan and its future versions will be sufficiently flexible to reflect changing societal and operational needs.

To ensure timely procurement of service-ready facilities, the department has introduced a number of alternative and more-efficient project procurement and construction methodologies. These initiatives include bundling projects on a geographic or building-type basis, using factory-built buildings and developing a suite of standard designs to expedite the design and documentation stages of project procurement.

Each facility is developed with the aim of providing optimal emergency service delivery to an affected community. The location of a facility can be reviewed if changes occur in the local social and geographical setting, for example if significant urban development occurs.

Progress on significant emergency services projects in 2007–08

- A $20 million Queensland Combined Emergency Services Academy at Whyte Island. This facility is currently under construction and, when completed, will be a comprehensive training facility for the full range of emergency services through real-life streetscape, administration and logistical support units.
- A $76 million Queensland Emergency Operations Centre in Kedron will provide a coordinated, operational and communication facility for the delivery of emergency services in the region. It will co-locate currently dispersed communication centres into one, state-of-the-art communication facility capable of responding to the most complex emergency situations in South East Queensland. Construction will commence in mid 2008 and is due to be completed in 2010.
- A $16 million Roma Street Fire and Ambulance Station was completed in 2007, replacing the old fire station on the same site. This combined emergency services facility was custom designed and built to meet the specific challenges of emergency services delivery in the high-density, high-growth Brisbane City environment.
- A $4 million Ipswich Regional Ambulance Station is currently at the planning stage and due for completion in 2009. The project has been developed in direct response to the demands of growth in Ipswich.

Queensland Combined Emergency Services Academy

The academy's role is to enhance the ability of emergency services to manage large-scale incidents through training of Queensland Ambulance Service (QAS) and Queensland Fire and Rescue Service (QFRS) officers. The academy has two campuses in the Brisbane area—the School of Ambulance and Paramedic Studies and the School of Fire and Rescue Service Training.

The School of Ambulance and Paramedic Studies

This branch of the Queensland Combined Emergency Services Academy is responsible for educating QAS staff. Located at Lutwyche, the school ensures that the spectrum of education and development needs within the service is addressed so that QAS personnel can function in Emergency Medical Systems environments across the state.

Additionally, the school helps to design and develop educational resources and packages to be implemented and delivered in regional areas.

The School of Fire and Rescue Service Training

Situated at Whyte Island, Lytton, the school focuses on training professional firefighters. As well as overseeing the strategic direction of their education and training, the school develops, conducts, supervises and evaluates a range of best-practice programs designed to ensure Queensland's firefighters are among the best in the world.

It is here that Queensland Fire and Rescue Service recruits receive 'non-flammable' training, which includes:

- vertical rescue
- confined space rescue
- trench rescue
- urban search and rescue
- road accident rescue.

The school also includes a *Live Fire Campus*, where firefighters study fire behaviour management, the principles and practices of fireground control, and hydrocarbon fuel and carbonaceous fires.

The quality and sophistication of the training at the School of Fire and Rescue Service Training is a significant factor in the delivery of highly professional services.

Justice services

Table 13—Justice and corrective services infrastructure

* For project locations, see map 10 on page 103.

Map 10 ref*	Project	Estimated investment $M	Estimate category (see note D)	Completed projects $M	Delivery timeframe		
					2008–09 to 2011–12	2012–13 to 2018–19	2019–20 to 2025–26
Western Corridor and Toowoomba							
14.1	Ipswich Court, Watch-house and Police Station	110	3				
14.2	Gatton Correctional Precinct	2567	1 & 3				
Brisbane, Moreton, Redland and Logan							
14.3	Brisbane Supreme Court and District Court	600	2				
14.4	Pine Rivers Courthouse, Strathpine[F]	18	3				
14.5	Sandgate Courthouse		4	4.4	Completed 2007–08		
Total		3295		4.4			

Construction started

Justice

The Queensland Government provides a range of infrastructure to support the justice system, including a network of courthouses and correctional facilities which are critical to maintaining a safe, just and supportive society.

Justice services infrastructure currently being constructed in South East Queensland includes:

- a $110 million Ipswich Courthouse in the Ipswich CBD. The project includes 12 courtrooms for the District Court and Magistrates Court as well as a watch-house and police station. Construction commenced in mid 2007 with completion anticipated for mid 2009
- a new Pine Rivers Courthouse at Strathpine incorporating three Magistrates courtrooms and a watch-house at a total project cost of $18 million. Construction is underway with completion anticipated in 2008.

Planning is also underway for a new Supreme Court and District Court complex at the intersection of Roma and George streets in Brisbane's CBD. The first design stage for these new court buildings and associated public square is complete. The 63 000 square metre building will include 47 courtrooms, associated support functions, registry, judges' chambers and cells. Along with the existing Magistrates Court and a large public square, the complex will create a new integrated legal precinct and public amenity for the western end of the CBD.

Corrective

In November 2006 the Queensland Government announced that it would establish a major corrective services precinct at Spring Creek near Gatton. The precinct, which may have an ultimate capacity of approximately 3000 beds, will be developed in stages and incorporate a number of correctional centres.

The government has acquired a 600-hectare site and made an initial commitment of $500 million for Stage 1A of the project. Work has commenced on site services including road and water infrastructure.

Notes

A. The table identifies the expected delivery timeframe for each infrastructure project. The darker shade represents projects that are under construction at 1 July 2008.
B. Estimated investment is in 2008 dollars except where projects have progressed to contract stage, in which case they are in out-turn dollars. Cost estimates in the state budget and other public documents may differ, as they may incorporate project costs that reflect anticipated changes in input prices between initial planning and the time of construction. Estimated investment includes funds already expended on projects.
C. Where funding is required from other levels of government, their estimated costs have been included. Where projects are subject to federal funding, it is noted as timing of these projects is subject to negotiation with the federal government.
D. For an explanation of estimate categories, refer to page 16.
E. Where a project has been completed or a stage of a project completed, it is noted in the table.
F. These funds also include a watch-house.

Infrastructure for rural development

The SEQ Regional Plan supports the growth of rural areas in South East Queensland by providing opportunities for existing towns and villages to accommodate additional residents. The plan also promotes more compact development by restricting further rural residential development.

To support rural areas the Queensland Government will continue to fund water, sewerage, social, community, and cultural facilities in rural shires through established grant and subsidy programs. Funding assistance for roads will also be maintained through the Roads Alliance program and the Southern Queensland Accelerated Road Rehabilitation program administered by Main Roads. Almost 10 per cent of the current funding allocation in the SEQ Infrastructure Plan is located in or provides support for rural areas across the water, transport, energy and social sectors.

The Queensland Government has established a Rural Futures Committee to help develop a Rural Futures Strategy for South East Queensland. The strategy will form the basis of an integrated rural planning framework in South East Queensland that will seek to balance the competition for land and natural resources, the needs of rural landowners, rural communities and the impacts of regional population growth. Due for completion in 2008, it is anticipated that the strategy will identify infrastructure critical to the long-term sustainability of the region's rural communities. Infrastructure identified through this process will be considered for inclusion in future updates of the SEQ Infrastructure Plan.

A number of projects to identify the infrastructure needs of rural areas have been completed. These include an assessment of the social infrastructure needs of the Lockyer and Brisbane Valley areas, and an assessment of the community transport facilities in rural areas that currently service education, health and emergency services needs.

Water is a critical issue for agriculture and rural towns and villages, particularly during the current drought. Rural water issues are being considered as part of the South East Queensland Regional Water Supply Strategy, to be released in 2008.

Planning for rural precincts helps to identify and prioritise rural infrastructure to support rural development. Rural precinct plans involve detailed land use planning for specific areas to protect and promote rural and regional landscape values and support sustainable economic development. Identifying rural infrastructure for preferred land uses within a rural precinct is an essential component of the planning process. Pilot planning projects have been initiated in partnership with the Redland City Council, Sunshine Coast Regional Council and Scenic Rim Regional Council.

The Department of Primary Industries and Fisheries is realigning much of its science infrastructure in and around Brisbane using the collaborative *Centres of Excellence* approach. These centres will feature state-of-the art infrastructure and involve collaboration with other science players—such as CSIRO and universities—to deliver excellent scientific outcomes for primary industries and fisheries.

The six key centres will focus on:

- health and food sciences
- crop development
- animal sciences
- fisheries and aquaculture
- ecosciences.

The centres will:

- tackle issues surrounding climate change
- protect our natural resources and environment
- grow our farming, mineral, forestry, marine and tourism industries so they are competitive and sustainable.

Regional sport and recreation

Sport and recreation

The Queensland Government is committed to providing new opportunities for Queenslanders to participate in sport and active recreation, from grassroots to elite level. The Department of Local Government, Sport and Recreation—the principal driver of the planning, development and implementation of sport and recreation activities in South East Queensland—delivers a range of programs and services to encourage people to participate in sport and active recreation. The government works collaboratively with local government and community organisations to develop strategies and infrastructure that foster increased participation in sport and active recreation. This collaboration also ensures that facilities are accessible and used effectively.

A major initiative of the Queensland Government is the Eat Well Be Active Taskforce, which involves a range of projects that address the growing prevalence of obesity. A key project—the Eat Well Be Active Supportive Environments for Active and Healthy Living—uses an integrated approach to ensure supportive environments are designed and provided, enabling Queenslanders to lead more physically active and healthier lives.

The Eat Well Be Active Taskforce—through its Supportive Environments for Active and Healthy Living Working Group—are leading cross-government collaboration, involving all sectors with a responsibility for structural environmental change. This can include urban design, health, land use planning and transport planning, which will contribute to improving outcomes for active living across the Queensland population. The approach will establish design considerations that facilitate 'healthy planning', resulting in healthy environments for people to live, work and visit. Examples include:

- incorporating planning and design considerations for infrastructure for pedestrians, cyclists and public transport
- establishing continuous cycle routes that give convenient access to employment centres, schools and other local facilities and that avoid, where possible, severance by main or distributor roads
- making urban areas more attractive and safer for pedestrians using principles of crime prevention through environmental design
- developing case studies that showcase best practice in urban design to promote active transport such as walking and cycling
- promoting active transport at workplaces, schools and community centres.

Progress on sport and recreation projects in 2007–08

Queensland Government grant programs provide funding assistance that helps local governments and community organisations to construct sport and recreation facilities and prepare recreation plans that foster improved use and management of facilities. During 2007–08 the Queensland Government constructed, or worked in partnership with local government, community organisations and private partners, to complete the following regionally significant projects:

- Skilled Park, Robina—a 27 000-seat stadium and home of the Gold Coast Titans National Rugby League Team ($160 million)
- Queensland Sport and Athletics Centre—Rehabilitation and Recovery Centre, completed in February 2008. The centre has a four-lane, 25-metre heated pool, cold plunge pool, hot spa, ice baths, change rooms, reception, and medical suite with consultation rooms, physiotherapy room, meeting room and stretching room ($10 million)
- University of the Sunshine Coast—three-court, multi-purpose facility, completed in mid 2007. The facility is currently being used by the university, Chancellor Park State College and a number of regional and local sporting organisations including the sports of futsal and basketball ($9 million).

Construction is also well underway on:

- the State Tennis Centre, which is due for completion in December 2008. The centre will include 23 international-standard courts including three grand-slam surfaces (grass, clay and acrylic). The centre court arena will seat 5500 people and be suitable for state, national and international tennis events. The project is being delivered in partnership between the Queensland Government and a private sector organisation as part of an integrated sport, recreation and residential precinct. The centre has already secured the rights to hold the Brisbane International tournament for five years from January 2009.

Outdoor recreation

Outdoor recreation is an important part of South East Queensland's attraction, liveability and lifestyle. Popular activities include picnicking, surfing, bushwalking, camping, canoeing and four-wheel driving.

Opportunities to participate in all of these activities are highly valued by both South East Queensland residents and visitors. Safe, convenient and beautiful places for outdoor recreation boost the South East Queensland tourism industry and help to connect people with the natural environment and rural landscapes.

When people participate in outdoor recreation activities they address obesity and other health issues. Surveys consistently show that walking; surfing; swimming in creeks, rivers and lakes; and cycling are more than half of the physically active forms of sport or recreation that people choose.

The Queensland Government is preparing the South East Queensland Outdoor Recreation Strategy to coordinate the delivery of outdoor recreation services and identify regional outdoor recreation priorities. Priority projects from the strategy will be delivered in partnership with local government, the community and the private sector.

In January 2007 the Queensland Government announced that it will invest $8.8 million over the next five years (commencing 2007–08) to develop three regional recreation trails in South East Queensland. These trails are pilot projects for an annual South East Queensland outdoor recreation infrastructure program linked to the South East Queensland Outdoor Recreation Strategy. The first trail projects include:

- Brisbane Valley Rail Trail—a 148-kilometre trail following the closed Brisbane Valley railway line between Ipswich and Blackbutt. The trail passes through Fernvale, Lowood, Esk, Toogoolawah, Harlin, Moore and Linville, exposing people to spectacular scenery and important agricultural landscapes. The project includes track construction, road and gully crossings, visitor amenities and directional and interpretive signage. A seven-kilometre pilot section between Moore and Linville was opened in November 2007, and new horse yards were opened in Linville in May 2008. Accommodation, food and other services are available in the townships along the trail.
- Boonah to Ipswich Trail—a 76-kilometre trail linking Ipswich to Boonah via Flinders Peak and the site of the proposed Wyaralong Dam. This trail is located on existing public land including formed and unformed roads through important scenic and cultural landscapes. It will cater for walkers, mountain bikers and horse riders. The project includes constructing a new track, visitor amenities and directional and interpretive signage.
- Maroochy River Canoe Trail—a 28-kilometre trail from near Yandina to Maroochydore along the Maroochy River and its tributary streams. The trail passes through scenic rural landscapes and will cater for canoeists and kayakers. There will be riverside parking areas, water access pontoons and ramps, visitor amenities, and directional and interpretive signage.

These trails will offer new outdoor recreation opportunities for a range of visitors and will help to achieve other Queensland Government priorities: reducing obesity, promoting healthier lifestyles, and more tourism and rural economic development.

In addition to building the trails, the Queensland Government has allocated a further $1 million to promote and market outdoor recreation opportunities. This will include arrangements for integrated planning, delivery and management issues between state agencies, local government and community organisations.

The government is also developing a significant network of horse riding trails within South East Queensland. Since 2005 a significant network of horse trails has been established or planned in consultation with riders and local governments. Further trails are currently being developed for the Bellthorpe, Caboolture and Mapleton areas.

Walking tracks, camping areas, visitor centres, public amenities, roads and picnic facilities are provided by the Queensland Government in national parks and on other state land to support outdoor recreation activities. The government spends approximately $15 million each year on visitor facilities in South East Queensland's national parks, state forest recreation areas and marine parks.

In 2007 the Environmental Protection Agency (EPA) completed and opened the 58-kilometre Sunshine Coast Hinterland Great Walk through the Blackall Range, and in March 2008 the 54-kilometre Gold Coast Hinterland Great Walk opened, linking the Lamington National Park and the Springbrook Plateau.

Work has commenced on two new Great Walks through national parks in South East Queensland, with $2.8 million allocated for their development. One will go from Noosa to Rainbow Beach via the Cooloola section of the Great Sandy National Park and the other will be located in the Conondale Range.

The EPA has spent more than $2 million on upgrading facilities in the Tamborine, Springbrook and Lamington National Parks for the Centenary of National Parks celebrations in 2008. In 1908 Witches Falls on Mt Tamborine was the first national park declared in Queensland.

Recreational boating is a popular activity for South East Queenslanders and for visitors to the region. The government has allocated $14 million in the past two years for projects to develop new, and upgrade existing, recreational boating infrastructure in the region. These funds cover dredging, boat ramps, pontoons, buoys, beacons and other aids to navigation. This investment complements the local government contribution to facilities that support recreational boating such as car parks, lighting, cleaning, maintenance and security for boat ramps and jetties, pontoons and toilets.

Table 14—Regional sport and recreation infrastructure

* For project locations, see map 10 on page 103.

Map 10 ref*	Project	Estimated investment $M	Estimate category (see note D)	Completed projects $M	Delivery timeframe		
					2008–09 to 2011–12	2012–13 to 2018–19	2019–20 to 2025–26
Western Corridor and Toowoomba							
15.1	Gatton Aquatic Centre	2.5	3				
15.2	Brisbane Valley Rail Trail	3.6	3				
15.3	Boonah to Ipswich Trail	2.4	3				
15.4	Clive Berghofer Stadium: Toowoomba upgrade	2	3				
15.5	Regional Tennis Facility: University of Southern Queensland campus	2.7	1				
Brisbane, Moreton, Redland and Logan							
15.6	Aquatic Centre upgrades: Balmoral, Mt Gravatt, Runcorn and Redcliffe	8	3				
15.7	Queensland Tennis Centre, Tennyson	82	3				
15.8	State Equestrian Centre, Caboolture	4	3				
15.9	Queensland Sport and Athletics Centre, Nathan upgrade: hydrotherapy centre		4	10	Completed 2007–08		
15.10	State Softball Centre, Ormiston		4	1.2	Completed 2006–07		
15.11	Cricket Centre of Excellence, Albion		4	2.5	Completed 2006–07		
15.12	Brisbane Cricket Ground, Wooloongabba		4	50	Completed 2006–07		
15.13	Queensland Sport and Athletics Centre, Nathan		4	1.5	Completed 2006–07		
Gold Coast							
15.14	Lamington–Springbrook Great Walk		4	3	Completed 2007–08		
15.15	Gold Coast Football Stadium, Robina (Skilled Park)		4	160	Completed 2007–08		
Sunshine Coast							
15.16	Maroochy River Canoe Trail	0.5	3				
15.17	Cooloola Great Walk	1.4	3				
15.18	Conondale Range Great Walk	1.4	3				
Total		110.5		228.2			

Construction started

Notes

A. The table identifies the expected delivery timeframe for each infrastructure project. The darker shade represents projects that are under construction at 1 July 2008.

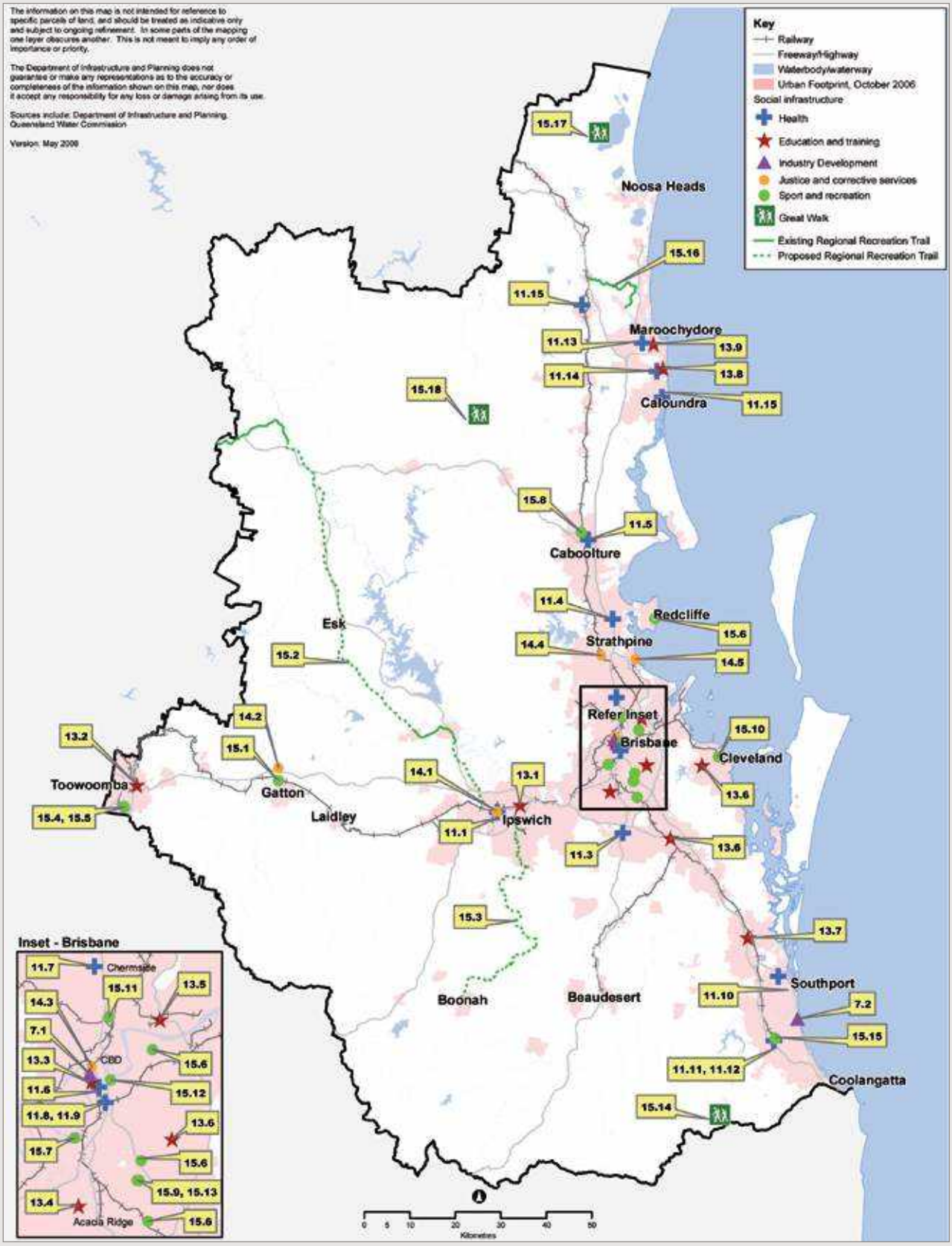
B. Estimated investment is in 2008 dollars except where projects have progressed to contract stage, in which case they are in out-turn dollars. Cost estimates in the state budget and other public documents may differ, as they may incorporate project costs that reflect anticipated changes in input prices between initial planning and the time of construction. Estimated investment includes funds already expended on projects.

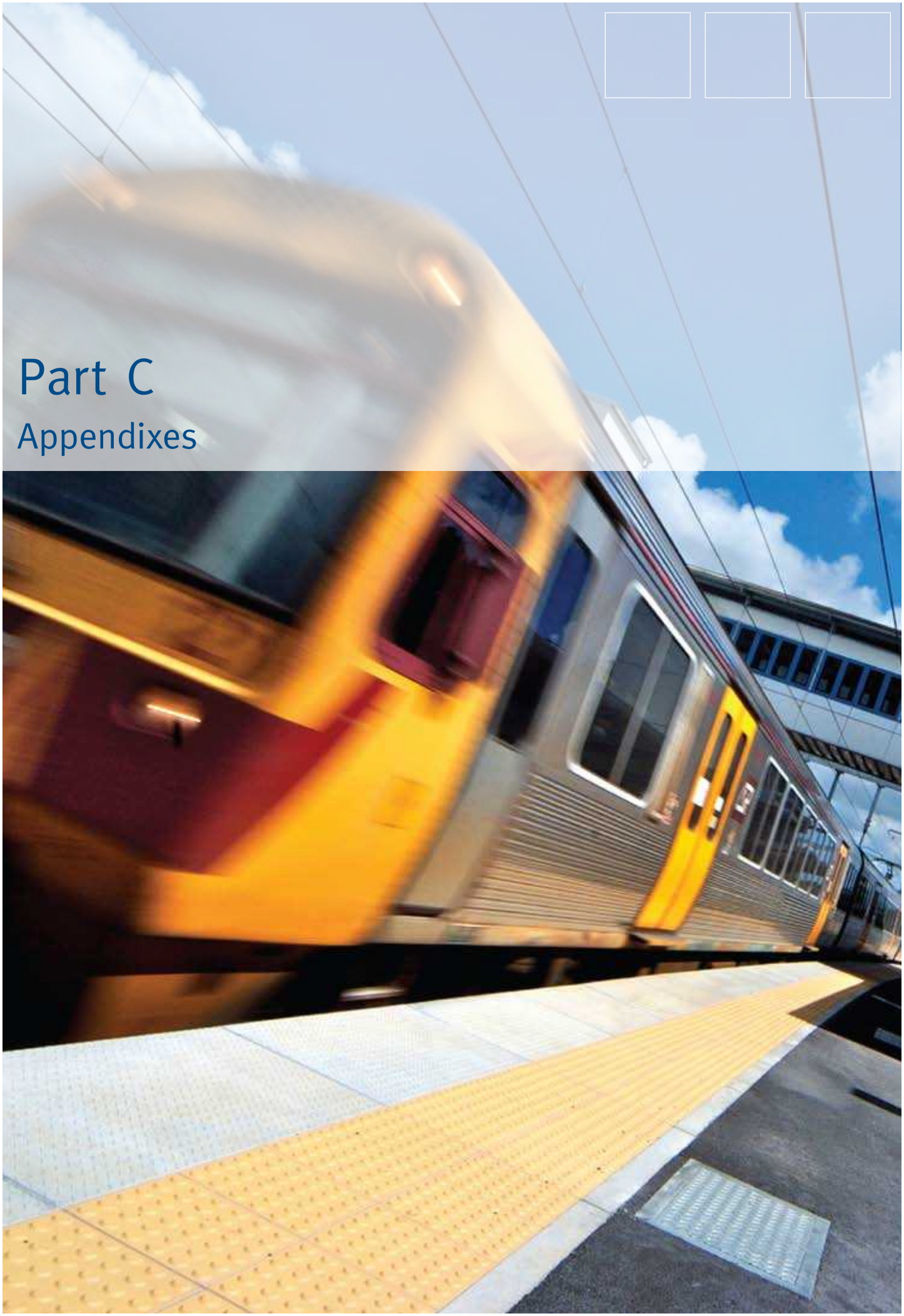
C. Where funding is required from other levels of government, their estimated costs have been included. Where projects are subject to federal funding, it is noted as timing of these projects is subject to negotiation with the federal government.

D. For an explanation of estimate categories, refer to page 16.

E. Where a project has been completed, it is noted in the table.

Map 10—Social and economic infrastructure





Part C

Appendixes

Useful websites

The following websites provide further information on the scope and status of infrastructure projects included in this infrastructure plan.

Project	Website
Regional planning and infrastructure projects	
SEQ Regional Plan	www.dip.qld.gov.au
Major projects and infrastructure	www.dip.qld.gov.au
Program Management Office	www.dip.qld.gov.au
Transport and Main Roads	
Queensland Transport	www.transport.qld.gov.au/Home/Projects_and_initiatives
Department of Main Roads	www.mainroads.qld.gov.au
Gateway Upgrade Project	www.gatewayupgradeproject.com.au
Bus and busway projects	www.translink.qld.gov.au
Airport Link	www.airportlink.com.au
North–South Bypass Tunnel	www.brisbane.qld.gov.au/nsbt and www.rivercitymotorway.net.au
Rail upgrades	www.qr.com.au/seqip
Water	
Queensland Water Commission	www.qwc.qld.gov.au
SEQ Regional Water Supply Strategy	www.seqwaterstrategy.qld.gov.au
Home WaterWise Service	www.homewaterwise.com.au
Traveston Crossing and Wyaralong dams	www.qldwi.com.au
Water Saving Rebate Schemes	www.nrw.qld.gov.au/water/saverscheme
Sustainable Housing Code	www.dip.qld.gov.au
Energy	
CS Energy	www.csenergy.com.au
Department of Mines and Energy	www.dme.qld.gov.au
ENERGEX	www.energex.com.au
Ergon Energy	www.ergon.com.au
National Electricity Market Management Company (NEMMCO)	www.nemmco.com.au
Origin Energy	www.originenergy.com.au
Powerlink Queensland	www.powerlink.com.au
Tarong Energy	www.tarongenergy.com.au

Information and communication technology

Queensland Telecommunications Strategic Framework	www.qgcio.qld.gov.au

Health

Queensland Health	www.health.qld.gov.au
Queensland Children's Hospital	www.health.qld.gov.au/buildinghealth
Gold Coast University Hospital	www.health.qld.gov.au/buildinghealth
Sunshine Coast Hospital	www.health.qld.gov.au/buildinghealth
Health Action Plan	www.health.qld.gov.au/publications/corporate/action_plan.asp
Health Precincts	www.health.qld.gov.au/publications
Smart State Medical Research Centre	www.smartstate.qld.gov.au/resources/publications/ss_strategy/building.shtm

Education, training and the arts

Department of Education, Training and the Arts	www.education.qld.gov.au
Queensland Smart State Academies	www.qldacademies.eq.edu.au
Millennium Arts Project	www.publicworks.qld.gov.au
Brisbane Convention & Exhibition Centre Expansion	www.bcec.com.au
Gold Coast Convention & Exhibition Centre Extension	www.publicworks.qld.gov.au
Queensland Skills Plan	www.trainandemploy.qld.gov.au

Community safety

Department of Emergency Services	www.emergency.qld.gov.au
Queensland Police Service	www.police.qld.gov.au

Justice services

Courthouse upgrades	www.justice.qld.gov.au
South East Queensland Gatton Correctional Precinct Development	www.dcs.qld.gov.au/About_Us/The_Department/Prison_Precinct/index.shtml

Regional sport and recreation

Sport and recreation funding programs	www.sportrec.qld.gov.au and www.dlgpsr.qld.gov.au
Horse trails and Great Walks	www.epa.qld.gov.au/parks_and_forests
SEQ Regional Outdoor Recreation Strategy	www.dip.qld.gov.au
Robina–Gold Coast Football Stadium (Skilled Park)	www.austadiums.com/stadiums
State Tennis Centre Tennyson	www.publicworks.qld.gov.au

Industry development

Department of Tourism, Regional Development and Industry	www.dtrdi.qld.gov.au
Boggo Road Urban Village–Ecosciences Precinct	www.sd.qld.gov.au/ecosciencesprecinct

Infrastructure for rural development

SEQ Rural Futures Strategy	www.dip.qld.gov.au

Index of tables, figures and maps

Tables

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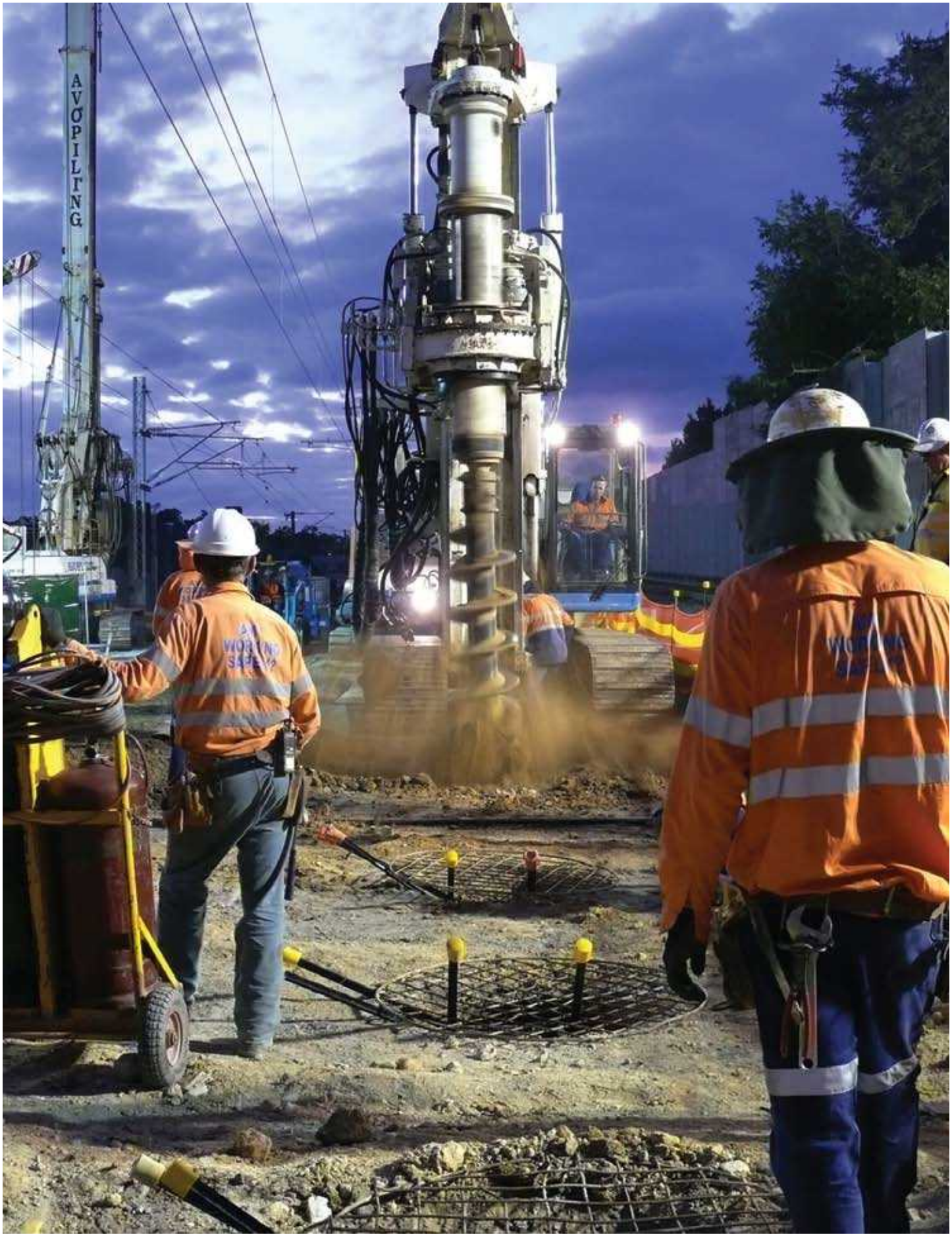

Images courtesy of:
Boggo Road Busway Alliance; Department of Education, Training and the Arts; Department of Justice and Attorney-General; Department of Mines and Energy; ENERGEX; Heath Mortiz; Leighton Contractors; Les Dixon; Main Roads; Major Sports Facility Authority; Mirvac; Pacific Link Alliance; Port of Brisbane; Powerlink; Queensland Motorways Limited; Queensland Health; Queensland Rail; Queensland Transport; Queensland Water Infrastructure; Rebecca Patrick; Salt Design; Southbank Institute of Technology; Springfield Lakes State School; TransLink.

Every drop counts

Water and energy are precious commodities. To reduce water consumption and minimise the release of volatile organic compounds (VOCs) into the atmosphere, this document has been printed on Sovereign paper, using the **Waterless Printing** technique and soya-based inks.

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South East Queensland

Infrastructure Plan and Program

2009 2026

Queensland Government

Foreword

The Hon Stirling Hinchliffe MP
Minister for Infrastructure and Planning

In the state s 150th year, South East Queensland s population continues to grow unaffected by the greatest global economic challenge in a generation. The Queensland Government is confronting these twin challenges by meeting the infrastructure needs of the region s communities and committing to job creation through this comprehensive plan.

In its fifth year, the Queensland Government s SEQ Infrastructure Plan is still the largest Infrastructure program in Australia.

This plan identifies an estimated $124 billion in infrastructure investment for South East Queensland, which is expected to support about 900 000 jobs through to 2026.

In its first few years, the SEQ Infrastructure Plan has already delivered a significant number of projects across the region including the Tugun Bypass, Queensland Tennis Centre and the South East Queensland Water Grid. It has also delivered new infrastructure for public transport including the Inner Northern Busway, 27 new three-car trains and 63 kilometres of new track.

Both industry and government have geared up over the past four years, delivering more than triple the infrastructure that had been delivered in the previous ten year period.

Only four years into the program, 87 projects have been completed, another 173 projects are underway, $16.4 billion has been invested and 130 000 jobs created.

Moving forward, the government is working hard to achieve a renewed balance in delivering infrastructure and supporting jobs in a very challenging economic environment. This infrastructure plan is a key plank of the government s job creation commitment, with expenditure forecast to increase by $5.8 billion to $22.2 billion, generating an extra 45 000 jobs.

The Department of Infrastructure and Planning is working actively with government agencies and industry to drive infrastructure projects from the planning stages through to the delivery and reporting stages.

Work is currently underway on the Gateway Upgrade Project, Airport Link, sections of South East Queensland s busways, multiple rail upgrades and line extensions, Queensland Children s Hospital, Princess Alexandra Hospital Emergency Department and Robina Hospital.

In partnership with other levels of government and the private sector, the Queensland Government is working to ensure the SEQ Infrastructure Plan continues to support the economy and create more jobs for the region.

The SEQ Infrastructure Plan provides a resilient and robust framework to respond to the current economic challenges and looks to the future by supporting sustainable growing communities with enviable lifestyles.

Table of contents

Highlights

The SEQ Infrastructure Plan outlines the Queensland Government s program of infrastructure and major projects to support the South East Queensland Regional Plan 2005 2026 (SEQ Regional Plan)

Next year the SEQ Infrastructure Plan will be reviewed to reflect an updated SEQ Regional Plan. The government is working to achieve a balance between delivering infrastructure to support jobs and growth and showing fiscal restraint.

The plan includes projects covering transport, water, energy, health, education and training, regional sport and recreation, infrastructure for rural development, activity centre renewal and transit oriented development, community services, industry development and information communication technology.

The investment listed in this infrastructure plan represents almost one-third of the state s total investment in infrastructure. Total investment in this year s SEQ Infrastructure Plan is $124 billion until 2026. This includes $94.6 billion in road, rail and public transport projects and studies, over $12.6 billion in social and community infrastructure, $4.6 billion in water infrastructure and $3.3 billion spending on energy. These projects are estimated to support up to 900 000 jobs through to 2026.

Since the first SEQ Infrastructure Plan was released in 2005, the 20-year plan has delivered 87 projects at a cost of more than $9 billion.

The first four years of delivery have seen a massive response from both industry and government to deliver nearly three times the infrastructure provided at the beginning of the decade.

In 2009 the SEQ Infrastructure Plan has been stabilised with forecast expenditure of around $5.8 billion. This latest plan sets out the sustained delivery of infrastructure through to 2026.

There has been significant infrastructure progress to date:

- The Queensland Tennis Centre at Tennyson was completed and the first international tournament was held there in January 2009
- Construction of the key elements of the Western Corridor Recycled Water Project were completed in December 2008, including approximately 205 kilometres of pipeline and three advanced water treatment plants at Bundamba, Gibson Island and Luggage Point
- Construction of the Southern Regional Water Pipeline was completed in December 2008. The pipeline has been moving water between the Gold Coast, Logan, Ipswich and Brisbane since January 2009

- The South East Queensland (Gold Coast) Desalination Project commenced supply to the SEQ Water Grid on 28 February 2009. By the end of March 2009 the desalination plant had supplied one billion litres of potable water into the SEQ Water Grid
- Construction is underway on the Airport Link road tunnel enabling motorists to bypass 16 sets of traffic lights between Bowen Hills and Kedron and 14 sets of traffic lights between Bowen Hills and Toombul when complete in 2012
- The completion in March 2009 of a $34.7 million refurbishment of the Queensland Performing Arts Centre at Southbank
- Construction is underway on Queensland s largest road and bridge construction project. The crucial Gateway Upgrade Project, building 20 kilometres of duplicated road and a second bridge across the Brisbane River at Murrarie, is scheduled for completion in mid 2011
- Construction of additional rail lines for the Gold Coast and Sunshine Coast with the Helensvale to Robina rail duplication completed in August 2008 and the Caboolture to Beerburrum duplication completed in April 2009
- The major reconstruction of the Ipswich Motorway/Logan Motorway interchange at Gailes and a 2-kilometre stretch of the Ipswich Motorway between Goodna and Gailes is well advanced
- The Northern Busway, from the Royal Children s Hospital at Herston to Windsor, and a new cycle centre near the Royal Brisbane Women s Hospital is expected to be complete in late 2009
- The Kurilpa Bridge, which will stretch from the North Quay end of Tank Street in the city, to Kurilpa Point in South Brisbane, adjacent to the Queensland Gallery of Modern Art, is expected to be complete by October 2009
- The Toowong pedestrian and cycle link built over the Centenary Highway linking to Mt Coot-tha has been operational since March 2009
- Construction of a link between sections of the Boggo Road and Eastern busways is expected to be complete by August 2009
- Construction of the Clem7 tunnel is well underway with the project scheduled to open in 2010.

What s updated in this SEQ Infrastructure Plan?

The previous SEQ Infrastructure Plan was released in June 2008. The following facets are new or have changed in this updated version of the plan:

- There are 32 new projects in the plan
- Project costs have been updated to 2009 dollars to allow price consistency over the full timeframe of the program
- The program has undergone a re-sequencing process to make delivery more efficient and to address emerging priorities such as dealing with the global financial crisis. While this means that some projects have had changes to either their commencement or completion date, overall the program is progressing as expected
- The SEQ Infrastructure Plan is presented in three updated time periods with the first phase from 2009 10 to 2012 13, the second phase from 2013 14 to 2018 19 and the third phase from 2019 20 to 2025 26
- An updated education infrastructure category incorporates primary and secondary education, vocational education and training and early childhood education and care
- An updated community services infrastructure category includes Queensland Police Service, emergency services, justice services, social housing and corrective services.

Job creation

The global financial crisis is making its mark on the Queensland economy and on the lives of every Queenslander. The Queensland Government, through its commitment to new infrastructure and new job initiatives, is working to maintain and create employment as its number one priority.

The SEQ Infrastructure Plan s forecast expenditure for the region up to 2026 is now set to reach $124 billion.

This investment funds 378 regionally significant projects across the transport, water, energy and social and community infrastructure sectors.

These projects are estimated to support up to 900 000 jobs through to 2026.

Projects such as Wyaralong Dam near Boonah will not only supply up to an extra 26 000 million litres of much-needed water every year (in conjunction with the nearby Cedar Grove Weir), but will also create approximately 420 jobs. Already more than 130 staff and sub-contractors are working on the project with further benefits for local business in Boonah, Beaudesert and across South East Queensland.

The Gateway Upgrade Project has the potential to create more than 5000 new jobs and generate an estimated $450 million in wages and salaries during the design and construction phases of the project.

Moving forward, major projects such as Inner City Rail, Logan Motorway upgrade, Ipswich Motorway upgrade, Bruce Highway upgrade, and Airport Link have potential to constitute some of the biggest job generators across the state.

In response to the global financial crisis, the government has announced a raft of measures to help maintain employment and increase skills.

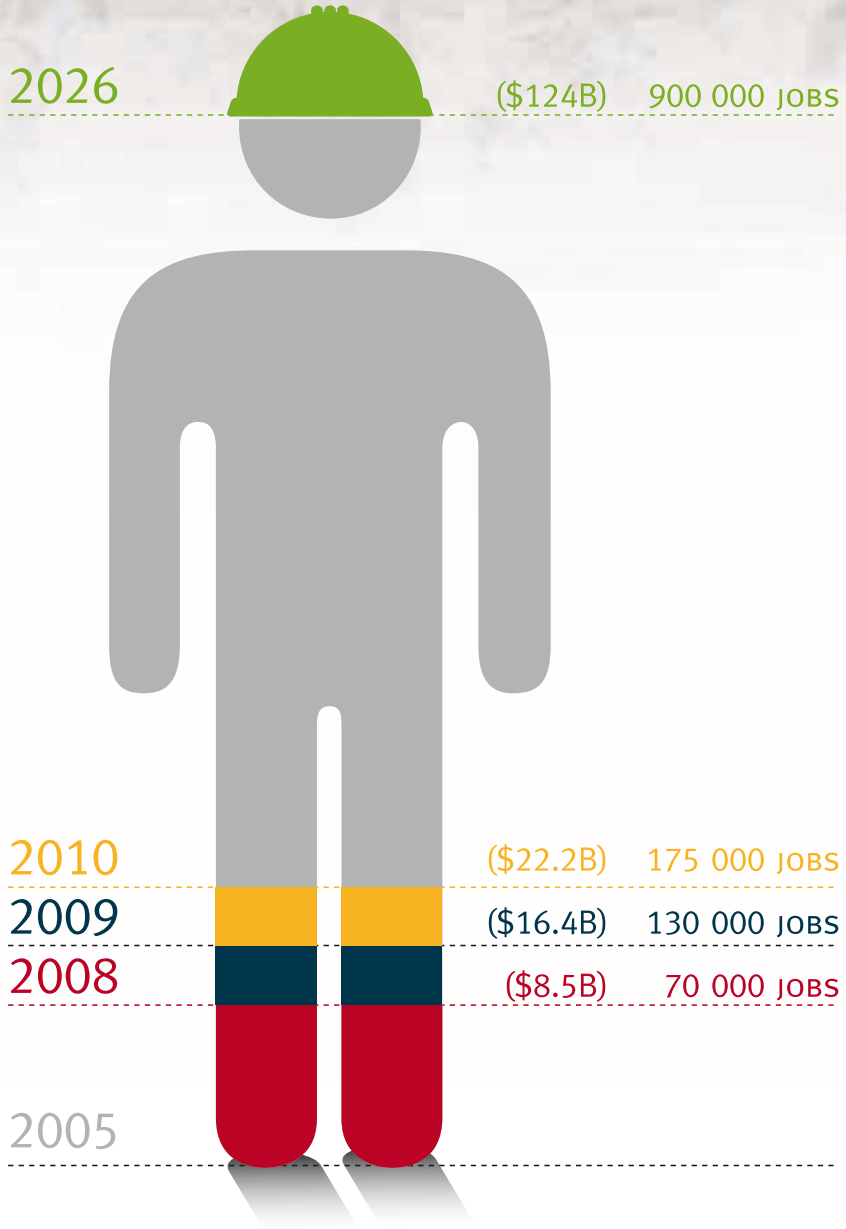
In supporting the creation of 100 000 new jobs over the next three years, the government will focus on four key planks of jobs generation:

- Maintaining the building program
- Investing in skilling and training
- Developing new industries and supporting existing industries
- Job creation programs.

Some of the initiatives include:

- The Premier s Employment Taskforce to provide expert advice to the government
- The Green Army, to provide up to 2300 paid work placements for up to six months and up to 700 green traineeships over the next three years
- Jobs Assist, to provide support for firms experiencing financial and operational challenges and workers that have been retrenched
- Ensuring 10 per cent of the workforce on every Queensland Government project are apprentices or trainees
- Helping to create 148 000 training places over the next four years to expand Queensland s skills base in the industries that need them most
- A scheme to make sure Queensland businesses and manufacturers get the maximum benefit of the Queensland Government building program
- A Local Industry Policy providing significant opportunities for employment and economic development by ensuring that local businesses have full, fair and reasonable opportunity to tender for work on infrastructure and resource sector projects
- The government keeping approval processes for all capital works projects within the minimum time possible and lead times in putting works to the market will be minimised, without compromising risk management. The government will also fast track some pre-construction activities where substantial employment and/or economic benefit can be generated
- Developing and supporting new industries such as liquefied natural gas (LNG) and solar
- Supporting existing industries such as tourism
- All state government agencies, government-owned corporations and statutory bodies are required to fast track new recruitment activities including advertising, selection and finalisation.

Figure 1 South East Queensland infrastructure investment and jobs



Note: this figure is an estimate of the job numbers the SEQ Infrastructure Plan will sustain on a year-by-year basis. The program job target estimate is a cumulative assessment of the job numbers based on the total spend for the program from 2005 to 2026. The 2010 data is based on current projected budget estimates and program spend. Future investment on a yearly basis will indicate job numbers against the target estimate.

Project achievements

For the past four years the SEQ Infrastructure Plan has been delivering real benefits for the community.

Since the first SEQ Infrastructure Plan was released in 2005, 87 projects have been completed and 173 projects are underway. Expenditure to date is already $16.4 billion.

In completing such a large number of projects government and industry have demonstrated a successful working relationship to manage growth, create jobs and improve services and facilities in South East Queensland.

The projects completed to date are diverse and far reaching and include road, transport, water, energy, schools and health projects. The completion of these projects demonstrates the government s commitment to providing a better future for South East Queensland.

Figure 2 Delivered projects pipeline

There are 87 completed SEQIPP Projects as at 31 March 2009

Completed in 2004-07
Pacific Motorway: Stewart Road Currumbin interchange (Tugun Bypass)
Warrego Highway: Plainlands interchange
Linkfield Connection Road
KTIA (Kawana Transport Infrastructure Agreement) Nicklin Way: additional lanes
Stretton State College (two stages); Meridan State College
Further TransApex investigations: Airport Link
Salisbury to Flagstone/Greenbank passenger rail investigation
Ormeau to Coomera: track duplication
Groundwater, desalination and recycling investigations
Subsidies paid for completed local government projects
Construction of new transmission lines between: Greenbank (Logan) and Maudsland (Gold Coast); Belmont and Murarrie (Brisbane)
Construction of major substations at: Molendinar (Gold Coast); Algester (Brisbane); Goodna (Ipswich); Sumner (Brisbane)
Springfield Lakes State School; Burpengary Meadows State School
State Softball Centre, Ormiston
Cricket Centre of Excellence, Albion
Brisbane Cricket Ground, Woolloongabba
Queensland Sport and Athletics Centre, Nathan

Completed in 2007-08

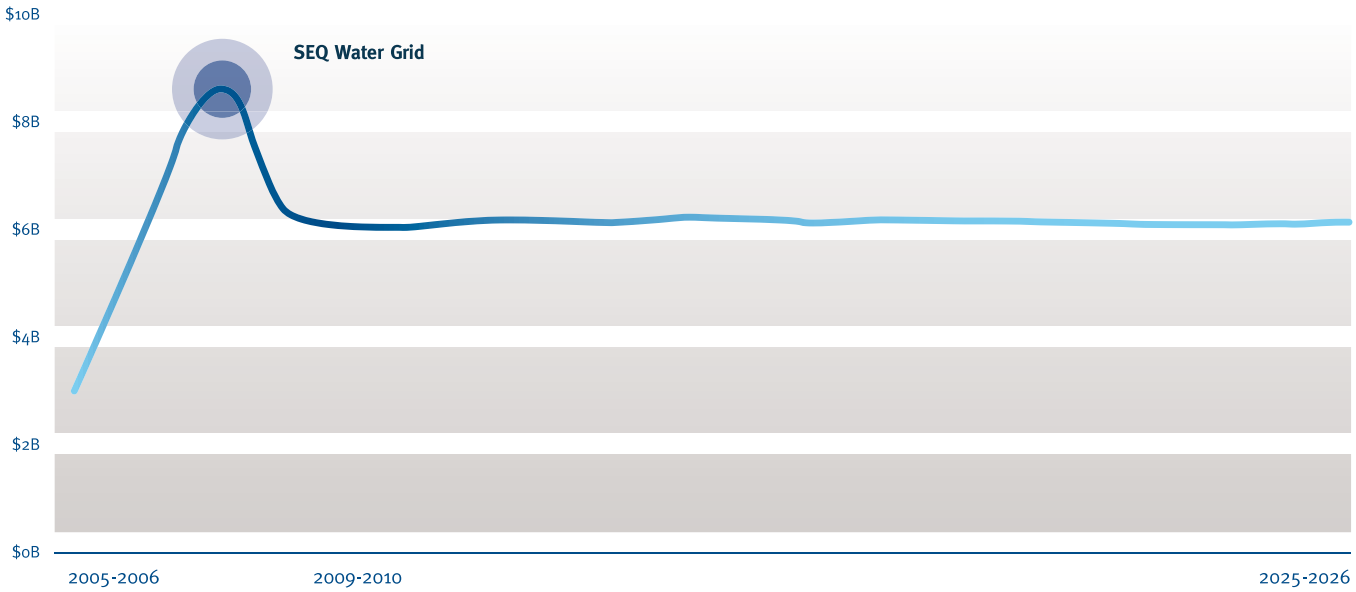
- Centenary Highway Boundary Road underpass (joint Brisbane City Council and Main Roads project)
- Ipswich Motorway alternative northern corridor investigation
- Ipswich to Springfield Public Transport Corridor Study
- Caboolture Northern Bypass
- Inner Northern Busway improvements and new busway stations
- Hamilton/Eagle Farm Transport Investigation
- Australian TradeCoast Transport Study
- Pacific Motorway: Tugun Bypass
- Bus priority on Smith Street: Olsen Avenue to Gold Coast Highway
- Cedar Grove Weir
- Bromelton Off-Stream Storage
- Brisbane Aquifer Project
- Bribie Island Groundwater Project
- Caltex Brisbane Recycled Water Project
- Construction of a new transmission line between Middle Ridge (Toowoomba) and Greenbank (Logan)
- Coomera Springs State School; Park Lake State School
- Sandgate Courthouse
- Queensland Sport and Athletics Centre, Nathan upgrade: hydrotherapy centre
- Lamington S pringbrook Great Walk
- Skilled Park, Robina
- King George Square Cycle Centre (a sub-project of the subregional cycle network)

Completed in 2008-09

- Inner City Bus Access Capacity Study
- Helensvale to Robina, Salisbury to Kuraby: additional track and upgrades
- Sunshine Motorway: Sippy Downs to Kawana Arterial
- Enoggera Reservoir water treatment plant
- Southern Regional Water Pipeline
- Eastern Pipeline Interconnector
- Western Corridor Recycled Water Project
- Ormeau State School stage one; Cupania, Norfolk Village State School stage one
- Northern Pipeline Interconnector (stage one)
- Automotive trade training facility: Toowoomba
- Southbank Institute of Technology
- Pine Rivers Courthouse, Strathpine
- Queensland Tennis Centre, Tennyson
- Gold Coast Convention and Exhibition Centre extension
- Toowong Cycle and Pedestrian Overpass (a sub-project of the subregional cycle network)
- Brassall Bikeway Connection stage one (a sub-project of the subregional cycle network)
- Install underground subtransmission cables between Crestmead and Browns Plains North substations
- Centenary Highway two lanes: Springfield to Yamanto
- Caloundra Road: additional lanes from Bruce Highway to Pierce Avenue
- Sunshine Motorway upgrade: Maroochydore Road to Pacific Paradise (including Maroochy River Bridge)
- MMTC: Caloundra Mooloolaba Road (new two-lane road): Caloundra Road to Creekside Boulevard
- The Prince Charles Hospital: upgrade to general hospital
- Browns Plains Health Precinct
- New substations at Currimundi, Holland Park and Wacol South
- Bounty Boulevard State School; Oxenford West State College
- Further stages on Meridan State College, Stretton State College, Chancellor State College, Coomera Springs State School, and Burpengary Meadows State School
- Northern Link: Toowong to Kelvin Grove tunnel investigation
- New passenger rail stock: 24 three-car train sets
- Powerlink major transmission upgrade: Abermain substation
- Powerlink major transmission upgrade: Greenbank substation
- Powerlink major transmission upgrade: South Pine substation
- Clive Berghofer Stadium: Toowoomba upgrade
- Aquatic Centre upgrades: Mt Gravatt, Runcorn and Redcliffe

Note: this figure does not include ENERGEX network upgrades in South East Queensland. Sub-projects of the cycle networks, as noted in the table, are not considered as fully completed projects.

Figure 3 Indicative activity of SEQ Infrastructure Plan to 2026



Note: this figure shows how the program will mature from its establishment phase, marked by a significant period of growing investment and gear-up by both industry and government, especially in delivering the SEQ Water Grid, into a stabilisation phase of sustained delivery of infrastructure over the term of the plan. This represents total funds from all sources and is presented in 2009 dollars.

Figure 4 Program expenditure to date

Note: this figure outlines the actual expenditure by quarter and a cumulative view of the expenditure to date.

Table 1 Program scorecard

Status	No. of projects	Estimated investment $M
Yet to commence	118	20,674
In progress/underway	91	55,780
Under construction	82	38,636
Complete	87	9,128
Total	378	124,218

Note: project status information current as at 31 April 2009.

Part A
Context of the SEQ Infrastructure Plan

About the SEQ Infrastructure Plan

The SEQ Infrastructure Plan and Program 2009 2026 outlines the government s infrastructure priorities to support the SEQ Regional Plan and represents an unprecedented long-term commitment to capital works in South East Queensland.

The SEQ Infrastructure Plan was first released in 2005 and is updated annually to reflect and align with the latest planning and budget commitments. It sets relevant timeframes and budgets to ensure the timely delivery of infrastructure supporting the region s growth.

The SEQ Infrastructure Plan is linked to the annual state budget process and is the principal mechanism for identifying, prioritising and delivering infrastructure projects. It also assists the coordination of infrastructure and services provided by state agencies, government-owned corporations, local government and the private sector.

By providing certainty about the nature and timing of regional infrastructure projects and through its improved coordination processes, the SEQ Infrastructure Plan contributes to a well-planned region.

About the SEQ region

South East Queensland is one of Australia s fastest growing regions. By 2031, its population is expected to grow from 2.8 million to 4.4 million people.

The region covers 22 890 square kilometres, stretching 240 kilometres from Noosa in the north to the Queensland-New South Wales border in the south, and 160 kilometres west to Toowoomba.

The region s growth will generate demand for 735 500 new dwellings, as well as supporting infrastructure and services, placing significant social, economic and environmental pressures on the region.

SEQ Regional Plan review

The SEQ Regional Plan is the key plan for managing growth and development of South East Queensland.

The South East Queensland Regional Plan 2005 2026, the first statutory regional plan for the region, was released in June 2005.

Since then, South East Queensland has experienced a period of significant population growth. The sustained growth of the region has brought with it new challenges including housing affordability, transport congestion and dealing with climate change.

The Queensland Government has brought forward the review of the regional plan to ensure these challenges are met and the region s great lifestyle is protected.

The Draft South East Queensland Regional Plan 2009 2031 takes a balanced approach to how and where South East Queensland will grow. It continues to protect the region from urban sprawl, focusing growth into the Urban Footprint and further developing the regulations introduced in 2004. It preserves the region s landscape, open spaces and farmland and ensures the environmental quality of the region is maintained.

The draft plan was released for consultation, seeking the ideas and concerns of the community in South East Queensland, late in 2008. A final plan incorporating this feedback will be released in 2009.

Map 1 - South East Queensland Region

Infrastructure priorities

The SEQ Regional Plan defines the regional land use pattern and desired regional outcomes. It guides the priorities for infrastructure investment across South East Queensland. Other factors considered when prioritising infrastructure projects are those supporting quality of life and community wellbeing.

This SEQ Infrastructure Plan takes account of the Queensland Government s 2020 vision, *TowardQ2: Tomorrow s Queensland*, which strives towards a Queensland that is:

- Strong: creating a diverse economy powered by bright ideas
- Green: protecting our lifestyle and environment
- Smart: delivering world-class education and training
- Healthy: making Queenslanders Australia s healthiest people
- Fair: supporting a safe and caring community.

The strategic outcomes for the SEQ Infrastructure Plan, derived from the *South East Queensland Regional Plan 2005 2026*, are listed, and include;

Infrastructure shapes growth patterns

By accommodating a higher proportion of population growth within the urban footprint, the most efficient use of land, infrastructure and services will be achieved. Public transport will support urban renewal and developments that focus on population and employment density around transport nodes and activity centres. Broadhectare development sites (or large areas of undeveloped land) will be contained within the urban footprint by supplying infrastructure to support priority areas such as the Western Corridor. Further, the SEQ Regional Plan seeks to reduce traffic and limit congestion on the roads by encouraging residents to make use of all the goods and services, jobs and leisure available within their local areas. This will strengthen communities across the region and reduce environmental impacts.

Efficient resource use

The SEQ Regional Plan recognises the importance of South East Queensland s rich and diverse natural environment and its contribution to the regional economy and way of life. The SEQ Infrastructure Plan seeks to maximise the use of existing infrastructure and ensure that the associated planning, development and operation of new projects minimise the demand they make on resources particularly water, energy supplies, minerals and aggregates. Projects will also maximise system integration and reduce the waste they generate, the carbon emissions they cause and the impact they have on natural areas.

Liveability and community wellbeing

Safe, healthy, accessible and inclusive communities are underpinned by well-planned and well-serviced infrastructure. This goal is supported by the timely and adequate provision of quality infrastructure and services relative to the economic, social and environmental needs of the region. This will include economic infrastructure (transport, water and energy), social infrastructure (education, health, emergency services and corrective services) and environmental infrastructure (natural areas, open space and recreational opportunities).

Economic activity

Central to the promotion of regional economic activity is the provision of infrastructure that supports diverse economic and employment opportunities in priority industries and regional activity centres. The SEQ Infrastructure Plan supports economic development initiatives associated with Smart State initiatives, knowledge industries, service sectors and freight transport.

Funding the SEQ Infrastructure Plan

The Queensland Government is committed to maintaining a strong infrastructure program.

The government funds infrastructure from government cash flows, borrowings and alignment of the government s capital portfolio.

The Queensland Government has established the Project Assurance Framework (PAF) and Value for Money (VfM) Framework in order to ensure high quality project initiation, evaluation and delivery. These frameworks are the minimum standard for project initiation, evaluation, procurement and assurance across the Queensland public sector.

The PAF is a whole-of-government project assessment tool that establishes a common approach to assessing projects at critical stages, and aims to maximise the value for money outcomes for project investments.

Where the PAF identifies a potential public private partnership, the VfM framework provides the assessment guidelines to determine if a public private partnership should be pursued and ensures the respective skills of each sector are best used to deliver effective infrastructure and services in a timely manner.

Contributions for funding projects come from all three levels of government, with various projects having a sub-regional, regional or national interest.

Partnerships

In delivering infrastructure in South East Queensland, the Queensland Government is a participant in a variety of partnership arrangements with the private sector and with other levels of government.

Queensland s first public private partnership the recently completed Southbank Institute of TAFE Redevelopment Project was awarded Best Global Project by the international Public Private Finance Awards in 2007.

The South East Queensland Water Grid is the product of a partnership between the government and private sector. The use of special purpose vehicles and the alliance procurement model provided the flexibility and governance structure for delivery of this huge infrastructure program.

Alliance contracts and special purpose vehicles are also used in the delivery of some road and rail projects. See Working together with industry on page 16 for more details.

Federal government contributions

Nation Building Program (formerly AusLink 2)

The Australian Government is investing $26.4 billion on road and rail infrastructure throughout Australia via its Nation Building Program over the six year period from 2008-09 to 2013-14.

The Nation Building Program assists national, regional economic and social development by funding projects which improve the performance of land transport infrastructure.

Funding is available for a range of road and rail programs and projects across the National Land Transport Network. The network is based on national and inter-regional land transport corridors that are of critical importance to national and regional growth.

There are several components under the Nation Building Program including:

- National network construction
- National network maintenance
- Roads to Recovery
- Black Spot
- Heavy Vehicle Program
- Funding for Local Roads
- Boom Gates for Level Crossings.

As part of the Australian Government s $42 billion Nation Building Economic Stimulus Plan, Queensland will receive a total of $4 billion towards three programs: Building the Education Revolution; Social Housing; and Roads and Safety.

The Nation Building and Jobs Plan builds on the stimulus measures already in place to support economic activity and jobs, including the Nation Building Package.

Building Australia Fund

The Australian Government has implemented a national approach to planning, funding and delivering the nation s future infrastructure needs.

The *Infrastructure Australia Act 2008* came into effect on 9 April 2008 paving the way to establish Infrastructure Australia.

Infrastructure Australia works to develop a strategic blueprint for Australia s future infrastructure needs and in partnership with the states, territories, local government and the private sector facilitate its implementation.

In the 2009-10 federal budget the government committed $8.5 billion to nationally significant infrastructure projects, releasing *Infrastructure Australia s* National Infrastructure Priority List.

South East Queensland projects funded as priority infrastructure projects are listed.

- Ipswich Motorway - additional works: construction commenced in 2009, with completion by 2012. Total federal investment will be $884 million, bringing the federal government overall commitment to the Ipswich Motorway to over $2.5 billion.
- Gold Coast Rapid Transit: construction is expected to commence in 2011 and is scheduled for completion in 2013. Total federal investment will be $365 million.

In addition, the federal government contributed $20 million to undertake a Brisbane Inner City Rail feasibility study, to determine potential route alignment, construction timetables and a preferred funding model. They also contributed funds to the Bruce Highway Cooroy to Curra (section B) Duplication. Construction is expected to start in 2009 and is scheduled for completion in 2012. Federal investment will be $488 million.

Additional South East Queensland projects have been identified by Infrastructure Australia for further development and analysis:

- Port of Brisbane Motorway
- Eastern Busway (stages 2 and 3)
- Bruce Highway Corridor (Brisbane to Cairns, including Cooroy and Curra)
- Fully controlled motorways in South East Queensland
- Northern Link Road Tunnel.

Delivering the SEQ Infrastructure Plan

Driving delivery of the SEQ Infrastructure Plan

The planning and delivery of the SEQ Infrastructure Plan is coordinated by the Department of Infrastructure and Planning. The role of the department is to lead local, regional and statewide infrastructure initiatives to ensure planning and infrastructure essential to the state s prosperous future is developed and delivered.

Working together with industry

The collaboration between industry and government is vital for the success of the SEQ Infrastructure Plan. Issues such as procurement, delivery models, available resources and a skilled workforce are all planned in conjunction with the construction, engineering and design industries.

Work undertaken since 2005 to support the successful collaboration of government and industry in delivering the program includes:

- The South East Queensland Infrastructure Industry Taskforce a joint government, industry and union taskforce designed to develop closer working relationships and ensure the smooth delivery of the SEQ Infrastructure Plan. The Industry Taskforce has focused on strategies to ensure industry capacity to deliver on one of the largest infrastructure programs in history. To meet the challenges of the current global financial crisis it will be necessary to shift this mandate, specifically to ensure organisations down the supply chain remain suitably resourced, skilled and ready for the pipeline of work that government and industry will bring to market

  The taskforce will continue to develop principles to encourage agreement between government and industry on infrastructure procurement. It will also create strategies to maintain capacity to deliver the program and continue to achieve more effective training outcomes that contribute to the government focus on delivering jobs in Queensland

- The production of procurement and construction pipelines, which detail upcoming projects for the next four years. These tools are updated regularly and provide industry with a sequenced program of infrastructure work.

Government and industry also work closely to provide innovation in delivery models and procurement for projects within the SEQ Infrastructure Plan. These include:

- A $1.1 billion contract under the Queensland Government s landmark South East Queensland public private partnership (PPP) schools project

  Seven new state schools will be built in high-growth areas of South East Queensland and will generate thousands of new jobs. Aspire Schools consortium will design, build and maintain six new primary schools and one new high school, while Education Queensland will provide teaching resources. Construction will begin shortly on prep to year 7 primary schools at Thornlands South in Brisbane and Peregian Springs on the Sunshine Coast. These schools are due to open in January 2010, with accommodation for up to 370 students each

- The Southbank Institute of TAFE Redevelopment Project Queensland s first public private partnership. The project involved constructing 11 new buildings and renovating another four buildings on the South Bank campus

- The Airport Link tunnel, which is currently one of Australia s largest road tunnel public private partnerships. This tunnel will link the Clem7 tunnel, Inner City Bypass and local road networks in the city s north-east. It will include two parallel, 7 kilometre tunnels and is set to open in mid 2012

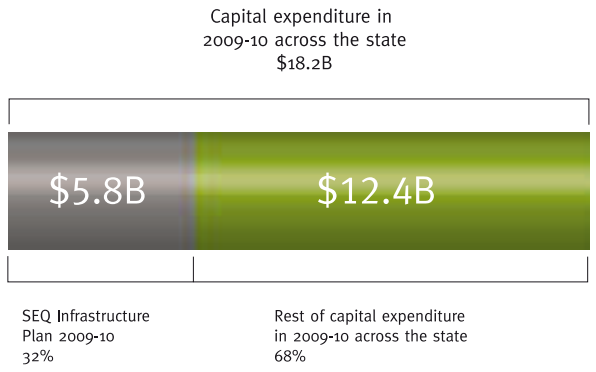
- The Gateway Upgrade Project, which is currently the largest road and bridge infrastructure project in Queensland s history. Queensland Motorways Limited (a government-owned company) is delivering the project through a 30-year franchise agreement and has awarded the design, construction and maintenance contract to a private sector partner
- The South East Queensland Water Grid, which employed more than 3500 workers across more than 45 sites at peak times. The workers were employed by a number of alliances, multiple state government agencies, local government agencies and companies established under the *Corporations Act 2001* to deliver infrastructure
- Three rail projects packaged into a rail infrastructure program designed to make the offering more attractive to the construct and design industries in 2006. An alliance between numerous key construction companies and QR Limited was formed. The combined delivery of these projects is now achieving considerable savings in time and cost. One of the projects involve straightening and duplicating the rail line between Caboolture and Landsborough on the North Coast line. The remaining two projects involve extending the rail line from Robina to Varsity Lakes and building a third track between Corinda and Darra to increase capacity for passenger and freight services on the Ipswich line
- Several road projects including the Maroochy River bridge duplication and upgrade of the Bruce Highway to six lanes from Uhlmann Road to Caboolture. In these projects, the government adopted a new approach called early contractor involvement . Early involvement of the contractor and the supply chain has resulted in a number of benefits including more scope for innovation, improved risk management and better forward planning of resource requirements.

Improving government processes

Not only has the Queensland Government continued to significantly invest in infrastructure spending in South East Queensland, it has developed and maintained processes to ensure funds are used efficiently and the impact of construction on the community is managed. The following initiatives are examples of better processes introduced over the life of this plan.

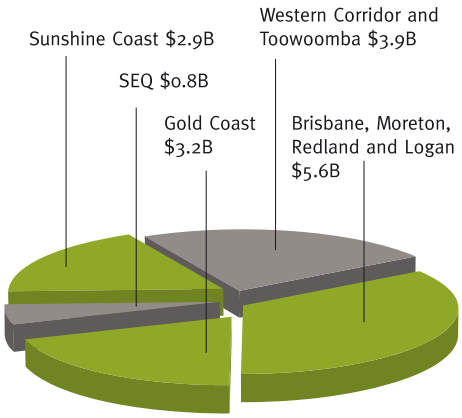
- Producing and maintaining a Community Engagement Index. This index is a database of community engagement activities, planning and infrastructure delivery activity by state agencies and local government. The index helps government at both levels to coordinate their community consultation activities to share experiences and resources in community consultation
- Developing and rolling out models for best practice project governance to ensure focus on service delivery outcomes and better project decision making
- Establishing the Gateway Review process. This is an independent peer review process undertaken at key project milestones. This process helps project owners by ensuring funds are well spent, and the project meets its strategic objectives and achieves value-for-money outcomes
- Developing corporate governance tools for companies established under the *Corporations Act 2001* to deliver infrastructure
- Monitoring and assessing regional and interstate competition for construction resources.

Figure 5 – Snapshot of infrastructure spending across the state



Note: This chart provides proposed capital spending of the SEQ Infrastructure Plan in 2009-10 against the balance across the state. SEQ Infrastructure Plan funding is inclusive of all funding sources.

Figure 6 – Cumulative expenditure to date by subregion



Note: South East Queensland spending of $0.8 billion includes SEQ-wide infrastructure projects and programs. Figures at 31 March 2009.

Summary of infrastructure investment

The SEQ Infrastructure Plan identifies an estimated $124 billion of infrastructure projects to support regional planning outcomes in South East Queensland to 2026.

This is about 32 per cent of infrastructure spending in Queensland for 2009-10.

Estimated investment over the life of the plan to 2026 has increased by $17 billion, from $107 billion in 2008 to $124 billion in 2009. This additional investment has arisen through the inclusion of completed project values; the indexation of costs to 2009 dollars to allow price consistency over the full timeframe of the program; inclusion of 32 additional infrastructure projects; rising construction costs; better cost estimates on planned projects through the review process; and inclusion of projects arising from investigations. The increase in the cost of the plan is across all funding sources including state, federal and local governments and the private sector.

Estimated transport investment includes contributions from the state and federal governments, Brisbane City Council and tolling companies. The total also includes investment by the Port of Brisbane Corporation Limited, a Queensland Government-owned corporation, for infrastructure to service the port's growing import and export trade.

Projects subject to funding from the federal government have been identified in the preferred delivery timeframes, but delivery is subject to the timing of federal funding.

Estimated water investment includes Queensland Government projects and funding assistance from the Queensland Government for projects being delivered by local government and water service providers.

Funding for electricity transmission and distribution is shown through to 2012–13. Investment beyond this time has not been identified, as capital works programs need to take account of growth in electricity demand and regulatory changes which may arise.

How to read the SEQ Infrastructure Plan

The SEQ Infrastructure Plan outlines significant infrastructure projects to support the SEQ Regional Plan. There are other government plans and reports to address matters that do not fall under this category.

The SEQ Infrastructure Plan is organised by infrastructure class. The transport section is further divided on a subregional basis, with additional coverage of freight activities and Port of Brisbane.

For each infrastructure class, there is a description of the government priorities. Additionally, for most infrastructure classes there is a program table, which reports the infrastructure projects supporting the SEQ Regional Plan, their indicative delivery timeframe and an estimated investment. This is the section that is tracked and measured by the Queensland Government.

Many projects described and listed in the SEQ Infrastructure Plan comprise a number of subprojects, each representing a separate component or stage of the overall project, and generally with varying delivery timeframes (overlapping, sequential or separated in time). In some cases, component subprojects have been bundled for delivery. For conciseness of presentation, these are represented as a single project and timeline.

The SEQ Infrastructure Plan is based on the planning horizon in the 2005 edition of the SEQ Regional Plan:

First phase

From 2009–10 to 2012–13: this phase represents the four-year Forward Estimates period of the state budget. It shows current funding commitments for the nominated

Table 2 Estimated investment identified in this infrastructure plan

Infrastructure class	Estimated investment to 2026 $M
Transport (including investigations)	94,624
Industry development	136
Water	4,559
Energy	3,312
Health	5,804
Education and training	2,901
Community services	3,570
Sport and recreation	184
Completed projects (2004-05 to 2008-09)	9,128
Total	124,218

Note:
A. Estimated investment is in 2009 dollars to allow price consistency over the full timeframe of the program. Estimates in the state budget and other documents may differ, as they may incorporate costs that reflect anticipated changes in input prices between initial planning and the time of construction. Estimated investment includes funds already expended on projects.
B. Infrastructure projects have been indexed to account for inflation and expected increases in construction costs. Refer below.
C. Where funding is required from sources other than the Queensland Government, their estimated costs have been included. Where projects are subject to federal funding, their timing is subject to negotiation with the federal government.

infrastructure projects in 2009 dollars and the timing for delivery of the projects.

Second phase

From 2013 14 to 2018 19: this phase complements the first phase and forms a planning period that aims to meet the strategic infrastructure objectives for the region, with estimated investment in 2009 dollars.

Third phase

From 2019 20 to 2025 26: this phase represents the longer term planning horizon of the SEQ Regional Plan. It includes infrastructure that is currently projected to be required over the longer term and which will be confirmed in future versions of the SEQ Infrastructure Plan. Project costs are estimated in 2009 dollars.

The SEQ Infrastructure Plan identifies key regional infrastructure investments by state agencies and government-owned corporations. It also refers to some federal and local government projects relevant to the SEQ Regional Plan. Where funding contributions are expected to be provided by the federal government and local government, these are noted. However, the timing and the delivery of these projects are not under the control of the Queensland Government. Where projects involve a subsidy payment to local government (for example, in the water sector), the expected Queensland Government funding allocation involved is outlined, pending agreement with local government on timing and implementation.

Cost estimates used in this SEQ Infrastructure Plan

All cost estimates provided in the SEQ Infrastructure Plan represent the best information available at present.

Estimated investment is in 2009 dollars to allow price consistency over the full timeframe of the program. Estimates in the state budget and other documents may differ, as they may incorporate costs that reflect anticipated changes in input prices between initial planning and the time of construction. Brisbane City Council projects are shown in out-turn dollars.

Rounding has been applied to projects with a pre-project or concept cost estimate (type 0, 1 or 2).

The level of planning that underpins the cost estimates varies with each project. Where detailed investigations have been completed and funding approved by the Queensland Government, estimates in the SEQ Infrastructure Plan reflect approved funding. Estimates for projects scheduled for delivery beyond the first phase of the plan are unlikely to have undergone detailed evaluation and generally include a contingency margin to reflect various project uncertainties.

Infrastructure investment is classified into five types depending on the level of investigation, approval and progress as follows:

Type 0 = Pre-project estimate: the earliest estimate of project cost and is undertaken before a concept design. It is generally based on the cost of similar projects plus a contingency.

Type 1 = Concept estimate: typically undertaken in the initial planning stages, and based on a concept design.

Type 2 = Pre-market estimate: based on a more detailed review of scope and requirements. This estimate is determined after the government has assessed the costs and benefits of a project.

Type 3 = Market price: the price agreed with the contractor. It is no longer an estimate nor is it a cost, since it has not been incurred.

Type 4 = Completed project cost: the total cost of the project, which will normally consist of the market price plus any variations.

Large projects comprising a number of subprojects may fall under two or more of the investment categories and this is reflected in the tables.

Part B
Infrastructure classes

Transport

Significant population growth in South East Queensland has led to a marked increase in public transport patronage, private vehicle use, and freight movements.

The SEQ Infrastructure Plan brings together all government planning documents to address the growing transport needs of the region and is the key document used for identifying projects that help tackle congestion in South East Queensland.

Tackling urban congestion

The Queensland Government is working to minimise urban congestion through providing quality public transport linking to major centres, building and maintaining an orbital motorway system, managing travel demand and developing the Principal Cycle Network. An Urban Congestion Taskforce has been established to tackle congestion across South East Queensland and is looking at innovative solutions through the following five core themes.

Land use and planning

Creating development patterns across South East Queensland, reducing the need for travel, through integrated planning and providing support for transit oriented developments.

Pricing and travel demand

Creating incentives for more efficient use of the existing network through travel demand management measures such as discounted multiple and longer journeys on public transport. These measures encourage less private vehicle travel, particularly during peak congestion periods.

Travel options

Creating a public transport and active transport network that is accessible, frequent and reliable. Funding goes to more cycling facilities, efficient bus-rail interchanges and more public transport, including buses and new rail rollingstock.

Efficiency

Maximising the efficiency of existing infrastructure investments through optimising the capacity and convenience of public transport networks, motorways and arterial roads.

Capacity

Building on additional infrastructure investment by providing more public transport infrastructure, including rail upgrades and extensions, busways, bus priority measures and station upgrades to complement major arterial road construction and tunnel projects.

Some of the recent achievements in relation to urban congestion include:

- New early morning trains from Caboolture and Ipswich, catering for an extra 15 000 commuters per week
- The introduction of specialised police patrols of state roads in peak times to coordinate quicker clearance of broken-down vehicles, or vehicles obstructing traffic
- Introduction of open roads legislation that gives police authority to efficiently clear stricken vehicles holding up traffic and their cargo from the road
- Two specially designed heavy-duty tow trucks located on the Gateway and Ipswich and Logan Motorways to reduce the clearance time of incidents from an average of three hours to an average of 30 minutes
- Investment in major cycle facilities including the Boggo Road cycleway, Toowong cycle and pedestrian overpass and Royal Brisbane and Women's Hospital end of trip cycle facility, which all allow access to a sustainable and reliable transport mode that provides an alternative to private vehicle travel trips.

Free-flow tolling in South East Queensland

The Queensland Government is committed to delivering an integrated road network that connects Queenslanders and supports the needs of our growing population. On 1 July 2009 free-flow tolling was introduced in South East Queensland. This will change the way road users travel on and pay for toll roads.

Free-flow tolling will play an important part in managing traffic congestion and improving safety on Queensland roads. Road users can plan their cross-town travel with greater confidence due to increased travel time reliability and simplicity of travel.

How free-flow tolling works

Using electronic tolling systems in place of cash toll booths removes the need to stop or slow down to pay tolls. Tolls are calculated using an electronic tag placed in the vehicle or video tolling technology to capture the details of a number plate. The toll is charged to the account holder as they travel through a tolling point.

Roads in South East Queensland to use free-flow tolling will include the Gateway Motorway and Logan Motorway by July 2009. Additionally the Clem7 tunnel, Hale Street Link and Airport Link will also use free-flow tolling when they open.

Benefits

Free-flow tolling is now accepted nationally and internationally as standard practice in planning and operating toll roads. It offers many benefits:

- Reduction in driver distraction, merging traffic at toll booths and driver frustration at the need to slow down
- Removing the need to slow down and stop to pay tolls means less emissions which is better for the environment
- Lower fuel consumption and reduced wear and tear on tyres and brakes.

Key to reducing urban congestion is smarter delivery of transport infrastructure. The SEQ Infrastructure Plan supports this aim in conjunction with other government initiatives:

- to manage travel demand and alleviate traffic congestion and freight bottlenecks
- to contribute to the government s climate change response strategy with initiatives such as reducing the need to travel and updating road design standards
- to provide for and promote the use of more sustainable transport (public transport, walking and cycling) as convenient, accessible and reliable alternatives to private vehicle travel trips
- by balancing infrastructure construction with improving public transport service levels and policy initiatives to deliver better value for money
- by using technology, such as intelligent transport systems, to better manage the transport network and improve efficiency of existing infrastructure
- by using best practice project costing and assessment methods to reliably prioritise transport system investments and ensure value for money in a tightening fiscal environment
- through alternative funding and project delivery approaches including increased use of public private and intergovernmental partnerships.

Meeting transport challenges will increasingly require different levels of government and the private sector to work in partnership. The state will continue to work in partnership with the federal government through the Infrastructure Australia program and the Building Australia Fund to improve relevant road and rail corridors to resolve priority infrastructure issues including urban traffic congestion.

The Queensland Government has acknowledged the possible impact of climate change in considering transport decisions, such as improving road design standards and choosing vehicle fleets. For example, the new Houghton Highway is designed to withstand a one-in-2000-year storm event, reflecting engineering lessons learned internationally after Hurricane Katrina hit New Orleans in 2005. The duplicate Houghton Highway Bridge will be approximately four metres higher than the existing bridge. This ensures Redcliffe will keep this vital link to Brisbane in the aftermath of a severe storm.

Furthermore, the government s public transport and heavy vehicle fleets are gradually being converted to more efficient, lower emission vehicles.

Given growth and development in the region, the government recognises the importance of securing transport corridors to meet long-term requirements. The SEQ Infrastructure Plan includes a number of ongoing strategic and corridor investigations to assess future transport needs, identify corridors that need to be preserved and commence land acquisition.

Supporting cycling in South East Queensland

In November 2007 the government released the Principal Cycle Network Plan (PCNP) for South East Queensland. The PCNP provides a framework for future cycle network planning and infrastructure in the region. The Cycle Network Program has been established to implement the PCNP through a comprehensive capital works and capital grants program. The program is managed by Smart Travel Centre Queensland and some key projects include:

- Stage one of the Brassall Bikeway Connection, a 2.9 kilometre off-road bikeway linking the Ipswich city centre with Brassall was completed in February 2009
- The Toowong Cycle and Pedestrian Overpass opened in March 2009 providing a much safer way for people to get across the Centenary Highway between Mt Coot-tha Road and the Bicentennial Bikeway near the Toowong roundabout
- As part of the Boggo Road busway project a cycleway link and overpass will connect O Keefe Street in Buranda over Ipswich Road to the new Princess Alexandra Hospital bus station finishing at Kent Street near Dutton Park rail station. It will be operational by late 2009
- A state-of-the-art cycle centre at the Royal Brisbane and Women s Hospital is being constructed as part of the Northern Busway
- Cycleways are under development in conjunction with the Gateway Upgrade Project and the combined Airport Link and Northern Busway project
- The King George Square Cycle Centre, Brisbane City s premier cycling facility became operational in May 2008 and provides 420 bicycle parking spots, change rooms and showers and other services to cyclists in the CBD.

Connecting SEQ 2031

The Queensland Government is currently preparing a new regional transport plan for South East Queensland titled Connecting SEQ 2031: An Integrated Regional Transport Plan for South East Queensland.

Connecting SEQ 2031 will provide a regional transport plan that serves the long term needs of the people living, working, recreating and conducting business in South East Queensland.

It will respond to new and emerging transport challenges, support the review of the SEQ Regional Plan and the SEQ Infrastructure Plan while presenting a strategic framework for developing the future transport network for the region. The Connecting SEQ 2031 draft plan will be released in late 2009 and residents of South East Queensland will have an opportunity to provide their ideas and comments on the plan.

Public transport initiatives

Successful first year of the *go card*

After being introduced in January 2008 to the TransLink network, the roll-out of the paperless ticketing system across the entire TransLink network was completed in June 2008. Cutting-edge technology enables passengers to seamlessly travel on TransLink's bus, rail and ferry services, making public transport quicker and easier. Public transport users have embraced the go card, with over 200 000 go cards in circulation by early December 2008—six months ahead of predictions. South East Queensland is using Australia's largest public transport system to successfully roll out smart card technology.

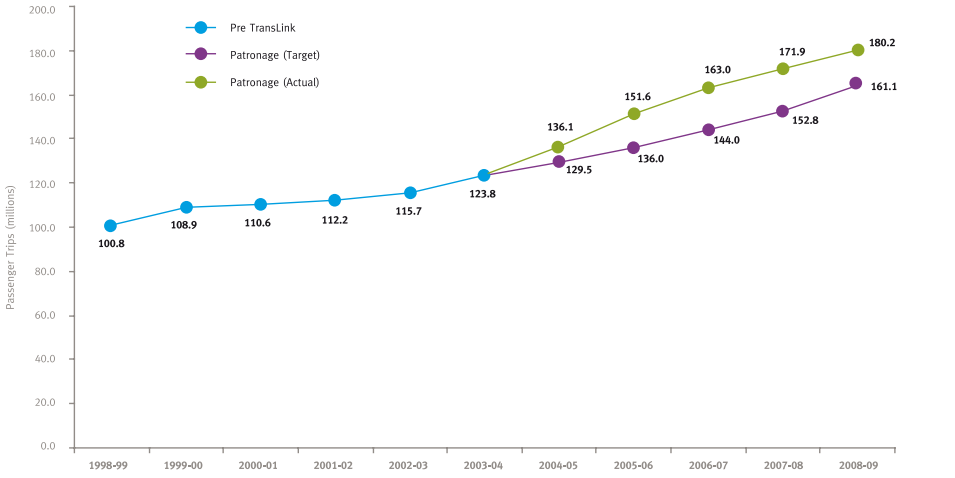
TransLink Transit Authority

The TransLink Transit Authority began operating on 1 July 2008 and is the statutory body responsible for improving and expanding public transport services across South East Queensland. Customers can now access a new single point of contact for public transport services, information and feedback 24 hours a day, seven days a week. The authority is responsible for coordinating all TransLink public transport services across all modes in the region, and managing passenger infrastructure including railway station upgrades, park 'n' ride facilities, bus stations and stops. Transport station upgrades will be constructed to improve disability access.

Public transport patronage

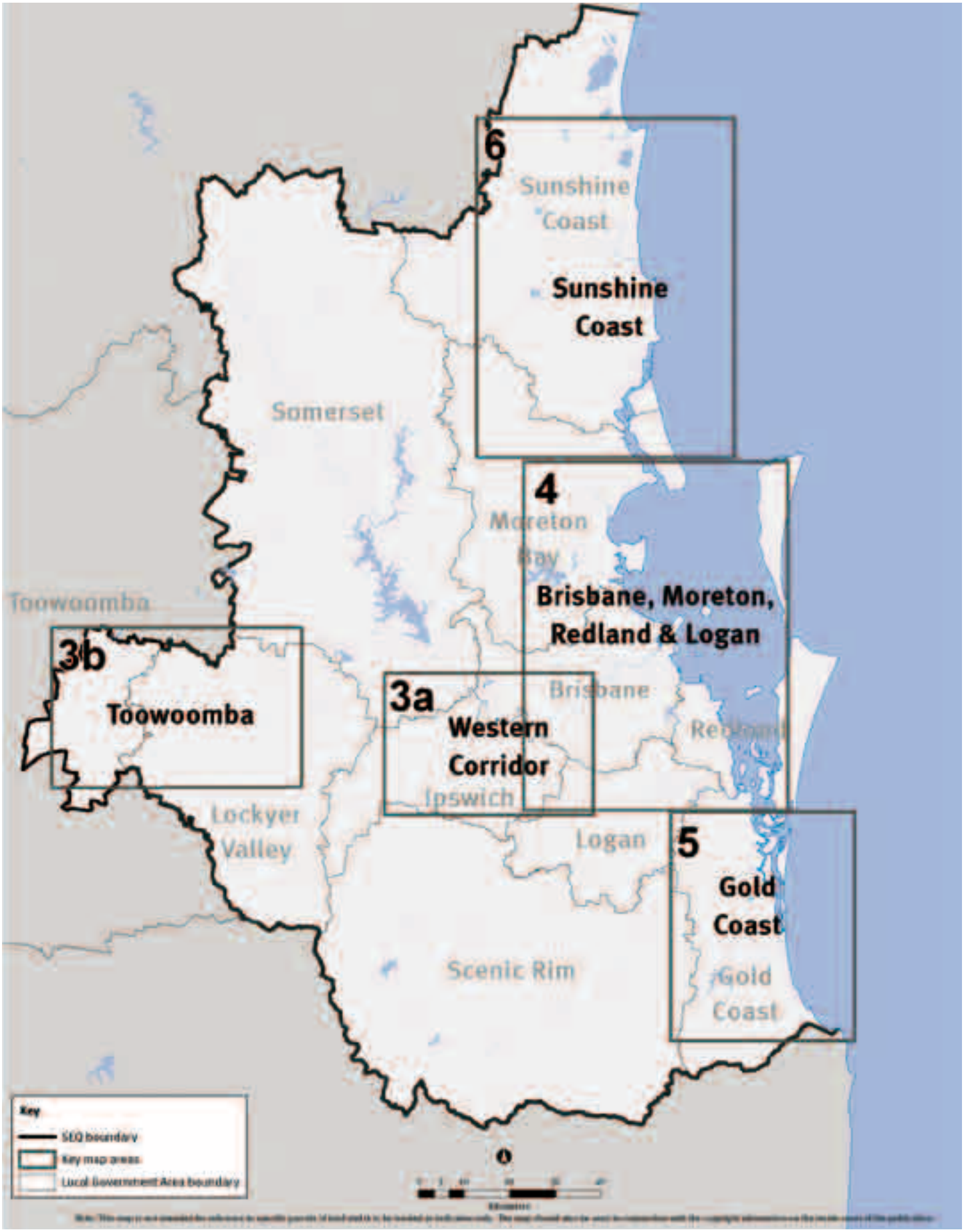
Growth in public transport usage across South East Queensland has soared almost 40 per cent since 2004. Approximately 174 million passenger trips were undertaken on the TransLink network in 2007–08, up from 163 million during 2006–07. The increase in demand is due to a number of factors including the success of integrated ticketing, the roll-out of extra public transport services and infrastructure and the boosted frequency of services.

Figure 7 – Public transport patronage



(Source – TransLink 2009)

Map 2 Transport infrastructure subregions



Western Corridor

The Western Corridor subregion is defined in this plan as the City of Ipswich, the Scenic Rim Regional Council, the Lockyer Valley and Somerset Regional Council and the part of the Toowoomba Regional Council formerly identified as Toowoomba City.

A significant share of the regions population growth will occur in the Western Corridor from Wacol through Ipswich City to Amberley and includes Ebenezer, Swanbank, Ripley Valley and Springfield. This corridor will also be a focus for new industrial development. Development in the Western Corridor is a key feature of the SEQ Regional Plan to encourage residential and industrial growth away from the coast. Timely provision of transport infrastructure to support this development in the Western Corridor will be vital.

Table 3 outlines a transport infrastructure investment program for the Western Corridor. To support population and employment opportunities around the centres of Ipswich, Springfield and Ripley Valley, the program focuses on:

- reducing traffic congestion, upgrading capacity and improving safety on existing key links, especially the Ipswich Motorway
- improving and providing new roads and public transport facilities to service growing population centres
- development of the Principal Cycle Network
- investigating the long-term transport requirements of the subregion and preserving transport corridors to cater for future growth.

Priority infrastructure projects

- *Reducing traffic congestion, upgrading capacity and improving safety on existing key links, especially the Ipswich Motorway*

  The efficiency and safety of the Ipswich Motorway is paramount. It is a key interstate and inter-regional commuter and freight route linking the Western Corridor to the rest of South East Queensland. A partnership between the Queensland and federal governments will deliver the Dinmore to Gailes section of the Motorway by 2012 13.

- *Improvements in capacity on the Ipswich rail line*

  The Ipswich line is being upgraded with additional rail tracks in various locations to provide more capacity for both commuter and freight trains.

- *Improving and providing new road and public transport links*

  New public transport infrastructure is needed to link the Ipswich city centre with recently developed precincts such as The University of Queensland Ipswich Campus and Springfield Town Centre, and the future Yamanto and Ripley Valley town centres, Swanbank Business Park and Redbank Plains South. A corridor is being preserved to service these centres in the future.

As the first integrated road and rail project ever delivered in Queensland, construction of the first stage of the rail and four-lane road to Springfield has commenced and is progressing well. The works include rail from Darra on the Ipswich line to a new station at Richlands and a four-lane extension of the Centenary Highway to north of the Logan Motorway. Ultimately, the project will deliver a four-lane extension of the Centenary Highway from the Ipswich Motorway to Springfield, including a new Logan Motorway interchange, and a new rail line between Darra and Springfield.

- *Supporting active transport modes*

  Cycling infrastructure continues to be planned and delivered in the subregion.

Progress on transport projects in the Western Corridor in 2008 09

- Works are underway on the Logan Motorway Ipswich Motorway interchange and on the upgrade of the Wacol to Darra section of the Ipswich Motorway with completions expected in 2009 and 2010 respectively.
- The Ipswich rail line is being upgraded to cater for the public transport needs of existing and future residents in the Western Corridor. Construction has commenced on the third and fourth tracks from Corinda to Darra and upgrades of Oxley and Darra stations with completion expected in early 2010.
- Construction of Darra to Springfield Transport Corridor Project (stage one Darra to Richlands) commenced in July 2008 and is expected to be completed by 2011.
- The pedestrian and cycle bridge (Springfield Link Bridge) near Woodcrest College over the road rail corridor was completed in October 2008.
- To provide access to the future Ripley Valley community and emerging industry at Yamanto, a two-lane extension of the Centenary Highway from Springfield to Yamanto was completed in June 2009.
- Construction of the Brassall Bikeway Connection stage one, a 2.9-kilometre off-road bikeway linking the Ipswich city centre with Brassall was completed in February 2009.

Transport investigations

To provide certainty, preserve corridors and assist other planning, the following strategic transport investigations and corridor identification projects are underway.

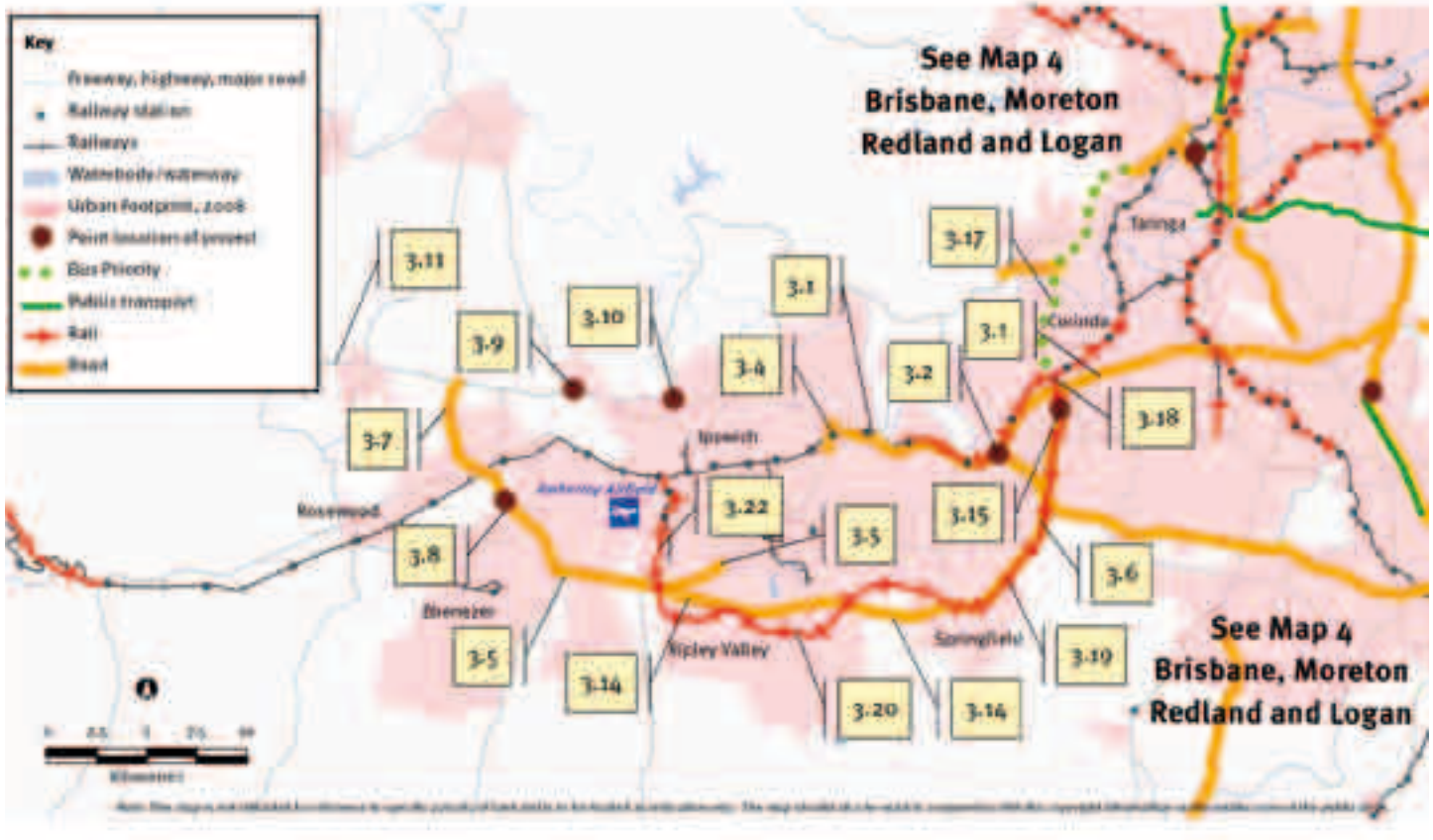
- *Southern Freight Rail Corridor*

  To boost future rail freight capacity in the region, and separate freight activity from sensitive residential areas, a study of the preferred alignment for a dedicated freight-only corridor is being finalised. This corridor, eventually comprising a preferred dual-gauge freight rail line would connect emerging industrial precincts in the Ipswich area, particularly Ebenezer, with the standard-gauge interstate rail line in the vicinity of the Bromelton Enterprise Precinct. These sites have been identified as being strategically located to take advantage of this next phase of industrial development.

- *Logan Motorway Upgrade investigations*

  Upgrades to the Logan Motorway are needed to meet forecast passenger and freight demand, service emerging logistics hubs and integrate with capacity improvements currently under construction on, or scheduled for, the Ipswich and Gateway motorways. An investigation is underway to determine these essential upgrades.

Map 3a - Western Corridor transport infrastructure



Map 3b - Toowoomba transport infrastructure

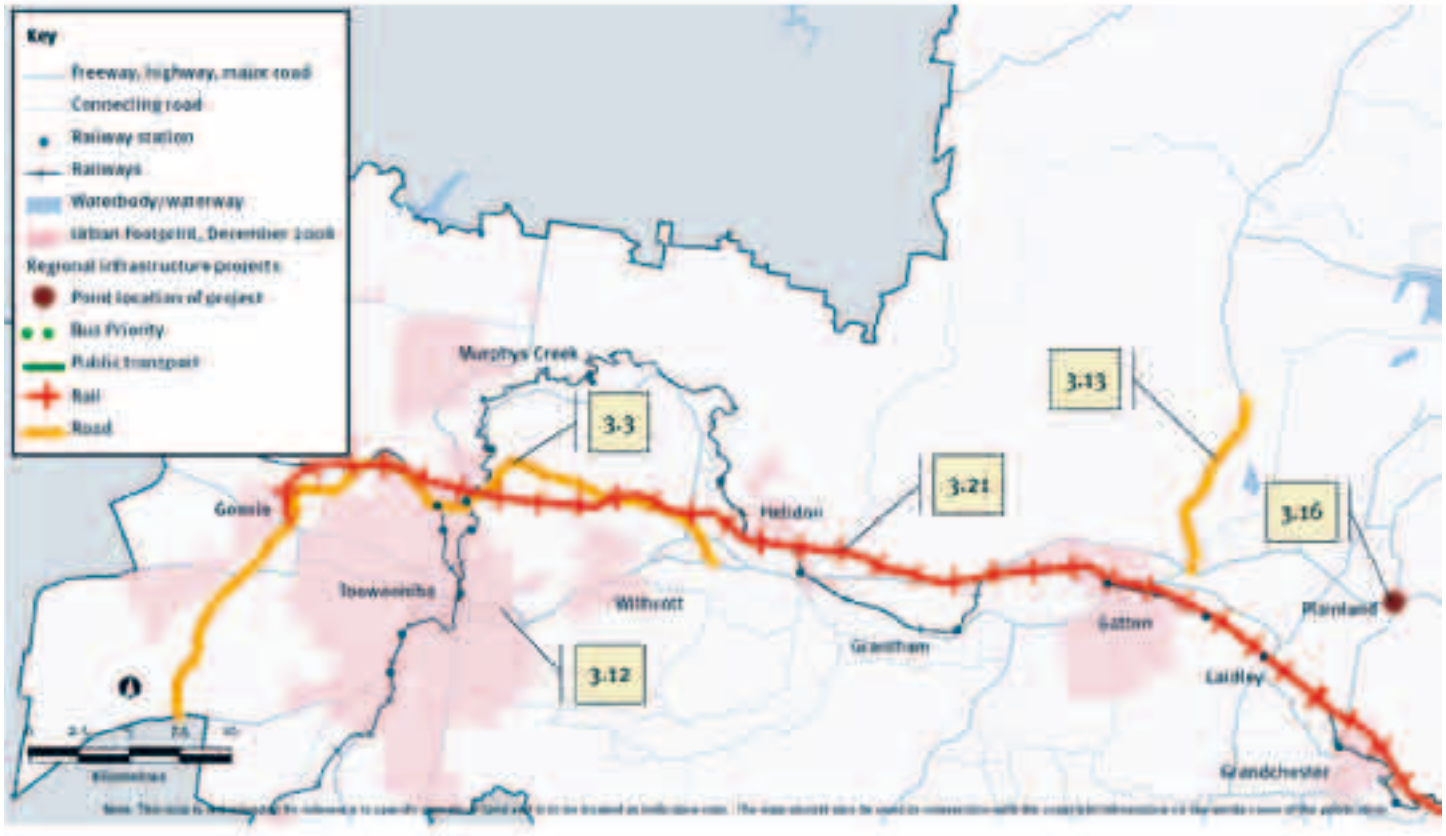


Table 3 - Western Corridor and Toowoomba transport infrastructure

Maps 3a and 3b ref	Project	Estimated investment $M	Estimate category (see note D)	Completed projects $M	Delivery timeframe		
					2009-10 to 2012-13	2013-14 to 2018-19	2019-20 to 2025-26
Motorways, highways, major roads							
3.1	Ipswich Motorway upgrade: Dinmore to Darra to Rocklea	3,678	0 & 3		Timing subject to federal contributions		
3.2	Ipswich Motorway upgrade: Logan Motorway interchange	255	3				
3.3	Toowoomba Bypass	1,390	2 & 4		Timing subject to federal contributions		
3.4	Cunningham Highway to Warrego Highway connection	83	1 & 4		Timing subject to federal contributions		
3.5	Cunningham Highway four lanes: Ripley Road to Ebenezer	950	0 & 1		Timing subject to federal contributions		
3.6	Centenary Highway four lanes: Ipswich Motorway to Springfield	1,128	2 & 3				
3.7	Western Ipswich Bypass: new road and interchange	600	0 & 1		Timing subject to federal contributions		
3.8	Western Ipswich Bypass: five-mile bridge	55	0 & 1		Timing subject to federal contributions		
	Southern Infrastructure Corridor (road: Yatala to Cunningham Highway) Study	60	0				
3.9	Warrego Highway-Brisbane Valley highway interchange	254	1 & 4		Timing subject to federal contributions		
3.10	Warrego Highway: Muirlea interchange and service roads	230	0		Timing subject to federal contributions		
3.11	Warrego Highway: safety improvements Ipswich to Gatton	40	0				
3.12	Warrego Highway: Toowoomba intersection upgrades	90	0		Timing subject to federal contributions		
	Intelligent Transport Systems (to manage congestion)	65	0				
3.13	Gatton to Esk road upgrade	35	1				
3.14	Centenary Highway two lanes: Springfield to Yamanto		4	366	Completed 2008-09		
3.15	Centenary Highway Boundary Road underpass (joint Brisbane City Council and Main Roads project)		4	43	Completed 2007-08		
	Ipswich Motorway alternative northern corridor investigation		4	10	Completed 2007-08		
3.16	Warrego Highway: Plainlands interchange		4	14	Completed 2005-06		
Walking and cycling							
	Subregional cycle network	55	1 to 3				
Busways and bus priority							
3.17	Centenary Highway bus priority/transit lanes Ipswich Motorway to Toowong	340	0				
	High-occupancy vehicle network program	80	1				
	TransLink subregional station upgrade program	132	1 to 3				
Rail infrastructure							
3.18	Ipswich rail line Corinda to Darra, Darra to Redbank third rail track	521	1 & 3				
3.19	Springfield passenger rail line	837	1 & 3				
3.20	Ipswich to Springfield rail line	1,500	1				
3.21	Gowrie to Grandchester rail line	1,400	1				
	Southern Freight Rail Corridor Study (Rail: Ebenezer to interstate standard gauge rail)	4	3				
3.22	Ipswich to Springfield Public Transport Corridor Study		4	4	Completed 2007-08		
Total		13,782		437			

Construction started

Notes

A. The table identifies the expected delivery timeframe for each infrastructure project. The darker shade represents projects that are under construction at 1 July 2009.

B. Estimated investment is in 2009 dollars to allow price consistency over the full timeframe of the program. Estimates in the state budget and other documents may differ, as they may incorporate costs that reflect anticipated changes in input prices between initial planning and the time of construction. Estimated investment includes funds already expended on projects.

C. Where funding is required from sources other than the Queensland Government, their estimated costs have been included. Where projects are subject to federal funding, it is noted as timing of these projects is subject to negotiation with the federal government.

D. For an explanation of estimate categories, refer to page 19.

E. Where a project has been completed or a stage of a project completed, it is noted in the table.

Greater Brisbane

The Greater Brisbane subregion is defined in this infrastructure plan as the cities of Brisbane, Logan and Redland; and the Moreton Bay Regional Council area.

Greater Brisbane is expected to house a large proportion of the total development proposed for South East Queensland. In outer areas such as Caboolture and Redland, most of this development will occur on broadhectare sites. Within Brisbane city an increasing amount of redevelopment will occur around existing activity centres (such as the Brisbane CBD, Chermside and Indooroopilly), public transport nodes and infill development sites (sites intended for development). Table 4 outlines a transport infrastructure investment program for the Greater Brisbane area. Strategic transport needs in this area include:

- providing quality public transport infrastructure and services to improve access to major centres as well as along key routes linking these 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 and efficiency to cater for growth
- investigating the long-term transport requirements of the subregion and preserving transport corridors.

Priority infrastructure projects

- *Providing quality public transport infrastructure and services to link activity centres with the CBD*

  This will improve access to major centres as well as provide a link to activity centres with CBD public transport infrastructure, such as railways and busways. They are being expanded and upgraded in areas where the SEQ Regional Plan encourages growth. Plans are underway to build new and expand existing busways along northern, southern and eastern transport corridors. Priority busway projects include the Northern Busway (Royal Children s Hospital Windsor Kedron), continuing work on the Boggo Road Busway and Eastern Busway (Princess Alexandra Hospital Buranda Mains Avenue section). For rail, new rollingstock is continuing to be delivered as well as a program of station and line upgrades.

- *Building and maintaining a high-standard orbital motorway system*

  A quality orbital road network is necessary to link centres outside the inner city, particularly the Australia TradeCoast and to preserve mobility for inter-regional freight. Construction is progressing on Queensland s largest road and bridge project, the Gateway Upgrade Project, with completion expected by mid 2011. This project includes duplication of the Gateway Bridge and an upgrade of 20 kilometres of motorway. Advanced technology, including intelligent transport systems, will be installed to better manage the Greater Brisbane motorway system.

- *Managing congestion and travel demand*

  Planning for the grade separation of the Mains Road-Kessels Road intersection in Brisbane s south is well advanced and will reduce traffic congestion and social impacts on the Brisbane Urban Corridor. The new Clem7 (previously known as North South Bypass Tunnel) and Airport Link projects will help relieve congestion in Brisbane. Construction of Brisbane City Council s Clem7 tunnel, which will provide a direct cross river link between Woolloongabba and Bowen Hills, is due for completion in 2010.

  The Airport Link toll road will be 7 kilometres long and includes a 5.7-kilometre tunnel. It will connect the Clem7 tunnel, Inner City Bypass and local road network at Bowen Hills to the northern arterials of Gympie Road and Stafford Road at Kedron and Sandgate Road and the East West Arterial in the north-east. Construction commenced in early 2009 and is scheduled for completion by 2012.

- *Development of the Principal Cycle Network*

  Active transport choices, such as cycling and walking, are being encouraged and this plan identifies the infrastructure necessary to achieve it. The construction of improved cycle infrastructure includes the Toowong Cycle and Pedestrian Overpass completed March 2009, a cycleway as part of the Boggo Road Busway project, Royal Brisbane and Women s Hospital Cycle Centre, and the Kurilpa Bridge at North Quay currently under construction. The subregional cycle network will continue to be expanded through the rollout of the Cycle Network Program. The Queensland Government also has a range of capital works projects in cooperation with local governments through a dollar-for-dollar capital grants program.

- *Increasing road capacity to cater for growth*

  Construction is well underway on the Houghton Highway bridge duplication and bus priority project at Redcliffe. The project features three traffic lanes, a pedestrian and cycle path and a dedicated fishing platform, and is scheduled for completion in 2011. The upgrade of the Pine Rivers to Caboolture section of the Bruce Highway to six lanes is scheduled for completion in 2009. The Uhlmann Road to Caboolture section will be the final section to be completed. Upgrading the Mt Lindesay Highway from Green Road to Rosia Road is underway with completion expected in late 2009. Preliminary work towards upgrading the Pacific Motorway from Springwood to Daisy Hill, including work on the Loganlea interchange, has commenced.

Progress on transport projects in Greater Brisbane in 2008 09

- Construction continues on the Northern Busway (Royal Children s Hospital to Windsor) and is due for completion late 2009. Construction of the Windsor to Kedron section (in conjunction with Airport Link) has commenced.
- Section one of the Eastern Busway between the Princess Alexandra Hospital (PAH) and Buranda is under construction and due for completion by August 2009.
- Section two of the Eastern Busway between Buranda and Main Avenue has commenced, with detailed design and community consultation underway.
- The Boggo Road Busway (Eleanor Schonell Bridge to PAH) is on schedule and is due to be completed by August 2009.
- February 2009 saw the final of 24 three-car trains (or sets) delivered for use in the QR network. Building of an additional 20 three-car trains has commenced. Delivery will be progressively rolled out until late 2010.
- Significant progress has been achieved on the Gateway Upgrade Project. Construction of the bridge s 10-span, 700 metre, northern approach is now complete and work on the main river span segments is now underway at both river piers. Free flow tolling was introduced on 1 July 2009 and several of the free flow tolling gantries, replacing tolling booths, have been installed across both the Gateway and Logan motorways.
- Tunnelling works for Brisbane City Council s Clem7 tunnel is progressing. Florence, the southbound tunnel boring machine has completed its 4.3 kilometre journey from Bowen Hills to Woolloongabba. The northbound tunnel boring machine, Matilda, broke through at Woolloongabba in late May 2009.
- Construction is well underway on the grade separation of Beaudesert Road and the interstate rail line at Acacia Ridge and is expected to be completed in 2010. This project will eliminate waiting times for motorists and provide options for future expansion of the rail road inter-modal freight terminal at Acacia Ridge.
- Cycle infrastructure is also being constructed across Brisbane including the Toowong Cycle and Pedestrian Overpass, which was completed in March 2009. Another cycleway, as part of the Boggo Road Busway, is due to be complete late 2009. The Royal Brisbane and Women s Hospital Cycle Centre will be complete in late 2009.
- The TransLink sub-regional station upgrade program is currently underway including the University of Sunshine Coast bus station upgrade and Klumpp Road bus lane in southern Brisbane. Other projects commenced in 2009 are Greenbank RSL park n ride expansion, Dinmore rail station park n ride and Moggill Road park n ride.

Transport investigations

The following studies explore options for the further development of the transport network in the Greater Brisbane area.

- *Western Brisbane Transport Network Investigation*

  The Western Brisbane Transport Network Investigation is a major study that guides development of the transport network across western Brisbane for 20 years and beyond. The investigation identifies a number of initiatives that are required to meet the expected growth in travel that necessitates additional infrastructure and enhanced public transport services in the sub-region. Information is available at www.wbtni.net.au

- *East West Arterial Planning Study and Corridor Preservation*

  The SEQ Infrastructure Plan includes a planning study and corridor preservation for Stafford Road in Brisbane s north west, from Gympie Road to South Pine Road in Everton Park. The final outcomes of the Western Brisbane Transport Network Investigation will guide the scope of this study.

- *Brisbane – Gold Coast Transport Network Investigation*

  The Brisbane – Gold Coast Transport Network Investigation is a major study that will evaluate the long-term transport needs between Brisbane and the Gold Coast, including east–west connections, to support the region's continuing economic development. Like other recent studies, it will examine the contribution that can be made by all transport modes across this highly urbanised and rapidly growing area.

- *Further TransApex investigations*

  Brisbane City Council has completed a detailed feasibility study of the Northern Link proposal as part of its TransApex plan. Northern Link is a proposed tunnel and toll road project, approximately 4.5 kilometres long, linking the Western Freeway at the Toowong roundabout to the Inner City Bypass at Kelvin Grove. Council released its Environmental Impact Statement (EIS) for public and agency comment in the second half of 2008. The submission period for the Northern Link Environmental Impact Statement has closed and the evaluation will be conducted by the Coordinator-General. In 2007, the federal government announced partial funds for this project.

- *Increased rail capacity in inner Brisbane*

  Brisbane's inner city rail network is the 'hub' of the rail network in South East Queensland. Its capacity limits the number of additional trains that can be introduced on the lines servicing the whole region. Given the existing growth in demand, service increases and proposed extensions to the rail network, by 2016 the limited capacity of the Merivale Bridge and the existing CBD rail tunnels will significantly constrain rail services through inner Brisbane. The initial Inner City Rail Capacity Study was completed in January 2009. It identified the options available for increasing capacity and assessed them. Options included support for an integrated inner city transport network and for future expansion of the CBD and inner city. The study found the track capacity of the inner city rail network will need to be doubled by 2026. The state government has released the outcomes of the study, which included underground tunnel options to increase rail capacity. The federal government contributed $20 million to undertake a Brisbane Inner City Rail feasibility study, to determine potential route alignment, construction timetables and a preferred funding model. This study has commenced and will be complete by mid 2011.

- *Gateway Motorway (Nudgee Road – Bruce Highway)*

  Ongoing development of the Australia TradeCoast and increasing north–south transport movements through Brisbane city will continue to place demand on the Gateway Motorway. A study is underway developing upgrade options to improve safety on the motorway and cater for increased travel demand, focusing on the 16 kilometres of the Gateway Motorway from Nudgee Road to the Bruce Highway.

- *Mt Lindesay – Beaudesert Strategic Transport Network Investigation*

  The Mt Lindesay – Beaudesert Strategic Transport Network Investigation is considering the pedestrian, cyclist, public transport, freight and road infrastructure requirements for the area. The investigation covers new developments, such as Yarrabilba, Flagstone, Greenbank, Park Ridge and the Bromelton Enterprise Precinct. To support population growth in the Mt Lindesay – Beaudesert area, a further study will consider an alignment of a north-south arterial road east of the Mt Lindesay Highway that would connect with the planned southern infrastructure corridor linking Yatala and Ebenezer.

- *Salisbury to Beaudesert Passenger Rail Study*

  The Salisbury to Beaudesert Passenger Rail Study will identify and preserve rail corridor land suitable for possible future passenger rail infrastructure. The study will identify engineering feasibility, including rail station locations that integrate with the proposed urban pattern of development.

- *Australia TradeCoast Transport Study*

  The Australia TradeCoast Transport Study is funded by several agencies in South East Queensland, concerned with developing a transport system that contributes to the growth of the Australia TradeCoast area as a significant employment and economic hub in the region by 2026. Sponsors include the Port of Brisbane Corporation, the Brisbane Airport Corporation, state and local government agencies and Australia TradeCoast. Some of the challenges the study will address include capacity constraints and the anticipated doubling of freight and increased travel in the next 20 years, on both the road and rail networks.

- *Moreton Bay Integrated Transport Study*

  The Moreton Bay Regional Council is experiencing rapid population growth. State and local governments are working together to identify how transport networks can be integrated to best serve the land use pattern envisaged for this sub-region in 2031.

- *Western and north western public transport corridor studies and Gympie Road Transit Study*

  This investigation will include detailed planning for three projects: bus rapid transit between Kenmore and the Brisbane CBD via Moggill Road and Coronation Drive corridors, an extension of proposed bus rapid transit from the Northern Busway at Kedron to Bracken Ridge within or parallel to the Gympie Road corridor and public transport priority from the north-western suburbs to the Brisbane CBD.

- *South East Queensland High Occupancy Vehicle Network Strategy and Plan*

  A High Occupancy Vehicle network strategy and implementation plan will promote efficient priority vehicle movement, and ensure a consistent planning approach across all subregions. These strategies and plans will be developed as part of a broader state-wide policy to inform the allocation of road space in South East Queensland.

Map 4 Brisbane, Moreton, Redland and Logan transport infrastructure

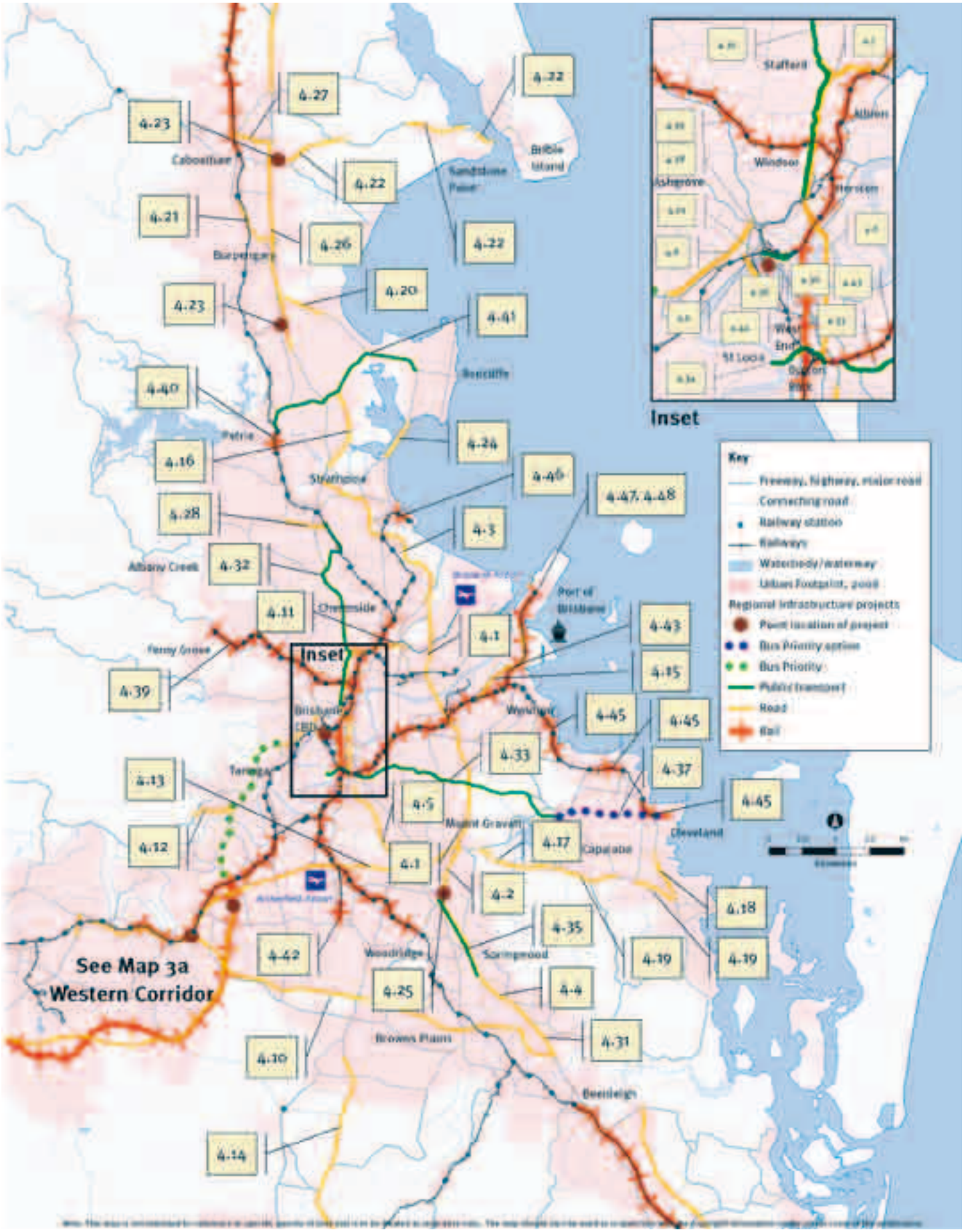


Table 4 - Brisbane, Moreton, Redland and Logan transport infrastructure

Map 4 ref no.	Project	Estimated investment $M	Estimate Category (see note D)	Completed projects $M	Delivery timeframe		
					2009-10 to 2012-13	2013-14 to 2018-19	2019-20 to 2025-26
Motorways, highways, major roads							
4.1	Gateway Motorway upgrade: Mt Gravatt–Capalaba Road to Nudgee Road including Gateway Bridge duplication	1,866	3				
4.2	Gateway Motorway upgrade: Mt Gravatt–Capalaba Road to Pacific Motorway	1,200	0		Timing subject to federal contributions		
4.3	Gateway Motorway upgrade: Nudgee to Bruce Highway	2,600	0		Timing subject to federal contributions		
4.4	Pacific Motorway Upgrade: Gateway to Logan Motorway	1,900	1 & 2		Timing subject to federal contributions		
4.5	Pacific Motorway upgrade: Juliette Street to Klumpp Road	90	0				
4.6	Clem7 (North–South Bypass Tunnel)(BCC project)	2,088	3				
4.7	Airport Link	3,302	3				
4.8	Northern Link: Toowong to Kelvin Grove (BCC project)	1,800	0				
4.9	Hale Street Link (BCC project)	370	3				
4.10	Logan Motorway upgrade: Ipswich Motorway to Pacific Motorway	4,000	0				
4.11	East–West Arterial upgrade: Airport Link to Gateway Motorway	301	3				
4.12	Kenmore Bypass: Western Freeway to Moggill Road	350	0				
4.13	Brisbane Urban Corridor (Granard Road & Kessels Road) intersection upgrades	1,100	0, 1 & 2		Timing subject to federal contributions		
4.14	Mt Lindesay Highway upgrade: Green Road to Jimboomba	573	0,1,3 & 4				
4.15	Port of Brisbane Motorway	1,300	1				
4.16	North–South Arterial: Mango Hill	340	0				
4.17	Redland sub-arterial road upgrade: Mt Gravatt–Capalaba Road to Tingalpa Creek	190	2				
4.18	Cleveland–Redland Bay Road upgrade: South Street to Boundary Road	70	2				
4.19	Redland Bay Road upgrade: Tingalpa Creek to Cleveland–Redland Bay Road	80	2				
4.20	Deception Bay Road upgrade: Bruce Highway to Lipscombe Road	95	1				
4.21	Burpengary–Caboolture Road upgrade: Bruce Highway to Gaffield Street	140	2				
4.22	East–west links: Caboolture to Bribie Island Road additional lanes	320	0 & 1				
4.23	Bruce Highway intersection upgrades: Pumicestone Road, Boundary Road and Bribie Island Road	210	0				
4.24	Houghton Highway duplication and bus priority	314	3				
4.25	Logan Road intersection upgrade: Miles Platting Road–Padstow Road	11	0				
4.26	Bruce Highway: additional lanes from Boundary Road to Caboolture	411	3 & 4				
	Intelligent Transport Systems (to manage congestion)	80	0				
4.27	Caboolture Northern Bypass		4	89	Completed 2007-08		
4.28	Linkfield Connection Road		4	30	Completed 2005-06		
Walking and cycling							
	Subregional Cycle Network	223	1 to 4				
4.29	Kurilpa Bridge	63	3				
4.30	Additional pedestrian/cycle bridge in the CBD	90	0				
4.31	Pacific Motorway Bikeway	16	2, 3 & 4				
	Subregional Walking Network Program	170	0				
Busways and bus priority							
4.32	Northern Busway: Royal Children's Hospital to Kedron to Bracken Ridge	2,635	1 & 3				
4.33	Eastern Busway: Buranda to Capalaba	3,264	1 & 3				
4.34	Eastern Busway: Buranda to Princess Alexandra Hospital to Boggo Road to Eleanor Schonell Bridge	358	3				
4.35	South East Busway: extension to Springwood	230	1				
4.36	Brisbane Cross River Bus Access	430	0				

Table 4 continued - Brisbane, Moreton, Redland and Logan transport infrastructure

Map 4 ref no.	Project	Estimated investment $M	Estimate Category (see note D)	Completed projects $M	Delivery timeframe
					2009-10 to 2012-13 / 2013-14 to 2018-19 / 2019-20 to 2025-26
	SEQ HOV Network Program	460	1		
	TransLink subregional station upgrade	331	1 to 4		
4.37	Redland bus priority measures	130	1		
4.38	Inner Northern Busway improvements and new busway stations		4	493	Completed 2007-08
Rail infrastructure					
4.39	Mitchelton to Keperra to Ferny Grove track duplication	104	1 & 4		1 or more stages complete
4.40	Lawnton to Petrie third rail track	95	1		
4.41	Petrie to Redcliffe Rail Corridor (including study) (F)	550	1		
	New passenger rail stock (78 x three-car sets)	1,012	2 & 3		
	New passenger rail stock (40 x three-car sets)	600	0		
4.42	Grade separation of Mt Lindesay Highway and interstate rail, Acacia Ridge	139	3		
4.43	Metropolitan freight capacity upgrades	98	1 & 3		
4.44	Inner City Rail Capacity	15,000	1		
4.45	Cleveland Rail Corridor upgrades	375	1		
4.46	Sandgate to Shorncliffe rail duplication	40	1		
	Train Servicing Depot	240	1		
Port infrastructure					
	Port of Brisbane Infrastructure	2,265			
4.47	Berth and Wharf 11 & 12 ($342M)				
4.48	Hamilton Site Redevelopment ($65M)				
Transport Investigations					
	Western Brisbane transport network investigation	19	3		
	Mt Lindesay Beaudesert strategic transport network investigation	1	3		
	Gympie Arterial investigation and preservation: Stafford Road to Roghan Road	60	0		
	Stafford Road investigation and preservation: Gympie Road to South Pine Road	65	0		
	Brisbane Gold Coast transport network investigation	25	1		
	Acacia Ridge intermodal access: road network investigations	2	1		
	Gateway Motorway: Nudgee Road to Bruce Highway Planning Study	6	3		
	Gateway Motorway extension south of Logan Motorway investigation and preservation	70	0		
	New Transport Investigations	18	2		
	Public Transport corridor preservation	250	1		
	Northern Link: Toowong to Kelvin Grove tunnel investigation		4	5	Completed 2008-09
	Inner City Bus Access Capacity Study		4	2	Completed 2008-09
	Hamilton/Eagle Farm Transport Investigation		4	0.2	Completed 2007-08
	Australian TradeCoast Transport Study		4	1	Completed 2006-07
	Further TransApex investigations: Airport Link		4	21	Completed 2006-07
	Salisbury to Flagstone/Greenbank passenger rail investigation		4	0.5	Completed 2006-07
Total		54,535		641.7	

Construction started

Notes

A. The table identifies the expected delivery timeframe for each infrastructure project. The darker shade represents projects that are under construction at 1 July 2009.

B. Estimated investment is in 2009 dollars to allow price consistency over the full timeframe of the program. Brisbane City Council projects are shown in out-turn dollars. Estimates in the state budget and other documents may differ, as they may incorporate costs that reflect anticipated changes in input prices between initial planning and the time of construction. Estimated investment includes funds already expended on projects.

C. Where funding is required from sources other than the Queensland Government, their estimated costs have been included. Where projects are subject to federal funding, it is noted as timing of these projects is subject to negotiation with the federal government.

D For an explanation of estimate categories, refer to page 19.

E. Where a project has been completed or a stage of a project completed, it is noted in the table.

F. Funds include $4 million for a business case and implementation plan by 2010.

Port of Brisbane

The Port of Brisbane is Australia s third largest and fastest growing container port. It is a key driver of economic growth throughout South East Queensland.

World-class port

Managed by the Port of Brisbane Corporation Limited, a Queensland Government-owned corporation, the port provides world-class cargo-handling and warehousing facilities.

Progressively developed since 1976, the port is a modern, purpose-built 750-hectare facility at the mouth of the Brisbane River, just 24 kilometres from Brisbane s CBD. Unlike its competitor ports in Sydney and Melbourne, the Port of Brisbane is unencumbered by urban encroachment and associated operational restrictions. Average annual container growth over the past 10 years has been 12 per cent. In 2007 08, there was record total trade of 30.2 million tonnes equating to 7.7 per cent growth from the previous year and representing the 15th year of continuous growth. Container trade reached almost 943 000 twenty-foot containers (or equivalent units) in 2007 08, and motor vehicle trade grew by 8.1 per cent to reach approximately 221 000 vehicles.

Although import trade levels are expected to slow in 2008 09 in line with the global economy, export markets are looking promising. With the recent drought-breaking rain, the export of grain and cereals is expected to perform strongly.

Despite the slowing in economic growth in the short term, positive growth in the long term is expected and so the ability to expand the quay-line and terminal space is vital. Berth 10 was commissioned on 3 February 2009 and within the next five years, two more new container berths will be completed and 80 hectares of terminal space developed. The ability to continue meeting the demands of long term growth has been assured through the construction of a 4.5-kilometre seawall to enclose an additional 230 hectares. This will enable the construction of up to four new berths and provide backup land for terminals and other port-related uses.

The port is well connected to major road infrastructure and improvements to transport corridors are designed to keep pace with the ongoing construction of port-related infrastructure. To achieve this, the Queensland Government works closely with the Port of Brisbane Corporation Limited and the federal government.

On 2 June 2009, the Queensland Government announced its intention to sell the Port of Brisbane Corporation Limited s business and assets. It is expected that the sale of the Port of Brisbane Corporation Limited will take place in the next three to five years however in the interim it is a business as usual approach with the port continuing to meet the service and infrastructure needs of the trade and shipping industry.

Progress of Port of Brisbane projects in 2008 09

- Completion of the extension of the grain wharf and terminal in June 2008 and Berth 10 in February 2009.
- Continued works on the general purpose Berth will be completed by the end of 2009.
- Construction will continue on Berth and Wharf 11 and 12 at Fisherman Islands in order to accommodate the strong growth across a range of commodity areas. Berth and Wharf 11 is expected to be finalised by 2012 and Berth and Wharf 12 is expected to be completed by 2014.

Gold Coast

The Gold Coast subregion extends from Yatala in the north to the New South Wales border in the south. Significant population and activity growth in this area will challenge the capability of the existing local transport system. Public transport needs to play an increasing role in moving people efficiently within the Gold Coast.

The emphasis in this plan is on expanding public transport infrastructure and services to relieve traffic congestion and provide more travel options for residents. Quality public transport links are needed to connect the Gold Coast s major centres and developing areas. Road projects will support the investment in public transport by providing both corridor space for public transport within the Gold Coast and increased capacity for inter-regional travel demand, particularly for road freight.

Key priorities include:

- linking major destinations and major coastal activity centres with improved public transport services
- improving passenger rail services on the Gold Coast rail line
- upgrading the Pacific Motorway and other roads to alleviate congestion
- developing the Principal Cycle Network
- identifying and preserving transport corridors to cater for future growth.

Priority infrastructure projects

- *Linking major destinations and coastal activity centres with improved public transport services*

  Various east-west road projects will support continued economic growth and make best use of the passenger rail line and expanding rail services by providing additional capacity for public transport and alleviating traffic congestion between existing and emerging activity centres. Smith Street Motorway will be upgraded with additional lanes between the Pacific Motorway and Parklands Drive to assist access to the new Gold Coast hospital.

- *Improving passenger rail services on the Gold Coast rail line*

  Sections of track are being duplicated and the rail line extended from Robina to Varsity Lakes, with a proposed extension south of Varsity Lakes in the longer term. The draft site master plan for a transit oriented development at the Varsity Lakes station was released in November 2008 and early stages of land development will commence when the Varsity Lakes Rail Station opens in late 2009. The master plan includes developing residential, retail and office space around the new train station.

- *Upgrading the Pacific Motorway and other roads to alleviate congestion*

  The Pacific Motorway is part of the National Land Transport Network and its importance as a freight route is growing. Upgrading the motorway between Nerang and Tugun, and improving local transport connections, are essential investments. Interchanges will be upgraded to improve safety and capacity. Planning for upgrading the Pacific Motorway from Nerang to Stewart Road is progressing. Construction on the Nerang south interchange has commenced as the first stage. Following completion of the Tugun Bypass, the interchange section from Terminal Drive to Bilinga on the Gold Coast Highway will be upgraded to cater for the change in traffic flows. In Labrador, the Gold Coast Highway will be widened to four lanes from Government Road to Robert Street. The widening of Hope Island Road to four lanes from Oxenford to Santa Barbara Road was completed in September 2008. The next section to Columbus Drive will follow.

- *Preserving the intra-regional transport corridor between Nerang and Stapylton*

  Preservation of this corridor provides options to meet future north south travel demand within the Gold Coast and improve access to growth areas around Coomera.

Progress on transport projects on the Gold Coast in 2008 09

- The Tugun Bypass is now finished, with an average of about 44 000 vehicles using the bypass each day. It was opened to traffic on 2 June 2008, six months ahead of schedule.
- Duplication of the rail track between Helensvale and Robina was completed in August 2008. Construction is progressing well on the Robina to Varsity Lakes rail extension which is due to be complete in late 2009.
- Twenty-four new three-car passenger trains have now been built and put into service. It is expected a further 20 x 3 car sets will be delivered by late 2010, with further orders currently being negotiated.
- Planning continues on the Gold Coast Rapid Transit Project from Parkwood Helensvale to Broadbeach, with the final concept design and impact management plan completed. In addition to funding from state and local governments, the federal government has contributed $365 million towards construction of the Gold Coast Rapid Transit project, Parkwood to Broadbeach.

Map 5 Gold Coast transport infrastructure

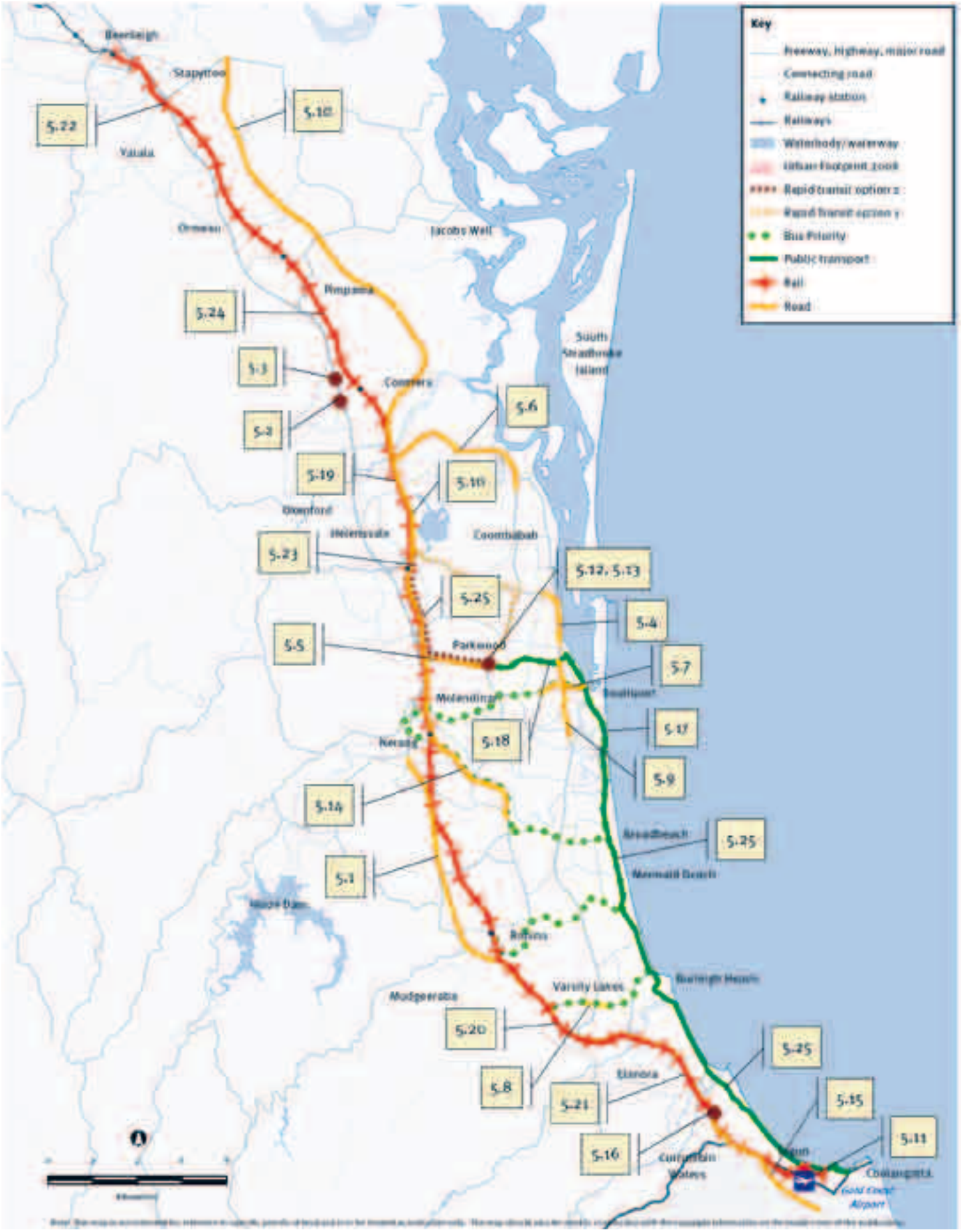


Table 5 – Gold Coast transport infrastructure

Map 5 ref no.	Project	Estimated investment $M	Estimate category (see note D)	Completed projects $M	Delivery timeframe		
					2009-10 to 2012-13	2013-14 to 2018-19	2019-20 to 2025-26
Motorways, highways, major roads							
5.1	Pacific Motorway: additional lanes and interchange upgrades: Nerang to Stewart Road	3,389	1 & 3		Timing subject to federal contributions 1 or more stages completed		
5.2	Pacific Motorway: Coomera interchange (Foxwell Road)	183	1 & 3		Timing subject to federal contributions 1 or more stages completed		
5.3	Pacific Motorway: additional Coomera interchange	120	0		Timing subject to federal contributions		
5.4	Gold Coast Highway: additional lanes from Government Road to Stevens Street	145	3 & 4		1 or more stages completed		
5.5	Smith Street: additional lanes from Pacific Motorway to Olsen Avenue	65	0				
5.6	Hope Island Road: additional lanes from Pacific Motorway to Columbus Drive	164	3 & 4		1 or more stages completed		
5.7	Southport–Nerang Road: additional lanes from Minnie Street to Queen Street	95	1				
5.8	Burleigh Connection Road: additional lanes from Mattocks Road to Kortum Drive	40	0				
5.9	Southport–Burleigh Road: intersection upgrades	95	0				
5.10	Intra-regional Transport Corridor (corridor preservation): Nerang to Stapylton	30	1				
5.11	Gold Coast Airport access upgrade	30	0				
5.12	Gold Coast University Hospital access	130	0				
5.13	Gold Coast Knowledge Precinct access	210	0				
	Intelligent Transport Systems (to manage congestion)	50	0				
5.14	Nerang–Broadbeach Road upgrades: bus lanes and intersection upgrade	65	2 & 4		1 or more stages completed		
5.15	Pacific Motorway: Tugun Bypass		4	543	Completed 2007-08		
5.16	Pacific Motorway: Stewart Road Currumbin interchange (Tugun Bypass)		4	17	Completed 2004-05		
Walking and cycling							
	Subregional cycle network	139	1 to 3				
Busways and bus priority							
5.17	Gold Coast Highway: bus priority and bus stations	26	3 & 4		1 or more stages completed		
	High-occupancy vehicle network program	120	1				
	TransLink subregional station program	133	1 to 4				
5.18	Bus priority on Smith Street: Olsen Avenue to Gold Coast Highway		4	7	Completed 2007-08		
Rail infrastructure							
5.19	Coomera to Helensvale, Kuraby to Kingston: additional tracks	360	1				
5.20	Southern extension of rail line: Robina to Elanora	1,159	0 & 3				
5.21	Southern extension of rail line: Elanora to Coolangatta	700	0				
5.22	Beenleigh to Gold Coast Corridor: additional track and upgrades	110	0				
5.23	Helensvale to Robina, Salisbury to Kuraby: additional track and upgrades		4	328	Completed 2008-09		
	New passenger rail stock: (24 x 3-car sets)		4	289	Completed 2008-09		
5.24	Ormeau to Coomera: track duplication		4	20	Completed 2006-07		
Public transport infrastructure							
5.25	Gold Coast Rapid Transit Project: Parkwood–Helensvale to Broadbeach to Coolangatta	1,800	2				
Total		9,358		1,204			

Construction started

Notes

A. The table identifies the expected delivery timeframe for each infrastructure project. The darker shade represents projects that are under construction at 1 July 2009.

B. Estimated investment is in 2009 dollars to allow price consistency over the full timeframe of the program. Estimates in the state budget and other documents may differ, as they may incorporate costs that reflect anticipated changes in input prices between initial planning and the time of construction. Estimated investment includes funds already expended on projects.

C. Where funding is required from sources other than the Queensland Government, their estimated costs have been included. Where projects are subject to federal funding, it is noted as timing of these projects is subject to negotiation with the federal government.

D. For an explanation of estimate categories, refer to page 19.

E. Where a project has been completed or a stage of a project completed, it is noted in the table.

Sunshine Coast

The Sunshine Coast subregion comprises the area administered by the Sunshine Coast Regional Council, and incorporates the former shires of Noosa and Maroochy and the City of Caloundra. The principal activity centre for this subregion is Maroochydore, which accommodates the key business, service and retail enterprises. Other major centres in the region are Caloundra, Nambour and Noosa. There are emerging centres at Beerwah, Kawana Town Centre and Sippy Downs and a future major activity centre at Caloundra South.

As the residential population expands, particularly in the emerging areas of Sippy Downs and Caloundra South, and employment activity increases, transport demand will increase and its focus will change. To support private travel, public transport and freight movement, the road network must mature to provide adequate access between key community facilities, emerging residential areas and the existing coastal activity centres. Upgrading of the north south and east west grid road network needs to occur to alleviate congestion. The Bruce Highway s important role as the gateway to the rest of the state must also be preserved.

Table 6 outlines a transport infrastructure investment program for the Sunshine Coast. To support greater self-containment of travel and economic growth within the Sunshine Coast, the program focuses on:

- providing improved access between Maroochydore and Caloundra and emerging population centres, including improved public transport
- increasing the capacity of the north coast rail line and upgrading connections between the rail line and coastal activity centres
- enhancing the safety and efficiency of the Bruce Highway, a national transport link
- developing the Principal Cycle Network
- investigating the long-term transport requirements in the subregion and preserving transport corridors to cater for future growth.

Priority infrastructure projects

- *Providing improved access between Maroochydore and Caloundra and emerging population centres, including improved public transport*

  The CoastConnect Caloundra to Maroochydore project is being developed to provide a quality public transport network between Caloundra and Maroochydore. Corridor options have been identified and potential staging opportunities and timing of delivery are being investigated. A new bus station at the University of the Sunshine Coast is currently being built and construction of a dedicated bus access road is due to commence in 2009. A priority is to extend the Sunshine Motorway south from the Mooloolah River Interchange to Caloundra Road within an existing Multi Modal Transport Corridor (MMTC), which is designed to cater for future road and public transport infrastructure. The southern-most section of this new motorway between Caloundra Road and Creekside Boulevard was completed in April 2009.

- *Increasing the capacity of the north coast rail line and upgrading connections between the rail line and coastal activity centres*

  The north coast rail line is being upgraded between Caboolture and Landsborough. The first stage, Caboolture to Beerburrum, was operational in April 2009 with two new station buildings and 14 kilometres of duplicated track. Planning is underway for the remaining 17 kilometre section between Beerburrum and Landsborough. This will reduce travel times between these centres. Further improvements in the track s alignment and duplication are being planned between Landsborough and Nambour. Steve Irwin Way, from the Mooloolah Connection Road to the Bruce Highway will be duplicated to cater for the increasing traffic volumes between the coastal areas and the hinterland.

- *Enhancing the safety and efficiency of the Bruce Highway, a national transport link*

  A section of the Bruce Highway from Federal to Traveston would be inundated by the lake formed by the proposed Traveston Crossing Dam. Replacing this section of the highway will occur as part of the planned upgrade of the Bruce Highway between Cooroy and Curra.

- *Supporting active transport modes*

  Cycling infrastructure continues to be planned in the subregion.

Progress on transport projects on the Sunshine Coast in 2008 09

- Corridor options have been consulted on and are being further refined for the CoastConnect project (Caloundra to Maroochydore bus corridor). The preparation of the concept design and impact management plan will determine the preferred alignment, staging and timing of delivery.
- An additional 14 kilometres of duplicated track on the north coast rail line and upgrade of two existing stations between Caboolture and Beerburrum are complete.
- Planning for the upgrade and duplication of the north coast rail line between Landsborough and Nambour is well advanced with the project s environmental impact statement being considered by government.
- Preliminary planning on the approved alignment and station locations of the CAMCOS rail corridor (Beerwah to Maroochydore) is complete. Planning and impact assessment of the alignment at Caloundra South and Maroochydore is underway.
- The Sunshine Motorway Sippy Downs to Kawana Way upgrade was completed in July 2008.
- The Sunshine Motorway from Maroochydore Road to Pacific Paradise upgrade was completed in March 2009.
- Construction of the new Caloundra Road to Creekside Boulevard road link was completed in April 2009.
- Maroochydore Road, from the Bruce Highway through to Kunda Park, has been upgraded to four lanes and was completed in late 2008.
- Construction work on Caloundra Road between the Bruce Highway and Pierce Avenue was completed in April 2009. This completes the upgrade of Caloundra Road to four lanes.
- Construction commenced in March 2008 on a new road over the rail line connecting Beerwah Parade, Roberts Road, Peachester Road and Steve Irwin Way. Construction of Beerwah grade separation works continue and are expected to be complete by late 2009.

Transport investigations

To assist future transport infrastructure planning and delivery for the Sunshine Coast, the following investigations are either underway or proposed.

- *Multi Modal Transport Corridor to improve access to emerging communities*

  Investigations are underway for the Multi Modal Transport Corridor between Caloundra Road and Maroochydore. These investigations include an extension of the Sunshine Motorway south from the Mooloolah River Interchange to Creekside Boulevard together with the Caboolture to Maroochydore Corridor Study (CAMCOS). Included in this investigation is an extension of Nicklin Way through the Mooloolah River Interchange and extending north into Maroochydore.

  The Bells Creek connection study will examine extending the Creekside Boulevard to Caloundra Road link further south to Bells Creek. The study, which will look at the potential route and project timing, is programmed for 2009 2013. The Sunshine Motorway Study for the section from the Kawana Way Interchange to the Mooloolah River Interchange will determine the infrastructure needed to complete duplicating the Sunshine Motorways east west section and to support the MMTC.

- *Beerwah to Caloundra to Maroochydore Public Transport Corridor part of CAMCOS*

  Planning and land acquisition will continue for an integrated public transport corridor between Beerwah and Maroochydore on the CAMCOS alignment. Refinements to the alignment at Caloundra South and at the Caloundra aerodrome site, at Kawana, and into the Maroochydore central business centre are being investigated.

- *CoastConnect (Maroochydore to Nambour) and CoastConnect (Maroochydore to Noosa) formerly the Nautillus Study*

  This project has investigated options for public transport corridors and nodes to link Maroochydore to Nambour and to Noosa.

- *Bruce Highway from Caboolture to Sunshine Motorway*

  The studies will determine the road transport needs for the Bruce Highway from Caboolture to the Sunshine Motorway at Tanawha. The studies will focus on protecting the role of the Bruce Highway as part of the national network and establishing alternative routes for trips that would be better served by local roads. It will improve safety by removing all remaining at-grade intersections (where two or more roads either meet or cross at the same level) and reviewing existing interchanges. The studies will guide future investment by the federal and Queensland governments.

- *General Aviation Strategy*

  The first stage of this study has looked at the general aviation needs of the region. Stage two, which commenced in 2008, has looked at the aviation needs of the Sunshine Coast in particular, including a strategy for relocating services from the existing Caloundra and Caboolture aerodromes to a new facility. A preferred location is to be identified in 2009 for concept planning and feasibility studies. The replacement aerodrome is scheduled for completion by the end of 2014 when current leases on the Caloundra aerodrome expire.

Map 6 – Sunshine Coast transport infrastructure

Table 6 Sunshine Coast transport infrastructure

Map 6 ref no.	Project	Estimated investment $M	Estimate category (see note D)	Completed projects $M	Delivery timeframe		
					2009-10 to 2012-13	2013-14 to 2018-19	2019-20 to 2025-26
Motorways, highways, major roads							
6.1	Bruce Highway upgrade: Cooroy to Gympie	3,358	1 & 3		Timing subject to federal contributions		
6.2	Bruce Highway upgrade: corridor preservation Caboolture to Caloundra Road	2	0		Timing subject to federal contributions		
6.3	Bruce Highway upgrade: Caloundra Road to Sunshine Motorway	450	0		Timing subject to federal contributions		
6.4	Bruce Highway interchanges: Johnstone Road to Bells Creek Road	120	0		Timing subject to federal contributions		
6.5 & 6.6	MMTC: Caloundra Mooloolaba Road duplication: Caloundra Road to Creekside Boulevard to Maroochy Boulevard (including Mooloolah River Bridge)	3,400	0				
6.7	Sunshine Motorway upgrade: Pacific Paradise to Doonan	1,500	0				
6.8	Sunshine Motorway extension: Mooloolah River to Kawana Way	140	0				
6.9	Bells Creek connection: Bruce Highway to Caloundra Road	700	0		Timing subject to developer contribution		
6.10	Maroochydore Road: additional lanes from Bruce Highway to Martins Creek	109	3		1 or more stages completed		
6.11	East West links: Eumundi to Noosa Road upgrade	160	0				
6.12	East West links: Steve Irwin Way (Glasshouse Mountains Road) upgrade	130	2				
6.13	East West links: Yandina to Coolum	65	0				
6.14	Nambour Connection Road upgrades	230	0				
	Intelligent Transport Systems (to manage congestion)	60	0				
6.15	Caloundra Road: additional lanes from Bruce Highway to Pierce Avenue		4	80	Completed 2008-09		
6.16	Sunshine Motorway upgrade: Maroochydore Road to Pacific Paradise (including Maroochy River Bridge)		4	235	Completed 2008-09		
6.17	Sunshine Motorway: Sippy Downs to Kawana Arterial		4	66	Completed 2008-09		
6.18	MMTC: Caloundra Mooloolaba Road (new two-lane road): Caloundra Road to Creekside Boulevard		4	75	Completed 2008-09		
6.19	KTIA Nicklin Way: additional lanes		4	7	Completed 2005-06		
Walking and cycling							
	Subregional cycle network	139	1 to 3				
Busways and bus priority							
	High-occupancy vehicle network program	120	1				
	TransLink subregional station upgrade program	66	1 to 3				
6.20	CoastConnect: Caloundra to Maroochydore quality bus corridor	350	1				
Rail infrastructure							
6.21	Caboolture to Beerburrum to Landsborough: additional rail line	673	1 & 4		1 or more stages completed		
6.22	Landsborough to Nambour: additional rail line	1,800	1				
6.23	Rail crossing grade separation: Beerwah	70	3				
Public transport infrastructure							
6.24	CAMCOS: Beerwah to Maroochydore	3,300	1				
	Nautilus Study	6	3				
Aviation							
6.25	General Aviation Strategy: Replacement Aerodrome Study for Caloundra and Caboolture Aerodromes	1	3				
Total		16,949		463			

Construction started

Notes

A. The table identifies the expected delivery timeframe for each infrastructure project. The darker shade represents projects that are under construction at 1 July 2009.

B. Estimated investment is in 2009 dollars to allow price consistency over the full timeframe of the program. Estimates in the state budget and other documents may differ, as they may incorporate costs that reflect anticipated changes in input prices between initial planning and the time of construction. Estimated investment includes funds already expended on projects.

C. Where funding is required from sources other than the Queensland Government, their estimated costs have been included. Where projects are subject to federal funding, it is noted as timing of these projects is subject to negotiation with the federal government.

D. For an explanation of estimate categories, refer to page 19.

E. Where a project has been completed or a stage of a project completed, it is noted in the table.

Freight

Transportation of goods and services is vital to the region s economic development and growth. The freight task in Queensland has accelerated rapidly over the past nine years with forecast data suggesting it will more than double in South East Queensland by 2020 with expected demand driven by strong population growth and economic activity. This is likely to place increasing pressure on key road and rail corridors, particularly those supporting the Port of Brisbane s rapidly expanding import and export activities.

The challenge is to continue to deliver an integrated transport system that is safe and efficient and promotes the movement of freight. The South East Queensland Regional Freight Network Strategy supports the implementation of the SEQ Regional Plan, which acknowledges freight as an important issue for the region. This strategy aims to encourage efficient freight movement across the transport network taking into account economic development, safety, quality of life and environmental sustainability. As part of this strategy the SEQ Infrastructure Plan identifies a number of initiatives to improve freight movement in South East Queensland. Key initiatives for each subregion are outlined in the respective sections within the plan.

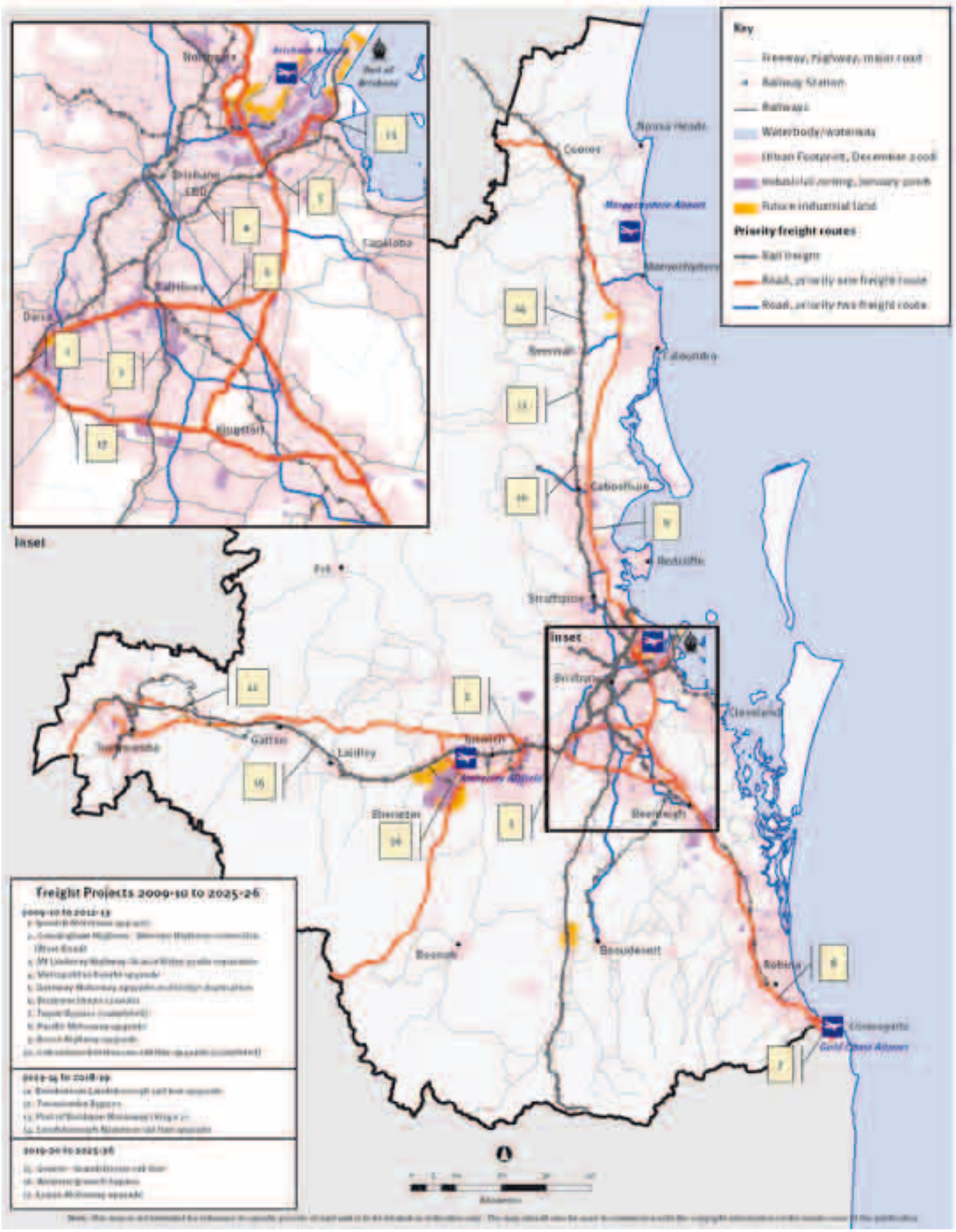
A quality orbital road network is necessary to better link localities such as the Australia TradeCoast with the rest of Brisbane and beyond. Construction is progressing on the Gateway Upgrade Project and Ipswich Motorway and Bruce Highway upgrades. In addition, investigations into an upgrade of the Logan Motorway and an extension to the southern end of the Gateway Motorway are underway.

Current investigations of rail network capacity, particularly through the city of Brisbane (between Mayne and Fairfield), are allowing for future activity and growth for both passenger and rail freight tasks. Various transport investigations are also taking place in South East Queensland s future growth areas to ensure transport networks will sufficiently cater for the increase in freight needed to service growing communities.

The Southern Rail Freight Corridor is intended to increase and streamline future freight capacity, by segregating freight movements from conflicts with passenger and other transport activities.

Map 7 identifies the key existing and future freight connections and the proposed investigations necessary for optimum freight movement within and through South East Queensland.

Map 7 Regional freight infrastructure



Activity centre renewal and transit oriented development

A key focus of the SEQ Regional Plan is to encourage infill of existing urban areas, particularly through redeveloping suburbs around activity centres and public transport nodes. To deliver this, the SEQ Regional Plan adopts integration of urban development, transport infrastructure, community services and employment as a key strategy for creating vibrant communities and achieving more efficient use of urban land.

The SEQ Regional Plan intends transit oriented development principles be applied as part of detailed planning for all regional activity centres and land in close proximity to high-capacity, high-frequency public transport nodes and corridors.

The Queensland Government is primarily focussing on achieving transit oriented development outcomes in three priority areas:

- major public transport nodes, public transport corridors and state landholdings within a 10-kilometre radius of the Brisbane CBD
- regional activity centres identified in the SEQ Regional Plan
- major new and planned public transport infrastructure including broadhectare areas.

Transit Oriented Development Taskforce

The Transit Oriented Development Taskforce was established in 2005 to support implementation of transit oriented development policy contained in the SEQ Regional Plan. The taskforce includes representatives from state and local government, academia and the planning and development industry. They provide leadership and advice on transit oriented development institutional arrangements, policy, projects, research and education.

Since the taskforce was established, key achievements regarding transit oriented development have included:

- recommending governance arrangements
- preparing interim selection criteria to assist local governments to find appropriate locations
- developing criteria to guide the state's allocation of funding
- developing car-parking principles
- developing submissions for the Smart State Council's Smart Cities report and the SEQ Regional Plan review
- advising the government on the opportunities and priorities project.

Progress on activity centre renewal and transit oriented development in 2008–09

- 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.

- The 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.
- 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.
- A master plan for Varsity Station Village was released in 2008. Construction of the Varsity Station Village will start in 2010, when the Varsity Lakes train station is to be opened.
- Construction is underway on the Boggo Road Urban Village, which is a transit oriented community. In February 2009 the government released an Expression of Interest for developers to take up further opportunities in the Boggo Road Urban Village.

Urban Land Development Authority

The Urban Land Development Authority (ULDA) was established in November 2007. It was established to help make housing more affordable and to deliver a range of housing options for the changing residential needs of Queenslanders.

The ULDA s role is to plan, carry out and coordinate land development in selected urban areas such as strategic infill and redevelopment sites which are declared by the government as urban development areas (UDAs).

The ULDA is a statutory authority established under the *Urban Land Development Authority Act 2007* with initial funding of $25 million over three years. The ULDA is a key vehicle to deliver transit oriented development throughout the state.

The ULDA plans for future land use and infrastructure delivery, provides land to market and regulates development within the declared UDAs.

The government initially nominated five strategic locations in the Queensland Housing Affordability Strategy to be the responsibility of the ULDA. Bowen Hills and Northshore (Hamilton) were declared as UDAs in March 2008 and Fitzgibbon UDA was declared in July 2008. Mackay Showgrounds and Woolloongabba are yet to be declared.

The achievements of ULDA in the last 12 months include:

- facilitating development in Bowen Hills, Northshore Hamilton and Fitzgibbon UDAs in accordance with the respective interim land use plans
- public consultation on the proposed development schemes including a land use plan, infrastructure plan and implementation strategy for Bowen Hills, Northshore Hamilton and Fitzgibbon UDAs
- finalising the development schemes for Bowen Hills and Northshore Hamilton to be introduced by government regulation
- preparing new interim land use plans for Bowen Hills and Northshore to ensure protection of the areas while government approval for the final development schemes was obtained.

Industry development

TowardQ2: Tomorrow's Queensland is the Queensland Government's 2020 vision for the future of the state. Part of this vision is to create a diverse economy powered by bright ideas. In support of this, the Smart Industry Policy has identified 15 priority industry sectors that are essential to Queensland's continuing drive towards a modern, globally competitive and future-focused economy. A number of projects in the SEQ Infrastructure Plan directly support these industries and the emerging innovation and technology precincts named in the SEQ Regional Plan.

The convention and conference market continues to be a significant contributor to the Queensland economy and the government has invested in major upgrades of convention centres in Brisbane and the Gold Coast. Convention bureaus are recognised worldwide as vital to promoting destinations both for business investment and visitation. They contribute to the overall development of tourism by:

- providing a further channel to attract new visitors
- creating expenditure in the region from business travel
- contributing to local employment and training opportunities.

It is essential that sites for future industrial development are protected to allow opportunities which give Queensland businesses a strategic competitive advantage. Such sites should be developed in response to market demand and supported with infrastructure and services delivered in a coordinated and timely manner.

The government is also creating a world-standard home for Queensland researchers and scientists. This includes a new Ecosciences Precinct at the Boggo Road Urban Village in Brisbane, a Health and Food Sciences Precinct, completing the existing Queensland Health Forensic and Services Campus at Coopers Plains and stage one of the Pharmacy Australia Centre of Excellence at the Princess Alexandra Hospital (a University of Queensland project).

Convention and conference centres

Brisbane Convention and Exhibition Centre expansion

The Brisbane Convention and Exhibition Centre expansion is a $136 million project 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.

The new expanded facility will be the only convention venue in Australia to have three stand-alone plenary halls covering meetings from 400 to 8000, two ballrooms, three speakers' presentation centres and six executive boardrooms.

Design development was completed in February 2008. The project is due for completion in 2010.

Gold Coast Convention and Exhibition Centre stage two extension

The recently completed extension of the Gold Coast Convention and Exhibition Centre means the centre can now host larger national and international events, providing seating for up to 6000 patrons and more than doubling the space in the exhibition hall to 10 000 square metres.

Land for industry

To support growth within South East Queensland, the Queensland Government is undertaking a range of initiatives to ensure sufficient supply of suitably located and serviced industrial land and supporting infrastructure. Current initiatives include:

- Industrial land supply and demand analysis. Industrial land supply and demand studies are being undertaken in the Ipswich-Western Corridor and the Moreton Bay region (Caboolture, Pine Rivers, Redcliffe and northern Brisbane). The analysis is looking at location, amount, timing, other market demands and infrastructure needed
- Specific industry sector studies and projects including aviation and marine. One major aviation project underway is the replacement aerodrome study for Caloundra and Caboolture aerodromes. Studies also underway are investigating marine infrastructure and activities in South East Queensland
- Planning and design of infrastructure corridors and facilities to support economic growth and regional connectivity. This includes the Southern Freight Rail Corridor between Rosewood and Beaudesert, and investigations for future intermodal (road/rail) freight facilities at Bromelton and Purga
- Site identification and land use planning of employment-generating projects such as the Amberley Aerospace Park and Special Industry Estates Study.

Science precincts

Ecosciences Precinct

As Australia s first centre dedicated to finding solutions to our biggest environmental issues, the Ecosciences Precinct will provide a new workplace for around 1000 scientists and researchers, currently working on issues including climate change, water and sustainable growth.

The co-location of so many of Queensland s brightest minds will create a highly collaborative working environment between staff of government agencies including; the Commonwealth Scientific and Industrial Research Organisation, the Department of Environment and Resource Management (including the Queensland Climate Change Centre of Excellence) and the Department of Employment, Economic Development and Innovation (including Primary Industries and Fisheries, Biosecurity Queensland and Mines and Energy).

The Ecosciences Precinct will include offices and staff support areas, a caf, education centre, workshops, laboratories, insect houses, glasshouses and greenhouses. Located within the mixed-use Boggo Road Urban Village, the precinct has easy access to the newly integrated bus, rail, cycling and pedestrian infrastructure.

The precinct is under construction and completion is expected in early 2011.

Health and Food Sciences Precinct

The Health and Food Sciences Precinct at Coopers Plains in Brisbane s south will expand on the existing Queensland Health Forensic and Scientific Services campus to create a science centre of excellence. Staff in this precinct will collaborate across agencies to focus on assisting people live longer, healthier lives through advances in healthcare,

medicine, food and nutrition and maintaining Australia s reputation for clean, safe and high quality food products.

New precinct facilities for 190 scientists from various Queensland Government departments and the Commonwealth Scientific and Industrial Research Organisation s Food Science Australia, include laboratories, office space and a food pilot plant.

The precinct is under construction and completion is expected in early 2010.

Pharmacy Australia Centre of Excellence stage one

The Pharmacy Australia Centre of Excellence (PACE) stage one will provide a new facility for the University of Queensland s School of Pharmacy on land adjoining Brisbane s Princess Alexandra Hospital.

PACE will bring together Australia s leading pharmacy educators and researchers, the key pharmacy professional organisations and commercial research and development, in a smaller scale pharmaceutical version of the computer industry s Silicon Valley.

The unique project will eventually cover every aspect of the pharmaceutical production line from drug discovery to eventual use, offering world class, coordinated and cost-effective research and testing capability.

The Queensland Government has donated the 1.7 hectare site and the University of Queensland will use part of the land for a new School of Pharmacy, to meet the growing demand from Australia and overseas for new pharmacy graduates and post-graduate research.

Other confirmed PACE partners and future tenants include The Pharmacy Guild of Australia, The Pharmaceutical Society of Australia, the Society of Hospital Pharmacists of Australia and the Australian Institute of Pharmacy Management.

PACE is under construction and will be developed in three stages. Stage one is due for completion in December 2009.

Table 7 Industry development infrastructure

Map 10 ref no.	Project	Estimated investment $M	Estimate Category (see note D)	Completed projects $M	Delivery timeframe		
					2009-10 to 2012-13	2013-14 to 2018-19	2019-20 to 2025-26
Brisbane, Moreton, Redland and Logan							
7.1	Brisbane Convention and Exhibition Centre expansion	136	3				
Gold Coast							
7.2	Gold Coast Convention and Exhibition Centre extension		4	35.5	Completed 2008-09		
Total		136		35.5			

Construction started

Notes

A. The table identifies the expected delivery timeframe for each infrastructure project. The darker shade represents projects that are under construction at 1 July 2009.
B. Estimated investment is in 2009 dollars to allow price consistency over the full timeframe of the program. Estimates in the state budget and other documents may differ, as they may incorporate costs that reflect anticipated changes in input prices between initial planning and the time of construction. Estimated investment includes funds already expended on projects.
C. Where funding is required from sources other than the Queensland Government, their estimated costs have been included. Where projects are subject to federal funding, it is noted as timing of these projects is subject to negotiation with the federal government.
D. For an explanation of estimate categories, refer to page 19.
E. Where a project has been completed, it is noted in the table.

Information and communication technology

Advanced information and communication technology (ICT) is essential to the successful delivery of *TowardQ2: Tomorrow's Queensland*, the Queensland Government's 2020 vision for the state. ICT serves as a catalyst for business growth, leads to increased investment, and positions Queensland to be more globally competitive in the critical areas of commerce, industry, enterprise and skills development.

Widespread availability of world standard, affordable, competitively priced, high-speed telecommunications (broadband) infrastructure and services is critical to support and advance the continued growth of South East Queensland.

Fibre-optic cable is the optimal technology for high-speed broadband telecommunications. However, multiple broadband technologies in association with information and communication applications will be necessary to deliver services economically.

Continued investment in the establishment and upgrading of broadband infrastructure and services will be necessary to underpin economic development and growth in South East Queensland.

While investment in telecommunications infrastructure is mainly undertaken by the private sector, governments will increasingly influence such investment through policies, programs and the regulatory environment. The Queensland Government actively contributes to national policy directions and initiatives through its membership of national committees including the Digital Economy Working Group, the Broadband Development Network and the National Broadband Development Group (reporting to the Online and Communications Council).

The federal government has primary responsibility for telecommunications policy and regulation. Because telecommunications is so important to the state economy, the Queensland Government works with the federal government to guide and influence broadband and telecommunications policies and initiatives.

Instruments used by the Queensland Government include:

- leveraging national telecommunications initiatives including the National Broadband Network, the Digital Education Revolution, Clever Networks and e-Health initiatives
- developing policy such as the Smart Industry Policy and contributing to national initiatives such as the Digital Economy and the role of ICT as a business transformational agent in climate change
- assisting and encouraging priority Queensland industry sectors to take up technologies which will transform their businesses through innovation, increasing productivity, exporting for growth and building regional strengths (Business and Industry Transformation Incentives)
- stimulating competition through leveraging Queensland Government spending and investments
- supporting industry excellence through recognition programs such as the Premier's Smart Awards.

Flagship Queensland Government activities include:

- 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.

Water

The South East Queensland Water Grid (SEQ Water Grid) is now operational. Key elements of the SEQ Water Grid were operational in late 2008 and early 2009, including:

- the first major desalination facility on the eastern seaboard
- the first purified recycled water scheme in Australia and one of the largest in the world
- a series of major pipelines, including the Northern Pipeline Interconnector stage one, Eastern Pipeline Interconnector and Southern Regional Water Pipeline.

Current forecasts are the projects will be delivered for about $4.6 billion, a saving of about $400 million.

A range of other projects are on track for completion by 2011. Construction of Wyaralong Dam has commenced, and detailed planning is underway for infrastructure to connect the dam to the SEQ Water Grid. Consultation on the Environmental Impact Statement for the Northern Pipeline Interconnector stage two has been completed and detailed design has commenced.

The Queensland Water Commission continues to publish monthly reports outlining the progress of projects yet to be completed, which is available on its website at www.qwc.qld.gov.au.

A new approach to sustainable water supply management and long term planning for security, in combination with tremendous water savings from the community and rainfall, has seen South East Queensland through the worst drought in terms of length and rainfall deficit in recorded history. The combined dam levels reached over 72 per cent in May 2009.

Strategic priorities

In addition to a drought-specific response, the Queensland Government's strategic priorities in addressing water planning and investment are:

- 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.

South East Queensland Water Strategy

The Millennium Drought has changed the way residents of South East Queensland think about water – awareness has grown that every drop is precious. The draft South East Queensland Water Strategy, which was released in March 2008, is a plan for meeting South East Queensland's water supply requirements for the next 50 years. It is designed to deliver a new standard of water security in Australia's fastest growing region.

The Queensland Water Commission developed the strategy using a new planning methodology and a comprehensive water balance model that, as far as possible, considers climate change, climate variability, population growth and other regional factors affecting supply and demand.

The strategy seeks to ensure South East Queensland will never go back to the water-wasting ways of the past. It proposes an ambitious demand-management program forecast to reduce the use of grid water by about 24 per cent compared with pre-drought trends. The average residential consumption target will be 230 litres per person per day or less.

The strategy highlights, with this reduction in demand, additional sources of supply beyond those under development will not be required until at least 2028, except as part of the response to another severe drought.

The strategy identifies a number of potential sources of supply for detailed investigation, including desalination plants and purified recycled water schemes. The pressure on land resources along the South East Queensland coastal strip and the limited availability of sites suitable to support a desalination plant means it is important to preserve sites which could be used in future if required.

The final strategy is scheduled for release in 2009. It will incorporate final decisions regarding future desalination plant sites and their categorisation by priority (see text box on page 58).

Establishing a water-efficient community

The Queensland Government has implemented a range of initiatives to ensure the best use is made of both climate dependent and climate resilient water supplies as part of a longer term strategy.

Business and industry

In consultation with stakeholders, the Queensland Water Commission has implemented a package of measures to deliver long-term savings for businesses while minimising risks to economic production and employment.

Water-intensive businesses are required to prepare Water Efficiency Management Plans to demonstrate they use water efficiently, or to show how they plan to reduce their water consumption by a minimum of 25 per cent in the near future. Ninety nine per cent of businesses required to submit a Water Efficiency Management Plan have now done so. Councils have approved and processed more than 80 per cent of these plans. In February 2009 the government announced a relaxation of water efficiency management plan reporting for business and industry from quarterly to annually.

Residents

In June 2006 the Queensland Government launched the Home WaterWise rebate scheme to promote the take-up of water saving opportunities. Under the scheme, rebates could be claimed for the installation of rainwater tanks and water efficiency devices such as showerheads, dual flush toilets, washing machines, swimming pool covers and greywater re-use systems.

About $296 million was paid in subsidies in South East Queensland between June 2006 and December 2008, when the scheme ceased operation.

Rainwater tanks were installed on 236 000 homes in South East Queensland. With these subsidies, tanks are now installed in about 36 per cent of homes in South East Queensland.

The Home WaterWise Service was established in August 2006, by the Queensland Government in partnership with local government. As part of the service, plumbers installed water-saving shower heads for residents and fixed leaking taps. The service concluded on 14 November 2008. A total of 228 551 homes were fitted with water saving devices, providing an estimated saving of 13.1 ML/day (1ML = 1 million litres) at a total project cost of $42 million.

Pressure and leakage management

Significant water savings can be achieved by reducing water loss from leaking and burst water mains and pipes. The Queensland Government provides subsidies to councils to implement the pressure and leakage management program more quickly. The government will contribute a subsidy of 40 per cent of capital costs up to $32 million, and has paid out $16.9 million to December 2008.

Preliminary site categorisation

Category	Site	Property description	Owner
Priority	Lytton site	Lot 49 SP193294	Minister for Industrial Development
	Either Marcoola site or Bribie Island site	Lot 753 CG3375 or Part of Lot 64 SP104224	Sunshine Coast Regional Council State of Queensland
Reserve	Tugun site	Lot 30 and Part of Lot 31 SP197355	Gold Coast City Council / State of Queensland
	North Stradbroke Island site	Part of Lot 1 USL32114	State of Queensland
	Port of Brisbane site and/or Brisbane Airport site	Part of Lot 83 SP108337 and/or Part of Lot 1 RP844114	Port of Brisbane Corporation Limited Commonwealth of Australia
	Either Marcoola site or Bribie Island site	Lot 753 CG3375 or Part of Lot 64 SP104224	Sunshine Coast Regional Council State of Queensland
Excluded	South Stradbroke Island site	Lot 17 WD2688 and Lot 18 WD1474	State of Queensland
	Kawana site	Lot 9 SP174900 and Lot 12 SP174900	Sunshine Coast Regional Council

Desalination site categorisation

The Queensland Water Commission has undertaken a preliminary assessment of possible sites for future desalination plants in South East Queensland.

Sites under consideration were identified in the first phase of the studies completed in early 2007 and included in the draft South East Queensland Water Strategy. Through consultation on the draft strategy and as part of the phase 2 studies a further three possible sites were identified. Two of the additional sites are at the mouth of the Brisbane River, on land that is controlled by the Port of Brisbane Corporation and Brisbane Airport Corporation. The third potential site is an expansion of the existing South East Queensland (Gold Coast) Desalination Facility at Tugun on the Gold Coast.

During phase 2, teams of environmental experts, engineers and planners have investigated the feasibility of locating a desalination plant on the sites. The interim findings of the study have formed the basis of the preliminary categorisation of sites as 'priority', 'reserve' or 'excluded'. This advice was provided to government in February 2009.

The analysis has sought to:

- maintain enough 'priority' and 'reserve' sites to potentially accommodate desalination facilities with a combined capacity in excess of 1000 ML/day for the long-term
- maintain diversity in the location of sites within South East Queensland
- recognise that future technological change may improve the viability of some sites in the future
- identify two 'priority' sites for detailed investigation as potential responses to another severe drought if it were to occur in the short term.

Confirmed priority and reserve sites will be included in the final advice to the Queensland Government as part of the South East Queensland Water Strategy, due for publication in 2009.

Diversification of our water supplies

South East Queensland Water Grid

The SEQ Water Grid is now operational. With a mix of climate dependent sources, such as dams and aquifers, and climate resilient sources, such as desalination and purified recycled water, the people of South East Queensland can be confident of an adequate supply of drinking water now and into the future. About 450 kilometres of new pipelines have been constructed to transport this water from areas of water surplus to areas facing a shortfall, permitting the coordinated use of major water sources across the region.

Key projects forming part of the Water Grid are outlined in the following paragraphs.

Western Corridor Recycled Water Project

Construction of the key elements of the Western Corridor Recycled Water Project were completed by December 2008, including approximately 205 kilometres of pipeline and three advanced water treatment plants at Bundamba, Gibson Island and Luggage Point.

On 26 November 2008, the Queensland Government confirmed it would adopt an emergency trigger to introduce purified recycled water into Wivenhoe Dam. The Queensland Water Commission advised government the trigger would be implemented when combined regional dam levels drop to 40 per cent.

The Western Corridor Recycled Water Project is the primary source of supply to power stations in South East Queensland. It commenced supply to the Swanbank power station in August 2007, and had supplied about 7000 ML to the end of February 2009 at an average of 14 ML/day. Supply to the Tarong and Tarong North power stations commenced in June 2008, with 6600 ML having been supplied to the end of February 2009 at an average of 34 ML/day.

Supply to industrial customers will commence in mid 2009, with Brisbane City Council currently finalising arrangements to supply purified recycled water to Incitec Pivot, Boral and the Airport Link project. The Queensland Water Commission is investigating opportunities to supply other industries and major residential and industrial development areas, in partnership with Ipswich and Brisbane City Councils.

Another 168 ML/day has been made available to irrigators in the Lockyer Valley and on the Brisbane River, when it is not required for emergency use. The state government is currently negotiating terms of supply with the Lockyer Water Users Forum.

South East Queensland (Gold Coast) Desalination Project

South East Queensland (Gold Coast) Desalination Project commenced supply to the water grid on 28 February 2009. By 26 March 2009 the desalination plant had supplied 1 billion litres of potable water to the SEQ Water Grid.

Southern Regional Water Pipeline

Construction of the Southern Regional Water Pipeline was completed in December 2008. The pipeline has been moving water between the Gold Coast, Logan, Ipswich and Brisbane since January 2009.

A pipeline will be constructed between the Southern Regional Water Pipeline and the water treatment plant proposed to be located at Cedar Grove Weir to connect the Wyaralong Dam into the SEQ Water Grid.

Northern Pipeline Interconnector

Stage one of the Northern Pipeline Interconnector has also been constructed, providing the capacity to transport up to 65 ML/day between the Sunshine Coast and Brisbane. The 47-kilometre pipeline connects the Landers Shute water treatment plant to the remainder of the water grid, at Morayfield.

Stage two of the Northern Pipeline Interconnector will extend the pipeline north to Noosa, providing a connection between the supply sources for Noosa, Caloundra and Maroochy and to the remainder of the water grid.

On 20 February 2009, the government announced it will install reverse flow capacity on the pipeline, providing additional security for the Sunshine Coast. The pumps will be installed by the end of 2011, as part of the construction of stage two.

Eastern Pipeline Interconnector

The Eastern Pipeline Interconnector was completed in December 2008, providing the capacity to transport up to 22 ML/day between Redland and Brisbane. The 8-kilometre pipeline connects Redlands to the SEQ Water Grid through Logan.

New and upgraded dams

Construction of the Hinze Dam upgrade began in January 2008. Scheduled to be completed by the end of 2010, the upgrade will increase the full supply level of Hinze Dam by 12.3 metres to 94.5 metres (increasing supply into the region by 16 ML/day) and provide further flood mitigation benefits.

Construction works have started on Wyaralong Dam, the next key project in the SEQ Water Grid, following project approval by the Australian Government in late 2008.

The dam will be located about 14 kilometres north-west of Beaudesert on the Teviot Brook (a tributary of the Logan River). When complete, the dam will operate in conjunction with Cedar Grove Weir and Bromelton Off-Stream Storage to meet the Beaudesert region's growing demand for water. It will also provide additional water supply to the rest of South East Queensland.

As a further benefit, the dam will improve the reliability of the Logan River Water Supply Scheme, helping to cater for increasing local demand from urban and industrial development.

When operating in conjunction with Cedar Grove Weir and Bromelton Off-Stream Storage, Wyaralong Dam will provide up to 26 000 million litres of additional water each year, enough for more than 300 000 people. The project is on track to be complete before December 2011.

The Traveston Crossing Dam is currently undergoing environmental assessment.

In late 2008, it was announced the Coordinator-General, if recommending that the project proceed, is likely to include a condition that a number of mitigation measures are required to minimise the impact on flora and fauna prior to construction of the dam wall.

It is now anticipated following project approval, work will commence on environmental measures and community projects. It is expected construction will commence on dam and other associated infrastructure after the conditional environmental work is completed.

Other water supply projects

Reactivating old dams

Lake Manchester and Enoggera dams have been reactivated, providing up to 30 ML/day.

Brisbane City Council completed an upgrade to the Enoggera water treatment plant in mid 2008. Commissioning was delayed by the storms that affected Brisbane in 2008, which lifted the roof from The Gap reservoir. The facility is expected to be fully operational in July 2009.

A $40 million water treatment plant has been constructed at Ewen Maddock Dam on the Sunshine Coast, providing the capacity to supply up to 20 ML/day to Caloundra and surrounding areas.

Aquifers

Construction of the Bribie Island Aquifer project was completed in early 2008, providing the capacity to supply up to an additional 5 ML/day. The treatment plant is currently being commissioned.

Toowoomba pipeline

The Queensland Government is fast tracking the construction of a pipeline connecting Toowoomba to the SEQ Water Grid. The $187 million project involves construction of a 38-kilometre pipeline from Wivenhoe Dam to Cressbrook Dam. It is scheduled to be in operation by January 2010, with the state government offering to contribute a subsidy up to $75 million and to provide water from Wivenhoe Dam at a discounted price until 2013.

Other recycled water projects

Brisbane City Council has completed projects to supply 4.5 ML/day to the Caltex refinery at a cost of about $35 million, and approximately 4 ML/day to other customers and commercial tankers. Moreton Bay Regional Council has constructed an advanced recycled water plant which now supplies up to 4 ML/day to the Amcor paper mill at Murrumba Downs at a cost of $41 million.

Rural water

The South East Queensland Irrigation Futures Program aims to reduce irrigation water use by up to 10 per cent across the region by 2009. More than 30 per cent of irrigators in South East Queensland have been involved

in field trials, research and development. The Queensland Government is working with major industry groups to deliver the program, including the Queensland Dairyfarmers Organisation, Growcom, the Nursery and Garden Industry of Queensland, Queensland Turf Producers Association and the Flower Association of Queensland. South East Queensland Catchments is also a partner.

Governance

Since 2005 the Queensland Government and local councils have been engaged in improving institutional and regulatory arrangements for water. In May 2007 the Queensland Water Commission delivered a report to the government recommending a restructure of the water sector in South East Queensland to ensure, in the face of climate change and massive population growth, water supplies and wastewater services will be sustainable and efficient.

The key features for the new arrangements at the bulk level were to establish:

- the Queensland Bulk Water Supply Authority, which owns all dams, groundwater infrastructure and water treatment plants in South East Queensland
- the Queensland Manufactured Water Authority, which owns the desalination plant at the Gold Coast and the Western Corridor Recycled Water Project
- the Queensland Bulk Water Transport Authority, which owns all major pipelines in South East Queensland (including the eastern and northern pipeline interconnectors)
- the South East Queensland Water Grid Manager.

These new bodies carry out the Regional Water Security Plan and the System Operating Plan to ensure water security for South East Queensland.

Reform at bulk level is well underway, with the new entities commencing operation on 1 July 2008.

The Queensland Water Commission and new bulk water supply entities will review the need for additional capital expenditure on water treatment and bulk transport infrastructure. Within the timeframe of the SEQ Infrastructure Plan, a range of new and upgraded water treatment plants and pipelines will be required.

Map 8 – Regional water infrastructure

Table 8 Regional water infrastructure

Map 8 ref no.	Project	Estimated investment $M	Estimate category (see note D)	Delivery timeframe			
				Completed projects $M	2009-10 to 2012-13	2013-14 to 2018-19	2019-20 to 2025-26
Water Storages							
8.1	Traveston Crossing Dam: Stage 1 and water treatment plant (F)	1,800	2				
8.2	Wyaralong Dam	350	2				
8.3	Raising of Hinze Dam - Stage 3	391	3				
8.4	Enoggera Reservoir Water Treatment Plant (G)		4	12	Completed 2008-09		
8.5	Cedar Grove Weir		4	19	Completed 2007-08		
8.6	Bromelton Off-Stream Storage		4	40	Completed 2007-08		
Groundwater sources							
	Brisbane Aquifer Project		4	70	Completed 2007-08		
	Bribie Island Groundwater Project		4	43	Completed 2007-08		
Making best use of available supplies							
	Pressure Reduction and Leakage Management Program (H)	32	3				
	Recycling, desalination and groundwater investigations and preliminary studies		4	12	Completed 2006-07		
	Subsidies paid for completed local government projects		4	25	Completed 2006-07		
Interconnection							
	Southern Regional Water Pipeline extension: Greenbank to Kuraby (I)	140	1				
8.7	Northern Pipeline Interconnector Stage 2 and additional works (J)	450	2				
8.8	Toowoomba Pipeline: Wivenhoe to Cressbrook	187	3				
8.9	Southern Regional Water Pipeline (K, L)		4	801	Completed 2008-09		
8.10	Eastern Pipeline Interconnector (K, L)		4	39	Completed 2008-09		
8.11	Northern Pipeline Interconnector Stage 1 and Ewen Maddock Water Treatment Plant (K, L, M)		4	350	Completed 2008-09		
Manufactured Water							
8.12	South East Queensland (Gold Coast) Desalination Facility (N)	1,209	3				
8.13	Western Corridor Recycled Water Project (L, O)		4	2,313	Completed 2008-09		
	Caltex Brisbane Recycled Water Project (BCC project)		4	12	Completed 2007-08		
Total		4,559		3,736			

Construction started

Notes

A. The table identifies the expected delivery timeframe for each infrastructure project. The darker shade represents projects that are under construction at 1 July 2009.
B. Estimated investment is in 2009 dollars to allow price consistency over the full timeframe of the program. Estimates in the state budget and other documents may differ, as they may incorporate costs that reflect anticipated changes in input prices between initial planning and the time of construction. Estimated investment includes funds already expended on projects.
C. Where funding is required from sources other than the Queensland Government, their estimated costs have been included. Where projects are subject to federal funding, it is noted as timing of these projects is subject to negotiation with the federal government.
D. For an explanation of estimate categories, refer to page 19.
E. Where a project has been completed, it is noted in the table.
F. The Environmental Impact Statement (EIS) released in October 2007 states that the total project capital cost is $1592 million, including mitigation measures, infrastructure relocation and pipeline connections. This estimate has been indexed to 2009 dollars and rounded, consistent with other projects contained in this plan.
G. The Gap reservoir sustained damage during the storms in late November 2008. While the water treatment plant was completed in 2008, the commencement of the proving period was delayed until March 2009.
H. The Queensland Government will contribute a subsidy of 40 per cent of capital costs up to $32 million towards pressure and leakage management projects. To end February 2009, $16.8 million had been paid to councils with 80 per cent of the targeted savings being achieved prior to the target date of 31 August 2008. The memorandum of understanding expires on 27 April 2009.
I. The scope of the Greenbank to Kuraby connection has been expanded since the previous version of this document to include the capacity required to distribute water from Wyaralong Dam.
J. The scope of the Northern Pipeline Interconnector Stage 2 has been expanded since the previous version of this plan to include the installation of pumps to provide reverse flow capacity.
K. These projects achieved practical completion in 2008-09 but are still within the defects and liability period.
L. The project cost is the current forecast final cost, which will not be finalised until the end of the defects and liability period.
M. The Northern Pipeline Interconnector Stage 1 has achieved practical completion. The Ewen Maddock water treatment plant will not achieve practical completion until after 30 June 2009. However, it represents only about 15 per cent of the total project cost and will not delay transfers through the pipeline.
N. Includes cost of connection to the Southern Regional Water Pipeline.
O. Construction of this project was generally completed by end 2008. Additional clarifiers are being constructed at Luggage Point, delaying achievement of practical completion for that advanced water treatment plant until early 2010. Additional pre-treatment processes are being implemented at Luggage Point, delaying achievement of practical completion under the contractual arrangements. Classification as completed should not impact on rights and responsibilities under the contractual arrangements between the parties who delivered the project. There remains further possible expenditure of up to $130 million on this project in 2009-10.

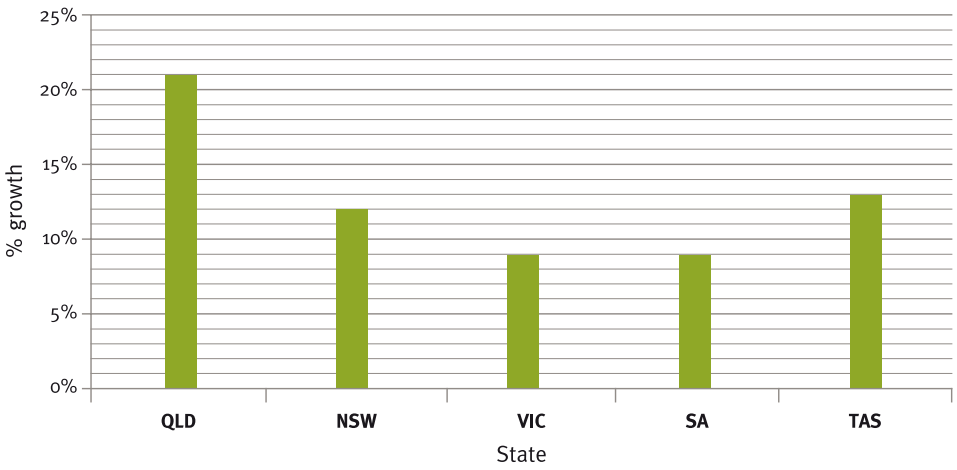
Energy

Electricity demand in Queensland is growing at a faster rate than other states, with investment in the South East Queensland electricity network rising at a commensurate rate. The Queensland gas market is also growing rapidly and demand has doubled since 2000. Managing the energy needs of Australia's fastest growing, most decentralised and energy-intensive state, while at the same time reducing greenhouse emissions, presents challenges.

The Queensland Government will meet these challenges by diversifying its energy sources towards gas and renewable sources, as well as by encouraging competition in energy markets. Queenslanders must also play their part by managing demand, especially during peak summer periods, through increased awareness and use of more energy-efficient appliances, or appliances that use alternative fuel sources.

Much of the infrastructure generating electricity for South East Queensland is located outside the region for various reasons, including proximity to fuel sources and major industry. Energy is then transported to the demand centres within South East Queensland via the high voltage electricity transmission network.

Figure 8 – Growth in electricity demand across Australia 2009-10 to 2013-14



Source: 2008 NEMMCO Statement of Opportunities (Native Demand)

Electricity

South East Queensland represents around 60 per cent of the state s electricity demand. The region s pattern of growth in electricity demand is expected to continue over the timeframe of the SEQ Infrastructure Plan, with peak summer demand forecast to increase by 4.1 per cent per year over the next 10 years. The growth in electricity demand is being driven by population growth, industrial development, and the continued uptake of airconditioning. Delivering other water, transport and community projects also impacts on the demand for electricity.

Community dependence and expectations for a reliable electricity network create challenges that will be addressed through extending the electricity transmission and distribution networks, refurbishing or replacing ageing network assets, building more facilities and using modern technologies.

Industry structure

The electricity industry comprises three distinct, yet interconnected sectors: generation, transmission and distribution.

- *Generation*

  Most electricity in Queensland is generated by coal-fired power stations, located mainly in central and southern parts of the state, close to major coal sources. However, an increasing amount of energy is being produced from natural gas, including coal seam methane, and from renewable sources such as hydro and biomass. Government-owned corporations own most of the larger power stations, but the number of partially or fully privately owned power stations is increasing. Currently about 42 per cent of Queensland s generation capacity is privately owned.

- *Transmission*

  Powerlink Queensland s high voltage transmission network transports electricity from power stations to the distribution networks in South East Queensland.

- *Distribution*

  Most business and residential customers are supplied with electricity via a distribution system connected to the high voltage transmission system. ENERGEX delivers electricity to most of South East Queensland and operates a network that includes 50 000 kilometres of powerlines. Ergon Energy distributes electricity to Toowoomba and rural and regional Queensland, and operates a network of 150 000 kilometres of powerlines throughout the state.

  Through its government-owned corporations, the Queensland Government owns and maintains electricity generation, transmission and distribution assets worth more than $26 billion. These corporations include CS Energy, Stanwell and Tarong Energy (generation), Powerlink Queensland (transmission), and ENERGEX and Ergon Energy (distribution). Queensland participates in the competitive National Electricity Market (NEM).

Office of Clean Energy

Established in November 2008, the Office of Clean Energy (OCE) has been commissioned to build on existing work and create a new focus on clean energy opportunities in Queensland. OCE is the Queensland Government s lead agency for developing world-class initiatives in renewable energy, demand side innovation and energy efficiency.

OCE will assist the development of the clean energy sector by:

- advising government on the policy frameworks to best support clean energy initiatives
- identifying, mapping and sourcing potential renewable energy locations around the state
- removing regulatory barriers to developing the renewable energy industry
- partnership programs to encourage private sector investment and start-up in the clean energy industry
- working with the Australian Government on designing the mandatory renewable energy target scheme to ensure Queensland s interests are protected in the national approach
- working with the electricity industry to assist demand-side innovation and energy efficiency with large-scale users
- assisting deployment of renewable energy infrastructure.

Generation capacity

Queensland currently has a generation capacity of more than 11 000 megawatts (MW), with more than $4.7 billion of investment in new generation infrastructure since 1998. Major investments include the privately owned Millmerran coal-fired power station, Braemar and Townsville gas-fired power stations, the joint-venture Callide-C coal-fired power station, and the government-owned Kogan Creek Power Station. A number of renewable energy projects have also been commissioned, including a 68 MW bagasse-fired generator at Pioneer Sugar Mill and a second bagasse-fired generator of 25 MW at Isis Sugar Mill. The electricity generation industry in Queensland is well placed to meet increasing demand, with sufficient generating capacity to meet average demand even under extreme weather conditions.

Projects completed or under construction include:

- The 450 MW Braemar 2 gas-fired power station adjacent to the existing 450 MW Braemar Power Station approximately 40 kilometres west of Dalby in Southern Queensland. The project achieved commercial operation in mid 2009
- The 140 MW coal seam gas-fired Condamine Power Station. The project will be fully operational by the end of 2009
- The 630 MW Darling Downs Power Station which will be the biggest combined-cycle power station in Australia. The project is under construction and will be operational in early 2010.

These projects all contribute to electricity supply in South East Queensland via the electricity grid, but are not included in this plan because they are located outside the region and are privately funded.
The Office of Clean Energy is working with energy companies, the renewable energy industry, government-owned corporations and other interested parties to actively accelerate the uptake of renewable energy in Queensland.

Support is provided through initiatives such as the $50 million Queensland Renewable Energy Fund (QREF) to assist with commercialising renewable energy generation technologies; resource mapping; and the solar bonus scheme (solar feed-in tariff).

Electricity network

To meet increasing electricity demand, new transmission and distribution network infrastructure must be constructed. Powerlink invested $676 million in capital works in Queensland during 2007 08, and expects to invest more than $2.9 billion over the five year period to 2012 13, to ensure that future growth in electricity demand can be met.

ENERGEX is also investing heavily in its electricity distribution network, with a five-year capital budget in South East Queensland of up to $5 billion. This program is expected to:

- increase network capacity to meet forecast demand and peak demand growth
- improve network security and reduce the amount of electricity load at risk
- improve overall reliability
- renew older assets to maintain network reliability and improve network security
- The tables show proposed transmission and distribution network upgrades in South East Queensland.

Electricity sector activity

Figures released recently by ENERGEX reveal in the December quarter (October to December 2008) 8436 additional homes and businesses were connected to the South East Queensland power network. These are new connections and are in addition to more than 7700 reconnections (mostly for people moving from one property to another) recorded in the same quarterly period. The reliability of the South East Queensland electricity grid has shown a 33 per cent improvement during the period July 2005 and January 2009. The normalised interruption duration for the system was 162 minutes for 2004 05 and the 12 month rolling year to date 2008 09 is currently 129 minutes.

Electricity delivered to ENERGEX customers has increased slightly from 20 758 Gigawatt hours (GWh) in 2006-07 to 20 920 GWh in 2007-08.

ENERGEX has installed more than 4340 kilometres of underground electricity cable in South East Queensland in the last 4.5 years, expanding total underground cabling from 11 025 kilometres in June 2004 to 15 365 kilometres in December 2008. Over this same period, the length of overhead mains has increased by 1382 kilometres, expanding from 35 032 kilometres to 36 414 kilometres. The larger increase in underground construction is attributed to most urban subdivisions now being reticulated with underground power and the installation of additional 11 000 volt feeders from zone substations to cater for load growth.

The Queensland Government also supports demand management programs aimed at reducing the effect of peak electricity demand on the network, and programs which support efficient use of energy, such as:

- working with builders and developers to implement sustainable housing design
- supporting a range of energy and watersaving measures for households
- promoting energy-efficient air-conditioning
- improving energy efficiency in government buildings, government-owned corporations and statutory authorities via the Government Energy Management Strategy and the Strategic Energy Efficiency Program.

Progress on electricity projects in 2008 09

- ENERGEX has invested more than $674 million in improvements to and maintenance of its electricity network and supporting infrastructure during 2008 09, up to the end of January 2009.
- Increases in network capacity have been achieved through a strong program of works that has seen ENERGEX s total zone substation capacity rise from 8632 megavolt amperes (MVA) at the end of February 2008 to 9142 MVA at the end of January 2009, an increase of 510 MVA in less than 12 months. This increase means the network has the capability of supplying an additional 170 000 homes in South East Queensland.
- Powerlink completed three major substation projects: the $25 million expansion of its 275/110 kilovolt Abermain Substation near Ipswich; the $35 million upgrade of its 275 kilovolt Greenbank Substation in the Logan area; and the $36 million upgrade of its 275 kilovolt South Pine Substation in north Brisbane. These substation augmentation projects, together with the completion in 2007-08 of the $138 million Middle Ridge to Greenbank transmission line, have increased the transmission capacity into South East Queensland, helping to meet the growing needs of the region. This new project, together with other upgrades at existing substations in South East Queensland, should cater for the regions bulk electricity transmission needs for the next five years.

Solar bonus scheme

The Queensland Government solar bonus scheme pays households and other small customers for the surplus electricity generated from roof-top solar photovoltaic (PV) panel systems, which is exported back into the Queensland electricity grid. The scheme is designed to make solar power more affordable for Queenslanders, stimulate the solar power industry and encourage energy efficiency.

The solar bonus scheme commenced on 1 July 2008. Customers participating in the scheme are paid 44 cents per kilowatt hour (kWh) for surplus electricity fed into the Queensland grid after the household load is met.

By April 2009, over 4200 households and businesses were signed up to the scheme representing approximately $320 000 worth of solar energy and over 725 000 kilowatt hours exported to the grid from over six megawatts of installed generation capacity.

Gas

Natural gas will play an increasingly significant role as a fuel source for Queensland s electricity generation, industrial processes, business and residential consumers. Total natural gas consumption in Queensland is expected to more than triple over the period to 2030.

Unlike other states, Queensland is not a single gas market, but a series of markets in different locations. South East Queensland is the state s single biggest market for natural gas, with an annual consumption of around 63 petajoules (PJ) a year approximately 40 per cent of Queensland s overall gas consumption.

Transmission and distribution

Gas infrastructure, like electricity, consists of major transmission lines (pipelines) and localised distribution networks. Queensland has more than 4500 kilometres of high-strength steel gas transmission pipelines, which move gas from gas-producing regions to customers. This infrastructure is owned by the private sector and is not included in the SEQ Infrastructure Plan.

The 440-kilometre Wallumbilla (near Roma) to Brisbane gas transmission pipeline (RBP) is the sole transporter of gas from the Surat and Bowen gas fields to the growing South East Queensland market. The owners of the RBP, Australian Pipeline Trust (APA), are currently working to increase the capacity of the pipeline (by increasing compressor capacity) to meet growing customer demand for gas. APA is also considering constructing a transmission pipeline connecting the RBP at Gatton to Gympie, enabling delivery of gas to the expanding Sunshine Coast market.

In South East Queensland APA reticulates gas for domestic, commercial and industrial purposes in Brisbane south and Gold Coast, and Envestra do so for Brisbane North and Ipswich. APA has made plans to expand residential customer connections in South East Queensland by 9000 over the next three years by supplying new residential estates.

Market development

The Queensland Energy Policy has been successful in increasing the use of gas in the state s energy mix. In particular, the Queensland gas scheme requires at least 13 per cent of electricity sold in Queensland be from gas-fired generation. This has encouraged the development of new gas sources, in particular coal seam gas. The commissioning in 2006 of the 450 MW Braemar Power Station, west of Dalby, brought Queensland s gas-fired power station capacity to more than 2000 MW, and there is more than 2000 MW of gas-fired generating capacity under active development.

Map 9 – Powerlink and ENERGEX infrastructure

Table 9 Powerlink upgrades in South East Queensland

Project	Estimated investment $M	Estimate category (see note D)	Delivery Timeframe		
			2009-10 to 2012-13	2013-14 to 2019-20	2020-21 to 2025-26
Western Corridor and Toowoomba					
Halys to Springdale to Blackwall line (500 kV)		1			
Halys to Springdale to Greenbank line (500 kV)		1			
Swanbank A substation rebuild	35	3			
Brisbane, Moreton, Redland and Logan					
South Pine to Sandgate line (275/110 kV)	58	3			
Greenbank to Mudgeeraba line (275 kV)		0			
Larapinta to Algester line (110 kV)		0			
Sandgate to Nudgee line (275 kV)		0			
Nudgee to Murarrie line (275 kV)		0			
Bergin's Hill to Drewvale line (275kV)		0			
Future substations (dependent on electricity demand)		0			
Gold Coast					
Southern Gold Coast bulk supply		0			
Future substations (dependent on electricity demand)		0			
Sunshine Coast					
Woolooga to Cooroy South line (275 kV)		0			
Future substations (dependent on electricity demand)		0			
Total	93				
Major transmission upgrades completed 2006-07 Construction of a new transmission line between Belmont and Murarrie (Brisbane) Construction of a new transmission line between Greenbank (Logan) and Maudsland (Gold Coast) Construction of major substations at Molendinar (Gold Coast), Algester (Brisbane), Goodna (Ipswich) and Sumner (Brisbane)	207	4			
Major transmission upgrades completed 2007-08 Construction of a new transmission line between Middle Ridge (Toowoomba) and Greenbank (Logan).	137.5	4			
Major transmission upgrades completed 2008-09 Abermain substation ($25m) Greenbank substation ($35m) South Pine substation ($36m)	96	4			
Total investment since 2005	440.5				

Construction started

Notes:

A. The table identifies the expected delivery timeframe for each infrastructure project. The darker shade represents projects that are under construction at 1 July 2009.
B. Estimated investment is in 2009 dollars to allow price consistency over the full timeframe of the program. Estimates in the state budget and other documents may differ, as they may incorporate costs that reflect anticipated changes in input prices between initial planning and the time of construction. Estimated investment includes funds already expended on projects.
C. Where funding is required from sources other than the Queensland Government, their estimated costs have been included. Where projects are subject to federal funding, it is noted as timing of these projects is subject to negotiation with the federal government.
D. For an explanation of estimate categories, refer to page 19.
E. Where a project has been completed, it is noted in the table.
F. In 2007, the Australian Energy Regulator set Powerlink s allowable regulated revenue for the five year period between 1 July 2007 and 30 June 2012, including an allowance for capital expenditure.
G. Energy authorities budget on a five-year basis. Project costs beyond that period are not included.
H. Timing of future investments will depend on demand. Expenditure will be adjusted as necessary to ensure the South East Queensland distribution network is able to meet demand, while also meeting mandated reliability requirements.
I. kV = Kilovolt.
J. Map 9 is indicative of long-term planning and does not reflect all information in Tables 9 and 10.

Table 10 – ENERGEX network upgrades in South East Queensland

Project	Estimated investment $M	Estimate category (see note D)	Delivery Timeframe		
			2009-10 to 2012-13	2013-14 to 2018-19	2019-20 to 2025-26
Western Corridor and Toowoomba	284				
Bundamba Substation: install second 110kV transformer to increase network capacity ($10m)		3			
Brisbane, Moreton, Redland and Logan	2115				
Annerley: replace underground cables nearing end life with new larger cables ($11m)		3			
Myrtletown: establish a bulk supply substation to boost network capacity ($42m)		3			
North Springwood: install new transformer to boost network capacity ($11m)		3			
Sandgate: establish a bulk supply substation to boost network capacity ($18m)		3			
Toowong-Ashgrove: install a new powerline between Toowong and Ashgrove to boost network capacity and improve reliability ($13m)		3			
Taringa: install second transformer inside existing substation, plus new indoor high voltage switchgear ($17m)		3			
Buranda: establish new zone substation to cater for electricity load growth in area ($14m)		3			
Whiteside: establish a new substation to improve network reliability and increase network capacity on the northern side of North Pine Dam ($11m)		3			
Gold Coast	483				
Beenleigh: upgrade two transformers and 33KV to boost network capacity ($11m)		3			
Merrimac: install two transformers to boost network capacity ($25m)		3			
Southport: increase substation capacity by installing third transformer ($10m)		3			
Coomera Bulk Substation: establish a second 33kV feeder to Hope Island substation ($12m)		3			
Mudgeeraba Substation: install second 33kV feeder to improve reliability and second transformer to increase network capacity ($10m)		3			
Sunshine Coast	337				
Caboolture-Toorbul Point: install a new powerline between Caboolture and Toorbul Point to improve network reliability and capacity ($10m)		3			
Total	3219				
Completed in 2005-06	142	4			
Completed in 2006-07	541	4			
Completed in 2007-08	479	4			
Completion in 2008-09 New zone substations in Wacol South ($10m), Holland Park ($10m) and Currumundi ($10m) Underground subtransmission cables between Crestmead and Browns Plains North substations ($12m)	42	4			
Total investment since 2005	1204				

Construction started

Notes:

A. The table identifies the expected delivery timeframe for each infrastructure project. The darker shade represents projects that are under construction at 1 July 2009.
B. Estimated investment is in 2009 dollars to allow price consistency over the full timeframe of the program. Estimates in the state budget and other documents may differ, as they may incorporate costs that reflect anticipated changes in input prices between initial planning and the time of construction. Estimated investment includes funds already expended on projects.
C. Where funding is required from sources other than the Queensland Government, their estimated costs have been included. Where projects are subject to federal funding, it is noted as timing of these projects is subject to negotiation with the federal government.
D. For an explanation of estimate categories, refer to page 19.
E. Where a project has been completed, it is noted in the table.
F. ENERGEX's capital works program, up to 30 June 2010, is covered by the current regulatory determination. The capital works program for the next regulatory period, starting 1 July 2010, will be included in ENERGEX's proposal to the national regulator, the Australian Energy Regulator.
G. Projects in the period 2009-10 to 2010-11 have been allocated to respective subregions. Investment in the period 2011–12 to 2012–13 has been allocated to subregions on a proportional basis only.
H. Energy authorities budget on a five-year basis. Project costs beyond that period are not included.
I. Timing of future investments will depend on demand. Expenditure will be adjusted as necessary to ensure the South East Queensland distribution network is able to meet demand, while also meeting mandated reliability requirements.
J. Specific projects in this table reflect strategic infrastructure investment within the overall capital investment. As part of the National Electricity Market, projects valued at more than $10 million are submitted to the market for regulatory testing.
K. kV = Kilovolt.
L. In 2008-09 only those projects that are considered strategic infrastructure investment within the overall capital investment have been included in the completed projects count. See note J for further information.
M. Map 9 is indicative of long-term planning and does not reflect all information in Tables 9 and 10.

Health

Access to top quality services and qualified practitioners is an essential ingredient in the maintenance of health and wellbeing and an improved quality of life for all Queenslanders.

While population growth and changed demographic profiles are impacting on health systems around the country, especially in the area of aged care, an integrated program of expansion and improvement for Queensland's health infrastructure is helping keep pace with demands.

Rising cases of preventable diseases, combined with our growing and ageing population, is expected to result in a doubling of the number of hospitalisations over the next 20 years, making these changes vital and urgent.

Improved hospital services is one way to meet the expected demand with a more far-reaching plan that includes the delivery of health care in community settings and in partnership with commercial allied health providers.

The Queensland Government's Health Action Plan provides the blueprint for these improvements and innovations, which provide a mix of new facilities and refurbishment and a shift in focus for many existing facilities along with a significant commitment to the expansion and training of health services staff throughout Queensland.

Progress on health projects in 2008–09

- The $140 million upgrade of The Prince Charles Hospital to a general hospital was completed in 2008-09. As part of this project, allied health facilities including a heart valve bank, procedure room and eight recovery spaces were completed in stage 2A. Upgrades to four operating rooms and 57 additional beds in two new wards will also be commissioned this year. Stage one, completed in 2007, included a new emergency department, pharmacy, records, imaging and car park.
- Early site works for the Gold Coast University Hospital commenced in December 2008. The hospital will deliver comprehensive services in cancer care, cardiac, neurosciences, neonatal intensive care and trauma services. Its 750 overnight beds almost double current hospital capacity on the Gold Coast with provision for a co-located private hospital, medical and specialist services. Construction is forecast to commence in 2009 and be completed in 2012.

- Site preparation works for the Queensland Children s Hospital commenced in February 2009. The schematic design for the new Queensland Children s Hospital is nearing completion and the final business case will be completed in 2009. The Health Services Plan has been updated with the latest statistical information and workforce planning for the Queensland Children s Hospital is well underway.
- A private hospital providing 110 public beds is proposed to be established on the Sunshine Coast University Hospital site by late 2013. The availability of public beds on the SCUH site in Kawana represents the first step in the establishment of the SCUH, with subsequent construction on the site to see the public hospital capacity increase to 550 beds by 2016-17 with further expansion to 650 beds in the future.
- Construction of a 179-bed expansion of the Robina Hospital has commenced. The project will include two additional operating theatres as well as upgrades to medical imaging, pharmacy, pathology and catering services. The project is due for completion in 2012.
- Construction of the first stage of the Caloundra Hospital expansion was finished in 2008 and the project will be completed in 2009. The bed capacity at Nambour Hospital was increased by 30 and a new car park was completed in 2008. Construction of a new 96-bed ward block has commenced and will be completed in 2010; modifications to vacated space in an existing building will continue until late 2011. Alternative methods of delivery for the Sunshine Coast Health Precinct are also being reviewed.
- Construction of the Browns Plains Health Precinct was completed in May 2009. Services include aged care and rehabilitation, children s health services, adult community mental health services, drug and alcohol rehabilitation, dental clinics, antenatal clinics and chronic disease prevention and management services. An Early Years Centre will also be located on the site.
- Construction of the new North Lakes Health Precinct is expected to be completed in 2009 giving local residents access to many health services in the one location. This will also assist to reduce the demand on acute hospitals.
- Master planning for the Ipswich Hospital expansion to include an additional 84 beds commenced early this year. Expected growth in the region, including the delivery of a record 612 babies born at the hospital in the December quarter highlights the need for this expansion.
- Early construction works for the new 30-bed medical assesment planning unit and emergency department expansion at the Princess Alexandra Hospital commenced in late 2008 with construction due to be completed in mid 2010. Other works to be delivered with this project are a replacement helipad, oncology bunkers and a PET scanner.

Table 11 Regional health infrastructure

Map 10 ref no.	Project	Estimated investment $M	Estimate category (see note D)	Completed projects $M	Delivery timeframe		
					2009-10 to 2012-13	2013-14 to 2018-19	2019-20 to 2025-26
Western Corridor							
11.1	Ipswich Hospital: additional bed capacity	110	0				
11.2	Ipswich Hospital redevelopment	290	0				
	Health Precincts x 2: Ipswich area	50	0				
Brisbane, Moreton, Redland and Logan							
11.3	Queensland Children s Hospital	1,200	1				
11.4	Queensland Children s Hospital: Academic and Research Centre	75	0				
11.5	Princess Alexandra Hospital Emergency Department: additional bed capacity (F)	52	3				
11.6	North Lakes Health Precinct	56	3				
11.7	Caboolture Health Precinct	20	0				
11.8	The Prince Charles Hospital: Paediatric Emergency Department upgrade	45	0		Timing subject to federal contributions		
11.9	Emergency Department upgrades: Logan; Redland; Ipswich; QEII; Caboolture; Toowoomba Hospitals	75	0		Timing subject to federal contributions		
11.10	Translational Research	330	1		Timing subject to federal and private contributions		
11.11	Browns Plains Health Precinct		4	23	Completed 2008-09		
11.12	The Prince Charles Hospital: upgrade to general hospital		4	140	Completed 2008-09		
Gold Coast							
11.13	Gold Coast University Hospital	1,700	1				
11.14	Robina Hospital: expansion	240	1				
11.15	Robina Health Precinct	40	0				
Sunshine Coast							
11.16	Sunshine Coast Health Precinct	30	0				
11.17	Sunshine Coast University Hospital	1,300	1				
11.18	Sunshine Coast: expansion of existing facilities	191	3				
Total		5,804		163			

Construction started

Notes

A. The table identifies the expected delivery timeframe for each infrastructure project. The darker shade represents projects that are under construction at 1 July 2009.

B. Estimated investment is in 2009 dollars to allow price consistency over the full timeframe of the program. Estimates in the state budget and other documents may differ, as they may incorporate costs that reflect anticipated changes in input prices between initial planning and the time of construction. Estimated investment includes funds already expended on projects.

C. Where funding is required from sources other than the Queensland Government, their estimated costs have been included. Where projects are subject to federal funding, it is noted as timing of these projects is subject to negotiation with the federal government.

D. For an explanation of estimate categories, refer to page 19.

E. Where a project has been completed, it is noted in the table.

F. Formerly described as Princess Alexandra Hospital Emergency Department: expansion and redevelopment.

Education and training

Early childhood education and care

The Office for Early Childhood Education and Care was established 1 January 2009, as part of the early childhood reforms announced under the State Government's *TowardQ2: Tomorrow's Queensland* strategy. Local and international research shows high quality education early in life gives children the best start and a solid foundation for their development.

The priority is to plan and provide access to a kindergarten program for all $3^{1/2}$ to $4^{1/2}$ year-old children in the year before formal schooling. This initiative aligns with the Council of Australian Governments' (COAG) early child reforms and the commitment to universal access for all children of this age to a quality early education program delivered by a qualified early childhood teacher.

This initiative will see the roll-out of 240 new or extended kindergarten services across Queensland by 2014 at a cost of more than $300 million. The new and extended kindergartens will double the capacity of the Queensland community kindergarten sector and cater for the 12 000 children not currently accessing any centre-based early education or care services.

The first 20 of these new kindergarten services will open in 2010 and 2011, commencing with eight sites to be operational in 2010, including four in South East Queensland:

- Mudgeeraba State School
- Stretton State College
- Prince of Peace, Everton Hills
- Moorooka State School.

A further twelve sites will be operational in 2011, including ten in South East Queensland:

- Woodford State School
- Beachmere State School
- Forest Lake College
- Gaven State School
- Deception Bay North State School
- Fairview Heights State School, Toowoomba
- Crestmead State School
- Rochedale South State School
- Jimboomba State School (extended kindergarten)
- Carina State School (extended kindergarten).

The remaining 220 services are to progressively open in 2012, 2013 and 2014.

Extra support for families

There are a number of other Queensland Government initiatives to assist families with young children:

- The Government has committed $32 million to establishing four Early Years Centres across the state. These one-stop-shops will provide services for families expecting a child or with children aged up to eight years. Families can access integrated early education services, child care, child health services, parenting programs and other family support services in one location. Centres in South East Queensland at Caboolture and Nerang commenced operations in late 2008 and the Browns Plains centre has commenced construction.

- Funding of $21.3 million has been committed to establish early childhood education and care services. This included funding to purchase and/or refurbish ten preschool sites and to construct one purpose-built early childhood facility on a school site, planned for Acacia Ridge. A number of these centres also provide child health services, parenting programs and other family support services. Five of the refurbished preschools will be located in South East Queensland. West End is currently operational while construction commenced at Toowoomba and Beenleigh in 2008 09. Preschools at Beaudesert and The Gap, along with the purpose built facility planned at Acacia Ridge, will commence construction in 2009 10.
- The Queensland and Australian Governments are working closely together to establish nine Indigenous Child and Family Centres across Queensland, as part of a network of 35 such centres across Australia. These centres will provide a dynamic mix of services, responsive to community needs, including child care, early learning and parent and family support services. Five of the nine Queensland centres will be established in rural and remote areas and four in urban areas, which may include parts of South East Queensland. The Australian Government has committed over $75 million to assist in the construction of these centres.
- The Queensland Government is also working with the Australian Government to facilitate the construction of six Early Learning and Care Centres in Queensland. These centres will provide long day care services and some additional support services in response to community need. An Early Learning and Care Centre at Amberley in South East Queensland is expected to commence construction during 2009 in association with the State School relocated from the Amberley RAAF base to Yamanto.

Progress on early childhood projects in 2008 09

- In late 2008, Early Years Centres at Nerang and Caboolture commenced operation; and construction commenced at the Browns Plains Centre.
- Construction commenced at the Early Childhood Education and Care Centres located at Toowoomba and Beenleigh.

Primary and secondary education

The adequate and timely provision of education services is a critical factor in serving the region s existing and future communities. More than 70 per cent of Queensland school students access the state school system, with the Queensland Government operating and maintaining 612 schools and environmental education centres in South East Queensland.

Providing new schools in South East Queensland presents an ongoing challenge. Strong population growth, the need to identify optimum opening dates of new schools (to ensure their viability and that of existing schools) and the increasing pressure to use land effectively makes the planning and management of demand for schools increasingly complex.

The availability of quality information, robust school strategies, standards, and master plans helps the Queensland Government explore alternative avenues when planning for new schools. These avenues include public private partnerships and joint development agreements with other state and local government agencies.

Table 12 Regional state school infrastructure

Project	Estimated investment $M	Estimate category (see note D)	Completed projects $M	Delivery timeframe		
				2009-10 to 2012-13	2013-14 to 2018-19	2019-20 to 2025-26
Western Corridor and Toowoomba	800	0 - 3		4 schools	5 schools	8 schools
Brisbane, Moreton, Redland and Logan	850	0 - 3		3 schools	7 schools	9 schools
Gold Coast	400	0 - 3		2 schools	4 schools	2 schools
Sunshine Coast	600	0 - 3		2 schools	2 schools	8 schools
Completed 2008-09		4	115			
Completed 2007-08		4	27			
Completed 2006-07		4	37			
Completed 2005-06		4	32			
Total	2,650		211	11	18	27

Notes

A. The table identifies the expected delivery timeframe for each infrastructure project. The darker shade represents projects that are under construction at 1 July 2009.
B. Estimated investment is in 2009 dollars to allow price consistency over the full timeframe of the program. Estimates in the state budget and other documents may differ, as they may incorporate costs that reflect anticipated changes in input prices between initial planning and the time of construction. Estimated investment includes funds already expended on projects.
C. Where funding is required from sources other than the Queensland Government, their estimated costs have been included. Where projects are subject to federal funding, it is noted as timing of these projects is subject to negotiation with the federal government.
D. For an explanation of estimate categories, refer to page 19.
E. Where a project has been completed, it is noted in the table.
F. Estimated total costs include land and construction costs.
G. The table incorporates additional primary and secondary school provision in Ripley Valley in the period covering 2010 to 2026.
H. Gold Coast cost estimates do not include the new Queensland Academy for Health Sciences.
I. Provision has been made for the following emergent or newly clarified growth areas: Logan (Park Ridge, Flagstone, etc); Palmview (tentative); Oxley Wedge (tentative); Ripley.
J. Provision of schools is dependent upon population thresholds being met and timing of delivery may be adjusted to reflect changing demand.

Progress on primary and secondary education projects in 2008-09

- Stage one of Norfolk Village State School opened in January 2009 with 427 students from Prep to Year 7. This new school is located within the Ormeau area of northern Gold Coast.
- Stage one of Highland Reserve State School opened in January 2009 with 163 students from Prep to Year 7. This new school is located within the heart of the Gold Coast s current growth area - the suburb of Upper Coomera.
- Stage one of Bounty Boulevard State School opened in January 2009 with 134 students from Prep to Year 7. This new school is located within the rapid growth area of North Lakes.
- Ormeau Woods State High School opened in January 2009 with 245 Year 8 and 9 students.
- In 2009, the following recently established schools had new stages open Meridan State College, Stretton State College, Chancellor State College, Coomera Springs State School, and Burpengary Meadows State School.

Vocational education and training

Queensland s continuing economic strength depends on the state s workforce having the skills to meet the dynamic needs of business and industry.

The successful implementation of the initiatives within this SEQ Infrastructure Plan relies heavily on the availability of a skilled workforce.

The Queensland Government is implementing the Queensland Skills Plan to deliver 17 000 training places a year by 2010. Additionally, the government will invest over $124 million to help create nearly 150 000 training places over the next four years in a record expansion of the Queensland skills base.

The *Queensland Skills Plan 2008* provided a fresh approach to meeting the state s challenges. It draws together a number of new actions and strategies combined with key elements of the original 2006 *Queensland Skills Plan*, an analysis of the labour market, and advice from stakeholders on opportunities to better meet the state s workforce needs.

The Queensland Government s vision is for a highly skilled, flexible workforce that will underpin the state s continuing growth and prosperity. The *Queensland Skills Plan 2008* is a major investment in achieving this vision. To meet the needs of business and industry, we must build the capacity and skills, particularly professional, of our workforce to meet workplace requirements.

Key elements of the Queensland Skills Plan 2008 include:

- the consolidation of SkillsTech Australia to lead product development and delivery in key trade areas - automotive, building and construction, manufacturing and engineering, electrical/electronics and sustainable technology. SkillsTech Australia continues to develop close links with industry and centres of excellence to ensure training programs and qualifications address employer needs
- the Southbank Institute of Technology as the lead institute responsible for technological and high-level skills training and education, with major new facilities now fully operational
- collaborative partnerships with industry and private providers, thereby ensuring access to the best possible training services for clients using publicly funded training.

Progress on vocational education and training projects in 2008-09

The Queensland Skills Plan capital program is being implemented with construction or planning underway on many projects including:

- The major SkillsTech Australia trade training campus at Acacia Ridge in Brisbane continues to be developed. In 2008 construction industry training facilities for plumbing, furnishing foundry and pattern making were completed. Construction has also commenced on facilities for refrigeration, electrical and painting and decorating trades
- Repositioning the Gold Coast Institute of TAFE, aligned to industry and community needs and located in transport-centred locations with a new Marine campus which began operating from the Gold Coast City Marina in 2008, and planning for the Coomera Education Precinct
- Master planning continues for the upgrade of trade training facilities at Nambour (Sunshine Coast Institute of TAFE)
- Construction of an automotive facility at Toowoomba has now been completed and training has commenced (Southern Queensland Institute of TAFE)
- The modernisation of the Metropolitan South Institute of TAFE to become a lead institute for programs in aged care, small business and fashion, at the Mt Gravatt and Loganlea facilities is progressing with stage one completed in January 2009 and further works being planned
- The redevelopment of the former Southbank TAFE site at South Brisbane to establish the Southbank Institute of Technology – the lead institute for health, sport and recreation, arts and entertainment, and postgraduate programs for professionals and para-professionals.

Table 13 – Regional vocational education and training infrastructure

Map 10 ref no.	Project	Estimated investment $M	Estimate category (see note D)	Completed projects $M	Delivery timeframe		
					2009-10 to 2012-13	2013-14 to 2018-19	2019-20 to 2025-26
Western Corridor							
13.1	Campus modernisation: Bundamba	16	1				
13.2	Automotive trade training facility: Toowoomba		4	2.7	Completed 2008-09		
Brisbane, Moreton, Redland and Logan							
13.3	SkillsTech Australia: new campus at Acacia Ridge	111	3				
13.4	SkillsTech Australia: Northern Brisbane	55	1				
13.5	Metropolitan South Institute of TAFE: Mt Gravatt Stage 2	13	1				
13.6	Metropolitan South Institute of TAFE: Loganlea	7	3				
13.7	Brisbane North Institute of TAFE: Grovely	1	2				
13.8	Southbank Institute of Technology		4	234	Completed 2008-09		
Gold Coast							
13.9	New Gold Coast TAFE campus: Coomera	25	2				
Sunshine Coast							
13.10	Campus establishment: Kawana	6	1				
13.11	Campus modernisation: Nambour	12	1				
13.12	Campus modernisation: Mooloolaba	5	1				
Total		251		236.7			

Construction started

Notes

A. The table identifies the expected delivery timeframe for each infrastructure project. The darker shade represents projects that are under construction at 1 July 2009.

B. Estimated investment is in 2009 dollars to allow price consistency over the full timeframe of the program. Estimates in the state budget and other documents may differ, as they may incorporate costs that reflect anticipated changes in input prices between initial planning and the time of construction. Estimated investment includes funds already expended on projects.

C. Where funding is required from sources other than the Queensland Government, their estimated costs have been included. Where projects are subject to federal funding, it is noted as timing of these projects is subject to negotiation with the federal government.

D. For an explanation of estimate categories, refer to page 19.

E. Where a project has been completed, it is noted in the table.

Community services

Queensland Police Service

The functions of the Queensland Police Service are to preserve peace and good order, protect the community, prevent crime, detect offenders, uphold the law, ensure the fair and efficient administration of law, and provide services in emergency situations.

Strong population growth in South East Queensland has continued to increase demand for policing services and presents a significant challenge for the Queensland Police Service into the future.

To address this issue, the Queensland Police Service endeavours to continuously improve service delivery and productivity.

Reducing the Queensland road toll remains a priority and the Police Service works in partnership with the community and other agencies to deliver a range of road safety initiatives.

Establishing and maintaining infrastructure is an essential component of the Police Service's approach to delivering high-quality policing services. Strong investment in infrastructure ensures the community has ready access to policing services, and that police response times are timely and effective.

In 2008–09 the Queensland Government provided $142 million to progress major capital works projects for the Queensland Police Service. Key projects within the region planned for the next few years include:

- a new police station at Camp Hill/Carina
- an upgrade to the police station at Beenleigh
- a replacement water police facility for the Sunshine Coast District Water Police currently located at Kawana Waters Police Station.

Projects currently under construction within South East Queensland include:

- a replacement police station and watch-house at Ipswich
- replacement police stations at Fortitude Valley and Holland Park
- new police stations at Carseldine, Crestmead/Marsden, Reedy Creek/Robina, Springfield and Sippy Downs
- refurbishment of the Upper Mt Gravatt District Headquarters complex
- a new police station and district functions complex at Burpengary
- a new district headquarters at Coomera
- a new police beat at Logan Village.

Projects recently completed include:

- new or replacement police stations at Mango Hill/North Lakes, Surfers Paradise and Woodford
- upgrades to Mudgeeraba Police Station and Bribie Island Police Station
- new police beats at East Brisbane/ Kangaroo Point and Woolloongabba
- a new watchhouse at Pine Rivers
- an upgrade of The Gap Police Station.

The Westgate Project is continuing, with the design of the new Queensland Police Academy and operational facility at Wacol. The refurbishment of the first heritage listed building 'LillyPilly House' was completed in May 2009. This will accommodate the Westgate project team and later the Driver Training Unit. It is anticipated the new driver training facility will be fully operational by February 2010.

Emerging communities

The Police Service is continuing to develop new plans and strategies in consultation with other state agencies and local governments to address the policing needs of emerging communities in South East Queensland. These plans will incorporate the use of new technologies—particularly information management systems—and a broad range of service delivery options.

Emergency services

The Queensland Government is responsible for ensuring Queensland communities are supported by, and benefit from, a broad range of essential emergency services. Its operational arms include the Queensland Fire and Rescue Service (QFRS), the Queensland Ambulance Service (QAS) and Emergency Management Queensland (EMQ). These in turn support volunteer organisations ranging from the Rural Fire Service to Volunteer Marine Rescue and the State Emergency Service.

As well as the essential front line services (fire, ambulance, search and rescue), the government also provides for the planning, coordination and facilitation needed to build community capacity to be prepared for and respond to a range of predictable disasters and possible emergencies.

However, emergency services in South East Queensland are facing three main challenges: strong population growth, increasing high-density development, and further development within the urban footprint. These challenges put the pressure on the government s ability to deliver essential services and will be exacerbated by the anticipated impacts of climate change, including increases in the frequency and/or intensity of drought, heatwave, storm surge, flood and cyclonic activity.

The Queensland Government addresses these challenges by providing an extensive network of emergency services infrastructure. New fire and ambulance stations are procured in direct response to current and projected service delivery needs reduced response times to all types of emergency calls being a paramount requirement.

To help meet the challenge of increased demand and maintain service standards, planning for new priorities is informed by the QFRS and QAS capital infrastructure plans. These documents assist in identifying funding priorities for physical infrastructure land, buildings, plant and equipment and communication technology.

The plans are sufficiently flexible and revised regularly to reflect changing societal and operational needs.

To ensure timely procurement of service-ready facilities, the government has introduced a number of alternative and more efficient project procurement and construction methodologies. These initiatives include bundling projects on a geographic or building-type basis, using factory-built buildings, and developing a suite of standard designs to expedite the design and documentation stages of project procurement.

Queensland Emergency Operations Centre (QEOC)

The QEOC will be a state-of-the art facility at Kedron Park designed to meet the challenges of the 21st century for emergency and disaster management while supporting the government s counter-terrorism capability. It will provide for the future growth of ooo services in one of Australia s fastest growing regions.

Progress on emergency services projects in 2008 09

- A $76 million Queensland Emergency Operations Centre in Kedron will provide a coordinated operational and communication facility for the delivery of emergency services in the region. It will combine dispersed communication centres into one, state-of-the-art communication facility capable of responding to the most complex emergency situations across Queensland. Construction has commenced and is due to be completed in 2010.
- A $4 million Ipswich Regional Ambulance Station is currently at the planning stage and due for completion in 2010. The project will significantly improve service delivery in direct response to the demands of growth in Ipswich.
- Construction of the $20 million Queensland Combined Emergency Services Academy at Whyte Island has been completed. This facility comprises a comprehensive training facility for the full range of emergency services through real-life streetscape, administration and logistical support units.

Table 14 Community services

Map 10 ref no.	Project	Estimated investment $M	Estimate Category (see note D)	Completed projects $M	Delivery timeframe		
					2009-10 to 2012-13	2013-14 to 2018-19	2019-20 to 2025-26
Western Corridor							
14.1	Ipswich Court, Watch-house and Police Station	110	3				
14.2	Gatton Correctional Precinct	2,410	1 & 3				
14.3	Police Academy	450	1				
Brisbane, Moreton, Redland and Logan							
14.4	Brisbane Supreme Court and District Court	600	3				
14.5	Pine Rivers Courthouse, Strathpine		4	18	Completed 2008-09		
14.6	Sandgate Courthouse		4	4.4	Completed 2007-08		
Total		3,570		22.4			

Construction started

Notes

A. The table identifies the expected delivery timeframe for each infrastructure project. The darker shade represents projects that are under construction at 1 July 2009.

B. Estimated investment is in 2009 dollars to allow price consistency over the full timeframe of the program. Estimates in the state budget and other documents may differ, as they may incorporate costs that reflect anticipated changes in input prices between initial planning and the time of construction. Estimated investment includes funds already expended on projects.

C. Where funding is required from sources other than the Queensland Government, their estimated costs have been included. Where projects are subject to federal funding, it is noted as timing of these projects is subject to negotiation with the federal government.

D. For an explanation of estimate categories, refer to page 19.

E. Where a project has been completed, it is noted in the table.

Justice services

The Queensland Government provides a range of infrastructure to support the justice system, including a network of courthouses which are critical to maintaining a safe, just and supportive society.

Progress on justice services projects in 2008 09

- A $110 million Ipswich Courthouse, watch-house and police station in the Ipswich CBD. The project includes 12 courtrooms for the District Court and Magistrates Court as well as a watch-house and police station. Construction commenced in mid 2007 with completion anticipated for late 2009.
- A new Brisbane Supreme Court and District Court complex at the intersection of Roma and George streets in Brisbane s CBD. Construction commenced in late 2007 and is due to be completed in late 2011. The 60 000 square metre building will include 45 courtrooms, associated support functions, registry, judges chambers and cells. Along with the existing Magistrates Court and a large public square, the complex will create a new integrated legal precinct and public amenity for the western end of the CBD.

Social housing

The Nation Building Economic Stimulus Plan Social Housing Initiative aims to expand the supply of much-needed social housing and maximise the involvement of the not-for-profit housing sector.

Queensland will receive nearly $1.3 billion from $6.4 billion committed nationally by the Australian Government for the Social Housing Initiative. This funding will be spent on repairs and maintenance to existing social housing, and construction of approximately 4000 new properties between 2009 and 2012.

The Queensland Government will direct investment under this initiative to the not-for-profit sector through capital grants and head-leasing arrangements to support:

- the growth of a small number of providers to become significant developers of affordable housing, with plans to develop 500 to 1000 dwellings or more
- the growth of specialist tenancy management organisations capable of managing large portfolios of 500 or more tenancies.

Corrective services

In November 2006 the Queensland Government announced it would establish a major corrective services precinct at Spring Creek near Gatton. The precinct, which may have an ultimate capacity of approximately 3000 beds, will be developed in stages and incorporate a number of correctional centres. The government has acquired a 600-hectare site and made an initial commitment of $500 million for stage 1A of the project. A managing contractor has been engaged for construction and early works have commenced on site including road and water infrastructure.

Infrastructure for rural development

The SEQ Regional Plan details a wide range of desired regional land use outcomes and informs the Queensland Government's priority investments in regional infrastructure.

Within rural areas the SEQ Regional Plan aims to encourage compact residential development in existing towns and villages and minimise the impacts of development on areas of economic importance such as good quality agricultural land and other important regional landscape values. The plan contributes to the sustainable economic development of rural areas through land use planning that protects agricultural production areas and supports rural industry adjustment and diversification strategies.

The Queensland Government supports the development and maintenance of rural infrastructure through a range of grant and subsidy programs that assist rural communities with the costs of water, sewerage, social, community, and cultural facilities. Funding assistance for roads is also provided through the Roads Alliance program and the Southern Queensland Accelerated Road Rehabilitation program administered by the Department of Transport and Main Roads.

Additionally, in meeting commitments to develop sustainable rural communities, the Queensland Government has allocated approximately 11 per cent of total funding under the SEQ Infrastructure Plan to directly benefit rural communities across the water, transport, energy and social sectors.

Sustainable rural communities require reliable and safe water supplies to meet domestic needs and support agricultural and rural industries. Access to reliable water supplies has been a major challenge for many rural communities due to prolonged drought and the emerging impacts of climate variability.

In 2005, rural production in South East Queensland accounted for about 150 000 million litres, or 24 per cent, of the region's total water usage. The draft SEQ Water Strategy contains options for improving the reliability of supply for urban communities and, where possible, providing additional supplies to support agricultural production and rural industries.

With water supplies being limited under any water supply system, sustainable economic development increasingly is reliant on improvements in water use efficiency gains by rural and urban users. The SEQ Irrigation Futures initiative has played a central role in assisting agricultural producers and rural industries to be more productive with smaller volumes of water.

To supplement surface and ground water infrastructure investments, the Queensland Government will continue to investigate opportunities to supply recycled water for rural production through its sub-regional total water cycle planning program. This program intends to extend the benefits of investments in recycled water infrastructure, which add to urban supplies in times of drought, into rural communities and support the economic development of agricultural and other rural industries and businesses. In the medium-term, the Water Grid Manager is developing arrangements that include pricing to allow rural communities and industries to obtain urban water supplies on a temporary basis.

The draft SEQ Water Strategy also plans to provide increased security of supply to more than 200 000 rural residents who are not connected to the SEQ Water Grid or who rely on water from rainwater tanks or groundwater bores. Options listed in the strategy include direct connection to the water grid through the construction of new pipelines and providing additional surface and groundwater supplies.

The Rural Futures Strategy to be released in 2009 proposes a number of actions to address the infrastructure needs of rural areas. These include proposals for rural water users to access recycled water; continuing the SEQ Irrigation Futures (Water Use Efficiency) program; the equitable provision of social infrastructure to rural areas; and improving community transport infrastructure.

The strategy will form the basis of an integrated rural planning framework in South East Queensland seeking to balance the competition for land and natural resources, the needs of rural landowners, agricultural producers, rural communities and the impacts of regional population growth.

Regional sport and recreation

The Queensland Government is committed to providing new opportunities for Queenslanders to participate in sport and recreation, from community to elite level.

The government, working with local government and community organisations, delivers a range of programs and services to encourage people to participate in sport and recreation and ensure sporting facilities are accessible and used effectively.

The Find Your 30 campaign is a major initiative to address growing concerns that around half of Queenslanders report as overweight or obese and are not sufficiently active. Find Your 30 is designed to encourage Queenslanders to find simple ways of incorporating at least 30 minutes of physical activity into daily activities.

Progress on sport and recreation projects in 2008–09

Queensland Government grant programs assist local government and community organisations to construct sport and recreation facilities and prepare recreation plans to foster improved use and management of facilities. During 2008–09 the Queensland Government constructed, or worked in partnership with local government, community organisations and private partners, to complete the following regionally significant projects:

- The Queensland Tennis Centre was completed in December 2008. The centre includes 23 international-standard courts including all three grand-slam surfaces (grass, clay and acrylic). The centre court arena seats 5500 people and has already hosted the highly successful Brisbane International tennis tournament in January 2009
- The Redcliffe District Rugby League Football Club received funding for the construction of an indoor heated swimming pool. The facility opened to the public in September 2008
- Brisbane City Council received funding to construct two aquatic centres; incorporating a 25 metre, eight lane, heated swimming pool, a 16 x 20 metre heated indoor pool, kiosk/administration facilities, change rooms and amenities at both Mt Gravatt East State School and Runcorn State High School. The centres were completed and opened to the public in February 2009
- Brisbane City Council was provided over $1.1 million to construct ten new hard-court synthetic surface tennis courts and a clubhouse at Wavell Heights. Construction was completed in June 2008
- The $2 million redevelopment of the Toowoomba Sports Ground incorporating a new grandstand, amenities and entry way, was completed in March 2009.

Some of the following projects which will be progressed in 2009-10 include:

- Construction of a 25 000 capacity AFL stadium on the Gold Coast (estimated at up to $130 million, subject to scope of works) will commence in 2009. The stadium will be designed to enable upgrading in the future if required for international events, including athletics, cricket and football. The Queensland Government has committed $60 million to this project. The stadium is expected to open in 2011

- Construction of stage one of the Runaway Bay sports precinct extension incorporating six new multipurpose playing fields. The project is estimated to be complete in late 2010
- A new motorcycle sporting precinct including motocross track, clubhouse and amenities in the northern Gold Coast area. The project, which is being lead by the Gold Coast City Council, is expected to be complete in mid 2010
- Development of a new aquatic centre including a 50 metre pool at the University of the Sunshine Coast. The project is estimated to be complete in mid 2010.

Community programs

The government has a suite of community programs that provide practical information, advice and accreditation to Queenslanders to increase participation in sport and recreation. They consist of regional workshops, the Get Active Queensland Schools Program, the Get Active Queensland Accreditation Program, Moving with Children workshops, Teacher Professional Development workshops and providing sports locker rooms and other clinics. All initiatives are available to the public free of charge and can be accessed across Queensland. In 2007-08 and 2008-09, 301 events attracting 33 203 participants were held in South East Queensland.

Outdoor recreation

Outdoor recreation is an important part of South East Queensland s attraction, livability and lifestyle. Popular activities include picnicking, surfing, bushwalking, camping, canoeing and four-wheel driving.

Opportunities to participate in all of these activities are highly valued by both South East Queensland residents and visitors. Safe, convenient and beautiful places for outdoor recreation form a major part of the South East Queensland tourism industry and help connect people with natural environment and rural landscapes.

When people participate in outdoor recreation activities they address obesity and other health issues. Surveys consistently show that walking; surfing; swimming in creeks, rivers and lakes; and cycling make up more than half of the physically active forms of sport or recreation that people choose.

The Queensland Government is preparing measures to coordinate the delivery of outdoor recreation services within South East Queensland and identify regional outdoor recreation priorities. Priority projects will be delivered in partnership with local government, the community and the private sector.

Progress on outdoor recreation projects in 2008 09

The Queensland Government has invested funds to develop three regional recreation trails in South East Queensland.

- Brisbane Valley Rail Trail a 148 kilometre trail following the closed Brisbane Valley railway line between Ipswich and Blackbutt. The trail passes through the spectacular scenery and agricultural areas of Fernvale, Lowood, Esk, Toogoolawah, Harlin, Moore and Linville. The project includes track construction, road and gully crossings, visitor amenities and directional and interpretive signage. A 7 kilometre section between Moore and Linville was opened in November 2007, and new horse yards were opened in Linville in May 2008. Another section, north of Cominya, was opened in November 2008. About 50 kilometres of the rail trail is now open for public use. Accommodation, food and other services are available in the townships along the trail.

- Boonah to Ipswich Trail a 76 kilometre trail linking Ipswich to Boonah via Flinders Peak and the site of the proposed Wyaralong Dam. This trail is located on existing public land including formed and unformed roads through important scenic and cultural landscapes. It will cater for walkers, mountain bikers and horse riders. The project includes constructing a new track, visitor amenities and directional and interpretive signage.
- Maroochy River Trail a 50 kilometre trail from near Yandina to Maroochydore along the Maroochy River and its tributary streams. The trail passes through scenic rural landscapes and will cater for canoeists and kayakers. There will be riverside parking areas, water access pontoons and ramps, visitor amenities, and directional and interpretive signage. The River Trail will be officially opened in 2009.

In addition to building the trails, the Queensland Government has allocated a further $1 million to promote and market outdoor recreation opportunities.

Walking tracks, camping areas, visitor centres, public amenities, roads and picnic facilities are provided by the Queensland Government in national parks and on other state land to support outdoor recreation activities. The government spends approximately $15 million each year on visitor facilities in South East Queensland s national parks, state forest recreation areas and marine parks.

South East Queensland horse trail network

The Queensland Government announced in 2006 horse riders will have continued use of some formed management roads and tracks through proposed national parks in South East Queensland (subject to the SEQ Forest Agreement). This continued use will occur on formed management roads historically used for horse riding in five project areas: Noosa, Mapleton-Kenilworth, Caboolture-Bellthorpe, Western Brisbane and Gold Coast.

A network of approximately 500 kilometres of these trails will remain as a narrow strip of forest reserve tenure when the surrounding forest reserve transfers to national park. Horse riding will not be allowed on existing national parks and this commitment will not set a precedent for riding in other national park areas.

The government will spend $650 000 during 2009 for operational works, like installing fences, gates, signage and parking, on formed management roads through proposed national parks in South East Queensland. This work will be completed by late 2009.

Great Walks of Queensland

In March 2008 the 54 kilometre Gold Coast Hinterland Great Walk opened, linking the Lamington National Park and the Springbrook Plateau.

Almost $6.5 million was allocated in 2006 to fund the second stage of a network of world class middle-to-long distance walking tracks throughout the very best of Queensland s protected area network. Building on the success of the $10 million Great Walks of Queensland program first released in 2001, the network will be extended with new tracks through Cooloola and the Conondale Range in South East Queensland, as well as through the Whitsunday Islands and Carnarvon National Park.

The $1.4 million Cooloola Great Walk will traverse the spectacular Cooloola Section of the Great Sandy National Park along a 90 kilometre walking track. Linking the Noosa North Shore to Rainbow Beach via the upper Noosa River and the eastern high dunes, the Cooloola Great Walk will provide four hikers camps and associated facilities such as lookouts, bridges, trail heads and signage. Construction is well underway and on track for completion by the end of 2009.

The $1.4 million Conondale Range Great Walk will provide a 70 kilometre circuit walk showcasing the rugged mountains and gorges of the Conondale Range on a four day walk with numerous opportunities for short walks. Construction is well underway and on track for completion by mid 2010.

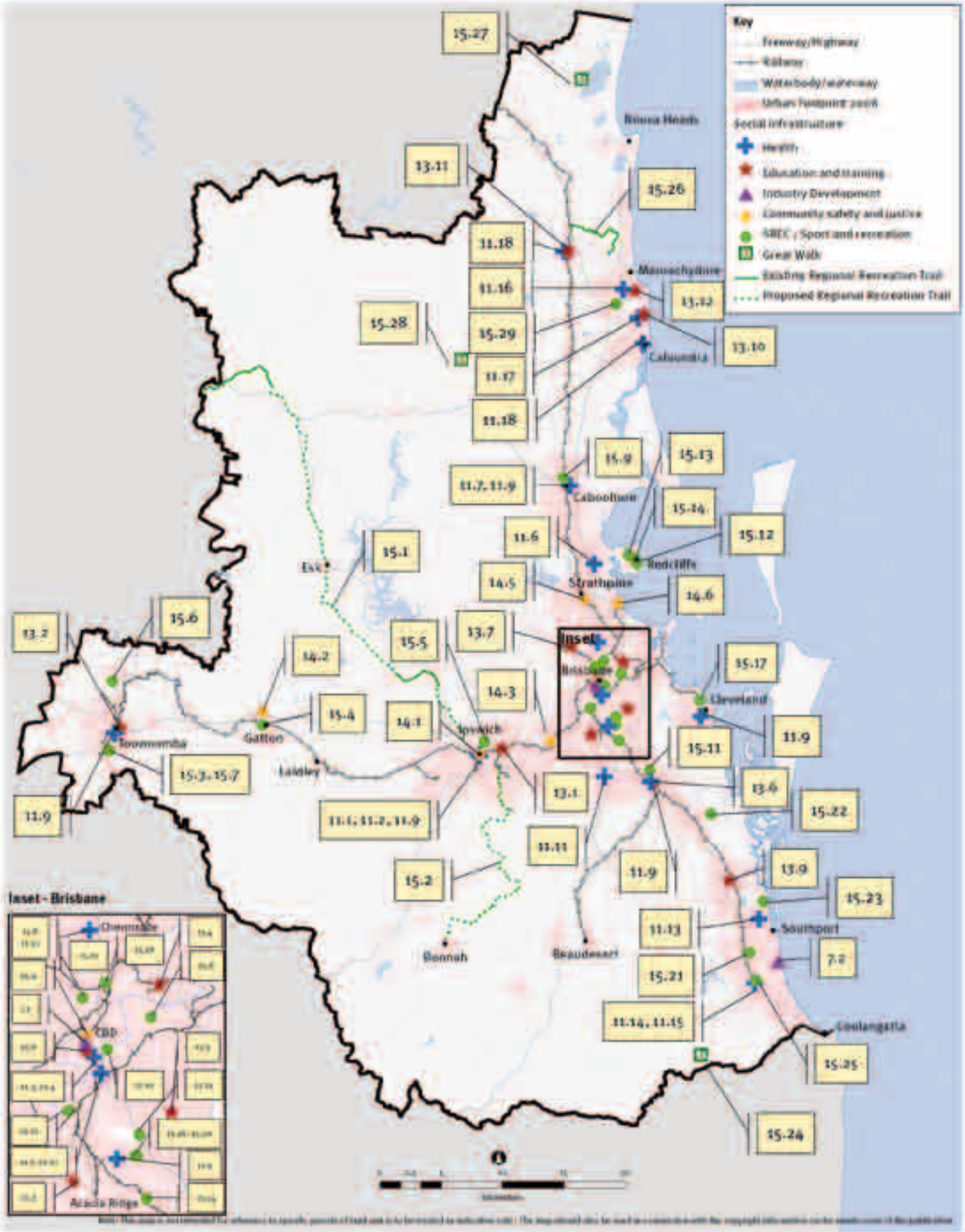
Table 15 Regional sport and recreation infrastructure

Map 10 ref no.	Project	Estimated investment $M	Estimate category (see note D)	Completed projects $M	Delivery timeframe		
					2009-10 to 2012-13	2013-14 to 2018-19	2019-20 to 2025-26
Western Corridor							
15.1	Brisbane Valley Rail Trail	3.6	3				
15.2	Boonah to Ipswich Trail	2.4	3				
15.3	Regional Tennis Facility: University of Southern Queensland campus	2.7	1				
15.4	Gatton Aquatic Centre	2.5	2				
15.5	Tivoli Multi-purpose facility Stage 1	3.3	1				
15.6	Highfields indoor multipurpose auditorium	1.3	1				
15.7	Clive Berghofer Stadium: Toowoomba upgrade		4	2	Completed in 2008-09		
Brisbane, Moreton, Redland and Logan							
15.8	Aquatic Centre upgrades: Colmslie	8	2				
15.9	State Equestrian Centre, Caboolture	4	3				
15.10	Ballymore Rugby Stadium Redevelopment	4	1				
15.11	Meadowbrook multisport fields	3	1				
15.12	Redcliffe Tennis Centre upgrade	3	1				
15.13	Kippa Ring indoor multi-purpose facility	4.4	1				
15.14	Aquatic Centre upgrades: Mt Gravatt, Runcorn and Redcliffe		4	21	Completed 2008-09		
15.15	Queensland Tennis Centre, Tennyson		4	82	Completed 2008-09		
15.16	Queensland Sport and Athletics Centre: Nathan upgrade (hydrotherapy centre)		4	10	Completed 2007-08		
15.17	State Softball Centre, Ormiston		4	1.3	Completed 2007-08		
15.18	Cricket Centre of Excellence, Albion (stage 1)		4	2.5	Completed 2007-08		
15.19	Brisbane Cricket Ground, Woolloongabba		4	50	Completed 2007-08		
15.20	Queensland Sport and Athletics Centre, Nathan		4	1.5	Completed 2007-08		
Gold Coast							
15.21	Gold Coast Stadium redevelopment (Carrara)	130	0				
15.22	Motorcycle Sporting Precinct: Northern Gold Coast	2.2	1				
15.23	Runaway Bay Sports Precinct Stage 1 (new playing fields)	3.9	1				
15.24	Lamington Springbrook Great Walk		4	3	Completed 2007-08		
15.25	Skilled Park, Robina		4	160	Completed 2007-08		
Sunshine Coast							
15.26	Maroochy River Trail	0.5	3				
15.27	Cooloola Great Walk	1.4	3				
15.28	Conondale Range Great Walk	1.4	3				
15.29	Aquatic Centre: University of the Sunshine Coast	2.4	1				
Total		184		333.3			

Construction started

Notes
A. The table identifies the expected delivery timeframe for each infrastructure project. The darker shade represents projects that are under construction at 1 July 2009.
B. Estimated investment is in 2009 dollars to allow price consistency over the full timeframe of the program. Estimates in the state budget and other documents may differ, as they may incorporate costs that reflect anticipated changes in input prices between initial planning and the time of construction. Estimated investment includes funds already expended on projects.
C. Where funding is required from sources other than the Queensland Government, their estimated costs have been included. Where projects are subject to federal funding, it is noted as timing of these projects is subject to negotiation with the federal government.
D. For an explanation of estimate categories, refer to page 19.
E. Where a project has been completed or a stage of a project completed, it is noted in the table.
F. For consistency across this document, amounts less than $20m remain unrounded.

Map 10 – Social and economic infrastructure



Part C
Appendices

Useful websites

The following websites provide further information on the scope and status of infrastructure projects included in this infrastructure plan.

Project	Website
Regional planning and infrastructure projects	
SEQ Regional Plan	www.dip.qld.gov.au
Major projects and infrastructure	www.dip.qld.gov.au
Transport	
Department of Transport and Main Roads	www.transport.qld.gov.au/Home/Projects_and_initiatives www.mainroads.qld.gov.au
Gateway Upgrade Project	www.gatewayupgradeproject.com.au
Bus and busway projects	www.translink.qld.gov.au
Airport Link	www.airportlink.com.au
Gold Coast Rapid Transit	www.translink.com.au/qt/TransLin.nsf/index/gc_rapidtransit
Inner City Rail Capacity Study	www.transport.qld.gov.au/Home/Projects_and_initiatives/Projects/Inner_city_rail_upgrade/
Clem Jones Tunnel (Clem7)	www.rivercitymotorway.com.au/content/2036/Clem-Jones-Tunnel
Rail upgrades	www.qr.com.au/seqip
Water	
Queensland Water Commission	www.qwc.qld.gov.au
SEQ Water Grid	www.watergrid.infrastructure.qld.gov.au/asp/index.asp
SEQ Regional Water Supply Strategy	www.seqwaterstrategy.qld.gov.au
Traveston Crossing and Wyaralong dams	www.qldwi.com.au
Water Saving Rebate Schemes	www.nrw.qld.gov.au/water/saverscheme
Sustainable Housing Code	www.dip.qld.gov.au
Energy	
CS Energy	www.csenergy.com.au
Department of Employment, Economic Development and Innovation (mines and energy)	www.dme.qld.gov.au
ENERGEX	www.energex.com.au
Ergon Energy	www.ergon.com.au
National Electricity Market Management Company (NEMMCO)	www.nemmco.com.au
Origin Energy	www.originenergy.com.au
Powerlink Queensland	www.powerlink.com.au
Tarong Energy	www.tarongenergy.com.au

Information and communication technology	
Queensland Telecommunications Strategic Framework	www.qgcio.qld.gov.au
Health	
Queensland Health	www.health.qld.gov.au
Queensland Children s Hospital	www.health.qld.gov.au/buildinghealth
Gold Coast University Hospital	www.health.qld.gov.au/buildinghealth
Sunshine Coast Hospital	www.health.qld.gov.au/buildinghealth
Health Action Plan	www.health.qld.gov.au/publications/corporate/action_plan.asp
Health Precincts	www.health.qld.gov.au/publications
Smart State Medical Research Centre	www.smartstate.qld.gov.au/resources/publications/ss_strategy/building.shtm
Education and training	
Department of Education and Training	www.education.qld.gov.au
Queensland Smart State Academies	www.qldacademies.eq.edu.au
Millennium Arts Project	www.publicworks.qld.gov.au
Brisbane Convention and Exhibition Centre Expansion	www.bcec.com.au
Gold Coast Convention and Exhibition Centre Extension	www.publicworks.qld.gov.au
Queensland Skills Plan	www.trainandemploy.qld.gov.au
Community safety and justice	
Community safety initiatives	www.emergency.qld.gov.au
Queensland Police Service	www.police.qld.gov.au
Courthouse upgrades	www.justice.qld.gov.au
Gatton Correctional Precinct	www.dcs.qld.gov.au/About_Us/The_Department/Prison_Precinct/index.shtml
Regional sport and recreation	
Sport and recreation funding programs	www.sportrec.qld.gov.au and www.dlgpsr.qld.gov.au
Horse trails and Great Walks	www.epa.qld.gov.au/parks_and_forests
SEQ Regional Outdoor Recreation Strategy	www.dip.qld.gov.au
Skilled Park, Robina	www.stadiums.qld.gov.au
State Tennis Centre	www.publicworks.qld.gov.au
Industry development	
Department of Employment, Economic Development and Innovation	www.dtrdi.qld.gov.au
Boggo Road Urban Village Ecosciences Precinct	www.sd.qld.gov.au/ecosciencesprecinct
Infrastructure for rural development	
SEQ Rural Futures Strategy	www.dip.qld.gov.au

Index of tables, figures and maps

Tables

Figures

Maps

Published July 2009

ISBN: 978-0-9805449-0-9

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South East Queensland Regional Plan 2009–2031

Qplan

Queensland Government

South East Queensland Regional Plan 2009–2031
(SEQ Regional Plan)

Prepared by the Honourable Stirling Hinchliffe, regional planning Minister, in accordance with the Queensland *Integrated Planning Act 1997*, Section 2.5A 14 and 2.5C 10.

In partnership with the Council of Mayors (South East Queensland).

In consultation with the South East Queensland Regional Coordination Committee.

Queensland Government

July 2009

ISBN 978-0-9805449-1-6

Release notes:

The *South East Queensland Regional Plan 2009–2031* is released by the Minister for Infrastructure and Planning in accordance with the *Integrated Planning Act 1997*, section 2.5A 15 and 2.5C 11.

Find out more
For more information and copies of the SEQ Regional Plan (including the state planning regulatory provisions) contact:

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Regulatory maps
A set of regulatory maps (32 cadastre-based (1:50 000) maps in total) form part of the State planning regulatory provisions associated with the SEQ Regional Plan. The regulatory maps are available separately to the SEQ Regional Plan. Contact the Department of Infrastructure and Planning to request a copy of the regulatory maps on CD.

Map disclaimer
The information on maps in this document is not intended for reference to specific parcels of land, and should be treated as indicative only. In some parts of the mapping, one layer obscures another; this is not meant to imply any order of importance or priority.
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Data sources include:
- Department of Infrastructure and Planning
- Department of Environment and Resource Management
- Department of Transport and Main Roads
- Department of Employment, Economic Development and Innovation
- Department of Education and Training
- Queensland Health
- Geoscience Australia
- South East Queensland Catchments
- Mapinfo Roads

Map version: June 2009

Translation statement
The Queensland Government is committed to providing accessible services to Queenslanders from all culturally and linguistically diverse backgrounds. If you have difficulty understanding this document and need an interpreter, please call the Translating and Interpreting Service (TIS National) on 131 450 and ask them to telephone the Queensland Department of Infrastructure and Planning on 07 3227 8548.

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ISBN 978-0-9805449-1-6

Foreword



As Australia's fastest-growing state, Queensland needs a contemporary system of planning that is responsive to change and continues to deliver the lifestyle for which we are famous.

The South East Queensland Regional Plan is the Queensland Government's long-term plan that will shape South East Queensland (SEQ) over the next 20 years and protect our wonderful way of life.

It's a plan for smart growth, to manage our expanding population and tackle the issues of today like housing affordability, congestion and climate change.

To manage growth, the regional plan promotes compact settlement by consolidating growth in existing areas which are close to public transport, to encourage reduced car use and help fight congestion.

The SEQ Regional Plan ensures there is adequate land available for new homes, businesses and infrastructure to 2031, while safeguarding more than 85 per cent of the region from inappropriate urban development.

The existing Urban Footprint remains mostly unchanged, providing a clear boundary to stop urban sprawl and protect our natural environment, whilst providing enough land for anticipated population growth.

The SEQ Regional Plan is the major planning document for SEQ and part of the Queensland Government's move towards planning for a better future for all Queenslanders. The SEQ Regional Plan contributes to the Queensland Government's *Toward Q2: Tomorrow's Queensland 2020* vision by protecting greenspace and supporting a sustainable environment.

Importantly, the SEQ Regional Plan is supported by the Queensland Government's regularly updated *South East Queensland Infrastructure Plan and Program* which lays the foundation for infrastructure that anticipates growth and accommodates the needs of the region.

The development of the regional plan has been supported by the Council of Mayors (SEQ) which is working closely with the Queensland Government to deliver and implement the policies and programs set out in the plan.

We would like to acknowledge the Aboriginal and Torres Strait Islander peoples as the first peoples of the land and recognise and acknowledge the traditional owners and elders of the region. The SEQ Regional Plan will contribute to advancing reconciliation through engagement of Aboriginal and Torres Strait Islander peoples in planning processes and includes policies and programs that work towards closing the gap in disadvantage to help meet their needs.

Government is now getting on with the job of implementing the SEQ Regional Plan. We are delivering on the commitments made in the plan, including important new initiatives to manage climate change, deliver residential land supply, preserve green space and develop essential infrastructure.

The Honourable Anna Bligh MP
Premier of Queensland

The Honourable Stirling Hinchliffe MP
Minister for Infrastructure and Planning

The Right Honourable, the Lord Mayor of Brisbane, and the Council of Mayors (SEQ) Chairman
Councillor Campbell Newman

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PART A—Introduction

Purpose

The purpose of the *South East Queensland Regional Plan 2009–2031* (SEQ Regional Plan) is to manage regional growth and change in the most sustainable way to protect and enhance quality of life in the region.

South East Queensland Regional Plan review

The state government reviewed the *South East Queensland Regional Plan 2005-2026* (SEQ Regional Plan 2005) to determine the appropriate action to address emerging regional growth management issues—continued high population growth, housing affordability, transport congestion, climate change and employment generation.

This SEQ Regional Plan refines and modifies the strategic directions, principles and policies of the SEQ Regional Plan 2005 to respond to emerging issues. Population and housing projections have been extended to 2031 and the implications for accommodating growth in SEQ have been examined.

The SEQ Regional Plan and associated state planning regulatory provisions (Part F) have been prepared in accordance with sections 2.5A and 2.5C of the *Integrated Planning Act 1997* (IPA).

New state planning regulatory provisions (*South East Queensland Regional Plan 2009–2031 State planning regulatory provisions*) and associated regulatory maps have also been prepared. These support the SEQ Regional Plan and should be read in conjunction with it. The regulatory provisions have effect from the date of their gazettal.

The IPA sets out the required procedure that the regional planning Minister must follow in preparing and making the SEQ Regional Plan. The key steps include:

- preparing a draft plan and state planning regulatory provisions
- making the draft plan available for public consultation for a minimum of 60 business days and the regulations for 30 business days
- considering all properly made submissions
- consulting with the Regional Coordination Committee (RCC).

To comply with these requirements, the preparing and making of the SEQ Regional Plan included:

- preparing the *Draft South East Queensland Regional Plan 2009–2031* (draft SEQ Regional Plan) and state planning regulatory provisions, which were released on 7 December 2008
- undertaking a comprehensive public consultation program on the draft SEQ Regional Plan and regulations, which were on public display until 1 May 2009
- reviewing 3500 formal submissions. Each submission was assessed and summarised, and a consultation report was prepared with recommendations for the regional planning Minister
- the regional planning Minister consulting with the RCC during preparation of the draft and final SEQ Regional Plan.

South East Queensland region

The SEQ region comprises 11 regional and city councils. The area covered by the SEQ Regional Plan includes the following local governments and adjacent Queensland waters (as shown on Map 1):

- Brisbane City Council
- Gold Coast City Council
- Ipswich City Council
- Lockyer Valley Regional Council
- Logan City Council
- Moreton Bay Regional Council
- Toowoomba Regional Council (part of)
- Redland City Council
- Scenic Rim Regional Council
- Somerset Regional Council
- Sunshine Coast Regional Council.

Effect

The SEQ Regional Plan is the pre-eminent plan for the SEQ region and takes precedence over all other planning instruments. The particular effect of the regional plan is established under section 2.5A of the IPA as follows:

- For the purpose of the IPA, the regional plan is taken to be a state interest.
- Under the IPA, the regional plan prevails where there is any inconsistency with any other plan, policy or code, including any other planning instrument made under state legislation that has effect within the SEQ region.
- Any plans, policies and codes being prepared or amended by state agencies that relate to the SEQ region must reflect and align with the regional plan.

The state planning regulatory provisions of the regional plan are required to be taken into account in planning and development decision-making processes, including:

- state government plans and policies
- local government planning schemes and other plans and policies
- planning and development processes under the IPA
- development applications made under the Integrated Development Assessment System (IDAS) of the IPA.

Where local government planning schemes materially contradict the regional plan, the planning scheme must be amended to ensure alignment with the regional plan.

The following parts of the SEQ Regional Plan are relevant when assessing a development application or an application for approval of a master plan against or having regard to the SEQ Regional Plan:

- the sub-regional narratives in Part C
- the regional policies in Part D.

An application conflicts with the SEQ Regional Plan if it does not comply with the sub-regional narratives in Part C or the regional policies in Part D. If there is an inconsistency between the sub-regional narratives in Part C and the regional policies in Part D, the sub-regional narratives prevail.

The regional plan also directs state agencies, through Queensland Government-agreed principles, policies and programs, for the future of SEQ.

The *South East Queensland Regional Plan 2009–2031* (the SEQ Regional Plan) replaces the *South East Queensland Regional Plan 2005-2026*. The *Draft South East Queensland Regional Plan 2009–2031* was released by the regional planning Minister on 7 December 2008. The draft plan was subject to community consultation and comment to 1 May 2009.

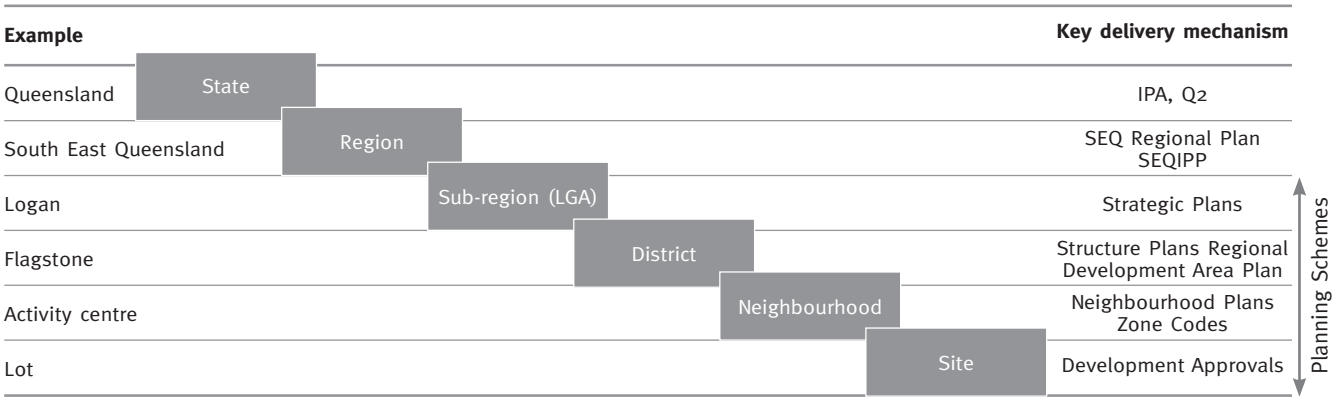
The SEQ Regional Plan has been prepared in good faith, taking into account all public submissions, to provide a framework for the management and development of the SEQ region to 2031.

The SEQ Regional Plan has effect on and from the day the notice about the making of the plan is published in the *Government Gazette*.

The *South East Queensland Regional Plan 2009–2031 State planning regulatory provisions* (SEQ Regional Plan regulatory provisions) have effect from the day they are published in the *Government Gazette*.

Map 1: South East Queensland

Figure 1: Land use planning framework for Queensland



Planning period

The SEQ Regional Plan provides the framework on which to manage growth, change, land use and development in SEQ to 2031.

It also considers the region's potential management needs beyond 2031 to ensure planning decisions made today do not compromise options to meet longer term needs. The SEQ Regional Plan also addresses long-term issues such as climate change.

Amending or replacing the regional plan

Amendments to the SEQ Regional Plan must be made in accordance with the procedures set down in section 2.5A of the IPA.

The SEQ Regional Plan will be regularly monitored and reviewed to ensure it continues to provide the most appropriate framework for managing growth and change in SEQ. The monitoring will be undertaken through both the SEQ Growth Management Program and State of the Region reporting.

A formal review—informed by this monitoring—will be undertaken every five years. The next formal review will be undertaken by July 2014.

Notwithstanding the above, the regional planning Minister can amend or replace the SEQ Regional Plan at any time under the procedures set out in the IPA.

The role of the SEQ Regional Plan

The SEQ Regional Plan sits within the Queensland land use planning framework (Figure 1) and reflects and informs state planning policy and priorities. It also informs local government plans and policies.

The SEQ Regional Plan also informs non-statutory processes, such as planning for natural resource management and the planning of urban renewal and new growth areas at the district and neighbourhood levels.

Other SEQ regional planning documents

The SEQ Regional Plan is supported by a range of documents including:

- the annual *South East Queensland Infrastructure Plan and Program* (SEQIPP)
- guidelines and codes associated with regional policies or regulatory provisions
- maps indicating areas where specific regional policies or regulatory provisions apply
- associated strategies and non-statutory plans.

The status of these documents will vary depending upon the enabling legislation and planning intent applied in the SEQ Regional Plan. The planning intent and statutory basis is set out in each document.

Inter-regional coordination

The SEQ region has a close connection with the surrounding areas of Wide Bay Burnett (north), the Darling Downs (west) and the Tweed Shire in New South Wales (south).

Some of these areas are experiencing comparable growth pressures and face similar issues to those affecting SEQ. In particular, growth pressures in the Darling Downs region and Tweed Shire are heavily influenced by growth within the SEQ region.

The SEQ Regional Plan does not directly influence the planning processes or regulate the use of land in areas outside SEQ. It is important, however, that potential cross-regional development issues be considered in a broader planning context, and that arrangements are put in place to address these issues.

Darling Downs

In addition to its role in SEQ, Toowoomba is the major urban centre for the Darling Downs, which includes key agriculture and rural areas stretching from Dalby in the north to Warwick in the south. The Darling Downs takes in the regional councils of Southern Downs, Goondiwindi, Dalby and the remainder of the Toowoomba Regional Council area not included in SEQ.

Growth in the region is heavily influenced by growth in SEQ, as well as the development of the Surat Basin. The Department of Infrastructure and Planning consults with local government to coordinate planning across the regions.

Tweed Shire

The Tweed Shire is located in northern New South Wales, adjacent to Gold Coast City. The area has a close association with the Gold Coast and the Tweed Heads to Pottsville Coastal Corridor, effectively forming an extension of the greater Gold Coast urban area. The majority of the growth in the Tweed Shire is likely to take place in the northern and coastal areas of the shire, closest to Gold Coast City.

The Tweed Shire is facing many of the same growth management issues as SEQ—rapid population growth; high tourism visitations; development pressures on natural areas, the coastal zone and agricultural lands; and a requirement to invest in additional infrastructure and community services.

The Department of Infrastructure and Planning consults with the New South Wales Department of Planning and the Tweed Shire Council to coordinate planning across the two regions.

Wide Bay Burnett

The Wide Bay Burnett region is also experiencing rapid rates of growth. The region contains significant natural features and landscapes, including the southern end of the Great Barrier Reef, Great Sandy Strait wetlands and Fraser Island, the Bunya Mountains and Cania Gorge National Park. Most of the region's population lives in the five major centres of Bundaberg, Maryborough, Hervey Bay, Gympie and Kingaroy.

The *Wide Bay Burnett Regional Plan 2007–2026* was developed to ensure the region's new homes and jobs are accommodated without harming the environment, which underpins the region's agriculture- and tourism-based economy. The Department of Infrastructure and Planning consults with local governments to coordinate regional planning across SEQ and Wide Bay Burnett.

Definitions

Terms used in this SEQ Regional Plan are as defined in the IPA, unless otherwise specified in the SEQ Regional Plan regulatory provisions or glossary.

Growth management

Over the 25 years to 2004, SEQ's residential population increased from around 1.5 million people to more than 2.5 million. Population growth, projected demand for housing and anticipated distribution of development emphasised the need to establish a plan to guide expected future growth in order to protect and enhance the liveability of the region.

The regional plan was established in 2005 and given a statutory basis to guide appropriate growth, change and development, and to prevent development inconsistent with the plan.

The key features introduced to manage growth within the *South East Queensland Regional Plan 2005-2026* included:

- promoting a compact urban form
- identifying an Urban Footprint, as a means to control unplanned urban expansion
- allocating land to accommodate future urban growth
- supporting growth in the Western Corridor
- linking the plan with state infrastructure and service delivery
- informing local government infrastructure programs and budgets, and providing certainty to the private sector.

Notwithstanding the recent global economic downturn, substantial growth is projected to continue to 2031 and beyond, and the *South East Queensland Regional Plan 2009–2031* will continue to provide for growth to occur in an orderly manner.

The SEQ Regional Plan identifies sufficient land to accommodate a projected population of 4.4 million people and their employment and economic development needs up to 2031 in a more compact urban form. Identified Growth Areas (IGAs) acknowledge additional locations which, subject to further investigations, may accommodate growth in the long-term, beyond 2031. Consideration of any development within an Identified Growth Area before 2031 will only occur in exceptional circumstances and where further investigations address the Urban Footprint principles and relevant studies identified in the sub-regional narratives. It is anticipated that no IGAs will be required to be developed in the period prior to the next formal review of the SEQ Regional Plan.

The strong link between the SEQ Regional Plan and *South East Queensland Infrastructure Plan and Program* (SEQIPP) is also continued. The SEQIPP outlines the government's infrastructure priorities for the region. Together the plans coordinate planning, infrastructure and service delivery in SEQ to ensure that the desired, more compact urban settlement pattern is achieved.

An annual review of dwelling and employment land delivery will be introduced through an SEQ Growth Management Program. It will inform implementation priorities for the SEQ Regional Plan and SEQIPP's annual review to optimise the use of infrastructure delivered to support the region's growth.

The SEQ Regional Plan refines the growth management principles established under the *South East Queensland Regional Plan 2005-2026*. It also adjusts aspects of policy and implementation to ensure that it can better deliver its intended outcomes, and respond to new and important issues such as climate change.

Population growth

In order to cover the range of possible outcomes, three population projection series were produced for the region—low, medium and high projections (Queensland's Future Populations 2008).

The SEQ Regional Plan is based on the medium series projection; however, population growth will be monitored and kept under review to ensure future planning uses the most up-to-date information.

Dwelling demand

From 2006 to 2031, 754 000 additional dwellings will be required to cater for population growth in SEQ and provide housing choices for a more diverse population.

A detailed review of the Urban Footprint found that it has the capacity to accommodate in excess of 754 000 additional dwellings through a mix of additional development in existing urban areas and on broadhectare land. Further land is also available in development areas in the Western Corridor and South Western Corridor capable of accommodating growth beyond 2031.

Demand and supply for dwellings within each sub-region will be subject to significant fluctuations within the life of the plan. In response, the SEQ Growth Management Program will inform the state government each year on land delivery and supply. This will help to determine if regional and sub-regional land supply is responding to demand, and where actions are required to assist in delivery.

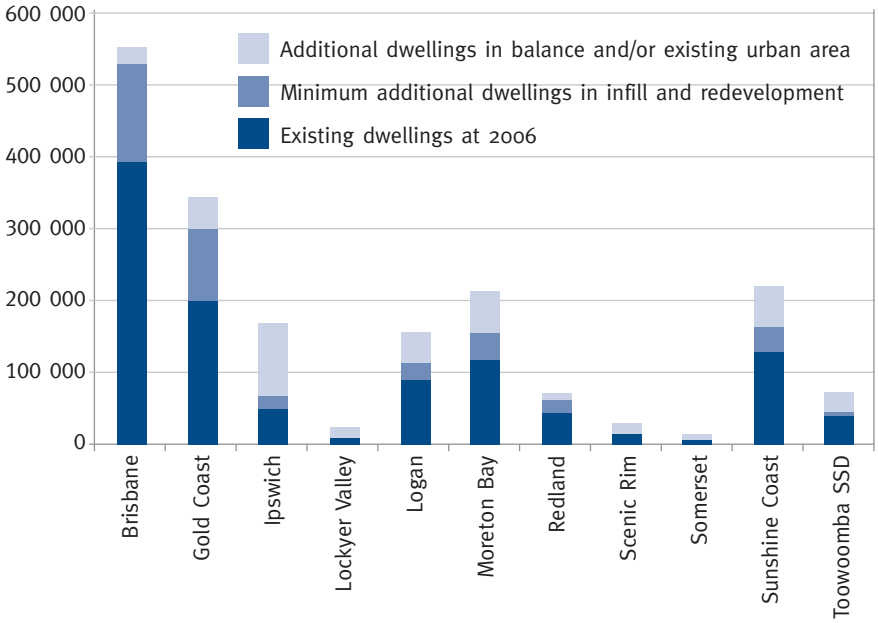
The SEQ Regional Plan allocates the projected 754 000 additional dwellings to local government areas based on the preferred settlement pattern principles of:

- relieving pressures on the coast
- redistributing growth to the Western Corridor
- promoting infill in existing centres
- redeveloping 'infrastructure-rich' areas
- maximising residential yield in major new residential developments.

The distribution is shown graphically in Figure 2.

In some instances the dwelling projections and the SEQ Regional Plan dwelling allocations vary. The projections of dwelling demand provide a reasonable scenario of the future dwellings in SEQ if relevant assumptions are realised and are not constrained by land supply and densities at a local level. The SEQ Regional Plan dwelling allocations reflect specific growth management policies aimed at achieving urban consolidation and encouraging infill and redevelopment in established urban areas.

Figure 2: Existing and planned dwelling distribution by local government area to 2031



Structure

The SEQ Regional Plan is set out under the following sections:

Part A Introduction

The introduction gives background information that explains the purpose, intent and effect of the SEQ Regional Plan.

Part B Regional vision and strategic directions

The desired future for South East Queensland is outlined in the vision statement. The strategic directions statements set out the broad policy framework for the SEQ Regional Plan.

Part C Regional land use pattern

Regional land use is established in the SEQ Regional Plan by growth boundary and land use categories that are applied through the regulatory provisions.

Narratives for local government areas indicate the general allocation of growth through the SEQ Regional Plan and will guide local planning and provide for the coordination of services.

Part D Regional policies

This part sets out the:

- desired regional outcomes for the SEQ region
- principles necessary to achieve those outcomes
- policies to be applied to guide state and local government planning processes and decision-making
- programs to be implemented over the life of the plan.

Part E Implementation and monitoring

This part sets out how the SEQ Regional Plan will be implemented, and the monitoring requirements to inform subsequent reviews of the SEQ Regional Plan.

Part F Regulatory provisions

The *South East Queensland Regional Plan 2009–2031 State planning regulatory provisions* were established and have affect in accordance with the relevant sections of the *Integrated Planning Act 1997*. Where indicated in the regulatory provisions, these apply to development applications for material changes of use and subdivision in the SEQ region.

Part B—Regional vision and strategic directions

The Queensland Government has framed a 2020 vision in *Toward Q2: Tomorrow's Queensland* around five ambitions for communities across Queensland:

- Strong: Create a diverse economy powered by bright ideas
- Green: Protect our lifestyle and environment
- Smart: Deliver world-class education and training
- Healthy: Make Queenslanders Australia's healthiest people
- Fair: Support a safe and caring community.

The regional vision defines the community's long-term aspirations for SEQ and contributes to the delivery of the Q2 vision and targets in the region.

Regional vision

The vision for SEQ is 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.

Strategic directions

The strategic directions outlined in the SEQ Regional Plan establish the broad policy framework for achieving the regional vision and intended growth management outcomes.

Creating a more sustainable future

SEQ is to be managed in a sustainable way by reducing the region's ecological footprint while enhancing its economy and residents' quality of life. To achieve this, social, ecological and economic improvements need to be made in an equitable and harmonious manner.

The SEQ Regional Plan aims to protect biodiversity, contain urban development, build and maintain community identity, reduce car dependency, and support a prosperous economy. Communities are to be built and managed using contemporary measures to conserve water and energy, with buildings designed and sited to take advantage of the subtropical climate.

Addressing climate change and oil supply vulnerability

SEQ communities and industries are vulnerable to the adverse effects of climate change. The challenges are to mitigate climate change by reducing greenhouse gas emissions and to adapt to the effects of climate change by developing adaptation strategies and protecting areas at risk, such as low-lying areas vulnerable to flooding from higher sea levels.

The increasing vulnerability of oil supply will progressively affect liveability and affordability in SEQ. New development must substantially reduce the need for fuel by reducing car dependency. A more compact urban form is preferred. This will be achieved through increased densities and mixed-use developments that support public transport, close to the city and activity centres.

Protecting the regional landscape

SEQ's rural and natural landscape areas support environmental, rural production, recreational, cultural and scenic functions. They underpin the region's liveability and viability, and will be protected from urban development and rural residential subdivision.

The enhancement of bioregional corridors outside planned urban and rural production areas will help to protect biodiversity and achieve carbon offsets from urban development.

Supporting rural production

Strong and viable rural communities are to be maintained so that they continue to contribute to not only the state's economy, but to the health, character, liveability and self-sufficiency of the region. Rural production lands will be protected from further fragmentation and urban encroachment.

Accommodating future residential and employment growth

Residential and employment growth is distributed across the region to facilitate access and choice, assist housing affordability and sub-regional self-containment, and to strengthen regional identity.

Future residential growth will be accommodated through a combination of redevelopment and use of:

- underutilised land within the broader urban framework and established urban areas
- remnant broadhectare land
- broadhectare development
- limited rural living.

Future employment growth will be accommodated within urban areas through a combination of activity centres, specialised employment precincts and limited home-based business. Further employment growth will also occur in rural and regional landscape areas through greater rural production, diversification of rural industries, tourism and recreation.

Facilitating growth in the west

An increased proportion of the region's future population will be accommodated in the Western Corridor and South Western Corridor, making use of significant areas of available land and reducing pressure on the coast. Future growth in this corridor also provides the opportunity to achieve compatibility between employment, transport infrastructure and population growth.

By identifying areas for future urban development and giving priority to infrastructure and services, economic and population growth will increase in the Western and South Western corridors.

New development is expected to provide a wide range of housing types, locations and densities to meet the community's needs and to complement priority infrastructure investment.

The South Western Corridor will emerge in the medium- to long-term as a key provider for employment and residential growth. It is located in the south of Logan City and the north-eastern section of the Scenic Rim local government areas. The corridor contains a series of areas that are capable of accommodating new residential communities and employment precincts, and further areas that—subject to investigation—can accommodate growth. The corridor contains existing infrastructure including the Brisbane–Sydney rail line and the Mount Lindesay Highway, but will require significant extensions of urban infrastructure networks, including roads and public transport. It also contains significant environmental values and natural resources, which need to be protected.

Delivering smart growth

The SEQ Regional Plan requires a more efficient use of urban land by redeveloping older and under-used areas that are suitable and ready for renewal. This will be achieved by setting targets for infill development across the region, and by improving yields and housing choice in these areas.

A significant proportion of future residential growth will be accommodated through infill and redevelopment within the urban framework and established urban areas. Prime locations for infill development are around urban activity centres that have existing facilities, services and amenities, and along public transport corridors and nodes where the public transport system can best service the additional population.

New residential areas will be developed with mixed-uses and at densities that support walkable communities, public transport services and efficient delivery of infrastructure. Coordinated land use and infrastructure plans supported by agreed infrastructure arrangements and responsibilities will be required for broadhectare development sites.

Regional accessibility

The Urban Footprint establishes a boundary for urban development, containing urban growth and promoting a higher density urban form. By consolidating urban growth into an identified area, travel times and distances can be greatly reduced and accessibility to essential services improved. The SEQ Regional Plan sets out the preferred approach to land use planning.

The impacts of traffic congestion on the region can be greatly reduced by locating self-contained activities in well-defined nodes along existing and planned transport corridors. Providing access to alternative transport options to reduce car dependancy will improve accessibility. Alternative transport measures include increasing the availability of high-quality public transport, creating resiliency and connectivity within the transportation network, and ensuring pedestrian, bike, public transport and road facilities are well connected.

The overall efficiency of existing and proposed investment in transport infrastructure will be improved through better coordination and sequencing of land use and transportation approaches.

Building a series of strong, identifiable communities

The SEQ Regional Plan emphasises building strong and well-serviced communities with distinct local character and identity.

Growing urban areas will be contained and framed by the Regional Landscape and Rural Production Area (RLRPA) to preserve key inter-urban breaks, which define the extent and character of regional communities. These inter-urban breaks range in scale from a separation of the Brisbane metropolitan area and the Gold Coast and Sunshine Coast, to smaller inter-urban breaks defining local settlements. The preferred structure also encourages consolidating growth within and immediately adjacent to rural townships.

Providing infrastructure and services

Infrastructure needed to support the future development of the region is identified in order to manage future growth patterns and to inform the implementation and review of the SEQIPP. The provision of roads and public transport to support current and future residents is a priority. Water and energy use will be an important focus across the region—to reduce consumption, manage demand and increase the use of renewable resources in the interests of a more sustainable region.

Supporting strong and healthy communities

Creating liveable communities and improving quality of life for residents in growth areas is an essential part of managing future growth in SEQ.

The coordinated and timely delivery of social infrastructure is important to support the range of community needs, including an ageing population, disadvantaged communities and new neighbourhoods.

Healthy communities will be shaped by the physical and social environment, including:

- suitable areas for physical activity and exercise
- well-connected communities with active transport networks
- accessible public spaces for community activity
- access to facilities and services
- the development of strong community networks.

Part C—Regional land use pattern

Purpose

The regional land use pattern defines the spatial framework for the region to achieve the desired regional outcomes. It identifies:

- regional land use categories
- land that can accommodate urban development to 2031
- land that is protected from further urban development
- sub-regional narratives.

It also helps to align regional infrastructure and transport systems with urban and economic activity areas.

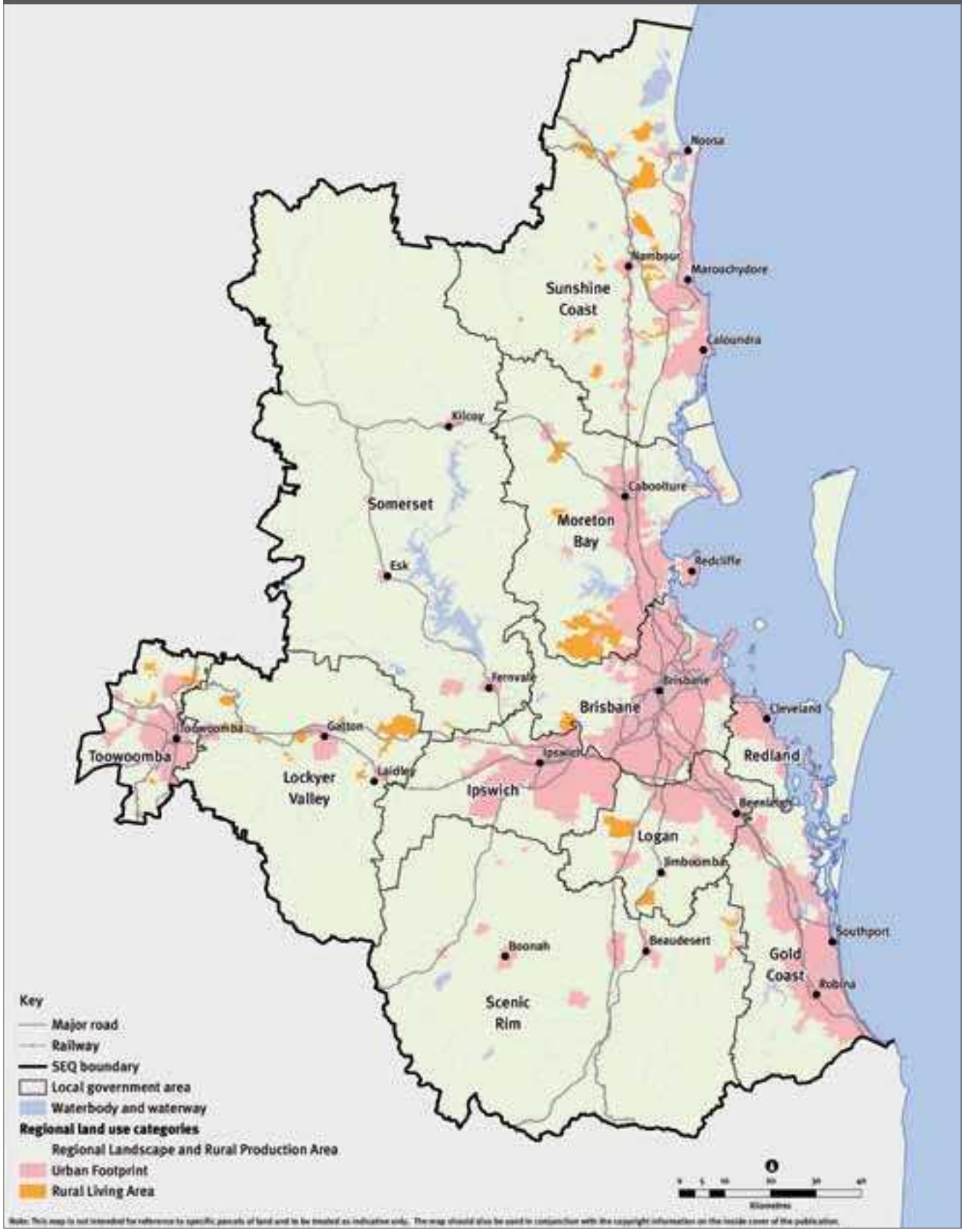
Regional land use categories

The SEQ Regional Plan allocates all land into one of three regional land use categories:

- Regional Landscape and Rural Production Area
- Urban Footprint
- Rural Living Area.

These categories provide the spatial context for the regulatory provisions of the SEQ Regional Plan. They are shown in Map 2 and are more precisely defined on the regulatory maps (at 1:50 000 scale) that accompany the SEQ Regional Plan and are contained within the *South East Queensland Regional Plan 2009–2031 State planning regulatory provisions.*

Map 2: South East Queensland regional land use categories



Regional Landscape and Rural Production Area

Intent

The Regional Landscape and Rural Production Area (RLRPA) identifies land with regional landscape, rural production or other non-urban values. It protects this land from inappropriate development, particularly urban or rural residential development.

These areas support the lifestyle and wellbeing of the regional population, primarily located in the Urban Footprint. The RLRPA's natural assets require management to improve the capacity to provide ecosystem services, increase the region's resilience and support the population.

Description

The RLRPA includes land with one or more of these values:

- significant biodiversity
- regional ecosystems that are endangered or of concern
- national parks, conservation parks, resources reserves or other conservation areas
- koala habitat
- good quality agricultural land and other productive rural areas
- cultural and landscape heritage values (traditional and non-Indigenous)
- natural economic resources, including extractive resources and forestry plantations
- water catchments, water storages and groundwater resources
- native forests
- coastal wetlands
- land that forms strategic and regionally significant inter-urban breaks.

The RLRPA maintains existing land use rights. This ensures that significant activities such as agricultural production, access to natural resources, water storage, tourism, outdoor recreation and nature conservation can continue.

Regulatory provisions

The regulatory provisions apply to the RLRPA. These provisions restrict:

- further fragmentation of land holdings
- urban development, except within established villages
- the expansion of rural residential development outside areas already allocated in local government planning schemes.

The regulatory provisions support diversification of rural economies by allowing a range of developments, including:

- small- to medium-scale tourist activities
- small-scale industry and business activities
- sport and recreation facilities.

The regulatory provisions do not apply to areas where the Minister has endorsed a rural precinct plan.

Urban Footprint

Intent

The Urban Footprint identifies land that can meet the region's urban development needs to 2031 in a more compact form.

Description

The Urban Footprint includes established urban areas, broadhectare and remnant broadhectare areas that could be suitable for future urban development. It incorporates the full range of urban uses, including housing, industry, business, infrastructure, community facilities and urban open space.

Remnant broadhectare lands are undeveloped lots that could potentially be developed for urban residential purposes but are not currently zoned for higher density development. They are located within the Urban Footprint, and are usually surrounded by urban development or near existing or planned urban infrastructure services.

The Urban Footprint defines the extent of urban development to 2031 by using cadastral or other clearly defined boundaries.

The Urban Footprint does not imply that all included land can be developed for urban purposes. For example, national parks and state forests will continue to be protected and managed under state legislation such as the *Nature Conservation Act 1994* and the *Forestry Act 1959*, and remnant vegetation will continue to be protected under the *Vegetation Management Act 1999*.

Land in the Urban Footprint may be unsuitable for urban development for other reasons, including constraints such as flooding, land slope, scenic amenity, and the need to protect significant biodiversity values.

Local government planning schemes are the main instrument that will establish and refine the desired use of land and the preferred timing of development within the Urban Footprint.

The Urban Footprint focuses urban growth in locations that:

- provide reliable and effective transportation choices or otherwise reduce car use, particularly for infill and redevelopment in and around existing urban centres, and along high-frequency public transport corridors
- physically connect to existing communities wherever possible, or otherwise provide new development with direct transport linkages to established urban areas early in the development
- promote cohesive communities that support a wide range of services and facilities
- include or have access to existing or planned employment centres.

The Urban Footprint includes some areas designated or already developed for rural residential purposes that are well located with respect to urban services and facilities. Local government is required to review these areas to identify potential opportunities for developing or redeveloping them for urban purposes.

Regulatory provisions

Areas that the *South East Queensland Regional Plan 2005-2026* previously identified as major development areas are included as Development Areas where appropriate. The regulatory provisions ensure that development does not adversely affect the future development intent of these areas.

Rural Living Area

Intent

The Rural Living Area comprises locations currently designated for rural residential development in local government planning schemes, and where further rural residential development through infill and consolidation is permitted under the SEQ Regional Plan.

Description

Rural residential areas within the Rural Living Area can continue to be developed for rural residential purposes according to the relevant local government planning scheme requirements.

Significant areas of land are already developed or allocated for rural residential development in the region. Land for rural residential purposes is to be restricted to the Rural Living Area to ensure future development is appropriately located and access to services and facilities can be provided.

Regulatory provisions

The regulatory provisions allow the development of land in the Rural Living Area for rural residential purposes. They also make development applications for urban activities in the Rural Living Area impact assessable.

Sub-regional narratives

Introduction

One of the SEQ Regional Plan's key objectives is to redirect growth to existing urban areas, particularly activity centres and corridors, while maintaining a supply of broadhectare land for development. Through smart growth—a compact development pattern that includes appropriate access to services and transport—SEQ can maintain its enviable lifestyle and accommodate anticipated growth.

Sub-regional narratives have the status of policies under the SEQ Regional Plan. They:

- provide more detailed information about the pattern of expected growth in each local government area, which will be necessary to achieve the regional plan's outcomes
- address the planning and delivery of land for employment growth across the region
- identify the key infrastructure priorities that will support expected growth
- set out and explain the appropriate approach to development for each local government area in the region.

The sub-regional narratives link state, regional and local government strategic planning. Each SEQ local government will use these narratives to prepare local strategic frameworks and schemes for their areas.

Brisbane

Population in 2006: **991 000**

Indicative planning population 2031: **1 270 000**

Dwellings in 2006: **397 000**

Forecast additional dwellings by 2031: **156 000**

Residential areas	
Broadhectare	Rochedale, Upper Kedron, Lower Oxley Creek
Existing urban areas	Eastern Corridor, Northern Busway Corridor, Brisbane CBD and surrounding frame areas (Milton, Albion, Newstead River Park, Woolloongabba, Bowen Hills, South Brisbane and West End) Northshore Hamilton
Regional activity centres	
Primary	Brisbane CBD
Principal	Chermside, Indooroopilly, Carindale and Upper Mount Gravatt
Major	Toombul, Mitchelton, Wynnum Central, Toowong
Employment areas	
Enterprise	Australia TradeCoast, South West Industrial Gateway, Northern Industrial Region
Health, education and technology	Eight Mile Plains–Rochedale, Bowen Hills, Herston–Kelvin Grove, South Brisbane, Woolloongabba, Spring Hill, Fortitude Valley, Albion, The University of Queensland St Lucia, Toowong and Buranda–Boggo Road
Identified Growth Areas	
None	

The City of Brisbane supports the largest proportion of SEQ's population, with an estimated residential population of 991 000 in 2006. The City of Brisbane comprises significant economic drivers, including the CBD, adjacent employment areas, and the region's main air and sea ports.

Brisbane's existing and planned inter- and intra-regional transport and telecommunications infrastructure supports the city's highly skilled labour force and the export of goods and services.

Brisbane City comprises a series of centres that support diverse communities, such as high-density apartments, well-established 'timber and tin' suburbs and new communities.

The Urban Footprint promotes development in existing urban areas, with a focus on regional activity centres and public transport nodes and corridors. The Urban Footprint also includes core biodiversity network areas, within which the Brisbane City Council proposes to re-establish 40 per cent of mainland Brisbane as natural habitat.

Brisbane's residential and employment growth will be achieved primarily within established areas through renewal, particularly in and around the CBD, regional activity centres and growth corridors.

Limited residential and employment growth will be accommodated through broadhectare development in areas such as Rochedale.

Residential

The SEQ Regional Plan focuses on retaining the qualities that Brisbane residents value while accommodating expected growth. Under the SEQ Regional Plan, an additional 156 000 dwellings will be required to house Brisbane's expected regional growth and demographic change. Most will be delivered in existing urban areas. Redevelopment and infill will need to deliver at least 138 000 of these additional dwellings.

The city provides many opportunities to accommodate growth within regional activity centres, growth corridors and renewal areas, as well as other infill opportunities. Accommodating a greater proportion of growth in these areas will relieve growth pressures on other established residential areas.

Regional activity centres outside the CBD will accommodate residential development in identifiable precincts and mixed-use settings. The CBD and inner city frame areas support large, in-centre resident populations. These areas are connected by train and bus services, and can accommodate higher density residential and mixed-use developments.

Growth corridors support commercial, retail and residential activities, and have high-quality access to major transport corridors. Growth corridors include:

- Brisbane–Indooroopilly, Brisbane–Albion, Brisbane–Yeerongpilly and the proposed Darra–Richlands railway lines
- the Boggo Road (Brisbane–Buranda) Busway, and the Northern and Eastern busways.

Opportunities for higher density residential and mixed-use development will be investigated at centres along these corridors.

Economy and employment

Brisbane contains economic drivers of regional, state and national importance, such as the CBD and adjacent employment areas, the region's main air and sea ports, and the economic development area of Australia TradeCoast.

Brisbane will continue to generate a high proportion of the region's employment growth by providing an attractive and competitive business environment that includes a highly skilled workforce, efficient and effective transport infrastructure, suitable serviced accommodation for businesses and industries and an attractive living environment.

Brisbane's CBD and frame area will remain the region's primary activity centre, comprising distinct commercial, legal, government, retail, community and entertainment precincts, and a significant in-centre residential population. These areas also provide specialist employment opportunities through partnerships with, and in close proximity to, government and private science, and health, education and technology facilities.

A network of activity centres that focus on enterprise opportunities, innovation and technology will complement the CBD. These centres benefit from access to quality public transport and major road networks, are close to the CBD, are characterised by significant employment opportunities and residential development. Such locations include Boggo Road–Buranda, Toowong, Herston–Kelvin Grove, South Brisbane and Woolloongabba.

Ongoing research and development activity around The University of Queensland, the Griffith Knowledge Precinct, Queensland University of Technology and Southbank Institute of Technology campuses will generate further economic growth. 'New economy' employment opportunities will also emerge in the science and technology precincts in Boggo Road–Buranda, and in the research and development facilities in Pullenvale, Pinjarra Hills and Coopers Plains.

Identified Growth Areas

There are no identified Growth Areas in the Brisbane local government area.

Infrastructure

Transport investment will be focused on both economic and commuter needs. The priority will be linking related economic activity centres; for example, the CBD to Australia TradeCoast, and the South West Industrial Gateway to industrial areas south of the city.

In terms of public transport and community activity, the priority will be linking regional activity centres through quality public transport services, cross-city roads, and walking and cycle networks.

The *2008 Inner City Rail Capacity Study* found that four additional rail tracks will be required on two corridors through the inner city to meet rail system demand over the next 20 years. Upgrading the road network and constructing an orbital motorway system through projects such as the Gateway Motorway upgrade, North–South Bypass Tunnel and Airport Link will also help manage congestion and travel demand.

Transport corridors will also be preserved to cater for future growth. Key projects identified in the *South East Queensland Infrastructure Plan and Program* (SEQIPP) to support delivery of the SEQ Regional Plan include:

- Northern, Boggo Road and Eastern busways
- Mitchelton-Ferny Grove rail line duplication
- North-South Bypass Tunnel, Hale Street Link and Airport Link
- Kurilpa pedestrian and cycle bridge
- Northern Link
- Queensland Children's Hospital
- Gateway Motorway upgrade, including Gateway Bridge duplication.

Brisbane contains several potential renewal areas, such as disused industrial and government land, which may be suitable for residential development. These areas include Newstead River Park, Northshore Hamilton, Milton, Woolloongabba, Bowen Hills, South Brisbane and Albion. These areas will require detailed planning processes to identify opportunities for residential development.

Investigations into existing urban areas and remnant broadhectare areas will progressively identify other infill residential opportunities. Realising the potential of these areas will require community engagement and support. Any new development in these areas will be sympathetic to local character, including distinctive examples of 'timber and tin housing'.

Although Brisbane's broadhectare land supply is becoming exhausted, new areas are located at Rochedale, Lower Oxley Creek and Upper Kedron. Developing these areas will deliver approximately 30 000 dwellings, in the short- to medium-term.

Gold Coast

Population in 2006: **466 500**

Indicative planning population 2031: **749 000**

Dwellings in 2006: **202 500**

Forecast additional dwellings by 2031: **143 000**

Residential areas	
Broadhectare	Coomera, Hope Island, Pimpama, Ormeau, Maudsland and Reedy Creek
Existing urban areas	Mermaid Beach, Labrador, Tugun, Biggera Waters, Helensvale, Burleigh Heads and Palm Beach
Regional activity centres	
Principal	Southport and Robina
Major	Coomera, Helensvale, Nerang, Surfers Paradise, Bundall, Broadbeach and Coolangatta
Employment areas	
Enterprise	Steiglitz, Coomera, Gold Coast Airport and Yatala
Health, education and technology	Burleigh, Oxenford and Steiglitz
Identified Growth Areas	
Employment	Ormeau

The Gold Coast is the second-largest SEQ sub-region, with a resident population of approximately 466 500 in 2006. The Gold Coast's urban development is concentrated between Yatala and Coolangatta, and continues south beyond the Queensland border into the Tweed Shire.

The Urban Footprint ensures that growth is managed to protect the Gold Coast's coastal, estuarine, riverine and hinterland environments. More than 60 per cent of the Gold Coast is located in the RLRPA, which supports rural production, water quality, scenic amenity and outdoor recreation.

The north-eastern area of the Gold Coast is retained as a regionally significant inter-urban break that separates the greater Brisbane area from the Gold Coast. The inter-urban break is bounded by the Pimpama River and Hotham Creek in the vicinity of the Pacific Motorway, widening to the foothills of the hinterland to the west and to the canelands, estuaries and islands of Southern Moreton Bay in the east. Inclusion in the RLRPA acknowledges the major ecological corridor and flood storage functions of the inter-urban break. This protects its agricultural and landscape values while allowing ongoing sand extraction and appropriate recreation and tourism activities.

Springbrook Plateau contains rainforest habitat of World Heritage status, with some of the most spectacular scenery in Australia. The plateau has an extremely diverse range of plants and animals—more than 600 native plant species and 272 native animal species recorded to date. The vision for Springbrook is of a vibrant community of residents and visitors sustaining and sustained by World Heritage values, and a mostly natural landscape that inspires and revives the human spirit.

The Queensland Government will minimise development and redevelopment on the Springbrook Plateau, and prevent further habitat fragmentation, forest edge impacts, clearing and loss of connectivity among habitat areas. Rehabilitation of cleared areas and avoiding the introduction of incompatible land uses are crucial long-term objectives.

Urban growth within the north-eastern part of the Gold Coast is limited to land at Steiglitz that has been identified as suitable for marine industry purposes. Land east of the Ormeau Urban Footprint and west of the proposed intra-regional transport corridor is designated as an Identified Growth Area which, subject to further investigation, may be suitable in the long-term for employment purposes.

Residential

The Gold Coast comprises a wide range of residential environments, such as extensive low-density residential communities, canal estates and high-rise developments.

Under the SEQ Regional Plan, by 2031 an additional 143 000 dwellings will be required to house the Gold Coast's expected regional growth and demographic change.

Broadhectare development can accommodate 32 000 dwellings, including land at Coomera, Hope Island, Pimpama, Ormeau, Maudsland and Reedy Creek. The broadhectare supply is expected to be largely exhausted by 2016.

Settlement patterns will be configured to appropriately manage the environment and protect key features such as the Green Heart, the Spit, beaches and hinterland. To support this, development will be consolidated around transport nodes, and densities will be at least 15 dwellings per hectare to efficiently use the land and infrastructure.

Coomera is the largest community on the Gold Coast that will be accommodated through broadhectare development. It will be supported by high-density residential, entertainment, education, health, industry, retail, commercial, leisure and tourist-related activities. These activities will help create a sustainable and attractive mixed-use town centre environment. Northern Coomera provides additional opportunities for residential growth consolidated around a future rail station in the Pimpama area.

The initial stages of Coomera, in and adjacent to the town centre, will provide broadhectare land supply in the short-term, with further stages of development to provide additional residential and employment land supply in the medium- to long-term. Northern Coomera provides additional opportunities for residential growth, subject to the provision of a train station in the Pimpama area and addressing biodiversity, flooding and other environmental constraints. If this occurs, Pimpama and environs will be planned as an integrated community, focused around the train station.

As the supply of broadhectare land is limited, infill development plays a significant role in meeting the medium- and long-term accommodation needs of the Gold Coast's growing population. Infill will come through high-density and remnant broadhectare development.

Infill development will provide the majority of the additional dwellings needed between 2016 and 2031—approximately 97 000 dwellings. The main focus will be the principal regional activity centres of Southport and Robina, and the major regional activity centres of Surfers Paradise, Broadbeach, Coolangatta, Nerang, Helensvale and Bundall.

The coastal communities of Mermaid Beach, Labrador, Palm Beach, Tugun and Biggera Waters also demonstrate capacity for infill growth. Further development opportunities have been identified in proximity to existing and proposed public transport networks at Helensvale, Burleigh Heads and Palm Beach.

Economy and employment

Further substantial employment growth will be required to support projected population growth to 2031.

Historically, the Gold Coast's economy has been linked to tourism and recreation industries. However, it has diversified and now comprises commercial, retail and industrial areas, and specialist health, education and technology hubs. Government precincts have been co-located with commercial activities at Southport, Nerang and Bundall.

The Gold Coast's principal regional activity centres at Southport and Robina are expected to expand their roles as commercial, retail, and administrative and specialist centres, and evolve into mixed-use centres. The rapid transit corridor will further increase opportunities in Southport for economic growth. Robina is expected to enhance links to medical, education and technology industries by developing specialist industry precincts, and to generate higher levels of employment within mixed-use developments near the Robina rail station.

Helensvale, Nerang, Surfers Paradise, Coolangatta and Bundall will provide complementary district level retail, commercial and specialist services.

A domestic and international airport, and a growing regional and local population base, will assist further economic and employment diversification on the Gold Coast.

The Gold Coast offers a range of 'new economy' science and technology opportunities, including Oxenford's film and interactive media industry cluster, the Gold Coast University Hospital and Knowledge Precinct, and Southport's Queensland Academy of Medicine and Health Sciences. It also provides opportunities for health, education or training institutes, which could stimulate future 'new economy' business, such as the Robina Hospital, Griffith University and Bond University. The Knowledge Precinct will incorporate the Robina Hospital, a private hospital, the University and its Medical School and Smart Water Research facility, and a mixed-use community.

The growth of manufacturing, logistics and freight distribution on the Gold Coast will be located predominantly in Yatala, and in smaller precincts in Ashmore, Burleigh West, Nerang and the Gold Coast Airport.

The marine industry's economic and employment growth will continue through an expansion of the Gold Coast Marine Precinct at Coomera and the proposed establishment of a marine industry precinct at Steiglitz.

Tourism will continue to be a significant economic driver for the Gold Coast. However, protecting and enhancing the cultural and natural values of the coast and hinterland are essential for the long-term sustainability of tourism and its contribution to the economy.

Further opportunities for tourism and associated development, integrated with local services and residential activity, will be accommodated in urban centres along the coast, including Southport, Surfers Paradise, Broadbeach, Mermaid Waters, Miami, Burleigh Heads, Palm Beach, Currumbin, Tugun and Coolangatta.

Land-intensive tourism activities, such as theme parks, will continue to be accommodated where appropriate along the Gold Coast–Brisbane transit corridor, with easy access to public transport.

Identified Growth Areas

Land at Ormeau is designated as an Identified Growth Area, which acknowledges its potential to accommodate employment activities and limited residential development in the long term. This will be subject to assessment against the Urban Footprint principles, and investigations considering flooding and other physical constraints,

surrounding uses and access. The Identified Growth Area is limited to land outside the Urban Footprint between Yatala and Ormeau, west of the proposed intra-regional transport corridor and east of the Pacific Motorway.

Infrastructure

The main focus for transport infrastructure on the Gold Coast is linking major destinations and regional activity centres by improving public transport services and upgrading the road network to alleviate congestion. Transport corridors will be preserved to cater for future growth.

The Gold Coast will be connected via heavy rail to the Gold Coast Airport. A rapid transit system will run along the high-density coastal spine, and bus services will provide interconnectivity. Other transport modes, such as ferries, cycling and walking, will also be facilitated.

Key projects identified in SEQIPP to support delivery of the SEQ Regional Plan include:

- Gold Coast Rapid Transit Project: Parkwood–Helensvale–Broadbeach–Coolangatta
- Pacific Motorway—additional Coomera interchange
- Gold Coast railway extension
- new passenger rail stock
- Gold Coast Highway bus priority and bus station
- TransLink sub-regional station upgrade
- bus priority on Smith Street
- sub-regional cycle network.

Other infrastructure priorities for the Gold Coast include:

- the Gold Coast University Hospital
- the Robina Health Precinct and expansion of Robina Hospital
- additional schools to accommodate growth, particularly in the northern corridor
- Gold Coast TAFE campus at Coomera
- the Gold Coast Convention Centre.

Sunshine Coast

Population in 2006: **295 000**

Indicative planning population 2031: **497 000**

Dwellings in 2006: **130 000**

Forecast additional dwellings by 2031: **98 000**

Residential areas	
Broadhectare	Caloundra South and Palmview
Existing urban areas	Maroochydore, Caloundra, Sippy Downs, Kawana, Nambour and Beerwah
Regional activity centres	
Principal	Maroochydore
Major	Noosa, Nambour, Kawana, Caloundra, Sippy Downs, Caloundra South and Beerwah
Employment areas	
Enterprise	Sunshine Coast Airport, Sunshine Coast Regional Business and Industrial Park, Kunda Park Business and Industrial Area, Cooroy, Forest Glen and Coolum industrial estates
Health, education and technology	Noosa Business Centre Technology and Industrial Hub and Sunshine Coast University Hospital
Identified Growth Areas	
Employment	Beerwah
Residential and employment	Caloundra South (Halls Creek) or Beerwah–Caloundra South Corridor

The Sunshine Coast had an estimated resident population of 295 000 in 2006 and is expected to experience significant growth during the life of the plan.

Urban development on the Sunshine Coast is concentrated mostly along the coast, with a high proportion located south of the Maroochy River between Caloundra and Maroochydore. A series of hinterland towns provide an alternative to coastal living.

A major regional inter-urban break between the Sunshine Coast and Greater Brisbane preserves the distinctive character and identity of the Sunshine Coast and its many communities. The Urban Footprint ensures that anticipated urban development and growth will be managed to protect the Sunshine Coast's rural and landscape areas.

The Sunshine Coast adjoins the southern boundary of Gympie Regional Council and the Wide Bay region. Sunshine Coast Regional Council will continue to work with Gympie Regional Council and the Department of Infrastructure and Planning to coordinate planning approaches.

Residential

The SEQ Regional Plan estimates that the Sunshine Coast will require 98 000 additional dwellings by 2031 to accommodate its expected regional growth. These additional dwellings can be accommodated by developing existing urban-zoned land and the major long-term Regional Development Areas of Caloundra South and Palmview.

The Sunshine Coast's residential growth areas will be further planned to create sustainable, balanced and affordable communities. This planning will ensure that growth occurs in an appropriate sequence and is coordinated with necessary infrastructure.

Infill is anticipated to provide approximately 37 000 additional dwellings by 2031 through higher density and remnant broadhectare development, subject to more detailed land capability assessments. Infill development will be focused in Maroochydore, the principal activity centre for the Sunshine Coast, and around the major regional activity centres of Caloundra, Sippy Downs, Kawana, Nambour and Beerwah. Communities at Birtinya and the proposed Caloundra Aerodrome centred around future public transport hubs will provide additional infill opportunities.

The Sunshine Coast's remaining areas, including broadhectare lands, are anticipated to accommodate 61 000 dwellings to 2031. This includes residential growth in Caloundra South, Palmview, Mountain Creek, Peregian and hinterland townships.

Hinterland towns with access to a passenger rail service provide further opportunities to accommodate limited residential growth within transit oriented communities. However, protecting the character and amenity of individual townships will be a high priority, and all development will be subject to the provision of adequate local infrastructure, such as water and sewerage.

Palmview is a Regional Development Area that will provide a range of housing choice and affordability, as well as employment and recreation opportunities. Palmview will deliver short-term residential land supply, utilising areas contiguous to existing urban development. However, full development of Palmview will require significant new infrastructure investment and consideration will be given to the preparation of an infrastructure agreement prior to development.

Caloundra South is a Regional Development Area that will be developed as a compact community with an efficient and effective public transport system provided in sequence with urban development. Caloundra South will comprise a series of walkable neighbourhoods with a range of housing choice and affordability, local employment opportunities, retail and community facilities, services and recreational opportunities.

Opportunities are available in the northern area of Caloundra South, contiguous to existing urban development, for delivering short-term residential land supply. Though Caloundra South is proximate to existing infrastructure, due to its large scale it will require significant new infrastructure investment. Consideration will be given to an infrastructure agreement prior to development.

Planning for Caloundra South is a priority for the delivery of short- to medium-term land supply on the Sunshine Coast. This includes detailed planning of initial stages to assist in the delivery of residential land in the short-term.

Economy and employment

Emphasis is required on the Sunshine Coast towards promoting further employment growth and diversification to avoid a jobs shortfall by 2031. Development Areas will provide high levels of self-containment and employment diversity to assist in achieving employment growth.

The Sunshine Coast seeks a diversified, viable, interdependent and self-sufficient urban and rural economic base that maximises local job creation and employment options, and builds economic strength and resilience. Innovation, knowledge-based and creative industries, research and development, health, tourism and sport are all essential to the Sunshine Coast's economic development.

Retail and commercial employment dominates in the regional activity centres of Maroochydore, Noosa, Nambour, Kawana Waters, Caloundra and Sippy Downs. To create more employment opportunities, as well as accommodating further residential growth, centres on the Sunshine Coast will provide for a mix of land uses in a compact form with easy access to public transport.

As the Sunshine Coast's principal regional activity centre, Maroochydore will be the most significant location for economic and employment growth. The other major planned activity centres of Noosa, Nambour, Kawana, Sippy Downs and Caloundra will supplement this growth.

Maroochydore comprises the existing city centre and surrounds. It will be the office-based business, community services and government administration focus of the Sunshine Coast. It will provide a diverse range of housing, and an efficient and effective multi-modal public transport system. It will contain office-based and mixed-use precincts to support employment diversity.

The town centre of Nambour supports the higher retail, employment and service needs of Nambour and surrounding hinterland areas, and will accommodate further housing development over time.

Service areas in and around Caloundra, Maroochydore, Kawana, Nambour and Noosa will continue to provide local economic and employment opportunities to encourage self-containment.

Creating new activity centres within the Regional Development Areas of Palmview and Caloundra South, and redeveloping the Caloundra Aerodrome site, will provide further opportunities for a range of jobs, and help develop a high level of employment self-containment on the Sunshine Coast.

The sub-region has a number of employment and enterprise areas, including industrial precincts at Nambour, Yandina, Kunda Park, Forest Glen, Noosa, Cooroy and Beerwah. Service industry areas are located around Caloundra, Maroochydore, Kawana, Nambour and Noosa. In addition, the Sunshine Coast Airport and associated aviation enterprises contribute to economic diversity and employment in the sub-region.

The Sunshine Coast Regional Business and Industrial Park is expected to accommodate the growth of manufacturing, logistics and freight distribution. Additional industry and enterprise growth area opportunities exist with the expansion of the Coolum (Quanda Road) industrial estate, and smaller precincts at Yandina, Forest Glen and Beerwah.

Specialist enterprise clusters, including rural precincts, will help create a diverse economy and employment growth. The Sunshine Coast Airport is a specialist aviation and aerospace opportunity area and one of SEQ's major existing and expanding specialist locations.

The expansion of science and technology opportunities at the Noosa Business Centre Technology and Industrial Hub will also facilitate employment growth and diversity. In addition, the University of the Sunshine Coast and proposed Sunshine Coast University Hospital will provide opportunities in health, education and training.

The small rural hinterland centres and surrounding rural production areas will continue to play an important role in diversifying the Sunshine Coast's economy and lifestyle. They will also support the long-term sustainability of rural areas. The encouragement of home-based businesses and rural enterprises with access to high-speed broadband telecommunications provides additional economic and employment growth opportunities outside the Urban Footprint.

Identified Growth Areas

The SEQ Regional Plan identifies additional land at Beerwah as an Identified Growth Area which, subject to further investigation, may accomodate long-term employment growth.

The Beerwah Identified Growth Area includes land that is outside the Urban Footprint to the east of Beerwah and generally within one kilometre of Steve Irwin Way. Subject to further investigation, this area may accommodate long-term economic and employment growth. Development in the Beerwah IGA is subject to the relevant RLRPA requirements within the SEQ Regional Plan regulatory provisions.

Additional lands in the Caloundra South (Halls Creek) and Beerwah–Caloundra South Corridor are designated as Identified Growth Areas in the SEQ Regional Plan. Further investigations are required to determine which of these IGAs will be seriously considered to accommodate long-term residential and employment growth on the Sunshine Coast. To inform this decision, investigations into the Caloundra South (Halls Creek) and Beerwah–Caloundra South Corridor IGAs will need to consider each site's ability to:

- comply with the Urban Footprint principles and requirements within the Sunshine Coast sub-regional narrative
- assist in the delivery and performance of infrastructure (including public transit) to the Sunshine Coast community
- protect environmental values
- achieve urban consolidation and self-containment
- achieve coordinated delivery of infrastructure
- achieve high environmental performance.

In addition, development within the Caloundra South (Halls Creek) or Beerwah–Caloundra South Corridor IGAs will need to demonstrate:

- sufficient demand for further urban land within the sub-region
- accessibility to a public transit service
- achieving compliance with the Urban Footprint principles
- achieving world leading environmental performance for any urban development and related infrastructure
- materially assisting in the provision of infrastructure for the southern Sunshine Coast community
- demonstrated high levels of employment self-containment
- coordinated delivery of infrastructure.

Development in the Caloundra South (Halls Creek) and Beerwah–Caloundra South Corridor IGAs is subject to the relevant RLRPA requirements within the SEQ Regional Plan regulatory provisions.

The cadastral boundaries for each IGA will be determined through further investigations before consideration for urban use.

Infrastructure

Transport infrastructure is required to facilitate the creation of a network of communities, linked through public transport with centres and enterprise areas. Key projects identified in SEQIPP to support the delivery of the SEQ Regional Plan include:

- CoastConnect—a road-based public transport link between Caloundra and Maroochydore
- improved public transport connections between Beerwah and coastal centres from Caloundra South to Maroochydore
- pedestrian and cycle network enhancements
- Sunshine Coast Health Hub at Maroochydore
- Sunshine Coast University Hospital at Kawana.

Moreton Bay

Population in 2006: **333 000**

Indicative planning population 2031: **513 000**

Dwellings in 2006: **123 900**

Forecast additional dwellings by 2031: **84 000**

Residential areas	
Broadhectare	Dakabin, Griffin, Mango Hill, North Lakes, Newport and Rothwell
Existing urban areas	Hills District, Albany Creek, Eatons Hill, Warner, Joyner, Lawnton, Bray Park, Strathpine, Petrie, Kallangur, Murrumba Downs, Dakabin, Narangba, Burpengary, Morayfield, Caboolture–Morayfield, Scarborough and Redcliffe
Regional activity centres	
Principal	Caboolture–Morayfield
Major	North Lakes, Strathpine and Redcliffe
Employment areas	
Enterprise	Caboolture Airport, Morayfield, Burpengary and Narangba
Health, education and technology	North Lakes
Identified Growth Areas	
Residential and employment	Caboolture West

Moreton Bay includes a diverse range of urban, coastal, hinterland and rural communities. In 2006 the population was approximately 333 000.

Two major areas of urban settlement have been established in Moreton Bay—a southern area and a northern growth corridor. The southern area is extensively developed and extends north from Brisbane to the North Pine River and the Pine River. It is focused around the Strathpine major regional activity centre. The northern growth corridor is focused around the Caboolture–Morayfield principal regional activity centre, and the major regional activity centres of North Lakes and Redcliffe.

Riparian and biodiversity corridors provide east–west links across the Moreton Bay sub-region. This includes The Mangroves to Mountains corridor, linking the Boondall Wetlands to Brisbane Forest Park in the west. The Mangroves to Mountains corridor will be retained and enhanced to assist in the long-term protection of biodiversity values in the area.

Residential

An estimated 84 000 additional dwellings will be required by 2031 to accommodate Moreton Bay's expected regional growth, population increase and demographic change.

Urban growth will continue in the major residential developments of North Lakes, Mango Hill, Griffin and Dakabin. These large broadhectare areas will provide Moreton Bay with a range of housing types and densities.

The Caboolture–Morayfield principal regional activity centre will be the focus for infill development within the northern growth corridor. Higher density residential development and mixed-use development will be located within the Caboolture CBD, particularly in the vicinity of Caboolture's railway station.

Other significant infill opportunities will be generated through efficient use of land close to the Brisbane–Sunshine Coast rail corridor, particularly the conversion of suitable rural residential lands and other remnant broadhectare lands at Narangba, and between Morayfield and Burpengary. Moreton Bay Regional Council will undertake planning and coordination to achieve orderly conversion to urban development.

Subject to further investigation, land in the Caboolture West Identified Growth Area could also help accommodate long-term residential growth.

Economy and employment

Moreton Bay requires strong employment growth to prevent a future shortfall in jobs and improve employment diversity. Development Areas will assist by providing high levels of self-containment and employment choice.

Historically, Moreton Bay's economy has been supported by retail, manufacturing, health care and social assistance, education and training, and construction.

Regional activity centres at Caboolture–Morayfield, Redcliffe, North Lakes and Strathpine are Moreton Bay's major centres for business, employment, research, education, services, higher density living and social interaction. Caboolture–Morayfield accommodates regional offices of health, education, cultural and entertainment facilities that are centred around public transport nodes.

Redcliffe, North Lakes and Strathpine each provide a sub-regional focus for administration. They accommodate sub-regional or branch offices of government, cultural and entertainment facilities of regional significance, and provide a focus for residential intensification.

Bellara, Burpengary, Deception Bay, Kallangur, Petrie, Warner, Albany Creek, Arana Hills, Dakabin, Kippa Ring, Margate, Clontarf, Scarborough, Woody Point, Woodford, Dayboro and Samford all provide district level services. This network of centres will continue to provide an appropriate mix of business, community and government services, facilities and employment.

Mixed-use development in accessible local and district centres will create additional business and employment opportunities. Promoting home-based businesses and community uses throughout urban and rural areas, and encouraging rural and tourism-related business opportunities outside the Urban Footprint, will achieve further economic and employment diversity.

Other business and industry employment in Moreton Bay will be contained predominately within Caboolture, Morayfield, Burpengary, Narangba, Strathpine, Brendale, Lawnton, Petrie, North Lakes, Rothwell and Clontarf. Continuing to develop these areas will produce a diverse range of employment and business opportunities, and increase the level of employment self-containment in the region.

Elimbah East will be a light industry area that benefits from direct access to the Bruce Highway. Any urban development in Elimbah East will be subject to infrastructure and servicing requirements.

Subject to further investigation, land in the Caboolture West Identified Growth Area may also help accommodate long-term employment and enterprise growth.

Additional land for other business and industry employment (that is, large footprint uses) will need further investigation.

While protected from large-scale urban development, the rural areas of Moreton Bay will also continue to provide economic and employment opportunities by accommodating rural industries, rural and home-based enterprises, small business, industry and tourism.

Identified Growth Areas

The SEQ Regional Plan identifies additional land west of Caboolture that, subject to further investigation, may in the long-term accommodate significant growth in the Moreton Bay region.

The Caboolture West Identified Growth Area is located adjacent to the Caboolture Urban Footprint. It includes lands east of the north branch of the Caboolture River and south of the D'Aguilar Highway. Further investigation will determine the cadastral boundaries before the area is considered for urban use. This includes investigations into land capability and suitability, infrastructure requirements and responsibilities, appropriate land uses, necessary corridors and other relevant matters.

This development also depends on:

- achieving compliance with the Urban Footprint principles (Principle 8.2)
- providing road and public transport infrastructure that connects the Caboolture West Identified Growth Area to the urban communities and activity centres of northern Moreton Bay
- achieving leading environmental performance for any urban development and related infrastructure
- coordinating the delivery of infrastructure, including public transport aligned with growth
- demonstrating high levels of employment self-containment
- demonstrating sufficient demand for further urban land in this northern corridor.

In the meantime, development in Caboolture West is subject to the relevant RLRPA requirements within the SEQ Regional Plan regulatory provisions.

Infrastructure

The Moreton Bay area requires further capital investment to meet the demand driven by growth and change. The focus for infrastructure provision is on linking major regional activity centres to proposed areas of residential growth and providing additional capacity to service new development areas.

Increasing road capacity and providing public transport infrastructure and services along key routes is critical to accommodate the sub-region's projected growth.

Key projects identified in SEQIPP to support the delivery of the SEQ Regional Plan include:

- north–south arterial roads
- upgrades to east–west links
- upgrades to the Bruce Highway and intersections
- the Houghton Highway duplication and bus priority
- the Lawnton to Petrie third rail track
- the Petrie to Redcliffe Rail Corridor
- the North Lakes Health Precinct
- the Caboolture Health Precinct
- an upgrade to Redcliffe's Aquatic Centre.

Logan

Population in 2006: **260 000**

Indicative planning population 2031: **434 000**

Dwellings in 2006: **90 000**

Forecast additional dwellings by 2031: **70 000**

Residential areas	
Broadhectare	Park Ridge, Flagstone, Yarrabilba North, Bahrs Scrub and New Beith Forest–Round Mountain
Existing urban areas	Beenleigh, Bethania–Waterford, Edens Landing–Holmview, Eagleby, Springwood, Browns Plains, Kingston, Loganlea and Logan Central
Regional activity centres	
Principal	Springwood, Beenleigh
Major	Logan Central, Browns Plains, Logan Hyperdome, Yarrabilba and Flagstone
Employment areas	
Enterprise	Marsden–Kingston, Crestmead–Berrinba, Park Ridge and Loganholme
Health, education and technology	Meadowbrook
Identified Growth Areas	
Employment	North Maclean
Residential and employment	Greater Yarrabilba, Greater Flagstone and Greenbank
Residential	New Beith–Round Mountain

The City of Logan comprises a range of urban and rural communities and had a population of around 260 000 people in 2006. Existing urban development and a series of regional activity centres are located along major road and rail corridors, particularly the Pacific and Logan motorways, Mount Lindesay Highway and the Brisbane–Gold Coast rail line. This transport network provides strong links to adjoining Brisbane, Gold Coast and Ipswich local government areas.

The availability of affordable housing and Logan's proximity to major employment generators in Ipswich, Brisbane and the Gold Coast have both greatly affected the existing urban settlement pattern and the level of employment self-containment.

South Western Corridor

Logan City contains several areas that could accommodate future urban communities, and other localities that, subject to further planning, could accommodate additional long-term urban development. These areas are located within the South Western Corridor, between the existing urban area of Logan and the southern boundary of Logan City. Most of the areas are located adjacent to existing urban services, the Mount Lindesay Highway or the Brisbane–Sydney rail corridor.

The South Western Corridor has the potential to accommodate regionally significant levels of residential and employment growth, which would alleviate growth pressures on the southern area of SEQ, including the Gold Coast.

This will be achieved by establishing a series of communities linked by a sub-regional public transport network and roads to Greater Logan, Brisbane, the Gold Coast and Ipswich. The communities will be separated by landscape and biodiversity corridors, which will establish inter-urban breaks and help develop separate and well-defined urban communities.

Areas identified for further urban growth include Park Ridge, Bahrs Scrub, Flagstone, Yarrabilba North and Greenbank Central. Other areas, such as Greater Flagstone, Greater Yarrabilba, Greenbank, North Maclean and New Beith are designated as Identified Growth Areas and require further studies to determine their capacity to accommodate urban development in the long-term.

The timing of land release in the South Western Corridor depends on the land's proximity to existing urban infrastructure, and any associated impacts on infrastructure cost and delivery.

Prior to any development, the corridor needs coordinated planning to effectively provide infrastructure services and a network of centres, and to ensure high levels of employment self-containment. Investigations will assess land capability and suitability, infrastructure requirements and responsibilities, appropriate land uses, necessary service corridors and other related matters.

Residential

By 2031, approximately 70 000 additional dwellings will be required to accommodate Logan's expected regional growth, population increase and demographic change.

A range of infill and redevelopment opportunities exist in Logan. The established urban areas of Bethania–Waterford, Edens Landing–Holmview and Eagleby can accommodate further urban growth. Additionally, redevelopment in regional activity centres, particularly Beenleigh, Springwood, Browns Plains and Logan Central, present further infill opportunities.

Park Ridge is a Regional Development Area contiguous to Logan's existing urban area. Park Ridge will comprise residential communities and employment precincts, and offer diverse housing, community facilities, knowledge-based employment opportunities and a mixed-use business park. Park Ridge can provide additional land supply in the short-term, utilising adjacent urban infrastructure. However, ultimate delivery of Park Ridge will require significant upgrades to the existing urban infrastructure network.

Bahrs Scrub is a Local Development Area proximate to existing urban infrastructure that can accommodate urban residential development in the short-term, and provide recreation and open space opportunities to residents.

Flagstone is a Regional Development Area proximate to existing urban infrastructure. It will be developed as an urban community with a full range of services, and employment and transport options. Ultimately, the area will become a major regional activity centre with several employment clusters.

Development timing depends on meeting water and sewerage infrastructure needs, and coordinating the delivery of road and public transport infrastructure. Planning for Flagstone will address but not depend on the potential development of Greater Flagstone to ensure appropriate, long-term land use patterns and infrastructure delivery. Opportunities are available in the northern area of Flagstone, contiguous to existing residential development, for delivering short-term residential land supply.

Yarrabilba North is a Regional Development Area that is remote from existing urban areas and requires significant extensions to existing transport networks and new urban infrastructure networks. It could potentially develop into a self-contained community in the short- to medium-term to accommodate a residential neighbourhood, local services and a substantial employment area.

Planning for Yarrabilba North will need to demonstrate high levels of employment self-containment and environmental performance. Planning will address the potential development of the Greater Yarrabilba Identified Growth Area to ensure appropriate, long-term land use patterns, and infrastructure delivery and funding.

Rural communities, such as Logan Village and Jimboomba, provide limited opportunities for alternate residential development. Additionally, Logan has a significant supply of existing rural residential lands.

Economy and employment

Logan requires further employment growth and diversification to prevent a jobs shortfall by 2031. Development areas in the South Western Corridor will provide high levels of self-containment and employment diversity.

Historically, the Logan economy has been linked to retail, manufacturing, education, health and community services. However, the aim is for Logan to greatly increase its commercial and office-based employment opportunities.

Springwood and Logan Central will accommodate regional government and commercial precincts to service the sub-region. Springwood will utilise its diverse employment and economic base to establish a core business district. Logan Central will maintain its role as the sub-region's strategic civic and cultural centre.

Beenleigh will supplement the commercial and administrative roles of Springwood and Logan Central. It will generate employment for the surrounding community and provide business services to the northern parts of the adjoining Gold Coast sub-region, including the enterprise areas at Yatala and Ormeau.

Establishing government administration and services and office-based business precincts within Springwood, Beenleigh, Logan Hyperdome and Browns Plains will help to provide diverse employment opportunities. Regional activity centres will also accommodate mixed-use precincts, help deliver anticipated residential growth, provide more diverse employment and assist in place making.

Planned and potential urban communities in the South Western Corridor, particularly Park Ridge, North Maclean, Flagstone and Yarrabilba, must significantly contribute to employment and economic growth. The proposed communities at Flagstone and Yarrabilba will ultimately provide major activity centres and employment clusters, with a focus on the hospitality industry, major sports venues and regional education facilities.

Greenbank Central is a Local Development Area that could potentially become an employment precinct subject to access to a passenger transport service. Potentially, an east–west road system could also link to the Western Corridor and northern Gold Coast.

Marsden–Kingston and the proposed Park Ridge centre will provide supplementary

commercial and specialist services. They will also accommodate office-based businesses, mixed-use precincts and transitional home businesses.

Park Ridge will offer diverse employment options, a range of knowledge-based employment opportunities and a mixed-use business park. It will become a major economic hub and play a key role in providing sub-regional employment. It will service the increased residential densities of the neighbourhood and the emerging communities at Greenbank, Flagstone and Yarrabilba.

Crestmead and Loganholme offer light and general industry employment opportunities while Berrinba has additional potential for mixed industry and business. They will also accommodate ancillary retail and commercial services.

Meadowbrook will be established as a specialist centre based around health, research and education. It will benefit from opportunities generated by the Logan Hospital, Logan TAFE and Griffith University Meadowbrook Campus and access to the Brisbane–Gold Coast rail corridor.

Jimboomba will retain its role as a major rural activity centre, providing district level services to surrounding rural residential development.

Identified Growth Areas

The SEQ Regional Plan identifies additional land within the South Western Corridor that, subject to further investigation, will accommodate a high proportion of long-term growth. These areas are designated as Identified Growth Areas and include Greater Yarrabilba, North Maclean, Greater Flagstone, Greenbank Central and New Beith Forest–Round Mountain.

The Yarrabilba area comprises the former pine plantation land directly south of Yarrabilba North and west of Plunkett Conservation Park, and adjacent lands fronting the northern side of Plunkett Road. The Yarrabilba area may provide Logan with a long-term residential and employment land supply beyond 2031.

Subject to further investigation, Yarrabilba will be developed as a compact community with ready access to an efficient and effective public transport system that will be provided in sequence with urban development. It will also comprise a series of neighbourhoods, integrated with Yarrabilba North, with a range of housing choices and affordability, local employment opportunities, retail and community facilities and services, and recreational opportunities.

The Greater Flagstone Identified Growth Area is located to the west and south-west of the Flagstone Urban Footprint. Further investigation will determine the area's cadastral boundaries. Greater Flagstone, in conjunction with the Flagstone Development Area, could accommodate a major centre for residential, employment, and other principal regional activity centre services. It could generate enough demand to support the long-term extension of a public rail corridor between Flagstone and Salisbury.

The Greater Flagstone Identified Growth Area and the Flagstone Development Area will be compact communities with ready access to an efficient and effective public transport system provided in sequence with urban development. It will also comprise walkable neighbourhoods with a range of housing choices and affordability, local employment opportunities, retail and community facilities and services, and recreational opportunities.

The Greater Flagstone and Yarrabilba Identified Growth Areas have the potential to accommodate regionally significant levels of residential and employment growth. However, further investigations are required to establish the capacity, performance, sequencing, costs and benefits of them delivering urban communities to the South Western Corridor.

For Greater Flagstone and Yarrabilba Identified Growth Areas, development depends on:

- achieving compliance with the Urban Footprint principles (Principle 8.2)
- providing road and public transport infrastructure to link the area to the urban communities of the Gold Coast, Logan and Ipswich
- achieving world leading environmental performance for any urban development and related infrastructure
- materially assisting to provide infrastructure for the South Western Corridor community
- coordinating the delivery of infrastructure, including public transport, to the South Western Corridor
- demonstrating high levels of employment self-containment.

The North Maclean Identified Growth Area comprises land outside the Urban Footprint, adjacent to the Mount Lindesay Highway, south of Gieseman Park, east of Greenbank Road and north of the Logan River. Further investigation will determine the area's cadastral boundaries before it can be considered for urban use.

Subject to further investigation, this area could accommodate an enterprise precinct with office, commercial, warehouse, retail services and low-impact industrial uses. This use depends on responding to biodiversity values and physical constraints, and compliance with the remaining Urban Footprint principles (Principle 8.2).

The Greenbank Identified Growth Area comprises land that borders the eastern side of Middle Road, extending approximately 1500 m to the east, and north of the Mount Lindesay Highway. Further investigation will determine the area's cadastral boundaries before being considered for urban use.

Subject to further investigation, this area could be developed as a residential and employment precinct that benefits from access to a passenger rail system.

Urban development and timing depends on providing passenger rail services and a rail station in the New Beith area.

The New Beith–Round Mountain Identified Growth Area comprises land outside the Rural Living Area and Urban Footprint that is close to Flagstone and the Brisbane–Sydney rail line. It consists of land previously zoned as rural residential in the local government planning scheme.

Subject to further investigation, New Beith could be developed as a consolidated residential community that benefits from access to a passenger rail system that links it to Flagstone and Brisbane. Urban development and timing depends on providing passenger rail services and a rail station in the New Beith area. If further investigation indicates that urban development is not appropriate, the New Beith area will be included in the Rural Living Area.

Proximity to existing urban infrastructure and the associated effects on costs and delivery are important factors in determining an orderly development sequence for the South Western Corridor. This is particularly important for Yarrabilba and North Maclean, which are remote from existing urban areas, and require major extensions to existing transport networks and new urban infrastructure networks.

In the meantime, development in both areas is subject to the relevant RLRPA requirements within the SEQ Regional Plan regulatory provisions.

Infrastructure

Developing regionally significant growth areas within Logan will depend on the timely delivery of state and local infrastructure, particularly water and sewerage, road and public transport infrastructure. Further investigation must confirm the need and location of the Gateway Motorway extension, including a potential interchange at Park Ridge.

Expanding the South Western Corridor to accommodate growth in Greater Flagstone and Yarrabilba will depend on the delivery of road and public transport infrastructure to connect these communities to the Gold Coast, Logan and Ipswich. Providing public transport for New Beith and Greenbank and Flagstone, potentially utilising the existing Brisbane–Sydney rail freight corridor, is critical to their development.

The Mount Lindesay–Beaudesert Strategic Transport Network Investigation currently underway will determine the long-term transport network requirements for east–west and north–south roads, public transport, rail and cycle links to assist this area to service future growth.

Key projects identified in SEQIPP to support the delivery of the SEQ Regional Plan include:

- Pacific Motorway transit lanes from Springwood to Daisy Hill, including the Loganlea interchange
- Logan Motorway upgrade from the Ipswich Motorway to Pacific Motorway
- Mount Lindesay Highway upgrade from Green Road to Jimboomba
- South East Busway extension to Springwood.

Redland

Population in 2006: **131 000**

Indicative planning population 2031: **169 000**

Dwellings in 2006: **50 000**

Forecast additional dwellings by 2031: **21 000**

Residential areas	
Broadhectare	Kinross Road (Thornlands), South East Thornlands and Victoria Point
Existing urban areas	Cleveland, Capalaba, Victoria Point, Redland Bay, Thorneside, Thornlands, Birkdale, Wellington Point, Alexandra Hills and Ormiston
Regional activity centres	
Principal	Capalaba and Cleveland
Employment areas	
Enterprise	Cleveland Enterprise Area and Redlands Business Park
Health, education and technology	Department of Employment, Economic Development and Innovation Redland Research Station and Cleveland Hospital Health Precinct
Identified Growth Areas	
None	

Redland City is a coastal local government situated on Moreton Bay, south-east of Brisbane. It comprises both nationally and regionally significant areas of high environmental and visual quality. In 2006 Redland's population was approximately 131 000.

Redland City comprises urban, rural, bushland and island communities. Urban development is focused around a framework of activity centres that are linked through an established road and rail network. The rail network is limited to the north-eastern part of the city. The edges of the urban communities are defined by open spaces that contain biodiversity corridors, waterways, wetlands, bushland habitat and the foreshore.

Redland City is predominantly within the RLRPA. These areas include strong rural communities supported by viable rural enterprises, and areas of scenic amenity, environmental and biodiversity value, including koala conservation areas and agricultural lands.

Redland's urban koala population must be protected to maintain a viable koala population in the wider region. Further measures to protect the urban koala population will be developed and implemented within Redland.

Broadhectare land availability in Redland is restricted so that existing non-urban land can be enhanced to accommodate koala habitat. In response, appropriate opportunities for urban development within the Urban Footprint, particularly those close to public transport, will be fully utilised to accommodate expected residential and employment growth.

Residential

By 2031, approximately 21 000 additional dwellings will be required to meet Redland's expected population growth and demographic change.

Infill and redevelopment in existing urban areas will accommodate approximately 15 000 additional dwellings, and the development of the remaining supply of broadhectare land within the Urban Footprint will accommodate the remaining dwellings.

Infill development will be located around the regional activity centres of Cleveland and Capalaba, Victoria Point and other activity nodes on the public transport network stations and major bus routes. These centres could accommodate residential dwelling units through multi-storey, mixed-use development.

The suburbs of Thorneside, Birkdale, Wellington Point and Ormiston are close to public transport, presenting opportunities for further development in the longer term, subject to detailed local planning. Future development opportunities also exist at Cleveland and Redland Bay, and in the Weinam Creek marine area and environs. Detailed local planning and ferry passenger terminal upgrades will guide and support development in these locations.

Subject to environmental constraints including flooding, storm surge and drainage, development of existing vacant residential lots on Coochiemudlo, North Stradbroke and other southern Moreton Bay islands will continue during the planning period.

Upgrading services, efficient water-based transport and protection of the environmental values of the islands and Moreton Bay are all necessary to manage growth on these islands.

Kinross Road and South East Thornlands are Local Development Areas proximate to existing urban areas and infrastructure and capable of accommodating urban development in the short-term. Kinross Road has capacity for a residential community in combination with additional employment opportunities, local retail and commercial functions, and community services. South East Thornlands will accommodate a residential community with local retail and service functions.

Planning for both Development Areas will maximise opportunities for urban development where appropriate to help deliver the expected growth and establish consolidated urban communities. Areas of existing koala habitat will be protected.

The Victoria Point Local Development Area is contiguous with existing local services and can accommodate additional residential development. The area requires further investigation and planning scheme amendments before any development can proceed.

Economy and employment

To address existing low self-containment levels, employment opportunities in Redlands will be identified and enhanced. Employment growth will be focused within Redland City's network of multi-purpose activity centres and in an integrated enterprise precinct at Redland Bay.

The principal regional activity centres of Cleveland and Capalaba will accommodate most of the expected centre-based employment growth. They will become locations for major retail, commercial, community, administrative and recreational activities. Victoria Point, a major regional activity centre, and the lower-order centres across Redland City will accommodate the remaining centre-based employment growth.

The principal regional activity centres will primarily accommodate the economic and employment growth of industry and other enterprises.

Other employment growth will occur through non-centre based employment located across Redland City. They will include tourism, education, marine, construction and health, and will continue to be supported and protected from incompatible uses.

Examples include specialist services, educational and health clusters, including the state government Redlands Research Station, and the Cleveland hospitals and community health precinct. Ecotourism and tourism opportunities will continue to grow due to the city's extensive natural environmental assets, including its bushland, koala habitat areas, Moreton Bay and its islands.

Identified Growth Areas

There are no identified Growth Areas in the Redland local government area.

Infrastructure

The timely provision of transport infrastructure—including increased road capacity and quality public transport infrastructure—is essential to support Redland City's expected population and employment growth. This infrastructure will lead the sequenced development of urban communities in Local Development Areas.

Government will take an integrated approach to determine and address the specific infrastructure needs of the southern Moreton Bay islands.

Key projects identified in SEQIPP to support the delivery of the SEQ Regional Plan include:

- the Eastern Busway from Buranda to Capalaba, including interim measures to provide priority bus access into and out of the Capalaba principal regional activity centre
- bus priority measures between Cleveland and Capalaba principal regional activity centres and Victoria Point
- passenger rail duplication between Cleveland and Manly
- Redland's subarterial road upgrade
- the Cleveland–Redland Bay road upgrade.

Ipswich

Population in 2006: **142 400**

Indicative planning population 2031: **435 000**

Dwellings in 2006: **52 300**

Forecast additional dwellings by 2031: **118 000**

Residential areas	
Broadhectare	Ripley and Springfield
Existing urban areas	Goodna, Redbank, Redbank Plains, Springfield, Booval, Yamanto and Brassall
Regional activity centres	
Principal	Ipswich and Springfield
Major	Goodna and Ripley
Employment areas	
Enterprise	Swanbank, New Chum, Willowbank, Bundamba and Ebenezer
Health, education and technology	Amberley, Springfield and Ipswich CBD
Identified Growth Areas	
Residential and employment	Purga
Residential	Lanefield–Grandchester

The City of Ipswich forms most of SEQ's Western Corridor, stretching from Goodna to Grandchester. In 2006 Ipswich's population was 142 400.

The Western Corridor will continue to experience significant growth and plays a key role in the SEQ Regional Plan's preferred settlement pattern. The Western Corridor provides substantial opportunities to accommodate new residential communities and employment growth, supported by infrastructure provision.

Existing urban development is concentrated along the Ipswich–Brisbane rail line and is generally contained between the Warrego and Cunningham highways. The Urban Footprint includes existing urban areas and areas that could accommodate additional growth that are well serviced or located along committed infrastructure corridors.

Regionally significant employment areas are located at Ebenezer, Swanbank and Bundamba. Purga could also potentially provide additional employment land in the medium- to long-term.

The RAAF base at Amberley is a major employment generator and will expand its role to provide more employment to the region. To encourage its long-term viability, future planning will minimise and mitigate the affects of conflicting development close to the base.

Emerging communities south-east of Ipswich City will also contribute to the urban open space network within the Ipswich area and its surrounds.

Residential

By 2031 approximately 118 000 additional dwellings will be needed to accommodate Ipswich's expected regional growth, population increase and demographic change.

With a range of broadhectare, infill and other residential opportunities available, Ipswich could exceed both the projected total and infill targets of the SEQ Regional Plan.

Ripley Valley and Springfield, with smaller broadhectare areas such as South Redbank Plains, Walloon–Thagoona and West Brassall, will provide most of the new residential development in the Western Corridor.

Numerous infill and redevelopment opportunities will provide alternate, higher density housing choices in more established urban areas. Ipswich CBD, Ripley Valley and Springfield will utilise further opportunities, as will other locations accessible from existing and proposed public transit networks.

The Springfield town centre and its surrounds will continue to provide an extensive residential land supply and infill opportunities. Establishing public transit links with Brisbane and, in the longer term, Ipswich, will further consolidate residential development within the town centre, providing both mixed-use and residential precincts.

Ripley Valley is a Regional Development Area proximate to existing urban infrastructure that has undergone extensive planning. It will be developed as an urban community with a full range of services and transport options. It will provide a range of housing choices and employment opportunities. Ripley Valley will also provide a major regional activity centre and several employment clusters.

The initial stages of development within Ripley Valley will be undertaken in the short-term. Further development of Ripley Valley is dependant on meeting water and sewerage infrastructure needs, coordinating the delivery of road and public transport infrastructure, and facilitating the necessary approvals and infrastructure agreements.

Economy and employment

The Ipswich local government area includes the principal regional activity centres of the Ipswich CBD and Springfield, and the major regional activity centres of Goodna and Ripley.

The Ipswich CBD is the historic centre for commerce, and is strategically located to function as the principal administrative, cultural and community centre for Ipswich and surrounding areas. This centre will also act as the main retail and commercial centre for Ipswich's central and western suburbs and surrounding rural areas.

This centre is serviced by rail and bus public transport infrastructure and will include residential uses. Office-based business and government administration precincts will be expanded and integrated into mixed-use areas, promoting a range of housing options and small businesses.

Springfield is the main retail, commercial, health and education centre for the residential communities located along the Centenary Highway. Opportunities generated by the university for specialised employment will be supported, as well as office-based business and government administration, and mixed-use precincts that promote a range of housing options and small businesses.

Ripley town centre will provide major regional activity centre functions to supplement the commercial and administrative roles of the Ipswich CBD and Springfield. It will generate most of the employment for the surrounding Ripley Valley community and will provide several employment clusters.

It will create opportunities for office-based business precincts within Ripley town centre to assist in providing diverse employment opportunities. The town centre will also accommodate mixed-use precincts to help deliver anticipated residential growth, provide greater employment diversity and assist in place making.

The employment areas of Ebenezer–Willowbank, Swanbank, New Chum, Bundamba, Wulkuraka industrial area, Carole Park, the RAAF Base Amberley, and the Amberley Aerospace and Defence Support Centre will ensure a high level of self-containment and contribute significantly to regional employment growth.

Ebenezer is a Regional Development Area that can potentially accommodate a range of manufacturing and logistics enterprises, as well as heavy, difficult-to-locate and large-footprint industries. To deliver employment and enterprise opportunities, key infrastructure upgrades are needed for regional road networks, water, sewerage, telecommunications and energy infrastructure. Ebenezer requires planning and infrastructure arrangements and responsibilities, to the state government's satisfaction, prior to development.

Identified Growth Areas

Lanefield–Grandchester is an Identified Growth Area that, subject to further investigation, may accommodate long-term development needs after the development of communities in the Ripley Valley and Walloon–Thagoona. Further investigation will determine the area's boundaries.

Investigations must be undertaken into the Lanefield–Grandchester area's potential to accommodate long-term residential and employment growth. This includes determining land capability and suitability, infrastructure requirements and responsibilities, appropriate land uses, necessary corridors and other relevant matters. In particular, geotechnical studies are required. Additionally, sufficient demand for further urban land in the Western Corridor must be demonstrated before Lanefield–Grandchester can be recognised as a Development Area.

Purga is an Identified Growth Area that, subject to further investigation, could provide employment and enterprise area opportunities in the medium- to long-term. Potentially, it could be developed as an extension to the Amberley Aerospace and Defence Support Centre park and as an inland port that comprises logistics, distribution, warehousing and associated activities.

Purga requires further planning to determine its development potential and to guide development. This includes determining land capability and suitability, infrastructure requirements and responsibilities, appropriate land uses, necessary corridors and other relevant matters. The timing of development will depend on completing the Cunningham Highway upgrade, and establishing Ebenezer and Amberley as employment areas.

Infrastructure

The timely provision of infrastructure is vital to lead the planned growth of the Western Corridor and sustain the creation of new and varied job opportunities. The focus is on improving existing infrastructure and providing new infrastructure to support growing population centres.

Major road upgrades will result in a four-lane extension of the Centenary Highway from the Ipswich Motorway to Springfield, including a new Logan Motorway interchange. A new rail line will connect Darra and Springfield.

Two new health precincts in Ipswich will provide necessary services to support growth within the Western Corridor.

A project identified in SEQIPP to support these growing communities involves building new schools in the Western Corridor. This support extends to the modernisation of the Bundamba TAFE campus.

Key projects identified in SEQIPP to support the delivery of the SEQ Regional Plan include:

- upgrading the Ipswich Motorway
- providing additional line capacity for the Ipswich rail line
- upgrading rail and road access to Springfield.

Western councils

Population in 2006: **86 300**

Indicative planning population 2031: **166 000**

Dwellings in 2006: **33 000**

Forecast additional dwellings by 2031: **33 000**

Residential areas	
Existing urban areas	Gatton, Fernvale, Lowood and Beaudesert
Regional activity centres	
Principal	Beaudesert and Gatton
Major	Boonah, Esk, Fernvale, Kilcoy and Laidley
Employment areas	
Enterprise	Bromelton, Helidon Hazardous Industry Area and Gatton North
Health, education and technology	Gatton and the SEQ Correctional Precinct
Identified Growth Areas	
Residential	Beaudesert South

In 2006, the western SEQ regional councils of Lockyer Valley, Scenic Rim and Somerset had a population of approximately 86 300.

Lockyer Valley Regional Council borders the significant growth areas of Ipswich to the east and Toowoomba to the west. The Scenic Rim Regional Council follows the Fassifern Valley and upper reaches of the Logan and Albert valleys. It contains the World Heritage-listed mountains that form the scenic rim, and it borders the southern, south-western and western growth corridors. Somerset Regional Council covers the Brisbane River Valley and Stanley River catchments.

The Warrego, Mount Lindesay, and Brisbane Valley highways, and the Brisbane–Toowoomba and Brisbane–Sydney rail lines, provide critical connections through the western council sub-region, establishing strong links with Toowoomba and Ipswich, and Brisbane to the east.

The western councils are predominantly located within the Regional Landscape and Rural Production Area, and sustain diverse economic, environmental and cultural values for the region.

Rural centres, towns and villages provide local services and a mix of housing types to accommodate the changing needs of the community. They enable people to remain in the local area and provide alternative housing options to those in larger urban centres.

The Urban Footprint enables existing towns and villages to accommodate expected residential and employment growth. It promotes compact development, and protects rural and natural values by preventing ad-hoc and dispersed development throughout the rural landscape.

Residential

By 2031 dwelling numbers in the western SEQ sub-region will need to double from 33 000 to 66 000 to accommodate expected regional growth, population increase and demographic change.

Rural residential areas located close to the Warrego and Brisbane Valley highways house a high proportion of the sub-region's population and have the capacity, through existing zoned land and approvals, to accommodate further growth.

Rural centres and towns will take a greater role in accommodating future growth. Gatton, Beaudesert, Lowood and Fernvale have the capacity to accommodate a considerable percentage of residential development, with additional housing supply provided in Kilcoy, Boonah, Laidley, Kalbar, Canungra and Kooralbyn. Some growth will also occur in Esk, Fernvale, Toogoolawah, Withcott and Helidon.

In response to an ageing population, rural centres with access to local health and community services will accommodate adaptable housing, allowing community members to remain in the local area through each stage of life.

The Urban Footprint of the Western Corridor can accommodate sufficient capacity for employment and residential growth. Lanefield–Grandchester is also available to increase supply in the long term if required.

Economy and employment

The economy of the western SEQ sub-region is dominated by rural industry and associated activities on rural lands, and a series of rural centres, towns and villages. Rural industries will be enhanced by increasing the self-containment of processing and packaging local produce, as well as expanding associated cottage industries, tourism and recreation opportunities. Rural industries will also grow through increased adaptability and productivity, and improved access to markets.

Gatton and Beaudesert are principal rural activity centres, and the focus for sub-regional growth in office-based business, retail and commercial activities, and government and health services. Boonah, Laidley, Fernvale, Esk and Kilcoy provide local services to surrounding rural communities, supplementing the roles of Gatton and Beaudesert. Toowoomba, Ipswich, Logan and Brisbane provide regional level services.

Retail, commercial and office-based businesses within rural centres, towns and villages will integrate with the established urban fabric to enhance traditional main streets and respond to cultural and heritage values.

Industrial precincts in rural centres and towns will be enhanced to help provide diverse employment opportunities and protect them from conflicting land uses.

Plainland is a Local Development Area that will develop as a service centre to accommodate surrounding rural living areas and supplement activities in Gatton and Laidley. Current retail development will be integrated with office-based business to provide specialist services and small business opportunities. Opportunities to locate government services, stemming from direct access to the Warrego Highway and Plainland's central location in the sub-region, will be considered.

To increase employment self-containment, rural centres will facilitate the development of small- to medium-scale incubator businesses. They will utilise their locational and cost advantages over the region's larger urban centres.

Bromelton is a Regional Development Area proximate to Beaudesert that needs major extensions to existing infrastructure networks. It is part of the Bromelton State Development Area declared by the Coordinator-General in 2008. Bromelton has the potential to become an employment and enterprise precinct that specialises in industries that need direct access to the national standard gauge rail network, and activities that need substantial separation from residential areas. Bromelton offers locational advantages for logistics operations involved in regional scale intermodal freight handling.

Gatton North, a Local Development Area proximate to the existing Gatton township, requires major extensions to existing infrastructure networks. It will function as an enterprise precinct that provides land for industrial purposes. Further planning is required, and infrastructure costs and funding arrangements determined to the state government's satisfaction, prior to development.

Helidon Hazardous Industry Area will continue to provide specialist services relating to explosives manufacturing and distribution. To assist in its long-term viability, future planning will need to investigate expanding the existing precinct and protecting it from conflicting land uses.

Sustainable rural villages

The expansion of Kooralbyn, Canungra and rural villages outside the Urban Footprint will be considered through the planning scheme review process to help them achieve long-term sustainability and self-contained employment. This expansion is subject to land capability and suitability assessments, riparian corridor protection, infrastructure requirements and responsibilities, appropriate land uses and other relevant matters. Additionally, areas considered for expansion must demonstrate compliance with the Urban Footprint principles (Principle 8.2), and materially assist in the self-containment of employment and residential growth in the sub-region.

Identified Growth Areas

Beaudesert South is an Identified Growth Area contiguous to existing urban development that requires substantial infrastructure extensions. Further planning will determine the area's boundaries before it is considered for development. Beaudesert South has the potential to accommodate residential growth subject to land capability and suitability assessments, riparian corridor protection, infrastructure requirements and responsibilities, appropriate land uses and other relevant matters.

Bromelton's expansion into the Identified Growth Area is being considered in response to a State Development Area designation. Planning is underway for the Bromelton State Development Area to accommodate:

- large lot industrial uses that require direct access to the national standard gauge rail network
- freight and logistics operations (major intermodal freight terminal)
- medium- and large-scale manufacturing and warehouse activities
- industry support services, freight and logistics, and transport servicing depots.

Infrastructure

Providing and maintaining appropriate levels of infrastructure and services to rural centres, towns and villages is integral to long-term growth in the western councils sub-region.

Key projects identified in SEQIPP to support the delivery of the SEQ Regional Plan include:

- safety improvements to increase the capacity of the road network
- the construction of interchanges and service roads on the Warrego Highway
- the Gatton Correctional Precinct.

Toowoomba

Population in 2006: **121 800**

Indicative planning population 2031: **197 000**

Dwellings in 2006: **45 500**

Forecast additional dwellings by 2031: **31 000**

Residential areas	
Broadhectare	Highfields, Glenvale, Drayton and Westbrook
Existing urban areas	Toowoomba City
Regional activity centres	
Principal	Toowoomba
Employment areas	
Enterprise	Charlton Wellcamp and Toowoomba Airport
Health, education and technology	University of Southern Queensland, Tor Street Laboratories and Toowoomba Health Hub
Identified Growth Areas	
Residential	Westbrook

Toowoomba is located at the western edge of the SEQ region and comprises a range of urban and semi-urban settlements. Toowoomba City is the principal activity centre for the sub-region and services the Darling Downs and Surat Basin. In 2006 Toowoomba's resident population was approximately 121 800.

The Toowoomba sub-region does not include the entire Toowoomba Regional Council local government area. However, the SEQ region boundary accommodates many of the anticipated growth localities and areas that require development controls close to Toowoomba City.

Urban development is focused around Toowoomba City and various satellite urban centres, such as Highfields, Glenvale, Cambooya and Kingsthorpe. The settlement pattern is also characterised by fringe urban and rural residential precincts adjacent or close to these centres.

The development of the Surat Energy and Resource Province, and major infrastructure such as the Gowrie–Grandchester rail corridor and Toowoomba Bypass, will continue to drive population growth in Toowoomba.

The proportion and location of rural residential development in fringe urban locations has important implications for growth management and infrastructure provision. For this reason, the Urban Footprint identifies existing settlements and other development opportunities to accommodate growth to 2031.

Council will undertake further studies to detail local planning and sequencing for Development Areas. To do this a combined planning scheme will be prepared for the Toowoomba Regional Council to provide a uniform and consistent basis for strategic land use planning and development assessment.

Residential

By 2031 approximately 31 000 additional dwellings will be needed to house Toowoomba's expected regional growth.

A combination of broadhectare, infill development and redevelopment will deliver these dwellings. Council will undertake local planning within the next five years to identify additional medium- to long-term broadhectare opportunities. These investigations will refine dwelling allocations for the sub-region in future revisions of the SEQ Regional Plan.

Highfields has become Toowoomba's primary urban growth front due to its relative proximity to Toowoomba City and available services, facilities and land. Broadhectare opportunities at Glenvale, Drayton and Westbrook, and in smaller communities such as Kingsthorpe, Gowrie Junction and Cambooya, will accommodate residential growth. Ongoing, low-density residential development through existing approvals will also contribute to growth in Hodgson Vale, Torrington, Cotswold Hills and Meringandan West.

Infill development will be focused within Toowoomba City, with the CBD providing opportunities for mixed-use and higher density development.

Westbrook is an existing rural area that, subject to further planning, could accommodate some of Toowoomba's projected residential growth needs.

Economy and employment

Toowoomba is the economic and service hub for the Darling Downs and Surat Basin. It is expected to benefit significantly from mining activity in the Surat Basin, accommodating professional and other higher order services demanded by growth in the region. The challenge for the Toowoomba sub-region is to provide adequate employment opportunities for the expected population growth.

The challenge for the Toowoomba sub-region is to provide adequate employment opportunities for the expected population growth.

The greater Toowoomba urban area provides most of the sub-region's employment, which is focused around a series of commercial centres, specialist nodes and industrial precincts. It is recognised as the gateway to the Darling Downs, and is well located to support the economic growth and development of the sub-region and the eastern downs.

Highfields and Charlton Wellcamp are two significant employment areas outside the Toowoomba urban area. Several smaller rural village centres provide localised employment opportunities.

Toowoomba CBD, Kearneys Spring, Clifford Gardens, Wilsonton and the Range are the major commercial centres. The Highfields centre is anticipated to become a centre of sub-regional significance during the planning period.

A range of specialist activity centres that cover the health, education and defence sectors are located throughout the sub-region. The Toowoomba aerodrome is a regionally significant specialist node. However, the aerodrome's future role as Toowoomba's sub-regional aviation hub is constrained by numerous physical and spatial attributes, and the surrounding pattern of land use. It is anticipated that the long-term location of the aerodrome and the use of the existing site will be investigated in the development of the combined planning scheme.

The sub-region's major industrial activity precincts are located at Wilsonton, Drayton and Charlton Wellcamp. The Charlton Wellcamp industrial area is located at the junctions of the Warrego, New England and Gore highways. It covers approximately 1000 hectares of mostly undeveloped land, but is anticipated to be the sub-region's major industrial expansion area and multi-modal freight hub.

Identified Growth Area

Westbrook is an Identified Growth Area proximate to urban development that will need infrastructure extensions if it is found to be suitable for residential development. Further planning will confirm the area's boundaries before it is considered for development. Development for residential use is subject to land capability and suitability assessments, infrastructure requirements, responsibility identification and other relevant matters.

Infrastructure

The sub-region's key infrastructure focus involves securing an adequate water supply and improving inter-regional transport links for passengers and freight.

Key projects identified in SEQIPP to support the delivery of the SEQ Regional Plan include:

- Warrego Highway–Toowoomba intersection upgrades
- the Toowoomba Bypass
- the Gowrie–Grandchester rail upgrade.

Part D—Regional policies

Regional policies set out the desired regional outcomes, principles, policies and programs to address growth and management of the region.

For each desired regional outcome, a set of principles is identified to achieve the outcome.

Specific policy statements indicate what must be done for the principles to have effect. Programs identify actions that need to be implemented over the life of the plan. Notes are also included to provide an explanation of the policy statements, identify implementation processes and provide additional relevant information.

The principles and policies guide state and local government in the formulation of their own policies as they are the cornerstones to the correct functioning of the region. Local government planning schemes must be consistent with the intent of the desired regional outcomes, principles and policies. Programs may be delivered by state or local government, industry, non-government organisations or community groups.

The desired regional outcomes are an integrated and holistic set, with no intended priority. They appear under the following headings:

1 Sustainability and climate change

2 Natural environment

3 Regional landscape

4 Natural resources

5 Rural futures

6 Strong communities

7 Engaging Aboriginal and Torres Strait Islander peoples

8 Compact settlement

9 Employment location

10 Infrastructure

11 Water management

12 Integrated transport.

1. Sustainability and climate change

Desired regional outcome 1

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.

Since 1994, sustainable development principles have been included in a range of Queensland's legislative instruments such as the *Environmental Protection Act 1994*, *Integrated Planning Act 1997* and *Water Act 2000*. The Australian Government has produced a National Strategy for Ecologically Sustainable Development (ESD), which defines the goal of ESD as:

Development that improves the total quality of life, both now and in the future, in a way that maintains the ecological processes on which life depends.

The overriding intent of the SEQ Regional Plan is to ensure the region grows and changes in a sustainable way. The challenge is to reduce the region's ecological footprint while enhancing the region's economy and people's quality of life. The SEQ Regional Plan achieves this through the desired regional outcomes to realise concurrent social, ecological and economic improvements.

The Queensland framework for ecologically sustainable decision-making has been used to inform principles and polices of the SEQ Regional Plan. The framework commits to:

- integrated and long-term decision-making—incorporating long- and short-term environmental, economic and social considerations into decision-making
- intergenerational equity—ensuring the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations
- intra-generational equity—ensuring a fair share of resources and opportunity among present generations
- conserving biological diversity and ecological integrity—protecting the variety of all life forms, their genetic diversity and the ecosystem of which they form a part, recognising the various services they provide to humans as well as their intrinsic value
- internalising environmental costs—ensuring the true costs and life-cycle costs (incurred from when inputs are produced through to waste disposal) of protecting and restoring environmental damage are reflected in the price of a product or service
- engaged governance—ensuring broad community involvement in decisions and actions that affect people.

Source: adapted from *Premier's Policy Scan Issue 4: Ecologically sustainable development*, Queensland Government, 2002 and *National Strategy for Ecologically Sustainable Development*, 1992.

The SEQ Regional Plan will guide the region towards sustainable development. Setting targets for each of the desired regional outcomes will help to guide actions required to achieve each of the outcomes. Monitoring and reporting on progress towards achieving these targets and the desired regional outcomes are essential to the review and improvement process for the SEQ Regional Plan.

Overwhelming scientific evidence indicates that human-induced climate change is occurring, primarily due to increasing concentrations of greenhouse gases in the atmosphere. Urgent action is necessary to stabilise greenhouse gas emissions at a level where the effects of extreme climate change can be avoided. The government must also move quickly to implement measures that reduce the effects of natural hazards and climate change, and secure the sustainability and prosperity of the region.

International and Australian research indicates that there are significant benefits in responding immediately to climate change. This response should include both reducing the emission of greenhouse gases and adapting to the effects of climate change that will occur regardless of global efforts to reduce emissions. The sooner we start reducing greenhouse gas emissions and adapting to the effects of climate change, the smaller the cost of climate change will be in terms of the region's economic growth and lifestyle.

Toward Q2: Tomorrow's Queensland sets a target to cut Queenslanders' carbon footprint by one-third through reduced car and electricity use by 2020. Regional climate change actions for SEQ will also be influenced by statewide and national climate change initiatives and policies including the Queensland Government's climate change strategy and the Australian Government's proposed Carbon Pollution Reduction Scheme.

1.1 Sustainability principles

Principle

Ensure ecologically sustainable development through the application of the Queensland framework for ecologically sustainable decision-making.

Policies

1.1.1 All decisions should reflect the Queensland framework for ecologically sustainable decision making.

1.1.2 Reflect the sustainability characteristics in all land use and infrastructure planning.

Notes

The SEQ Regional Plan provides the overarching framework for ensuring the sustainability of the region. The desired regional outcomes are based on Queensland's framework for ecologically sustainable decision-making. The principles, policies and programs provide direction on the implementation of the SEQ Regional Plan to achieve the desired regional outcomes. The sustainability characteristics provide a description of the desired built and natural form of the region to contribute to meeting these outcomes.

Sustainable development in SEQ is expected to include the following sustainability characteristics:

- compact urban form that minimises impacts on natural resources and environmental values and reduces the need for travel by private vehicles
- well-designed activity centres and corridors based on high-frequency public transport services and accessible active transport networks
- high-level and equitable access to activities and services through transport and communication systems
- buildings that are designed and oriented to take advantage of the region's climate and reduce the use of energy, especially for cooling and heating
- low levels of water, energy and material consumption, and high levels of recycling and re-use of natural resources, materials and waste products
- generation and distribution of energy from renewable sources
- a well-protected system of wildlife habitats including open space, biodiversity networks and greenspace
- adequate and well-situated open space—including public parks, trails and sporting and recreational facilities—which supports healthy behaviour, social activity and physical and psychological wellbeing
- total water cycle management to minimise impacts on the natural water cycle, including aquatic ecosystems
- protection from natural hazards, including the effects of climate change
- local and diverse employment opportunities
- retention of distinctive regional and local character and scenic amenity
- cultural and landscape heritage that is appreciated, protected and managed.

1.2 Sustainability monitoring

Principle

Monitor the progress made in SEQ towards achieving sustainability.

Policy

1.2.1 Develop regional targets for desired regional outcomes of the SEQ Regional Plan.

Program

1.2.2 Publish the SEQ State of the Region report using relevant and timely sustainability indicators to report on the progress in achieving sustainability in the region.

Notes

A State of the Region report will be produced as part of the five-year review of the SEQ Regional Plan. Publication of this information is important to ensure a consistent information base for reviewing the SEQ Regional Plan, and to allow agencies, organisations and the community to participate more effectively in the management of the region. Sustainability indicators will be based on the regional targets to measure progress in achieving the outcomes.

The *South East Queensland State of Region Sustainability Indicators Baseline Review 2006* identifies sustainability indicators for use in State of the Region reporting.

The *State of Region Baseline Report 2005–2006* provides information on the status of the sustainability indicators at the time of the commencement of the *South East Queensland Regional Plan 2005-2026* (SEQ Regional Plan 2005), and provides a point of comparison for future reports.

The *South East Queensland State of the Region Technical Report 2008* was produced to inform the review of the SEQ Regional Plan 2005, and the development of the *South East Queensland Regional Plan 2009–2031*. It includes detailed information on the status of each of 76 sustainability indicators.

Regional targets will be prepared in consultation with relevant stakeholders and be consistent with existing federal, state and local government processes. Targets must be measurable, achievable and time-bound, and relate to the desired regional outcomes of the SEQ Regional Plan. Targets have already been established, or are in the process of being established, through a number of programs (Table 1).

Table 1: Description of targets relevant to the SEQ Regional Plan

Target source	Description	Timeframe	Spatial scale
Toward Q2: Tomorrow's Queensland	Vision for Queensland around five ambitions: strong, green, smart, healthy, fair	2020	Queensland
South East Queensland Natural Resource Management Plan 2009–2031	Includes targets for air and atmosphere, coastal and marine, community, land, nature conservation, regional landscape areas, traditional owners and water	2031	SEQ
Rural Futures Strategy for South East Queensland	Includes targets for economic development, rural communities and rural land management	2020–2031	SEQ
COAG Closing the Gap commitment	Includes targets to close the gap in health, education and employment outcomes for Aboriginal and Torres Strait Islander peoples	10 years	National
SEQ Regional Plan	Includes dwelling targets for existing urban areas	2031	SEQ
Draft South East Queensland Water Strategy	Includes targets for water supply and water use	Immediate	SEQ
South East Queensland Healthy Waterways Strategy 2007–2012	Includes targets for waterway health	2026	SEQ
Connecting SEQ2031: An Integrated Regional Transport Plan for South East Queensland	Proposes to include targets for transport	2031	SEQ

1.3 Reducing greenhouse gas emissions

Principle

Reduce greenhouse gas emissions from development, land management and other planning decisions in the region.

Policies

1.3.1 Incorporate planning and design measures in development, land management and other planning decisions to reduce greenhouse gas emissions in accordance with agreed performance criteria.

1.3.2 Reduce greenhouse gas emissions from transport fuel consumption by adopting patterns of urban development that reduce the need to travel and the distance travelled and by increasing the provision of active and public transport.

1.3.3 Improve energy efficiency through siting, design, construction and use of demand management technologies to reduce greenhouse gas emissions from electricity use.

1.3.4 Increase the local provision of renewable energy and low emission technology in Development Areas, activity centres and other urban areas identified to accommodate future growth.

1.3.5 Increase stored carbon through the retention or planting of trees or other vegetation, and other land management practices that also provide sustainability and amenity outcomes.

1.3.6 Minimise greenhouse gas emissions from landfill and implement capture and re-use of landfill gas.

Programs

1.3.7 Align and coordinate the implementation of regional policies to reduce greenhouse gas emissions through the South East Queensland Climate Change Management Plan (SEQ Climate Change Management Plan).

1.3.8 Develop agreed performance criteria for reducing greenhouse gas emissions in development, land management and other planning decisions.

Notes

The regional planning process in SEQ can make a significant contribution to the reduction of greenhouse gas emissions through:

- reducing the need for travel, particularly by private vehicles
- providing active and public transport infrastructure
- increasing the efficient use of energy
- supporting the generation of renewable energy and use of low emission technologies
- increasing the sequestration of carbon dioxide
- minimising emissions from landfill.

These regional initiatives will help to achieve the target in *Toward Q2: Tomorrow's Queensland* to cut Queensland households' carbon footprint by one-third with reduced car and electricity use and greenhouse gas emissions from waste by 2020. The Queensland Government's climate change strategy commits Queensland to making an equitable contribution towards the national target of reducing greenhouse gas emissions to 60 per cent below 2000 levels by 2050.

As SEQ has the largest population and highest growth rate of any region in Queensland, it has the opportunity and a major responsibility in contributing to state and national greenhouse gas emission reduction targets. Currently, about 40 per cent of greenhouse gas emissions in SEQ arise from energy used by industry, 22 per cent from fuel consumed by road transport, 13 per cent from energy consumed by residential users, 12 per cent from commercial energy use, 7 per cent from agricultural emissions, 3 per cent from clearing of woody vegetation, and 3 per cent from waste disposal and treatment (International Council for Local Environmental Initiatives 2009).

Implementation of policies to reduce greenhouse gas emissions through planning and design will be achieved by reinforcing activities such as the application of transit oriented development and subtropical design principles, urban consolidation, provision of greater public and active transport and improved sustainable housing regulations.

The contribution of these and other initiatives will be strengthened over time by developing performance criteria to assess the contribution of development to reducing greenhouse gas emissions. The performance criteria will assist governments and the development industry to improve the efficiency of the urban form, reduce resultant transport fuel and energy use and maximise opportunities for the use of low emission technologies.

1.3 Reducing greenhouse gas emissions—continued

Some of the mechanisms to achieve these outcomes include:

- consolidating urban growth by supporting higher densities of energy-efficient buildings in well-designed and appropriately located centres
- reducing the length and number of journeys by co-locating schools, shopping centres, other services and major trip generators close to population centres
- improving the energy performance of buildings through siting, design and orientation
- increasing accessibility to high-quality public transport services and improved intermodal transport opportunities
- maximising opportunities and facilities for active transport including walkways and cycleways
- increasing opportunities for the generation of solar and wind power or co-generation in key urban and rural locations
- increasing the planting of trees to store carbon and provide shade and cooling in urban and rural areas.

The Queensland Government's climate change strategy supports deployment of existing low emission renewable technologies such as solar power, wind, geothermal and biomass (e.g. the waste from sugarcane milling) and the development of emerging low emission renewable technologies. The Australian Government has also committed to ensuring that 20 per cent of the nation's electricity supply comes from renewable energy sources by 2020. Electricity use accounts for about 42 per cent of the emissions in the SEQ region (International Council for Local Environmental Initiatives 2009).

In March 2009 the Queensland Government introduced mandatory compliance for all new houses and townhouses to achieve a minimum 5 stars (out of 10) energy equivalence rating. From 1 September 2009, new or replacement air conditioners installed in new or existing Queensland homes and units must have a minimum tested average energy efficiency ratio of 2.9, which is equivalent to 4 stars on a current energy rating label. Retrofitting existing buildings with energy efficient fixtures and fittings can also achieve significant reductions in energy use and greenhouse gas emissions.

Primary producers and other rural industries have an important role to play in reducing greenhouse gas emissions. As opportunities for global emissions trading emerge, the Queensland Government will increasingly direct research, development and extension to help primary producers to access opportunities for carbon sequestration in forestry, grazing lands and cropping activities.

The Council of Mayors (SEQ) is developing a voluntary regional carbon sink initiative to help offset the greenhouse gas emissions from each of the 11 local governments in SEQ and contribute to offsetting community emissions. Sites for tree plantings will be strategically selected to ensure improved water quality and biodiversity outcomes. Planting trees in urban areas provides many benefits in addition to carbon sequestration such as shade, biodiversity and scenic amenity. Other methods to store carbon include land management practices that store carbon, such as local cycling of organic waste, rotation grazing and enhancing the ecological condition of natural vegetation.

The SEQ Climate Change Management Plan will provide an integrated framework for implementing regional policies to reduce greenhouse gas emissions and build resilience to natural hazards and climate change. It will describe programs and actions to reduce greenhouse gas emissions and support transition of the SEQ community to a low-carbon future. A core function will be to align and coordinate state and local government programs to reduce greenhouse gas emissions from development and land management.

1.4 Natural hazards and climate change adaptation

Principle

Increase the resilience of communities, development, essential infrastructure, natural environments and economic sectors to natural hazards including the projected effects of climate change.

Policies

1.4.1 Reduce the risk from natural hazards, including the projected effects of climate change, by avoiding areas with high exposure and establishing adaptation strategies to minimise vulnerability to riverine flooding, storm tide or sea level rise inundation, coastal erosion, bushfires and landslides.

1.4.2 Reduce the risk from natural hazards, including the projected effects of climate change, by establishing adaptation strategies to minimise vulnerability to heatwaves and high temperatures, reduced and more variable rainfall, cyclones and severe winds, and severe storms and hail.

1.4.3 Planning schemes and development decisions shall be in accordance with the Queensland Coastal Plan, including the range of potential sea level rises.

Programs

1.4.4 Align and coordinate the implementation of regional policies to increase resilience to and reduce risks from natural hazards, including the projected effects of climate change, through the SEQ Climate Change Management Plan.

1.4.5 Develop performance criteria for the planning and design of development and infrastructure to manage risks from natural hazards and climate change.

Notes

Implementation of natural hazard and climate change adaptation policies will be achieved through building community resilience, avoiding vulnerable development in hazardous areas and incorporating design measures that are suited to more varied climatic conditions.

Natural hazards such as flooding, bushfires and storm surge pose a significant risk to communities and infrastructure in SEQ. Climate change is expected to increase the frequency and severity of extreme weather events that cause these natural hazards. In addition to factors such as rising sea levels, natural hazards pose a significant risk to development in SEQ. The United Nations Intergovernmental Panel on Climate Change (IPCC, 2007) has identified SEQ as one of six 'hot spots' in Australia where vulnerability to climate change is likely to be high.

Natural hazards and the projected effects of climate change are likely to compound the effects of existing threats to communities and the natural environment, such as habitat loss and fragmentation from development. SEQ has sustained Aboriginal populations for many tens of thousands of years. Understanding how climate change has affected the region's ecosystems in past periods of climate change can inform projections and management of climate change into the future.

The planning process in SEQ can reduce the risks from natural hazards and the projected effects of climate change through:

- avoiding hazardous areas
- improving the design of developments and infrastructure
- improving community preparedness to respond to natural hazards
- enhancing the resilience of natural systems
- maximising opportunities for rural industries in the face of increasing climate variability.

1.4 Natural hazards and climate change adaptation—continued

Many of the effects of climate change will be experienced as an increase in the frequency and severity of hazards associated with extreme weather events.

SEQ local governments and the state government will implement State Planning Policies (including State Planning Policy 1/03 Mitigating the Adverse Impacts of Flooding, Bushfire and Landslide) and the *State Coastal Management Plan* and develop local disaster management plans for sensitive locations such as areas that may be susceptible to sea level rise, storm surge, coastal erosion and riverine flooding. For example, the International Panel for Climate Change (IPCC) projects a sea level rise range of 0.18 to 0.79 metres by 2100. Planning for natural hazards in SEQ will be informed by the projected sea level rise outlined in the Queensland Coastal Plan.

The sea level rises in the Queensland Coastal Plan are:

- for land not already subject to a development commitment, a sea level rise of 0.8 m by 2100 will need to be taken into account
- for land already subject to a development commitment the following projected sea level rise needs to be accommodated for the year of end of planning period (asset life):
  - 2050 0.3 m
  - 2060 0.4 m
  - 2070 0.5 m
  - 2080 0.6 m
  - 2090 0.7 m
  - 2100 0.8 m.

Information on climate change science from the Queensland Centre for Climate Change Excellence, CSIRO and the Bureau of Meteorology will ensure essential infrastructure, natural environments, people and development are less vulnerable to climate change impacts.

Rapid onset hazards include heatwaves and high temperatures, cyclones and severe winds, severe storms and hail storms, riverine flooding and storm tides, bushfires, landslides and coastline erosion. Gradual onset hazards include sea level rise and reduced and highly variable rainfall. Other natural hazards, such as earthquakes and tsunamis, are unlikely to occur in SEQ.

Biological hazards such as pests and diseases will also be affected by climate change and will be principally managed through federal, state and local government biosecurity programs. For example, the incidence and distribution of mosquito populations and mosquito-borne diseases (e.g. dengue fever and Ross River virus) are likely to change as a result of changes in temperature and rainfall.

The SEQ Climate Change Management Plan will provide an integrated framework for implementing regional policies to reduce greenhouse gas emissions and build resilience to natural hazards and climate change. It will describe programs and actions needed to support adaptation to climate change. A core function will be to align and coordinate state and local government adaptation responses.

1.5 Responding to oil supply vulnerability

Principle

Identify people, economic sectors and areas that are at risk due to oil supply vulnerability and increase their resilience to the effects of oil supply vulnerability.

Policies

1.5.1 Manage risks and reduce impacts on people, economic sectors and areas from the effects of oil supply vulnerability.

1.5.2 Design Development Areas to encourage walking, cycling and public transport use to get to local shopping facilities and employment locations, and early provision of public transport services.

1.5.3 Ensure transport infrastructure and service investment actively reduces oil dependence, particularly for trips that could be undertaken by public or active transport.

1.5.4 Reduce the length of trips and dependence on oil by localising access to goods, services and employment opportunities.

Programs

1.5.5 Identify, monitor and report on the risks to economic sectors of the effects of oil supply vulnerability.

1.5.6 Identify the implications of oil supply vulnerability for socially and locationally disadvantaged communities.

Notes

Most of the world is now dependent on a diminishing number of oil-producing countries for their oil needs. Current rates of global oil production are predicted to decline within the next five years. Australia does not have enough oil to meet the nation's needs. Australia and Queensland are therefore becoming more dependent on imported oil and oil-based fuels. The oil used by Queensland is therefore strongly linked to global supply and demand. As in many parts of the world, SEQ communities and economic sectors are firmly structured around an abundant supply of low-cost oil. This puts SEQ, along with the rest of the world, at risk from changes in the supply and price of oil.

Information on household exposure to higher oil prices—such as that provided by the vulnerability assessment for mortgage, petroleum, and inflation risks expenditure (VAMPIRE) index (Dodson and Sipe 2008)—can be used to inform planning by identifying communities vulnerable to reductions in oil supply and increases in oil prices.

Reducing travel by private vehicle is a key component in achieving the *Toward Q2: Tomorrow's Queensland* target to cut the carbon footprint by one-third.

The transport industry is the largest consumer of petroleum products, accounting for almost three-quarters of all fuel used. However, other industries—in particular the mining, agriculture, manufacturing and construction sectors—are also heavy users of oil-based fuels. While there is no easy solution to replacing oil-based fuel and products with other energy sources, some of the opportunities for building a region that is more resilient to oil supply vulnerability include:

- providing enhanced public and active transport networks and improved, safe walkways and cycleways
- providing incentives for people to walk or cycle for short- and medium-length journeys, or use public transport
- retaining agricultural production areas close to population centres.

Many of these actions provide other benefits such as contributing to the reduction of greenhouse gas emissions. Improving freight networks and increasing the production and use of alternative fuels are also important mechanisms for reducing vulnerability to changes in oil supply.

2. Natural environment

Desired regional outcome 2

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.

SEQ is one of Australia's identified 'biodiversity hotspots' and is renowned for the quality and diversity of its natural environment, which includes some distinctive features:

- rich and diverse native flora and fauna
- the largest urban koala population in Australia
- a dynamic coastline and marine waters that comprise
  - coastal wetlands, including Pumicestone Passage and Carbrook
  - unique sand islands, including Moreton, Stradbroke and Bribie islands
  - internationally recognised dugong, turtle and wader bird habitats in Moreton Bay
  - open coastline including rocky foreshores, reefs, headlands and surf beaches
- spectacular forested mountain ranges and peaks, including
  - the Gondwana Rainforests of Australia World Heritage area including expansive rainforest reserves in Lamington, Springbrook, Mount Barney and Main Range national parks
  - D'Aguilar Range, Blackall Ranges, Tamborine Mountain and the Glass House Mountains
- freshwater wetlands, waterways and floodplains, including the Noosa River and the extensive waterways of the Brisbane, Logan and Lockyer valleys
- generally good air and water quality.

SEQ's population growth and related urban and rural development are increasing the pressure on the natural environment. SEQ was a vastly different place before European settlement in 1824. Although shaped by human occupants for tens of thousands of years prior to that time, the region's lands, waters, atmosphere and biodiversity were managed in a sustainable way. Continued clearing and fragmentation of natural areas and further degradation of natural environmental processes will adversely affect the region's biodiversity, resilience to climate change, air and water quality, agriculture, economic potential and public health. Unless prevented, managed or reversed, these factors will continue to threaten regional sustainability. Protecting and managing the natural environment is fundamental to achieving a sustainable future for the region.

The Queensland Government has committed to protecting 50 per cent more land for nature conservation statewide by 2020 in *Toward Q2: Tomorrow's Queensland*.

A coordinated and collaborative approach by government, industry and the community, with full engagement of traditional owners, has been enhanced by the establishment of the Chief Executive Officers Committee for Natural Resource Management in South East Queensland and a new state agency designed to better coordinate environment and resource management across the state. Community engagement is essential to protect and strategically restore the region's natural environmental values in order to build resilience, especially as climatic conditions become more varied and extreme. Strategic investment in new habitat areas and a viable network of connecting corridors will be required to enable flora and fauna to move and adapt to changing conditions over time.

2.1 Biodiversity

Principle

Protect, manage and enhance the region's biodiversity values and associated ecosystem services and maximise the resilience of ecosystems to the impacts of climate change.

Policies

2.1.1 Avoid impacts on areas with significant biodiversity values in the Regional Landscape and Rural Production Area, including biodiversity corridors.

2.1.2 Avoid or minimise impacts on areas with significant biodiversity values in the Urban Footprint or Rural Living Area, including biodiversity corridors.

2.1.3 Avoid offsite impacts from development or other activities on adjacent areas with significant biodiversity values.

2.1.4 Where impacts on areas with significant biodiversity values cannot be avoided, offset impacts in accordance with the principles of the *Queensland Government Environmental Offsets Policy* and relevant specific issue offset policies.

2.1.5 Within biodiversity networks, protect significant biodiversity values, improve ecological connectivity, enhance habitat extent and condition, and rehabilitate degraded areas.

2.1.6 Optimise biodiversity conservation outcomes by locating environmental and carbon offsets within identified biodiversity networks and other suitable areas, giving a high priority to the protection or rehabilitation of significant biodiversity values.

Programs

2.1.7 In partnership with private and public landholders, identify and manage regional and local biodiversity networks, including areas with existing values and areas suitable for rehabilitation as habitat or biodiversity corridors.

2.1.8 Establish information sharing and coordination mechanisms to integrate the location and management of biodiversity networks within the broader open space network at regional and local scales.

2.1.9 Implement actions to help achieve the nature conservation targets in the *South East Queensland Natural Resource Management Plan 2009–2031*.

2.1.10 In consultation with governments, industry and the community, develop and implement a regional environmental offsets framework to coordinate state and local offset policies and programs.

2.1.11 Integrate an agreed biodiversity mapping approach for the region, including methods to map and represent biodiversity networks for use in state, regional and local planning and management.

Notes

Toward Q2: Tomorrow's Queensland sets a statewide target of protecting 50 per cent more land for nature conservation statewide by 2020. The SEQ National Reserve System Partnership between local, state and federal governments assists with the prioritisation and purchase of land for nature conservation.

The strategic intent of these policies is to ensure that development and other land use activities do not cause any loss or degradation of areas with significant biodiversity values and that the overall biodiversity values of the region are enhanced over the longer term to support regional sustainability.

Areas with significant biodiversity values include areas of ecological significance (as shown in Map 3) and areas identified in local government planning schemes or master plans. Areas identified as being of high ecological significance in Map 3 and bushland koala habitat areas described in section 2.2 indicate the general spatial extent of state interests in biodiversity conservation. Other plans and maps—including remnant and regrowth vegetation maps, regional natural resource management plans, corporate plans and environmental impact statements—may also identify areas with significant biodiversity values. These maps and plans should be used to inform and guide the application of regional biodiversity policies. The *Vegetation Management Act 1999* and the proposed State Planning Policy for koala conservation will assist in regulating vegetation clearing, avoiding impacts on significant biodiversity values, and preventing new urban development and further subdivision in the Regional Landscape and Rural Production Area.

The SEQ Common Nature Conservation Classification System has been used to generate assessments of biodiversity values. There is a need to continue to refine and consolidate a biodiversity evaluation and mapping approach, which effectively supports planning at the state, regional and local scales.

Habitat areas have been extensively fragmented through past development. The challenge is to re-connect wildlife habitats by clearly identifying and protecting biodiversity networks and corridors at regional and local scales. Biodiversity networks include:

- existing areas of significant biodiversity values
- existing biodiversity corridors e.g. waterway corridors and biodiversity corridors including mosaic, contiguous or stepping stone corridors
- future biodiversity corridors and habitat areas e.g. areas currently developed or cleared that can be rehabilitated to restore connectivity.

2.1 Biodiversity—continued

Strategic expansion, connection and rehabilitation of biodiversity networks will require an understanding of anticipated ecosystem vulnerability to climate change induced increases in natural hazards (e.g. flood, sea level rise, bushfire, higher temperatures and heat waves).

The regional landscape supports multiple values including scenic amenity, outdoor recreation, cultural heritage and biodiversity. Integration of biodiversity networks with the broader regional landscape framework will assist in protecting and enhancing a range of landscape and biodiversity values, to achieve greater efficiencies and improved outcomes at the landscape scale.

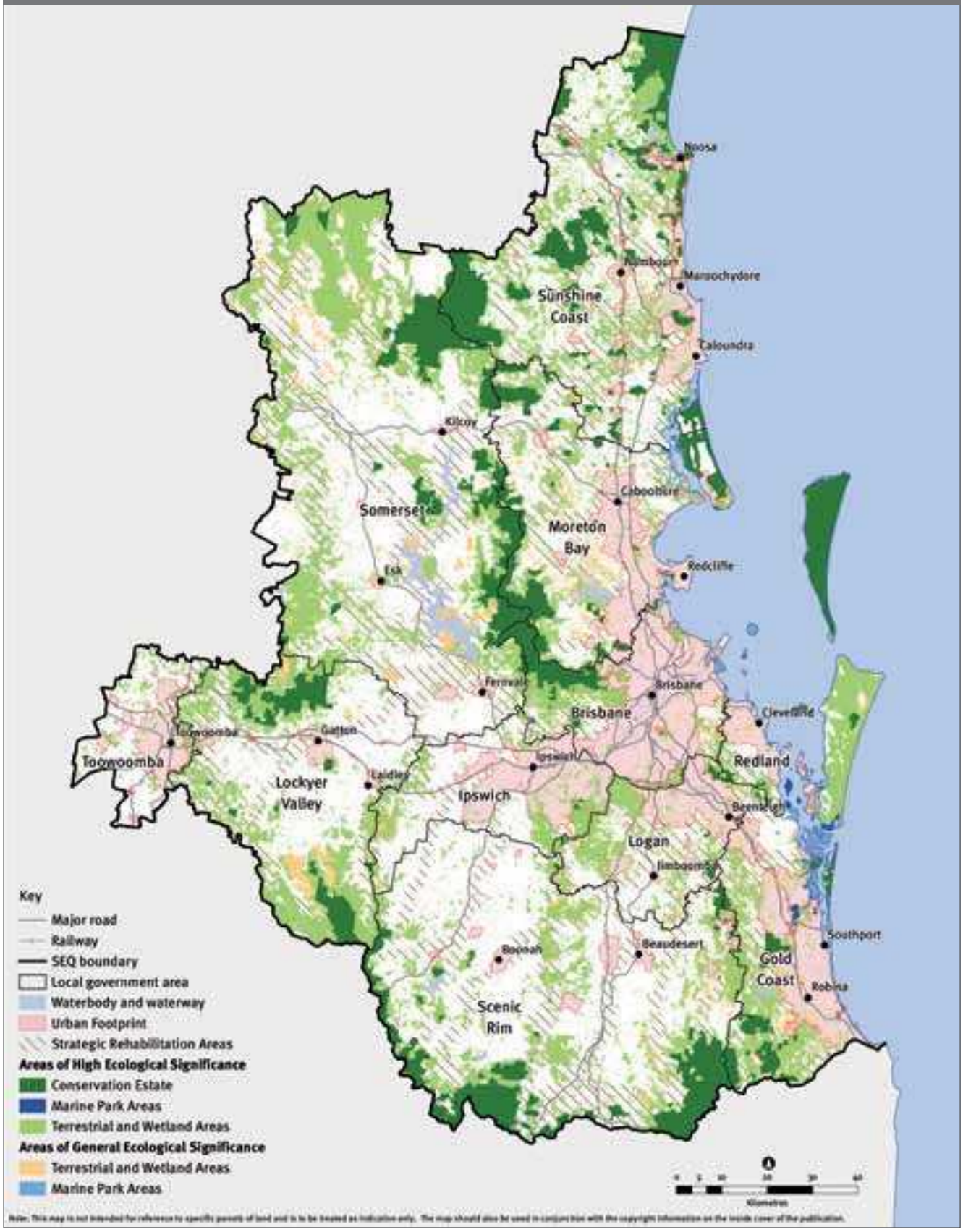
Offsets are one mechanism to deliver improved biodiversity outcomes, including connectivity. Offsets will be subject to the principles of the *Queensland Government Environmental Offsets Policy* and relevant specific issue offset policies including Vegetation Management, Koala Habitat, Marine Fish Habitat and proposed Biodiversity Offsets policies.

The *South East Queensland Natural Resource Management Plan 2009–2031* (SEQ Natural Resource Management Plan) is a non-statutory plan that establishes a collaborative framework to link regional natural resource management planning, investment and activities, to achieve a range of targets, including improved biodiversity outcomes. The SEQ Natural Resource Management Plan includes targets to:

- maintain or increase the area and extent of regional vegetation cover, habitat for priority species and wetlands
- ensure no net fragmentation of large tracts of vegetation over 5000 ha
- protect vulnerable regional ecosystems
- ensure no decline in the conservation status of native species.

Mechanisms to achieve these targets include native vegetation management, threatened species recovery plans and proactive management of protected areas. Biodiversity conservation stakeholders can use the SEQ Natural Resource Management Plan's collaborative framework to improve the way they identify, evaluate, protect, manage and report on SEQ's biodiversity values.

Map 3: Areas of ecological significance



2.2 Koala conservation

Principle

Koala populations in the region are enhanced through the protection, management and the achievement of a net gain in bushland koala habitat and through managing conflict with urban development.

Policies

2.2.1 Prioritise the establishment and implementation of consistent planning requirements for the protection of koala habitat areas across the region.

2.2.2 Ensure development impacts on koala habitat throughout SEQ are offset through the delivery of a net benefit to koalas, including through the expansion of habitat on lands identified as suitable for rehabilitation.

2.2.3 Ensure planning and development caters for koala movement between conserved areas of bushland koala habitat.

2.2.4 Prioritise the protection and rehabilitation of koala habitat areas outside the Urban Footprint as a key source of long-term habitat for the region's koala population.

2.2.5 Ensure planning and development seeks to maintain or enhance koala habitat values in areas of bushland habitat, areas suitable for rehabilitation and other areas of value to koalas.

Programs

2.2.6 Identify existing and potential koala habitat areas suitable for protection, transfer, acquisition and rehabilitation in a State Planning Policy for koala conservation.

2.2.7 Establish development codes within a State Planning Policy for koala conservation to ensure development addresses adverse impacts on koalas and koala habitat.

2.2.8 Establish guidelines within a State Planning Policy for koala conservation to ensure koala conservation is considered within plans for Regional and Local Development Areas and strategic plans.

2.2.9 Identify, monitor and report on health and risks to koala populations across the region.

Notes

The koala population of the region has, as a whole, declined over the past 10 years. Some of the major populations within the region, particularly those populations in or near urban areas such as those in Pine Rivers and the Koala Coast, are seeing larger declines than others. This is attributed to habitat loss and fragmentation and to the generally high rates of mortality from cars, domestic dogs and stress-induced disease that are evident in and near urban areas.

In contrast, major populations in the predominantly rural western areas of the region are generally believed to be stable, largely due to lower levels or absence of such threats.

To assist the recovery of the koala population, the Queensland Government has committed to increase the current extent of mature and actively regenerating koala habitat by 2020 and to implement a range of other supporting measures informed by comprehensive koala habitat mapping.

Map 4 identifies the general location of major koala populations across the region and shows the specific location of three habitat strata. Map 4 is not a statutory map and has no regulatory effect.

In addition to the government's overarching commitment to increase koala habitat by 2020, the new goals will:

- ensure adequate connectivity between major populations to allow for genetic exchange
- apply measures that address the different circumstances of each habitat strata and the role they can play in ensuring long-term koala viability
- focus priority actions in the first five years of the SEQ Regional Plan on addressing the decline of the most at-risk populations, with detailed strategies for these priority actions to be in place by December 2009.

The key outcome is to maintain all current major koala populations across the region at viable levels.

A State Planning Policy (SPP) for koala conservation will be framed to minimise the impact of development on koala habitat. It will contain:

- a statutory map that identifies different categories of koala habitat areas across the region
- policies to inform local government planning schemes and other planning documents
- codes for development assessment purposes.

The SPP statutory map will be developed taking into consideration existing planning commitments and environmental requirements.

As a component, the SPP will require the provision of an offset where new development in a koala habitat area will have unavoidable impacts on koalas. Offset contributions will be used to:

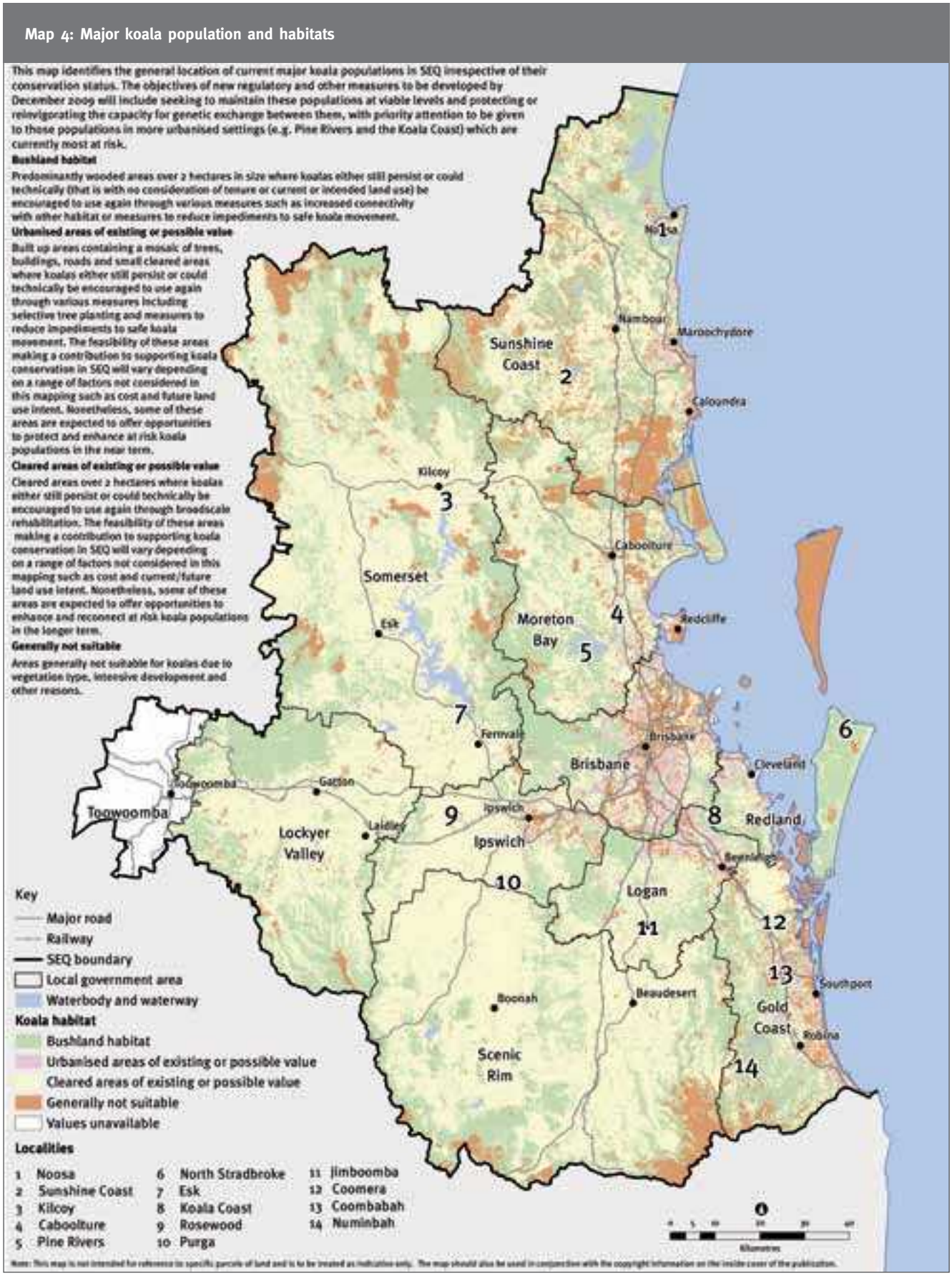
- acquire additional koala bushland
- rehabilitate potential koala bushland habitat areas outside the Urban Footprint
- implement measures that will reduce koala deaths in urbanised areas and along transport corridors.

Opportunities for exchange of land to accommodate development in koala habitat areas in the Urban Footprint will also be considered as part of an offset package.

The SPP will also require koala-sensitive design outcomes to be provided in urban areas that form a connection between conserved bushland koala habitats.

The draft State Planning Policy for koala conservation will be released for consultation in the second half of 2009. The *Draft South East Queensland Koala State Planning Regulatory Provisions* and the current assessment provisions of the Koala Conservation Plan will be extended to cover the period before the koala conservation SPP takes effect.

Map 4: Major koala population and habitats



2.3 Air and noise

Principle

Protect and manage the air and acoustic environments to maintain the health and wellbeing of the community and the natural environment.

Policies

2.3.1 Design and operate development to minimise air, odour and noise emissions and the impacts of emissions on sensitive land uses.

2.3.2 Adequately separate, plan, design, construct and operate development to ensure the impacts of air, odour and noise emissions on sensitive land uses meet the objectives of the Environmental Protection (Air) Policy 1997 and the Environmental Protection (Noise) Policy 2008 under the *Environmental Protection Act 1994*, the *Road Traffic Noise Management Code of Practice* and local government noise management policies.

2.3.3 Separate sensitive land uses from activities that generate noise and air emissions, including commercial, recreational activities such as motor sports, intensive agricultural land uses, major transport facilities and corridors, and industrial developments to ensure that existing activities are not affected by the encroachment of sensitive land uses.

2.3.4 Noisy outdoor recreational activities, such as motor sports, are designed, located and managed to avoid conflicts with adjacent residential areas.

Program

2.3.5 Implement actions to achieve the air quality and noise pollution targets in the SEQ Natural Resource Management Plan.

Notes

The air and acoustic environments are natural assets that play a vital role in ensuring the health of the community, protecting the environment and fostering economic development.

SEQ's air quality generally meets national standards with only infrequent exceptions. The major sources of air pollutants in SEQ are motor vehicle use, industrial and domestic energy consumption, and bushfires (both fuel reduction and wildfires). Population growth, household numbers and the increasing reliance on motor vehicles in urban areas all pose a threat to future air quality. The SEQ Natural Resource Management Plan includes targets for air and noise pollution.

Eliminating the impacts of air and noise emissions is not always possible. Providing separation distances between industry and other sensitive land uses serves to reduce the impacts on health, amenity, quality of life and the natural environment that may result from hazards or from air or noise emissions. Wherever possible, sensitive land uses, such as residential development, should be located away from industrial or intensive agricultural land uses and major transport routes. As far as possible, permanent facilities for noisy outdoor recreational activities, such as motor sports, should be located away from residential areas. However, some facilities, such as showgrounds, may already be located close to residential areas. These facilities may enjoy existing use rights for a range of outdoor recreational activities. Similarly, temporary events may sometimes occur close to residential areas.

Air and noise pollution is currently managed through:

- *Environmental Protection Act 1994*
- *Environmental Protection Regulation 2008*
- Environmental Protection (Air) Policy 2008
- Environmental Protection (Noise) Policy 2008
- *Road Traffic Noise Management Code of Practice*.

This legislation establishes standards for air and acoustic quality. The purpose of the Code of Practice is to provide guidance and instruction for the assessment, design and management of the impact of road traffic noise.

2.4 Managing the coast

Principle

Maintain, protect and enhance the values of the region's coast, including the foreshore, coastal wetlands, dunes, coastal processes, marine ecosystems, significant coastal values and marine waters.

Policies

2.4.1 Locate, design and manage coastal development to avoid or mitigate adverse effects on coastal values.

2.4.2 Ensure development other than maritime infrastructure avoids erosion prone areas, storm tide inundation hazard areas, and undeveloped sections of tidal waterways in accordance with the Queensland Coastal Plan.

2.4.3 Ensure that development on the coast or in tidal waters maintains natural physical coastal processes or ensures that there is no increased risk of shoreline erosion to adjacent areas of coastline.

2.4.4 Maintain and enhance safe public access to the foreshore and coastal waters and ensure public access is designed and maintained to conserve coastal resources.

2.4.5 Ensure land use and infrastructure plans are consistent with the Moreton Bay Marine Park zones and fish habitat zones and management plans for the region.

Programs

2.4.6 Identify and protect areas that provide for the landward retreat of coastal habitats and species at risk from predicted sea level rise.

2.4.7 Implement actions to achieve the coastal and marine targets in the SEQ Natural Resource Management Plan.

2.4.8 Manage erosion prone areas to reduce the risk of erosion.

2.4.9 Identify the preferred locations for maritime development to minimise impacts on coastal values.

Notes

SEQ's coastline supports diverse values and resources, including biodiversity, scenic amenity, outdoor recreation, economic activities and cultural heritage. Urban development, vegetation clearing, water pollution and climate change impacts are all increasing pressure on the coast. Climate change effects, such as sea level rise, increased erosion rates and extreme weather events including flooding, will exacerbate these pressures. For example, the International Panel for Climate Change (IPCC) projects a sea level rise range of 0.18 to 0.79 metres by 2100. Planning for natural hazards in SEQ will be informed by the projected sea level rise outlined in the Queensland Coastal Plan.

Allowing coastal processes such as beach accretion and loss (erosion) and the associated migration of plant and animal species to occur naturally protects coastal values. These processes may cause significant changes to coastal landforms in response to climate change effects such as sea level rise. Land use on the coast will need to allow for this natural fluctuation of the coastline to ensure the protection of human life and property as well as coastal values. Avoiding development in coastal erosion prone areas is a key mechanism to achieving this.

The preferred land use types, developments and activities for areas of greater risk are those that:

- maintain groundwater levels to prevent or minimise alterations to the natural hydrological regime
- prevent or minimise the release or export of surface run-off that contains nutrients of concern
- incorporate best practice stormwater and wastewater quality management, including water sensitive urban design and sediment controls.

Whole-of-government regional studies should identify suitable locations for maritime infrastructure. These locations must minimise the need for capital and maintenance dredging, be compatible with adjacent marine park zones and the development status of tidal waterways, and minimise adverse effects on coastal wetlands and other coastal resources.

Other programs, strategies and guidelines that assist in achieving the desired regional outcome include:

- Queensland Coastal Plan
- *Mitigating the Adverse Impacts of Storm Tide Inundation* (guideline)
- *State and regional coastal management plans—Queensland's coastal policy: Implementation guideline for planning schemes*
- *Coastal Protection and Management Act 1995*
- guidelines for planning scheme level hazard mapping for indicative nutrient levels.

The SEQ Natural Resource Management Plan includes targets for the coastal zone to:

- maintain or improve the extent and condition of seagrass, coastal wetlands, mangrove and coral ecosystems and habitat for key species
- maintain or enhance the condition of open coastlines
- reduce the extent and frequency of coastal algal blooms.

3. Regional landscape

Desired regional outcome 3

Key environmental, economic, social and cultural values of the regional landscape are identified and secured to meet community needs and achieve ecological sustainability.

Residents and visitors value the combination of diverse and culturally significant landscapes that shape the region's economy, culture, liveability and lifestyles. This quality and diversity of the region's landscapes are major reasons for migration into and within the region.

To remain attractive and functional, the regional landscape must continue to support values such as biodiversity, rural production, scenic amenity, landscape heritage and outdoor recreation.

Toward Q2: Tomorrow's Queensland establishes targets for environment and lifestyle, economy, education and skills, health and community. It makes a commitment to achieve a statewide target to protect 50 per cent more land for public recreation by 2020. The achievement of other Q2 targets for the economy, health and community will also be assisted by effective protection and management of regional landscape values across the state.

Regional landscape values occur in urban, peri-urban and rural areas. Communities across the region recognise that these values influence the character and quality of the places where they choose to live, work and play.

Regional sustainability and prosperity require understanding and careful management of the interdependencies between people, urban, peri-urban and rural land uses, and regional landscape values. For example, the regional landscape is being increasingly used to locate major infrastructure that services growing urban communities. Large infrastructure projects, such as powerlines, pipelines, roads and railways, have the potential to undermine the attractiveness and function of the regional landscape.

Regional planning must help to ensure regional landscape values are resilient to pressures from rapid population growth, infrastructure development, known climate variability and future climate change.

Planning for resilience requires a better understanding of the current state of landscape values, as well as how to maintain and enhance the capacity of the regional landscape to deliver ecosystem services to all communities in the region. This requires programs that prioritise where, when and how investment can be most effectively targeted to restore and maintain landscape values.

Given the multiple values, varying interests and wide range of stakeholders involved, collaboration between state agencies, local government, regional natural resource management organisations, industry, community groups and traditional owners is essential. Wide stakeholder representation and inclusive consultation processes are necessary to gain agreement on evidence-based targets and management practices. These collaborative institutional arrangements are helping to integrate statutory and non-statutory initiatives to deliver better and more coordinated regional landscape outcomes.

A major feature and challenge of the SEQ regional landscape is the fact that approximately 83 per cent of the region is privately owned and that historic subdivision has resulted in highly fragmented land uses. In peri-urban areas, a diverse range of management, uses and lifestyles have emerged and are now well established. As these areas are not well suited to either traditional planning or rural land management approaches, protecting regional landscape values in these areas will require specific forms of regional landscape planning, management, incentives and collaboration.

3.1 Regional landscape values

Principle

Protect, manage and enhance the multiple values of the regional landscape and optimise the contribution these values make to the region's liveability, health, lifestyle and economy.

Policy

3.1.1 Plan, design and manage development, infrastructure and activities to protect, manage and enhance regional landscape values.

Programs

3.1.2 Use the SEQ Ecosystem Services Framework to identify and evaluate the multiple benefits provided to communities by regional landscapes and ecosystems.

3.1.3 Identify and map regional landscape values to inform regional and local planning and define regional landscape areas.

Notes

The community recognises that the many qualities and values of the regional landscape contribute significantly to the economy and liveability of the region. These values include:

- biodiversity
- rural production (including natural economic resources)
- scenic amenity
- landscape heritage (non-Aboriginal and Aboriginal cultural heritage)
- outdoor recreation.

Any part of a landscape may have one or more of these values. Areas of highest landscape value have a coincidence of different, high-quality values. The SEQ region is renowned for its multiple landscape values.

Some of these landscape values can be quantified in terms of the regional economy and environment. Scenic amenity and biodiversity values can be evaluated according to existing regional methodologies. Research on landscape heritage values, especially traditional cultural values, is underway (Low Choy et al 2009). Other landscape values are more difficult to define, but are widely recognised as underpinning the quality of life and sense of place of SEQ.

Regional landscape areas support significant regional landscape values and functions. Types of key regional landscape areas are identified in Table 2.

Regional prosperity requires a long-term commitment to preserving landscape values and maintaining and improving environmental infrastructure. This involves coordinating actions across all levels of planning, and cost-effective management to sustain the multiple community benefits derived from regional landscapes.

In addition to the production of food, fibre, timber and water for human use, rural production also creates rural landscapes with a range of aesthetic and cultural attributes linked to scenic amenity and landscape heritage. In turn, each of these values can also be described as 'services' that the landscape provides to the people of SEQ.

The SEQ Ecosystem Services Framework is emerging as an important tool to evaluate the range and extent of benefits provided to SEQ residents and visitors by ecosystems. The framework can also be used to identify the most highly valued landscapes. Enhanced awareness of the critical role landscape values and associated ecosystem services play in supporting the communities of SEQ will help to focus effective investment in planning, management and restoration of the regional landscape.

3.2 Regional landscape areas

Principle

Focus coordinated planning, management and investment in priority regional landscape areas to optimise multiple community benefits.

Policies

3.2.1 In collaboration with stakeholders, identify regional landscape areas and corridors of highest priority for protection, management, rehabilitation and restoration.

3.2.2 Avoid or minimise impacts on identified priority regional landscape areas.

3.2.3 Coordinate the locations of environmental, carbon and other development offsets to establish multiple-value regional offset areas in strategic locations within priority regional landscape areas.

3.2.4 Protect, maintain and enhance the function of inter-urban breaks.

Programs

3.2.5 Identify regional landscape areas with a high confluence of existing values and with a high priority for protection, management, rehabilitation and restoration.

3.2.6 Identify current and potential landscape corridors to connect priority regional landscape areas.

3.2.7 Investigate mechanisms to offset impacts on regional landscape values through coordination with environmental offset programs.

3.2.8 Work with tourism service providers to develop a consistent approach to the assessment, approval and management of rural, nature-based and ecotourism facilities, based on an appreciation of the values of regional landscape areas.

3.2.9 Investigate the existing and potential contributions of regional inter-urban breaks to defining regional communities, supporting ecosystem services and regional landscape values and providing land for public recreation.

3.2.10 Research, design and develop alternative peri-urban land use models that achieve a mutual benefit for stakeholders and landowners.

Notes

A regional landscape planning framework

Prioritising regional landscape areas that demonstrate a range of values and community benefits can help to build and sustain the capacity of regional landscapes to provide ecosystem services.

In partnership, regional stakeholders can identify priorities and share information and resources to ensure a better alignment of regional landscape policies and programs.

This regional landscape planning framework can be used by all stakeholders to inform and target strategic planning, management and investment actions.

Regional offset areas

A range of existing and proposed environmental offset policies address unavoidable impacts on remnant vegetation, koalas, marine fish habitat and biodiversity values. Regional offset areas can be identified that support multiple landscape values and that could be used to deliver consolidated offsets at a regional scale.

Inter-urban breaks

Urban settlement is contained within the Urban Footprint with distinctive inter-urban breaks framing each sub-region and enhancing a sense of place for regional communities. The benefits provided by inter-urban breaks can be compromised by some land uses and activities. To provide clarity and certainty for land use planning, further investigation is warranted. This will ensure:

- the long-term viability of maintaining inter-urban breaks through effective management and by supporting appropriate rural industries, including rural production, tourism and recreation opportunities
- the clear identification of the important landscape planning and management functions of inter-urban breaks.

3.2 Regional landscape areas—continued

Table 2: Regional landscape areas

Single value landscape areas—areas identified by individually mapping and evaluating a primary landscape value	
Biodiversity networks	Networks of wildlife habitats and connecting biodiversity corridors designed and managed to sustain significant biodiversity values at regional and local scales
Natural economic resource areas (including rural production)	Landscape areas supporting agriculture, rural industries, forestry, fisheries, extractive resources and minerals
Scenic amenity areas	Landscape areas identified by the SEQ regional scenic amenity methodology as having scenic amenity value (see Map 7)
Landscape heritage areas	Landscapes important to preserving sociocultural and historic connections, including landscapes with cultural significance to Aboriginal people
Multiple value landscape areas—areas identified by mapping and evaluating a combination of different landscape values in the same area	
Core landscape areas	Areas of highest confluence of multiple regional landscape values and ecosystem services **Benefits:** concentration of multiple landscape values, functions, ecosystem services and community benefits Examples include: ■ D'Aguilar Range ■ Tamborine Mountain Escarpment ■ Blackall Ranges ■ Koala Coast ■ Moreton Bay and islands ■ Springbrook and Lamington plateaux ■ Wivenhoe, Somerset and Wyaralong dams ■ Mount Coot-tha and Taylor Range ■ Glasshouse Mountains ■ Scenic Rim.
Landscape corridors	Lineal areas with current or potential high confluence of landscape values and ecosystem services that have the capacity to improve connectivity between core landscape areas, people, places, infrastructure and ecosystems **Benefits:** increased connectivity, resilience and sustainability of multiple regional landscape values and land use efficiency Examples include: ■ Karawatha–Greenbank–Flinders Peak Corridor linking Brisbane, Logan, Ipswich and the Scenic Rim region ■ Mountains to Mangroves Corridor linking the D'Aguilar Range to Moreton Bay ■ Brisbane Valley Rail Trail ■ Brisbane River Corridor ■ Darlington Range–Pimpama River Corridor linking Gold Coast Hinterland to the coast.
Inter-urban breaks	Areas separating major urban development areas **Benefits:** Enhanced community and sub-regional identity and sense of place, definition of landscape corridors, potential provision of land for public recreation and other ecosystem services close to population centres Examples include: ■ Moreton Bay–Sunshine Coast inter-urban break ■ Brisbane–Logan–Ipswich inter-urban break (Karawatha–Greenbank Corridor) ■ Brisbane–Logan–Redlands inter-urban break ■ Brisbane–Logan–Gold Coast inter-urban break ■ Ipswich–Laidley inter-urban break.

3.2 Regional landscape areas—continued

Regional offset areas	Strategically located areas managed to offset the impacts of major development on regional landscape values **Benefits:** account for impacts on a range of landscape values, provide certainty for investors, potential to help expand the regional community greenspace network, restore critical landscape and ecosystem functions, and improve the resilience of environmental assets
Regional community greenspace network	The regional community greenspace network comprises land that is publicly owned or managed and to which the community generally has a legal right of access **Benefits:** improved community health and wellbeing through physical activity, direct experience of landscapes and nature, social interaction increased employment and liveability
Rural, nature-based and ecotourism destinations	Areas that support tourism and tourism facilities compatible with and based on the protection and presentation of regional landscape values **Benefits:** economic development, education and landscape protection
Coastal waters and foreshores	**Benefits:** fisheries habitat, recreation opportunities, fishing, transport, extractive industry, tourism, scenic amenity and resilience to natural hazards and climate change
Waterways, wetlands, water sources and catchments	**Benefits:** safer drinking water, more reliable water supply, reduced water treatment costs, and healthy receiving waters in waterways, wetlands and Moreton Bay

3.3 Regional landscape management

Principle

Support and align research, planning, investment and institutional arrangements to protect, manage, monitor and restore priority regional landscape areas.

Policies

3.3.1 Ensure coordination of state and local government land use and infrastructure planning to protect and manage priority regional landscape areas.

3.3.2 Coordinate strategic planning, management, monitoring and investment by multiple stakeholders in priority regional landscape areas.

3.3.3 Support further evidence-based research to address key knowledge gaps, inform regional planning and build stakeholder capacity in best practice management of the regional landscape.

3.3.4 Further develop processes and mechanisms to align statutory and non-statutory plans and programs to deliver integrated landscape outcomes.

3.3.5 Improve collaborative institutional arrangements to achieve stakeholder agreement and provide certainty for ongoing investment in priority regional landscape areas.

Programs

3.3.6 Use regional natural resource management institutional arrangements to ensure coordination between the *Rural Futures Strategy for South East Queensland* (SEQ Rural Futures Strategy), *South East Queensland Natural Resource Management Plan 2009–2031* (SEQ Natural Resource Management Plan), local government plans and other relevant strategies and programs.

3.3.7 Investigate planning tools, incentives and other mechanisms to address the region's peri-urban areas.

3.3.8 Investigate and report on opportunities to enhance the status of environmental infrastructure identified in the *South East Queensland Infrastructure Plan and Program* and its application in regional landscape planning.

3.3.9 Monitor the condition of the regional landscape and report on its status through the State of the Region and SEQ Natural Resource Management Plan reporting frameworks.

Notes

To achieve desired regional outcomes for the regional landscape, natural environment, natural resources and rural futures, an agreed framework for coordinated planning and investment across agencies and disciplines is required.

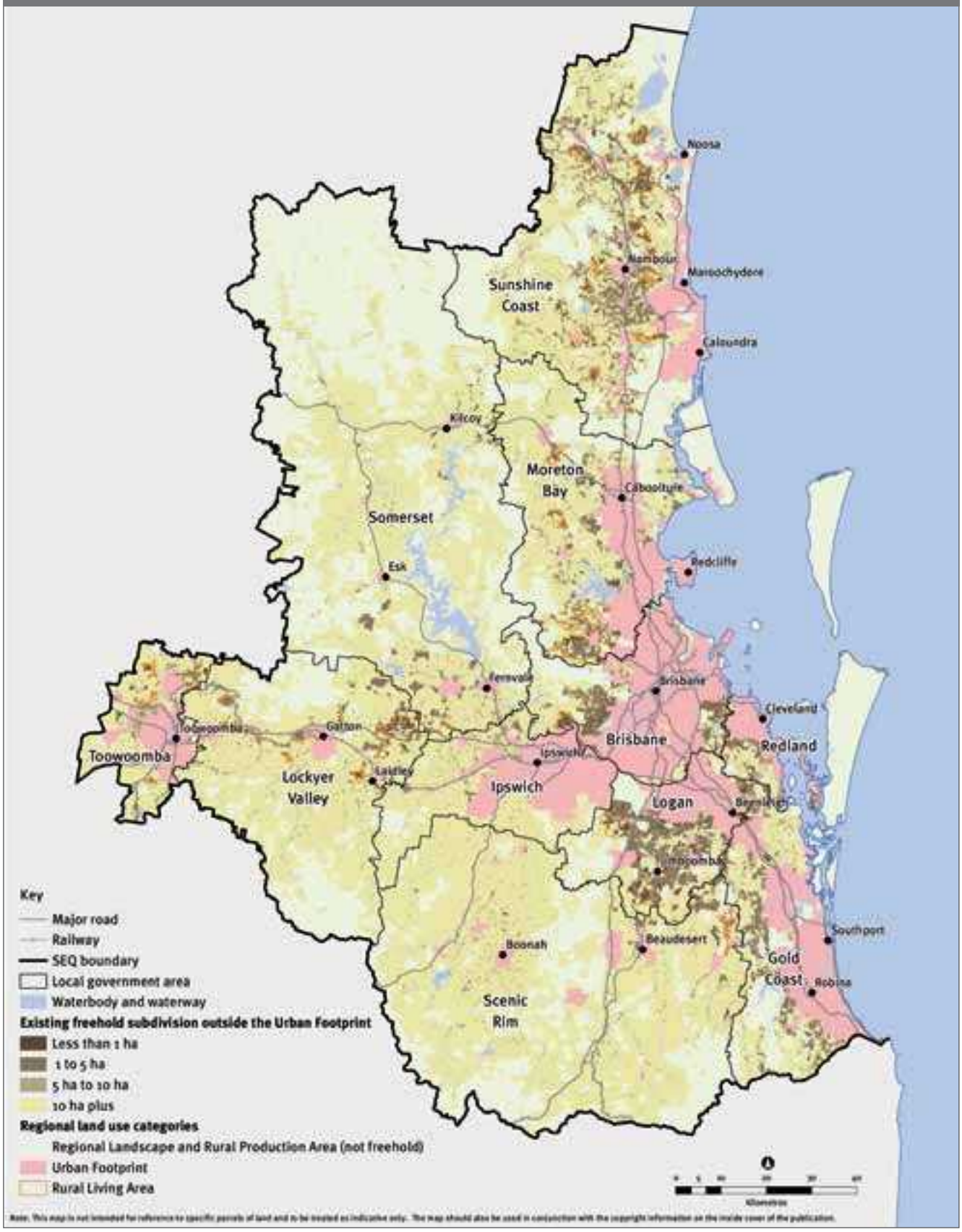
The many and varied policies, plans and programs that influence regional landscape outcomes require better coordination and alignment to ensure responsive decision-making and certainty.

An important step towards improved coordination has already been taken with the revision of the SEQ Natural Resource Management Plan and the establishment of new regional natural resource management arrangements.

Coordination and implementation mechanisms in SEQ will continue to facilitate partnerships and information sharing and to manage the regional landscape values critical to ensuring regional sustainability.

Fragmentation of the region's peri-urban areas threatens the sustainability of regional natural resources and landscape values (Low Choy et al 2008). This fragmentation includes existing subdivisions (Map 5), and different forms of ownership and land management. Initiatives that limit further fragmentation, amalgamate existing small lots, and enhance stakeholder capacity for improved management of regional landscape values and functions need to be developed.

Map 5: Existing subdivision outside the Urban Footprint



3.4 Community greenspace network

Principle

Provide an integrated, high-quality, regional community greenspace network to cater for a range of community and environmental needs.

Policies

3.4.1 Expand and develop the capacity of the existing regional community greenspace network to meet current and future community needs.

3.4.2 Retain state and local government managed lands, including unformed roads, stock routes, waterways, cemeteries, caravan parks, camping sites, utility corridors and community purpose reserves for potential inclusion in the regional community greenspace network.

Programs

3.4.3 Develop and implement the *South East Queensland Greenspace Strategy* (SEQ Greenspace Strategy) to help meet the *Toward Q2: Tomorrow's Queensland* statewide target to protect 50 per cent more land for public recreation.

3.4.4 Define, identify and map a preferred future regional community greenspace network, including new regional parks, regional trails and corridors, especially in areas accessible by public transport within 25 km of activity centres in the Western Corridor and Logan City.

3.4.5 Investigate the potential to integrate regional carbon sink and environmental offset programs with implementation of the SEQ Greenspace Strategy and the development of the regional community greenspace network.

3.4.6 Facilitate collaborative provision and management of the regional community greenspace network by state agencies, local governments, the community sector, private landholders and private enterprises.

Notes

The regional community greenspace network preserves and protects regionally significant open space for public access and provides for outdoor recreation, nature conservation, scenic amenity, water catchment management, forest production, spiritual connections, cultural heritage, education and scientific research.

The existing regional community greenspace network comprises less than 20 per cent of the region's land area. *Toward Q2: Tomorrow's Queensland* sets a statewide target of protecting 50 per cent more land for nature conservation and public recreation by 2020. The proposed SEQ Greenspace Strategy will help to meet this target.

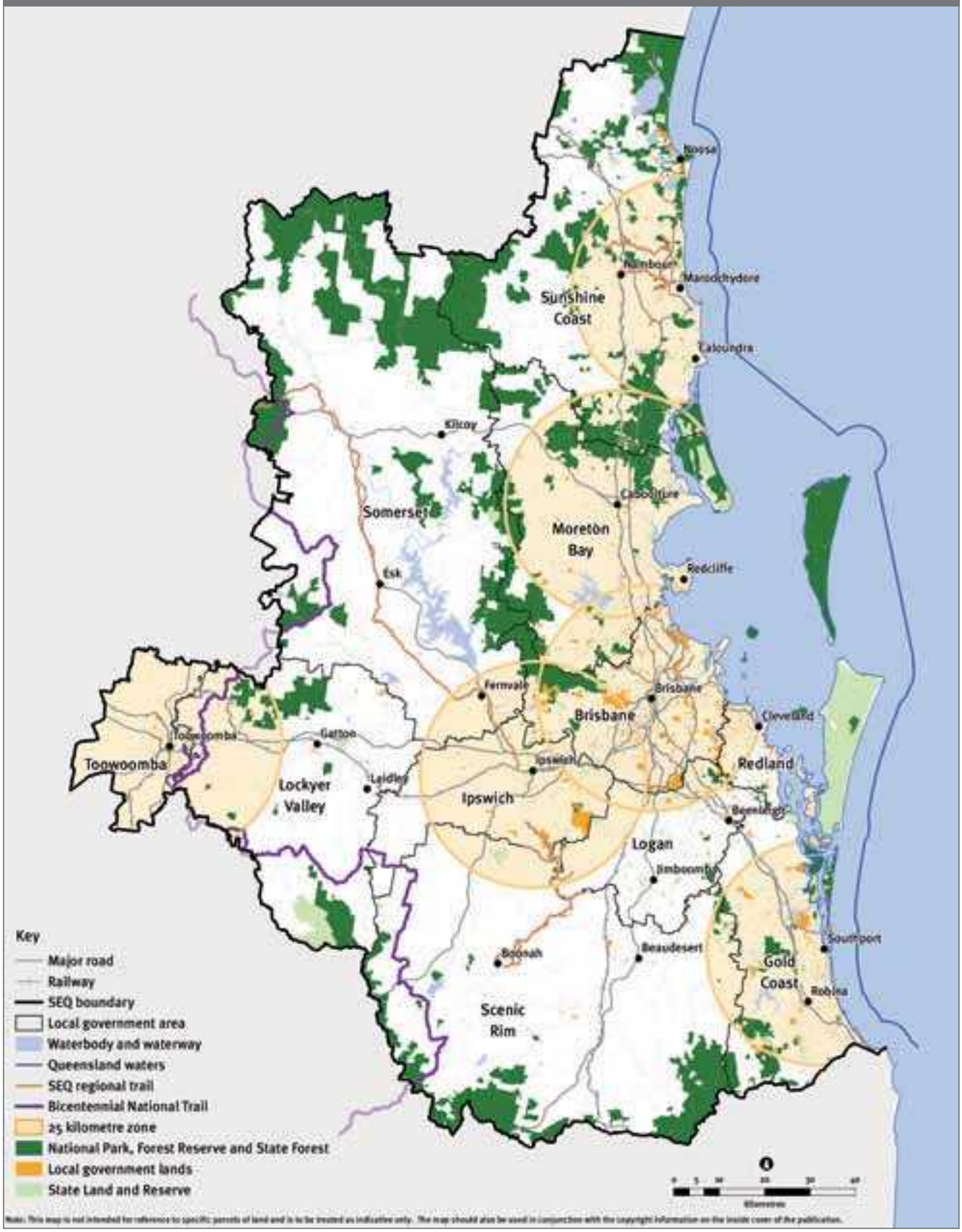
Most of the existing regional community greenspace network is owned and managed by state or local government, and includes national parks, marine parks, state forests, beaches, major waterways and Moreton Bay, regional parks, recreation trails, water supply dams and major urban parks. In the future, it may include strategically located private lands under voluntary arrangements (see Map 6).

An integrated regional community greenspace network incorporates urban and non-urban areas and:

- connects urban and rural communities
- connects people and landscapes
- reconnects fragmented landscapes
- protects and enhances regional landscape values
- recognises Aboriginal and non-Aboriginal cultural and landscape heritage values.

The regional community greenspace network's effectiveness depends on connectivity, size, quality, proximity, diversity and coordinated planning and management.

Map 6: Existing regional community greenspace network



3.5 Scenic amenity

Principle

Identify and protect important scenic amenity areas, view corridors and viewpoints.

Policies

3.5.1 Identify regionally significant and locally important areas of scenic amenity, view corridors and popular and significant viewpoints, and protect them from intrusive development.

3.5.2 Integrate intrusive built elements into the landscape through design that minimises visual impacts on locally important scenic amenity.

3.5.3 Retain and enhance public access to significant and popular viewpoints.

3.5.4 Increase the scenic amenity value of highly visible landscapes of low scenic amenity by reducing their visual exposure and improving scenic preference values.

Programs

3.5.5 Monitor and report on major changes in scenic amenity values resulting from changes in land cover and land use or the visibility from important viewpoints.

3.5.6 Investigate approaches to the evaluation of scenic amenity in urban areas.

Notes

The outstanding scenic qualities of SEQ's beaches, oceans, waterways, ranges, parks and farmlands are some of the region's most memorable assets. Scenic locations such as the Sunshine Coast, the Gold Coast, Moreton Bay, the Scenic Rim and the Glass House Mountains draw tourists from across the world, and provide breathtaking views for local residents and holiday-makers.

Scenic amenity is the measure of a landscape's scenic qualities, reflecting the psychological benefit that the community derives from viewing the region's wide variety of landscapes. Scenic amenity is a function of scenic preference (relative preference for different landscape features) and visual exposure (relative visibility from public viewing locations). Poorly designed urban and industrial development that is highly visible from rural roads poses one of the greatest threats to the region's scenic amenity.

South East Queensland Regional Plan 2005-2026 Implementation Guideline No. 8: Identifying and Protecting Scenic Amenity Values outlines a common method and assessment criteria for assessing scenic amenity, and describes acceptable solutions for maintaining and managing scenic amenity areas, view corridors and viewpoints.

In 2004, 15 per cent of SEQ had high scenic amenity (Map 7). The SEQ Natural Resource Management Plan sets targets to maintain areas of regional and locally significant scenic amenity.

3.6 Landscape heritage

Principle

Recognise and manage landscape heritage to maintain character, culture and sense of place.

Policies

3.6.1 Identify, evaluate and manage landscape heritage and cultural components of the regional landscape.

3.6.2 Through the planning process, identify, recognise and respect Aboriginal peoples' cultural connections to the regional landscape.

Programs

3.6.3 Develop and adopt regionally consistent methods of assessing Aboriginal and non-Aboriginal landscape heritage to inform regional and local planning and decision-making.

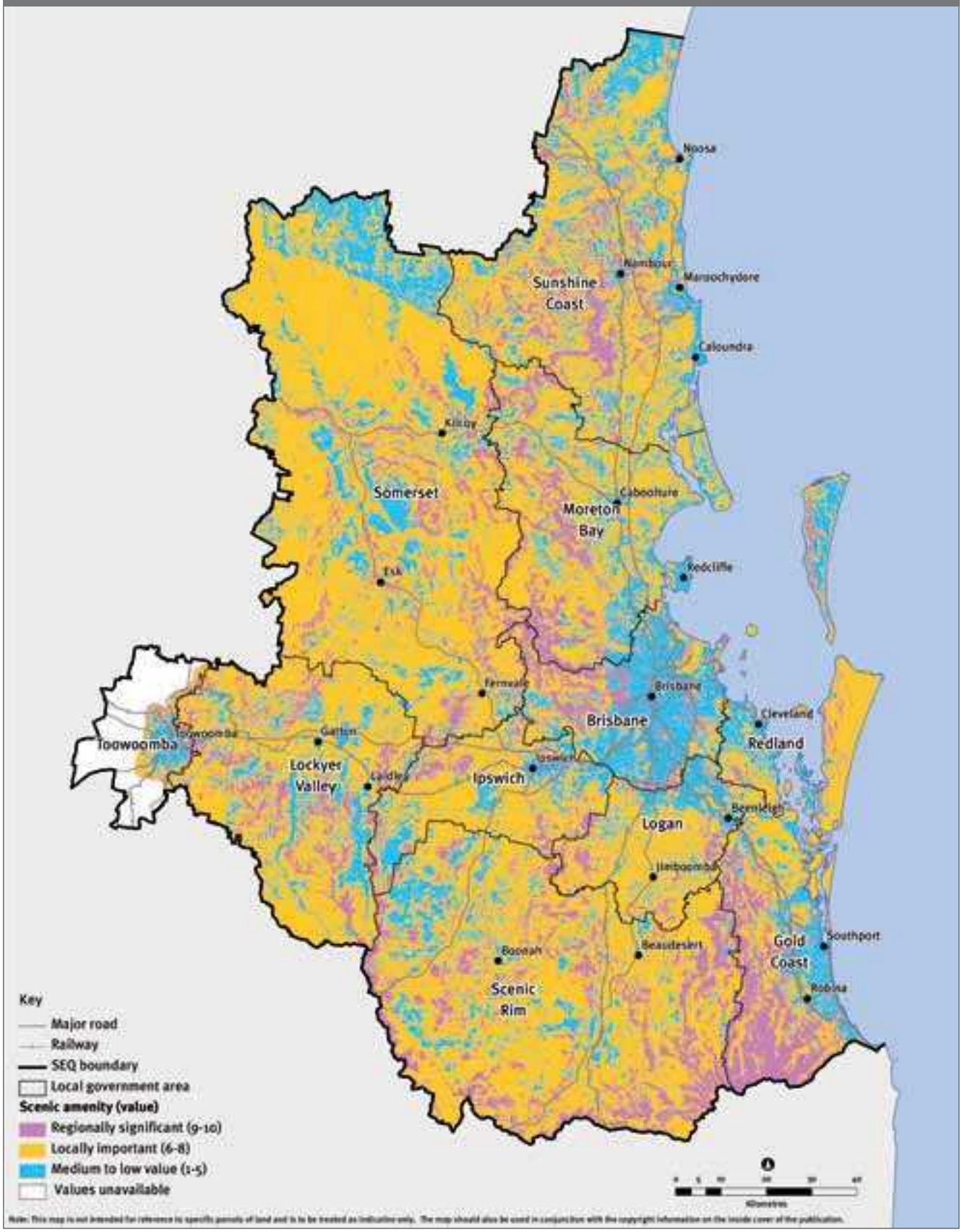
3.6.4 Document and publicise landscape heritage values to enrich regional landscape experiences for residents and visitors.

Notes

SEQ's rich and varied landscape heritage includes both Aboriginal and non-Aboriginal connections with natural, rural, productive and scenic landscapes. This connectivity helps create the special character, culture and sense of place of SEQ. The SEQ Natural Resource Management Plan sets targets to retain regionally important landscape heritage.

Traditional cultural landscapes are important to Aboriginal peoples, providing present and future generations with a sense of identity and a rich sense of place. The Queensland Government has legislated to protect, conserve and manage Aboriginal cultural heritage across the state through the *Aboriginal Cultural Heritage Act 2003*. The main purpose of the Act is to 'provide effective recognition, protection and conservation of Aboriginal cultural heritage'. Involving traditional owners is vital to identifying and protecting Aboriginal landscape heritage, and managing access to significant places in the regional landscape. Aboriginal landscape heritage should be identified and mapped using a protocol agreed with traditional owners.

Map 7: Scenic amenity



3.7 Outdoor recreation

Principle

Provide a variety of outdoor recreation opportunities to meet priority community needs, while protecting other regional landscape values.

Policies

3.7.1 Incorporate outdoor recreation activities, infrastructure and opportunities in planning and management for land use, priority infrastructure and natural resources.

3.7.2 Develop and implement the *South East Queensland Outdoor Recreation Strategy* (SEQ Outdoor Recreation Strategy) to coordinate outdoor recreation services—including policy, planning, development, management and regulation—across the region.

Programs

3.7.3 Establish a mechanism to coordinate the delivery of outdoor recreation services by all providers.

3.7.4 Identify planned investment in outdoor recreation infrastructure and services by state and local government to align investment and deliver the priorities of the SEQ Outdoor Recreation Strategy and the SEQ Greenspace Strategy.

3.7.5 Develop and maintain a regional inventory of places for public recreation as part of the *Toward Q2: Tomorrow's Queensland* statewide inventory of land for public recreation.

3.7.6 Review, refine and implement the South East Queensland Active Trails Strategy in consultation with local government.

Notes

Outdoor recreation activities contribute to better social, health, economic, tourism, cultural and environmental outcomes. The SEQ Outdoor Recreation Strategy and SEQ Greenspace Strategy are being finalised and will include initiatives to coordinate outdoor recreation services.

Toward Q2: Tomorrow's Queensland sets a statewide target of protecting 50 per cent more land for nature conservation and public recreation by 2020. A critical first step to achieve this is the development of a regional inventory of land for public recreation. Continued implementation of the South East Queensland Regional Recreation Trails Program will help to achieve this target. The SEQ Natural Resource Management Plan includes targets to meet the demand for outdoor recreation.

4. Natural resources

Desired regional outcome 4

Regional natural resources and rural production areas are protected, managed, enhanced and used sustainably.

Natural resources include land, fresh and marine water, air, forests, minerals, native animals and plants. For traditional owners, these are cultural resources and are inseparable from their culture. These resources underpin the region's major economic activities, and support diverse industries that rely on their quality and accessibility.

The SEQ Regional Plan promotes the sustainable management of rural production and natural resource areas by protecting them from incompatible development. It also supports the livelihoods of people who work in and depend on rural and natural resource-based industries. Natural resources provide lifestyle and economic benefits to the region's communities through outdoor recreation, ecotourism and related activities.

The natural resources of the SEQ region provide a wide range of ecosystem services to the people of SEQ. These include cultural services such as opportunities for outdoor recreation and scenery to enjoy, provisioning services such as the production of food and timber and regulating services such as clean air and water.

4.1 Natural resource management

Principle

Coordinate the management and use of natural resources to enhance community, economic and environmental values.

Policies

4.1.1 Coordinate regional natural resource management, planning, investment, monitoring and reporting through implementation of the *South East Queensland Natural Resource Management Plan 2009–2031* (SEQ Natural Resource Management Plan).

4.1.2 Engage the community, traditional owners, landowners and industry in promoting and practising sustainable natural resource management.

Programs

4.1.3 Further develop the SEQ Natural Resource Management Atlas and enQuire information management system to implement a strategic and coordinated process for capturing, analysing, managing and monitoring natural resource management information and landholder knowledge.

4.1.4 Implement actions to achieve the regional natural resource targets in the SEQ Natural Resource Management Plan.

Notes

Natural resource management should be undertaken in a coordinated, collaborative and integrated manner with effective partnerships between government and non-government organisations, landowners and traditional owners.

The SEQ Natural Resource Management Plan:

- establishes a commitment by all contributors to a coordinated planning framework, measurable natural resource targets and to monitoring, reporting and coordinating institutional arrangements
- outlines a common direction for managing natural resources in SEQ, particularly in research, planning, investment and on-ground activity.

The SEQ Regional Coordination Group and Chief Executive Officers Committee for Natural Resource Management in SEQ coordinate the implementation of the SEQ Natural Resource Management Plan.

The SEQ Natural Resource Management Plan acknowledges that natural resources are managed differently across regional land use categories. Reference to the SEQ Natural Resource Management Plan in a policy under this desired regional outcome indicates its status as a key implementation mechanism for natural resource management in SEQ, and does not alter its non-statutory status.

Implementing the SEQ Natural Resource Management Plan will also require coordination with the Condamine Alliance and Burnett Mary Group natural resource management plans, which specifically address the Toowoomba region and the upper reaches of the Mary River catchment respectively.

The SEQ Natural Resource Management Plan includes a target that natural resource managers, government and non-government organisations are resourced and working together to implement the SEQ Natural Resource Management Plan.

4.2 Land, extractive resources, minerals, forestry and fisheries

Principle

Manage the region's natural economic resources to sustainably and efficiently meet the needs of existing and future communities.

Policies

4.2.1 Identify and protect natural economic resource areas from further fragmentation and inappropriate land use.

4.2.2 Protect the region's good quality agricultural land and provide for its long-term and sustainable agricultural use.

4.2.3 Identify and protect extractive and mineral resources for potential future extraction, including providing appropriate transport corridors and buffers, and ensuring that planning preserves the opportunity for discovery and development of new resources in appropriate areas.

4.2.4 Protect, enhance and sustainably manage the region's native and plantation forests.

4.2.5 Protect, manage and enhance marine, estuarine and freshwater habitats to sustain fish stock levels and maximise fisheries production for the ongoing benefit of the community.

4.2.6 Manage the region's fish habitats and fisheries resources in consultation with all stakeholders including commercial fishers, traditional owners, recreational fishers and conservation groups.

4.2 Land, extractive resources, minerals, forestry and fisheries—continued

Notes

The distribution and accessibility of the region's natural resources influence where economic activities such as farming, forestry and mining are located. Many natural resources are limited and some are non-renewable. Overuse or irreversible loss of natural resources could have significant environmental, economic or social impacts on the region. The location of these resources is shown in Map 8.

Most of the region's agricultural area is used for beef farming, though some dairy farming is located on productive grazing land. The rich alluvial soils along the valleys in the region's west and south support an array of cropping industries, including the Brisbane, Lockyer, Fassifern and the Albert–Logan valleys. Closer to the coast, horticultural and cropping industries are located in the Gold Coast, Redlands, Glass House Mountains and Sunshine Coast districts.

State Planning Policy 1/92: Development and the Conservation of Agricultural Land (SPP 1/92) provides guidance on identifying and protecting good quality agricultural land through local government planning schemes. The policy focuses on good quality cropping lands; however, some local government planning schemes also protect intensive grazing lands suitable for dairy farming to recognise the contribution of this activity to the regional economy.

Within the Urban Footprint, SPP 1/92 does not preclude the conversion of good quality agricultural land to urban uses during the life of the plan, but decisions on development sequencing should seek to retain these lands in production for as long as possible.

SEQ's extractive resources are dispersed across the region. Major hard rock resource deposits include those in the Petrie–Narangba and Darlington Range areas and at Bli Bli, Yandina Creek, Bracalba, Kholo Creek, Mount Cotton, Nerang, Bromelton and Wellcamp Downs. Important sand and gravel resources are located in the alluvial flats of the Brisbane, Mooloolah, Pine, Coomera and Logan rivers, and in coastal deposits at Beachmere and Jacobs Well.

State Planning Policy 2/07: Protection of Extractive Resources (SPP 2/07) ensures the long-term availability of extractive resources of state or regional significance, and provides the basis for identifying and protecting key resource areas in local government planning schemes. Future iterations of SPP 2/07 and local government planning schemes will continue to identify and protect the additional resources required to ensure supply. Planning schemes must define relevant land use zones in a way that permits resource development where appropriate.

The region's mineral resources include coal, metallic ores and industrial minerals such as rutile, zircon, silica and foundry sand. Locations include the coalfields around Ipswich, mineral sands on North Stradbroke Island and sandstone near Helidon. Other known deposits include silica sand, dolomite, diatomite, perlite and ceramic clay. Granted mining leases, claims, licences or applications cover most of the region's valuable resources.

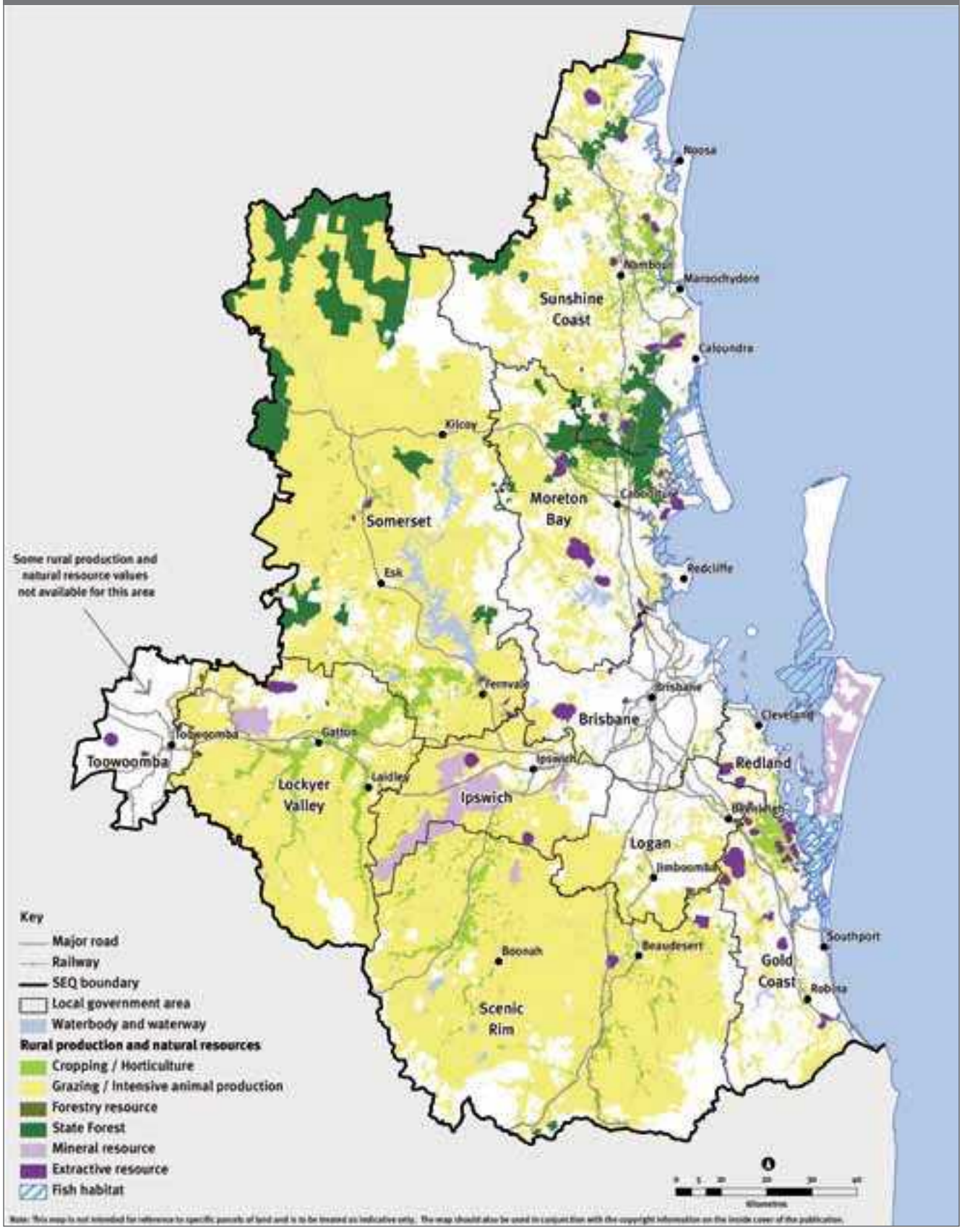
Mining activities are undertaken according to the requirements of the *Mineral Resources Act 1989*. Local government planning schemes will continue to identify and protect key mineral resource areas from inappropriate development.

SEQ has significant forestry plantation areas that incorporate approximately 15 per cent of state-owned plantations. The region's forestry resources include exotic plantations (mostly pine), hardwood plantations and native forests. Under the SEQ Forests Agreement, harvesting from public native forests will be phased out by 2024 and hardwood plantations will replace the supply. The hardwood and softwood timber industries in SEQ are resource constrained and have limited potential for expansion, but are expected to maintain a constant supply.

SEQ has important freshwater and estuarine fisheries, and fish habitats. Moreton Bay accounts for 20 per cent of Queensland's commercial fisheries catch. Recreational fisheries, including estuaries, bays and ocean beaches, are important to the lifestyle of the region's communities. Fish habitats and fisheries need to be protected from the release of acid into the aquatic environment by the disturbance of acid sulfate soils. State Planning Policy 2/02: Planning and Managing Development involving acid sulfate soils is a measure that can support healthy and productive fish habitats by not disturbing these types of soils or by identifying and managing them.

Active fish restocking programs support freshwater fishing in rivers and impoundments. Aquaculture is a key emerging industry in the region, particularly freshwater finfish and crayfish, marine oysters and prawns. The SEQ Natural Resource Management Plan includes targets to sustain the condition of wild fishery stocks, protect land for sustainable agriculture and forestry and ensure extractive resources are available for their highest use while ensuring no net loss to other environmental or landscape values.

Map 8: Rural production and natural resources



4.3 Ecosystem services

Principle

Protect, maintain and enhance the capacity of the region's ecosystems to supply ecosystem services.

Policy

4.3.1 Protect areas supplying high levels of ecosystem services from development impacts.

Programs

4.3.2 Use the SEQ Ecosystem Services Framework to identify and measure ecosystem services.

4.3.3 Support landholders to protect, maintain and enhance the provision of ecosystem services.

Notes

Ecosystem services are the goods and services provided by ecosystems that benefit, sustain and support the wellbeing of people. They include production of food and medicines, regulation of climate and disease, provision of productive soils, clean water and air, opportunities for recreation and spiritual benefits.

Coordination of actions to maintain SEQ's ecosystem services should be aligned with the SEQ Ecosystem Services Framework, which lists, defines and maps the region's ecosystem services.

The SEQ Ecosystem Services Framework has been developed in collaboration with key stakeholders and the wider SEQ community. The framework has the potential to be applied in a variety of management contexts, including prioritising natural resource investment in strategic locations and assessing the health of the region's landscapes and ecosystems.

Recognising the critical relationship between natural resource management and the provision of ecosystem services is one of the guiding principles of the SEQ Natural Resource Management Plan. The *Rural Futures Strategy for South East Queensland* also has an important role in facilitating the continued production of ecosystem services for the benefit of the community. The SEQ Ecosystem Services Framework also incorporates mapping of ecosystem services for the region that can be used to implement actions to enhance the provision of ecosystem services.

The framework recognises that the region's ecosystems perform functions (the ecological processes that occur within an ecosystem), which provide services (the benefits people obtain from ecosystems), which in turn contribute to the wellbeing of people in the region. The framework recognises 28 ecosystem services:

- food
- water for consumption
- building and fibre
- fuel
- genetic resources
- biochemicals, medicines and pharmaceuticals
- ornamental resources
- transport infrastructure
- air quality
- habitable climate
- water quality
- arable land
- buffering against extremes
- pollination
- reduced pests and diseases
- productive soils
- noise abatement
- iconic species
- cultural diversity
- spiritual and religious values
- knowledge systems
- inspiration
- aesthetic values
- effect on social interactions
- sense of place
- iconic landscapes
- recreational opportunities
- therapeutic landscapes.

5. Rural futures

Desired regional outcome 5

Rural communities are strong and viable with sustainable economies contributing to the health, wealth, character and liveability of the region.

Rural communities, industries and environments make an important and often under-recognised contribution to people's quality of life in the region. SEQ's rural communities are a major contributor to Queensland's economy, providing diverse agriculture, grazing, forestry and fishing opportunities.

The intent of this desired regional outcome is that it will lead to strong rural communities with sustainable economies that will contribute to the health, wealth, character and liveability and maintain the natural resource condition of the region.

The core requirements for sustainable rural communities are economic development, healthy and productive rural landscapes, water resources, community development and leadership and collaboration.

Balancing regional growth and land use change with increased rural production and protecting regional landscape values can be achieved by:

- promoting profitable and sustainable rural industries
- supporting diversified economic development opportunities for rural communities
- raising awareness of the interdependence between rural and urban communities
- improving on-farm water use efficiency and vegetation management
- developing rural infrastructure
- improving the delivery of government services to rural communities.

The SEQ Regional Plan identifies around 85 per cent of the region as Regional Landscape and Rural Production Area. A proportion of this area comprises protected national and conservation parks, water storages and state forests. The majority, however, is privately-owned farmland, generally designated rural in local government planning schemes.

The community is genuinely interested in the future of rural areas and wants to see rural communities remain sustainable. In these constantly changing times, rural communities and industries are facing financial, economic, social, environmental and climatic challenges. While it is critical for a healthy region to ensure rural communities and industries remain sustainable, rural issues must be considered in the context of national and international economic and social forces.

Along with increasing global competition, key issues affecting the profitability of the rural sector include:

- the accessibility and cost of water
- the availability and affordability of labour
- the increase in regulation
- challenges surrounding climate change and climate variability
- declining terms of trade.

Much of the Regional Landscape and Rural Production Area is already fragmented into small rural allotments (see Map 5), even though the right to build a dwelling has not always been exercised. In some parts of the region, this has been the predominant form of development over the past three decades and has provided lifestyle opportunities.

By prohibiting further fragmentation and urban development in the Regional Landscape and Rural Production Area, the SEQ Regional Plan makes a strong statement about protecting the future of agricultural lands and rural communities.

On the urban fringe, however, where rural lands are close to urban development, community expectations and speculation about the potential for future urban development are likely to continue. In the past, conflict between rural activities and urban uses has generally seen farming curtailed where housing has been allowed to encroach into agricultural areas. The financial burden of servicing urban encroachment scattered around the urban fringe is not sustainable and is curtailed by the Urban Footprint and the urban consolidation policy framework of the SEQ Regional Plan.

Planning for rural communities—large geographical areas with small and dispersed populations—requires a different approach from past regional initiatives. Rural communities have a low rate base, are highly dependent on resource-based industries and often have a limited capacity to participate in planning and related activities.

The SEQ Regional Plan includes strategies to support rural production areas and proposes a framework on which to develop more detailed planning, with the following objectives:

- protecting productive rural lands from incompatible land uses
- identifying alternative economic uses of rural land
- ensuring suitable management of land at the interface between rural and urban areas
- providing required infrastructure, facilities and transport services in rural areas
- encouraging appropriate growth in rural towns and villages.

Planning for the SEQ region can affect the future of rural areas by:

- reducing development pressure, thereby reducing pressure on agricultural land values
- encouraging efficient use of water and energy in rural communities, agriculture and rural industries
- encouraging rural communities to identify, celebrate and capitalise on their unique characteristics.

Investment strategies through the *South East Queensland Natural Resource Management Plan 2009–2031* (SEQ Natural Resource Management Plan), the Burnett Mary Natural Resource Management Plan and the *South East Queensland Healthy Waterways Strategy 2007–2012* also provide an opportunity to achieve positive long-term outcomes that support sustainable rural and regional communities.

5.1 Rural futures strategy

Principle

Recognise the significant and increasing role rural areas and rural landholders play in SEQ; ensure healthy, productive and sustainable rural futures; and enhance the interdependence of urban and rural communities.

Policy

5.1.1 Ensure sustainable rural communities consistent with the *Rural Futures Strategy for South East Queensland* (SEQ Rural Futures Strategy).

Programs

5.1.2 Implement the SEQ Rural Futures Strategy to coordinate rural policies through planning schemes, policies and other programs.

5.1.3 Improve coordination of rural issues and service delivery, rural land use policy and implementation through appropriate engagement with stakeholders.

Notes

The SEQ Rural Futures Strategy highlights the following five areas for action to sustain rural areas:

- economic development
- healthy and productive rural landscapes
- water resources
- community development
- leadership and collaboration.

The strategy includes current programs and proposed actions, including ongoing research and planning, protection of waterways and ecosystems, workforce initiatives, infrastructure provision, social support and promotion to enhance food security, products and activities. It is underpinned by the Sustainable Agriculture Strategy prepared by the Queensland Farmers' Federation.

5.2 Rural planning

Principle

Conserve and manage rural areas to enhance their contribution to the regional economy, rural industries and regional landscape values.

Policies

5.2.1 Consolidate future rural population growth within existing towns and villages.

5.2.2 Ensure the consolidation of future rural population growth within existing towns and villages does not fragment productive rural land.

5.2.3 Encourage the development of sustainable rural areas by supporting innovative planning approaches consistent with the Rural Precinct Guidelines.

5.2.4 Minimise the impact of climate change and rising energy costs on regional food production by enhancing and encouraging compatible agricultural enterprises in proximity to urban areas and associated market outlets.

5.2.5 Ensure land use and water management policies and regulations do not unreasonably constrain the development of agriculture, agribusiness, appropriate ecotourism and recreation opportunities in rural areas.

5.2.6 Protect areas of good quality agricultural land from incompatible development and provide for the expansion of agricultural production.

Program

5.2.7 Identify strategic agricultural production areas consistent with the nature and diversity of the region's productive capacity and agricultural land uses.

Notes

The future of rural areas in SEQ depends on sustainable and diverse rural industries, reliable and efficient water resource management, and flexible and responsive rural land use planning. The emerging opportunities from policy developments in natural resource management, such as ecosystem services, carbon trading and 'green' energy production, highlight the need for a systematic approach to rural land use planning and management. This approach includes:

- identifying strategic agricultural production areas through classifying land based on relevant biophysical and socio-economic factors
- recognising the importance of agricultural land and industries near major population centres as a key determinant of future food costs and liveability
- preventing inappropriate fragmentation of rural land
- improving infrastructure and investment opportunities for agriculture
- protecting farming operations from conflict with non-farming or rural lifestyle residents
- enabling rural industries to diversify, adjust, innovate and value-add
- identifying preferred future uses of unproductive lands, recognising that some forms of agricultural production are not necessarily constrained by soil type or fertility
- assisting local government to protect and enhance productive rural lands and their associated environmental and landscape values
- maintaining benefits to the community that are derived from the natural environment.

5.2 Rural planning—continued

The intent, scope, context, matters for consideration and process for rural precinct planning are set out in the *South East Queensland Regional Plan 2005–2026 Implementation Guideline No.6 Rural Precinct Guidelines.*

The *South East Queensland Regional Plan State planning regulatory provisions 2009–2031* (SEQ Regional Plan regulatory provisions) have been amended to reflect the intentions of policies regarding rural planning, particularly the need to facilitate economic diversification and sustainability in rural areas.

To support long-term sustainability of agricultural lands, various local governments have identified areas within their planning schemes that generally correspond with good quality agricultural land or land identified as being predominantly for agricultural purposes. These areas are identified within the SEQ Regional Plan regulatory provisions as rural subdivision precincts. Minimum lot sizes are established within the relevant planning scheme for each rural subdivision precinct, which respond to the types of rural production prevalent in the area.

Land within a rural subdivision precinct has the potential for further subdivision below 100 hectares, where further subdivision assists in the long-term use of the land for agricultural production and the lot sizes proposed are consistent with the relevant local government planning scheme requirements.

Adopting best practice land management in relation to issues such as stormwater run-off, erosion control, salinity and disturbance of acid sulfate soils, water management, vegetation clearing and stock management can help to maintain and enhance the quality of the region's rural lands and ecosystems, and the services they provide.

5.3 Rural communities

Principle

Ensure rural communities benefit from regional growth, and participate fully in the planning and development of the region.

Policies

5.3.1 Provide and maintain appropriate levels of infrastructure and services to rural towns and villages.

5.3.2 Accommodate the required growth of rural villages through the planning scheme revision process.

Program

5.3.3 Assist rural communities to identify strategies for economic development and growth that capitalise on their rural character, local attributes and cultural heritage values.

Notes

Rural communities generally have less access to social infrastructure and diverse employment opportunities than their city counterparts. Long distances to principal and major activity centres and a lack of public transport services often compound this situation.

To address this, state and local governments will work together to improve infrastructure and services to rural areas. Partnerships between government and local communities can promote leadership and encourage social networking in local communities to enhance communication and facilitate proactive and positive changes. Initiatives to achieve these partnerships include:

- assisting rural communities to respond to changing rural industries and economic circumstances
- improving community capacity to contribute to planning and other regional engagement processes
- investigating alternative strategies for economic development and growth in rural communities
- addressing the potential for social and land use conflict at the interface between urban and agricultural areas.

The regional land use pattern provides sufficient land around rural towns to facilitate future planning and growth of these centres. The intent is to reduce isolated rural residential developments by consolidating growth around discrete, serviceable urban centres. The SEQ Regional Plan also identifies a number of rural activity centres that deliver higher order infrastructure, community services, commercial activities and transport into rural areas.

Local governments will need to demonstrate that:

- extensions to rural villages are required to assist in the provision of housing, employment, services or facilities for the locality and do not undermine the roles of nearby towns or urban areas
- the village's character and surrounding rural production capacity will be protected
- there is insufficient supply within existing and proposed urban lands.

5.4 Rural industries

Principle

Maintain a sustainable rural production sector that capitalises on existing advantages and is ready to meet changing circumstances.

Policies

5.4.1 Strengthen rural industries by increasing compatibility, adaptability and productivity, value-adding and improving access to markets.

5.4.2 Identify and support sustainable, new and innovative rural industries and uses for rural land.

5.4.3 Recognise the potential contribution of places of cultural heritage significance in rural areas to rural economic development.

Program

5.4.4 Promote better understanding, knowledge and community support for agricultural industries.

Notes

The rural sector continues to experience structural adjustment due to a range of factors, including competition, deregulation and changing product demands. The intent of the SEQ Regional Plan is to maintain competitive industries and to transition others to new activities.

Changes in rural areas provide opportunities to develop new activities based on rural and ecotourism, carbon sequestration, green energy production, new agricultural products, sport and recreation activities, the region's unique cultural and heritage values, and local arts and crafts.

Providing an expanded range of services to surrounding areas will generate a variety of employment opportunities. For example, expansion of industrial and service activity in the Western Corridor should yield benefits for surrounding rural areas.

The cultural heritage and tourism appeal of the region's rural towns and villages are becoming increasingly important. Building awareness of traditional cultural heritage values will add to this appeal. The unique character of rural towns and villages and the diversity of natural features provide significant opportunities to boost these activities.

Access to a reliable water supply as well as infrastructure and services is crucial to the ongoing sustainability of rural industries and communities.

6. Strong communities

Desired regional outcome 6

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.

SEQ's socioeconomic profile will change markedly over the next 20 years. Demographic factors, such as an ageing population, declining fertility rates and changing migration patterns, will increase the number of people living in the region, and increase the number and proportion of smaller households. Economic development, and employment, education and training opportunities will also influence the number and type of people who choose to live in SEQ.

Some sections of the community face social, cultural and locational disadvantages. The availability of affordable housing affects where different people in the community are able to live.

Many live in urban fringe locations and rural areas with limited services and high transport costs. Increasing population density and future urban development creates opportunities for some sections of the community, but disadvantages and limits the choices of others.

Building strong SEQ communities will be assisted by:

- understanding the characteristics and needs of the community to positively inform planning and development processes and outcomes
- providing healthy, safe and inclusive places and spaces
- using community engagement and capacity building processes
- integrating land use planning and social infrastructure planning
- ensuring that all members of the community have access and mobility.

The Queensland Government has committed in *Toward Q2: Tomorrow's Queensland* to delivering world-class education and training, making Queenslanders Australia's healthiest people, and supporting safe and caring communities.

6.1 Social planning

Principle

Consider and respond to changing community characteristics, issues and needs in planning processes to support community wellbeing and quality of life for all.

Policies

6.1.1 Consider and incorporate social and community issues and needs in land use and infrastructure planning processes.

6.1.2 Identify, acknowledge and respond to the social effects of growth and change in regional communities.

6.1.3 Identify and address the social and community needs of higher density development when preparing plans for activity centres and established urban areas identified to accommodate future growth.

Programs

6.1.4 Develop a research and monitoring program for key socioeconomic characteristics and demographic trends affecting SEQ regional communities to provide an evidence base to inform planning and infrastructure provision.

6.1.5 Plan for an ageing population, including housing options suitable for older people, retirement and aged-care accommodation, access to services and public transport, and use of 'universal design' in development to enable people to 'age in place'.

Notes

Social planning involves investigating, understanding and responding to social and community issues, as well as the needs and aspirations of people and communities. Consideration of social and community trends, issues and changes in planning processes will help develop better community outcomes.

Important planning information includes current and likely future socio-demographic characteristics, the social impacts of growth and development, and current and emerging community needs. For example, the implications of an ageing population and changes to household size and composition are important land use and infrastructure planning considerations. An ageing population will need access to a diverse range of housing and accommodation choices, appropriate services, and public transport to 'age in place'.

Consideration of the social and community wellbeing implications of higher density urban development can also inform good planning outcomes. Integrating emerging communities with established communities is important to minimise social exclusion and build community cohesion.

6.2 Addressing disadvantage

Principle

Address issues of social and locational disadvantage in communities.

Policies

6.2.1 Ensure the planning and development of residential areas avoids creating communities of social and locational disadvantage.

6.2.2 Provide adequate and appropriate social infrastructure in development.

6.2.3 Integrate and connect communities in new development with existing or adjacent communities to prevent areas of social and locational disadvantage.

Programs

6.2.4 Investigate the contributing factors to, and spatial patterns of, social and locational disadvantage in SEQ, and the relationship with and implications for land use planning.

6.2.5 Implement best practice social inclusion, and prevention and early intervention programs to positively address social and locational disadvantage.

Notes

Many factors influence social disadvantage, including housing, income, employment, education, health and access to services. Many groups face a range of social, cultural, financial or locational disadvantages. These groups include people on low incomes, unemployed people, people living in rural areas, young people, elderly people, people from a culturally and linguistically diverse background, people from an Aboriginal or Torres Strait Islander background, people with disabilities, people experiencing mental illness, and people who are homeless or at risk of homelessness.

Land use planning outcomes influence spatial patterns of social disadvantage. Groups with the highest needs are often concentrated in urban fringe locations, rural areas, and some suburbs where public transport and services are unavailable or inadequate.

Increased fuel prices as a result of oil-supply vulnerability are likely to become a major contributor to disadvantage. This will significantly affect residents in urban fringe and rural areas who rely on their cars for transport. Climate change in SEQ will also affect groups in various ways. Disadvantaged groups are some of the most vulnerable to climate change effects.

Preventing areas of future disadvantage requires meeting basic human service needs. These needs include affordable housing, education, training and employment, social infrastructure, health, recreation and leisure opportunities, public transport and community development initiatives.

Mechanisms to achieve integration include physical links between, and access to, neighbouring communities, shared access to services and facilities, and community development and capacity-building programs.

Considering social justice principles, including access, equity, participation and inclusiveness, in development and infrastructure planning will help prevent disadvantage, social polarisation and displacement. It can also increase social diversity and inclusion in new development. Implementing prevention and early intervention programs is crucial to prevent inter-generational disadvantage.

6.3 Healthy and safe communities

Principle

Develop healthy and safe environments that encourage community activity, participation and healthy lifestyles, and prevent crime.

Policies

6.3.1 Integrate health and community safety considerations in the design and delivery of broadhectare development, Development Areas, activity centres and other urban areas identified to accommodate future growth.

6.3.2 Implement best practice urban design to create built environments that enable walking and cycling, support community safety and provide adequate shade.

6.3.3 Provide adequate and appropriate community greenspace for outdoor recreation, built spaces and facilities for recreation and sport, and community facilities and spaces to enable community activity and healthier lifestyles.

6.3.4 Plan for broadhectare development and development in established urban areas using the *Crime Prevention Through Environmental Design (CPTED) Guidelines* for Queensland to optimise community safety.

6.3.5 Apply a health and social impact assessment framework to planning processes to identify and manage likely health and community wellbeing effects of development.

Programs

6.3.6 Research and monitor major broadhectare and redevelopment projects to evaluate the delivery of health and community wellbeing outcomes.

6.3.7 Develop an implementation guideline on the development of healthy communities in strategic and statutory land use planning processes.

6.3.8 Support initiatives that increase access to fresh food in urban environments, including provision of space for fresh food markets and community gardens.

6.3.9 Prevent the spread of mosquito-borne diseases by identifying significant mosquito breeding sites, including temporary water pools, to inform planning and development processes.

6.3 Healthy and safe communities—continued

Notes

There are key links between health, community wellbeing and the physical environment. The health of a community is determined by a range of factors including social disadvantage, population characteristics, social cohesion and sense of community, access to social infrastructure, safety and perceptions of safety, housing affordability and density, transport and accessibility, physical activity and the availability of open space, exposure to pollutants and hazards, and climate change.

Best practice planning and design of the built environment encourages physical activity and healthy lifestyle choices, provides a sense of community safety, and assists in preventing crime. Communities that comprise a range of housing choices, efficient public transport systems, sufficient employment opportunities, appropriate local support services, adequate social infrastructure and strong community networks tend to be safe communities. Community safety is also enhanced through good access and connectivity, adaptability and versatility, pedestrian-focused approaches, sight lines and surveillance, appropriate lighting, and variety of venues for activities.

Sedentary lifestyles and poor diets result in high obesity levels and poor health. Physical activity through everyday life, including work, travel, recreation and sporting activities, leads to improved mental health and reduces the risk of preventable diseases, such as type 2 diabetes and heart disease. Protecting agricultural land and developing urban gardens and spaces for local markets will increase access to fresh, local, seasonal produce.

The *Toward Q2: Tomorrow's Queensland* targets for health involve making Queenslanders Australia's healthiest people, with the shortest public hospital waiting times, and cutting by one-third obesity, smoking, heavy drinking and unsafe sun exposure.

Healthy and safe communities:

- use best practice urban design to create built environments that foster and enhance community safety
- apply the principles and strategies of CPTED guidelines for Queensland to improve safety
- establish safe, convenient and legible pathways and movement systems with good connectivity between activity locations
- provide access and mobility for all community members
- encourage increased physical activity through provision of community greenspace for outdoor recreation, sport and recreation facilities, cycling and pedestrian pathways and networks, and community spaces and facilities
- optimise walking and cycling by providing safe, accessible routes and footpaths that link to local destinations and facilities, such as shops, schools, public transport and local parks
- provide inclusive public spaces for community interaction and activity
- provide access to community services, including health services
- develop and maintain healthy buildings for home and work
- provide adequate shade and shelter to protect people from unsafe sun exposure
- provide accessible and appropriate public transport services that link residential areas with employment, education, services and commercial areas
- conserve agricultural land for food production, provide spaces for urban agriculture such as community gardens, and enable access to fresh, quality, seasonal local produce
- address social and locational disadvantage, particularly for high-needs groups
- address environmental health issues, including noise, odour, air quality and waste management in natural and built environment planning
- consider major emergency situations, such as floods, chemical hazards, fires and traffic accidents, which require efficient emergency services.

The health of the community is also reliant upon appropriate planning and design of water flows to prevent mosquito breeding. Risks of contracting mosquito-borne diseases are increased through residential development located close to major mosquito breeding sites, designs that impede surface water drainage and enable water pooling and water storage practices. Temporary pools of water formed after rain or tidal inundation generally provide greater opportunities for mosquito breeding than permanent water, which usually houses the natural predators of mosquitoes.

6.4 Community engagement, capacity building and identity

Principle

Develop and support strong, functional and connected communities through the process of growth and change in SEQ.

Policies

6.4.1 Incorporate community engagement in planning processes and decision-making, enabling local communities to identify, articulate and contribute their views.

6.4.2 Identify, reflect and maintain unique and important local characteristics to enhance a strong sense of place and community identity.

6.4.3 Provide adequate and accessible public spaces and places for a diverse range of community uses and activities in development.

Programs

6.4.4 Implement community development and capacity-building strategies and programs in broadhectare development and development in established urban areas.

6.4.5 Implement collaborative community engagement programs to ensure that communities in established urban areas are informed and actively involved in planning for proposed changes in local communities.

Notes

Planning and developing new communities involves not only the built environment, but how people will live and work together, form relationships, develop their community over time, and deal with and respond to change. Strong, functional, connected communities provide a great social and economic benefit to SEQ.

Community engagement refers to the connections between governments and communities regarding policy, program and service issues. This includes information sharing, community consultation and, in some instances, active participation in government decision-making.

Community engagement is a powerful mechanism to identify new approaches and solutions for managing growth and development. Involving people in planning and decision-making processes can improve planning outcomes and create a greater community understanding and ownership of those outcomes.

Community capacity describes the set of skills, relationships and networks in a community. These capacities provide social support, particularly when people need assistance. The more capacity a community possesses, the more likely it is to participate in, and influence decisions and processes for, change.

Toward Q2: Tomorrow's Queensland sets a state target of a 50 per cent increase in the proportion of Queenslanders involved in their communities as volunteers. Volunteering is an important part of building capacity and resilience in communities.

Developing communities and building capacity are particularly important in new development areas and areas undergoing significant change. Community capacity-building events and activities enable people to participate in community life and create a strong sense of identity and belonging. The *Strong Communities Handbook* provides advice on building community capacity.

Sense of place is found in the distinctive features of an area's physical landscape, built environment, population characteristics, economy, arts and cultural heritage. It is also based upon the relationships, connections and networks between the people who live and work in a community. A sense of belonging to and identifying with a place is an essential part of building a community.

Public spaces and places, which are available for a diverse range of community uses, are also essential in community building. Accessible and informal public space enables people to interact, connect and participate in community activity. Development should include a vital public domain that welcomes and accommodates diverse users and uses.

The success of any development process depends on making changes to the built environment, as well as building inclusive and diverse communities that reflect local character, identity and values.

6.5 Cultural heritage, arts and cultural development

Principle

Identify, protect and manage the region's unique cultural heritage, including historic places, landscapes of significance and traditional Aboriginal culturally significant places, and support the arts and cultural development through the planning and provision of cultural infrastructure and spaces.

Policies

6.5.1 Identify and protect Queensland heritage places and local heritage places and ensure development in or adjacent to those places does not compromise their cultural heritage significance.

6.5.2 Plan for the future provision of arts and cultural infrastructure and facilities, including cultural precincts in developments.

6.5.3 Provide appropriate public spaces for cultural activities, events and festivals when planning communities.

Program

6.5.4 Identify local heritage places of cultural significance through a heritage survey using key historical themes for SEQ.

Notes

SEQ has diverse cultures that demonstrate the unique values, beliefs, ideas, knowledge, symbols, ways of life and traditions of the region's many different communities. Architecture, crafts, design, festivals, multimedia, tourism, heritage, leisure, sport and recreation, and the arts, including public art, all represent culture. Spaces, facilities and infrastructure for cultural activity are focal points for communities to develop cohesion, cultural identity and sense of place.

SEQ has many distinctive places that reinforce the sense of place and identity of local communities through historical and cultural associations. These places, including landscapes, landmarks, streetscapes, buildings and other structures, form an integral part of the region's appeal, image and identity.

Places of significant cultural heritage should be protected and conserved for future generations. Processes of growth and change must not cause important places to lose the history, meaning and community identity that they capture and reflect. The SEQ Natural Resource Management Plan sets targets to retain regionally important landscape heritage.

Redevelopment involving heritage places is particularly complex, but offers the opportunity to bring a vitality and character to communities that is difficult to replicate through new development alone. Planning and design processes should recognise and reflect an area's unique character, historic fabric and potential contribution to the life of the new community.

The *Queensland Heritage Act 1992* provides for the conservation of Queensland's cultural heritage by protecting all places and areas entered in the Queensland Heritage Register. The register comprises state heritage places, archaeological places and protected areas. Development of a place registered under the Act is assessable development.

The Act also requires a local government to keep a local heritage register of places of cultural heritage significance in its local government area.

The Department of Environment and Resource Management is currently undertaking a statewide survey of Queensland's heritage places. Key historical themes that are relevant to the different regions of Queensland have been identified in the *Queensland Cultural Heritage Places Context Study* (Blake, 2005). These themes should be used by a local government when undertaking a local heritage survey of its area.

7. Engaging Aboriginal and Torres Strait Islander peoples

Desired regional outcome 7

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.

Approximately 35 per cent of Queensland's Aboriginal and Torres Strait Islander population live in SEQ. This figure includes those who identify as descendants of the region's original inhabitants (traditional owners) and those who moved to the region (historical and contemporary residents).

The intent of this desired regional outcome is that:

- engagement of Aboriginal and Torres Strait Islander communities recognises both traditional owners and historical and contemporary residents as important stakeholders with differing needs and aspirations in relation to land
- all Aboriginal and Torres Strait Islander peoples are able to enjoy a high standard of living similar to that of other residents and participate fully as residents of the region.

7.1 Traditional owner engagement

Principle

Recognise Aboriginal traditional owners as stakeholders, involve them in planning, and understand and respect their relationship with the land, sea and natural resources.

Policies

7.1.1 Consult with traditional owners in the development of planning schemes and planning for Regional and Local Development Areas, particularly regarding the inclusion of processes for identifying and conserving Aboriginal cultural heritage sites and landscapes.

7.1.2 Recognise traditional owners' procedural rights to be consulted at the outset in relation to matters that may affect their native title rights, the alienation of unallocated state land or traditional cultural heritage values.

Programs

7.1.3 Engage with traditional owners through recognised cultural group organisations or the South East Queensland Traditional Owners Alliance.

7.1.4 Support traditional owners to engage with local governments in planning, and natural and cultural resource management activities.

7.1.5 Identify opportunities for collaborative partnership agreements (such as Indigenous Land Use Agreements) to address, resolve and support traditional owner issues.

Notes

SEQ is home to several traditional owner groups (Map 9). As traditional owners, Aboriginal people have a unique connection to their ancestral lands and have responsibilities to the land under their traditional law and customs.

Consultation processes with traditional owners regarding land and resource planning must be inclusive and culturally appropriate and conducted with the people entitled to speak for country. Organisations and agencies should engage within traditional owner boundaries. This engagement must be effective at regional, sub-regional and local planning levels. Traditional owners build their capacity to engage in these planning processes through the South East Queensland Traditional Owners Alliance, a culturally appropriate engagement framework. Engagement with traditional owners on matters of native title or cultural heritage should be through recognised cultural group organisations. On issues of a regional scale, engagement is most appropriate through the South East Queensland Traditional Owners Alliance.

Involving Aboriginal and Torres Strait Islander peoples in planning empowers their communities to identify their own issues, strategic directions and solutions. This requires appropriate mechanisms that acknowledge the diversity of the communities and the resources they need to participate.

The South East Queensland Traditional Owners Alliance facilitates wider Aboriginal and Torres Strait Islander engagement in the SEQ Regional Plan's implementation and monitoring processes. This transparent and inclusive process uses the strengths of existing engagement processes, including Aboriginal and Torres Strait Islander Partnerships under the Department of Communities.

Traditional owners desire to have their interests and responsibilities acknowledged, respected, and progressed through planning processes. They ask to be involved in all land use planning that relates to areas and values of traditional cultural heritage significance.

Resourcing is an important part of effective engagement. Regional and local land use planning processes must complement other regional traditional owner processes, such as native title and cultural heritage activities.

Map 9: South East Queensland Traditional Owner Alliance sub-regions and groups

7.2 Community engagement

Principle

Provide Aboriginal and Torres Strait Islander peoples who have traditional, historical and contemporary connections to SEQ with the opportunity for active involvement in planning processes.

Policy

7.2.1 Recognise the cultural need for Aboriginal and Torres Strait Islander representatives to obtain group endorsement of consultation responses, and provide periodic forums for the provision of information to the broader community of Aboriginal and Torres Strait Islander peoples.

Programs

7.2.2 Establish a regional Aboriginal and Torres Strait Islander coordination mechanism through an agreed engagement framework, with appropriate representatives from relevant state agencies, local governments and traditional owner and Aboriginal and Torres Strait Islander community organisations.

7.2.3 Establish a scientific expert panel to coordinate data collection and research.

7.2.4 Provide training opportunities to enhance the capacity of Aboriginal and Torres Strait Islander peoples to play a more active role in planning and land management processes.

7.2.5 Provide more extensive cultural awareness training to state agencies and local government.

Notes

The policies of the SEQ Regional Plan that address the principle of community engagement provide partnership and governance mechanisms. Localised, place-based partnerships are effective mechanisms to engage Aboriginal and Torres Strait Islander peoples. Local government should promote localised partnerships with the Aboriginal and Torres Strait Islander community. These partnerships should demonstrate an understanding and respect for cultural difference. State and local governments responsible for planning and land management must fully understand and appreciate the valuable contribution that Aboriginal and Torres Strait Islander peoples can provide, and invite them into planning processes at an early stage.

A regional coordination mechanism would report on programs and progress, consult with Aboriginal and Torres Strait Islander representatives about delivering planning and service, and help coordinate actions under the SEQ Regional Plan. The group would include senior officers and agreed representatives from Aboriginal and Torres Strait Islander communities. Any actions that address the needs of Aboriginal and Torres Strait Islander peoples must be effectively monitored and evaluated, and all programs must be adaptively managed. An Aboriginal and Torres Strait Islander scientific expert panel could coordinate the development of an effective system to monitor, evaluate, report on and improve actions and programs.

7.3 Social and economic equity

Principle

Assist Aboriginal and Torres Strait Islander peoples living in SEQ to have equal access to as high a standard of living, good economic prospects and general wellbeing as other residents of the region.

Policies

7.3.1 Assess and improve Aboriginal and Torres Strait Islander peoples' access to community services, facilities and social infrastructure.

7.3.2 Improve the quality of data relating to Aboriginal and Torres Strait Islander peoples, and use this information to inform and guide local and coordinated regional planning processes, infrastructure and services planning, decision-making, reporting adaptive management and the monitoring of progress towards Closing the Gap targets.

7.3.3 Identify and manage the social and economic impacts of development and growth on Aboriginal and Torres Strait Islander peoples living in both urban and rural areas.

7.3.4 Recognise economic development for Aboriginal and Torres Strait Islander communities as a priority need to achieve the Closing the Gap targets and to maximise wider community prosperity.

7.3.5 Plan for the social infrastructure needs of Aboriginal and Torres Strait Islander communities, including their needs for coordinated facilities, in all social infrastructure planning and in consultation with Aboriginal and Torres Strait Islander communities.

Programs

7.3.6 Develop and implement regional and local housing strategies in collaboration with Aboriginal and Torres Strait Islander housing organisations to address the housing and housing affordability needs of Aboriginal and Torres Strait Islander peoples.

7.3.7 Address the employment and business development needs of Aboriginal and Torres Strait Islander peoples through the provision of land, employment, business opportunities, development of business skills, training and investment to foster enterprise.

7.3.8 Identify localities of extreme poverty, and implement measures to address and manage the support of Aboriginal and Torres Strait Islander peoples with multiple support needs, and break the poverty cycle.

7.3.9 Identify opportunities for Aboriginal and Torres Strait Islander enterprises to supply relevant services to state and local government and government-owned corporations through targeted procurement policies.

Notes

The Queensland Government has committed to the Council of Australian Governments' Closing the Gap targets in relation to Aboriginal and Torres Strait Islander peoples, including:

- halving infant mortality rates in 10 years
- halving the gap in reading, writing and numeracy in 10 years
- halving the gap in employment outcomes in 10 years
- closing the life expectancy gap within a generation
- at least halving the gap in Year 12 (or equivalent) student attainment rates by 2020.

To achieve these targets, the government must effectively address the many areas of Aboriginal and Torres Strait Islander disadvantage and enhance Aboriginal and Torres Strait Islander peoples' socioeconomic wellbeing.

Collecting and analysing data about Aboriginal and Torres Strait Islander communities will help the government plan, evaluate and service their needs across agencies and improve information sharing. The Productivity Commission's *Overcoming Indigenous Disadvantage: Key Indicators 2007* details wide-ranging measures of Aboriginal and Torres Strait Islander social and economic equity.

The Queensland Government has published the *Queensland Closing the Gap Report: 2007/08 Indicators and Initiatives for Aboriginal and Torres Strait Islander Peoples*. This first Closing the Gap Report provides a statewide snapshot of the most recent available data on the gap in life outcomes and on Queensland Government strategies for 'closing the gap', aligned with directions identified by the Council of Australian Governments Working Group on Indigenous Reform.

Aboriginal and Torres Strait Islander peoples must be able to access the same range of services, housing and economic opportunities available to the wider community. The government will consider both urban and rural Aboriginal and Torres Strait Islander communities, and consider specific cultural values and needs in the delivery of services. This may require tailoring policy responses and service delivery mechanisms to suit particular communities. Programs to address extreme poverty and multiple support needs should be culturally sensitive and supportive of the family unit and community participation. To break the poverty cycle, programs around educational attainment, training participation and business development can be implemented and geared towards meeting critical skills shortages.

Levels of workforce participation, employment and business ownership among Aboriginal and Torres Strait Islander peoples are lower than those among the wider community. Improvements in Aboriginal and Torres Strait Islander health, labour force participation and educational opportunities will result in significant benefits for the wider community.

Aboriginal and Torres Strait Islander employment and economic development can be promoted through a commitment to business partnerships in a wide range of ways. The Queensland Government's Looking After Country Together program offers options to develop better employment and business outcomes for Aboriginal and Torres Strait Islander peoples. The purchasing power of and business partnerships with government and industry, including targeted procurement policies and the engagement of Aboriginal and Torres Strait Islander consultants and contractors, can support increased employment and enterprise development. Linking training for long-term unemployed Aboriginal and Torres Strait Islander people to job opportunities and workplace mentoring, and programs of innovative enterprise training and investment can assist in fostering enterprise development.

7.4 Cultural values

Principle

Recognise, protect and conserve traditional Aboriginal cultural values in land, water and natural resources, and historical or contemporary Aboriginal and Torres Strait Islander values in places.

Policies

7.4.1 Protect and maintain traditional Aboriginal cultural landscapes and culturally significant places in land use, planning and management arrangements in partnership with the traditional owners of those landscapes and places, and maintain or improve traditional owners' access to cultural resources.

7.4.2 Manage areas of high historical or contemporary cultural significance for Aboriginal and Torres Strait Islander communities in collaboration with those communities.

Program

7.4.3 Implement the *South East Queensland Traditional Owner Cultural Resource Management Plan* to support Aboriginal traditional owner issues in relation to land, water and natural resources.

Notes

Cultural heritage is important to Aboriginal and Torres Strait Islander peoples as it provides present and future generations with a sense of identity. The Queensland Government has legislated to protect, conserve and manage Aboriginal cultural heritage across the state through the *Aboriginal Cultural Heritage Act 2003*.

The Queensland Government's Cultural Heritage Grants program and Looking After Country Together program contribute to managing natural and cultural resources and conserving places of cultural heritage significance. The Looking after Country Together program provides Aboriginal and Torres Strait Islander people with access to and involvement in managing land and sea country. It also provides Aboriginal and Torres Strait Islander people with the resources and skills to plan for and sustainably manage land and sea country to meet their objectives.

The *South East Queensland Natural Resource Management Plan 2009–2031* (SEQ Natural Resource Management Plan) includes a target for implementing the *South East Queensland Traditional Owner Cultural Resource Management Plan*.

Traditional owners have intimate traditional relationships with all aspects of their country and regard all natural resource assets—such as land, water and biodiversity—as cultural resources. A knowledge of cultural places and their values is often confidential and difficult to obtain. Traditional owners aspire to systematically collecting traditional knowledge of places, landscapes and biological relationships.

Partnerships between the Queensland Government and Aboriginal and Torres Strait Islander communities would provide opportunities to share information and effectively manage cultural values and heritage. Information about places of cultural significance must be managed in a way that satisfies the traditional custodians of the area, and enables those managing the land to access sufficient data to manage effectively and adaptively. State and local government policy, planning and land management arrangements must acknowledge and protect Aboriginal cultural heritage, and places of cultural significance to Aboriginal and Torres Strait Islander peoples.

8. Compact settlement

Desired regional outcome 8

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.

SEQ is the third largest urban region in Australia and is experiencing sustained growth pressure. What, where and how we build to accommodate more people in SEQ will have major effects on quality of life.

SEQ has developed historically in a dispersed, low-density settlement pattern, which has moved outward into the regional landscape. This pattern has become unsustainable. The natural landscape and regional ecosystems are experiencing increasingly adverse effects, and SEQ residents are experiencing increasing traffic congestion and, therefore, longer journeys to and from work.

In response, the SEQ Regional Plan concentrates urban development in the Urban Footprint and redirects an increased proportion of new growth to existing communities. Containing urban growth pressures will preserve the region's landscape, open spaces and farmland, and provide significant environmental quality and health benefits. *Toward Q2: Tomorrow's Queensland* makes a commitment to preserving land for nature conservation and public recreation.

The SEQ Regional Plan's balanced approach to settlement ensures the efficient use of land and infrastructure. It does this by requiring the efficient use of infrastructure in the city before new infrastructure is built further out.

Development Areas provide additional land supply in areas within the Urban Footprint adjacent or proximate to existing infrastructure networks. This will allow new road and public transport connections to be made in a timely and cost-effective manner, reducing reliance on private vehicle travel in new communities. New communities should be designed as attractive, walkable neighbourhoods that support community life.

Development Areas, regional activity centres and other suitable established urban areas, are the focus for accommodating regional dwelling and employment targets, and will accommodate projected growth to 2031.

In addition, if required, further lands are recognised as potentially suitable for accommodating urban growth. Such lands are within the Regional Landscape and Rural Production Area (RLRPA) and are designated as Identified Growth Areas (IGAs). For an IGA to be further considered for urban development within the life of the SEQ Regional Plan, extensive investigations are required in relation to land capability and suitability, infrastructure requirements, the principles used for defining the boundary of the Urban Footprint, and other relevant matters described in the local government sub-regional narratives.

Transport plays a fundamental role in SEQ's sustainability and is best supported in a compact urban form. The SEQ Regional Plan outlines a self-contained development pattern that places regional activity centres at strategic locations on the transport network. This reduces the need for travel and provides transport alternatives to private car use. Reduced car use will also contribute to achieving the *Toward Q2: Tomorrow's Queensland* target to cut the carbon footprint by one-third by 2020.

Providing mixed land uses is another important factor in creating better places to live. Placing a mix of uses in close proximity makes alternatives to driving—such as walking or cycling—more viable. This also creates a more diverse and sizable population, and a commercial base to support viable public transport. Transit oriented communities have mixed uses at key public transport stops, such as rail stations, to create quality lifestyle alternatives for residents. Provision of housing options should include consideration of the costs of access to employment, facilities and services.

Changing household demographics, including an ageing population and more diverse households, are increasing the demand for wider housing choice in SEQ. The balanced growth approach of the SEQ Regional Plan provides housing choices for all SEQ residents—such as a garden apartment, new unit, or traditional suburban home—and accommodates growth at the same time. In this way, diverse housing choices help provide affordable housing and can also mitigate the environmental costs of car-dependent development, use infrastructure resources more efficiently, and ensure a better jobs to housing balance.

8.1 Compact development

Principle

Conserve land by making the most efficient use of land allocated for urban development.

Policies

8.1.1 Accommodate a higher proportion of growth through infill and redevelopment of existing urban areas to meet the dwelling targets in Table 3.

8.1.2 Focus higher density and mixed-use development in and around regional activity centres and public transport nodes and corridors.

8.1.3 Include in Development Areas a diversity of uses and employment opportunities at densities that support walkable communities, shorter vehicle trips and efficient public transport services.

8.1.4 Achieve a minimum dwelling yield of 15 dwellings per hectare net for new residential development in Development Areas.

Program

8.1.5 Monitor the rates of development in broadhectare and infill areas and the availability of land stocks on a regular basis by establishing an SEQ Growth Management Program.

Notes

The population of SEQ is expected to increase from 2.8 million in 2006 to 4.4 million in 2031. The SEQ Regional Plan provides sufficient land to accommodate the additional 754 000 dwellings required to 2031, taking into account land required for residential, employment and other purposes, as well as physical constraints. Urban development capacity is provided in the Urban Footprint.

The historically low density settlement in the region provides significant opportunities for infill development. In addition, large areas of remnant broadhectare lands are suitable for further development. Through the effective use of infill, remnant broadhectare and broadhectare lands, the Urban Footprint can accommodate projected growth to 2031.

An SEQ Growth Management Program will annually monitor the supply of land and dwellings in broadhectare and existing urban areas. The region's dwelling capacity will be reviewed at each five-year SEQ Regional Plan review to maintain a sufficient housing supply.

To promote a balanced settlement pattern and more compact development within the Urban Footprint, the SEQ Regional Plan:

- sets targets by local government area to contribute to an increase in the proportion of additional dwellings constructed through new development or redevelopment in existing urban areas to 50 per cent by 2031 (see Table 3)
- requires new residential developments in Development Areas to achieve a minimum net dwelling yield of 15 dwellings per hectare (with the potential for higher densities as appropriate through the planning process). This will help to provide a mix of dwelling types to match the community's changing needs, household sizes and structures
- requires higher density residential development to be focused within and around regional activity centres, and public transport nodes and corridors. This will improve access to existing and planned facilities and services
- restricts further land allocation for rural residential development and promotes a more sustainable use of existing rural residential areas.

Table 3: Dwellings by local government area (2006–2031)

Local government area	2006	2006–2031		
	Existing dwellings Source: Australian Bureau of Statistics (ABS) 2006 Census, for 2006 existing dwellings	**Total additional dwellings**	**Infill and redevelopment (minimum)**	**Balance areas and/or additional in existing urban area**
Brisbane	397 007	156 000	138 000	18 000
Gold Coast	202 588	143 000	97 000	46 000
Ipswich	52 357	118 000	18 000	100 000
Lockyer Valley	11 554	11 500	0	11 500
Logan	90 179	70 000	28 000	42 000
Moreton Bay	123 900	84 000	35 000	49 000
Redland	49 779	21 000	15 000	6 000
Scenic Rim	13 652	15 000	2 000	13 000
Somerset	7 818	6 500	0	6 500
Sunshine Coast	130 016	98 000	37 000	61 000
Toowoomba SSD	45 538	31 000	4 000	27 000
Total	**1 124 388**	**754 000**	**374 000**	**380 000**

8.2 Containing growth

Principle

To promote liveability and transport efficiency and reduce car dependence and private vehicle travel, locate urban development in the Urban Footprint either within or near existing communities to utilise their infrastructure and services, or within existing activity centres and at key locations along planned public transportation infrastructure.

Policies

8.2.1 Accommodate regional growth in locations that provide superior transportation choices or otherwise reduce car use, particularly through supporting growth in established urban areas and redevelopment in and around existing urban centres, and along priority transit networks and other high-frequency transit corridors.

8.2.2 Make Development Areas contiguous with existing communities wherever possible, or otherwise provide development with direct transport linkages to established urban areas early in the development.

8.2.3 Ensure physical and social infrastructure can be adequately funded and delivered before permitting development of Development Areas.

8.2.4 Proponents must demonstrate how necessary infrastructure and services for broadhectare areas outside current state and local government infrastructure delivery programs will be delivered and funded.

Notes

The following are the principles to define the boundary of the Urban Footprint in the SEQ Regional Plan.

General principles

1. The Urban Footprint is a tool for managing, rather than simply accommodating, regional growth.

2. The Urban Footprint sets the context to achieving a pattern of development that is consistent with the strategic directions and regional policies set out in the regional plan.

3. The Urban Footprint should accommodate the region's urban development needs to 2031 based on population, housing and employment projections, and reasonable assumptions about future growth.

4. Opportunities for increasing the capacity of the existing Urban Footprint should be given higher priority than expanding the Urban Footprint, and it should only be expanded if there is insufficient capacity to accommodate the planned distribution of regional growth.

5. Economic opportunities in rural areas should be accommodated where there is adequate or planned infrastructure to service the development and where the development will not prejudice orderly planning of the locality.

6. Minor adjustments should be made to include land in or remove land from the Urban Footprint to reflect changed circumstances including new or better information, to correct existing anomalies or to recognise constraints.

Operational principles

7. Areas to be considered for inclusion in the Urban Footprint should:

   - be physically suitable
   - exclude areas with an unacceptable risk of natural hazards including predicted impacts of climate change
   - exclude areas with significant biodiversity values
   - be appropriately separated from incompatible land uses
   - be either a logical expansion of an existing urban area, or of sufficient size to support the efficient provision of social and economic infrastructure.

8. New Urban Footprint areas should be located to:

   - achieve a balanced settlement pattern across SEQ and within sub-regions over the planning period
   - maintain a well-planned region of distinct cities, towns and villages
   - maintain the integrity of inter-urban breaks
   - minimise impacts on natural resources
   - maximise the use of committed and planned major transport and water infrastructure
   - enable the efficient provision of physical and social infrastructure, including public transport
   - have ready access to services and employment
   - ensure significant non-residential activities achieve specific locational, infrastructure and site requirements.

9. Priority for new Urban Footprint areas should be given to Identified Growth Areas (where supported by specific investigations).

10. The boundary of the Urban Footprint should be:

    - cadastrally based or otherwise clearly defined, preferably using a major feature such as a road or stream to provide a clear boundary and buffer between urban and non-urban land uses
    - consistent with existing planning scheme zonings or development commitments
    - continuous around each discrete urban area.

8.3 Urban character and design

Principle

Design and site development to reflect SEQ's subtropical climate, reinforce local character and achieve innovation and design excellence.

Policies

8.3.1 Ensure that new development and redevelopment in established urban areas reinforce the strengths and individual character of the urban area in which the development occurs.

8.3.2 Ensure that new government buildings respond with high-quality design to the urban context in which they are to be located, and that particular attention is afforded to making high-quality public spaces.

8.3.3 Ensure all development and appropriate infrastructure, such as public transport stations, incorporate subtropical design principles, including orientation, siting and passive climate control.

8.3.4 Achieve design excellence for all new prominent buildings and public spaces in the Brisbane central business district, regional activity centres and transit communities.

8.3.5 Provide an accessible and high-quality public realm in all Development Areas by allocating or revitalising open space and creating well-designed public places.

Programs

8.3.6 Prepare a Model Code for Smart Growth to guide state and local governments on sustainable approaches to planning of Regional and Local Development Areas and development standards for new urban areas.

8.3.7 Utilise the Board for Urban Places to deliver high-quality urban design outcomes in the region's urban environment.

Notes

The Urban Design Alliance of Queensland outlines the following fundamental ideas that can be used as a framework to achieve desirable urban qualities. Cities and towns must be:

- sustainable
- liveable
- viable
- responsible
- memorable.

The Queensland Government established the Board for Urban Places to advise on high-quality urban design and to provide general and project-specific advice on urban design, planning, architecture, landscape architecture, sustainability and built environment issues.

Subtropical environment

Increased energy consumption has become a substantial national trend. Despite this, the orientation, siting and design of buildings to respond to local climatic conditions are largely neglected. The building industry, designers, developers and owners need to consider local climatic factors during design and construction.

Climate-responsive building—or passive climate control—involves using natural methods to reduce energy consumption by designing, constructing and using materials appropriate to a specific climate. SEQ is Australia's only subtropical metropolitan region. Design must be more responsive to the subtropical environment and appropriate design principles should guide all planning and design considerations.

Subtropical design principles for SEQ

- Recognise sub-regions: recognise and reflect SEQ's diverse climatic, landscape, cultural, and habitat sub-regions when applying design principles.
- Respect topography: protect the integrity and character of the hills, mountains and ridgelines that frame and define the subtropical environment.
- Diversify the built environment: incorporate diverse building densities, heights, types, and scales into new development.
- Consider local character and design: recognise how contemporary design and appropriate building materials contribute to the subtropical environment's character and diversity.
- Integrate with nature: design for appropriate climate-based orientation, provide shade and allow the breeze, sunlight and natural environment to penetrate.
- Acknowledge informality: recognise the informal relationships among the natural, built and rural environments.
- Use vegetation: use extensive native vegetation and large shade trees in private and public spaces, particularly along pedestrian and cycling corridors.
- Ensure open space diversity: diversify, integrate and design open space to form networks.
- Incorporate access to open space: reflect the proximity of nature in subtropical environments and SEQ's outdoor-based lifestyle in the access to open space.
- Design for water: reflect the importance and presence of water, and provide public access to any natural or artificial waterways.
- Develop outdoor centres: include outdoor dining, entertainment, recreation, sheltered public transport access and shaded pedestrian pathways to create informality and a village-like character.
- Develop outdoor meeting places: incorporate outdoor meeting places into building and design.

8.4 Urban greenspace

Principle

Provide an integrated, high-quality, urban community greenspace network to cater for community and environmental needs in development areas and existing communities.

Policies

8.4.1 Identify and respond to community needs for urban community greenspace, generated as a result of urban development, especially in activity centres and areas of higher density residential development.

8.4.2 Ensure urban community greenspace is integrated into the urban structure of development areas to provide for land use efficiencies and long-term sustainability.

8.4.3 Integrate planning and delivery of urban community greenspace networks with regional landscape areas and the regional community greenspace network.

8.4.4 Facilitate adequate and timely provision of urban community greenspace through appropriate infrastructure charging and other mechanisms.

Programs

8.4.5 Establish partnerships between urban community greenspace providers across governments, business and the community.

8.4.6 Identify new standards of service based on quality of experience, functions, diversity of settings, and connectivity of urban community greenspace networks.

8.4.7 Identify and improve links between urban community greenspace networks in adjacent local government areas.

Notes

Urban greenspace is publicly accessible land for community activities including sport, recreation, outdoor education, community services and tourism. It is used by a wide range of people living and working in urban areas and contributes significantly to quality of life.

Urban greenspace at regional, district and local levels can be created efficiently though careful planning and site-responsive design. Urban greenspace can contribute to the legibility, identity and sense of place that helps build and maintain communities.

Climate change and other emerging global issues have highlighted some other benefits of urban greenspace such as urban water management, cooling services for hot cities and space for community gardens.

The need to protect the region's unique biodiversity, landscapes and natural areas from the impacts of urban growth is also being increasingly recognised. The biodiversity and scenic values of the region's urban areas support recreation and tourism, and help to define the character of the region's major urban centres. The retention of natural features and conservation values is highly respected by the community, with a balance needing to be struck between retaining bushland and providing parkland for active community use.

There is also a growing awareness of the need for urban community greenspace to accommodate an expanding range of outdoor recreation activities, including walking, cycling, dog walking, mountain biking, skate boarding and rock climbing.

8.5 Housing choice and affordability

Principle

Provide a variety of housing options to meet diverse community needs, and achieve housing choice and affordability.

Policies

8.5.1 Prioritise the short- to medium-term supply of broadhectare land in SEQ.

8.5.2 Provide housing choice through a range and mix of dwelling type, size and location in residential developments.

8.5.3 Support an increased provision of affordable housing through community-based, not-for-profit entities and housing cooperatives.

8.5.4 Encourage all major development to incorporate affordable housing, including appropriate housing for the entry buyer and low-income housing markets.

8.5.5 Consider affordable housing in decisions on the disposal or redevelopment of government property and surplus land.

Programs

8.5.6 Monitor housing prices, land availability and other factors that affect housing costs as part the Queensland Housing Affordability Strategy.

8.5.7 Prepare a Model Code for Smart Growth to guide state and local governments on sustainable approaches to planning and development standards for residential subdivision, and dwelling location and design.

Notes

Providing diverse and affordable housing options is an important issue and key challenge both nationally and in SEQ. A range of housing choices helps create diverse communities and prevent social polarisation and displacement.

With significant population growth, SEQ is undergoing economic, social and demographic change. Traditional households of couples with children are decreasing, and the number of people living alone, without children or as lone parents, is increasing. This household change is creating demand for more housing options, including more affordable housing. Understanding these changes and the implications for housing demand and supply at a local level can help determine the type of housing needed in new development.

Some groups are at risk of housing stress, including working families, specific industry workers, Aboriginal and Torres Strait Islander families, the unemployed and young single people on fixed incomes. These groups constitute the bottom 40 per cent of household income distribution, and often pay more than 30 per cent of their household income in rent or on home loan repayments for appropriate housing in the private market.

Queensland Housing Affordability Strategy

The strategy will ensure that state land and housing is brought to market quickly and at the lowest cost. This will create a more competitive and responsive land and housing market by reducing the timelines and associated holding costs of bringing new housing to the market.

Through the strategy, the Queensland Government:

- established an Urban Land Development Authority (ULDA)
- changed planning legislation to improve the quality and timeliness of planning and assessment processes
- implemented measures to change planning and assessment management practices.

The strategy will also increase the short- to medium-term supply of SEQ's greenfield (broadhectare) land to bring appropriate and available land in the Urban Footprint to market in a timely, cost-effective and efficient manner.

Other relevant strategies include:

- regulating infrastructure charging plans across Queensland
- identifying and developing appropriate, under-utilised government land for urban proposals
- enabling local governments to facilitate private sector infrastructure financing.

Urban Land Development Authority

The ULDA works with local and state government, community, local landholders and industry representatives to deliver commercially viable developments that include diverse, affordable, sustainable housing, using best-practice urban design.

Within SEQ, the ULDA is currently focusing on Bowen Hills, Northshore Hamilton, Woolloongabba and Fitzgibbon.

8.6 Activity centres and transit corridors

Principle

Focus employment, infill housing and community services in well-planned, vibrant and accessible regional activity centres and along high-frequency transit corridors.

Policies

8.6.1 Ensure that development supports the activity centres network and the transport system.

8.6.2 Locate major employment and trip-generating activities in regional activity centres and on priority transit corridors and other high-frequency transit corridors.

8.6.3 Encourage mixed-use development along priority transit corridors and other high-frequency transit corridors.

8.6.4 Ensure that new state government facilities for health, education, justice, community and administration and employment activities are located within regional activity centres on priority transit corridors and other high-frequency transit corridors.

8.6.5 Exclude out-of-centre land use and development that would detrimentally impact on activity centres.

8.6.6 Ensure optimal use of transport and service availability in regional activity centres and corridors by delivering appropriate residential densities and by maximising business location opportunities.

Program

8.6.7 Prepare detailed land use and infrastructure plans for regional activity centres to guide land use, transport, infrastructure delivery, quality urban design and public spaces.

Notes

Regional activity centres are accessible locations that have concentrated businesses, services and facilities for employment, research and education, as well as higher density residential development serving a regional population. The SEQ Regional Plan proposes a strong network of regional activity centres connected by quality public transport to create compact, self-contained and diverse communities. Regional activity centres are also a key land use element to create an efficient public transport system.

To achieve these objectives, regional activity centres need to be more than retail and service providers. Regional activity centres can attract high-end creative and knowledge-based businesses, and advanced business services. To create regional economic activity and generate local jobs, regional activity centres must provide attractive, quality and affordable premises for small businesses and for creative, knowledge-based and new technology businesses. They should also provide opportunities to expand home-based businesses into commercial premises.

The regional activity centres network encourages centres that:

- create economic growth by co-locating a mix of land uses
- concentrate goods and services more efficiently
- provide appropriate locations for government investment in public transport, health, education, cultural and entertainment facilities
- provide a focus for community and social interaction
- encourage multi-purpose trips and shorter travel distances to reduce demand for private travel
- integrate land use and transport to support walking, cycling and public transport
- accommodate higher density residential development, employment and trip-generating activities.

The transport and transit components of the SEQ Regional Plan will be underpinned by the development of Connecting *SEQ 2031: An Integrated Regional Transport Plan for South East Queensland*. Priority transit corridors are key public transport routes where mixed-use, public transport supportive activities and development are to occur.

Local government planning schemes should allow for a mix of land use (tertiary education, office, local retail, entertainment, high density residential and professional services) that generates high demand for public transport within 400 to 800 metres of stops or stations in these transit corridors.

Similar land use outcomes are supported along other transit corridors and in other locations such as principal regional activity centres in SEQ. However, the priority transit corridors are seen as the best opportunity for short- to medium-term change and may be extended in the future.

Out-of-centre development is inconsistent with the SEQ Regional Plan's strategic intent, as it can diminish the vitality of activity centres and detract from economic growth by diluting public and private investment in centre-related activities, facilities and infrastructure.

8.6 Activity centres and transit corridors—continued

Large format retail premises, such as bulky goods retail activities, can occupy large sites and should be located on a centre's periphery. If there is no room in a centre, the out-of-centre location of these large premises should be assessed in terms of community need and potential impact on the:

- primacy and functionality of surrounding centres
- maintenance of pedestrian convenience and transport system efficiency
- amenity of surrounding residential neighbourhoods.

In preparing planning schemes, local governments should develop measures to support and reinforce the roles of activity centres. This includes identifying activity centre boundaries and determining the potential extent of each centre's growth, including residential development opportunities. They should consider urban design principles, and the quality, functionality and interrelationships between building forms and public spaces.

Activity centres network

Map 10 and Map 11 show SEQ's activity centres network. The network is based on the following definitions, and incorporates existing and planned activity centres.

Primary activity centre

The Brisbane central business district (CBD) is the region's primary activity centre, accommodating the largest and most diverse concentration of activities and land uses. For some activities, it has a statewide function—it is the key focus of government administration, retail, commercial, and specialised personal and professional services. In addition, it accommodates cultural, entertainment, health and education facilities of state, national and international significance.

The CBD is the focus of the region's radial public transport system. As it is the centre of highest employment mix and density, and it supports a large, in-centre residential population, the CBD generates and attracts a large number of transport trips.

The role of Brisbane's CBD as the primary activity centre has expanded over time into the surrounding frame area (including Fortitude Valley, Spring Hill, Milton, Albion, Newstead, Woolloongabba, Bowen Hills, South Brisbane and West End). The frame area provides distinct commercial, legal, government, retail, community and entertainment precincts, and significant residential communities. The increasing role of the frame area should be acknowledged and supported with appropriate land use forms of development and services.

Principal regional activity centres

SEQ's principal regional activity centres serve catchments of regional significance and accommodate key employment concentrations. They also serve business, major comparison and convenience retail, and service uses. These centres provide a secondary administrative focus, accommodating regional offices of health, education, cultural and entertainment facilities that have governmental and regional significance. Outside the Brisbane CBD, principal regional activity centres serve as key focal points for regional employment and in-centre regional development. As major trip generators, these centres typically have existing or planned, dedicated public transport, including rail, bus or light rail, and comprise key nodes in the regional public transport system. Residential development densities in principal regional activity centres should be around 40–120 dwellings per hectare (net) or greater.

Major regional activity centres

These centres complement the principal regional activity centres by serving catchments of sub-regional significance and accommodating key employment concentrations. They also provide business, service, and major retail and convenience functions. With a secondary, sub-regional administration focus, they accommodate district or branch offices of government facilities, and cultural and entertainment facilities of regional significance. These centres are typically located around key suburban or inter-urban public transport stops, and provide frequent public transport services to link the centre to surrounding communities. Residential development densities in major activity centres should be around 30–80 dwellings per hectare (net) or greater.

Specialist activity centres

As centres of regional economic significance, these provide a primary focus for specialised economic activity, employment or education rather than having a retail function. The core emphasis of these centres results in high levels of trip generation.

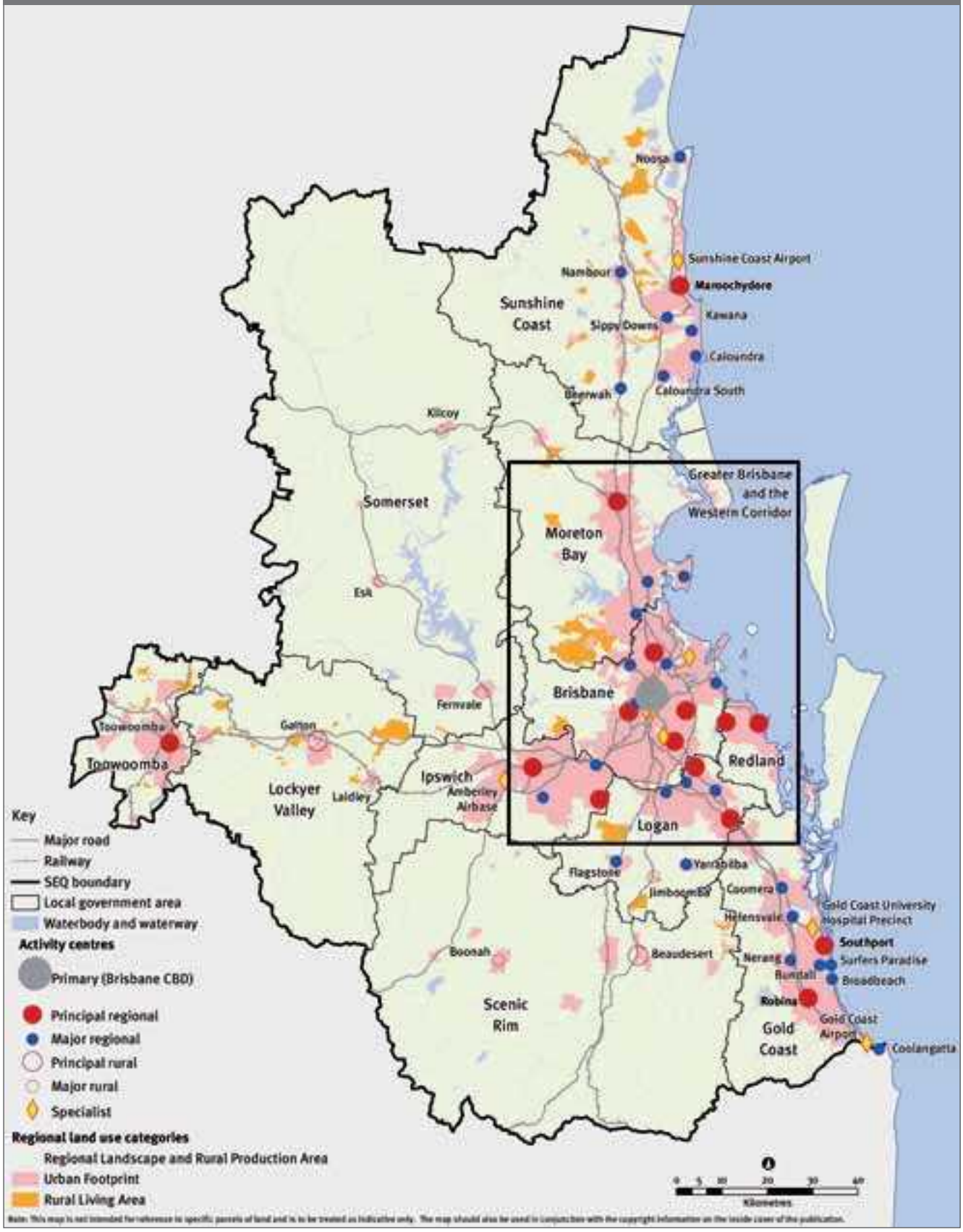
Principal rural activity centres

These centres are important service and community hubs in rural areas. They support a sub-regional rural catchment and contain concentrated rural services, as well as commercial, retail, government and community activities. Principal rural activity centres have excellent roads and basic public transport links. Government has provided additional land within the Urban Footprint to encourage appropriate investment and residential development to support each centre's growth.

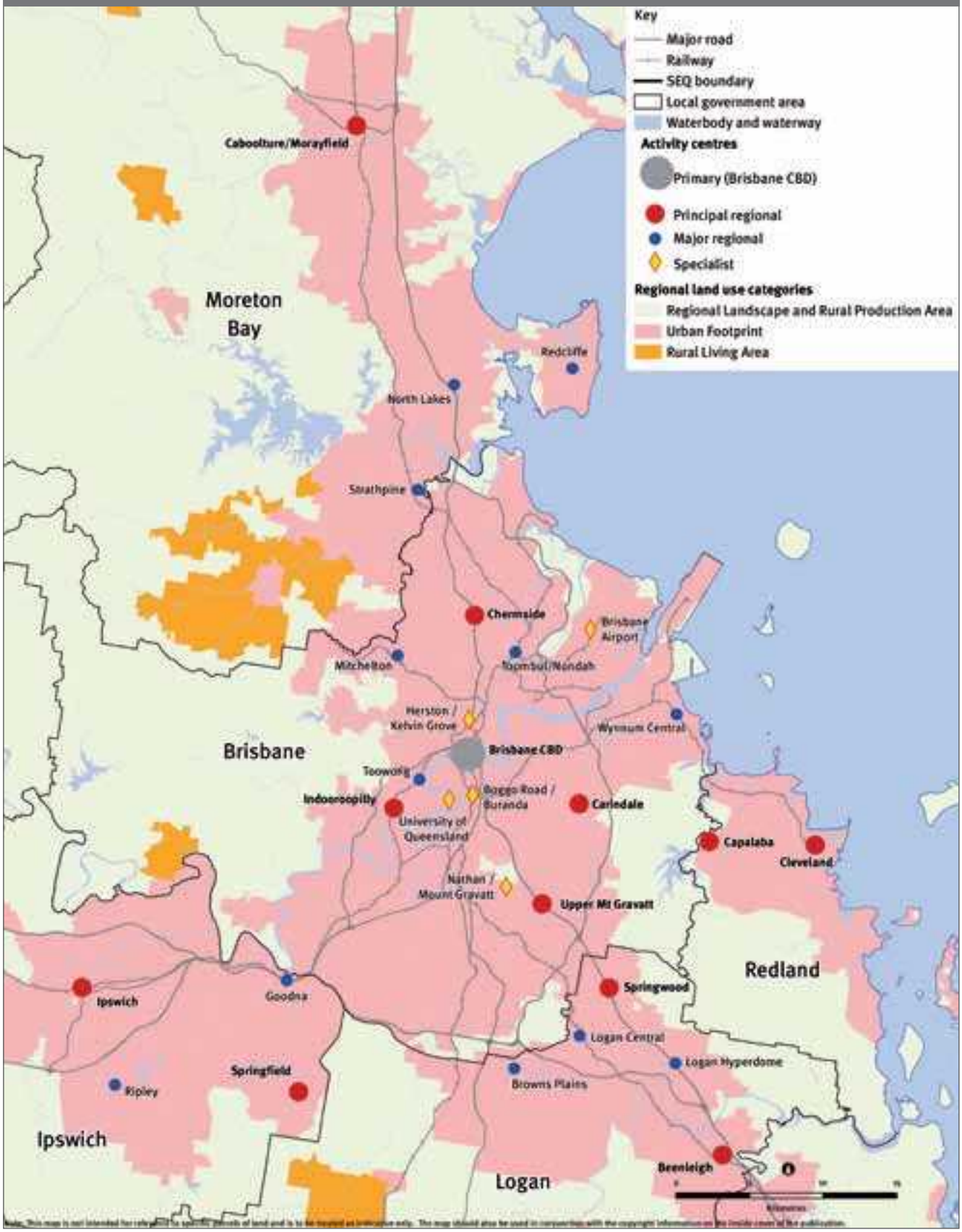
Major rural activity centres

Rural towns that provide more than one function to the surrounding rural catchment are major rural activity centres. They provide concentrated retail, commercial, community and some government services. They also have excellent road connections and possibly public transport services.

Map 10: Activity centres network



Map 11: Activity centres network—Greater Brisbane and the Western Corridor



8.7 Centres that support business

Principle

Principal and major regional activity centres located on priority transit network and other high-frequency transit corridors should provide for the future growth of a broad range of business uses to support employment growth.

Policies

8.7.1 Consider whether an activity centre is on an existing or proposed priority transit network or other high-frequency transit corridor when making a decision on a relevant planning scheme amendment or development application.

8.7.2 For any extension of more than 10 000 sq m to an existing retail centre in an activity centre, provide sufficient land with street frontage to accommodate non-retail business premises.

Programs

8.7.3 Review activity centres to ensure that each has sufficient suitable land for creative and knowledge-based businesses into the future.

8.7.4 Assess activity centres for their future growth potential, based on drivers of demand, possible future jobs growth, accessibility and land available for growth.

Notes

Retail centres are to be designed to enhance connectivity with surrounding communities and include publicly accessible spaces for social interaction. Active street frontages are incorporated wherever appropriate and opportunities are taken to include a mix of uses and employment opportunities. The intent is to enable residents, business people and workers to meet and interact, build social capital, and create networking and business opportunities.

Policy 8.7.2 is intended for planning authorities to have regard for when making decisions on planning scheme amendments and development applications. The policy seeks to ensure that activity centres support business and employment growth, and not retail alone.

The policy asks for land that is well located and has sufficient street frontage to accommodate affordable office premises to be identified and secured. This land must be equivalent to at least 15 per cent of the proposed increase in retail floor space. Alternatively, the policy could be met by building up to two storeys, as long as the buildings occupy no more than 40 per cent of site cover.

8.8 Mixed-use activity centres

Principle

Include a broad mix of land uses in activity centres and structure them as mixed-use centres in a predominantly main-street format to best serve their surrounding communities.

Policies

8.8.1 Provide for a range of land uses to be incorporated into activity centres appropriate to their roles and functions in the network.

8.8.2 Develop new activity centres with street-fronting retail layouts instead of enclosed or parking-lot dominant retail formats.

8.8.3 Provide activity centres with attractive, high-amenity public areas at locations that encourage and support social interaction, casual meeting and active lifestyles.

8.8.4 Transform activity centres that are dominated by enclosed retail into a main-street format as redevelopment occurs by including active street frontages, integrating development with surrounding public spaces and activities, and introducing more employment opportunities and a wider range of services.

Notes

Mixed-use centres on priority transit corridors and other high-frequency transit corridors improve environmental, economic and social outcomes for regional communities. This results in:

- improved support for public transport, cycling and walking
- increased urban and streetscape amenity, and public realm, with an enhanced sense of place and community ownership
- support for a wider variety of uses, local employment and small businesses
- an appropriate setting for higher density housing.

All centres should be planned as activity centres, not just shopping centres, and provide for high-yielding employment uses as well as retail and residential land uses.

Enclosed retail formats are generally not supported because they connect poorly to the surrounding communities, do not have streets for social interaction and do not support sufficient non-retail jobs.

If existing retail-dominated centres undergo necessary expansion, developers should take the opportunity to introduce active street frontages, more employment and a wider range of services. This enables residents and workers to meet and interact, builds social capital, and creates networking and business opportunities.

8.9 Integrated land use and transport planning

Principle

Ensure new development utilises existing infrastructure or can be provided with timely transport infrastructure, community services and employment.

Policies

8.9.1 Prioritise new broadhectare development sites with access to existing or planned transport infrastructure.

8.9.2 Undertake land use and transport planning concurrently and sequence development with timely infrastructure provision.

8.9.3 Plan new public transport routes, facilities and high-frequency services to ensure safe and convenient passenger accessibility, and support the interrelationship between land use and transport.

8.9.4 Connect active transport routes to improve accessibility and encourage transport use by a broader range of people.

8.9.5 Apply transit oriented development principles and practices to the planning and development of transit nodes, having regard for local circumstances and character.

8.9.6 Manage car parking provision in regional activity centres and high-capacity transport nodes to support walking, cycling and public transport accessibility.

8.9.7 Ensure all new development within walking distance of a transit node or regional activity centre maximises pedestrian amenity, connectivity and safety.

Programs

8.9.8 Prioritise amendments to planning schemes to support delivery of transit oriented development outcomes in activity centres and identified nodes on priority transit corridors.

8.9.9 Identify areas in consultation with local government that are suitable for the application of transit oriented development principles.

Notes

Land use, transport and employment integration all play a key role in achieving social, economic and environmental sustainability for SEQ. By shaping the development pattern and influencing the location, scale, density, design and mix of land uses, integrated planning can create complete communities.

Integrating land use and transport reduces the need for travel; results in shorter journeys; provides safer and easier access to jobs, schools and services; supports more efficient land and existing infrastructure use; and maintains the environmental benefits of compact development.

Accommodating future residential and employment growth in areas with access to high-frequency public transport and a mix of land uses promotes social equity and travel choice, and maximises efficient use of existing and planned infrastructure.

Transit oriented development principles

Transit oriented development principles (Table 4) are to be applied to precincts within a comfortable 10-minute walk of a transit node. Principles ensure mixed-use residential and employment areas are designed to maximise the efficient use of land through high levels of access to public transport. A transit oriented development precinct has a walking and cycle-friendly core with a rail or bus station, and is surrounded by relatively high-density residential development, employment or mixed uses.

Prerequisites for transit oriented precincts include the following:

- they are or will be serviced by quality and high-frequency public transport
- they have the capacity for development density and intensity levels to support public transport
- they can provide a vital and active, pedestrian-friendly, walkable catchment that is centred around a public transport node or corridor.

Transit oriented development in SEQ will be based around frequent and high-capacity public transport systems, primarily rail and busway. Regional activity centres are primary locations for the application of transit oriented development principles. It is proposed to connect transit precincts of different scales and types into 'transit corridors' across sub-regions in SEQ.

Transit oriented development precincts can be categorised in terms of the role they play (Table 5).

Local governments should use transit oriented development principles for appropriate locations (Tables 4 and 5) in their areas when preparing local planning strategies, planning schemes and amendments. They should determine the specific scale, intensity and land use mix for each precinct through the planning process.

8.9 Integrated land use and transport planning—continued

Table 4: Transit oriented development principles for South East Queensland

Location	
Infrastructure and services levels	Locate development around nodes or corridors where infrastructure capacity exists or can be created. Prioritise locations with high levels of transit service frequency.
Development levels	Ensure transit oriented development occurs at a scale that is appropriate for the location.
New development	Apply transit oriented development principles in new communities where transit nodes exist or are proposed.
Land use	
Type	Ensure transit oriented development precincts are dominated by land uses that support transit.
Extent	Transit oriented development precincts focus on the area within 5 to 10 minutes of the transit node considering the nature of the topography.
Density	Incorporate higher density residential uses in transit oriented development precincts to increase vitality and provide more convenient access to services and transport. Use the following baseline density guidelines: ■ activity centres: 40–120 dwellings per hectare (net) or greater ■ suburban and neighbourhood locations: 30–80 dwellings per hectare (net) or greater ■ priority transit corridors: 40 dwellings per hectare (net) or greater
Intensity	Incorporate high-employment intensities and a mix of employment opportunities.
Mix	Provide and integrate a mix of uses to create a greater variety of services catering for the diverse needs of a vibrant community. Provide timely and convenient access to services and facilities required to support people's daily needs, including an appropriate mix of commercial and retail services, jobs, community infrastructure and open space relevant to the context of the surrounding area.
Continuity	Encourage continuous activity in transit oriented development precincts to provide a sense of vitality and safety.
Design	
Adaptability	Ensure development delivers a built form that is robust and flexible, allowing development to be adapted or redeveloped over time to vary uses, increase densities or increase employment intensity.
Built form	Ensure development features high-quality subtropical design that maximises amenity, street activity and pedestrian connectivity.
Public realm	Provide for a high-quality public realm to meet the needs of the surrounding community, including open space, pedestrian areas and transit access. Deliver design that promotes social interaction and inclusion, physical activity and a sense of place and identity.
Integration	Ensure design seamlessly integrates transit nodes and the community.
Safety and accessibility	Ensure development promotes a high sense of personal and community safety, and equitable access to all public areas.
Parking	Locate, design, provide and manage car parking in transit oriented development precincts to support walking, cycling and public transport accessibility.
Transport	
Mode share	Create an increased mode share for walking, cycling and public transport by providing high levels of accessibility and public amenity within precincts and to stations and surrounding areas for cyclists and pedestrians, with priority for pedestrians.
Transport efficiency	Facilitate a high level of intermodal connection.
Social	
Social diversity and inclusion	Ensure development creates an environment that supports social inclusion and diversity of different age, cultural, employment and income groups. Provide a mix of housing types, tenures and affordability to support social diversity. Promote physical and social connections between new and existing communities. Ensure community development initiatives are carried out as an integral part of community building.
Process	
Coordination	Planning for development in transit oriented development precincts requires the coordinated effort of all stakeholders, including state agencies, local government and the development industry.
Community engagement	Engage with the community likely to experience change early and throughout planning and development processes to promote a sense of ownership and involvement.
Timeframes	Transit oriented development outcomes take time to deliver, and precincts mature over time.

8.9 Integrated land use and transport planning—continued

Table 5: Transit oriented development precinct typology

Type	Guidance
City centre	Metropolitan capital with excellent transit connections and existing high-density and mixed-use built form.
Activity centre	This broad typology includes principal and major regional activity centres designated in the SEQ Regional Plan. These centres comprise: ■ traditional town centres undergoing renewal ■ major regional shopping centres adapting to become more transit-oriented ■ infill opportunities to expand existing centres ■ new activity centres within Development Areas where identified in the activity centres network. These centres should provide a comprehensive range of retail, commercial, services, community facilities and other employment opportunities. High to medium densities are appropriate in these precincts; however, the scale of development will vary significantly in different centres depending on the context and transit services. In most cases the transit services will need to be improved to support transit oriented development and to reflect the important role of these centres as key destinations that support large catchments.
Specialist activity centres	This type includes institutional uses, such as hospitals and universities, which generate significant levels of activity and transit demand. They do not include major retail centres. The institution may anchor supporting uses but have greater potential to develop a full mix of uses. They can support a transit node because their many users come from a wide range of destinations.
Urban	This type of precinct includes inner urban areas with frequent transit services that are well connected to employment hubs and key destinations. Due to their accessible location and excellent transit services, they can support high densities and a diverse range of land uses. Urban precincts can accommodate high-density residential and commercial uses, as well as shops and services to support the large local population.
Suburban	This type of precinct includes locations with excellent development potential. They are located on transit stations or corridors, and have reasonable services to support a significant provision of residential use and a good mix of other uses. Suburban precincts act as a hub for surrounding suburbs and should provide a range of shops, employment opportunities and community facilities.
Neighbourhood	This type of precinct includes locations with adequate transit services and the development potential to support a primarily residential community. However, constraints or inadequate access make these unsuitable as hubs or destinations for a wider suburban catchment. Neighbourhood precincts should provide a basic mix of uses to meet local residents' needs, but will remain primarily residential with only moderate densities.

8.10 Development Area delivery

Principle

Development Areas, in addition to regional activity centres and other suitable established urban areas, are the focus for accommodating regional dwelling and employment targets, and require comprehensive planning to coordinate future development with infrastructure delivery.

Policies

8.10.1 Undertake necessary land use and infrastructure planning for all Development Areas using smart growth principles and practices.

8.10.2 Facilitate the achievement of regional dwelling and employment targets through Development Areas.

8.10.3 Ensure delivery of Development Areas is coordinated with the provision of public transport.

8.10.4 Ensure infrastructure delivery is timed and sequenced with the development.

8.10.5 Ensure state and trunk infrastructure planning, and associated costing and funding arrangements are determined prior to development.

8.10.6 Complete infrastructure agreements in conjunction with Development Area plans, wherever appropriate.

8.10.7 Identify and protect Identified Growth Areas for accommodating long-term growth beyond the life of the plan.

Program

8.10.8 Establish an SEQ Growth Management Program and update on an annual basis to monitor land supply and to inform the delivery of development in existing urban areas and broadhectare areas consistent with the intentions of the regional plan.

Notes

Development Areas are fundamental to the delivery of dwelling and employment targets in the SEQ Regional Plan. Their identification in the SEQ Regional Plan means that the state government is committed to ensuring that they can be delivered through timely planning processes. The government will use the SEQ Growth Management Program to monitor progress and intervene, if necessary, to ensure that land supply outcomes are achieved. Development Areas and Identified Growth Areas are shown in Map 12.

Planning and timing of delivery of Development Areas needs to be coordinated to ensure that the local environment is protected, land uses are optimally distributed and infrastructure is provided in an efficient and timely manner. Development Areas may be:

- contiguous to existing urban development and require infrastructure extensions
- proximate to established urban areas but still require significant infrastructure augmentation such as new headworks for water or sewerage, or road and public transport infrastructure
- remote from established urban areas and require significant extensions to existing transport networks and new urban infrastructure networks.

It is proposed to undertake the planning of Development Areas through planning initiated and led by councils, developers or the state government as appropriate.

Planning for a Development Area includes analysing the Development Area and its context, considering council and state agency policies and requirements, and examining infrastructure needs, staging, timing and funding.

Planning outcomes and requirements will vary in form and content depending on the scale and significance of a Development Area. Table 6 identifies Development Areas within the Urban Footprint and categorises them in terms of their predominant activity and whether they are regionally or locally significant, as follows:

- Regional Development Areas are likely to require substantial state infrastructure and are expected to yield regionally significant dwelling and employment yields.
- Local Development Areas are significant in the delivery of dwelling targets and employment for particular local government areas.

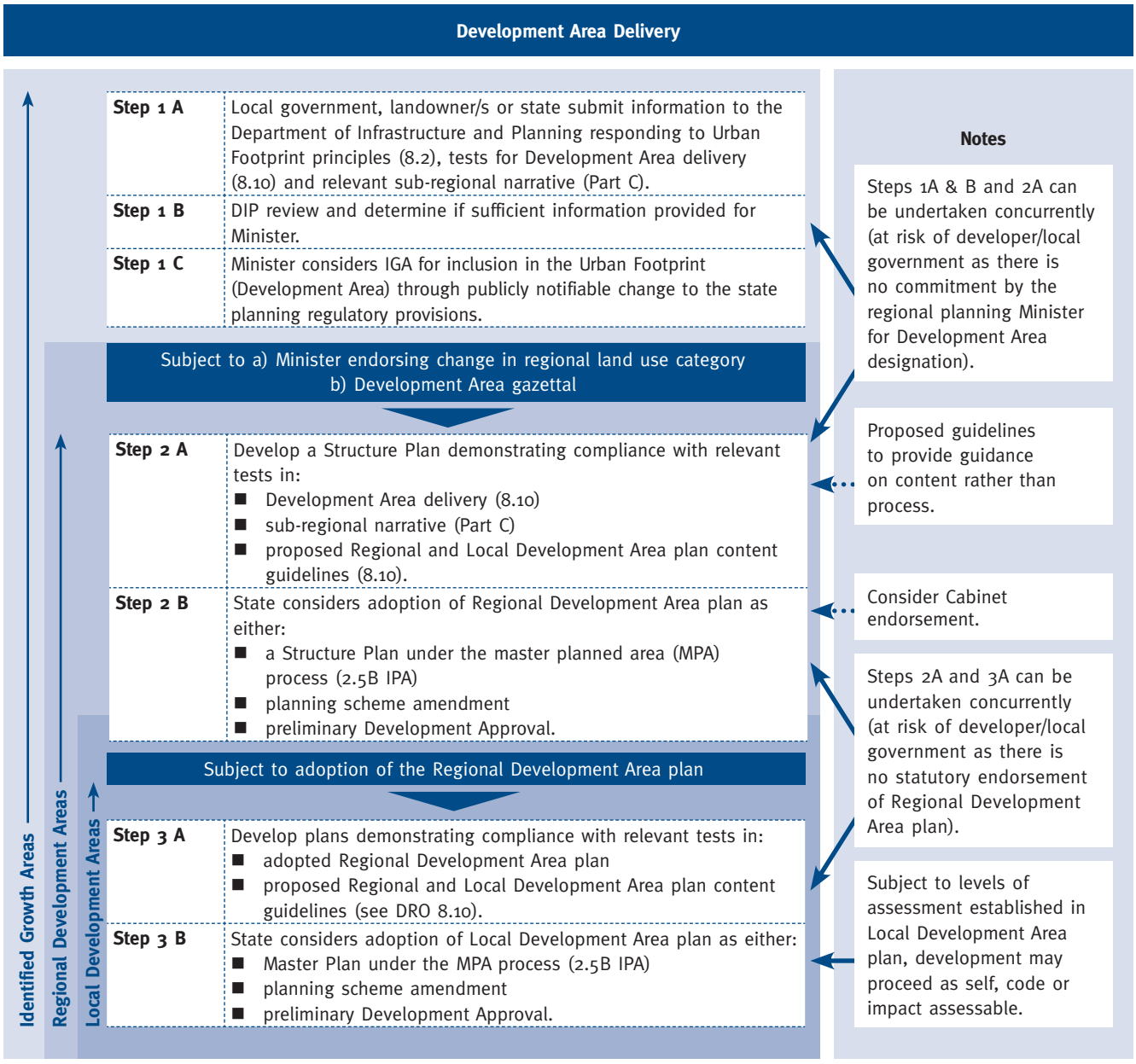
Plans for a Development Area can be:

- prepared and approved formally as a Structure Plan under the *Integrated Planning Act 1997* (IPA)—where the Minister declares an area as a master plan area
- prepared informally and then used as a basis for submitting a proposed planning scheme amendment or an application for a preliminary approval.

This is further illustrated in Figure 3.

8.10 Development Area delivery—continued

Figure 3: IPA Approvals framework for Development Areas



8.10 Development Area delivery—continued

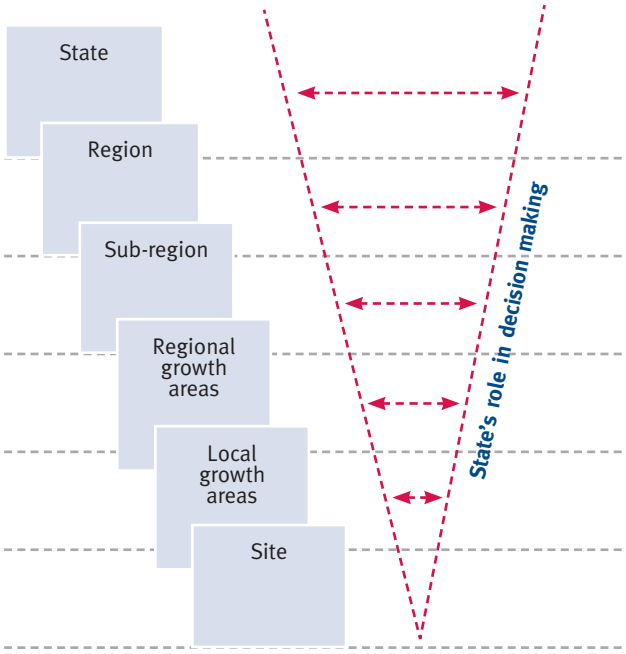
Scale is important in Development Area planning. Regional Development Areas (such as Ripley Valley and Caloundra South) are initially planned at a broad scale, typically through plans that look at the strategic elements necessary to coordinate future urban development such as:

- the pattern of neighbourhoods around town and neighbourhood centres
- arterial roads
- the protection of natural features such as water courses and vegetation
- major open spaces and parklands
- major public transport routes and facilities
- the pattern and disposition of land uses
- schools and community facilities
- staging, timing and responsibilities for proposed infrastructure, including any infrastructure agreements.

Planning of each stage of Local or Regional Development Areas is carried out through plans that may include:

- neighbourhood plans around proposed neighbourhoods and town centres
- existing and proposed commercial centres
- natural features to be retained
- street block layouts
- the street network including street types
- transportation corridors, public transport network, and cycle and pedestrian networks
- land uses including residential densities, and estimates of population and employment yield
- schools and community facilities
- public parklands
- urban water management areas
- local infrastructure needs, timing and proposed delivery mechanisms.

Figure 4: State agency interests



Notes

Once items are dealt with they should not be revisited at following levels of planning unless they are departed from significantly.

Strategic guidance to be provided at each level to inform consideration of variations and to ensure consistency with established planning objectives.

Where possible, planning for state interests will be resolved in the initial planning stage, reducing the role of the state in subsequent detailed planning. Figure 4 gives an overview of how the state's role in decision making should reduce at more detailed levels of planning, with the notable exception of proposals for state-delivered infrastructure such as a hospital.

The Department of Infrastructure and Planning will work to ensure that state interests are included at the appropriate level in order to avoid delays, particularly delays resulting from revisiting strategic level inputs during subsequent detailed planning stages. Figure 4 illustrates the appropriate level of state government involvement proposed in establishing land use plans. Plans for Regional Development Areas will be approved by the state government to ensure all relevant agency inputs have been properly considered and resolved.

New planning guidelines for Development Areas will be prepared to:

- guide who should initiate and undertake land use and infrastructure planning, and how key stakeholders should work together, such as through the early establishment of taskforces
- guide the content of Regional and Local Development Area plans
- guide the process for agency inputs into Regional and Local Development Area plans
- clarify the way in which relevant factors need to be considered when assessing a Regional or Local Development Area plan
- ensure that Regional or Local Development Area plans work efficiently with statutory approvals processes, so that steps properly undertaken in Regional or Local Development Area plans do not need to be repeated in the IPA approvals process.

8.10 Development Area delivery—continued

The immediate aim of the SEQ Regional Plan is for the planning for the Regional Development Areas identified in Table 6 to be prepared. This is required to achieve on-going land supply through the delivery of several large master-planned communities across the SEQ region. The Department of Infrastructure and Planning will collaborate with state agencies, local government and land owners to enable development where consistent with an endorsed Regional Development Area plan.

Infrastructure agreements

Through the SEQIPP, the Queensland Government is committed to significant infrastructure expenditure, which will provide many benefits to sections of the community. In these instances, the Queensland Government considers it reasonable for beneficiaries to bear some of the cost of infrastructure provision.

Where new major infrastructure is required to lead regional development ahead of full anticipated demand, landowners and developers of broadhectare or redevelopment areas who will benefit must contribute to infrastructure provision through an infrastructure agreement. Planning outcomes for Regional and Local Development Areas will be approved only when a satisfactory infrastructure agreement accompanies them. The agreement outlines contributions towards priority state infrastructure and services where required.

The Queensland Government and developers or landowners will negotiate an agreement on an area-by-area basis, taking into account the particular circumstances and exact nature of each infrastructure commitment.

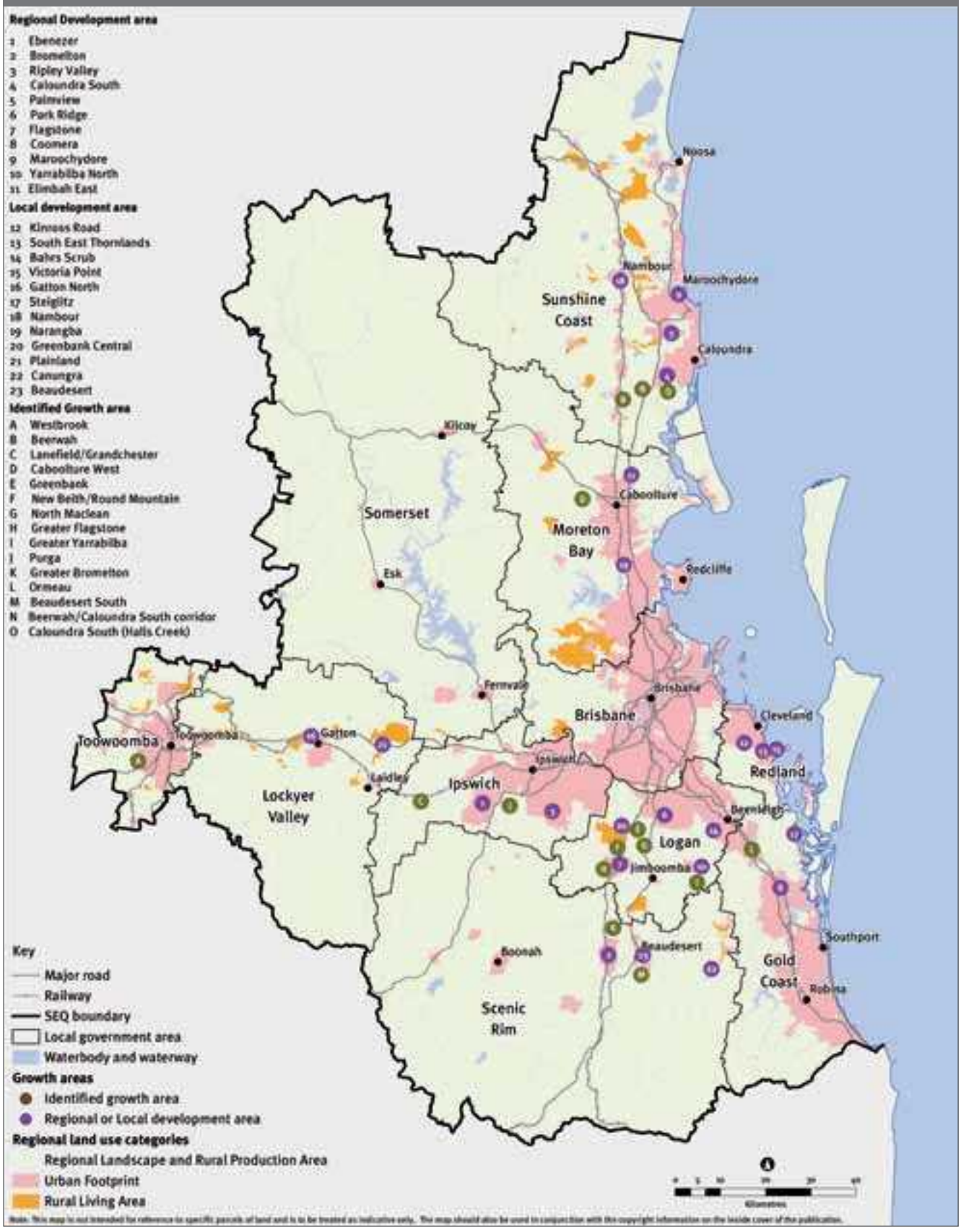
Table 6: Development Areas within the Urban Footprint

Regional Development Areas		
Residential	**Employment**	**Residential and employment**
Nil	Ebenezer (Ipswich) Bromelton (Scenic Rim) Elimbah East (Moreton Bay)	Ripley Valley (Ipswich) Caloundra South (Sunshine Coast) Palmview (Sunshine Coast) Park Ridge (Logan) Flagstone (Logan) Coomera (Gold Coast) Maroochydore (Sunshine Coast) Yarrabilba North (Logan)
Local Development Areas		
Residential	**Employment**	**Residential and employment**
Kinross Road (Redland) South East Thornlands (Redland) Bahrs Scrub (Logan) Canungra (Scenic Rim) Beaudesert (Scenic Rim) Victoria Point (Redland)	Gatton North (Lockyer Valley) Steiglitz (Gold Coast)	Nambour (Sunshine Coast) Narangba (Moreton Bay) Greenbank Central (Logan) Plainland (Lockyer Valley)

Map 12 shows both Development Areas, which are inside the Urban Footprint, and Identified Growth Areas, which are outside the Urban Footprint. Development Areas are gazetted by the regional planning Minister and further details (including boundaries) can be found in the relevant gazette notice.

Identified Growth Areas are shown indicatively on this map. They will be subject to further review before their boundaries are finalised and the Minister considers them for inclusion as a Development Area.

Map 12: Development Areas and Identified Growth Areas



8.10 Development Area delivery—continued

Identified Growth Areas

Table 7 identifies areas outside the Urban Footprint which, subject to further investigations, may accommodate growth beyond 2031. The long-term viability of urban development of IGAs will be protected by retaining IGAs within the Regional Landscape and Rural Production Area (RLRPA) to limit further development and fragmentation within the life of the plan. Urban development within an IGA before 2031 will only occur in exceptional circumstances, subject to achieving compliance with the Urban Footprint principles and relevant investigations contained within the sub-regional narratives. Any further consideration of an IGA for urban development will also take into account proximity to existing and planned urban infrastructure networks and associated costs of expanding the network to accommodate growth in the IGA, and achieving a compact urban settlement pattern in the region.

Further investigations are required to determine which of the two residential and employment IGAs on the Sunshine Coast will be seriously considered to accommodate long-term growth. To inform this decision, investigations into the Caloundra South (Halls Creek) and Beerwah–Caloundra South Corridor IGAs will need to consider each site's ability to comply with the Urban Footprint principles and requirements contained within the Sunshine Coast sub-regional narrative.

Table 7: Identified Growth Areas outside the Urban Footprint

Identified Growth Areas outside the Urban Footprint (within the Regional Landscape and Rural Production Area)		
Residential	**Employment**	**Residential and employment**
New Beith–Round Mountain (Logan)	Greater Bromelton (Scenic Rim)	Yarrabilba (Logan)
Westbrook (Toowoomba)	North Maclean (Logan)	Greater Flagstone (Logan)
Lanefield–Grandchester (Ipswich)	Beerwah (Sunshine Coast)	Caboolture West (Moreton Bay)
Beaudesert South (Scenic Rim)	Purga (Ipswich)	Greenbank (Logan)
	Ormeau (Gold Coast)	Caloundra South–Halls Creek (Sunshine Coast)
		Beerwah–Caloundra South Corridor (Sunshine Coast)

8.11 Rural residential development

Principle

Contain and limit areas allocated for rural residential development to ensure efficient provision of services and infrastructure and limit further land fragmentation.

Policies

8.11.1 Restrict further rural residential development to the identified Rural Living Area and in the Urban Footprint where lands are unsuitable for urban use.

8.11.2 Facilitate opportunities to consolidate existing rural residential development in the Urban Footprint or convert it to an appropriate urban use wherever possible.

Program

8.11.3 Support the conversion of rural residential lands for urban development by facilitating the orderly planning and delivery of land use frameworks and infrastructure.

Notes

Rural residential development is large lot residential subdivision in a rural, semi-rural or conservation setting. Allotments usually have a power supply but a limited range of other services, such as reticulated water and sewerage.

Until now, a significant proportion of new development in the region's rural and semi-rural areas has been rural residential. Sufficient land is zoned or identified as rural residential to satisfy demand beyond the period of the SEQ Regional Plan. The SEQ Regional Plan restricts the amount of committed rural residential land and enables existing areas to be appropriately consolidated by:

- stopping land being further allocated for rural residential development
- restricting future rural residential development to areas within the rural living areas and, in limited cases, the Urban Footprint
- investigating options to consolidate or convert to appropriate urban uses any rural residential areas within the Urban Footprint.

While rural living is important to the lifestyle of people in the region and provides choices in living opportunities, it has not always been well planned or located. If any more land in the Regional Landscape and Rural Production Area is converted to rural residential uses, potential problems are likely to emerge, including:

- scattered communities without access to services and facilities
- lost productive agricultural land in some areas
- declining rural character and lost regional liveability
- potential poor land management resulting in land degradation, loss of biodiversity and declining water quality
- fragmented land on the urban fringe that may be more suitable for future urban development
- long commutes to work.

9. Employment location

Desired regional outcome 9

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.

In recent years, SEQ's economy and labour markets have grown faster than the Australian average. This has been driven by a rapidly growing population and the need for services to support Queensland's resources boom.

SEQ's economy is based predominantly on services, although the nature of economic activity and employment vary throughout the region. The top four sectors for employment in SEQ are retail trade, health care and social assistance, manufacturing and construction.

Tourism in SEQ contributes more than $5.2 billion to Queensland's economy and directly employs more than 68 000 people. The rural economy also plays a significant role in the region and will expand through capitalising on existing advantages, creating greater diversity, increasing adaptability and productivity, value-adding and improving access to markets.

To sustain the region's high living standards, it is necessary to strengthen and diversify the region's economy. *Toward Q2: Tomorrow's Queensland* sets a target that Queensland will be Australia's strongest economy and recognises that innovation and skills are necessary to improve productivity.

To continue economic growth and development, the government must:

- set aside sufficient land for future economic use
- provide infrastructure and services, such as transport and freight networks and information and communication technology
- create knowledge centres based on educational, scientific and technological institutions
- provide competitively priced services, including wastewater, water and power.

Continuing housing growth will increase population-led jobs in emerging residential areas. Creating appropriate business settings in the planning of new developments will stimulate further investment in these areas.

Creating highly skilled jobs in knowledge-based industries will be important to achieve regional economic diversification. Attractive living and working environments, and lifestyle opportunities, are essential to create communities with high levels of self-contained employment.

Employment is not evenly distributed across the region. To achieve balanced growth, consideration needs to be given to the identification of additional business and industry needs in appropriate locations throughout SEQ.

9.1 Balanced and diverse employment

Principle

Develop a diversified regional economy within each sub-region that retains local jobs and builds on regional and sub-regional competitive advantages and specialisations.

Policies

9.1.1 Support expansion of the services sector and growth of specialised technology-based manufacturing with supportive locations and infrastructure.

9.1.2 Target development of high value-added and knowledge-based industries, and facilitate private sector investment in the region's economy.

9.1.3 Plan for balanced employment growth within each sub-region that builds on competitive advantage, including securing and protecting appropriate locations for future employment and enterprise expansion.

Programs

9.1.4 Maintain the SEQ Regional Plan Economic Development Opportunities Profiles through the SEQ Growth Management Program.

9.1.5 Consider employment needs and employment land requirements, including type, location and timing, when preparing local government strategic frameworks.

9.1.6 Develop industry clusters and partnerships, targeting industries relevant to each sub-region's competitive advantages and market opportunities.

9.1.7 Initiate and implement projects that support economic development of the Western Corridor.

9.1.8 Local governments to demonstrate employment self-containment in planning decisions, including planning scheme review.

Notes

Land capacity for employment is provided within the Urban Footprint to 2031. The urban settlement pattern supports the protection, expansion and enhancement of existing land and identifies further land to accommodate anticipated growth for economic and employment needs.

The plan advocates that job creation and employment diversification opportunities are maximised in all new major urban development areas and regional activity centres, including town centres, major industrial areas, ports and knowledge centres.

Opportunities for sustainable economic growth are supported through the identification and planning of appropriate land areas with sufficient diversity to accommodate a range of industrial, commercial and retail models.

The dominance of the services sector in the SEQ economy will strengthen, especially in advanced business services, knowledge-intensive industries and design-based and creative industries that are trade exposed and compete in the global economy.

The region supports manufacturing and expanding food, pharmaceutical and energy-related industries that also compete in the global economy through applied research, tailored design solutions and appropriate technologies.

To drive the future services sector and specialised, technology-based manufacturing growth, the SEQ region must:

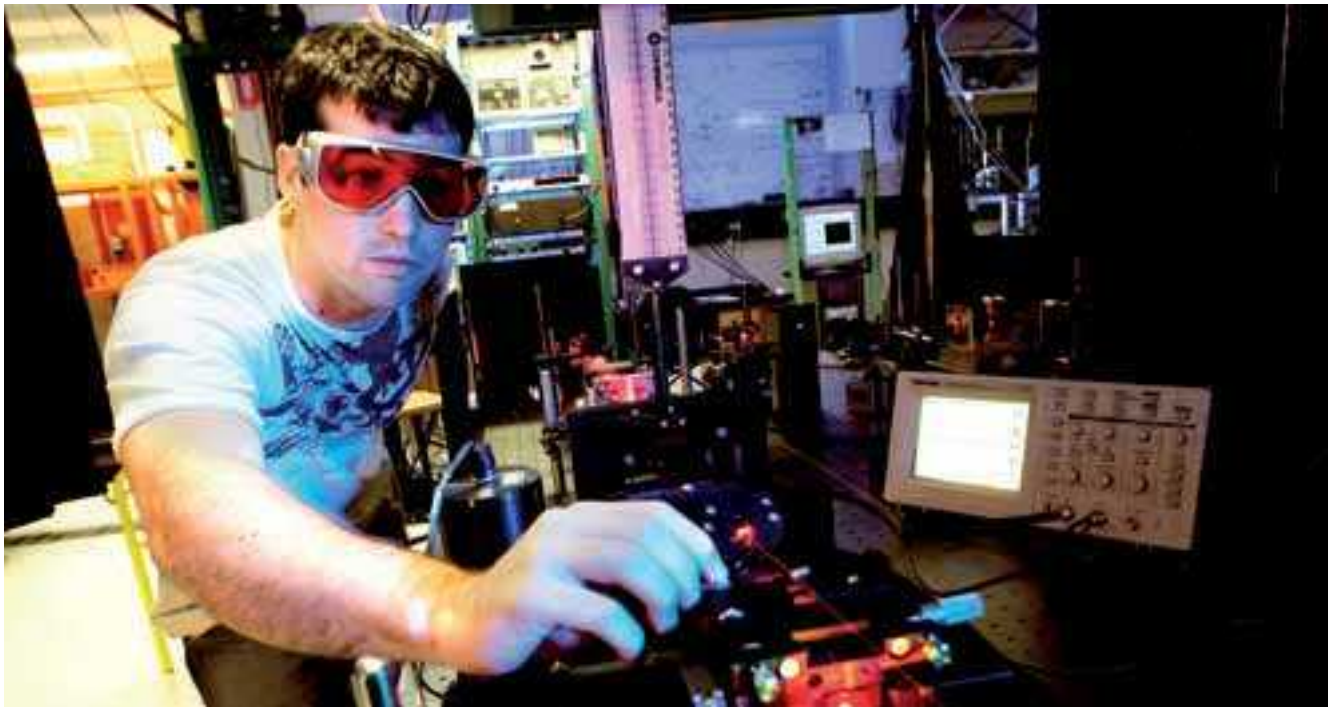
- provide business settings that accelerate innovation and creativity, and adopt appropriate technologies by traditional and new economy industries
- provide highly effective and efficient transport infrastructure, and make the best use of high-frequency public transport, active transport networks and freight routes
- provide world-class, low-cost, high-speed telecommunications infrastructure
- support the clustering of public and private research institutes, businesses that use the latest technology, and advanced business and support services.

The SEQ Regional Plan provides for employment growth through:

- providing for employment opportunities in transit corridors, Development Areas, activity centres, and enterprise precincts
- planning for industry and business lands and clusters of science and technology, and clusters of health, education and training, and protecting these lands and clusters from incompatible development
- facilitating rural enterprises, recreation and tourism activities in the rural areas of the region.

Employment is not evenly distributed across the region. In particular there is need for:

- office-based businesses and government and community services in centres outside the Brisbane CBD, particularly in high growth areas such as the Sunshine Coast, Moreton Bay, Gold Coast, Ipswich, Toowoomba and Logan
- manufacturing and logistics employment in the Sunshine Coast, Ipswich, Moreton Bay, Gold Coast, Scenic Rim, Toowoomba, Lockyer Valley, Somerset and Logan.



9.1 Balanced and diverse employment—continued

Consideration therefore needs to be given to identifying employment requirements for each sub-region—particularly in areas of high population growth. This will ensure that sufficient land is set aside for future employment use.

To achieve this, local government will consider employment needs and requirements for employment land—including type, location and timing—when preparing strategic frameworks. This will position local government to ensure that there is sufficient employment land available across each sub-region.

SEQ Regional Plan Economic Development Opportunities Profiles

Economic development opportunities throughout SEQ have been identified and mapped, with profiles prepared for each site or area.

Locations recognised as 'new economy' science and technology opportunity areas have been mapped and profiles prepared (see Map 13 and Map 14). These areas occur where the government and private sector organisations have invested major research infrastructure and where land must be secured to create future creative industry, science and knowledge-based hubs in SEQ.

The plan also identifies locations for catalytic new health, education and training opportunity areas, such as hospitals, education or training institutes, which could provide the stimulus and focus for future 'new economy' business clusters (see Map 15 and Map 16).

Map 17 and Map 18 combine the economic development opportunities clusters into larger employment opportunity precincts for local area planning by local government. The relevant science and technology; health, education and training opportunities comprising each employment opportunity are listed in Table 8.

Enterprise opportunity areas are also identified (see Map 19) where business and industry benefiting from high-quality access to regional freight corridors, proximity to workforce, and separation from conflicting uses are expected to cluster.

The opportunities have been included in the SEQ Regional Plan to outline locations for economic development in SEQ, and alert state and local governments to existing and prospective locations. This will ensure that these areas are not lost to other uses before having regard for their potential for economic development and employment.

Local government should have regard to the profiles when drafting planning schemes in order to draft statutory provisions that will facilitate appropriate uses and prevent incompatible uses. In this way essential land can be set aside for long-term economic development and employment.

The profiles are meant to be dynamic and are proposed to be released with and updated annually through the SEQ Growth Management Program in consultation with other agencies and local government. The update will review the opportunity area to see if it is still relevant to be listed, reflect any changes within the opportunity areas to be retained, and list new opportunity areas as they arise. In this way industry, and state and local government will have an up-to-date snapshot of key enterprise opportunities throughout SEQ—facilitating planning and investment for employment and enterprise activity.

9.1 Balanced and diverse employment—continued

Table 8: Employment Opportunity Areas

Employment opportunity areas Maps 17 and 18	Science and technology opportunity areas Maps 13 and 14	Health, education and training opportunity areas Maps 15 and 16
B1 Boggo Road / Buranda	B13 Pharmaceutical, Biomedical Education and Research, Princess Alexandra Hospital B14 Ecosciences Precinct, Boggo Road	B9 Princess Alexandra Hospital B10 Ecosciences Precinct, Boggo Road
B2 Chermside		B13 Prince Charles Hospital
B3 Herston / Kelvin Grove	B9 Qld Academy for Creative Industries / Institute of Health & Biomedical Innovation, Kelvin Grove B10 Qld Institute of Medical Research / Australian eHealth Research Centre, Herston	B6 Royal Brisbane and Royal Womens Hospitals
B4 Toowong	B5 Information Technology, Toowong	B15 Wesley Hospital B3 Qld Academy of Science, Mathematics and Technology, Toowong
B5 Nathan / Coopers Plains	B15 Griffith Knowledge Precinct B16 Health and Food Science Precinct, Coopers Plains B17 Innovation Park, Nathan	B11 Griffith University, Nathan B12 Griffith University, Mount Gravatt
B6 Pinjarra Hills	B4 UQ Pinjarra Aquatic Research Station	
B7 South Brisbane	B12 Education and Training Precinct, South Bank	B7 Queensland Children's Hospital, South Brisbane B8 Enterprise and Training Precinct, South Bank
B8 University of Queensland, St Lucia	B8 Qld Biosciences Precinct, UQ, St Lucia	B1 UQ St Lucia Campus
B9 Eight Mile Plains / Rochedale	B6 Brisbane Technology Park, Eight Mile Plains	
B10 Australia TradeCoast	B1 Skills Tech Campus, Eagle Farm	
I1 Amberley	I1 Amberley Aerospace and Defence Support Centre	
I2 Ipswich CBD		I3 Ipswich Hospital I4 UQ Ipswich Campus
I3 Springfield		I1 Springfield Education City I2 Springfield Health City
L1 Meadowbrook		L1 Griffith University Campus and Hospital, Meadowbrook
M1 North Lakes		M1 North Lakes Health Precinct
G1 Coomera	G1 Film and television training	G1 Film and Interactive Media Cluster G7 Coomera TAFE
G2 Robina		G2 Robina Hospital G6 Bond University, Robina
G3 Southport	G2 Gold Coast Hospital and Knowledge Precinct G3 Qld Academy of Medicine and Health Sciences	G3 Griffith University, Gold Coast G4 Gold Coast University Hospital and Knowledge Precinct G5 Qld Academy of Medicine and Health Sciences
LV1 University of Queensland, Gatton	LV1 CSIRO, Gatton LV2 UQ School of Veterinary Science	
S1 Sippy Downs	S2 Information and Communication Technology Business Hub, Sippy Downs	S1 University of Sunshine Coast, Sippy Downs
S2 Kawana		S2 Sunshine Coast University Hospital
T1 University of Southern Queensland, Toowoomba	T1 Tor Street Laboratories	T1 USQ Campus, Toowoomba
T2 Toowoomba Health Hub		T2 Toowoomba Health Hub

9.2 Innovation and technology

Principle

Plan for existing and emerging clusters of science and technology, and health, education and training, and protect them from incompatible development.

Policies

9.2.1 Secure locations with significant investment in science and technology, and health, education and training infrastructure, and allow for future expansion of these activities together with complementary businesses and services.

9.2.2 Protect science and technology, and health, education and training clusters as identified in the SEQ Regional Plan Economic Development Opportunities Profiles from incompatible development when making a decision on a planning scheme amendment or development application.

Programs

9.2.3 Create attractive business environments for each cluster that support creativity, innovation, research and development, and are attractive to new business founders and to employees with creative, business, research, technical, technology and trade skills.

9.2.4 Facilitate the provision of infrastructure support (including advanced telecommunications and high-frequency public transport services) to underpin the international competitiveness of the new economy clusters.

Notes

The private sector and the state and federal governments have invested heavily to create specialised science, innovation and technology hubs; new health, education and training institutes; and centres of business excellence. The continuing growth of Queensland's international reputation for research and development, and economic specialisations, is crucial to the region's future competitive advantage.

To retain and grow the region's global business competitiveness and create region-wide employment outcomes, locations with the best opportunities to commercialise applied research and knowledge-intensive industry clusters must be secured. These must also be linked into a network of appropriately located business enterprise areas.

These specialised science, innovation and technology activities must be able to expand at these locations, with complementary co-locating businesses and services, to create new hubs of knowledge economy activity. This is essential to achieve efficient business, commercialise applied research, stimulate creativity, and to accelerate innovation and the early adoption of appropriate technologies.

Strategically located land for existing and future innovation, science and technology hubs should be protected for the long-term from inappropriate use and the encroachment of incompatible land uses. Any proposal that could erode the future use of such land for industry and business purposes should be reviewed against the long-term business and employment needs for the land.

New and emerging business clusters are characterised by their strong relationships with education, research and development, skills development and the community. Maps 13–16 provide a snapshot of opportunity areas.

It is recognised that health, education and training institutes could provide the stimulus and focus for future 'new economy' business clusters. *Toward Q2: Tomorrow's Queensland* recognises that research and development, innovation and skills programs improve competitiveness and productivity. *Toward Q2: Tomorrow's Queensland* sets a target to increase by 50 per cent the proportion of Queensland businesses undertaking research and development or innovation by 2020.

SEQ competes directly with other Australian regions, as well as major North American, European and Asian cities. The SEQ region therefore needs to provide lifestyle and residential choices, as well as attractive working environments that appeal to new business founders, researchers and people with scarce creative, technical, technological and trade skills who want to live and work where they choose.

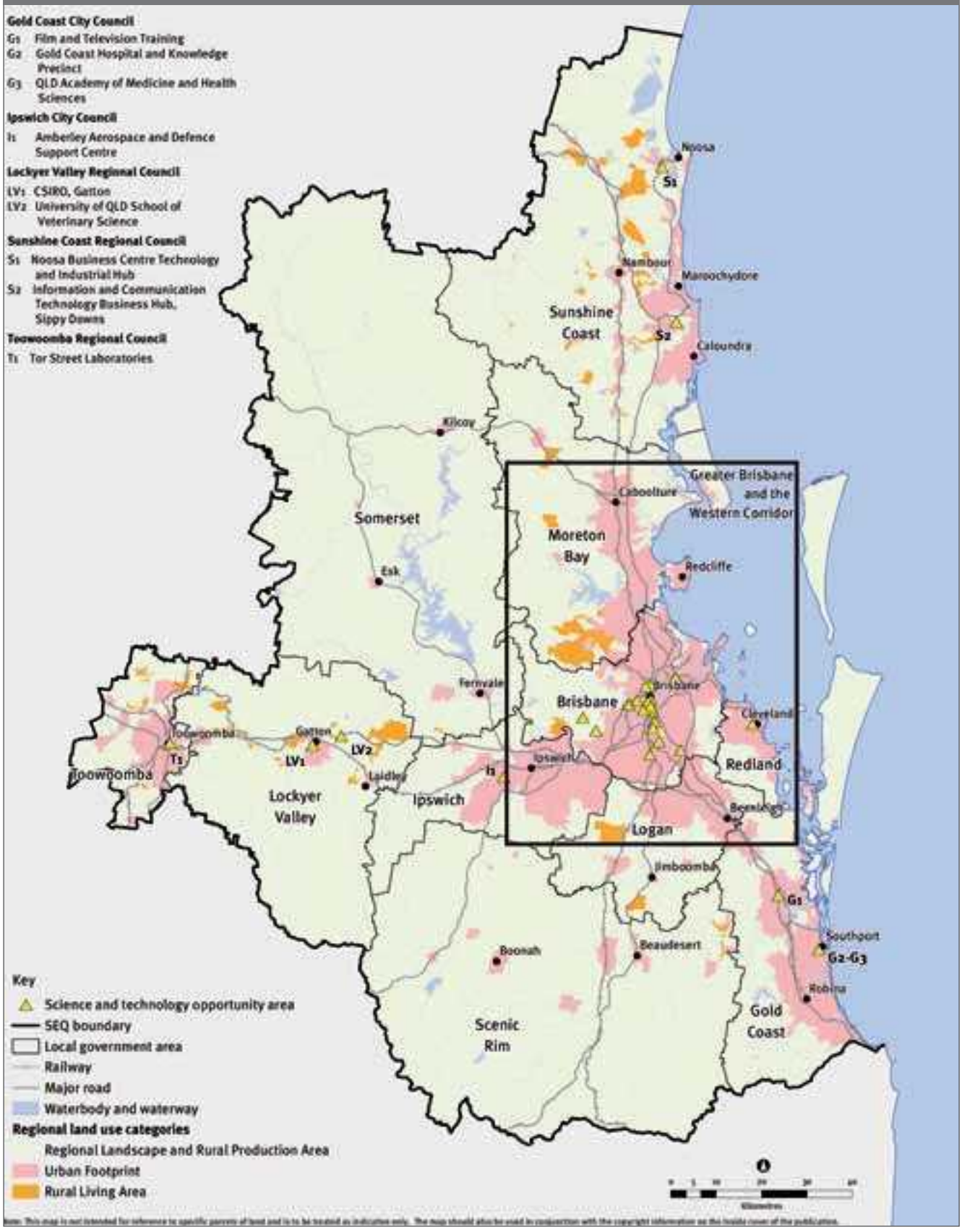
The Brisbane CBD and surrounding inner suburbs accommodate a range of specialised employment precincts including globally recognised knowledge clusters, a developing information and communications technology sector, and substantial research and development activity.

Other research and development opportunities in the science and technology sector are located in other areas of Brisbane such as the Princess Alexandra Precinct, Mount Gravatt and Nathan campuses of Griffith University, Pullenvale, Murarrie and Coopers Plains.

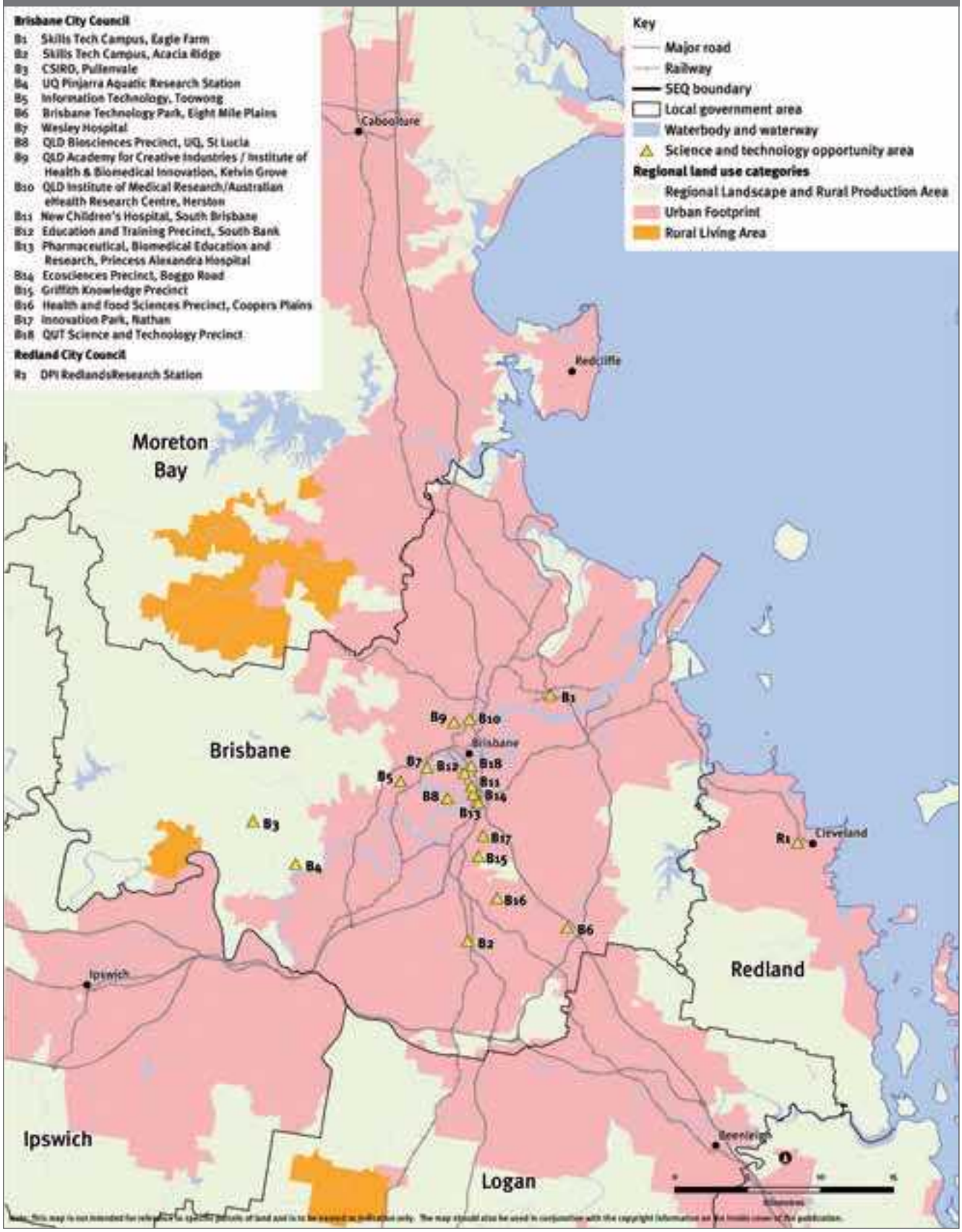
Other centres of applied research, commercialisation and business incubation are located at the University of the Sunshine Coast, Bond University and Griffith University's Gold Coast campus. The ongoing development of university campuses at Ipswich, Springfield and Gatton will be a key factor in diversifying economic activity, future business and industry development, and increasing access to education and training in the Western Corridor.

The Gold Coast is also home to a thriving information and communications technology industry, with its creative industry, film, cinema and software product hub, and other concentrations of technology-based enterprises associated with leisure and entertainment industries.

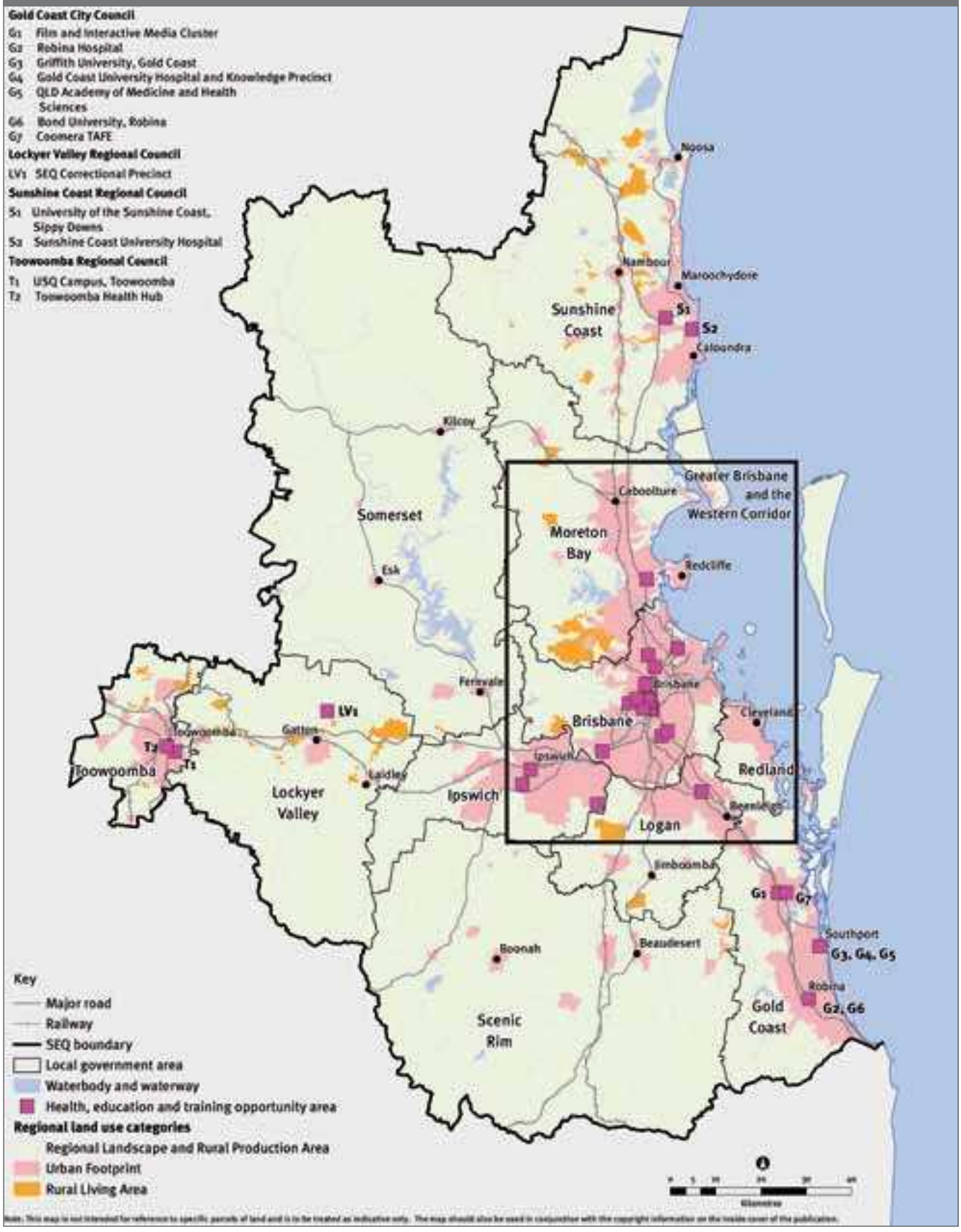
Map 13: Science and technology opportunity areas



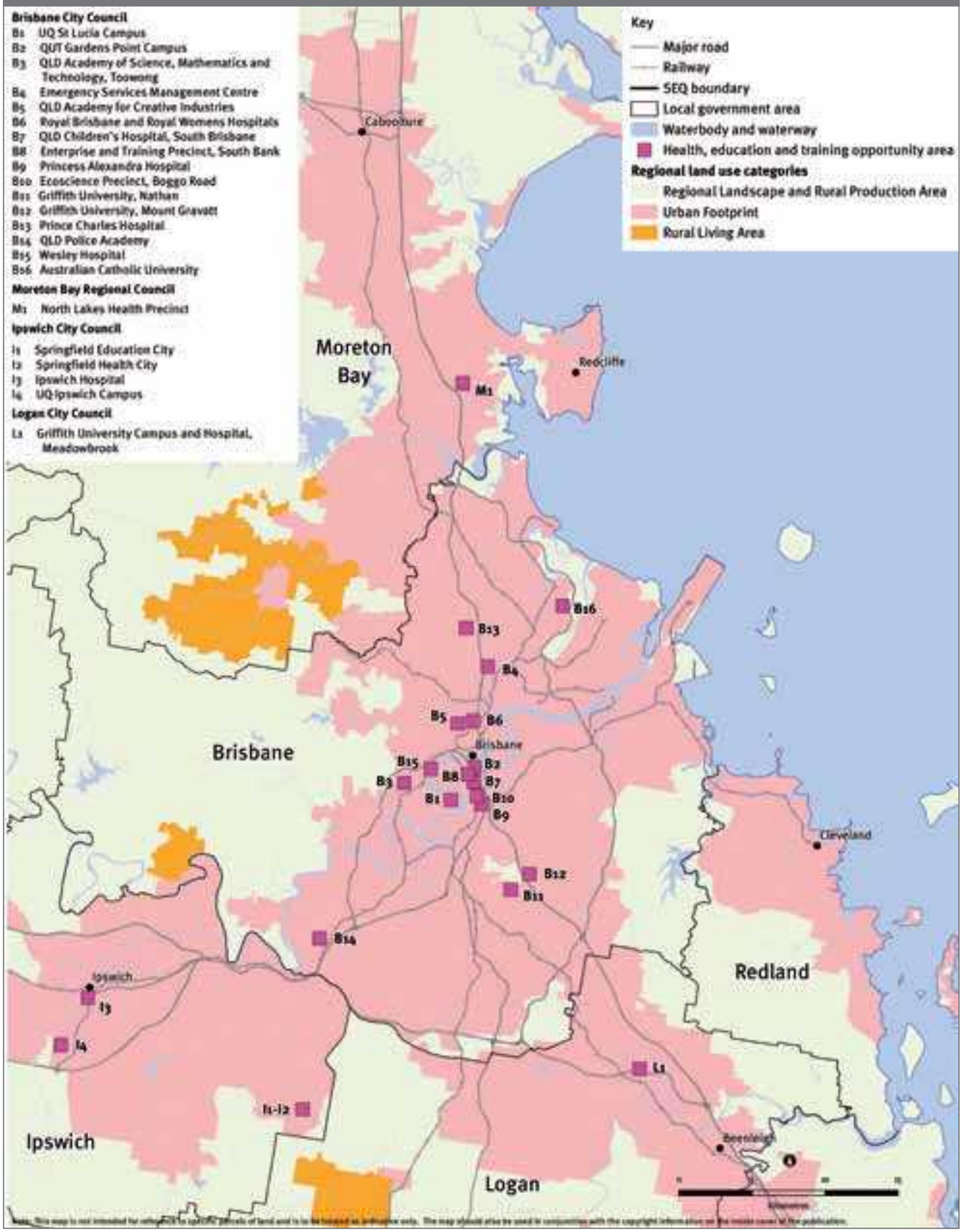
Map 14: Science and technology opportunity areas—Greater Brisbane and the Western Corridor



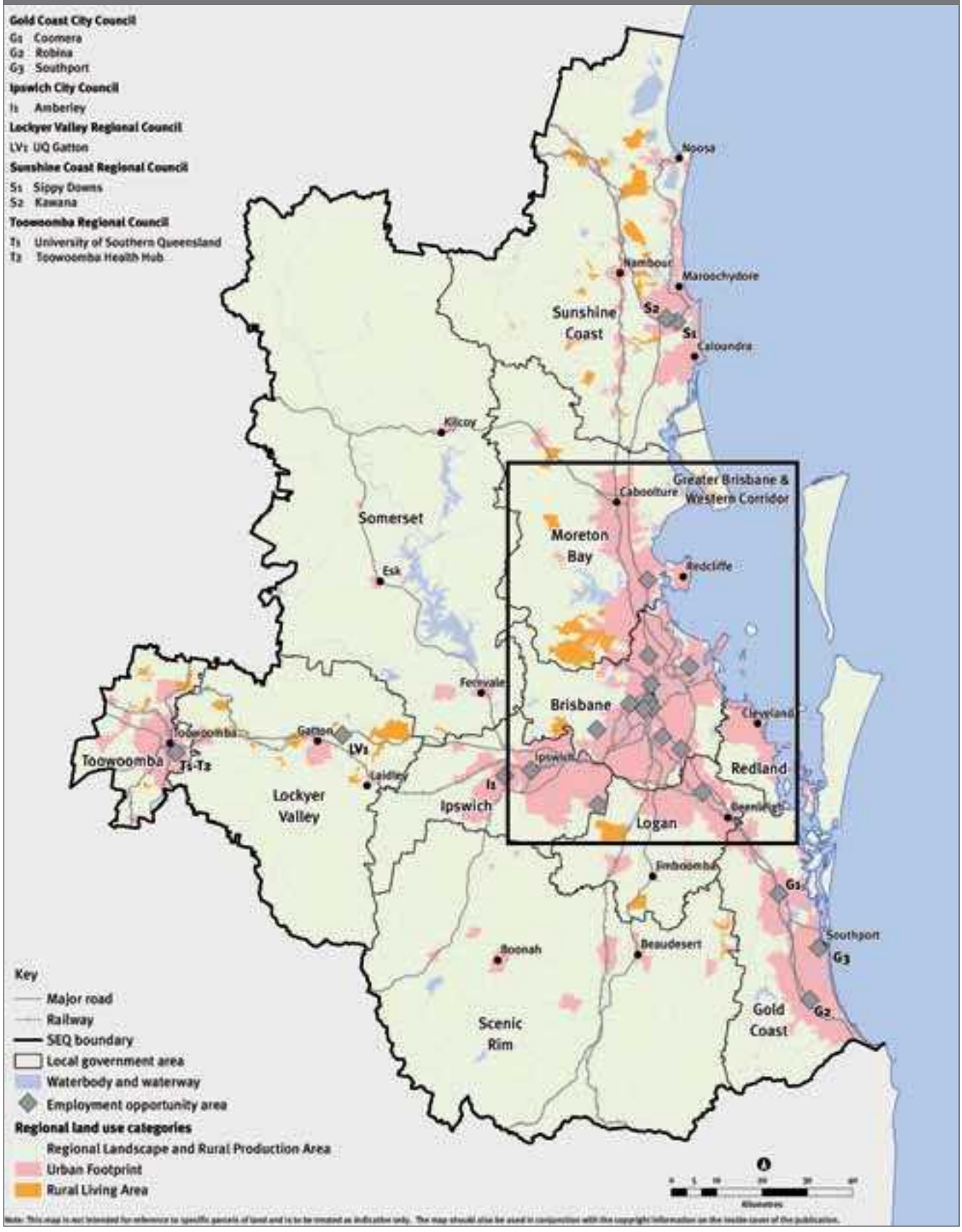
Map 15: Health, education and training opportunity areas



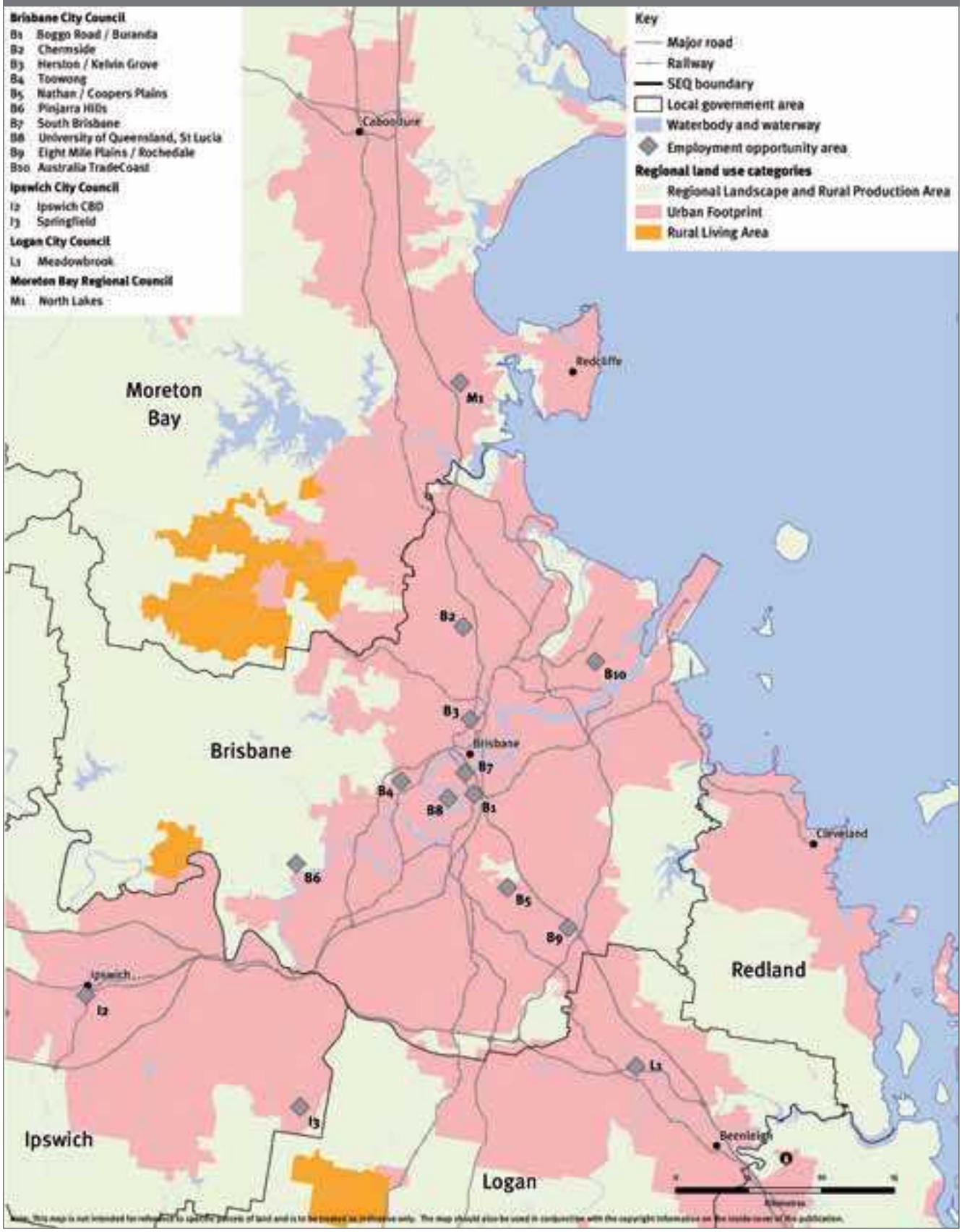
Map 16: Health, education and training opportunity areas—Greater Brisbane and the Western Corridor



Map 17: Employment opportunity areas



Map 18: Employment opportunity areas—Greater Brisbane and the Western Corridor



9.3 Enterprise opportunities

Principle

Provide sufficient land for business and industry to enable diversified, broad-based, future economic and employment growth across the region.

Policies

9.3.1 Secure strategically located land and facilitate planning for future business and industry uses to meet current and future needs of business and industry requirements, including long-term provision beyond the timeframe of the SEQ Regional Plan.

9.3.2 Protect sites and areas suitable for enterprise location from incompatible development, as identified in the SEQ Regional Plan Economic Development Opportunities Profiles, when making a decision on a planning scheme amendment or development application.

9.3.3 Protect and ensure the long-term security of transport terminals (including ports), other utilities and special uses.

9.3.4 Encourage the relocation of large-scale industrial, warehousing, transport and storage businesses from inner suburbs to release these sites for higher and better use.

Programs

9.3.5 Facilitate planning and provide infrastructure support to underpin the competitiveness of enterprise areas.

9.3.6 Create attractive enterprise business environments that support business and industry, and complementary activities.

9.3.7 Monitor industrial land supply through the SEQ Growth Management Program.

Notes

SEQ's long-term economic future depends on improving the competitiveness of local trade-exposed businesses. They must be able to expand in particular locations, such as land for marine industries requiring deep water frontage, or land for freight and logistics centres requiring rail and regional road access. This includes land for export and knowledge-based businesses requiring ready port and airport access.

Strategically located land in areas with good motorway, regional arterial, port, airport or rail access should be secured for business and industry serving the wider region, or importing and exporting goods and services outside SEQ.

Providing a broad range of economic and employment opportunities in each part of the region will reduce long-distance commuting and employment difficulties, and help grow local business.

The Western Corridor and the Australia TradeCoast will provide substantial opportunities for enterprise growth.

The state government has also committed to significant employment growth in the Western Corridor, identifying large areas of land for large-scale industries and logistics. These areas are adequately separated from sensitive land uses and have excellent freight transport links to state and national highways and rail networks. The Western Corridor will also accommodate significant residential growth, providing easy access to a workforce with the appropriate mix of skills for local industries. Additionally, the *South East Queensland Infrastructure Plan and Program* prioritises investment in transport infrastructure, and training and upgrading skills in the Western Corridor.

The Australia TradeCoast, which includes Brisbane Airport and the Port of Brisbane, is Queensland's gateway to the world and SEQ's main industrial, export and logistics hub. It is an essential driver of the region's economic growth and a significant employment generator. The area has potential to further develop as a major industrial and logistics hub on a national and international scale.

Additional lands will be required to ensure greater sub-regional self-containment of industry and business growth. An increasingly pressing need exists to provide sites for regional logistics operations that will support the rapidly growing population and emerging industries on the Sunshine Coast.

Scarce land for business and industry at strategic locations must not be squandered on land uses and activities that may have many other locational options. Strategically located land for existing and future business and industry use should be protected for the long-term from inappropriate use and the encroachment of incompatible land uses. Any proposal that could erode the future use of such land for industry and business purposes should be reviewed against the long-term business and employment needs for the land.

Complementary and competing businesses and support services should be co-located in attractive business environments. This will draw new business investment, and attract experienced employees with scarce business, technical, technology and trade skills.

High-impact and large-scale transport, manufacturing and logistics industries often have specific site and location requirements. These include adequate road access; rail access; access to high-capacity power and water supplies; access to the coast, deep water frontage, or proximity to a port; or access to airport or interstate transport services. Certain industrial activities also require spatial separation from sensitive land uses, such as residential areas. This is also relevant for activities with possible off-site impacts or those which operate outside normal business hours.

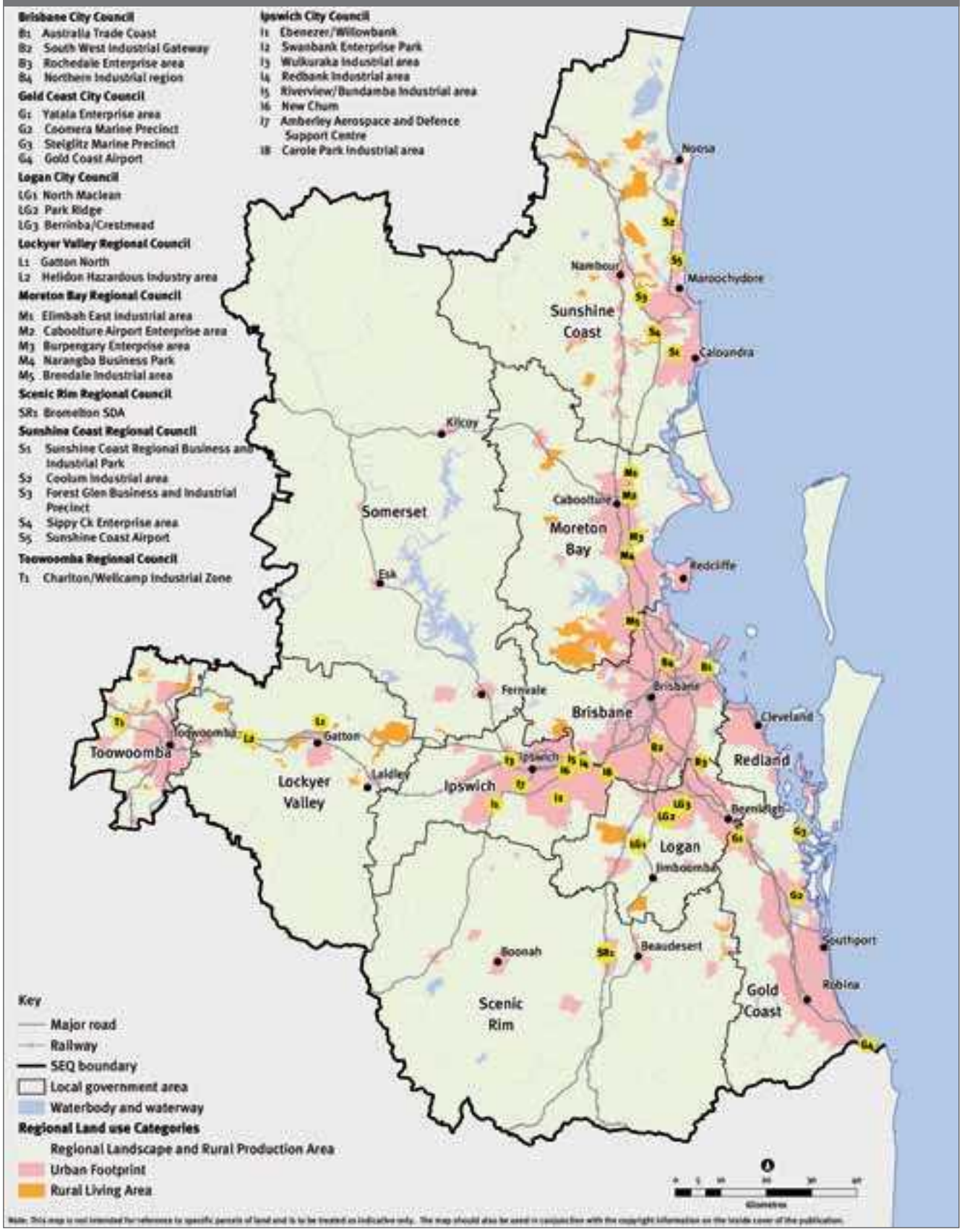
Investigations are underway in southern Queensland to identify a 50-year landbank for large-scale and high-impact industries to service the SEQ region. Studies are required to determine the suitability of areas within the region for these types of industries. Such investigations would typically address a wide range of environmental, land use, social, and infrastructure issues.

Providing sufficient land for future large logistics operations is important to SEQ's continuing economic health and export future. Major opportunities exist for a multi-modal inland port at Charlton–Wellcamp in Toowoomba and at Ebenezer–Purga in the Western Corridor. Bromelton, located on the standard gauge rail link near Beaudesert in the region's south, offers opportunities for longer term industrial development, particularly in large-scale logistics and light industry.

Morayfield Business Park Enterprise, Wulkuraka Industrial Area, Coolum Industrial Area, Steiglitz Enterprise Areas and North MacLean Opportunity Area are considered for long-term development.

Enterprise opportunity areas have been identified in the SEQ Regional Plan Economic Development Opportunities Profiles (see Map 19).

Map 19: Enterprise opportunity areas



10. Infrastructure

Desired regional outcome 10

Plan, coordinate and deliver regional infrastructure and services in a timely manner to support the regional settlement pattern and desired community outcomes.

Toward Q2: Tomorrow's Queensland sets a target for 2020 that Queensland is Australia's strongest economy with infrastructure that anticipates growth. Within the context of the SEQ Regional Plan, this includes economic (transport, water and energy), social (education, health, emergency services and corrective services) and environmental (natural areas, open space and recreational opportunities) infrastructure that supports sustainable regional growth. One of the challenges of rapid population growth with a dispersed low-density urban settlement pattern in SEQ has been providing well-located and timely infrastructure. New development should be situated in locations that allow efficient infrastructure extensions, and its form and density must support cost-effective infrastructure provision.

Key challenges for infrastructure include:

- maximising the use of existing infrastructure by managing it efficiently and effectively
- using demand management strategies to maximise the use of existing infrastructure and minimise the need for new infrastructure
- establishing a balance between upgrading existing infrastructure and prioritising, coordinating and funding new infrastructure projects
- giving priority to development in infrastructure-rich areas
- avoiding, minimising and offsetting the impacts of infrastructure
- developing innovative funding and delivery mechanisms.

The timely provision of appropriate infrastructure is also critical to achieving the Queensland Government's economic development and employment objectives. For example, industrial development in the Western Corridor is dependent on the availability of transport, power and water infrastructure.

Development proposed without existing or planned infrastructure will have to demonstrate how infrastructure can be provided and funded prior to the development being approved.

The Smart State Strategy supports education, training and skills, research and development, and innovation projects. It provides funding initiatives for infrastructure to support research facilities and technology incubators.

The *South East Queensland Infrastructure Plan and Program* (SEQIPP) outlines the Queensland Government's infrastructure priorities to support the SEQ Regional Plan. It establishes priorities for regionally significant infrastructure within a 20-year planning timeframe. The SEQIPP ensures state agencies align their infrastructure and service priorities with the SEQ Regional Plan. It also provides coordination of infrastructure and services provided by state agencies, government-owned corporations, local government and the private sector.

10.1 Supporting regional growth

Principle

Use infrastructure to support desired regional growth and help create a more compact urban pattern, cohesive urban and rural communities, and regional economic development.

Policy

10.1.1 Identify and plan infrastructure that supports the SEQ Regional Plan, shapes the preferred settlement pattern and provides greater certainty for development.

Program

10.1.2 Upgrade infrastructure and services in a timely manner to facilitate greater development and redevelopment in established urban areas, including in activity centres.

Notes

Toward Q2: Tomorrow's Queensland sets a target for 2020 that Queensland is Australia's strongest economy with infrastructure that anticipates growth. The Queensland Government has made a commitment to long-term infrastructure planning through SEQIPP. However, to remain effective, this relies on sharing information among state agencies and local government to identify, fund and deliver significant infrastructure sequenced with development.

Use of infrastructure programs to support and direct development can substantially influence the preferred settlement pattern and urban form. This includes broadhectare areas, urban infill and redevelopment sites and activity centres.

The location and timing of infrastructure delivery can also drive economic development activities and the distribution of employment opportunities.

10.2 Infrastructure planning, coordination and funding

Principle

Coordinate, prioritise and sequence infrastructure through strategic plans, programs, budgets and statutory planning.

Policy

10.2.1 Coordinate and integrate the planning and delivery of infrastructure services at regional, sub-regional and local levels.

Programs

10.2.2 Use information from the SEQ Growth Management Program, including demographic forecasts and additional dwellings in existing urban areas, to inform infrastructure planning and service delivery.

10.2.3 Update the SEQIPP annually to support the implementation of the SEQ Regional Plan.

10.2.4 Align and coordinate infrastructure plans, priorities and budgets of state agencies with the SEQ Regional Plan and SEQIPP.

10.2.5 Identify the best delivery options and funding mechanisms for infrastructure projects with due consideration of benefits, public interests and risk management.

10.2.6 Develop mechanisms such as State Infrastructure Agreements for Development Areas where appropriate.

Notes

Significant cost and service efficiencies can be achieved by improving coordination among individual infrastructure agencies and among infrastructure, land use and economic planning agencies.

The SEQIPP is the principal mechanism for identifying, prioritising and delivering infrastructure projects to support the SEQ Regional Plan. The SEQIPP is based on the principle that strategically focused infrastructure investment will help to lead and support the preferred pattern of development and achieve key policy outcomes. In some instances, this means implementation ahead of existing need.

Infrastructure coordination takes place at national, state, regional and local levels. To ensure coordination with federal and local government, the Queensland Government will continue to cooperate and consult extensively with stakeholders, industry and interest groups to achieve a shared understanding of infrastructure issues and priorities.

Funding of regional infrastructure must address whole-of-life costs to ensure equity between current and future beneficiaries and users. Where appropriate, options for funding and delivery of these projects will be evaluated through the Queensland Government's value for money framework. This framework promotes innovation and ensures maximum effectiveness of planned investment.

A number of funding and charging mechanisms are used to finance infrastructure projects and services. These include federal and state taxes, local government rates, state agency funding, special-purpose levies, user charges, private investment, public private partnerships and developer contributions. The Queensland Government has a process to identify projects that are suitable for public private partnerships.

Where the Queensland Government is providing new infrastructure to lead development ahead of anticipated demand, landowners and developers of new areas who stand to benefit significantly will be required to contribute to capital works infrastructure provision through mechanisms such as a State Infrastructure Agreement, or contribute works or land in lieu. In some instances, mechanisms such as State Infrastructure Agreements can support the timely delivery of infrastructure programs ahead of anticipated demand.

10.3 Managing demand

Principle

Manage demand and influence consumer behaviour to maximise the use and benefits of existing infrastructure, and minimise the need for additional infrastructure and services.

Policy

10.3.1 Incorporate demand management principles in transport, water, energy, built and other infrastructure planning.

Notes

Demand management aims to make better use of existing infrastructure by modifying consumer behaviour, rather than directing limited resources towards major new or upgraded infrastructure. It is commonly considered in relation to transport, water and energy resources.

Demand management initiatives can include a broad range of economic, social planning and regulatory tools, for example:

- educational or incentive measures to bring about voluntary changes to consumer behaviour, including reductions in use
- the introduction of technology to make better use of existing resources
- restrictive or pricing measures designed to reflect the true cost or increase the comparative attractiveness of alternatives.

10.4 Protecting key sites and corridors

Principle

Identify, protect and manage key infrastructure sites and corridors.

Policy

10.4.1 Identify, preserve and protect key sites, corridors and buffer areas for current and future regional infrastructure and services.

Programs

10.4.2 Identify opportunities for co-location of joint infrastructure services, sites and corridors.

10.4.3 Minimise impacts from essential economic infrastructure by providing offsets in accordance with the principles of the *Queensland Government Environmental Offsets Policy* and relevant specific issue offset policies.

Notes

To achieve the strategic intent of the SEQ Regional Plan, sites and corridors for infrastructure such as transport and freight networks, pipelines, dams, transmission lines, outdoor recreation trails and biodiversity networks must be identified and preserved well ahead of time. The SEQIPP identifies a number of investigations where, dependent on circumstances, it would be prudent to preserve potential corridors and sites at an early stage.

Environmental offsets are a key mechanism to counterbalance any unavoidable loss of environmental values. Offsets requirements arising from infrastructure development are subject to the *Queensland Government Environmental Offsets Policy* and relevant specific-issue offset policies including Vegetation Management, Koala Habitat, Marine Fish Habitat and proposed Biodiversity Offsets policies. Offsets may also be provided to enhance community facilities and recreational opportunities.

Co-locating infrastructure has the potential to reduce the need for new infrastructure sites and corridors, thereby reducing the overall cost to the community. For example, emergency services, transport and public utilities could be co-located in generic infrastructure corridors.

10.5 Energy

Principle

Provide energy generation production, transmission and distribution capacity to meet the needs of a growing population and support the use of viable low emission energy sources where appropriate.

Policies

10.5.1 Identify and prioritise additional electricity transmission lines, substations and auxiliary infrastructure required to support the preferred pattern of development.

10.5.2 Identify, preserve and acquire sites and corridors for substations, easements and other necessary energy infrastructure.

10.5.3 Ensure energy infrastructure agencies address long-term regional energy needs.

10.5.4 Ensure the use of gas as an additional energy source is considered for new developments.

10.5.5 Increase the proportion of energy derived from low emission and renewable sources to reduce greenhouse gas emissions from electricity use.

10.5.6 Encourage opportunities for low emission, renewable and decentralised sources of energy supply and supporting infrastructure.

Program

10.5.7 Identify and protect optimal locations for low emission, renewable energy resources, taking into consideration needs and constraints arising from market mechanisms, infrastructure and growth.

Notes

As a result of national competition reforms, the electricity industry in Queensland operates as an open market. The Queensland Government's principal role in this market is to ensure a supportive investment climate exists to encourage timely investment to meet emerging demands.

The Queensland climate strategy includes a comprehensive package of initiatives designed to secure the state's stationary energy supply, and balance the government's climate change response, while maintaining economic prosperity. The policy measures will ensure that the Queensland stationary energy sector makes an equitable contribution to meeting a national greenhouse gas reduction target of 60 per cent below 2000-level emissions by 2050. This will be achieved by accelerating the development and widespread deployment of low emission and renewable technologies.

The electricity generation sector is competitive, with substantial private sector interest in providing future generating capacity. The Queensland Government monitors investment activity to ensure there is adequate generation capacity for the region as it grows.

Powerlink's annual transmission network planning process takes into account forecasts of future electricity demand growth and anticipated power generation developments, including from renewable sources. New large-scale generation developments are likely to occur in locations that are outside the major electricity consumption centres in SEQ. As such, a stronger transmission grid will be needed to transport electricity to consumers from new generators such as wind farms, geothermal (hot rocks) and large-scale solar thermal as well as clean coal and low CO_2 emission gas generators. Powerlink's annual transmission network planning process is already designed to accommodate market-driven changes in generation and should be able to effectively manage the impact of changes in the generation mix in response to climate change and carbon emissions. Significant new distribution infrastructure will also be required.

Demand for gas in SEQ is increasing. As a result, challenges for the gas industry in this region include:

- ensuring transmission and distribution infrastructure can keep pace with future demand requirements and changing customer use patterns, especially in the domestic, commercial and small industrial sectors
- expanding and optimising the use of gas distribution networks
- maintaining growth in exploration and production of gas for the SEQ market
- providing a sound legislative and regulatory base for future growth of competitive gas markets.

10.6 Information and communication

Principle

Provide affordable access to high-speed broadband telecommunications.

Program

10.6.1 Expedite the deployment of high-speed broadband telecommunications in SEQ.

Notes

The Australian Government has principal responsibility for the policy and regulatory environment of the telecommunications industry. State and local governments are constrained in the range of actions available to influence investment in telecommunications infrastructure.

In recent years, the policy environment has been progressively deregulated. While a more competitive marketplace for telecommunications infrastructure has developed, the incumbent provider is still the primary supplier of the connection to the individual or end user, mainly existing copper wire connections.

There is duplicated access to advanced fibre optic telecommunications in many metropolitan areas, but gaps in infrastructure provision to most outlying and more remote areas. Fibre optic cable is still considered to be the optimal technology to provide the next generation broadband. However, other technologies, such as asymmetric digital subscriber line (ADSL) and wireless technology, will also be used in particular situations to satisfy demand, particularly in multistorey buildings, and outlying and remote areas.

At present in Queensland, different processes are applied by state and local governments when assessing approvals for telecommunications infrastructure. State and local governments are working together to review this, with the aim of providing a consistent approach to infrastructure approvals across the state.

Broadband services are an indispensable component of business growth and efficiency in modern economies, as well as being a powerful enabling technology for the information and communication technology (ICT) industry and an important ICT industry sector in their own right. The need for broadband has been recognised by the Australian Government through its commitment to a national broadband network costing $4.7 billion and servicing 98 per cent of the homes and businesses across Australia. The Australian Broadband Guarantee funding program of $270.7 million over the next four years currently provides the basis for this improvement.

The Queensland Government has also instituted improvements in the telecommunications infrastructure in Queensland through initiatives such as the Reef Network, SmartNet and Northern.net.

10.7 Waste

Principle

Reduce the need for new landfill sites by minimising waste and associated environmental impacts and maximising re-use and recycling.

Policies

10.7.1 Promote policies that recognise waste as a resource and encourage re-use and recycling of waste to reduce the proportion going to landfill.

10.7.2 Minimise greenhouse gas emissions by diverting green and organic waste from landfill, and by implementing capture and re-use of landfill gas.

10.7.3 Use demand management and pricing policies to encourage better industry and community waste management practices.

10.7.4 Develop an integrated and coordinated system for waste management across the region to encourage efficiencies, economies of scale and innovation.

10.7.5 Make provision for location of adequate sites for future resource recovery facilities across the region, including, where appropriate, creation of resource recovery precincts.

10.7.6 Adopt local solutions for waste management and resource recovery, except where sufficient economies of scale can be gained in regional facilities located close to transport infrastructure.

10.7.7 Adopt full-cost waste disposal pricing to balance the true cost of waste management and encourage waste reduction, re-use, and recycling.

Notes

The expanding population of SEQ results in more waste being produced every year. Finding ways to curb waste production and make better use of finite and precious resources is a key issue for the future sustainability of the region.

Some of the challenges for SEQ are:

- identifying appropriate locations for waste and resource recovery infrastructure within planning schemes
- stimulating investment in new resource recovery infrastructure
- improving resource recovery from households, business and building construction
- maximising transport efficiencies in the waste industry
- finding ways to reduce greenhouse gas emissions from landfills and throughout product lifecycles
- educating consumers about purchasing choices and consumption.

The *State of Waste and Recycling in Queensland 2006* report gives a high-level overview of annual rates of waste generation, recycling and waste sent to landfill.

The Environmental Protection (Waste Management) Policy 2000 and the Environmental Protection (Waste Management) Regulation 2000 establish waste management practices in Queensland to provide improved environmental outcomes. Developed in conjunction with local government and industry, this legislation benefits Queensland communities by improving the way waste services are planned and managed, and ensuring practices for the disposal of waste are safer and more cost-effective.

The policy provides a preferred waste management hierarchy and principles for achieving good waste management. The waste management hierarchy moves from the most preferred to least preferred method:

- waste avoidance
- waste re-use
- waste recycling
- energy recovery from waste
- waste disposal.

The principles for achieving good waste management include:

- the 'polluter-pays principle'—all costs associated with waste management should, where possible, be met by the waste generator
- the 'user-pays principle'—all costs associated with the use of a resource should, where possible, be included in the price of goods and services developed from that resource
- the 'product-stewardship principle'—the producer or importer of a product should take all reasonable steps to minimise environmental harm from the production, use and disposal of the product.

These principles and the waste management hierarchy provide a basis for waste management programs that may be required as a condition of approval for an environmentally relevant activity for industry, voluntary industry waste reduction programs, and state and local government waste management strategic plans.

10.8 Social infrastructure

Principle

Plan and coordinate the effective and timely provision of social infrastructure.

Policies

10.8.1 Identify and plan for social infrastructure provision in sequence with residential development.

10.8.2 Provide social infrastructure that is well located and accessible in relation to residential development, public transport services, employment and educational opportunities.

10.8.3 Identify and secure sites for social infrastructure, particularly in broadhectare developments located in outlying areas with high service and transport needs, and in development in activity centres and established urban areas identified to accommodate further growth.

10.8.4 Provide multipurpose, flexible and adaptable social infrastructure that can respond to changing and emerging community needs over time.

10.8.5 Co-locate and integrate community facilities and services to improve service delivery, and form accessible hubs and focal points for community activity, where appropriate.

10.8.6 Identify opportunities to use surplus government land or infrastructure for community purposes.

10.8.7 Engage in partnerships with the private, public and non-government sectors to collaboratively plan and deliver affordable and accessible social infrastructure.

Programs

10.8.8 Update and implement the *South East Queensland Regional Plan 2005–2026 Implementation Guideline No. 5: Social Infrastructure Planning* to inform planning for new development.

10.8.9 Develop a recreation and sport infrastructure planning implementation guideline.

10.8.10 Establish a coordination mechanism to improve information sharing and collaboration between all levels of government, non-government and the private sector for the planning and delivery of social infrastructure.

10.8.11 Undertake research into best practice, contemporary models of social infrastructure planning and provision.

10.8.12 Develop strategies to address gaps in current social infrastructure planning and provision, including cemeteries.

Notes

Social infrastructure refers to the community facilities, services and networks that help individuals, families, groups and communities meet their social needs and 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, Aboriginal and Torres Strait Islander peoples and culturally diverse people.

(Source: *South East Queensland Regional Plan 2005–2026 Implementation Guideline No.5: Social Infrastructure Planning*).

Investment in social infrastructure is essential for the health, wellbeing and economic prosperity of communities. It plays an important part in bringing people together, developing social capital, maintaining quality of life, and developing the skills and resilience essential to strong communities.

Key challenges in social infrastructure planning and provision in SEQ include:

- ensuring that existing social infrastructure has the capacity to respond to the diverse and changing community needs of the growing population in SEQ
- gaining access to and providing social infrastructure in rural and urban fringe areas
- finding available space and land for social infrastructure in established urban areas where land is limited and expensive
- gaining maximum benefit and resource efficiencies through new models of social infrastructure development and provision.

To address these challenges, it is necessary to:

- provide social infrastructure in a timely, efficient, coordinated and integrated way
- ensure social infrastructure is accessible through the integration of land use and infrastructure planning
- ensure new developments include the timely provision of social infrastructure
- secure additional space, and retain, redevelop and retrofit existing social infrastructure in development in established urban areas to address changing community needs
- provide additional and accessible social infrastructure in urban-fringe developments, rural areas and urban areas of social disadvantage.

Social infrastructure must be responsive to changing demographics and community needs. For example, an ageing population requires innovative service responses to meet changing needs. New models for the use of, and access to existing and proposed community facilities and services will be required to maximise community benefit. Flexible, adaptable, multipurpose and multifunctional facilities are better able to respond to changing needs over time.

Social infrastructure should be safely and conveniently located, accessible to public transport and pedestrian and cycle paths, and integrated with adjacent and compatible land uses. Integrating and co-locating services and facilities allows a number of uses to occur in one locality or hub. Locating facilities and services in a common space or area can assist in cost-effective delivery, enhancing access and maximising community use.

Collaborative partnerships across government, non-government and private sectors are increasingly required to fund, manage and deliver social infrastructure.

11. Water management

Desired regional outcome 11

Water in the region is managed on a sustainable and total water cycle basis to provide sufficient quantity and quality of water for human uses and to protect ecosystem health.

SEQ contains some of the most valuable waterways and bays in the state. They provide many ecosystem services such as water supply and water quality, recreational opportunities, scenic amenity, transport and food production, and have internationally recognised environmental values. The sustainable management of water and waterways requires protecting the health of aquatic ecosystems so these services can continue to meet human needs.

Freshwater is a limited resource—a fact made very real to the community by the effects of the SEQ millennium drought. Population growth and climate change will put even more pressure on the state's water resources. The response to the drought and ongoing water supply challenges has included a demand management program; a range of infrastructure projects, which form the SEQ Water Grid; and extensive institutional changes. These measures are described in the *draft South East Queensland Water Strategy* (draft SEQ Water Strategy), which aims to improve standards of water security and management to ensure a sustainable water supply.

To manage water sustainably, it is necessary to address the total water cycle. This includes managing water resources, land use, waterways, and water quality, to protect the significant aquatic environmental values that underpin the economy, lifestyle and wellbeing of the region's residents. The *SEQ Healthy Waterways Strategy 2007–2012* (SEQ Healthy Waterways Strategy) addresses aquatic ecosystem health and water quality issues in SEQ, and provides measures to avoid or ameliorate the impacts of human activities on waterways under an adaptive management framework.

11.1 Total water cycle management

Principle

Plan and manage water as a valuable and finite regional resource on a total water cycle basis.

Policies

11.1.1 Incorporate total water cycle management and water sensitive urban design principles in land use and infrastructure planning.

11.1.2 Ensure that planning and management of urban stormwater complies with the design objectives as set out in the *South East Queensland Regional Plan 2009–2031 Implementation Guideline No.7: Water Sensitive Urban Design*.

Programs

11.1.3 Undertake sub-regional total water cycle planning for key development areas and where major water infrastructure is planned, to establish objectives, design parameters and a framework for works delivery.

11.1.4 Develop and implement local total water cycle plans to integrate water cycle management issues not addressed by regional and sub-regional planning.

Notes

Total water cycle management recognises the interrelationships between the human uses of water and its role in the environment. Key principles include:

- natural cycles—minimising the alteration to natural flow and water quality regimes
- sustainable limits—ensuring that the volume of water extracted from a source is sustainable for the community and the environment
- demand management—reducing demand by minimising water use and losses, and maximising efficient use and re-use
- diversity in new supplies—considering all potential sources of water when new supplies are needed, including re-using water and stormwater
- water quality—managing the water cycle at all phases to preserve water quality for the community and the environment.

Total water cycle management encompasses all aspects of water management. This subsection provides a framework for integrating planning by organisations responsible for aspects of the water cycle. The following subsections address elements of the water cycle, and include specific mechanisms for implementation.

In selected areas where large-scale development and significant infrastructure is to occur, the Queensland Water Commission will lead the development of sub-regional total water cycle management plans. The sub-regional plans will integrate land use policy and decisions with waterway health and water supply planning for urban and rural purposes, and involve the key organisations responsible for managing the water cycle. Plans will specify the location of key infrastructure, where major wastewater recycling will occur, and high-level objectives for development to protect water quality and to capture and use stormwater. The outcomes from sub-regional planning will be recommended for inclusion in the Regional Water Security Program under the *Water Act 2000*.

For areas that are not covered by sub-regional plans, decision-making should also be based on total water cycle management principles and should involve the relevant entities with responsibilities for the water cycle. Local governments should develop total water cycle management plans that address their core responsibilities for the water cycle, while considering how they integrate with facets of the water cycle managed by other entities.

Councils' total water cycle management plans will inform planning schemes and development assessment decisions as well as local government works programs. Councils will continue to have a controlling influence over stormwater and local water cycle management through planning instruments. Local governments are required to develop stormwater management plans under the Environmental Protection (Water) Policy. These plans should be incorporated into local government total water cycle management plans, along with other relevant plans such as catchment management plans.

Water sensitive urban design (WSUD) integrates total water cycle management into the urban built form to minimise the effects of development on the natural water cycle and environmental values, and to address water supply and use. All development in SEQ is to incorporate total water cycle management principles and water sensitive design.

Specific requirements for urban development and stormwater are set out in the *South East Queensland 2009–2031 Regional Plan Implementation Guideline No. 7: Water sensitive urban design—design objectives for urban stormwater management*. This document sets minimum urban stormwater management design objectives for water quality, waterway stability and waterway management. The Healthy Waterways Partnership has published a range of design and implementation guidelines to assist the uptake of WSUD by local governments and developers.

11.2 Water supply planning

Principle

Supply sufficient water to support a comfortable, sustainable and prosperous lifestyle, while meeting the needs of urban, industrial and rural growth, and the environment.

Policies

11.2.1 Identify and protect existing and proposed water infrastructure sites and buffer areas from encroachment by development that may compromise their viability.

11.2.2 Ensure the timing and sequencing of water supply planning is consistent with the framework for urban settlement established within the SEQ Regional Plan.

11.2.3 Integrate water supply planning with planning for other elements of the water cycle through sub-regional and local total water cycle planning.

11.2.4 Allocate water for all users through water resource planning, including the provision of environmental flows that protect the biological diversity and health of natural ecosystems.

Programs

11.2.5 Secure future water supply by finalising the draft SEQ Water Strategy and updating and implementing the Regional Water Security Program.

11.2.6 Undertake detailed planning and assessment to meet the local water and sewage distribution needs for the region, within the context of regional, sub-regional, local land use and total water cycle plans.

11.2.7 Deliver the SEQ Water Grid in accordance with the Water Regulation 2002.

11.2.8 Complete detailed investigations of potential sources of water supply, including centralised and decentralised sources.

Notes

The Queensland Water Commission (QWC) was created in June 2006 to ensure a secure water supply for SEQ. The Commission developed the draft SEQ Water Strategy, to provide a plan to meet future water supply requirements to 2056. The draft strategy builds on the significant developments that have already occurred in response to the millennium drought. It includes a water supply guarantee with specified levels of service to be achieved by ensuring that available supplies always exceed demand, and water is used efficiently.

New institutional arrangements for water supply comprise a bulk supply entity (Seqwater), a manufactured water entity (WaterSecure) a bulk distribution entity (LinkWater) and the SEQ Water Grid Manager. New retailer-distributor entities, owned by councils, will be established to manage local water and sewage infrastructure, as well as water sales. These entities will be based on geographic groupings of councils, to provide more coordinated service delivery.

The Regional Water Security Program will detail supply and demand measures required to achieve water security for the region. It is guided by sub-regional planning, and can specify key water cycle objectives that must be reflected in land use and infrastructure planning. Within this framework, planning and development to ensure that local water and sewage infrastructure and services are sufficient will need to be undertaken by the relevant entities.

Land use planning must protect existing and future sites for water supply infrastructure from encroachment by development that would compromise their viability. The location of potential desalination sites is being investigated by the QWC, with interim advice released in February 2009. Sites will be classified as priority or reserve. Priority sites will be identified as potential responses to a short-term gap in supply (for example as a result of severe drought), while reserve sites are not expected to be required within the life of the SEQ Regional Plan. Final priority and reserve sites should be incorporated into planning schemes in consultation with the QWC.

Forecasts indicate that supply infrastructure will not need further augmentation until between 2028 and 2042, unless brought forward as part of the response to a severe drought. The draft SEQ Water Strategy provides a planning framework for bringing on supplies at appropriate times to meet projections of normal demand, and options for filling a potential short-term gap in supply.

The *Water Act 2000* establishes a system for the planning, allocation and use of water. Sustainable management under the Act requires that water be allocated for the wellbeing of the people of Queensland and the protection of the biological diversity and health of natural ecosystems, within limits that can be sustained indefinitely. Catchment-based water resource plans take into account surface water, groundwater and overland flow, and provide for environmental needs as well as human uses by providing secure water entitlements with a specified probability of supply. Water resource plans have been completed for the Moreton, Gold Coast, Logan and Mary basins in the region. Groundwater areas identified on Map 20 are managed by the state government, and legislative approvals may be required for taking water from these resources.

Map 20: Water resources and water grid

11.3 Efficient water use

Principle

Achieve targeted reductions in water consumption to decrease pressure on water supplies and the environment.

Policies

11.3.1 Ensure that new and refurbished buildings meet the water efficiency and water savings target requirements of the Queensland Development Code.

11.3.2 Exceed the water savings target in broadhectare development, where cost-effective compared with alternative sources of supply.

11.3.3 Utilise water use targets to inform water supply and infrastructure planning and financial assessment.

Programs

11.3.4 Implement programs that facilitate non-residential users, including businesses, to move to best practice water use.

11.3.5 Implement demand management programs to meet the water use targets in the draft SEQ Water Strategy.

11.3.6 Design and manage water distribution infrastructure to meet efficiency and loss-reduction targets.

Notes

Demand management measures significantly reduced water consumption during the millennium drought under the Target 140 provisions, from an average of 296 litres per person per day before restrictions were introduced, to 129 litres for the year to end July 2008. These measures included:

- regulations to achieve structural water efficiency
- rebate schemes to achieve water efficiency in homes and businesses
- community education and behavioural change campaigns
- water restrictions.

At the height of the drought, dam levels sank to below 20 per cent capacity. The drought ended on 20 May 2009, when combined dam levels reached 60 per cent—five years to the day since dam levels where last at this level. With the drought officially over, restrictions will be replaced across SEQ by ongoing permanent water conservation measures from 1 December 2009.

The draft SEQ Water Strategy includes a demand management program to ensure that demand remains at least 24 per cent lower than it was before the millennium drought. The residential consumption target will be 230 litres or less per person per day on average across the region. Many households, particularly those with efficient appliances and alternative water sources, will achieve well below 230 litres. To achieve these savings, efficient water use must be considered as part of planning new communities and designing new buildings. New detached houses in SEQ must meet the water savings target by supplying 70 000 litres of non-grid water per year, while each townhouse must supply 42 000 litres. Water sensitive urban design options to achieve the targets include internally connected rainwater tanks, communal rainwater tanks, stormwater harvesting, and dual-reticulation recycled water systems.

Sub-regional or local planning may specify solutions for local water supply, or development proponents should consider the most appropriate option to achieve the water savings target on a site-specific basis. Larger scale developments provide the opportunity to install cost-effective infrastructure, which exceeds the water savings target, and options should be considered as part of development planning.

From 1 January 2008, installation of rainwater tanks is mandatory on targeted categories of new commercial and industrial buildings. Rainwater tanks must be plumbed into toilet cisterns, washing machines and an external tap. All new buildings and refurbished bathrooms must have water-efficient showers and toilets under the Queensland Development Code.

All businesses must use water efficiently. Non-residential activities that use more than 10 million litres per year must complete a water efficiency management plan that demonstrates how they are achieving, or will achieve, best practice water use. Businesses using more than one million litres per year must have water-efficient appliances such as low-flow taps, trigger sprays, showerheads, urinals and cooling towers.

11.4 Waterway health

Principle

Protect and enhance the ecological health, environmental values and water quality of surface and groundwater, including waterways, wetlands, estuaries and Moreton Bay.

Policies

11.4.1 Ensure that development is planned, designed, constructed and operated in accordance with best practice environmental management to protect environmental values and meet the water quality objectives of all regional surface waters, groundwaters, wetlands and coastal waters.

11.4.2 Identify areas with high probability of acid sulfate soils and comply with the requirements and management measures in State Planning Policy 2/02: Planning and managing development involving acid sulfate soils.

11.4.3 Avoid impacts on wetlands, waterways and associated buffers.

11.4.4 Minimise impacts from required community infrastructure located in a wetland or waterway buffer on water quality, natural hydrological processes, ecological functions and ecosystem services.

11.4.5 Identify nutrient hazard areas and ensure development and activities are located, designed and managed to avoid the mobilisation and release of nutrients that increase the risk of algal blooms.

11.4.6 Avoid allocating areas identified as High Ecological Value (HEV) waters for urban purposes.

11.4.7 Ensure that the development of urban land draining directly to HEV waters demonstrates achievement of the relevant urban stormwater design objectives.

Programs

11.4.8 Protect, manage and rehabilitate riparian areas to maintain and enhance their water quality, scenic, biodiversity, ecological, recreational and corridor values.

11.4.9 Monitor environmental values and the achievement of water quality objectives to assess the health of waterways and the effectiveness of management actions.

11.4.10 Implement actions to achieve the targets in the *South East Queensland Natural Resource Management Plan* (SEQ Natural Resource Management Plan), including actions in the SEQ Healthy Waterways Strategy.

Notes

Water quality objectives are currently managed through the:

- *Environmental Protection Act 1994*
- Environmental Protection Regulation 2008
- Environmental Protection (Water) Policy 1997.

Environmental values for water are set under the Environmental Protection (Water) Policy 1997, with more detailed objectives set for key water quality parameters. Legislative and management decisions must take account of these values. Avoiding impacts from development within and close to waterways and wetlands will help to preserve the water quality, natural hydrological processes, ecological functions and ecosystem services of these important landscape elements.

Through WetlandInfo, the state government provides assistance for wetland management, including mapping and classification of wetlands. Key wetlands are identified on a map of referable wetlands.

A wetland buffer has two components:

- a support area adjacent to the wetland, which maintains and supports the environmental values of the wetland
- a separation area around the support area, which protects the wetland from external threats.

Examples of the role of the support area include:

- maintaining hydrological processes (connectivity, hydrological regimes)
- supporting biodiversity by providing habitat for semi-aquatic wetland dependent species
- allowing for wetland migration due to, for example, erosion or sea level change
- adding to the aesthetic qualities of a wetland
- providing roost sites for waterbirds
- shading fish habitats
- maintaining bank stability and condition.

The separation distance role includes:

- trapping and filtering sediments of surface run-off travelling to the wetland from surrounding land
- providing a physical barrier to herbicide and pesticide spray drift from adjacent crop dusting activities
- providing an attractive visual barrier to other adjacent land uses.

The increasing frequency and severity of algal blooms in SEQ, including the toxic cyanobacterium *Lyngbya majuscula*, pose threats to natural environments, human health, tourism and local communities. Nitrogen, phosphorus, iron and organic matter (dissolved organic carbon) are nutrients of concern that contribute to the growth of coastal algae.

11.4 Waterway health—continued

The *South East Queensland Regional Coastal Management Plan* (2006) contains maps that indicate hazardous nutrient export areas in SEQ. They also provide guidance for planning and development and link to technical guidelines such as methods for developing detailed (planning-scheme scale) hazard maps and best practice management of nutrients of concern (particularly iron and organic matter).

HEV waters are defined in the Environmental Protection (Water) Policy 1997 as effectively unmodified or other highly valued systems, typically (but not always) occurring in national parks, conservation reserves, or in remote or inaccessible locations. A number of HEV waters have been identified in SEQ, including Eastern Moreton Bay, Upper Enoggera Creek and the upper Noosa River. To protect identified HEV waters, land use allocations proposed for land in HEV waters should be for purposes other than urban development—for example, conservation, environmental, wilderness or low-impact rural purposes. Land that drains directly to a HEV water is land that does not drain via another waterway or drainage line into the HEV area.

Regional, sub-regional and local land use planning must consider the impact on environmental values of stormwater pollutants, changes to natural flow regimes and encroachment on waterways and wetlands. The impacts associated with both the construction and operational phases of development are to be addressed through water sensitive urban design including compliance with *South East Queensland Regional Plan 2009–2031 Implementation Guideline No. 7: Water sensitive urban design—design objectives for urban stormwater management*.

Programs to improve the management of existing uses and repair degraded areas include the Healthy Waterways Strategy and the SEQ Natural Resource Management Plan. The Healthy Waterways Ecosystem Health Monitoring Program Report Card provides an annual assessment of the health of fresh and tidal waters in SEQ to guide future management actions.

11.5 Drinking water catchment protection

Principle

Manage risks in drinking water catchments to achieve acceptable water quality.

Policy

11.5.1 Identify and protect existing and potential drinking water catchments from inappropriate land use.

Programs

11.5.2 Manage risks to water quality from existing land uses in drinking water catchments.

11.5.3 Address management of catchment risks in drinking water quality management plans.

11.5.4 Operate water storages, treatment plants and distribution infrastructure to ensure safe drinking water quality.

Notes

The *Water Supply (Safety and Reliability) Act 2008* includes provisions dealing with drinking water that aim to protect public health by requiring drinking water service providers to:

- undertake monitoring and reporting on drinking water quality
- develop and implement a Drinking Water Quality Management Plan approved by the Office of the Water Supply Regulator.

Catchment management is a core element of managing the quality of drinking water, and is achieved by managing existing uses, planning new development to manage risks, and rehabilitating catchments. Local government planning schemes must identify drinking water catchment areas and include appropriate development controls. Planning studies in these areas must consider how to avoid future types or scales of development that would pose an unacceptable risk to water quality. Where development is permitted, strict controls may be required to protect the natural water cycle. Infrastructure should also be located and designed with regard to water quality risks.

Seqwater has prepared guidelines on how to address development in drinking water catchments. These guidelines should be considered in planning and development assessment decisions for all land from which water flows to drinking water supplies. Map 20 illustrates the catchment areas for key storages and distribution channels.

Management of existing uses and rehabilitation is core business for drinking water providers. It will form part of their drinking water quality management plans. Actions under these plans will be complemented by programs under the SEQ Healthy Waterways Strategy, the SEQ Natural Resource Management Plan and local government management plans. Rehabilitation, such as tree planting, can have multiple benefits, including sequestration of carbon and protection of habitat, as well as improved water quality for consumption and ecosystem health.

11.6 Overland flow and flood management

Principle

Provide necessary flood immunity for infrastructure and buildings, and resilience to potential climate change flooding, while seeking to maintain the natural flow regime.

Policies

11.6.1 Avoid areas of unacceptable flood risk, including additional risks from climate change, and areas where development may unacceptably increase flood risk elsewhere.

11.6.2 Achieve acceptable flood immunity through water sensitive movement and detention infrastructure that minimises alterations to natural flow regimes, including floodplain connectivity.

Programs

11.6.3 Identify areas of flood risk, including the projected effects of climate change, and undertake programs to mitigate the risk.

11.6.4 Prepare for and respond to flooding events.

Notes

Flooding is unavoidable in certain storm events. However, planning and development decisions can reduce the occurrence and severity of floods, minimise impacts, and provide a level of flood immunity.

State Planning Policy 1/03: Mitigating the adverse impacts of floods, bushfires and landslides specifies requirements for development in flood hazard areas. The policy states that planning schemes should include strategies to address how development will be managed in a flood hazard area to achieve an acceptable level of risk on and off-site.

Development in a flood hazard area should be avoided if the earthworks and infrastructure required to attain an acceptable level of flood immunity significantly alter the natural flow regime and have an unacceptable effect on environmental values. Where feasible, natural flow and inundation patterns should be restored, including connectivity between rivers and floodplains and beneficial flooding of agricultural areas. This will also minimise the concentration of flows and flooding downstream. The flood hazard area should be determined based on a defined flood event, taking into account the effects of climate change on rainfall and storm surges.

The natural overland flow regime can also be altered by development outside flood hazard areas, such as increased run-off from impervious areas as part of urban development, and harvesting or interference with overland flows as part of agricultural activities. In urban areas, these flow alterations should be managed by using water sensitive urban design. All development should be assessed to ensure flow alterations are acceptable in relation to flood risk and environmental flows. Overland flow is regulated in the Moreton Basin under the *Water Resource (Moreton) Plan 2007*.

11.7 Rural water

Principle

Supply and use rural water in an efficient and sustainable way.

Policy

11.7.1 Incorporate total water cycle planning and rural water supply opportunities in planning processes for the Regional Landscape and Rural Production Area.

Programs

11.7.2 Support land management practices to protect waterway health through voluntary uptake of industry-led programs and incentives.

11.7.3 Create tradeable water entitlements under water resource planning processes.

11.7.4 Investigate opportunities to provide recycled water for rural irrigation.

11.7.5 Improve the efficiency of rural water use, particularly irrigation systems, through information and incentives.

Notes

Rural communities need reliable and safe water supplies to meet domestic needs and support a diversity of agricultural pursuits. Access to water has proved to be a major challenge for the rural sector in SEQ. In 2005, rural production in this area of the state accounted for about 150 000 million litres, or 24 per cent, of the region's water use.

The draft SEQ Water Strategy contains options for improving the reliability of supply and, where possible, providing additional supplies. With limits on the supply of water in the region, water efficiency is as important for rural industries as it is for urban users. The SEQ Irrigation Futures initiative helps rural industries to be more productive with the water available and prepares them for future water trading.

Opportunities to supply recycled water for rural production will be investigated as part of sub-regional total water cycle planning, which may also reduce nutrient loads in waterways. As with new and existing urban development, planning and management is necessary to ensure that rural activities do not further degrade waterway health. The SEQ Healthy Waterways Partnership runs the Healthy Country program to facilitate improved management practices in rural areas, to maintain and improve water quality and waterways.

Water resource plans and resource operations plans for the region will progressively convert existing water authorities to secure water entitlements with a clear volume, and a specified probability of supply for tradable water allocations. These conversions will apply to priority areas including surface water and groundwater.

12. Integrated transport

Desired regional outcome 12

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.

The quality of life for people living in SEQ relies on a transport system that connects the wider community with goods, services and employment.

An effective, integrated network of roads, railways, ports and airports supports the competitiveness of industry and business. Public transport provides access for the whole community, including those who do not have access to a private vehicle or who choose not to drive. Active transport networks, such as walking and cycling routes, provide flexibility as well as significant health and environmental benefits.

Transport has some negative impacts including greenhouse gas emissions, air and noise pollution, accidents and congestion. These impacts must be managed effectively to ensure SEQ's future sustainability.

Car use in SEQ is growing. Private cars will continue to be used into the future for the majority of trips in SEQ. However, with oil supply vulnerability, dependency on cars will cause financial stress to urban-fringe communities and vulnerable groups. The alternatives—public transport, walking and cycling—are more sustainable transport modes and must be made more viable and attractive.

There will be a major increase in the freight task, particularly associated with continued growth in the Australia TradeCoast area and the Western Corridor. Conflicts between the passenger and freight tasks are already evident on the road and rail networks. These have the potential to increase as the region develops.

The foundations are in place for an integrated transport system in SEQ. Brisbane City saw a 40.9 per cent rise in public transport patronage in the 10 years to 2007—the highest of any Australian city and more than twice the national average. A strong busway network has been started in the Brisbane area, and the TransLink Transit Authority (TransLink) is delivering an integrated public transport system to increase bus, ferry and train use across the TransLink area. Further planned investment in public transport infrastructure and services, especially the development of a high-frequency bus and rail network across SEQ's urban areas, will make public transport and active transport more attractive choices in the future. At the same time, new roads, better orbital road networks and improvements to existing roads are being planned to improve regional connections.

The transport components of the SEQ Regional Plan will be underpinned by the development of *Connecting SEQ 2031: An Integrated Regional Transport Plan for South East Queensland* (Connecting SEQ 2031). This will be the primary transport plan for the region and aims to manage congestion in the region, improve freight movement and increase the use of public transport, cycling and walking.

All levels of government will continue to have a role in managing and developing the SEQ transport system.

12.1 Integrated transport planning

Principle

Support integrated land use and transport planning, regional connectivity and greater levels of trip self-containment within sub-regions.

Policies

12.1.1 Develop interconnected and coordinated rail and busway networks to provide high-quality, dedicated passenger transport links across all the region's major urban areas.

12.1.2 Plan new public transport routes, facilities and high-frequency services, including priority transit corridors, to ensure safe and convenient passenger accessibility, and support the interrelationship between land use and transport.

12.1.3 Support transit oriented communities and regional activity centres with priority public transport networks and services and safe cycling and walking routes.

12.1.4 Ensure the planning and development of urban areas supports walking, cycling and public transport.

12.1.5 Provide a multi-modal transport network to connect established urban areas to new broadhectare and employment areas.

12.1.6 Align transport plans, policies and implementation programs at regional and local levels across all modes.

Program

12.1.7 Finalise and release Connecting SEQ 2031 to manage congestion, improve freight movement and increase the use of public transport, cycling and walking.

Notes

The SEQ Regional Plan emphasises the need for better integration of transport and land use planning. Integrated transport planning recognises the complementary roles that roads, public transport, cycling, walking and land use arrangements play in a sustainable transport system.

The ability to achieve the compact urban settlement pattern advocated in desired regional outcome 8 is subject to a significant shift in the region's transport framework, with a strong emphasis on improving the public transport system. Policy directions include more compact forms of urban development, self-containment of travel and developing public transport spines for the Sunshine and Gold Coasts, and expanding Brisbane's busway and passenger rail network. Fast passenger rail travel between all of the region's major urban centres will be the backbone of the public transport system. The planned strategic transport network of 2031 for the region and sub-regions is shown on Map 21, Map 22, Map 23 and Map 24.

The SEQ Regional Plan identifies some of the tools that will be used to ensure better integration of land use and transport planning in urban developments. These include the planning process for broadhectare areas and developing State Infrastructure Agreements.

Transit oriented communities and regional activity centres are essential components of urban structure and form. Transport investment by the Queensland Government, particularly in public transport, will support transit oriented communities, regional activity centres and priority transit corridors.

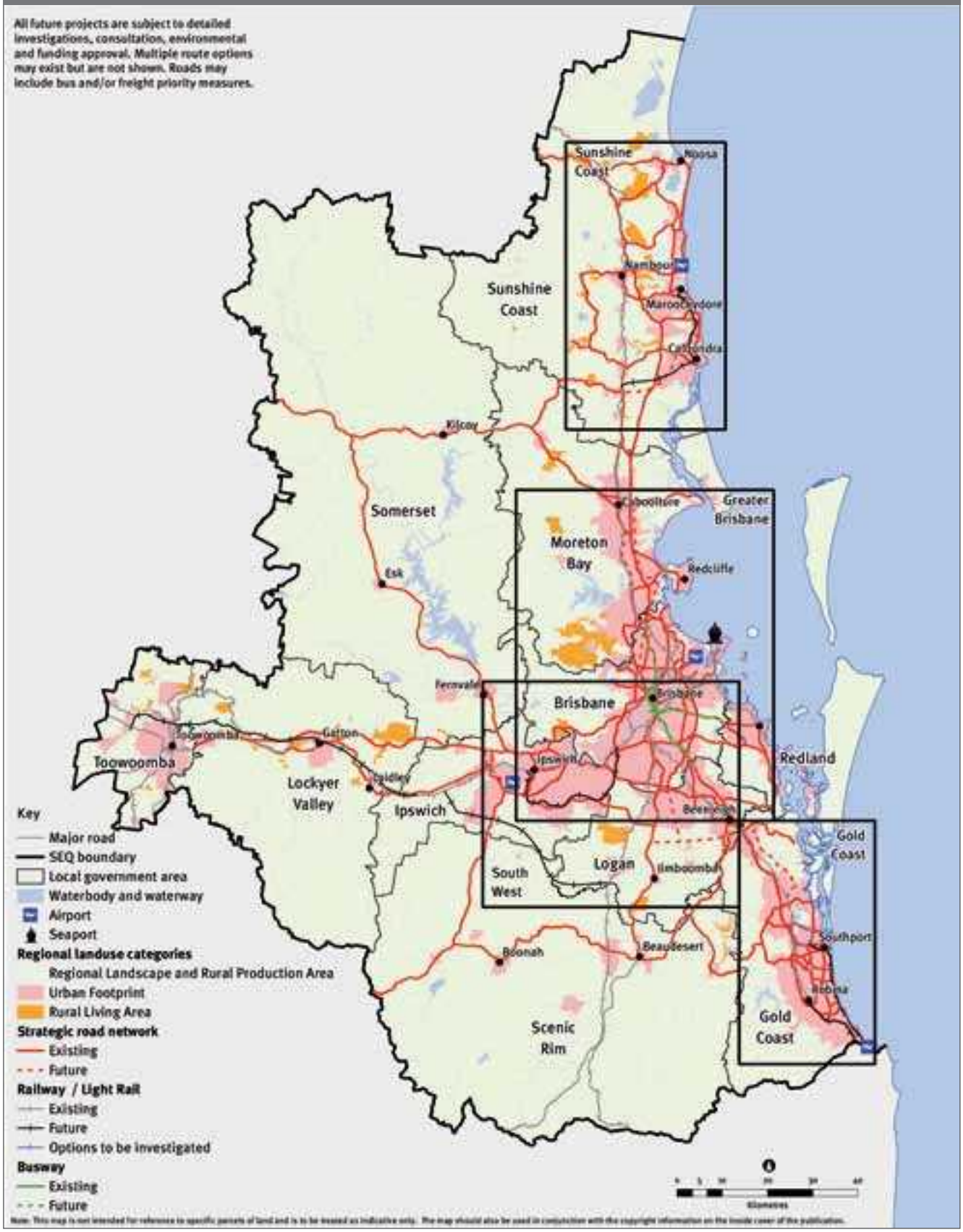
Priority transit corridors will be identified in Connecting SEQ 2031. They are key public transport routes where mixed-use, public transport supportive activities and development are to occur within 400–800 m of public transport stops and stations. Development should achieve land use densities within these corridors of 40 dwellings per hectare or greater.

Jobs should be located in highly accessible locations, such as regional activity centres and high-frequency and priority public transport corridors, to maximise transport investment benefits. However, some areas will need to cater for employment that predominantly depends on private cars and commercial vehicles. Consideration must be given to the capacity of the transport system to deal with the resultant increase in travel demand.

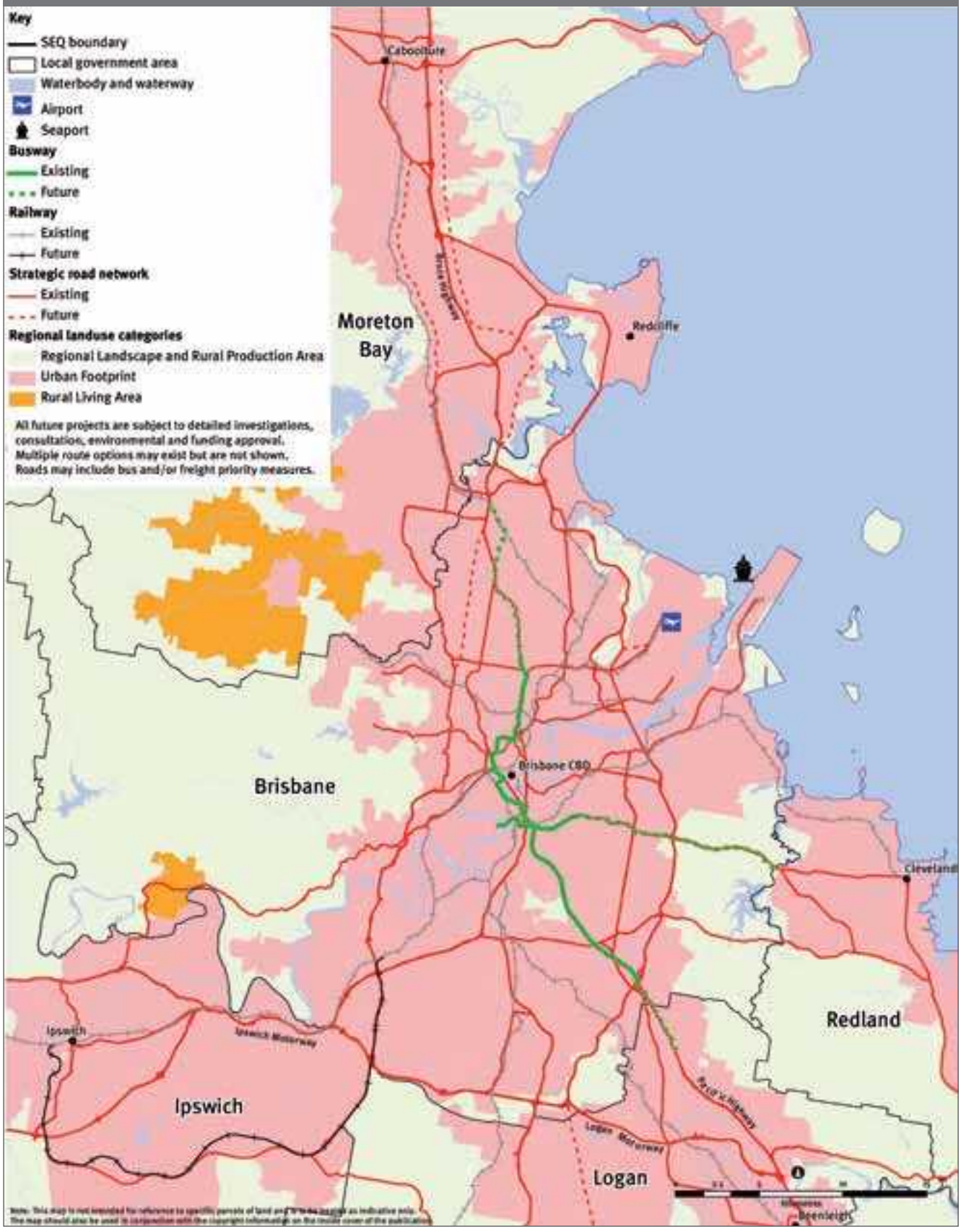
Every community has individuals and groups for whom transport choice is limited—these include the elderly, disabled, young and people without private transport. A community-based transport solution, which can be initiated at a local level, may provide access to activities and services, reducing community isolation and encouraging social interaction.

To provide further detail on implementing the integrated transport and land use aspects of the SEQ Regional Plan, the Department of Transport and Main Roads will develop Connecting SEQ 2031. The transport policies and regional transport infrastructure priorities of Connecting SEQ 2031 are intended to guide future SEQ Infrastructure Plan and Program (SEQIPP) reviews. Connecting SEQ 2031 will be supported by integrated local transport plans which local government will prepare and update.

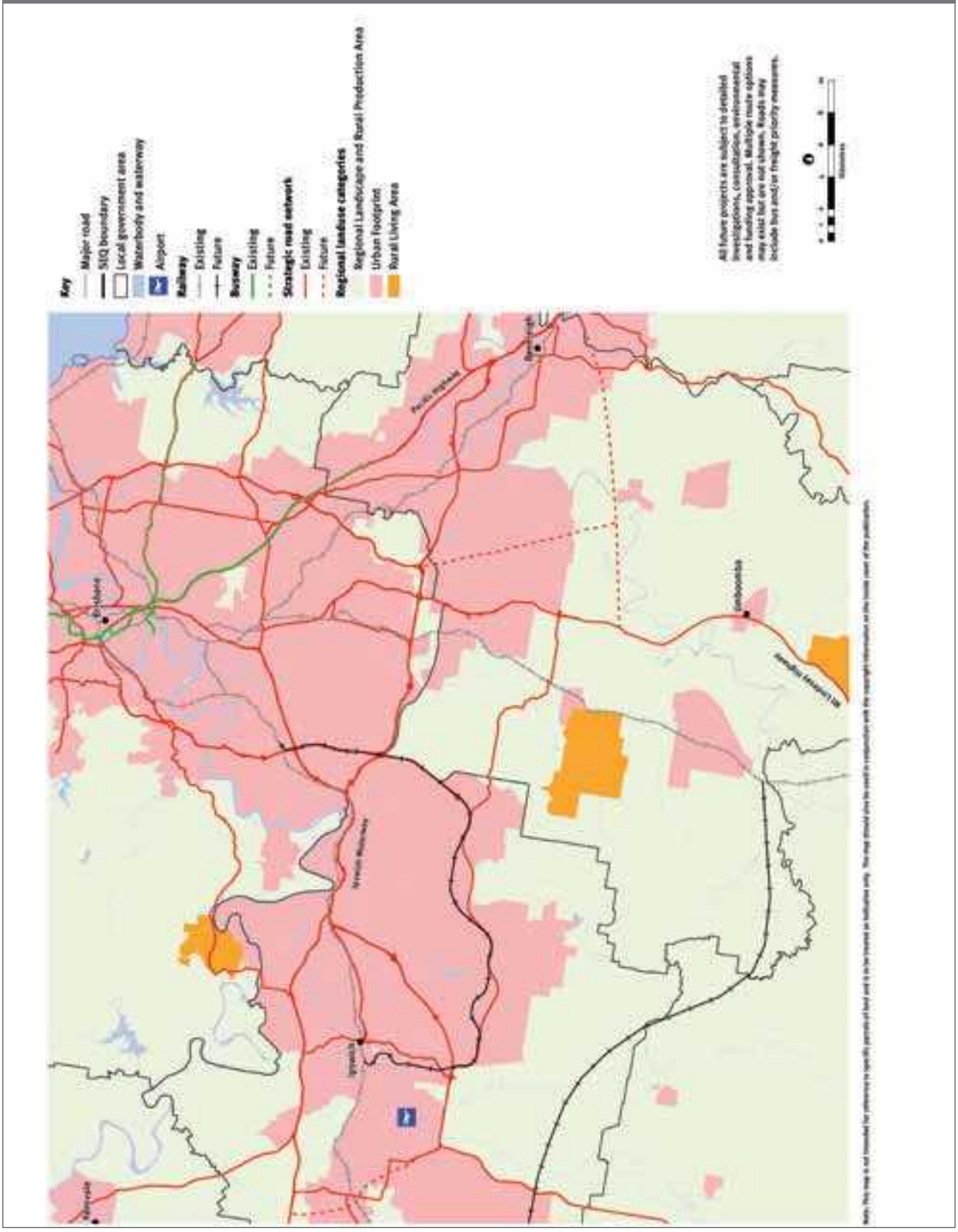
Map 21: Strategic transport network 2031



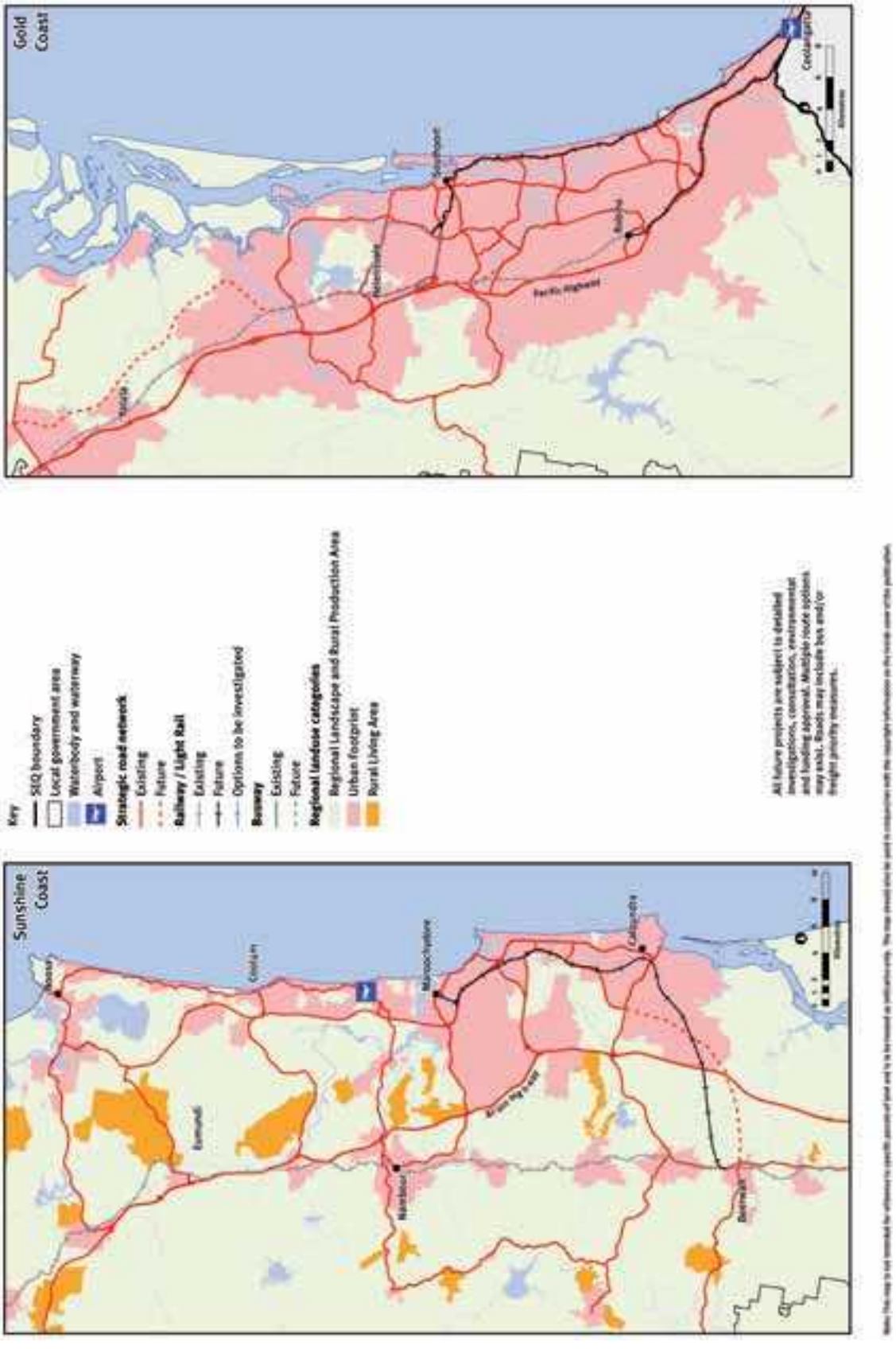
Map 22: Strategic transport network 2031—Greater Brisbane and the Western Corridor



Map 23: Strategic transport network 2031—South West



Map 24: Strategic transport network 2031—Sunshine Coast and Gold Coast



12.2 Sustainable travel and improved accessibility

Principle

Provide sustainable travel choices to support the accessibility needs of all members of the community, manage congestion, reduce car dependency and reduce greenhouse gas emissions.

Policies

12.2.1 Develop a high-quality and frequent public and active transport network linked to regional activity centres and other significant trip generators.

12.2.2 Support walking, cycling and public transport use with new infrastructure, improved services and information.

12.2.3 Increase awareness of options for sustainable travel and influence travel behaviour to reduce dependence on private car travel.

12.2.4 Adopt a regional approach to manage parking to support transport objectives and regional activity centre functions.

12.2.5 Support community-operated transport services that connect rural communities to service centres.

Programs

12.2.6 Develop and implement a 10-year Network Plan for public transport services in the TransLink service area.

12.2.7 Implement the *South East Queensland Principal Cycle Network Plan* and the *Action Plan for Walking 2008–2010*.

12.2.8 Develop and implement an Urban Congestion Management Strategy for SEQ.

Notes

Access to a public transport system that conveniently connects people with goods, services, places and other people is essential in a large and vibrant urban region.

A high-quality public transport network in SEQ will:

- support increased urban densities around public transport nodes and along public transport corridors
- provide access to community services and employment
- reduce commuter travel time, travel stress and loss of productive work time
- improve environmental outcomes by reducing the number of private motor vehicle trips
- improve travel choices, particularly for people disadvantaged in their access to transport.

Connecting SEQ 2031 will replace the *Integrated Regional Transport Plan 1997* and will be based on achieving the following desired outcomes:

- amenity and liveability
- equity and accessibility
- economic prosperity and employment growth
- efficient transport
- managed congestion
- environmentally responsible transport
- individual physical activity for health
- a resilient system
- safety and security.

From 2008 to 2012, the TravelSmart programs will continue to promote a change in travel behaviour targeted at communities, workplaces and schools.

The TransLink Network Plan sets out a 10-year vision for the public transport system. It includes a four-year program, which will be updated annually and will cover rail, bus and ferry public transport services, ticketing and information.

The SEQ Regional Cycle Network Plan identifies key links in the regional cycle network. The plan is used to prioritise and guide state investment in cycling. The *Action Plan for Walking 2008–2010* focuses on acknowledging walking as a sustainable transport mode.

An Urban Congestion Task Force has been established by the Queensland Government to coordinate a whole of government response to urban congestion and to develop an Urban Congestion Management Strategy.

12.3 Effective transport investment

Principle

Invest in the transport system to maximise the use of existing infrastructure and community benefits, reduce greenhouse gas emissions and vulnerability to oil depletion.

Policies

12.3.1 Integrate transport infrastructure, services and land use planning by sequencing Development Areas and aligning transport investment.

12.3.2 Support a range of measures to improve travel choices, including policy, education, infrastructure and services, regulation, demand management, marketing and non-transport solutions.

12.3.3 Develop and manage strategic road and rail links to regional Queensland and other states.

12.3.4 Review transport investment priorities to take into account the maximum use of existing infrastructure, the whole of life costs (construction plus operation) and environmental implications.

12.3.5 Review transport investment priorities to ensure that the future transport system is resilient to oil depletion and climate change impacts.

Program

12.3.6 Prepare the *South East Queensland Infrastructure Plan and Program* (SEQIPP) on an annual basis to prioritise the provision and timing of transport infrastructure investment.

Notes

Investment in transport infrastructure, public transport services and new policy measures will be a major contributor to the preferred future for SEQ.

The SEQ Regional Plan strongly supports public transport and active transport modes such as walking and cycling. The early planning and provision of public transport services and walking and cycling networks in emerging communities will ensure residents have access to sustainable transport choices from the outset.

New connections in the road system, where needed, will assist in improving traffic flow and supporting growth. This can also be achieved through using road space more efficiently, for example through providing bus-priority or high-occupancy vehicle lanes in peak periods. Ensuring easy movement for commercial and freight vehicles, particularly in off-peak times, is also important.

The SEQIPP is the main instrument for coordinating the planning and prioritising the delivery of regionally significant transport infrastructure within SEQ. Detailed implementation of transport projects in the SEQIPP will occur through agency programs such as the Roads Implementation Program, the TransLink Network Plan, the Australian Government's AusLink program and through local government works programs.

12.4 Transport system efficiency

Principle

Provide an efficient and integrated transport system for the region.

Policies

12.4.1 Maximise the use of existing transport assets and services by effective transport investments and policies, demand management and the use of new technologies.

12.4.2 Identify, protect and manage key existing and future transport sites and corridors.

12.4.3 Improve connectivity to regional activity centres and cross-regional links between centres and enhance road and public transport networks to provide a hierarchy of alternative routes.

Notes

Transport system efficiency refers to the ability of the transport system to satisfy the community's transport needs at least cost. This includes maximising benefits from investment in existing transport infrastructure and systems. It considers whole-of-life asset costs, system connectivity, travel speeds and economic and social costs. The SEQ Regional Plan promotes a future transport system for the region that will provide the maximum transport benefit for the lowest transport cost, for both people and freight movement.

It is critical to identify and protect future transport corridors to support longer term land use and development. A joint approach between state and local government will ensure that planning schemes reflect the strategic long-term importance of these corridors. The corridors include principal cycle routes.

In parts of SEQ there are missing links in the transport network that result in poor connectivity for some urban areas. These deficiencies limit opportunities for desired local interaction and self-containment. In these locations new or upgraded arterial routes are required to provide for efficient movement and other desired regional outcomes.

Designing and maintaining infrastructure so that whole-of-life asset costs are minimised is particularly important in the region's high-traffic areas, where maintenance works on major roads and rail systems can cause significant delays.

New technology provides the opportunity to significantly enhance the operation of the road network. A cooperative approach between all levels of government in applying new technology will improve road system efficiency. Examples include managing access to the road network for higher mass limit vehicles, providing information to road users, and coordinating traffic signals and other road network management initiatives. Similar benefits from new technology are also available for rail, sea and air networks.

The region has several important national and inter-regional transport assets that must be supported with local transport links. These include the:

- Australian TradeCoast including the Port of Brisbane and Brisbane Airport
- Gold Coast and Sunshine Coast airports
- rail links to regional Queensland and the standard gauge line to Sydney and Melbourne
- national and state highway networks.

AusLink

The Australian Government bases transport investment on the AusLink National Transport Network. The national network is an integrated network of land transport corridors of national importance.

Key transport corridors of interest to AusLink in SEQ are the:

- Ipswich Motorway
- Bruce Highway
- Brisbane Urban Corridor
- Cunningham Highway
- Port of Brisbane Motorway
- Sydney to Brisbane Railway
- Pacific Motorway and Pacific Highway
- Warrego Highway
- Gateway Motorway and Bridge
- Logan Motorway
- proposed inland rail freight corridor
- North coast rail line.

Improvements to the above assets will be negotiated with the Australian Government through the AusLink process.

Infrastructure Australia

Infrastructure Australia is a statutory advisory council that advises the Australian Government on infrastructure priorities and investments. It conducts audits to determine the adequacy and capacity of nationally significant infrastructure, including transport infrastructure. It develops an infrastructure priority list to guide public and private investment.

12.5 Efficient freight services

Principle

Provide an efficient and integrated freight transport system for the region to enhance SEQ's position as a major national and international freight and logistics centre servicing the Australian east coast.

Policies

12.5.1 Develop partnerships between all levels of government and industry stakeholders to improve freight efficiency and movement to, from and within the region.

12.5.2 Integrate planning for freight services into all transport and land use planning for SEQ.

12.5.3 Protect the strategic freight network while managing the impacts of freight in urban areas.

12.5.4 Ensure that land accessible to the priority freight corridors and the ports is protected for industry, logistics and other low-density uses that require space or necessitate high volumes of commercial or freight trips.

Program

12.5.5 Develop and implement an SEQ regional freight network strategy, including freight interchange requirements.

Notes

Freight movements across Queensland are forecast to double by 2020. There will be rapid growth in SEQ with expanding import and export activities in the Australia TradeCoast area. The ability to easily move freight into and around SEQ will be essential for economic growth.

The challenges in managing road freight include protecting future freight routes and ensuring road space is shared effectively among heavy vehicles, passenger vehicles and other road users. For rail, challenges lie in improving rail's share of the freight task, particularly for heavy long distance loads, and in managing the demand from rail passengers and freight on a limited number of rail lines in the metropolitan network.

It is important to clearly define the required freight function of road and rail networks, to inform the location of future economic activities.

For rail freight, initiatives in the SEQIPP include:

- expanding the capacity of the Acacia Ridge rail terminal
- increasing rail capacity through the metropolitan network to the Port of Brisbane
- increasing capacity on the northern line
- investigating new inland port options and associated infrastructure upgrades
- integrating with any future inland rail proposals.

For road freight, initiatives in the SEQIPP include:

- supporting economic development in the Western Corridor by upgrading strategic road freight corridors
- improving freight flows into and around the Australia TradeCoast
- ensuring Priority One road freight routes are adequately developed to handle their share of the freight task.

Map 25 and Map 26 show a strategic freight network for SEQ. Priority One road freight routes facilitate high-volume, business-to-business freight movements. Priority Two road freight routes allow freight to be distributed from factories or distribution centres to retail outlets or warehouses. The maps also include priority freight links for further investigation.

12.6 Coordinated air and sea transport

Principle

Provide efficient air and sea transport to service both freight and passenger needs in SEQ.

Policies

12.6.1 Support development of regional airports as significant economic and social links for regional communities.

12.6.2 Provide transport infrastructure to support the primary role of regional air and sea ports.

12.6.3 Protect and enhance the freight routes to the Australia TradeCoast.

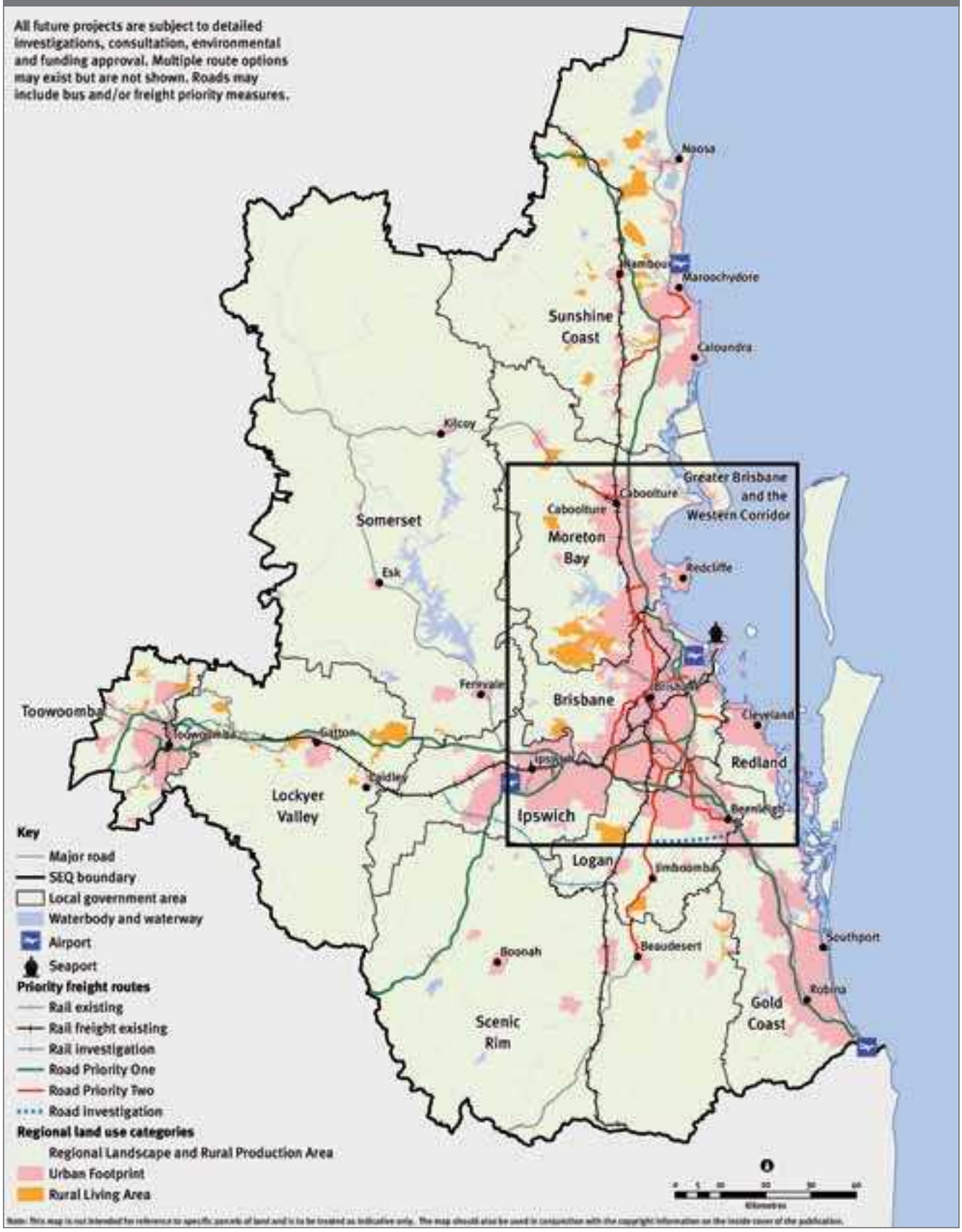
Notes

Brisbane Airport is a major international gateway for air transport to and from eastern Australia and SEQ. Gold Coast (Coolangatta) and Sunshine Coast (Maroochydore) airports also provide scheduled services to and from the region. A major Royal Australian Air Force Base is located at Amberley. SEQ also has a number of other airports, including Archerfield, Caboolture, Caloundra, Toowoomba and Redcliffe. A study on the relocation of the Caloundra Airport is underway. These and other local airports play an important economic and social role in SEQ. Increasingly, they are a focus for a range of employment and land use options.

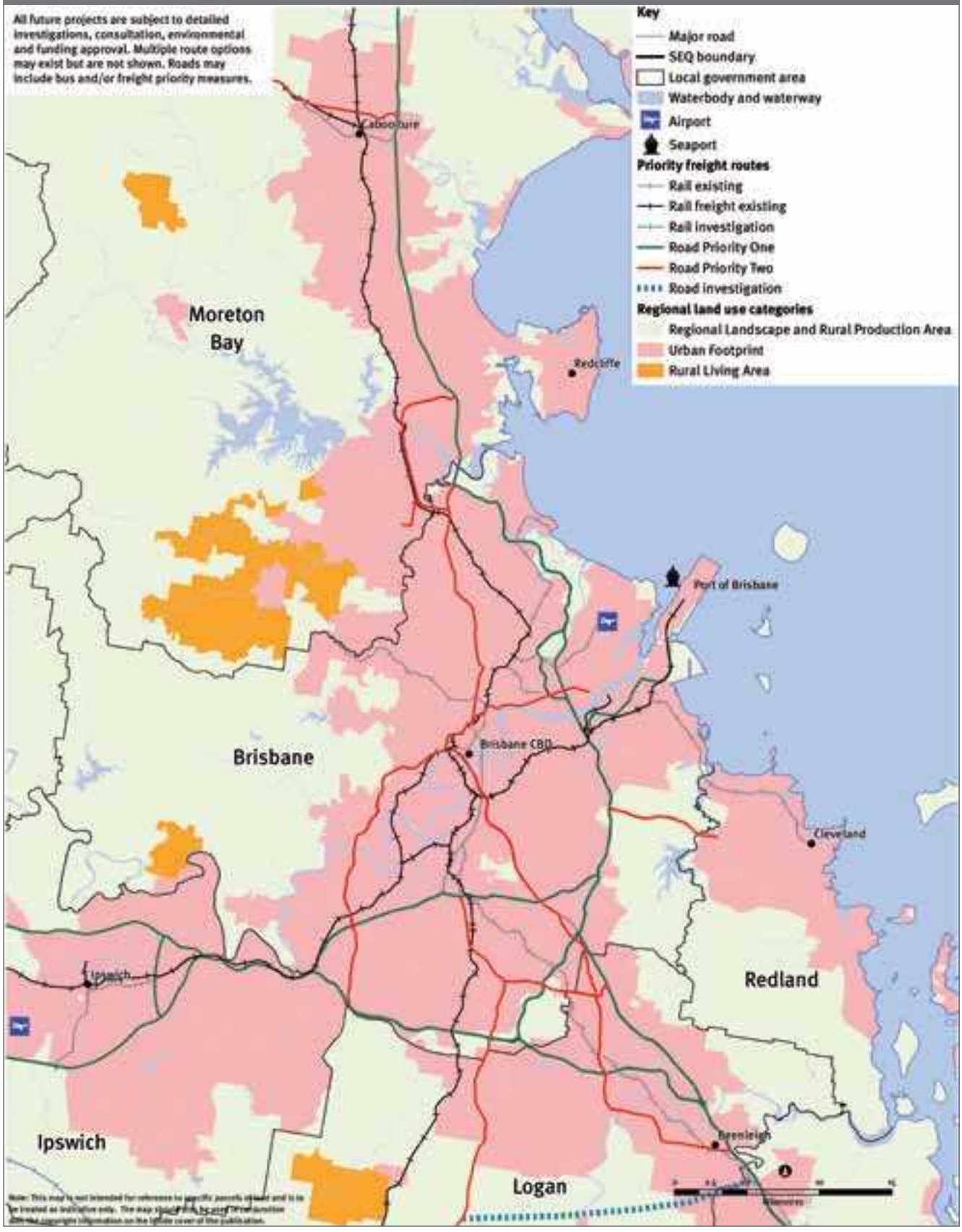
Development areas related to the air transport industry are located around the Brisbane Airport and Amberley Airbase. The Australia TradeCoast will continue as a major regional employment generator in the future. The Amberley aerospace precinct will also have a major role to play as a significant and increasing employment generator in the Western Corridor.

Sea transport is important to SEQ and the Port of Brisbane makes a major contribution to the regional, state and national economy. The Port of Brisbane handles more than 25 million tonnes of bulk and non-bulk freight, and in excess of 650 000 standard containers each year. Access to the port is by a dual gauge rail line and the Port of Brisbane Motorway. Continued development of the Port of Brisbane and associated land facilities have the potential to make the port a major national logistics centre.

Map 25: Priority freight routes



Map 26: Priority freight routes—Greater Brisbane and the Western Corridor



Part E—Implementation and monitoring

The regional plan is a framework to achieve good planning, management, and development in the SEQ region. It is both a statutory and strategic plan.

The regional plan is given statutory effect by:

- its inclusion in the statutory processes of the *Integrated Planning Act 1997* (IPA)
- the desired regional outcomes (DROs), which establish principles and policies that must be followed for the regional plan to achieve the vision
- the sub-regional narratives, which inform delivery of the regional plan through strategic frameworks, structure planning for Development Areas, investigations required for Identified Growth Areas, and development decisions
- the urban growth boundary that sets out the Urban Footprint
- a regional land use map that indicates which areas are protected as Regional Landscape and Rural Production Areas or Rural Living Areas
- regulations that restrict urban development outside the Urban Footprint
- the identification of Development Areas in the Urban Footprint
- the process within the IPA for development of Development Areas.

The regional plan operates in conjunction with other statutory planning tools including state planning policies, local government planning schemes, state planning regulatory provisions and development assessment process. The regional plan also reflects other legislation and state policies relevant to planning in SEQ.

The SEQ Regional Plan contains programs to be implemented over the life of the plan for the coordination of activities to achieve the desired regional outcomes (DROs). Implementing the SEQ Regional Plan also involves coordinating and reviewing the plans, infrastructure projects and services of other government agencies.

The SEQ Regional Plan is given strategic effect by the cooperation of the community, industry and stakeholders in coordination with government. This strategic implementation is central to achieving a sustainable region, as it creates an informed community and enables a broad cross section of SEQ to apply skills, energy and resources to implementation.

Statutory processes

The regional plan is a statutory instrument under the *Statutory Instrument Act 1992*. Its effects are established under the *Integrated Planning Act 1997* (IPA).

Relevant provisions of the legislation include:

- establishing the Regional Coordination Committee (RCC) to advise the regional planning Minister on regional issues
- ensuring local government planning schemes reflect the regional plan
- ensuring state and local governments take account of the regional plan when preparing or amending a plan, policy or code that may affect a matter covered by the regional plan
- ensuring development assessment processes—including referral agency obligations for development applications—address matters covered in the regional plan
- allowing the regional planning Minister to exercise call-in powers
- establishing processes for amending the regional plan.

South East Queensland Regional Plan 2009–2031 State planning regulatory provisions have been prepared in accordance with the IPA. They have effect from the day they are published in the *Government Gazette*. Relevant provisions include:

- restrictions on urban development outside the Urban Footprint
- a regional land use map that indicates which areas are to be protected as Regional Landscape and Rural Production Areas or Rural Living Areas, and which are designated as Urban Footprint
- restrictions on development within Development Areas, where development is inconsistent with the future planning intent.

Linking with planning schemes

When a local government creates a planning scheme or an amendment, it indicates how the planning scheme will reflect the regional plan.

To do this, a local government should, among other matters, address any:

- content and directions in the sub-regional narrative
- any conflict between each policy that becomes a provision of the SEQ Regional Plan regulatory provisions, and therefore a matter that the assessment manager will have regard to, and any provisions of the planning scheme
- steps taken in the planning scheme to reflect the desired regional outcomes (DROs), particularly Sustainability and climate change (DRO 1), Compact settlement (DRO 8) and Employment location (DRO 9)
- any zones in the planning scheme that are inconsistent with the future planning intent for a Development Area.

Desired regional outcomes

The SEQ Regional Plan establishes DROs, principles and policies that will guide the development of SEQ.

Each DRO is a set of goals, aspirations and requirements for the region's future development. Each DRO sets out principles that must be followed to achieve the outcome. State and local governments must reflect these principles in their own policies, as they are essential to the correct functioning of the region.

Policy and program statements follow the principles. Policies outline what must be done for the principles to have any effect. The policies are specific and should direct local government and state agencies in which steps to follow.

State agencies must implement the regional plan, and adopt its principles and policies, in their own planning. Local governments must amend planning schemes and adopt other policies to align with the regional plan.

Programs outline actions that need to be undertaken over the life of the regional plan to implement the principles and achieve the DRO. State or local governments or non-government bodies can undertake the programs.

Other groups, including regional natural resource management bodies, water management agencies and industry bodies, are also encouraged to align their planning and programs with the regional plan's principles, policies and programs to coordinate the effort across the region.

Development Areas

The SEQ Regional Plan outlines Development Areas within the Urban Footprint where future growth is expected. Development Areas require coordinated land use and infrastructure planning. The regional planning Minister will remain part of the process to ensure the DROs are followed as the area becomes ready for urban development.

Regional plan regulations state that development that is incompatible with the land's potential use as a Development Area should not be approved in these areas.

Identified Growth Areas

Identified Growth Areas (IGAs) are listed in the SEQ Regional Plan. These areas are not required to accommodate projected growth to 2031. However, they will be considered for future urban development beyond the life of the plan.

These areas need further investigation to confirm their suitability for urban development consistent with the objectives of the relevant sub-regional narrative, the Urban Footprint principles and relevant DROs.

SEQ Regional Plan regulations contain IGAs within the Regional Landscape and Rural Production Area designation to prevent urban development in the interim.

Infrastructure and services coordination

The *South East Queensland Infrastructure Plan and Program* (SEQIPP) identifies the regional infrastructure priorities required to support the regional plan. It is updated annually. To ensure budget proposals align, state agencies should prepare their infrastructure and services plans in line with the regional plan. To support this, the Department of Infrastructure and Planning coordinates annual consultation with local government on infrastructure priorities and budgets.

The IPA also allows State Infrastructure Agreements to be used to help fund and deliver infrastructure.

Monitoring, evaluation, review and improvement

To manage regional growth and change in the most sustainable way, a monitoring, evaluation and reporting framework aligned to DROs and sustainability indicators is required. The framework simplifies, clarifies and provides aggregated information to ensure better decision-making and more effective action.

Monitoring provides information on progress in implementing and achieving outcomes to improve strategies. With appropriate reporting, monitoring promotes public interest and information on the region's sustainability.

Reporting on progress in achieving sustainability outcomes will be publicly available through the SEQ State of the Region report.

Evaluation measures and calibrates progress towards DROs, associated targets and performance indicators, and assesses the effectiveness of policies and actions. Based on an adaptive management approach, evaluation facilitates policy responses and the adjustment of policy interventions to changing conditions throughout implementation.

Effectively monitoring, evaluating and reviewing existing policies, their implementation and their effectiveness in achieving the desired outcomes will continually improve policy development and implementation.

The regional plan will be formally reviewed every five years. The regional planning Minister may then amend or replace the regional plan. The regional planning Minister may approve minor revisions of the regional plan at any time if required.

The following information is critical to regular reviews of the regional plan:

- the SEQ Growth Management Program
- population and dwelling projections
- employment growth
- annual reviews of the SEQIPP
- progress on the implementation of regional plan policies and actions
- progress against regional targets
- progress against targets in *Toward Q2: Tomorrow's Queensland*
- State of the Region reporting
- emerging regional issues.

Analysis of the take-up of available land and the amount of growth in existing urban areas is critical to understanding the operation of land and housing supply in the Urban Footprint. An SEQ Growth Management Program will annually monitor the supply of land, dwellings and industrial land.

The state government will produce the program in consultation with local government and the development industry. The program will estimate the current state of land supply and dwelling yields, including growth accommodated in existing urban areas and broadhectare dwelling potential. The annual report on land supply will identify the number of years of land supply available in each sub-region and the amount of land and dwellings potentially available in the short- to medium-term.

The State of the Region reporting process will assess progress against regional targets. Targets will be established for each DRO and will reflect existing targets, such as those in *Toward Q2: Tomorrow's Queensland*. The State of the Region report will provide information on progress towards achieving these targets and the DROs required to achieve sustainability.

Independent experts may provide recommendations for reviews. These recommendations will be based on available information about implementation and progress towards achieving the outcomes of the regional plan.

SEQ is subject to changes in population growth and demographics. These aspects will be monitored and reviewed annually. This information will also inform annual reviews of SEQIPP.

Roles and responsibilities

The Department of Infrastructure and Planning works collaboratively with other Queensland Government agencies, local governments and stakeholders to facilitate and coordinate the implementation of the regional plan.

The Regional Coordination Committee (RCC) was established in accordance with the *Integrated Planning Act 1997*. Through the regional planning Minister, the RCC advises the Queensland Government on the regional plan's development and implementation. The RCC will play a key role in confirming priorities and monitoring implementation.

Coordination and monitoring of implementation of the regional plan across state and local governments is essential to ensure effective delivery.

Collaborative implementation and coordination mechanisms will assist governments to implement the following SEQ Regional Plan priorities:

- climate change
- monitoring and reporting
- regional landscapes and open space
- natural resource management
- rural futures
- social infrastructure and social planning
- Aboriginal and Torres Strait Islander coordination
- activity centres and the application of transit oriented principles
- employment land delivery.

Advisory committees currently exist for some of these priorities, including the Regional Landscape and Open Space Advisory Committee, the Chief Executive Officers Committee for Natural Resource Management in SEQ and the Sustainability and Environmental Reporting Interdepartmental Committee.

Where coordination and advice mechanisms do not currently exist, new mechanisms will be established in response to new and emerging priorities.

Glossary

Active transport: Physical acitivity undertaken as a means of transport; for example, walking or cycling.

Agriculture: The use of land and premises to grow and produce food, fibre, flowers and foliage for human consumption or use.

Biodiversity: Biological diversity—the natural diversity of wildlife and the environmental conditions necessary for its survival.

Bio-sequestration: The removal from the atmosphere and storage of greenhouse gases through biological processes, such as growing trees and using practices that enhance soil carbon in agriculture.

Cadastre: A public register that spatially represents separate properties.

Co-generation: The use of waste heat energy to produce heat or electricity.

Community greenspace: An area of open space on land that is publicly owned or managed, and to which the community generally has a legal right of access.

Concurrence agency: An entity prescribed under the *Integrated Planning Act Regulation 1998* as a Concurrence Agency for a development made under the IPA.

Infill development: New development that occurs within established urban areas where the site or area is either vacant or has previously been used for another urban purpose. The scale of development can range from the creation of one additional residential lot to a major, mixed-use redevelopment.

Inter-urban breaks: Non-urban land areas that separate or surround urban villages, towns and metropolitan areas.

Net residential density: A measure of housing density expressed as dwellings or lots per hectare. It is calculated by adding the area of residential lots to the area of local roads and parks, and then dividing by the number of dwellings or residential lots created.

Open space: An area of land and/or water that has no or very few built structures, and which has most of its surface open to the sky. The surface may be modified from its natural condition (such as by clearing, ploughing, mowing or grazing) but is usually substantially unpaved. Open space can include forests, farm lands, beaches, swamps, natural lakes, lakes formed by dams, estuaries, inshore coastal waters, deserts and urban parks with no or few built structures. Open space may be owned publicly or privately.

Peri-urban: The area of influence between rural and urban areas, usually located near urban areas but with no planning intent for urban development.

Public recreation: Any outdoor sport or recreation activity undertaken on land that is allocated or managed for recreation use, and to which the community generally has a legal right of access. Public recreation excludes sport or recreation activities that take place on land that is managed for the exclusive benefit of paying customers or members of a club or association.

Abbreviations

CBD	central business district
CEO	chief executive officer
COAG	Council of Australian Governments
CPTED	Crime Prevention Through Environmental Design Guidelines
DRO	desired regional outcome
HEV	high ecological value
IDAS	Integrated Development Assessment System
IGA	Identified Growth Area
IPA	Integrated Planning Act
MPA	Master Planned Area
RCC	Regional Coordination Committee
RLRPA	Regional Landscape and Rural Production Area
SEQ	South East Queensland
SEQIPP	South East Queensland Infrastructure Plan and Program
SPP	State Planning Policy
ULDA	Urban Land Development Authority

Acknowledgements

A large number of individuals and organisations have contributed to the SEQ Regional Plan. Although it is not possible to list all of these individually, their contributions are acknowledged and appreciated.

The contributions of the following individuals and groups are acknowledged:

- members of the Regional Coordination Committee
- regional interest groups
- state agencies
- local government
- Council of Mayors (SEQ)
- industry and community representatives
- staff from the Department of Infrastructure and Planning.

Special thanks

The RCC membership

The Hon Stirling Hinchliffe MP (Chair), Minister for Infrastructure and Planning

The Hon Andrew Fraser MP, Treasurer and Minister for Employment and Economic Development

The Hon Kate Jones MP, Minister for Climate Change and Sustainability

The Hon Tim Mulherin MP, Minister for Primary Industries, Fisheries and Rural and Regional Queensland

The Hon Rachel Nolan MP, Minister for Transport

The Hon Stephen Robertson MP, Minister for Natural Resources, Mines and Energy and Minister for Trade

The Hon Karen Struthers MP, Minister for Community Services and Housing and Minister for Women

The Hon Craig Wallace MP, Minister for Main Roads

Cr Bob Abbot, Mayor of Sunshine Coast Regional Council

Cr John Brent, Mayor of Scenic Rim Regional Council

Cr Campbell Newman, Mayor of Brisbane City Council and Chair of the Council of Mayors (SEQ)

Cr Paul Pisasale, Mayor of Ipswich City Council

Cr Allan Sutherland, Mayor of Moreton Bay Regional Council

Ms Felicity McNeill, The Australian Government Department of Infrastructure, Transport, Regional Development and Local Government

Queensland Government departments

Department of Communities

Department of Community Safety

Department of Education and Training

Department of Employment, Economic Development and Innovation

Department of Environment and Resource Management

Department of Infrastructure and Planning

Department of Justice and Attorney General

Department of Public Works

Department of the Premier and Cabinet

Department of Transport and Main Roads

Queensland Health

Queensland Police Service

Queensland Treasury

Local governments

Brisbane City Council

Gold Coast City Council

Ipswich City Council

Lockyer Valley Regional Council

Logan City Council

Moreton Bay Regional Council

Redland City Council

Scenic Rim Regional Council

Somerset Regional Council

Sunshine Coast Regional Council

Toowoomba Regional Council

Images courtesy of:

Brisbane City Council

Department of Employment, Economic Development and Innovation

Department of Environment and Resource Management

Department of Infrastructure and Planning

Griffith University

Ipswich City Council

Lockyer Valley Regional Council

Logan City Council

Mark Straker Photography

Mick Capelin

Moreton Bay Regional Council

Tourism Queensland

TransLink

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Part F–South East Queensland Regional Plan 2009–2031 State planning regulatory provisions

Division 1 Preliminary

1.1 Short title

These State planning regulatory provisions may be cited as the *South East Queensland Regional Plan 2009–2031 State planning regulatory provisions*.

1.2 Definitions

The dictionary in schedule 10 of the *Integrated Planning Act 1997* defines particular words used in these State planning regulatory provisions unless otherwise defined in schedule 2.

1.3 Relationship to SEQ Regional Plan

These State planning regulatory provisions implement the regional plan for the SEQ region (*South East Queensland Regional Plan 2009–2031*).

1.4 SEQ region divided into categories

(1) The SEQ Regional Plan allocates all land in the SEQ region into one of the following categories:

(a) Regional Landscape and Rural Production Area;

(b) Urban Footprint; and

(c) Rural Living Area.

(2) The maps referred to in schedule 1 show these areas.

1.5 When these State planning regulatory provisions do not apply

(1) Sections 2.1 and 3.1 of these State planning regulatory provisions do not apply to development in the Regional Landscape and Rural Production Area or Rural Living Area if the premises are in–

(a) an urban area under a planning scheme (other than a transitional planning scheme); or

(b) a biodiversity development offset area approved under a State Planning Instrument.

(2) These State planning regulatory provisions do not apply to–

(a) development in a rural precinct if the development is consistent with the rural precinct; or

(b) development that is exempt from assessment against a planning scheme under the *Integrated Planning Act 1997*, schedule 9; or

(c) development carried out under a development approval which has not lapsed for a development application

(i) that was properly made before these State planning regulatory provisions commenced; or

(ii) to which Division 2 of these State planning regulatory provisions applied; or

(d) development that is consistent with a preliminary approval which has not lapsed, for the part of a development application mentioned in section 3.1.6 of the *Integrated Planning Act 1997* that states the way in which the effect of a local planning instrument is varied, where the development application for the preliminary approval was–

(i) properly made before these State planning regulatory provisions commenced; or

(ii) assessed against Division 2 of these State planning regulatory provisions; or

(e) development that is generally in accordance with a rezoning approval where the development entitlements from the rezoning approval are conferred by the following–

(i) the resulting zone in a transitional planning scheme;

(ii) a development permit or acknowledgement notice mentioned in section 3.2.5(1)(a) of the *Integrated Planning Act 1997* for a development application (superseded planning scheme) for the resulting zone in a transitional planning scheme which is a superseded planning scheme;

(iii) a planning scheme (other than a transitional planning scheme); or

(f) development that is–

(i) declared to be a significant project under section 26(1)(a) of the *State Development and Public Works Organisation Act 1971*;

(ii) in a State development area under the *State Development and Public Works Organisation Act 1971*.

Division 2 Material change of use

2.1 Material change of use outside the Urban Footprint

A material change of use in the Regional Landscape and Rural Production Area or the Rural Living Area identified in Column 1 of Table 2A—

(a) does not require assessment by the referral agency for these State planning regulatory provisions, if the material change of use is identified in Column 1 of the applicable table identified in Columns 2 and 3 of Table 2A;

(b) requires assessment by the referral agency for these State planning regulatory provisions and impact assessment against the identified assessment criteria, if the material change of use is identified in Column 2 of the applicable table identified in Columns 2 and 3 of Table 2A.

Table 2A—Material change of use in the Regional Landscape and Rural Production Area and Rural Living Area

Column 1 **Use**	**Column 2** **Regional Landscape and Rural Production Area**	**Column 3** **Rural Living Area**
Tourist activity	Table 2B	Table 2B
Sport and recreation	Table 2B	Table 2B
Community activities	Table 2B	Table 2B
Urban activities		
Indoor recreation	Table 2C	Table 2C
Residential development	Table 2D	Table 2D
Rural residential	Table 2D	Not applicable
Other urban activities	Table 2E	Table 2E

Table 2B—Community activity, sport and recreation and tourist activity

Column 1 **Material change of use not requiring referral agency assessment**	**Column 2** **Material change of use requiring referral agency assessment and impact assessment**
A material change of use having a gfa of no more than 5000 m² on the premises (excluding short-term accommodation) where– (a) any incidental commercial or retail activity on the premises is no more than 250 m²; and (b) short-term accommodation on the premises contains no more than 300 persons.	A material change of use not identified in Column 1 must comply with the site, use and strategic intent requirements under Schedule 4 of these regulatory provisions.

Table 2C—indoor recreation

Column 1 Material change of use not requiring referral agency assessment	Column 2 Material change of use requiring referral agency assessment and impact assessment
A material change of use having a gfa of no more than 3000 m² on the premises (excluding short-term accommodation) where– (a) the premises caters for no more than 250 persons; and (b) short-term accommodation on the premises contains no more than 100 persons.	A material change of use not identified in Column 1 must comply with the following assessment criteria— (a) the locational requirements or environmental impacts of the development necessitate its location outside the Urban Footprint; (b) there is an overriding need for the development in the public interest.

Table 2D—residential development and rural residential development

Column 1 Material change of use not requiring referral agency assessment	Column 2 Material change of use requiring referral agency assessment and impact assessment
A material change of use for a private residence on an existing lot.	A material change of use not identified in Column 1 must comply with the following criteria— (a) the locational requirements or environmental impacts of the development necessitate its location outside the Urban Footprint; (b) there is an overriding need for the development in the public interest.

Table 2E—Other urban activities

Column 1 Material change of use not requiring referral agency assessment	Column 2 Material change of use requiring referral agency assessment and impact assessment
1. A material change of use for an industrial and commercial purpose having a gfa of no more than 750 m² on the premises where— (a) any incidental retail activity on the premises is no more than 50 m²; and (b) any associated outdoor area on the premises is no more than 1500 m². 2. A material change of use for a service station having a gfa of no more than 1000 m² on the premises where any— (a) incidental retail activity on the premises is no more than 250 m²; and (b) associated outdoor area on the premises is no more than 2000 m².	A material change of use not identified in Column 1 must comply with the following assessment criteria— (a) the locational requirements or environmental impacts of the development necessitate its location outside the Urban Footprint; (b) there is an overriding need for the development in the public interest.

2.2 Material change of use in a development area

A material change of use in a development area identified in—

(a) Column 1 of Table 2F, does not require assessment by the referral agency for these State planning regulatory provisions; and

(b) Column 2 of Table 2F, is required to be assessed by the referral agency for these State planning regulatory provisions against the identified assessment criteria.

Table 2F—land within a development area

Column 1 **Material change of use not requiring referral agency assessment**	**Column 2** **Material change of use requiring referral agency assessment and impact assessment**
A material change of use involving exempt, self and code assessable development under the planning scheme where— (a) the gfa on the premises is no more than 10 000 m^2; and (b) the premises is no more than 10 000 m^2.	Development not identified in Column 1 must be consistent with the future planning intent for the area.

Division 3 Subdivision

3.1 Subdivision in the Regional Landscape and Rural Production Area

(1) A subdivision of land in the Regional Landscape and Rural Production Area is contrary to these State planning regulatory provisions and may not occur if identified in Column 2 of Table 3A.

(2) A subdivision of land in the Regional Landscape and Rural Production Area identified in Column 1 of Table 3A does not require assessment by the referral agency for these State planning regulatory provisions.

Table 3A—Subdivision in the Regional Landscape and Rural Production Area

Column 1 **Subdivision compliant with Division 3.1**	**Column 2** **Subdivision which may not occur**
(1) The subdivision is consistent with an rural subdivision precinct. (2) The subdivision results in lots of 100 hectares or greater. (3) The subdivision of a lot results in no additional lots, for example, amalgamation or boundary realignment. (4) The subdivision is— (a) in an area designated by the regional planning Minister in a gazette notice as having a rural residential purpose; and (b) subject to a development application that is properly made on or before 6 December 2010. (5) The subdivision is limited to one additional lot created to accommodate the following— (a) an emergency services facility; (b) water cycle management infrastructure; (c) a waste management facility; (d) telecommunication infrastructure; (e) electricity infrastructure; (f) a cemetery or crematorium; or (g) a correctional facility. (6) The subdivision divides one lot into two where— (a) the existing lot is severed by a road that was gazetted before 2 March 2006; and (b) the resulting lot boundaries use the road as the boundary of division. (7) The subdivision is consistent with a development approval for a material change of use of premises that has not lapsed, where— (a) the application for the development approval was properly made before 31 October 2006; or (b) the material change of use was assessed by a referral agency against Division 2 of the applicable State planning regulatory provisions.	Development not identified in Column 1.

3.2 Subdivision in a development area

A subdivision of land in a development area—

(a) identified in Column 1 of Table 3B, does not require assessment by the referral agency for these State planning regulatory provisions; and

(b) identified in Column 2 of Table 3B, requires assessment by the referral agency for these State planning regulatory provisions and impact assessment against the identified assessment criteria.

Table 3B—Subdivision involving land within a development area

Column 1 **Subdivision not requiring referral agency assessment**	**Column 2** **Subdivision requiring referral agency assessment and impact assessment**
(1) The subdivision complies with a master plan for a declared master planned area. (2) The subdivision results in no additional lots, for example, amalgamation or boundary realignment. (3) The subdivision is limited to one additional lot created to accommodate the following— (a) an emergency services facility; (b) water cycle management infrastructure; (c) a waste management facility; (d) telecommunication infrastructure; (e) electricity infrastructure; (f) a cemetery or crematorium; or (g) a correctional facility. (4) The subdivision divides one lot into two where— (a) the existing lot is severed by a road that was gazetted before 2 March 2006; and (b) the resulting lot boundaries use the road as the boundary of division. (5) The subdivision is consistent with a development approval for a material change of use of premises that has not lapsed, where— (a) the application for the development approval was properly made before 31 October 2006; or (b) the material change of use was assessed by a referral agency against Division 2 of the applicable State planning regulatory provisions.	Development not identified in Column 1 must be consistent with the future planning intent for the area.

Division 4 Assessment criteria for development applications

4.1 Assessment criteria for development applications

The assessment manager for a development application involving a material change of use involving an extension of more than 10 000 m² of retail floor space must assess the application against the following assessment criteria.

Assessment criteria

The development must have regard to the provision of sufficient land with street frontage for non-retail business premises.

Division 5 Regional Planning Minister Notices

5.1 Regional Planning Minister notices

(1) The regional planning Minister may by gazette notice designate an area within the SEQ Region to be:

(a) a local development area;

(b) a regional development area;

(c) an rural subdivision precinct;

(d) a rural precinct; or

(e) an area having a rural residential purpose.

(2) The referral agency for these State planning regulatory provisions must publish a copy of each gazette notice issued under section 5.1(1) on its webpage.

(3) Failure to comply with section 5.1(2) does not affect the validity of the gazette notice.

Division 6 Contrary and inconsistent development

6.1 Contrary and inconsistent development

(1) Development is only contrary to, or inconsistent[1] with, these State planning regulatory provisions to the extent the development is identified in Column 2 of Table 3A.

(2) Nothing in this section prevents the referral agency for these State planning regulatory provisions exercising its powers under the IDAS including directing refusal of, or imposing conditions on, a development.

[1] The reference to inconsistent development is to clarify the expected impact of section 324 of the *Sustainable Planning Bill 2009*.

Schedules

Schedule 1—Maps

South East Queensland Regional Plan 2009–2031 regulatory maps numbered SEQ RP 1 to SEQ RP 32.

Schedule 2—Dictionary

2.1 Use definitions

community activities means an activity limited to a place of worship, an education facility, a community hall, a childcare centre, hospice, institution, associated short-term accommodation and incidental commercial and retail activity.

indoor recreation means an activity limited to indoor sport, recreation and entertainment purposes. It includes an indoor sport and function centre facility, wedding chapel, restaurant, tavern with associated short-term accommodation and an incidental commercial and retail activity.

institution means an activity limited to—

(a) the care, treatment or accommodation of a mentally ill person admitted thereto pursuant to legislation; or

(b) the detention, reform or training of a person admitted thereto pursuant to legislation.

outdoor recreation means a recreation or sports activity that—

(a) has a direct connection to the rural, natural or resource value of the premises;

(b) is carried on outside of a building;

(c) requires areas of open space; and

(d) may include works necessary to manage safety and ecological impacts.

overriding need in the public interest has the meaning provided for by schedule 3.

primary industry means agriculture, apiculture, aquaculture, horticulture, pastoral industry, intensive animal husbandry and extractive industry.

private residence means a residential activity limited to no more than—

(a) a primary residence;

(b) secondary residence (e.g. granny flat); and

(c) manager's residence.

residential development means development for a residential purpose. It includes a rural residential development, relocatable home park, retirement village and a private residence. It does not include short-term accommodation or an institution.

short-term accommodation means a facility which is purpose built for non-permanent accommodation and makes individual units or spaces available for separate hire for periods of no more than 12 weeks to tourists and travellers. It includes, but is not limited to a holiday cabin, motel, hotel, holiday apartment, guesthouse, dormitory, backpackers hostel, camping site and caravan park. It does not include residential development.

sport and recreation activities means a purpose-built outdoor sport and recreation facility, including a clubhouse, short-term accommodation, grandstand and storage facility.

tourist activities means an activity which is reliant on the tourist trade. It includes short-term accommodation and an incidental commercial and retail activity.

urban activity means a residential, industrial, retail, or commercial activity. It does not include the following—

(a) tourist activity;

(b) sport and recreation activity;

(c) community activity;

(d) outdoor recreation;

(e) forestry and primary industry activity or an activity reasonably associated with such a purpose for which the premises or surrounding area is used, including, for example the following—

  (i) farm workers' accommodation;

  (ii) a mechanical repair workshop for farm machinery or vehicles;

  (iii) vehicle storage associated with transporting forestry or primary industry produce or resources;

  (iv) processing and packaging forestry or primary industry goods, including crushing and screening of extracted materials and wholesale nurseries.

(f) an aeronautical facility;

(g) an emergency services facility;

(h) water cycle, waste management, telecommunications and electricity infrastructure;

(i) a cemetery crematorium;

(j) an animal boarding facility.

2.2 Administrative definitions

applicable State planning regulatory provisions means the version of the State planning regulatory provisions for the SEQ region in effect at the time the application for the development approval was properly made.

associated outdoor area means the total outdoor area of the site used for or in association with an urban activity, tourist activity or sport and recreation. It includes an unenclosed covered area, parking area and a manoeuvring, loading and outdoor storage area. It does not include a landscaped area and driveway.

development area means land designated by the regional planning Minister in a gazette notice as:

(a) a local development area; or

(b) a regional development area

for the purposes of these State planning regulatory provisions.

gross floor area (gfa) means the total floor area of all stories of a building measured from the outside of the external walls or the centre of a common wall.

rezoning approval means an approval given under the following—

(a) the *Local Government (Planning and Environment) Act 1990* (repealed), section 4.5(6), 4.8(6), 4.10(6) or 8.10(9A);

(b) the *Local Government Act 1936* (repealed), section 33(5)(K) to which section 33(5)(M) also applied;

(c) the *Integrated Planning Act 1997*, section 6.1.26.

rural subdivision precinct means an area designated by the regional planning Minister in a gazette notice as a rural subdivision precinct for the purposes of these State planning regulatory provisions.

rural precinct means land endorsed by the regional planning Minister in a gazette notice as a rural precinct for the purposes of these regulatory provisions.

subdivision means creating a lot by subdividing another lot, or dividing land into parts by agreement rendering different parts of a lot immediately available for separate disposition or separate occupation, and does not include a lease for a term, including renewal options, not exceeding 10 years.

transitional planning scheme has the meaning given by the *Integrated Planning Act 1997*, Chapter 6, Part 1, Division 2.

Schedule 3—How to determine overriding need for the development in the public interest

To determine an overriding need for the development in the public interest an application must establish—

(a) the overall social, economic and environmental benefits of the material change of use weighed against—

  (i) any detrimental impact upon the natural values of the site; and

  (ii) conflicts with the desired regional outcomes of the SEQ Regional Plan, especially in relation to promoting the consolidation of development within the Urban Footprint and preventing land fragmentation in the Regional Landscape and Rural Production Area; and

(b) that the community would experience significant adverse economic, social or environmental impacts if the material change of use proposal were not to proceed.

This may require an assessment to determine if the material change of use could reasonably be located in the Urban Footprint.

The following do not establish an overriding need in the public interest—

(a) activities with relatively few locational requirements such as residential development and shopping centres; or

(b) interests in or options over the site; or

(c) the site's availability or ownership.

Schedule 4—Site, use and strategic intent requirements for community activities, sport and recreation and tourist activities

For Column 2 Table 2B, Section 2.1, Division 2 of these State planning regulatory provisions the site, use and strategic intent requirements are as follows:

(1) The proposed site must—

(a) be directly accessible to appropriate existing or proposed transport infrastructure, including public transport;

(b) be able to be serviced with efficient provision of physical infrastructure, including water and sewerage;

(c) have timely access to a suitable workforce;

(d) be physically suitable; and

(e) be appropriately separated from incompatible uses.

(2) Development on the proposed site must exclude areas of—

(a) significant biodiversity values;

(b) koala habitat;

(c) unacceptable risk from natural hazards, including predicted impacts of climate change; and

(d) good quality agricultural land.

(3) The use of the premises must not include residential development and—

(a) for community activities limits–

(i) short-term accommodation to a maximum of 300 persons; and

(ii) use of the premises for urban activities (other than short term accommodation) to no more than 50 m^2 gfa; and

(b) for tourist activities and sport and recreation activities limits–

(i) short-term accommodation to a maximum of 300 persons; and

(ii) use of the premises for urban activities (other than short term accommodation) to no more than 1000 m^2 gfa.

(4) The strategic intent of the SEQ Regional Plan must be met, including all relevant Desired Regional Outcomes.

Notes

Notes

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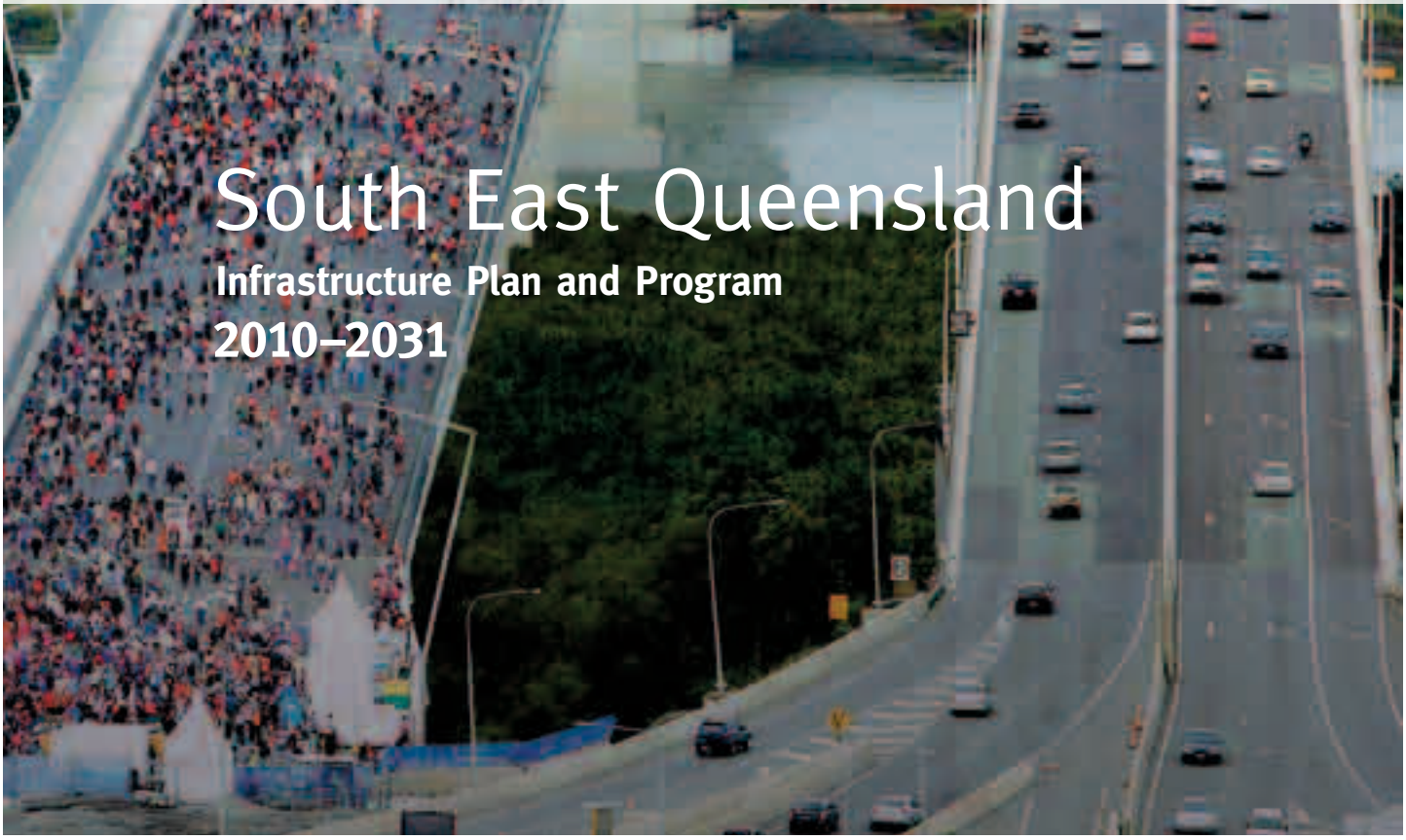

South East Queensland

Infrastructure Plan and Program 2010–2031

Tomorrow's Queensland:
strong, green, smart, healthy and fair

Toward Tomorrow's Queensland

Queensland Government

The Department of Infrastructure and Planning brings together planning, local government and infrastructure responsibilities into one department enabling government to deliver integrated solutions, face the state's population and economic challenges and secure a sustainable future for Queensland.

Published by the Queensland Government, July 2010, 100 George Street, Brisbane Qld 4000.

The Queensland Government is committed to providing accessible services to Queenslanders from all culturally and linguistically diverse backgrounds. If you have difficulty understanding this document and need an interpreter, please call the Translating and Interpreting Service (TIS National) on 131 450 and ask them to telephone the Queensland Department of Infrastructure and Planning on 07 3227 8548.

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Front cover—Official opening of Sir Leo Hielscher Bridges, Varsity Lakes Train Station, Robina Hospital expansion
This page—Kurilpa Bridge

South East Queensland

Infrastructure Plan and Program 2010–2031

Foreword

South East Queensland is one of Australia's fastest growing regions, with about 1300 new Queenslanders each week. By 2031, it is anticipated our region will be home to 4.4 million people. This growth brings challenges as well as opportunities.

The Queensland Government plans and manages for growth through the *South East Queensland Regional Plan 2009–2031* (SEQ Regional Plan). Additionally, the Queensland Growth Management Summit, held in March 2010, developed recommendations to ensure we continue to maintain our prosperous, liveable and sustainable way of life.

The *South East Queensland Infrastructure Plan and Program 2009–2031* (SEQIPP) identifies infrastructure to support regional priorities while planning for predicted growth.

In its sixth year, SEQIPP is still the largest regional infrastructure plan in Australia and provides a long-term outlook on investment, providing certainty for industry and the community. It outlines an estimated $134 billion in infrastructure investment, which is expected to support about 930 000 jobs through to 2031.

SEQIPP has transitioned to better align with the priorities and timeframes in the SEQ Regional Plan and will continue to transition as a result of findings from the Queensland Growth Management Summit. Next year SEQIPP will be replaced by a state-wide document, the Queensland Infrastructure Plan, which will clearly link infrastructure delivery with population growth and economic development priorities.

In 2010, the document is broken down into the four greater regions of Greater Brisbane, Western Corridor and Western South East Queensland, Sunshine Coast and Gold Coast. There is also a section for South East Queensland outlining infrastructure spanning the entire region, including water, energy, ports and freight.

The new format differentiates infrastructure underway in the next four years from the infrastructure planned out to 2031.

A lot has already been achieved for communities with 119 projects completed, 152 projects underway to 2014, another 128 projects planned up to 2031 and $22 billion already spent.

Work is underway on the Airport Link, Gold Coast Rapid Transit, Gold Coast University Hospital, Bruce Highway Upgrade, Queensland Children's Hospital, Darra to Springfield Transport Corridor, Eastern Busway, Northern Busway, Ipswich Motorway Upgrade and schools and hospitals across the region.

Some of the projects recently completed include the Sir Leo Hielscher Bridge duplication, Ipswich/Logan Motorway Interchange, Robina to Varsity Lakes Rail Extension, Ipswich Magistrates Court, North Lakes Health Precinct, CLEM7 tunnel, Pacific Motorway Bikeway, Toowoomba Pipeline, sections of the Eastern and Northern busways and Beerwah Grade Separation.

The Queensland Government is continuing to work hard to manage growth, deliver infrastructure and support jobs across the region.

SEQIPP is the Queensland Government's tool to reflect changes in infrastructure priorities and align with our planning priorities and the ever-changing environment.

In partnership with other levels of government and the private sector, we are working to ensure infrastructure planning continues to support the economy, accommodate growth and create more jobs for the region.

The Hon Stirling Hinchliffe MP
Minister for Infrastructure and Planning

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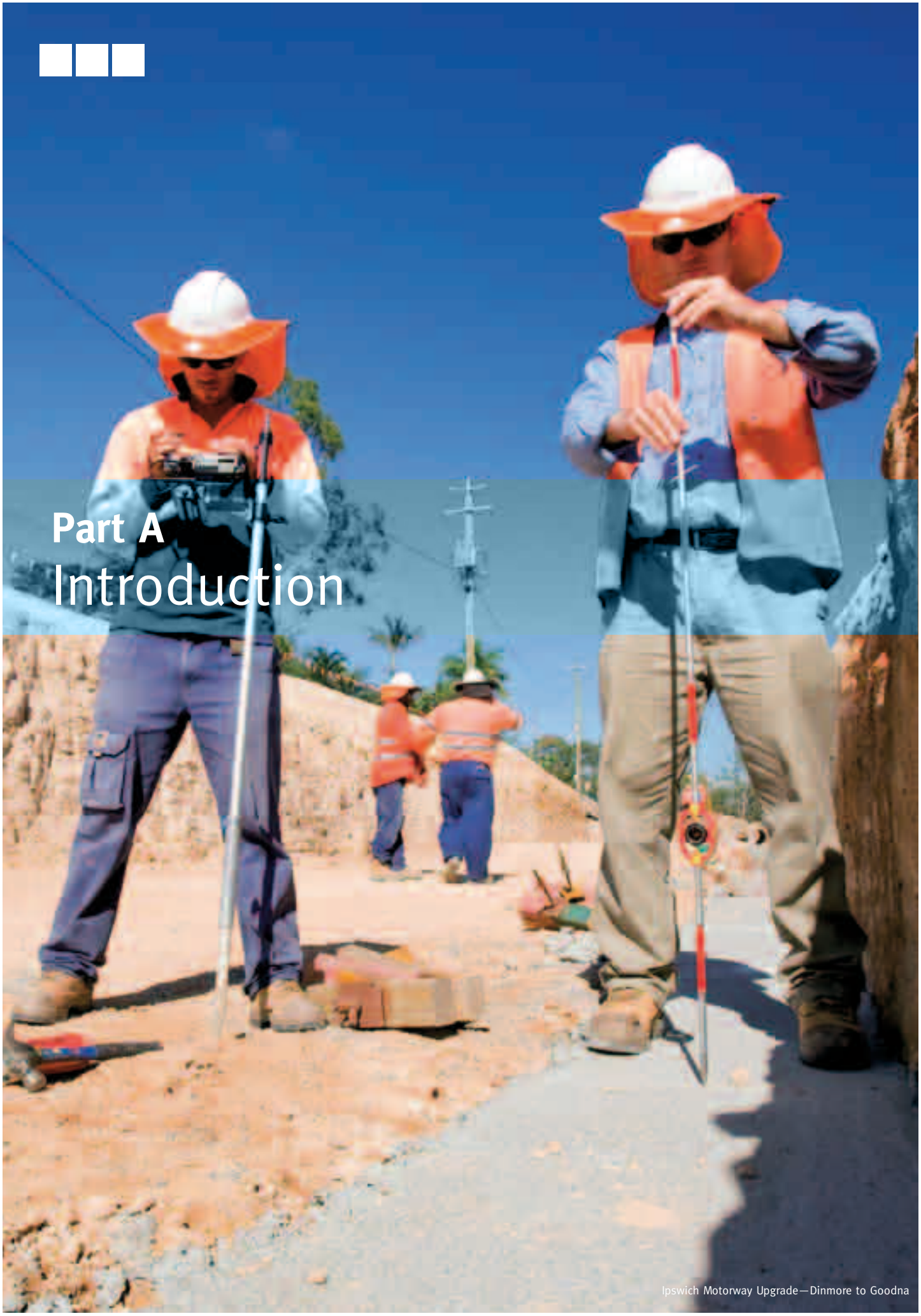


Ipswich Motorway Upgrade—Dinmore to Goodna

Role of SEQIPP

The *South East Queensland Infrastructure Plan and Program 2010–2031* (SEQIPP) outlines the Queensland Government's infrastructure priorities to support the *South East Queensland Regional Plan 2009–2031* (SEQ Regional Plan). It establishes priorities for regionally significant infrastructure over the next four years and outlines the longer-term planning horizon to 2031.

First released in 2005, the plan is updated annually to reflect and align with the latest planning and budget commitments. It sets relevant timeframes and budgets to ensure the timely delivery of infrastructure to support the region's growth.

This year's SEQIPP remains relatively unchanged. Next year when it transitions to a state-wide document it will be realigned to more effectively link to Growth Management Summit outcomes including regionalisation and feedback from Local Government's on population estimations.

The plan gives direction and momentum to infrastructure and services investment, taking into account other government plans and policies including:

- SEQ Regional Plan 2009–2031
- Queensland Growth Management Summit findings
- The Queensland Government budget process
- Toward Q2: Tomorrow's Queensland
- Queensland Transport and Roads Investment Program
- Queensland Government Economic Policy
- Health Services Strategy
- Queensland Skills Plan
- Queensland Housing Affordability Strategy
- South East Queensland Water Strategy.

As these plans are revised more detailed infrastructure planning takes place. This means that while the first four-year period will predominantly remain unchanged, projects listed in the longer-term planning horizon may change to better reflect the emerging needs of the region.

SEQIPP is integral to ensuring a sustainable future for South East Queensland.

Other Queensland Government plans and policies

While some areas of infrastructure are not covered in this plan, they are outlined in other Queensland Government plans and policies and are still significant for Queensland.

Information and communication technology

Toward Q2 through ICT 2009–2014 – the Queensland Government's strategy for government ICT outlines priorities and targets to help create more accessible, efficient and effective services for all Queenslanders.

For more information, visit www.qgcio.qld.gov.au.

Social housing

The South East Queensland region will continue to benefit from the social housing component of the Nation Building Economic Stimulus Plan. This will supply much-needed social housing and maximise the involvement of the not-for-profit sector across the state.

For more information visit www.public-housing.qld.gov.au.

Tourism

The recently released *Tourism Action Plan* to 2012 has a strong focus on tourism investment and infrastructure development.

For more information visit www.industry.qld.gov.au.


Kangaroo Point Park

Queensland Growth Management Summit

The Queensland Growth Management Summit, held in March 2010, explored solutions for a way forward and delivered new strategies for the future of a growing Queensland population.

Experts in planning, development, infrastructure and sustainability led discussions around the three key themes of prosperity, sustainability and liveability.

As a result of the summit, the Queensland Government has announced 22 new initiatives and 25 new supporting actions as their official growth management response. Some of the key announcements related to SEQIPP include:

- Establishment of a Queensland Infrastructure Plan (QIP) that will be a long term planning document for infrastructure for the entire state, integrating SEQIPP and other state planning documents.
- Establishment of Growth Management Queensland, to improve development approval processes, create delivery timetables for land supply, accelerate development of infill sites and delivery of transit oriented development precincts and protect and improve liveability in our community.
- Establishment of a new Infrastructure Charges Taskforce to look at how local governments deliver infrastructure for new development in Queensland.
- Development of three new master planned cities at Ripley Valley, Greater Flagstone and Yarrabilba that will become Queensland's first model communities and drive population growth to the west of South East Queensland.
- Work in partnership with local government to confirm the distribution of dwelling targets within South East Queensland, helping to strengthen the link between infrastructure investment and accommodating dwelling targets.

For the full Queensland Government response to the Queensland Growth Management Summit visit www.qld.gov.au/growth.

Queensland Infrastructure Plan

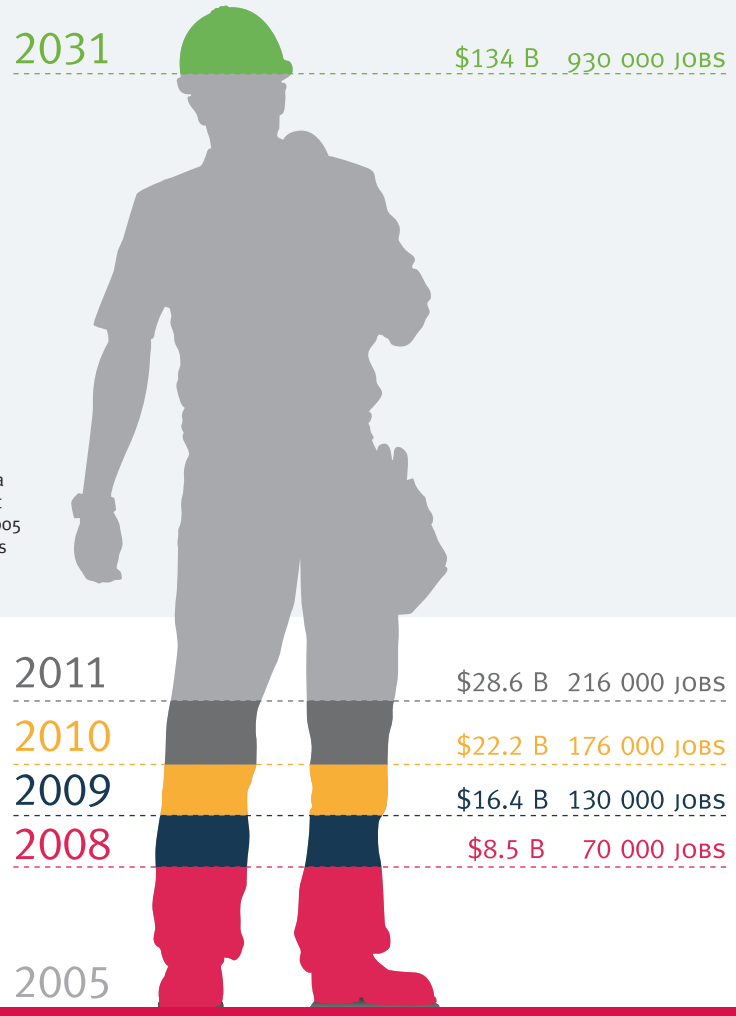
In 2011, a Queensland Infrastructure Plan (QIP) will be developed to ensure the capital works program is ready to anticipate and manage population growth across the state.

QIP will clearly link infrastructure delivery with population and economic development priorities, simplifying infrastructure planning and delivery through the inclusion of existing successful infrastructure planning documents such as SEQIPP, Far North Queensland Infrastructure Plan and the Road Implementation Program.

The plan will clearly list infrastructure priorities linked to growth issues and link closely with regional and state-wide initiatives being delivered through Growth Management Queensland.

QIP will provide:

- A clear state-wide blueprint of road, public transport, health and education infrastructure needs to match forecast population growth.
- A clear state-wide pipeline of targets with the credibility to attract federal funding.
- A robust prioritisation, sequencing and maturity assessment of projects across all of Queensland's regional planning frameworks.
- A plan that incorporates significant economic development activities (such as the new LNG industry) and associated infrastructure needs.



Note: This figure is an estimate of the job numbers SEQIPP will sustain on a year-by-year basis. The program job target is a cumulative assessment of the job numbers based on the total spend for the program from 2005 to 2031. The 2011 data is based on current projected budget estimates and program spend. Future investment on a yearly basis will indicate job numbers against the target estimate.

Figure 1
South East Queensland infrastructure investment and jobs

Job creation

The Queensland Government set a target to create 100 000 new jobs to guide Queensland through the global financial crisis and make the state even stronger than before.

The four-point plan to reach this target by 2012 is:

- keeping Queensland's record building program going
- preparing for recovery by developing skills for the future
- creating new jobs by supporting the new industries of the future like liquefied natural gas (LNG) and solar, while focusing on traditional strengths like tourism
- developing new job creation programs.

SEQIPP investment for the region through to 2031 is estimated to reach $134 billion.

This investment will fund regionally significant projects across the transport, water, energy, social and community infrastructure sectors.

These projects are estimated to support up to 930 000 jobs through to 2031.

Some of the major job generating infrastructure projects across the region include:

- Reconstruction of the 3.3 kilometre section of the Pacific Motorway between Springwood South and Daisy Hill. This will sustain an average of 1409 direct and indirect jobs over the life of the project.
- Construction of the Eastern Busway connecting the South East Busway at Buranda to Main Avenue at Coorparoo. This will generate 2509 direct and indirect jobs over the life of the project.
- Stage one of the Gold Coast Rapid Transit project linking Griffith University to Broadbeach via the key activity centres of Southport and Surfers Paradise. This will generate 6300 direct and indirect jobs over the life of the project.
- Construction of the 750 bed Gold Coast University Hospital. This will generate 9847 direct and indirect jobs over the life of the project.
- Construction of the 359 bed Queensland Children's Hospital. This will generate 7744 direct and indirect jobs over the life of the project.

Future major projects such as Cross River Rail, future stages of Gold Coast Rapid Transit and the Bruce Highway Upgrade have the potential to become some of the biggest job generators across the state.

To support this job generation, the Queensland Skills Plan outlines the measures the Queensland Government will take to ensure people with adequate skills are trained to deliver infrastructure projects into the future.

North Lakes Health Precinct

Highlights and achievements

SEQIPP remains the largest regional infrastructure plan in Australia. It gives a long-term outlook on investment, providing certainty to industry and the community. It also identifies an estimated $134 billion in infrastructure projects to support regional planning outcomes in South East Queensland to 2031.

Estimated SEQIPP funding in 2010-11 is about 33 per cent of capital spending across the state.

It is estimated that an average of $37 000 per South East Queensland resident will be spent to 2031 to deliver infrastructure across the region.

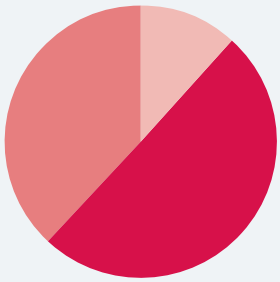
The Queensland Government is getting on with the job of delivering vital infrastructure for the region.

Some of the key projects completed over the past 12 months include:

- The Ipswich/Logan Motorway Interchange—the completed $255 million federally-funded project opened to traffic in November 2009, improving both safety, reliability and traffic flow for Ipswich Motorway motorists and local access to Gailes and Goodna.
- Ipswich Courthouse, police station and watch house—the $110 million Ipswich legal precinct opened for business in December 2009. It includes a new major courthouse, a watch house and a new 24-hour police station. The courthouse includes eight Magistrates courtrooms, one of which is a specialist Children's Court, three District Court courtrooms, registry and office accommodation for Department of Justice staff.
- North Lakes Health Precinct—construction of the new North Lakes Health Precinct was completed in 2009, giving local residents access to services including children's health, dental clinics and antenatal clinics.
- Toowoomba Pipeline—opened in January 2010, the 38 kilometre Toowoomba Pipeline has the capacity to transport 14 200 megalitres a year and, ultimately, up to 18 000 megalitres a year to secure Toowoomba's water supply.
- Eastern Busway—stage one of the Eastern Busway was opened in August 2009 connecting the University of Queensland and the Eleanor Schonell Bridge to the South East Busway at Buranda. The busway includes a new station at Princess Alexandra Hospital and the new Boggo Road busway station located adjacent to the Park Road rail station.
- Northern Busway—stage one of the Northern Busway from Royal Children's Hospital to Windsor was opened in August 2009. It links with the Inner Northern Busway and includes a new station at the Royal Brisbane and Women's Hospital.
- Beerwah grade separation—opened to traffic in November 2009, the Beerwah rail crossing project eliminated the rail level crossing to improve safety for road and rail traffic. Safe and easy pedestrian access across the rail corridor and a new pedestrian and cycle path was also constructed as well as a new pedestrian underpass under Roberts Road.
- Robina to Varsity Lakes Rail Extension—this $324 million project included a new rail track from Robina to Varsity Lakes. It included the new Varsity Lakes Station complete with a 300-space commuter car park.
- Gold Coast Highway bus priority—opened in February 2010, the Gold Coast Highway T2 transit lanes run from Broad Street down to the Loder Creek bridges, providing priority and faster passage to high-occupancy vehicles such as taxis and buses.
- Go Between Bridge—Brisbane City Council's Go Between Bridge (formerly Hale Street Link) is now operational. The four-lane toll bridge connects the northern and western suburbs with South Brisbane and West End.
- Clem Jones Tunnel (CLEM7)—the CLEM7 tunnel opened to traffic on 15 March 2010. The 6.8 kilometre tollway links five major roads north and south of the Brisbane River. It is the first section of Brisbane's new M7 motorway, due to be fully completed in 2012 following the construction of the Airport Link tunnel. The M7 will provide a direct link from Woolloongabba to the airport and fast-growing northern suburbs.

Figure 2

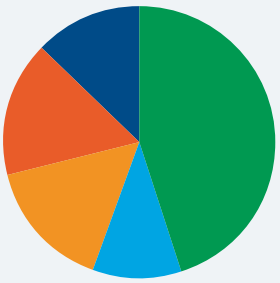
Program estimated investment



Investment so far (119 projects)	$16 B
Planned investment to 2014 (152 projects)	$67.3 B
Estimated investment to 2031 (128 projects)	$50.9 B
Total	**$134.2 B**

Figure 3

Summary of infrastructure by greater region

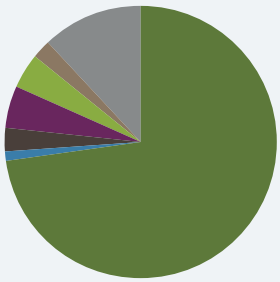


Greater Brisbane	$60.4 B
Gold Coast	$14.2 B
Sunshine Coast	$20.9 B
Western Corridor and Western SEQ	$21.7 B
SEQ-wide	$17 B

Note: These totals include completed project costs.

Figure 4

Estimated investment by asset class



Transport	$97.7 B
Water	$1.5 B
Community services	$3.8 B
Health	$6.8 B
Energy	$5.4 B
Education and training	$3 B
Completed projects	$16 B

Sir Leo Hielscher Bridges

The new Sir Leo Hielscher Bridge opened to traffic six months early in May 2010.

A community open day was held on 16 May 2010 to celebrate the opening.

This bridge is part of the Gateway Upgrade Project which includes construction of a second bridge, 12 kilometres of upgrades to the Gateway Motorway in the south and 7 kilometres of new motorway in the north.

In addition to the 10 minutes in travel time savings already being experienced due to free-flow tolling and completed upgrades, it is expected motorists will save an additional 15 minutes when the project is fully completed.

The entire project is expected to be opened in stages over 2010.

CLEM7 tunnel

Figure 5 – Delivered projects pipeline (119 completed projects)

Projects completed in 2005–2009

- Abermain substation
- Aquatic Centre upgrades – Mt Gravatt, Runcorn and Redcliffe
- Australian TradeCoast Transport Study
- Automotive trade training facility – Toowoomba
- Bounty Boulevard State School
- Bribie Island Groundwater Project[1]
- Brisbane Aquifer Project
- Brisbane Cricket Ground Woolloongabba
- Bromelton Off–Stream Storage
- Browns Plains Health Precinct
- Burpengary Meadows State School (Stage 1 and 2)
- Bus priority on Smith Street – Olsen Avenue to Gold Coast Highway
- Caboolture Northern Bypass
- Caloundra Road – additional lanes from Bruce Highway to Pierce Avenue
- Caltex Brisbane Recycled Water Project (BCC project)
- Cedar Grove Weir
- Centenary Highway Boundary Road underpass (joint Brisbane City Council and Main Roads project)
- Centenary Highway two lanes – Springfield to Yamanto
- Chancellor State College (Stage 2)
- Clive Berghofer Stadium – Toowoomba upgrade
- Construction of major substations at Algester (Brisbane), Goodna (Ipswich), Molendinar (Gold Coast) and Sumner (Brisbane)
- Construction of new transmission lines between Belmont and Murarrie (Brisbane), between Greenbank (Logan) and Maudsland (Gold Coast) and between Middle Ridge (Toowoomba) and Greenbank (Logan)
- Coomera Springs State School (Stage 1 and 2)
- Cricket Centre of Excellence, Albion – Stage 1
- Eastern Pipeline Interconnector
- Enoggera Reservoir Water Treatment Plant
- Further TransApex investigations – Airport Link
- Gold Coast Convention and Exhibition Centre extension
- Greenbank substation
- Hamilton/Eagle Farm Transport Investigation
- Helensvale to Robina, Salisbury to Kuraby – additional rail track and upgrades
- Highland Reserve State School
- Inner City Bus Access Capacity Study
- Inner Northern Busway Improvements and new busway stations
- Ipswich Motorway alternative northern corridor investigation
- Ipswich to Springfield Public Transport Corridor Study
- KTIA Nicklin Way – additional lanes
- Lamington – Springbrook Great Walk
- Linkfield Connection Road
- Merdian State College (Stage 1 and 2)
- MMTC – Caloundra–Mooloolaba Road (new two–lane road) – Caloundra Road to Creekside Boulevard
- New passenger rail stock – (24 x 3–car sets)
- New zone substations in Currumundi, Holland Park and Wacol South
- Norfolk Village State School
- Northern Link – Toowong to Kelvin Grove tunnel investigation
- Northern Pipeline Interconnector – Stage 1 and Ewen Maddock Water Treatment Plant
- Ormeau to Coomera – rail track duplication
- Ormeau Woods State High School
- Pacific Motorway – Stewart Road Currumbin interchange (Tugun Bypass)
- Pacific Motorway – Tugun Bypass
- Park Lake State School
- Pine Rivers Courthouse, Strathpine
- Qld Sport and Athletics Centre, Nathan upgrade – hydrotherapy centre
- Queensland Sport and Athletics Centre, Nathan
- Queensland Tennis Centre, Tennyson
- Recycling, desalination and groundwater investigations and preliminary studies
- Salisbury to Flagstone/Greenbank passenger rail investigation
- Sandgate Courthouse
- Skilled Park, Robina
- South Pine substation

Princess Alexandra Hospital Busway

Southbank Institute of TAFE
Southern Regional Water Pipeline
Springfield Lakes State School
State Softball Centre, Ormiston
Stretton State College (three stages)
Subsidies paid for completed local government projects
Sunshine Motorway – Sippy Downs to Kawana Arterial
Sunshine Motorway upgrade – Maroochydore Road to Pacific Paradise (including Maroochy River Bridge)
The Prince Charles Hospital – upgrade to general hospital
Underground subtransmission cables between Crestmead and Browns Plains North substations
Warrego Highway – Plainlands interchange
Western Corridor Recycled Water Project

Projects completed in 2009–10

Bay View Primary School (Stage 1)
Brisbane North Institute of TAFE – Grovely
Bruce Highway additional lanes from Boundary Road to Caboolture
Campus establishment – Kawana
Clem7 (North–South Bypass Tunnel)
Conondale Range Great Walk
Cooloola Great Walk
Eastern Busway – Buranda to PA Hospital to Boggo Rd to Eleanor Schonell Bridge
Annerley – replace underground cables nearing end life with new larger cables
Southport – increase substation capacity by installing third transformer
Gateway Motorway, Nudgee Rd to Bruce Highway planning study
Gold Coast Highway – bus priority and bus stations
Grade separation of Mt Lindesay Highway and interstate rail, Acacia Ridge
Hale Street Link (Go Between Bridge - BCC project)
Highfields indoor multi–purpose auditorium
Houghton Highway duplication and bus priority (Ted Smout Memorial Bridge)
Ipswich court, watchouse and police station
Ipswich/Logan Motorway interchange
Kurilpa Bridge
Metropolitan South Institute of TAFE – Loganlea
Mt Lindesay Beaudesert strategic network investigation
Nautilus study
North Lakes Health Precinct
Pacific Motorway Bikeway
Peregian Springs Primary School (Stage 1)
Powerlink upgrades – South Pine to Sandgate line (275/110 kV)
Rail crossing grade separation – Beerwah
South East Queensland (Gold Coast) Desalination Facility
Southern Freight Rail Corridor Study
Toowoomba Pipeline – Wivenhoe to Cressbrook
Pressure Reduction and Leakage Management Program[1]
Western Brisbane transport network investigation

Completed project stages 2005 to 2009–10

Caboolture to Beerburrum additional rail line
Caboolture to Bribie Island Road additional lanes from Aerodrome Road to Pasturage Road
Cunningham Highway to Warrego Highway connection study
Hope Island Road – duplicate 2 to 4 lanes from Columbus Avenue to Lae Drive
Maroochydore Road – additional lanes from Bruce Highway to Martins Creek
Mitchelton to Keperra rail line – track duplication
Mt Lindesay Highway upgrade – Green Road to Rosia Road section
Nerang–Broadbeach Road – intersection upgrades
Southern extension of rail line (Robina to Varsity Lakes extension)
Warrego Highway–Brisbane Valley interchange study

Notes:
1. All works within the project scope have been completed, however some works are continuing to optimise project outcomes.
2. This figure does not include three Energex network program upgrades across South East Queensland completed during 2005 and 2009.

BayView State School

About SEQIPP

SEQIPP was first released in 2005, and is updated annually to reflect and align with the latest planning and budget commitments. This year it has transitioned to better complement the new priorities and timeframes set in the SEQ Regional Plan.

The format takes a greater-region approach to allow communities to get a snapshot of infrastructure planned or underway in their local area, from transport through to schools and hospitals.

The four greater-regions are Western Corridor and Western South East Queensland, Sunshine Coast, Gold Coast and Greater Brisbane. There is an additional section for South East Queensland outlining infrastructure spanning the entire region including water, energy, ports and freight.

The plan has been broken down into these four greater-regions to best reflect the regional growth areas within the Urban Footprint—defined in the SEQ Regional Plan 2009–2031—and the connecting transport and infrastructure supporting these areas.

The document provides a snapshot of the population, infrastructure and expenditure, information on regional outcomes and the infrastructure to meet these goals in each of the four greater-regions.

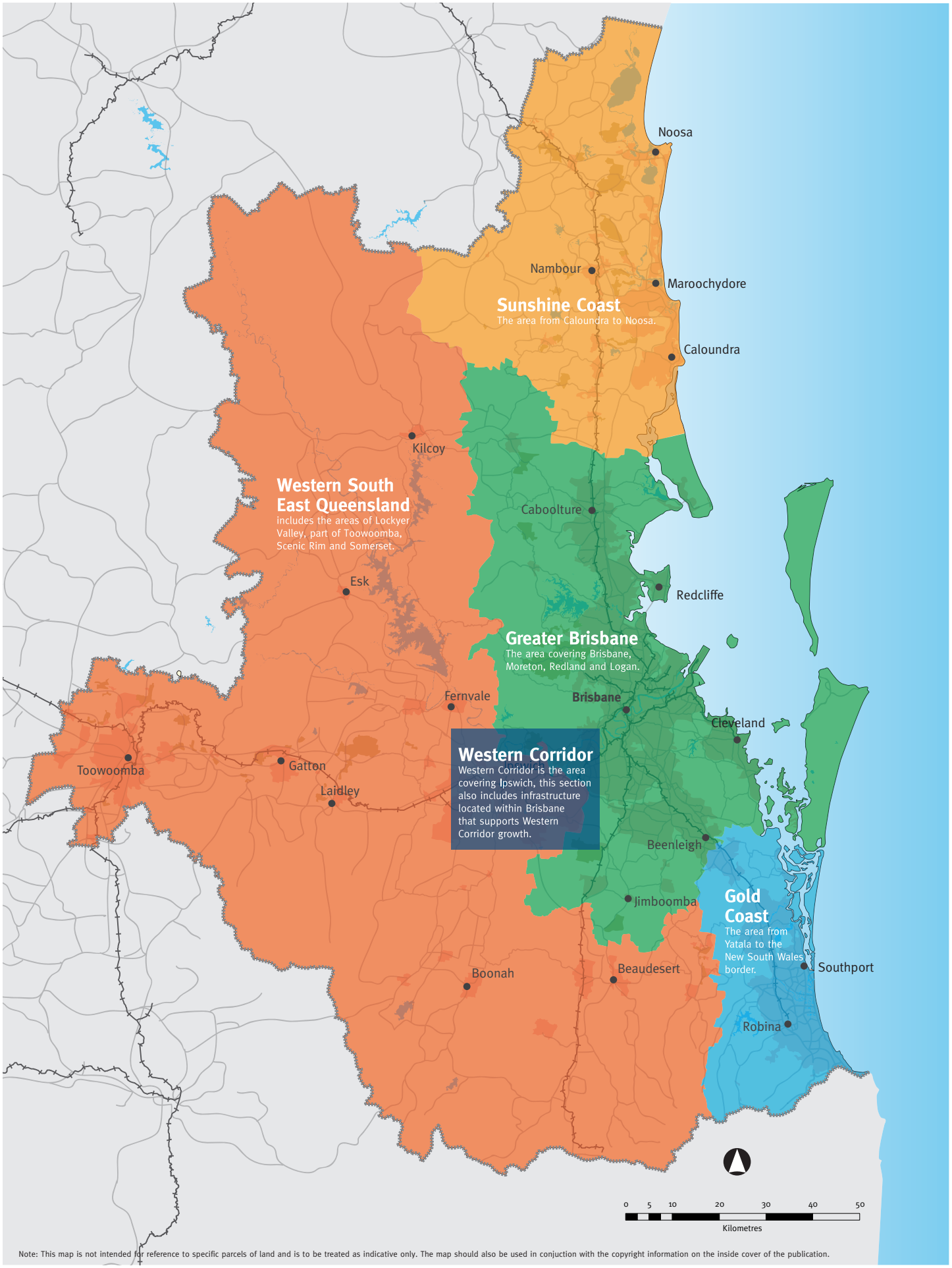
SEQIPP not only establishes priorities for regionally significant infrastructure over the next four years, it also outlines the longer-term planning horizon through to 2031. There are two tables in each greater-region section reflecting this split in timing.

Greater region break down

South East Queensland comprises 11 regional and city councils. The area covered by SEQIPP includes the following local governments:

- Brisbane City Council
- Gold Coast City Council
- Ipswich City Council
- Lockyer Valley Regional Council
- Logan City Council
- Moreton Bay Regional Council
- Toowoomba Regional Council (part of)
- Redland City Council
- Scenic Rim Regional Council
- Somerset Regional Council
- Sunshine Coast Regional Council.

Map 1—Greater region breakdown



Note: This map is not intended for reference to specific parcels of land and is to be treated as indicative only. The map should also be used in conjuction with the copyright information on the inside cover of the publication.

Strategic regional priorities

The SEQ Regional Plan articulates a vision for a region of interconnected communities, with excellent accessibility and an extensive and efficient public transport system assisting in the reduction of greenhouse gas emissions.

A subtropical world-class city, Brisbane is the heart of South East Queensland and is surrounded by large urban areas separated by open space and small to medium-sized towns and villages, each with its own character and identity.

The vision for South East Queensland is a future that is sustainable, affordable, prosperous, liveable and resilient to climate change. The regional priorities from the SEQ Regional Plan which SEQIPP support include:

- creating a more sustainable future
- addressing climate change and oil vulnerability
- protecting the regional landscape
- supporting rural production
- accommodating future residential and employment growth
- facilitating growth in the west
- delivering smart growth
- regional accessibility
- building a series of strong and identifiable communities
- providing infrastructure and services
- supporting strong and healthy communities.

SEQIPP supports the regional plan by outlining infrastructure projects designed to contribute to the desired regional outcomes:

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.

Further information on these desired regional outcomes can be found in the SEQ Regional Plan.


Brisbane Supreme Court and District Court


Robina Hospital expansion

SEQIPP funding and delivery

The Queensland Government is committed to maintaining a strong infrastructure program.

SEQIPP outlines an estimated $134 billion in infrastructure investment to 2031.

The government funds infrastructure from government cash flows, borrowings and alignment of capital portfolio. Additional innovative funding models for infrastructure delivery are being investigated.

It is important for government to maintain a strong balance sheet to provide stability, flexibility and the capacity to deal with any emerging financial and economic pressures. This is why SEQIPP identifies priorities for regionally significant infrastructure over the next four years, but also outlines the longer-term planning horizon to 2031. While there is some certainty around the projects outlined in the immediate four-year period, projects in the longer-term planning horizon may be updated in the future to reflect shifting planning priorities.

Contributions for infrastructure projects identified in SEQIPP come from all three levels of government as well as the private sector. Some identified projects may be subject to contributions from other levels of government which could affect timing for delivery.

Successful examples of where infrastructure has been delivered (or is being delivered) in partnership with the private sector and other levels of government are outlined.

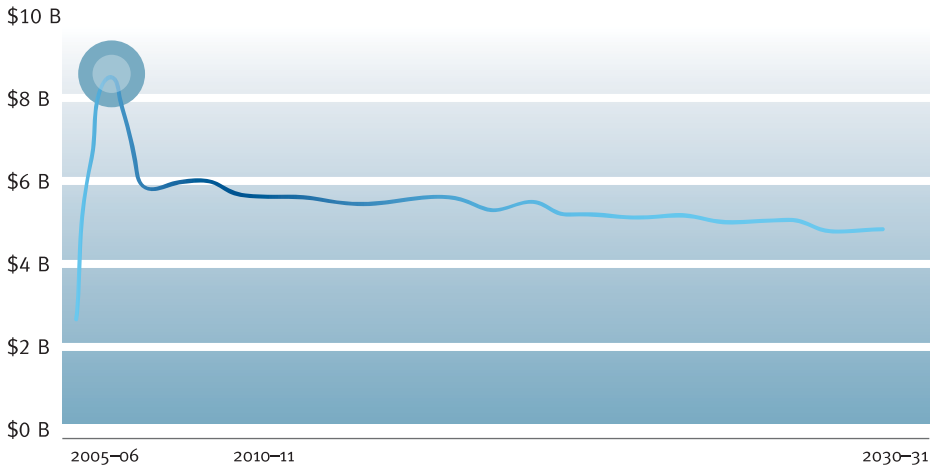
- Partnerships with industry were used to deliver the South East Queensland Water Grid, the Southbank Institute of TAFE Redevelopment Project and multiple road and rail projects.
- The Queensland Government and the Gold Coast City Council are working together to deliver the Gold Coast Rapid Transit project. The Australian Government has made provision for a contribution of $365 million for the project.
- Seven new schools will be built as part of the South East Queensland Schools public private partnership project. The Aspire Schools consortium will design, build and maintain for 30 years six new primary schools and one new high school in the rapidly growing Sunshine Coast, Western Corridor, Gold Coast and Redland areas.
- Airport Link is currently one of Australia's largest road tunnel public private partnerships. BrisConnections will finance, design, construct, commission, operate and maintain Airport Link for a period of 45 years.

The government uses the Project Assurance Framework, Value for Money Framework, Capital Works Management Framework and Gateway Review process to initiate, evaluate and deliver projects. These frameworks are the minimum standard for Queensland Government projects and their processes help decide the best delivery model for individual projects.

The planning and delivery of SEQIPP is coordinated by the Department of Infrastructure and Planning.

Figure 6

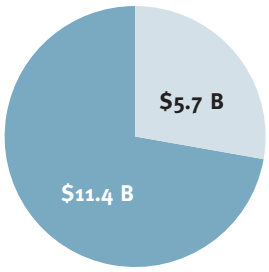
Indicative activity of SEQIPP to 2031



Note: This figure shows how the program is maturing from its establishment phase, marked by a significant period of growing investment and gear-up by both industry and government, especially in delivering the SEQ Water Grid, into a stabilisation phase of sustained delivery of infrastructure over the term of the plan. This represents total funds from all sources and is presented in 2010 dollars.

Figure 7

Snapshot of capital spending across the state



Capital expenditure in 2010–11 across Queensland - **$17.1 B**

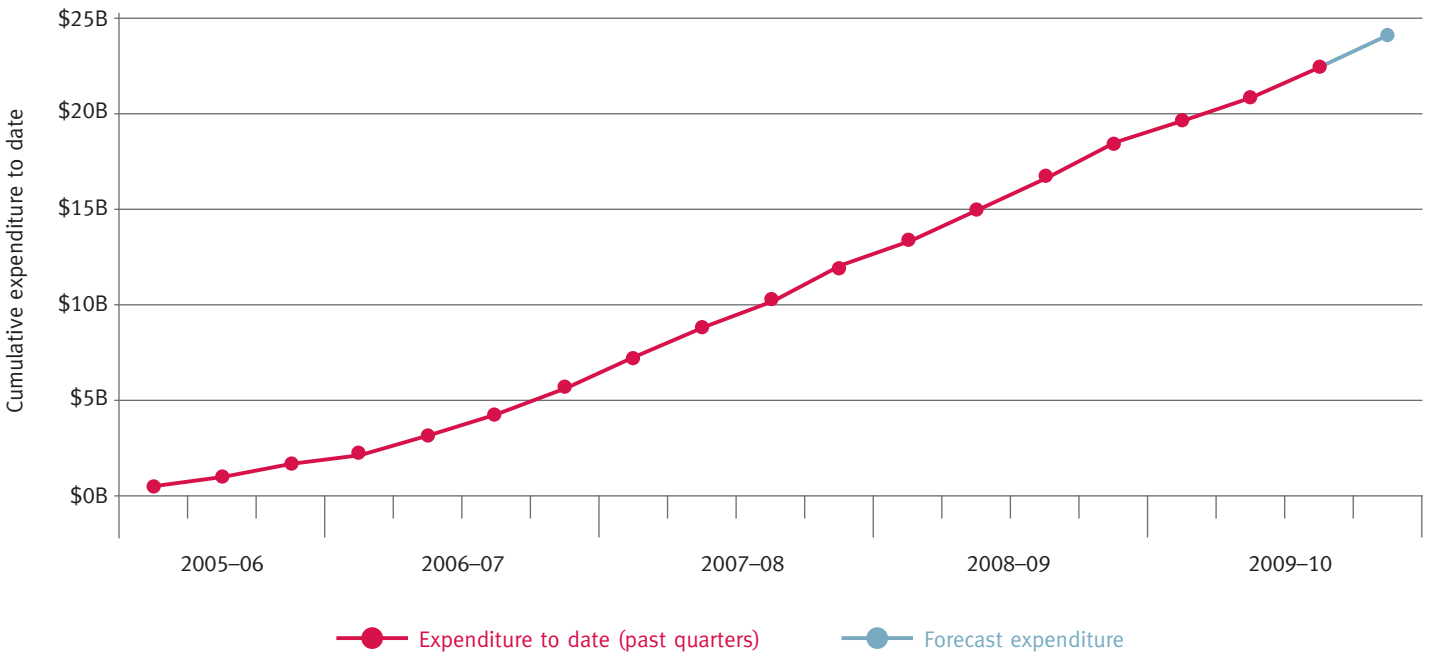
SEQIPP capital expenditure in 2010–11 33%

Rest of capital expenditure in 2010–11 across the state 67%

Note: SEQIPP capital expenditure does not include all capital spending in South East Queensland.

Figure 8

Program expenditure to date



Australian Government contributions

Nation Building Program

The Australian Government is investing $35.8 billion in road and rail infrastructure across the country through the Nation Building Program over the six-year period from 2008–09 to 2013–14.

In Queensland, federal funding is being provided for, among other things:

- school infrastructure
- public housing
- roads and rail.

Building Australia Fund

The Australian Government has implemented a national approach to planning, funding and delivering the nation's future infrastructure needs.

In the 2009–10 federal budget, the government committed $8.5 billion to nationally significant infrastructure projects, releasing Infrastructure Australia's National Infrastructure Priority List.

Projects funded through this list in South East Queensland include:

- Ipswich Motorway additional works—total federal investment will be $884 million, bringing the overall federal contribution to the Ipswich Motorway to more than $3 billion
- Gold Coast Rapid Transit—total federal investment will be $365 million
- Cross River Rail—total federal contribution for a detailed feasibility study will be $20 million
- Bruce Highway, Cooroy to Curra (section B) Duplication—total federal investment will be $488 million.

South East Queensland projects identified for further development and analysis include:

- Port of Brisbane Motorway
- Eastern Busway (stages two and three)
- Bruce Highway Corridor (Brisbane to Cairns, including Cooroy and Curra)
- Fully controlled motorways
- Northern Link Road Tunnel.

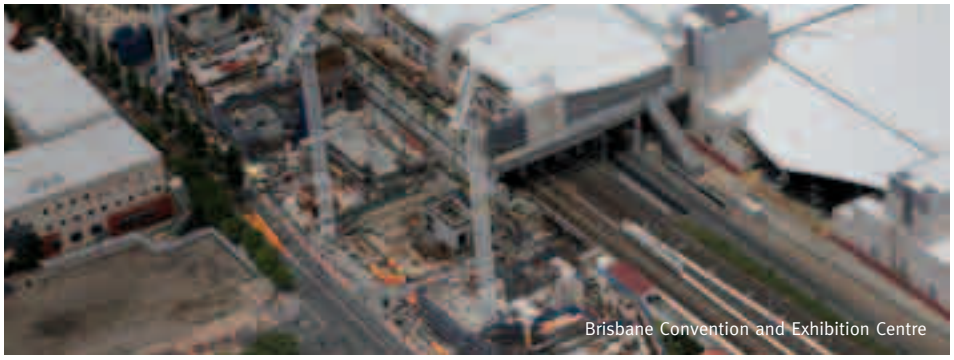
A National Health and Hospitals Network

In April 2010, the Council of Australian Government's (COAG), with the exception of Western Australia, agreed to the establishment of a National Health and Hospitals Network.

The Australian Government will invest $5.4 billion to deliver better health and hospitals across the country.

In Queensland, this funding will deliver improvements in three priority areas:

- better emergency departments
- faster elective surgery
- more hospital beds.



Brisbane Convention and Exhibition Centre

SEQIPP guidelines

Infrastructure tables

In the 2010 version of SEQIPP, the infrastructure projects are represented in two tables:

1. Infrastructure table—shows the forward estimates (FE) period outlining the immediate projects and priorities that are underway within the four-year forward estimates period (2010–11 to 2013–14).
2. Planned infrastructure table—outlines the post FE period providing an indicative delivery timeframe for planned infrastructure projects that align with the medium to long-term needs for the region (2014–15 to 2030–31).

Previous versions of SEQIPP represented staged projects as a single project, for example the South Queensland Correctional Precinct was previously listed as one project. This version breaks projects into stages providing clarity of delivery and funding timeframes, for example the South Queensland Correctional Precinct is now listed on two separate lines.

This separation provides more detailed information and clearly identifies where projects and project stages are subject to change. This is particularly relevant in the post FE table where there are a number of factors or triggers providing indicators of the need for a project.

To have a long-term commitment to an infrastructure program, it is necessary to recognise that some of the broader infrastructure drivers change over time, influencing the scope, sequencing and priority of projects across the region.

These factors include:

- the realisation of population growth and densities consistent with the SEQ Regional Plan
- impacts of climate change
- the availability of funding and investment from federal, state and local government and private investment
- consideration of the ongoing costs associated with operating and maintaining significant assets
- ensuring sufficient capacity and skills are available in the market to deliver projects in a timely manner
- consideration of the dependencies between projects such as hospitals, schools, public transport and roads
- the ability to procure significant corridors and land that aligns with the urban footprint, key activity centres and development areas
- the realisation of economic development opportunities such as increased exports and imports that trigger the need for additional commercial and social infrastructure
- changes to population demographics such as an ageing population.

Estimate categories

All cost estimates provided in SEQIPP represent the most relevant and timely information available at the time of publication. The estimated investment is calculated using a combination of budget approved, agency estimated, contract and/or construction costs where available.

Estimates in the state budget and other documents may differ, as they may incorporate costs reflecting anticipated changes in input prices between initial planning and the time of construction.

The level of planning that underpins the cost estimate varies for each project. Where detailed investigations have been completed and funding has been approved by the Queensland Government, estimates in SEQIPP reflect that funding. This is usually the case for projects within the first four years.

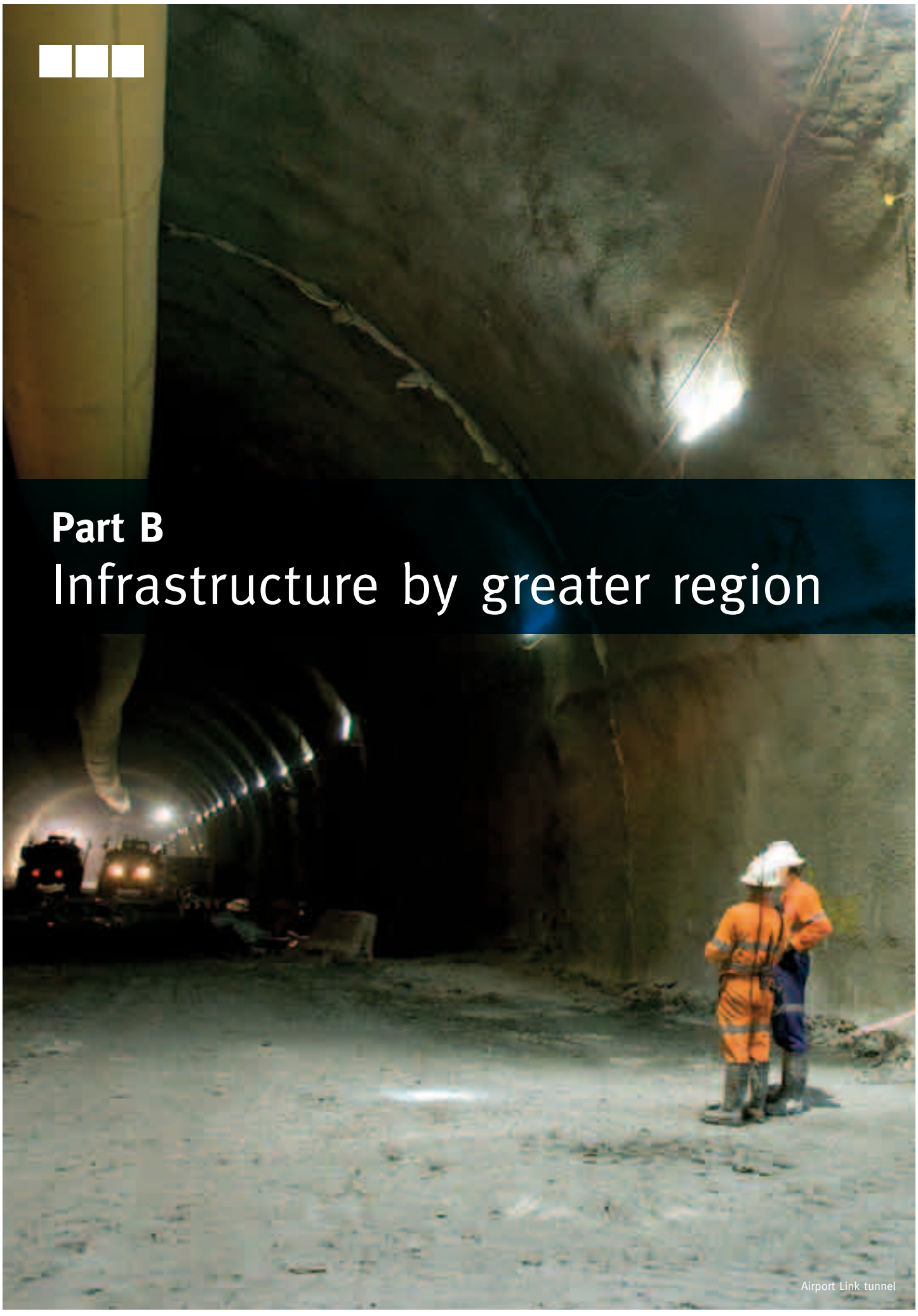
Estimates for individual projects outside the four-year horizon have not been identified. They are unlikely to have undergone detailed evaluation. A summed total for each greater region, calculated on an estimated basis and including contingency margins to reflect various project uncertainties, is shown at the end of the table.

Infrastructure investment is classified into five types depending on the level of investigation, approval and progress as follows:

- A pre-project estimate is the earliest estimate of project cost. It is undertaken before concept design and is generally based on the cost of similar projects plus a contingency.
- A concept estimate is typically undertaken in the initial planning stages and is based on a concept design.
- A pre-market estimate is based on a more detailed review of scope and requirements. This estimate is determined after the government has assessed the costs and benefits of a project.
- The market price is the price which has been agreed with the contractor. It is no longer an estimate or cost, since it has not been incurred.
- An ongoing program includes the total estimated cost of an ongoing program that is made up of several projects. It is generally based on the costs of individual projects currently underway and also within the program's planning.

Rounding has been applied to projects with a pre-project, concept or pre-market cost estimate.

Part B
Infrastructure by greater region



Airport Link tunnel

South East Queensland


Artist impression of Queensland Children's Hospital

Population:	2.8 million (2006), 4.4 million (2031)
Estimated no. of projects to 2031:	399 projects across the region (43 SEQ specific projects)
Estimated investment to 2031:	$134.2 billion across the region ($17 billion on SEQ specific projects)
Estimated per capita spend to 2031:	$37 000
Key regional projects:	Airport Link, Cross River Rail, Eastern and Northern busways, Northern Link, principal cycle network, energy transmission network, Queensland Children's Hospital, Translational Research Institute, Ipswich Motorway Upgrade, Queensland Police Academy, Gateway Upgrade Project, SEQ Water Grid, SEQ HOV network, Gold Coast Rapid Transit

Regional outcomes

South East Queensland is Australia's fastest growing metropolitan region. Its population is expected to grow from 2.8 million in 2006, to 4.4 million people by 2031. The region covers 22 890 square kilometres, stretching 240 kilometres from Noosa in the north to the Queensland-New South Wales border in the south, and 160 kilometres west to the city of Toowoomba.

The South East Queensland region encompasses land within 11 city and regional local governments. Its regional landscape is a rich mix of bushland and beaches, mountain ranges and farm lands, rivers and lakes, surrounding an Urban Footprint limited to less than 15 per cent of the region.

The population is highly urbanised and is generally concentrated in greater Brisbane, the Gold Coast, Sunshine Coast and Toowoomba.

The SEQ Regional Plan establishes a compact settlement pattern (Urban Footprint) for the region to outline how projected growth will be accommodated while protecting around 85 per cent of the region from urban development.

The compact settlement pattern will be delivered through a stronger focus on infill development within established urban areas concentrated around activity centres and public transport corridors. Broadhectare land will accommodate about 50 per cent of growth, predominantly within areas such as the Western Corridor in Ipswich and South Western Corridor in Logan.

The delivery of infill development will be assisted by the facilitation of transit-oriented communities providing a high-quality, medium to high-density mix of uses—housing, shops, offices and other facilities—within a comfortable 15 minute walk of established or planned rail and busway stations.

The SEQ Regional Plan requires the delivery of well-planned communities, supported by a network of accessible and convenient centres and transit corridors linking residential areas to employment and community infrastructure such as new hospitals and schools.

SEQIPP plans, coordinates and delivers infrastructure and services to achieve the visions of these plans.

The government is planning infrastructure to manage urban congestion, support infill development and improve access to community services through a range of transport initiatives:

- providing more public transport infrastructure through the South East, Northern and Eastern busways, Cross River Rail and rail network capacity improvements and planning for the Darra to Springfield rail corridor, Gold Coast Rapid Transit and CAMCOS

Connection of CLEM7, Airport Link and Inner City Bypass

- major investments in cycling facilities through delivery of the Principal Cycle Network Plan, Brassall-Ipswich Bikeway, the Royal Brisbane Hospital and King George Square cycle centres
- major road projects to increase network capacity such as the Gateway Upgrade Project, Airport Link, CLEM7 tunnel, Northern Link, Pacific Motorway upgrades and the Bruce Highway upgrade.

The proposed Cross River Rail project in Brisbane is a key initiative in meeting future public transport needs. It will help transform South East Queensland's rail system by providing more capacity for the region's rail services, meaning more people can move into and through the city more frequently. The project will enable the rail network to expand to new areas and link people to key inner city places, jobs and education.

The Gateway Upgrade Project will ensure better connections for business, industry and tourism including easier travel between the Gold and Sunshine coasts and improved access to the Australia TradeCoast precinct, including the Brisbane Airport and the Port of Brisbane.

The first stage of Gold Coast Rapid Transit, Griffith University to Broadbeach, is a key element in delivering a well-connected set of communities on the Gold Coast. It links key activity and employment centres as well as the Gold Coast University Hospital currently under construction with tourism nodes such as Surfers Paradise and Broadbeach.

In the Western Corridor, the Ipswich Motorway Upgrade and Centenary Highway Upgrade are providing vital links and improving network capacity.

On the Sunshine Coast, the Bruce Highway is being upgraded to improve safety and connections for this growing region.

Investment in social infrastructure is also essential for the health, wellbeing and economic prosperity of communities. It plays an important part in bringing people together, developing social capital, maintaining safety and quality of life and developing the skills and resilience essential to strong communities.

For example, a world-class police academy at Wacol will help meet the challenges of modern day policing and maintaining a safe community, while water management projects such as the South East Queensland Water Grid will protect our lifestyle and ensure water security into the future.

The Queensland Children's Hospital in Brisbane will not only be a centre of expertise in treating childhood illnesses and provide thousands of jobs, it will also be located within a health, education and technology hub. The hub benefits from high accessibility to the Goodwill pedestrian and cycle bridge, the South East busway, cycleway and freeway and the rail network. It is also within an area identified to accommodate increased residential and employment growth.

The major investment in health infrastructure at numerous sites across the region also positions South East Queensland well to respond to changes in the way the Australian health system may be funded by the Australian Government in the future.

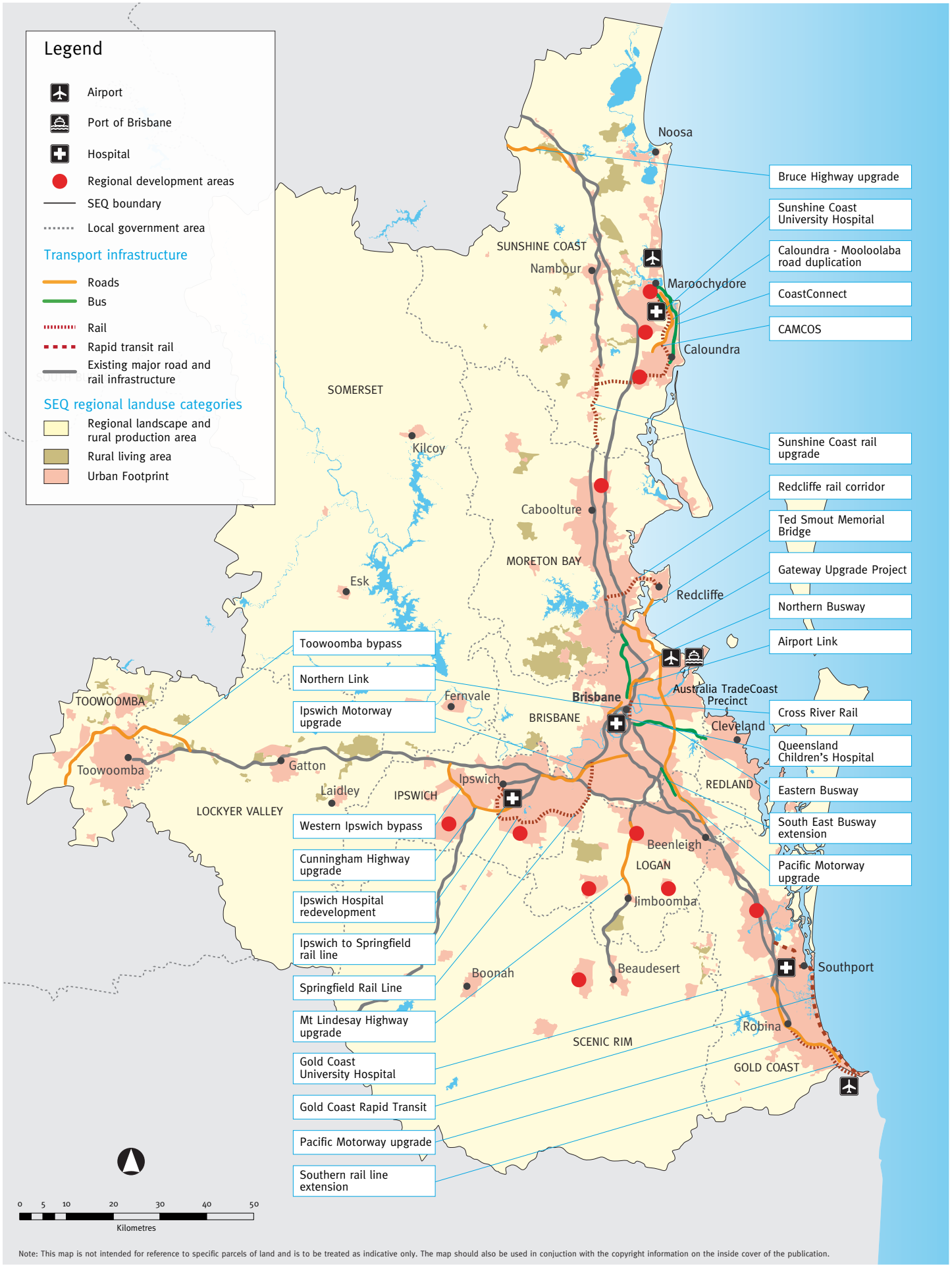
The next generation of environmental planners can train at the new Sustainability Interpretive Centre at the Mooloolaba campus of the Sunshine Coast Institute of TAFE. The convention centres in Brisbane and the Gold Coast and the State Equestrian Centre at Caboolture will also expand the region's tourism and support its economy.

Integrated land use and infrastructure planning is integral to enhancing diverse communities through the provision of affordable housing options in South East Queensland.

Initiatives under the Queensland Housing Affordability Strategy will ensure state land and housing is brought to the market quickly and at the lowest cost. This includes the provision of infrastructure to meet planned demand and consideration of various funding mechanisms to assist delivery. This will create a more competitive and responsive land and housing market by reducing the timelines and associated holding costs of bringing new housing to the market.

Well planned infrastructure projects are critical to ensuring sustainable communities while protecting the region's enviable lifestyle.

Map 2—South East Queensland strategic infrastructure



Note: This map is not intended for reference to specific parcels of land and is to be treated as indicative only. The map should also be used in conjuction with the copyright information on the inside cover of the publication.

Infrastructure goals

While infrastructure is broken down by greater region in SEQIPP, some asset classes support the entire region, including energy, water, the Port of Brisbane and freight. These asset classes are outlined here in the South East Queensland section, however some individual projects may also be referred to in the greater region where they are physically located.

Energy

Electricity demand in Queensland is growing at a faster rate than other states in the National Electricity Market. Over the next 10 years, Queensland peak demand is forecast to grow at an average 3.8 per cent per annum while consumption of electrical energy is forecast to grow at 3.1 per cent per annum.

The Queensland Government is meeting these challenges by diversifying its energy sources to include gas and renewable sources, funding a range of demand management initiatives and encouraging competition in energy markets. The Queensland gas market is also growing rapidly with demand doubling since 2000.

Electricity

South East Queensland represents about 60 per cent of Queensland's total electricity demand. Peak electricity demand in South East Queensland has grown by 32 per cent over the past five years (at an average of 5.7 per cent per annum) and is forecast to grow by another 24 per cent over the next five years (at an average of 4.3 per cent per annum). Electricity demand is growing at a higher rate than population growth.

Most of South East Queensland's power is generated outside the region primarily due to the location of fuel sources. Electricity is transported to the demand centres within South East Queensland via the high voltage electricity transmission network owned, developed and operated by Powerlink Queensland.

To ensure that future demand for electricity in South East Queensland can continue to be reliably met in the longer term, Powerlink plans to develop 500 kilovolt infrastructure in Southern Queensland as the next step in upgrading the capacity of the transmission network. The new 500 kilovolt transmission network will facilitate the increased transfer of electricity generated in South Western Queensland, including potential future low greenhouse gas emission and renewable generation sources, into South East Queensland. Powerlink is also acquiring easements for future projects in South East Queensland such as the proposed Woolooga to Cooroy South (Eerwah Vale) project which will reinforce high voltage electricity supply to the large area encompassing the northern Sunshine Coast, Gympie and surrounds.

Powerlink invested $675 million in capital works in Queensland during 2008–09 and expects to invest more than $2.9 billion over the five-year period to 2013–14 to develop Queensland's transmission network in time to meet growth in electricity demand.

ENERGEX, which is responsible for the low voltage distribution networks in South East Queensland, is expecting to spend $5.72 billion over the next five years, from 2010–11 to 2014–15, to meet the forecast electricity demand growth.

Gas

South East Queensland is currently the state's single biggest market for natural gas, with average annual consumption projected to be around 63 petajoules per annum—approximately 40 per cent of the state's overall gas consumption. Demand in South East Queensland is expected to continue to grow over the next 20 years.

Gas infrastructure, like electricity, consists of major transmission lines (pipelines) and localised distribution networks. Queensland has more than 4500 kilometres of high-strength steel gas transmission pipelines, which move gas from gas-producing regions to customers. This infrastructure is owned by the private sector and associated projects are not listed in SEQIPP.

The 440 kilometre Roma to Brisbane gas transmission pipeline is the sole transporter of gas from the Surat and Bowen gas fields to the growing South East Queensland market. The private owners of the pipeline are currently working to increase the capacity of the pipeline (by increasing compressor capacity) to meet growing customer demand for gas.

Queensland's Energy Policy has been successful in increasing the use of gas in the state's energy mix. In particular, the Queensland Gas Scheme requires at least 15 per cent of electricity sold in Queensland to be from gas-fired generation. The scheme has encouraged the commercialisation of new gas resources, in particular coal seam gas, and has led to the development of the state's emerging liquefied natural gas industry. The commissioning of the following gas fired powered stations brought Queensland's gas-fired power station capacity to more than 3000 megawatt:

- Braemar 1 Power Station (450 megawatt) in 2006
- Braemar 2 Power Station (450 megawatt) in 2009
- Condamine Power Station (144 megawatt) in 2009
- Darling Downs Power Station (630 megawatt) in June 2010.

Water

The South East Queensland Water Strategy is an adaptive plan to meet the water supply requirements to 2050 and beyond. It will deliver a 'water supply guarantee', supplying sufficient water to support a comfortable, sustainable and prosperous lifestyle while meeting the needs of urban, industrial and rural growth and the environment. This vision will be delivered through demand management, timely investment in infrastructure and the efficient operation of the South East Queensland Water Grid.

The Queensland Government's South East Queensland Water Grid is the largest urban drought response in Australia, securing the region's water supply now and for the future. The water grid is a network of connected water supplies, storages and pipelines allowing water to be transported from areas of water surplus to areas facing a shortfall.

The Queensland Government has worked in collaboration with other levels of government and in partnership with the private sector to deliver on its multi-billion dollar water plan.

Completed projects:

- Western Corridor Recycled Water project
- Gold Coast Desalination project
- Southern Regional Water pipeline

Port of Brisbane

- Northern Pipeline Interconnector – Stage 1
- Bromelton Off-stream storage
- Toowoomba Pipeline
- Eastern Pipeline Interconnector
- Cedar Grove Weir.

Projects underway

Construction of Wyaralong Dam is expected to be completed by December 2011. The completion of this project will provide additional water for the South East Queensland Water Grid.

The Northern Pipeline Interconnector – Stage 2 is planned for completion by December 2011. This will ensure security of supply for the Sunshine Coast, in particular Noosa, by permitting the bi-directional transfer of water.

Hinze Dam Stage 3 is now underway and is planned for completion in late 2010. This stage includes increasing the height of the dam wall and spillway, lengthening the saddle dam, increasing the height of the intake towers and relocation and refurbishment of recreational facilities.

Proposed projects

Priority sites for desalination plant construction have been identified at Lytton and Marcoola. These sites are currently undergoing investigations to ensure new bulk water supplies can be delivered efficiently when required. New bulk water supplies may be required by 2017 at the earliest, depending on regional growth and water demand.

The Wyaralong water treatment plant will be constructed in stages to supply water into the South East Queensland Water Grid through the proposed Cedar Grove Connector pipeline.

Port of Brisbane

The Port of Brisbane is Australia's third largest and fastest growing container port. It is a key driver of economic growth throughout South East Queensland. The port provides world-class cargo-handling and warehousing facilities and, despite the global financial crisis during 2008–09, total trade increased by 5.6 per cent.

Despite any short-term slowing in economic growth, positive growth in the long term is expected. The General Purpose Berth was commissioned in March 2010 to significantly boost project cargo and bulk trading capacity and, within the next five years, an additional two container berths will be completed and 80 hectares of terminal space developed. The capacity to continue meeting the demands of long-term growth has been assured through construction of a 4.5 kilometre seawall to enclose an additional 230 hectares. This will enable the construction of up to four new berths and provide back-up land for terminals and port-related uses.

In the coming year, the Port of Brisbane Corporation Limited will continue construction of Berth and Wharf 11 and 12 at Fisherman Islands to cater for strong growth across a range of commodity areas. Berth and Wharf 11 is expected to be finalised by 2012 and Berth and Wharf 12 by 2014.

The port is one of five government-owned assets being leased or sold under the Renewing Queensland Plan. It is expected that its lease will be finalised by the end of 2010, subject to market conditions. The levels of ownership by port users and their associates will be restricted to a cap of 20 per cent on port users and their associates.

Freight

Transportation of goods and services is vital to economic development and growth. The freight task in Queensland is expected to continue to grow, driven by strong population growth and economic activity. This is likely to place increasing pressure on the transport system, particularly those linkages supporting key industrial areas, commercial business parks and major retail centres.

South East Queensland is the gateway for interstate trade between Queensland and other states, and has a key role supporting international trade. Enhancing freight movement through the region is critical to the competitiveness and economic performance of the state. The challenge is to support trade through the provision of an integrated transport system that delivers sustainable freight solutions. This includes:

- exploring opportunities for integrated transport solutions that effectively utilise transport modes or a combination of modes to facilitate efficient freight movement
- optimising the existing transport system capacity and performance for freight
- planning and positioning the transport system to accommodate and exploit future freight opportunities
- supporting freight movement through cost-effective and affordable investment
- developing a more cohesive freight environment with local government, the Australian Government, industry and community.

The *South East Queensland Regional Freight Network Strategy* supports the implementation of the SEQ Regional Plan. This strategy aims to ensure the region's transport system continues to support the efficient movement of freight to achieve the best possible economic development, safety, quality of life and environmental outcomes.


Airport Roundabout Upgrade

Key infrastructure projects

Cross River Rail – Stage 1	
Status:	Under planning
Description:	A new north-south rail line in Brisbane's inner city including a tunnel under the Brisbane River and new underground inner city train stations
Cost:	$8.2 billion (to be confirmed as part of the current detailed feasibility phase)
Delivery:	Pending a decision from government to proceed to procurement, phase one construction could commence in 2012 for delivery by 2016
Key benefit:	When complete, it will provide the capacity to move up to 120 000 people in the morning peak into the inner city from the north and south. It would take a 30-lane motorway to match this

Airport Link	
Status:	Under construction
Description:	A 6.7 kilometre toll road, mainly underground, connecting the CLEM7 Tunnel, Inner City Bypass and local road network at Bowen Hills to the northern arterials of Gympie Road and Stafford Road at Kedron, Sandgate Road and the East West Arterial leading to the airport
Cost:	$3.3 billion
Delivery:	Construction is expected to be complete in 2012
Key benefit:	Airport Link will be the first major motorway linking Brisbane city to the northern suburbs and airport precinct, avoiding up to 18 sets of traffic lights

Queensland Police Academy	
Status:	Under planning
Description:	World-class police academy at Wacol
Cost:	$460 million
Delivery:	In planning and development
Key benefit:	This project will help position the Queensland Police Service to meet the challenges of modern day policing. When finished, the academy will have an educational and an operational precinct to support training in the latest investigative techniques and technologies

Queensland Children's Hospital	
Status:	Under construction
Description:	The new Queensland Children's Hospital will amalgamate the state's two leading children's hospitals—Royal Children's Hospital and Mater Children's Hospital
Cost:	$1.39 billion
Delivery:	Construction began in 2009 and is planned for completion in 2014
Key benefit:	The new hospital will have 359 beds—71 more than the combined total now at the Mater and Royal Children's,—along with new obesity, pain and allergy clinics and a new renal treatment centre

Halys to Springdale to Blackwall electricity project (500 kilovolt)	
Status:	Under planning
Description:	Part of Powerlink's planned 500 kilovolt network to increase the transfer of electricity from the major generating centres in South West Queensland into South East Queensland to meet the region's growing electricity demands
Cost:	$530 million
Delivery:	Construction of the line and associated works is expected to be completed in 2014–15
Key benefit:	The line will provide a secure and reliable supply of high voltage electricity to South East Queensland

Wyaralong Dam	
Status:	Under construction
Description:	Construction of Wyaralong Dam
Cost:	$348 million
Delivery:	Construction is planned for completion in December 2011
Key benefit:	Wyaralong Dam will provide a supply of 18 000 megalitres per annum of water for the South East Queensland Water Grid

South East Queensland infrastructure 2010–2014

Project	Estimate category	Estimated investment $M	Subject to federal funding	Delivery timeframe 2010–11	2011–12	2012–13	2013–14	Project continues in later years
TRANSPORT								
Public transport network								
New Passenger Rail Stock (20 x three-car sets)	Market	297		●	●			
New Passenger Rail Stock (20 x three-car sets)	Market	327		●	●	●		
New Passenger Rail Stock (38 x three-car sets)	Pre-market	600				●	●	→
Public Transport Corridor preservation fund	Ongoing program	260		●	●	●	●	→
Rail Capacity upgrades	Pre-project	130		●	●	●		→
Translink sub-regional station upgrade	Ongoing program	650		●	●	●	●	→
Strategic road network								
Intelligent Transport Systems	Pre-project	400		●	●	●	●	→
New Transport Investigations	Ongoing program	13		●	●			
Active transport network								
Sub-regional cycle network	Ongoing program	600		●	●	●	●	→
Freight network								
Port of Brisbane infrastructure - including Berth and Wharf 11 and 12 and Hamilton site redevelopment	Ongoing program	2,265		●	●	●	●	→
ELECTRICTY TRANSMISSION AND DISTRIBUTION NETWORKS[1, 2, 3]								
Powerlink[4]								
Halys to Springdale to Blackwall project (500kV)[5]	Concept	530		●	●	●	●	→
Swanbank A Substation Rebuild (Blackstone)	Market	35		●				
Energex								
New substations	Ongoing program	1,156		●	●	●	●	→
Substation upgrades	Ongoing program	246		●	●	●	●	→
Subtransmission and distrubution network upgrades	Ongoing program	3,477		●	●	●	●	→
WATER								
Northern Pipeline Interconnector – Stage Two	Market	450		●	●			
Raising of Hinze Dam - Stage 3	Market	395		●				
Southern Regional Water Pipeline extension - Cedar Grove Connector	Pre-project	250		●	●	●		
Wyaralong Dam	Market	348		●	●			
Wyaralong Dam Water Treatment Plant - Stage 1	Pre-market	100				●	●	→

Total estimated investment of projects underway in 2010–2014 = $12 529 million

1. Energy authorities budget on a five year basis. Project costs and timing beyond that period are not included in the above table. kV = kilovolt.
2. Timing of future investments will depend on demand. Expenditure will be adjusted as necessary to ensure the South East Queensland distribution network is able to meet demand while also meeting mandated reliability requirements.
3. The timing of energy projects seeks to ensure that mandated reliability requirements are maintained as forecast demand increases.
4. In 2007, the Australian Energy Regulator set Powerlink's allowable regulated revenue for the five year period between 1 July 2007 and 30 June 2012, including an allowance for capital expenditure.
5. Timing for Wyaralong Dam Water Treatment Plant - Stage 1 is subject to further investigations by the Queensland Water Commission which will include consideration of the demand-supply balance.
6. The table identifies infrastructure projects to 2014 that contribute to the whole of South East Queensland.
7. Estimates in the state budget and other documents may differ, as they may incorporate costs that reflect anticipated changes in input prices between initial planning and the time of construction. Estimated investment includes funds already expended on projects.
8. Where funding is required from other sources other than the Queensland Government, their estimated costs have been included.
9. For an explanation of estimate categories, refer to page 15.
10. Estimated investment for projects within this table refer to the total project cost, which may be beyond the four year period. This is relevant for projects with an arrow in the last column.
11. There are high occupancy vehicle (HOV) components within some of the projects outlined in this table including Northern and Eastern busways.

● Investigation/study projects ● Corridor preservation projects ● Infrastructure construction projects ▲ Subject to federal funding → Project continues in later years

South East Queensland planned infrastructure 2014–2031

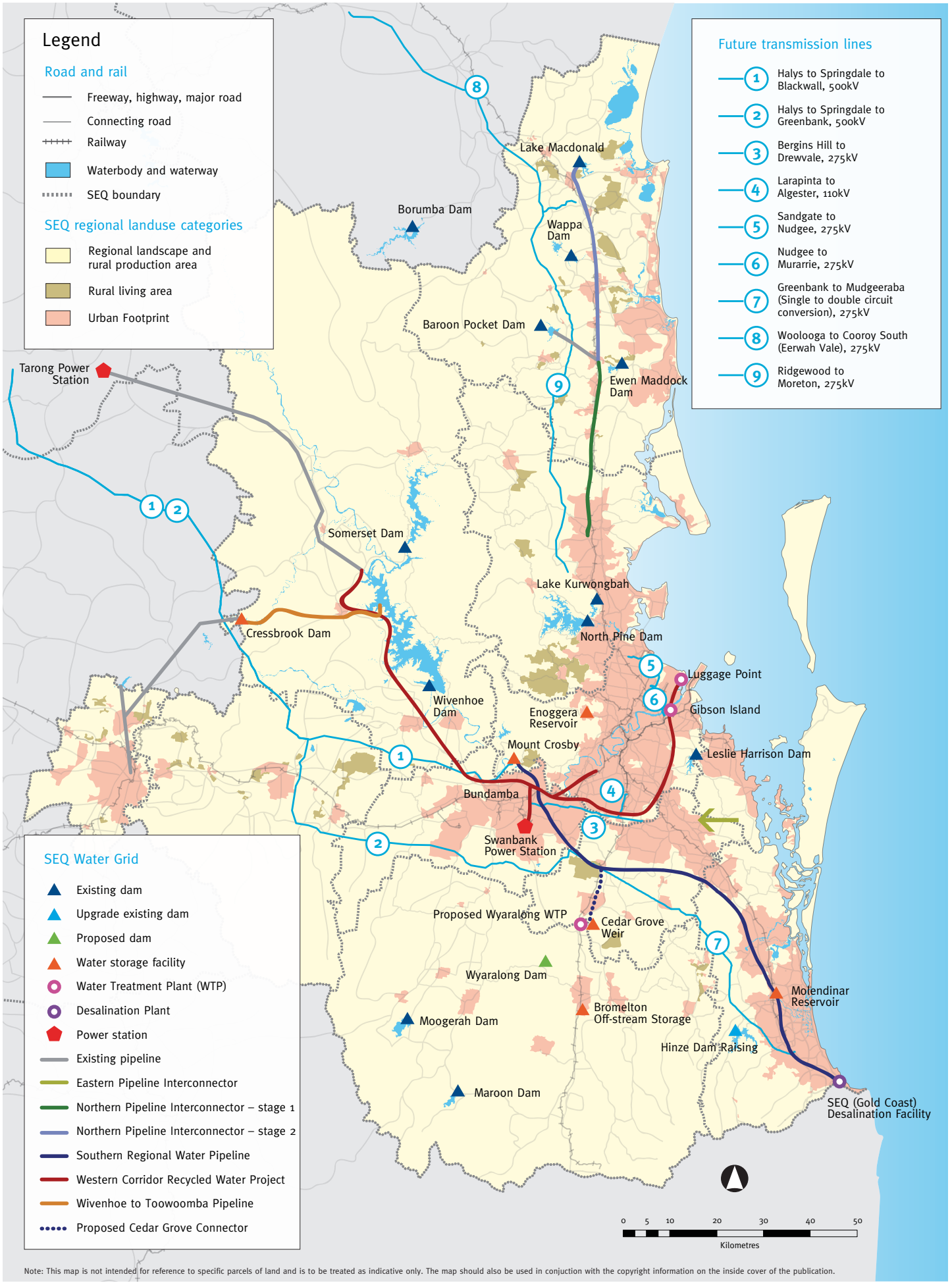
Project	Subject to federal funding	Indicative delivery timeframe		
		2014–15 to 2019–20	2020–21 to 2025–26	2026–27 to 2030–31
TRANSPORT				
Public transport network				
New Passenger Rail Stock (40 x three-car sets)		●		
Rail Crossing grade separation program			●	
Active transport network				
Sub-regional walking program			●	

Project	Subject to federal funding	Indicative delivery timeframe
		2014–15 to 2030–31
Strategic road network		
SEQ HOV program[10]		●
ELECTRICITY TRANSMISSION AND DISTRIBUTION NETWORKS		
Powerlink		
Bergins Hill to Drewvale project (275kV)		●
Future substations (dependent on electricity demand) - Brisbane, Moreton, Redland and Logan		●
Future substations (dependent on electricity demand) - Gold Coast		●
Future substations (dependent on electricity demand) - Sunshine Coast		●
Greenbank to Mudgeeraba project (275kV)		●
Halys to Springdale to Greenbank project (500kV)		●
Larapinta to Algester project (110kV)		●
Nudgee to Murarrie project (275kV)		●
Sandgate to Nudgee project (275kV)		●
Southern Gold Coast bulk supply		●
Woolooga to Cooroy South (Eerwah Vale) project (275kV)		●

Total planned investment = $1760 million

1. Energy authorities budget on a five year basis. Project costs and timing beyond that period are not included in the above table.
2. Timing of future investments will depend on demand. Expenditure will be adjusted as necessary to ensure the South East Queensland distribution network is able to meet demand, while also meeting mandated reliability requirements.
3. The timing of energy projects seeks to ensure that mandated reliability requirements are maintained as forecast demand increases.
4. In 2007, the Australian Energy Regulator set Powerlink's allowable regulated revenue for the five year period between 1 July 2007 and 30 June 2012, including an allowance for capital expenditure.
5. kV = kilovolt.
6. The table identifies planned infrastructure projects to 2031 that contribute to the whole of South East Queensland.
7. Total planned investment for South East Queensland does not include Powelink projects.
8. Projects listed in the longer-term planning horizon may change to better reflect the emerging needs of the region.
9. The indicative delivery timeframe outlines the estimated timeframe for completion of the project. However, project planning or commencement may occur before this timeframe.
10. Planning for this project will occur in the 2010–14 timeframe.

Map 3—South East Queensland energy and water infrastructure



Note: This map is not intended for reference to specific parcels of land and is to be treated as indicative only. The map should also be used in conjuction with the copyright information on the inside cover of the publication.

Greater Brisbane


Ted Smout Memorial Bridge

Population:	1.7 million (2006), 2.4 million (2031)
Estimated no. of projects to 2031:	157
Estimated investment to 2031:	$60.4 billion
Estimated per capita spend to 2031:	$34 000
Key regional projects:	Pacific Motorway Upgrade, Gateway Upgrade Project, Airport Roundabout Upgrade, Northern and Eastern busways, Brisbane Supreme and District Court, SkillsTech Australia, Logan Hospital Emergency Department Upgrade, Keperra to Ferny Grove Rail Duplication
Regional development areas:	Elimbah East, Park Ridge, Flagstone and Yarrabilba North

Regional outcomes

Greater Brisbane includes Brisbane City, Logan, Moreton Bay and Redland, and is home to more than 1.7 million people.

The Greater Brisbane region is expected to house a significant proportion of the projected growth in South East Queensland. In areas such as Caboolture and Logan, most of this development will occur on broadhectare sites. Within Brisbane City, an increasing amount of redevelopment will occur around existing activity centres, public transport nodes and infill development sites to better utilise existing infrastructure.

Brisbane

The city of Brisbane supports the largest proportion of South East Queensland's population and comprises significant economic drivers including the central business district (CBD) and the region's major sea and air ports located within the Australia TradeCoast region.

For Brisbane, public and active transport will need to play a much bigger role in the future. This will mean improved public transport infrastructure and services to the CBD. A higher standard of cross-town public transport services will also be needed.

Land surrounding urban centres and transit corridors will be planned appropriately to accommodate a majority of infill growth, without the need to remove the traditional backyard. This will provide a range of dwelling choices to suit diverse lifestyles.

To support infill development and manage urban congestion, a range of transport initiatives are underway or have been completed including:

- increasing capacity for public transport through the South East, Northern and Eastern busways, and major improvements to rail network capacity
- investing in active transport through the Principal Cycle Network Plan on projects such as the Northern Brisbane Cycleway Investigation and South East Freeway Bikeway
- major road programs to complete a network of regional motorways and highways. This will allow the movement of road freight and link workplaces to labour, as well as removing long-distance heavy vehicle trips from the local road network. Strategic projects include the CLEM7 tunnel, Airport Link, Gateway Upgrade Project and future planned projects such as Northern Link. This will also be supported by the continuing implementation of the managed motorways program to make more efficient use of the motorway network.

A focus will be to prioritise infrastructure that supports residential and employment opportunities in centres close to public

transport nodes. For example, the Princess Alexandra (PA) Hospital upgrade links to the Boggo Road and Eastern busways and PA Hospital cycleway, connecting key areas for health, education and technology as well as areas identified to accommodate additional residential growth.

Another focus in Brisbane is to improve current public transport, road and rail infrastructure to link employment centres and services to broadhectare areas identified as future growth areas.

Network extensions will focus on delivery of high level services to newly established and planned broadhectare lands in areas such as Rochedale and Oxley Wedge.

Growth in the region has placed significant demand on our health services. A major regional health infrastructure renewal and enhancement program is underway including construction of the new Queensland Children's Hospital at South Brisbane and upgrades to the emergency departments at the Princess Alexandra Hospital, Queen Elizabeth II (QEII) Hospital and The Prince Charles Hospital.

Logan

The city of Logan comprises a range of urban and rural communities benefiting from access to major road and rail corridors, in particular the Pacific and Logan motorways, Mt Lindesay Highway and the Brisbane to Gold Coast rail line.

Logan includes the South Western Corridor (Browns Plains to Flagstone and includes Park Ridge, Greenbank, Yarrabilba) that has the longer term potential to accommodate regionally significant levels of growth and alleviate long-term growth pressures on the southern area of South East Queensland such as the Gold Coast.

Developing these regionally significant growth areas will require water, sewerage and transport infrastructure to be enhanced and extended. Appropriate sequencing of infrastructure in the South Western Corridor is integral to achieving dwelling targets set in the SEQ Regional Plan.

Growth will be achieved by establishing a series of communities linked by sub-regional public transport and road networks with existing urban areas in Logan and employment and services in Brisbane, Ipswich and the Gold Coast.

The Queensland Government recently announced three brand new communities at Ripley Valley, Greater Flagstone and Yarrabilba. These will be model communities where children can walk to school, workers can live near public transport and families will be guaranteed greenspace for recreation and easy living lifestyle.

Infrastructure projects like the Metropolitan South Institute of TAFE and Logan Hospital Emergency Department upgrade will generate additional local employment opportunities in the area and increase employment diversity and local services. Further planning will be undertaken on expansion of health services required in this growing area. Planned upgrades to the Pacific Motorway and Logan Motorway will assist in linking local communities.

The upgrade of the Mt Lindesay Highway will not only assist in linking communities, it will enhance public transport access to broadhectare areas like Flagstone by supporting existing infrastructure corridors and networks.

Moreton Bay

Moreton Bay includes a diverse range of coastal, hinterland and urban communities. Two major areas of urban settlement have been established—a southern area and a northern growth corridor.

In Moreton Bay, the focus is on linking major regional activity centres to proposed areas of residential growth and providing additional capacity to service new development areas. Additionally, increasing sub-regional transport network capacity and providing public transport infrastructure along key routes is essential to cater for projected growth and provide access to employment and services.

Caboolture–Morayfield is the principal regional activity centre and the focus for infill development within the northern growth corridor. Other significant infill opportunities will be generated through efficient use of land close to the Brisbane–Sunshine Coast rail line.

To support infill development and accessibility to employment, projects such as the Burpengary to Caboolture Road Upgrade, duplication of the Houghton Highway bridge and Bruce Highway intersection upgrades at Pumicestone, Boundary and Bribie Island roads will link residential areas in the east to the Brisbane–Sunshine Coast rail line.

This infrastructure will also accommodate the increasing role of Caboolture as a principal activity centre and a location for employment growth.

The planned Moreton Bay Rail Link (formerly Petrie to Kippa Ring Rail Corridor) would ensure long-term connectivity to employment and services for the Redcliffe Peninsula.

Development of health services delivered through the Caboolture Hospital Emergency Department upgrade and the Caboolture Health Precinct will ensure communities have local access to essential health services. Planning for the future health services required to service this growing population is also an important initiative and contributes to the SEQ Regional Plan outcome of strong communities.

Long-term infrastructure planning decisions, including corridor location and protection, will continue to consider areas that may accommodate long-term growth like Caboolture West and will protect the function of the Bruce Highway.

Redland

Redland City comprises urban, rural, bushland and island communities. Urban development is focussed around activity centres that are linked through an established rail and road network.

The priority for Redland is the timely provision of transport infrastructure—including increased road capacity and increasing levels of public transport services—in line with growth.

Rail corridor upgrades will assist in accommodating residential and employment growth in activity centres including Cleveland, Ormiston, Birkdale, Thorneside and Wellington Point.

Development of social infrastructure services like the Redland Hospital emergency department upgrade and Redland Fire and Rescue Station will ensure communities have access to essential services.

Infrastructure planning will respond to the significant environmental and biodiversity values of the area, particularly the Queensland Government's commitment to the long-term viability of Redland's koala population.

Infrastructure goals

Transport

Greater Brisbane is expected to accommodate a large proportion of development and population proposed for the region. This will increase demands on public transport, freight and access to new growth areas.

The Queensland Government is working on a combination of projects to build an integrated transport network to assist people to move efficiently, while managing congestion and climate change.

South East Queensland's transport system supports the lifestyle enjoyed by residents and visitors, enhances the state's economic vitality and protects the natural environment.

Transport infrastructure planning goals for Greater Brisbane include:

- providing quality public transport infrastructure and services along key routes linking activity centres and the CBD
- building and maintaining a high-standard orbital motorway system to support a hierarchy of roads and protect the multi-modal functionality of key arterials
- managing congestion and travel demand
- accelerating development of the principal cycle network
- increasing public transport and road network capacity to cater for growth
- investigating the long-term transport requirements and preserving transport corridors to cater for future growth
- using existing transport infrastructure more efficiently.

In delivering these priorities, there are a range of challenges to be overcome including:

- congestion on the rail and road network impacting travel times and reliability
- limited ability to improve rail services until an additional rail river crossing is in place
- encouraging job growth in activity centres, placing further pressure on congested road networks
- providing adequate transport infrastructure to keep pace with rapid population growth, particularly in outer suburbs
- encouraging more trips by active transport, particularly to activity centres
- delivering new arterial roads in conjunction with the development of new communities to protect the motorway network from excessive use for local trips
- ensuring freight and commercial traffic can move efficiently around the network as traffic volumes grow.

Projects completed

Recently completed projects such as the Airport Roundabout Upgrade and the Bruce Highway upgrade between Uhlmann Road and Caboolture enhance connectivity and improve the efficiency of Greater Brisbane's road network by connecting suburbs with the central business district and important economic areas.

The Mt Lindesay Highway upgrade between Green Road and Granger Road at Park Ridge is complete. Work included duplicating the existing highway, constructing service roads and constructing an overpass at the Park Ridge Road Intersection, now known as the Cordingly Bridge.

The Acacia Ridge rail crossing overpass on Beaudesert Road was completed as part of the AusLink Program, jointly funded by the Queensland Government, the Australian Government and Queensland Rail. This project provides for a grade separation of the Mt Lindesay Arterial over the Brisbane–Sydney rail line at Acacia Ridge. This is being undertaken in conjunction with major upgrading of the Acacia Ridge rail terminal.

In the public transport arena, construction of the Eastern Busway from the Eleanor Schonell Bridge in Dutton Park to the South East Busway at Buranda is improving networks, reducing commute times and providing better services.

Specially designed bike paths such as the PA Hospital Cycleway offer commuters the opportunity to leave their cars at home and travel to work sustainably, contributing to a long-term vision for improved active transport in the region.

The new Royal Brisbane Women's Hospital (RBWH) Cycle Centre provides cyclists, pedestrians and joggers access to a state-of-the-art, end-of-trip facility with 750 secure bike parking spaces, male and female shower facilities, secure lockers, towel service and bike maintenance capabilities—making active transport an attractive choice not just for the journey, but at the destination.

The Northern Busway to Herston—the first stage of the Northern Busway—opened in August 2009. The busway links the Royal Children's Hospital to Herston via the RBWH. This section of the Northern Busway provides easy access to Queensland's largest public hospital from the CBD and makes travel to and from the city's northside faster and more reliable.

Projects underway

The Pacific Motorway upgrade from Springwood South to Daisy Hill is currently underway. The upgrade will increase traffic flow and improve safety on the Pacific Motorway.

The purchase of 20 three-car rail sets and construction of stabling facilities is also underway. This follows the successful delivery of 24 three-car rail sets completed in January 2009. The new rolling stock will be used to provide extra passenger services on the Citytrain network.

In August 2009, buses began operating along the Eastern Busway from the University of Queensland and the Eleanor Schonell Bridge at Dutton Park to the South East Busway at Buranda. The Queensland Government is expanding the Eastern Busway from Buranda to Main Avenue at Coorparoo. The Eastern Busway will ultimately connect the University of Queensland to Capalaba via Buranda, Stones Corner, Coorparoo, Camp Hill, and Carina, and will be the eastern link in Brisbane's world-class busway network, reducing bus travel times for thousands of commuters from all over the eastern suburbs.

The Northern Busway is an integral part of the Queensland Government's long-term plan to meet the transport needs of Brisbane's growing northside communities. The Northern Busway connects with the Inner Northern Busway which was completed in 2008. The section of the Northern Busway from the Royal Children's Hospital at Herston to Windsor was completed in August 2009.

The next stage, from Windsor to Kedron, is currently under construction and is being delivered in conjunction with Airport Link. It is due for completion in

2012. The final stage from Kedron to Bracken Ridge is in the planning stage.

Brisbane City Council has commenced a staged upgrade of Kingsford Smith Drive between Breakfast Creek Road and the Sir Leo Hielscher Bridges. The first stage, now under construction, is due for completion in early 2011 and will provide improved connectivity between the new and old Gateway Motorway.

Projects planned

The Queensland Government is also actively working to meet the future transport infrastructure needs in Greater Brisbane, planning projects such as Cross River Rail.

Cross River Rail is a proposed new north-south rail line in the inner city, including a tunnel under the Brisbane River and new underground inner city rail stations. The project will unlock South East Queensland's constrained rail network by providing more capacity for the region's rail services, meaning more people can move into and through the city more frequently.

The Australian and Queensland governments have committed $25 million to progress the detailed feasibility phase of the project. This is now underway and is due for completion in mid 2011. The detailed feasibility phase includes investigations to determine the location of the new route and new underground stations, preparing an environmental impact statement and a business case, and extensive community consultation. At the end of the detailed feasibility phase, the Australian and Queensland governments will consider the outcomes of the study, how it could be funded and when it should proceed to procurement.

Projects planned to increase rail network capacity across the region include completion of the Darra to Springfield Transport Corridor project and upgrades on the Ferny Grove and Cleveland lines. Other planned public transport infrastructure includes high occupancy vehicle and bus priority lanes throughout South East Queensland.

Brisbane City Council is well progressed with the tender process for Northern Link, the 5 kilometre underground toll road linking the Western Freeway at Toowong to the Inner City Bypass at Kelvin Grove. Three consortia have been shortlisted to develop bids to design, construct and operate the tunnel, with construction due to begin in late 2010.

Further upgrades are planned to major routes including the Ipswich, Logan, Gateway and Pacific Motorways and connecting roads.

Health

The Queensland Government is focused on increasing the capacity and provision of high quality, safe and sustainable health services to meet the needs of communities. This includes expanding the range of health services available in the home, workplace or community to allow public hospitals to focus on those most in need.

In Greater Brisbane, the focus is on undertaking service and infrastructure planning for the significant pressure experienced in the areas of Logan, Caboolture and inner Brisbane.

The Queensland Government is aiming to provide new and refurbished facilities to ensure Greater Brisbane residents have access to good health services and programs that effectively maintain and improve their overall health and wellbeing and provide them with a good quality of life.

Some of the health system projects include upgrades at the Princess Alexandra Hospital, The Prince Charles Hospital, Caboolture Hospital, Logan Hospital, Redland Hospital and QEII Emergency Department. In addition, the new Queensland Children's Hospital will provide expanded specialist paediatric care.

The demand for health services has been reflected in bed pressures, elective surgery waiting lists and emergency department attendances and waiting times. It has also had a significant impact in terms of infrastructure capacity, driving both demand for new infrastructure and efforts to ensure existing space is utilised efficiently.

Projects completed

One of the state's biggest hospitals, The Prince Charles Hospital, has undergone a major redevelopment including a new general adult emergency department, a new and expanded intensive care unit, a major upgrade of the existing operating suites and 150 additional adult beds.

Stage one of the Pharmacy Australia Centre of Excellence was completed in 2009. The centre will provide a new facility for the University of Queensland's School of Pharmacy.

Projects underway

Work on the Queensland Children's Hospital is continuing, with the 359 bed new tertiary facility to provide world-class care for Queensland children in a purpose-built facility adjacent to the Mater Hospital site.

Stage one of the Queensland Children's Hospital—the Hancock Street car park—opened in November 2009 and stage two prior works began in December 2009.

Children's health service improvements include the Caboolture Hospital Paediatric Emergency Services upgrade to expand the current facility, a new paediatric emergency department at The Prince Charles Hospital and an expansion of paediatric emergency services at Redland Hospital.

Delivery of the redevelopment of the Princess Alexandra Hospital Emergency Department comprising: a new and expanded emergency department; a new medical assessment and planning unit; mental health emergency assessment area; helipad with elevator to ground level; new radiation oncology bunkers for cancer treatment; and a new scanner, is well underway and forecast for completion by early 2011.

Projects planned

The Queensland Health Services Plan 2011–2026 is currently being drafted and will replace the existing Queensland Statewide Health Services Plan 2007–2012. This plan will outline objectives, strategies and service models to guide government to meet future demand.

Education and training

Early childhood education and care

Local and international research shows high quality education early in life gives children the best start and a solid foundation for their development.

The priority is to provide access to a kindergarten program for all children turning four by 30 June in the year before Prep. To do this, Queensland must have the infrastructure required to meet the demand for high-quality, accessible, affordable and integrated early childhood services.

The extra kindergarten services will double the capacity of the Queensland community kindergarten sector and cater for the 12 000 children not currently accessing any centre-based early education or care services.

Projects completed

Kindergarten facilities at Moorooka State School and Stretton State College were completed in January 2010 and are currently in operation.

An early years centre was opened at Browns Plains in October 2009.

A Best Start early childhood education and care centre was completed at West End in June 2008 on the site of the former pre-school.

Projects underway

Projects for new kindergartens are currently underway at Beachmere, Deception Bay North, Crestmead, and Rochedale South State Schools. These projects are all expected to be operational for first term in 2011. An extension of the Carindale kindergarten is planned for Carina State School, also to be completed by first term in 2011.

Projects are currently underway on the non-state school sites of Forest Lake College and Prince of Peace Lutheran College, Everton to deliver new kindergarten facilities for first term in 2011.

Projects for early childhood education and care centres are currently underway at Beenleigh, Beaudesert, The Gap and Acacia Ridge State School.

Projects planned

The Queensland Government has announced plans to develop new kindergartens on the following sites to be operational for first term of 2012:

- Bald Hills State School
- Durack State School
- Gumdale State School
- Kingston State School
- Logan Reserve State School
- Logan Village State School
- Mount Gravatt East State School
- Seven Hills State School
- St Anthony's School, Alexandra Hills
- St Paul's School, Bald Hills

A children and family centre is planned for Marsden and is expected to be operational by July 2012.

Primary and secondary education

The Greater Brisbane region will see significant growth over the next 20 years. Schools are closely linked with the planning process, with provision of schools aligned to the settlement pattern of the state.

There is an increasing need to emphasise both new schools in new broadhectare areas and the renewal of current schools serving older areas. The government continues to closely monitor trends such as what household structures favour different dwelling types and their implications on school planning.

To meet these demands, a 20-year plan of new schools is maintained and rolled out.

Projects completed

Recent new primary schools in Greater Brisbane include the Bounty Boulevard State School (North Lakes), Bay View State School (southern Redland) and a secondary replacement facility, Brisbane Bayside College (Wynnum).

Projects underway

A secondary school and a primary school are planned for northern Pine Rivers District and a further primary school is planned for Brisbane within the short-term period (up to and including 2014).

Projects planned

Longer-term future infrastructure plans for the Greater Brisbane region include six primary schools and one secondary school from 2015 to 2020, and seven primary and two secondary schools from 2021 to 2031.

Vocational education and training

Queensland's continuing economic strength depends on the state's workforce possessing the skills to meet the dynamic needs of business and industry.

The Queensland Government's vision is for a highly skilled, flexible workforce that will underpin the state's continuing growth and prosperity. The Queensland Skills Plan 2008 is a major investment in achieving this vision. To meet the needs of business and industry, the government is building workforce capacity and skills—particularly professional capacity and skills—to meet workplace requirements.

Artist impression of Queensland Emergency Operations Centre

The Queensland Government is implementing the Queensland Skills Plan to deliver 17 000 training places a year by 2010. In addition, the government will invest over $124 million to help create nearly 150 000 training places over the next four years in a record expansion of the Queensland skills base.

The successful implementation of the initiatives within SEQIPP relies heavily on the availability of a skilled workforce.

Projects completed

The Trade Training Centres in Schools Program, funded by the Australian Government, has continued with the Aviation High Trade Training Centre at Clayfield opened in January 2010.

Projects underway

The major SkillsTech Australia trade training campus at Acacia Ridge in Brisbane continues to be developed. In 2009, construction industry training facilities were underway for refrigeration, electrical, painting and decorating trades.

Work is continuing on the modernisation of the Metropolitan South Institute of TAFE, Mt Gravatt and Loganlea facilities, to become a lead institute for programs in aged care, small business and fashion, with stage one completed in January 2009 and further works underway.

Projects planned

There are a range of trade training centre projects planned for Greater Brisbane at Brisbane North West, Marsden, Rochedale-Springwood, Morayfield and Redcliffe Peninsula.

Community services

Queensland Police Service

Queensland's police service aims to ensure the Greater Brisbane region is a safe and secure place to live, visit and do business. This is achieved by delivering high quality, innovative, progressive and responsive policing services.

The growing population brings with it the need for increased policing and safety measures. New policing facilities that complement and support service delivery are being planned and progressed to assist in meeting that need.

Policing infrastructure such as law enforcement centres, administration facilities, training facilities and specialist police services need to be easily accessible, integrated and fit-for-purpose to ensure the safety and security of communities. Infrastructure must be designed to respond to future demographic and technological changes.

Several new police stations within the greater region are currently being planned and progressed while existing infrastructure is progressively upgraded to accommodate existing, new and emerging challenges the Queensland Police Service may face.

Projects completed

The upgrade to the Upper Mt Gravatt Police Station and new police stations at Carseldine, Crestmead and Mango Hill/North Lakes will continue to assist in delivering high quality policing services.

Projects underway

The development of a state-of-the-art police academy at Wacol has continued during the year. Renovations on Lillypilly House are now complete and will provide accommodation for the Driver Training Unit when the track is constructed. The construction of the driver training track and associated classrooms, renovation of the heritage listed cricket pavilion and the demolition of surplus buildings are close to completion.

Projects planned

The planned upgrade to the Pine Rivers district office, refurbishment of the Richlands watch house, a replacement forensic facility for the Oxley Police district and a replacement Camp Hill Police Station at Carina will assist in delivering high quality policing services into the future.

Emergency services

The provision of emergency services infrastructure shadows population and may be delivered either through the enhancement of existing assets or the development of new facilities.

Emergency services infrastructure includes the provision of fire, ambulance and emergency management facilities, appliances and equipment. This infrastructure supports essential service delivery and contributes to the achievement of safe, resilient and sustainable communities.

As population growth in South East Queensland continues, the need for emergency services also increases,

Princess Alexandra Hospital cycleway

particularly in and around the major growth areas identified in the SEQ Regional Plan. Higher density development could also impact on urban permeability and emergency service delivery.

The Queensland Government is addressing these challenges by providing a network of emergency services infrastructure. New or enhanced fire and ambulance services are produced in direct response to current and projected service delivery needs.

Projects completed

The Redland Bay Fire and Rescue station was completed in December 2009.

Projects underway

The $70 million Queensland Emergency Operations Centre in Kedron will provide a coordinated operational and communication facility for the delivery of emergency services in the region. It will co-locate currently dispersed communication centres into one, state-of-the-art communication facility capable of responding to the most complex emergency situations in the region and across Queensland. Construction is due to be completed in 2010 and commissioning will begin in 2011.

Woodridge and Pullenvale stations are scheduled for completion in 2010.

Justice services

As the population grows, so does the demand for justice services. The Queensland Government is committed to improving the quality, timeliness and accessibility of justice services.

These services ensure the community operates in safe, fair and productive work environments that contribute to the social and economic wellbeing of all Queenslanders. Appropriate services need to be strategically located within high growth regions to achieve this.

The challenge for justice services is to fully utilise the improved infrastructure to ensure a high level of service is maintained.

Projects underway

The construction of the new Brisbane Supreme Court and District Court is underway and will deliver one of the largest court facilities in Australia. The 19-storey building will increase the number of courtrooms available to the Supreme Court and District Court by 14, and provide sufficient accommodation for the courts to meet the expected growth in court business for at least the next 30 years.

The building will be integrated with the highly successful Brisbane Magistrates Court which was opened in 2004 and create a major new public square between the two buildings.

The project is scheduled for completion by the end of 2011, which will coincide with the 150th anniversary of the Supreme Court's establishment in Queensland.

Sport and recreation

The Queensland Government supports the development of healthy and socially inclusive communities through sport and recreation activities and programs, the development of the state's elite athletes and grants to support construction of sport and recreation facilities.

The government's sport and recreation services encourage Queenslanders to lead active and healthy lifestyles, from participation at a community level through to enhanced achievement at elite levels. Linked to this is a commitment to increase the land dedicated to nature conservation and public recreation by 50 per cent.

Rapid population growth in South East Queensland has contributed to an increase in the demand for community sporting facilities.

The availability of land and a range of complex land tenures for outdoor recreation have also led to increased demand levels for sport and recreation infrastructure.

This increased demand requires both the construction of new infrastructure and the most efficient use of existing space.

Projects underway

The Redcliffe Tennis Centre Upgrade will provide fresh facilities for northern suburbs residents.

The Queensland Government has committed to a number of community greenspace initiatives including the provision of three new urban parks at Kangaroo Point, Long Pocket and Fitzgibbon. The new Kangaroo Point Cliffs Park, opened in January 2010, also features five public artworks that are currently under construction. State land at Long Pocket will be developed into parklands, including 300 metres of river front land for the public to enjoy. A 40 hectare parcel of state-owned bushland at Fitzgibbon has been dedicated as a public park as part of the development of state land by the Urban Land Development Authority.

Construction of an aquatic facility incorporating a 50-metre, eight-lane heated swimming pool at Colmslie is expected to be completed in July 2010. The facility will host learn to swim programs and physical activity programs including water aerobics and lap swimming. The project aligns with the strategic direction of Swimming Queensland.

Projects planned

Construction of playing fields, a clubhouse and ancillary facilities for rugby union and touch football are planned for Logan. The project will support local sporting clubs, giving them a home and providing capacity to increase participation within the relevant sporting fraternities.

Eastern Busway—Eleanor Schonell Bridge to South East Busway

Key infrastructure projects

Eastern Busway—Buranda to Main Avenue	
Status:	Under construction
Description:	Construction of a busway connecting the South East Busway at Buranda to Main Avenue at Coorparoo
Cost:	$466 million
Delivery:	Construction commenced August 2009 and is planned for completion early 2012
Key benefit:	A total of 2509 direct and indirect jobs will be generated over the life of the project. It will be the eastern link in Brisbane's world-class busway network, reducing bus travel times for thousands of commuters from all over the eastern suburbs

SkillsTech Australia: new campus at Acacia Ridge	
Status:	Under construction
Description:	Construction of a major skills training campus at Acacia Ridge
Cost:	Part of a $214 million SkillsTech Australia: Redevelopment of Trade Training Facilities program
Delivery:	Expected to be complete by 2012
Key benefit:	The campus will enable consolidation of SkillsTech Australia to lead product development and delivery in key trade areas

Logan Hospital Emergency Department Upgrade	
Status:	In planning
Description:	Expansion of the emergency department
Cost:	$33 million (part of a $67 million program of emergency department upgrades across South East Queensland)
Delivery:	The project is planned for completion in 2012
Key benefit:	The project will result in reduced emergency department waiting times

Brisbane Supreme Court and District Court	
Status:	Under construction
Description:	Development of a new Supreme Court and District Court building including 45 courtrooms, associated support functions, registry, judges' chambers and cells
Cost:	$600 million
Delivery:	Construction commenced in late 2007 and is planned for completion late 2011
Key benefit:	The project will create a new integrated legal precinct and public amenity for the western end of the CBD

Pacific Motorway Upgrade—Springwood South to Daisy Hill	
Status:	Under construction
Description:	Reconstruction of a 3.3 kilometre section of the Pacific Motorway between Springwood South and Daisy Hill
Cost:	$422 million
Delivery:	The project is planned for completion late 2011
Key benefit:	An average of 1409 direct and indirect jobs will be sustained over the life of the project. It will increase traffic flow and improve safety on the busy Pacific Motorway

Northern Busway—Royal Children's Hospital to Kedron	
Status:	Under construction
Description:	Extending the Northern Busway from the Royal Children's Hospital to Kedron
Cost:	$743 million
Delivery:	Scheduled for 2012
Key benefit:	When completed, travel between Kedron, Herston and the city will be greatly improved

Greater Brisbane infrastructure 2010–2014

Map ref	Project	Estimate category	Estimated investment $M	Subject to federal funding	Delivery timeframe 2010–11	2011–12	2012–13	2013–14	Project continues in later years
TRANSPORT									
Public transport network									
–	Cross River Rail - Study	Market	25	▲	●	●			
GB1	Cross River Rail	Pre-project	8,200	▲			●	●	→
GB2	Lawnton to Petrie third rail track	Concept	170				●	●	
GB3	Mayne – Ferny Grove Line connection	Concept	20				●	●	
GB4	Mitchelton to Ferny Grove track duplication - Keperra to Ferny Grove	Pre-market	90		●	●			
–	Train Servicing Depot	Pre-project	260					●	→
GB5	CBD Bus Infrastructure Capacity Program - Cultural Centre safety upgrades	Pre-project	10			●	●		
GB6	Eastern Busway - future stages	Pre-project	1270	▲	●	●	●	●	→
	Eastern Busway - Buranda to Main Avenue	Market	466		●	●			
GB7	Northern Busway - Royal Children's Hospital to Kedron	Market	743		●	●			
	Northern Busway - Kedron to Chermside - Investigation	Pre-project	11		●				
	Northern Busway - Carseldine/Fitzgibbon bus station	Pre-project	45					●	→
	Northern Busway - Chermside Station and early works	Pre-project	30			●			
	Northern Busway - Royal Children's Hospital to Bracken Ridge - Interim HOV	Pre-project	340			●			→
Strategic road network									
GB8	Acacia Ridge intermodal access - road network investigations	Pre-market	2		●				
GB9	Airport Link	Market	3,302		●	●			
–	Brisbane - Gold Coast transport network investigation	Concept	30		●	●			→
GB10	Brisbane Urban Corridor intersection upgrades - Mains to Kessels Road interchange	Pre-market	300	▲	●	●	●	●	
GB11	Bruce Highway intersection upgrades - Pumicestone Road, Boundary Road and Bribie Island Road	Concept	200	▲	●	●	●	●	
GB12	Burpengary-Caboolture Road upgrade - Bruce Highway to Gaffield Street	Concept	150		●	●	●	●	→
GB13	Cleveland-Redland Bay Road upgrade - South Street to Boundary Road - three intersection upgrades	Market	25		●				
GB14	East-West Arterial upgrade - Airport Link to Gateway Motorway	Market	326		●	●	●		
GB15	Gateway Motorway - extension south of Logan Motorway - Investigation	Pre-project	7		●	●	●		
GB16	Gateway Motorway - Mt Gravatt-Capalaba Road to Nudgee Road (including Sir Leo Hielscher bridge duplication)	Market	1,750		●				
GB17	Gateway Motorway - Mt Gravatt-Capalaba Road to Pacific Motorway - Corridor Preservation	Pre-project	70	▲	●	●			
	Gateway Motorway - Mt Gravatt-Capalaba Road to Pacific Motorway[7]	Pre-market	1,400	▲	●	●	●	●	→
GB18	Gateway Motorway - Nudgee to Bruce Highway - Sandgate Road to Deagon Deviation third lane	Concept	250	▲	●	●	●	●	→
–	Gympie Arterial - Stafford Road to Roghan Road - Investigation	Pre-market	7		●	●			
GB19	Kingsford Smith Drive Corridor (BCC project)	Concept	650		●	●	●	●	→
GB20	Logan Motorway Upgrade - Ipswich Motorway to Pacific Motorway	Pre-project	4,300		●	●	●	●	→
GB21	Logan Road intersection upgrade - Miles Platting Road-Padstow Road	Pre-project	11		●				
GB22	Mt Lindesay Highway - Green Road to Jimboomba - Rosia Road to Chambers Flat Road	Market	142		●	●			→
GB23	Northern Link - Toowong to Kelvin Grove (BCC project)	Pre-project	1,800		●	●	●	●	→

Greater Brisbane infrastructure 2010–2014

Map ref	Project	Estimate category	Estimated investment $M	Subject to federal funding	Delivery timeframe 2010–11	2011–12	2012–13	2013–14	Project continues in later years
GB24	Pacific Motorway Upgrade - Daisy Hill to Logan Motorway - Corridor Preservation	Pre-market	19	▲	●				
	Pacific Motorway Upgrade - Gateway Motorway to Springwood South - Corridor Preservation	Concept	18	▲	●				
	Pacific Motorway Upgrade - Springwood South to Daisy Hill	Market	422	▲	●	●			
GB25	Pacific Motorway Upgrade - Juliette Street to Klumpp Road	Pre-project	90				●	●	→
GB26	Port of Brisbane Motorway - Lindum Street to Pritchard Street[8]	Pre-market	650	▲	●	●	●	●	
–	Stafford Road - Gympie Road to South Pine Road - Investigation	Pre-project	5					●	
Freight network									
GB27	Metro Freight Capacity Upgrades - Stage 1	Market	84		●				
HEALTH									
GB28	Caboolture Health Precinct	Pre-project	21				●	●	
GB29	Emergency Department upgrades - Logan, Redland, QEII and Caboolture	Concept	67		●	●	●		
GB30	Princess Alexandra Hospital - additional bed capacity	Market	52		●				
GB31	Queensland Children's Hospital - Academic and Research Centre	Concept	80		●	●	●	●	→
	Queensland Children's Hospital	Pre-market	1,397		●	●	●	●	→
GB32	The Prince Charles Hospital - Paediatric Emergency Department	Pre-market	46		●	●			
GB33	Translational Research Institute	Pre-market	334		●	●			
EDUCATION AND TRAINING									
–	State school infrastructure in Brisbane, Moreton Redland and Logan	Ongoing program	910		●	●	●	●	→
GB34	Metropolitan South Institute of TAFE - Mt Gravatt Stage 2	Pre-market	13		●	●			
GB35	SkillsTech Australia - redevelopment of Brisbane Trade Facilities	Pre-market	214		●	●			
COMMUNITY SERVICES									
GB36	Queensland Police Academy	Concept	460		●	●	●	●	
GB37	Brisbane Supreme Court and District Court	Market	600		●	●			
GB38	Brisbane Convention and Exhibition Centre expansion	Market	136		●				
GB39	Aquatic Centre - Colmslie	Market	8		●				
GB41	Kippa Ring Indoor Multi-Purpose Facility	Concept	5		●				
GB42	Meadowbrook Multi-Sport Fields	Concept	3		●				
GB43	Redcliffe Tennis Centre Upgrade	Market	3		●				
GB44	State Equestrian Centre - Caboolture	Market	5		●				

Total estimated investment of projects underway in 2010–2014 = $32 044 million

1. The table identifies infrastructure projects to 2014 in Greater Brisbane.
2. Estimates in the state budget and other documents may differ, as they may incorporate costs that reflect anticipated changes in input prices between initial planning and the time of construction. Estimated investment includes funds already expended on projects.
3. Where funding is required from other sources other than the Queensland Government, their estimated costs have been included.
4. For an explanation of estimate categories, refer to page 15.
5. State school infrastructure includes 19 planned schools in Brisbane, Moreton, Redland and Logan to 2031.
6. Estimated investment for projects within this table refer to the total project cost, which may be beyond the four year period. This is relevant for projects with an arrow in the last column.
7. This project incorporates funds announced in the State Budget 2010–11 for Gateway Upgrade South.
8. This project incorporates funds announced in the State Budget 2010–11 for the Port of Brisbane Motorway Upgrade.

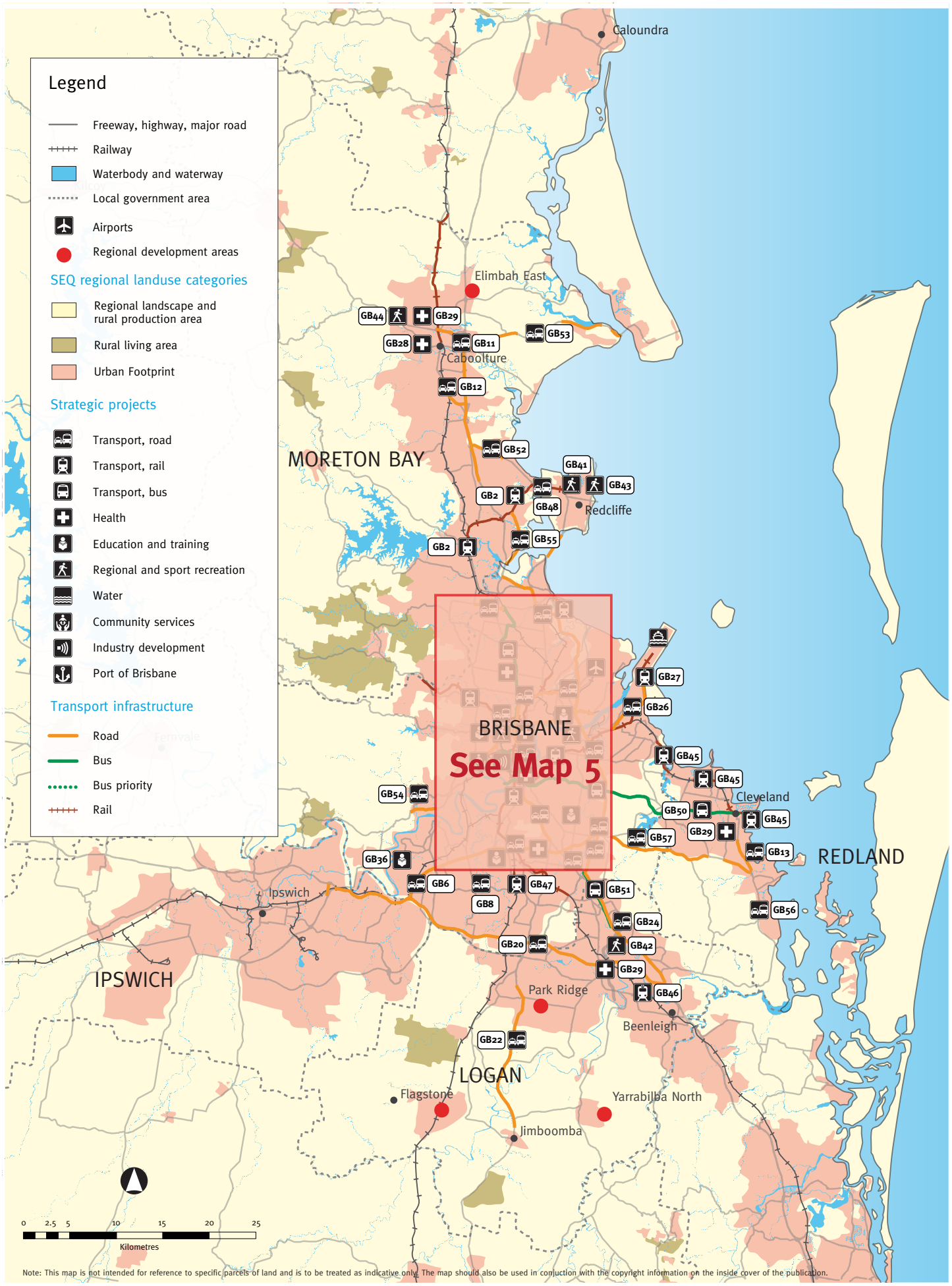
● Investigation/study projects ● Corridor preservation projects ● Infrastructure construction projects ▲ Subject to federal funding → Project continues in later years

Greater Brisbane planned infrastructure 2014–2031

Map ref	Project	Subject to federal funding	Indicative delivery timeframe		
			2014–15 to 2019–20	2020–21 to 2025–26	2026–27 to 2030–31
TRANSPORT					
Public transport network					
GB45	Cleveland Rail Corridor upgrades - Manly to Cleveland			●	
GB46	Kuraby to Loganlea third rail track			●	
GB47	Inner Brisbane Underground Rail	▲		●	
GB48	Petrie to Redcliffe Rail Corridor			●	
GB49	Sandgate to Shorncliffe track duplication			●	
GB5	CBD Bus Infrastructure Capacity Program		●		
GB6	Eastern Busway - Bennetts Road to Capalaba			●	
GB7	Northern Busway - Kedron to Bracken Ridge			●	
GB50	Redland bus priority measures				●
GB51	South East Busway - Eight Mile Plains to Rochedale to Springwood			●	
Strategic road network					
GB10	Brisbane Urban Corridor - intersection upgrades	▲		●	
GB13	Cleveland-Redland Bay Road upgrade - South Street to Boundary Road - four lane duplication			●	
GB52	Deception Bay Road upgrade - Bruce Highway to Lipscombe Road		●		
GB53	East-West links - Caboolture to Bribie Island Road - Pasturage Road to Saints Road - additional lanes			●	
GB15	Gateway Motorway - extension south of Logan Motorway - Corridor Preservation		●		
GB18	Gateway Motorway - Nudgee to Bruce Highway	▲		●	
–	Gympie Arterial - Stafford Road to Roghan Road - Corridor Preservation		●		
GB54	Kenmore Bypass - Western Freeway to Moggill Road			●	
GB22	Mt Lindesay Highway - Chambers Flat Road to Jimboomba (including Green Road Interchange)			●	
GB55	North-South Arterial - Mango Hill			●	
GB24	Pacific Motorway Upgrade - Gateway Motorway to Springwood South and Daisy Hill to Logan Motorway	▲		●	
GB26	Port of Brisbane Motorway - Pritchard Street to Boat Passage	▲		●	
GB56	Redland Bay Road upgrade - Tingalpa Creek to Cleveland-Redland Bay Road - four lane duplication			●	
GB57	Redland sub-arterial road upgrade - Mt Gravatt-Capalaba Road to Tingalpa Creek - intersection upgrades and four lane duplication		●		
–	Stafford Road - Gympie Road to South Pine Road - Corridor Preservation		●		
Active transport network					
GB58	Additional pedestrian/cycle bridge in the CBD		●		
Freight network					
GB27	Metropolitan freight capacity upgrades - Stage 2			●	
		Total planned investment =	**$21 740 million**		

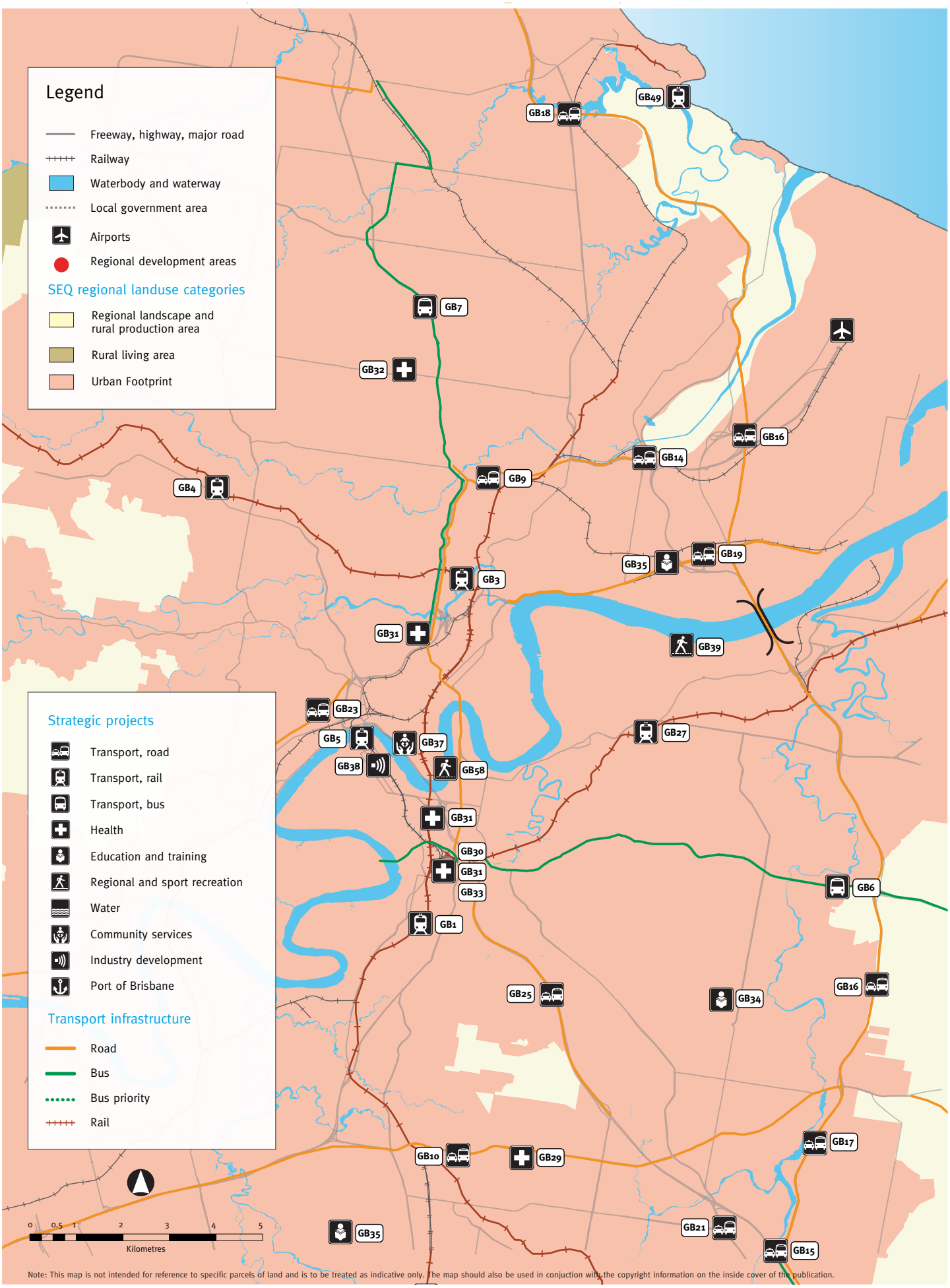
1. The table identifies planned infrastructure projects to 2031 in Greater Brisbane.
2. Projects listed in the longer-term planning horizon may change to better reflect the emerging needs of the region
3. The indicative delivery timeframe outlines the estimated timeframe for completion of the project. However, project planning or commencement may occur before this timeframe.

▲ Subject to federal funding



Note: This map is not intended for reference to specific parcels of land and is to be treated as indicative only. The map should also be used in conjuction with the copyright information on the inside cover of the publication.

Map 5—Greater Brisbane strategic infrastructure (inset)



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Western Corridor and Western South East Queensland


Ipswich/Logan Motorway interchange

Population:	350 500 (2006), 798 000 (2031)
Estimated no. of projects to 2031:	76
Estimated investment to 2031:	$21.7 billion
Estimated per capita spend to 2031:	$42 000
Key regional projects:	Toowoomba Bypass, Ipswich Hospital Redevelopment, South Queensland Correctional Precinct, Ipswich Motorway Upgrade, Centenary Highway Upgrade, Darra to Springfield Transport Corridor, Corinda to Darra Rail Upgrade
Regional development areas:	Ebenezer, Ripley Valley and Bromelton

Regional outcomes

The Western Corridor and Western South East Queensland greater-regions include Ipswich, Scenic Rim, Lockyer Valley and part of Toowoomba and Somerset.

The majority of growth in this area is expected to occur within the Ipswich area known as the Western Corridor.

It is essential that job opportunities, housing, utilities, transport and social infrastructure are planned and developed within the Western Corridor to accommodate growth.

The greater region provides substantial opportunities to accommodate new residential communities and employment growth, but this growth must be supported by infrastructure provision.

The SEQ Regional Plan has identified additional urban growth opportunities along existing and proposed infrastructure corridors, including regionally significant employment areas.

Infill, broadhectare and other residential opportunities will ensure residential capacity is enhanced.

Western Corridor

The Western Corridor includes the area covered by Ipswich City Council, less than an hour's drive from Brisbane. The corridor will house the majority of the region's residential and employment growth.

This significant population growth will be driven by increased employment opportunities anticipated at the RAAF Base and Ipswich Aerospace Park at Amberley, two universities, significant industrial lands and commercial growth within identified centres, including Springfield, Ripley Town Centre and Ipswich city centre.

The Queensland Government recently announced three brand new communities at Ripley Valley, Greater Flagstone and Yarrabilba. These will be model communities where children can walk to school, workers can live near public transport and families will be guaranteed greenspace for recreation and easy living lifestyle.

The bring forward of the 10-kilometre rail line to Springfield by two years demonstrates the Queensland Government's commitment to its go west for growth strategy.

The redevelopment of the Ipswich city centre will strengthen the prosperity and economic vitality of the area and reinforce the role of Ipswich as a principal activity centre.

The city centre will have increased commercial, retail and residential roles and upgraded multi-modal public transport. A planned bypass of Ipswich CBD will take traffic out of the city centre, supporting its redevelopment and growth for business, services and retail.

The Ipswich Motorway, Centenary Highway, Cunningham Highway, Warrego Highway and Ipswich Rail Line will be upgraded to improve safety and increase transport capacity in and out of the region. Construction has


Ipswich Motorway Upgrade—Dinmore to Goodna

commenced on a new rail line from Darra to Springfield which, in the longer term, is planned to continue to Ipswich. The rail projects will increase connectivity within the region by linking Ipswich City with Ripley and Springfield town centres.

Broadhectare projects will deliver the majority of residential growth in the Western Corridor. These projects will need a broad range of transport options, community infrastructure and diverse employment opportunities.

Ripley Valley and Springfield, alongside smaller broadhectare areas such as South Redbank Plains, Walloon-Thagoona and West Brassall, will provide most of the new residential development.

To ensure these areas have adequate education infrastructure, several new schools have been built or are scheduled to be built and the Bremer TAFE is being modernised to cater for existing and future needs.

The Ipswich Hospital redevelopment, two health precincts, the Tivoli multi-purpose sporting facility and the Brassall to Ipswich bikeway are among the projects supporting the health and wellbeing of the region.

Western South East Queensland

Western South East Queensland includes the Lockyer Valley Regional Council, Scenic Rim Regional Council and Somerset Regional Council areas. These regions are comprised primarily of world heritage-listed mountains and agricultural land. The region also hosts South East Queensland's core water supply —Somerset Dam and Wivenhoe Dam (the region's two largest dams) and the Western Corridor Recycled Water Plant.

Western council areas are expected to double their population size between 2006 and 2031. Consolidation of development is necessary to help protect the rural and natural values of the region and provide the most cost-effective delivery of infrastructure.

Gatton, Beaudesert, Lowood and Fernvale have the capacity to accommodate further residential development.

Stage one of the South Queensland Correctional Precinct will support employment opportunities and economic development within Western South East Queensland.

The Warrego Highway–Brisbane Valley Highway interchange is being upgraded to improve safety and accessibility to Western South East Queensland from the Western Corridor, providing easier employment access for people living in the Fernvale and Lowood areas.

Eastern area of Toowoomba Regional Council located within South East Queensland

Toowoomba is located at the western edge of South East Queensland and comprises a range of urban and semi-urban settlements. Part of the Toowoomba Regional Council local government area is outside the South East Queensland boundary and is therefore not included in SEQIPP.

Toowoomba city is the principal activity centre for the area, with urban development focused around this area and other satellite urban centres such as Highfields, Glenfields, Cambooya and Kingsthorpe.

A combination of broadhectare, infill development and redevelopment will facilitate growth in the area.

Infill development will focus on Toowoomba's central business district with medium to high-density living and mixed-use developments. Broadhectare will accommodate the majority of growth, particularly in Highfields, Glenvale, Drayton and Westbrook.

The Toowoomba Bypass and Warrego Highway improvements are planned to provide greater access to Highfields and provide heavy vehicles with an alternative to travelling through the city centre on their way to the Darling Downs and Surat Basin. This will help reduce congestion in the CBD, improve safety —particularly in known black spots—and improve freight accessibility.

Critical for the government is providing a secure water supply. The Toowoomba Pipeline became operational on 28 January 2010 and connects Wivenhoe Dam with Cressbrook Dam. This is helping to secure the water supply for the Toowoomba region.

An upgrade to the emergency department and the development of two new birthing suites at the Toowoomba Hospital to support the needs of the growing population are two of the projects contributing to the health and wellbeing of the region.

The University of Southern Queensland continues to be a significant contributor to the region—both in terms of education and recreational facilities. The new tennis facilities located on campus will be made available to students and non-students.

Infrastructure goals

Transport

A significant share of the region's growth will occur in the Western Corridor from Goodna through to Ipswich city and Amberley and will encompass Ebenezer, Swanbank, Ripley Valley and Springfield. The timely provision of transport infrastructure to support this population and industrial growth is vital.

South East Queensland's transport system supports the lifestyle enjoyed by residents and visitors, enhances the state's economic vitality and protects the natural environment.

The transport infrastructure priorities for Western Corridor and Western South East Queensland include:

- strategic capacity upgrades and improving safety on existing key road links, especially the Ipswich Motorway, Warrego Highway and Centenary Highway
- improving and providing new roads and public transport infrastructure to service growing population centres including expanding the rail network to Springfield (Darra to Springfield Rail Project) and from Ipswich to Ripley
- redirecting heavy vehicles from highly populated areas
- accelerating the development of the principal cycle network within 5 kilometres of centres such as Ipswich city centre, Springfield and Ripley and on corridors connecting these centres
- investigating the long-term transport requirements of the region and preserving transport corridors to cater for future growth
- providing greater connectivity to Brisbane's CBD, airport and the Port of Brisbane
- providing park'n'ride and interchange facilities for bus and rail commuters to encourage the use of public transport to get to Brisbane's CBD.

In delivering these priorities, there are a range of challenges to be overcome including:

- providing adequate transport infrastructure to keep pace with rapid population growth
- managing the impact of increasing road network congestion on freight and commercial vehicle movements
- supporting growth in local jobs so local employment opportunities are available for residents
- staging of new urban development to allow timely provision of transport infrastructure and public transport services in new development areas to support sustainable outcomes
- encouraging more trips by public and active transport for travel to the Ipswich city centre as it grows as a service and employment centre.

Projects completed

Projects recently completed include the Ipswich Motorway Upgrades (Ipswich/Logan Motorway Interchange Upgrade Project and Wacol to Darra Upgrade Project), the resurfacing of the Warrego Highway at Tivoli, Muirlea and Blacksoil and the Centenary Highway Extension—Springfield to Yamanto. Many of these projects include the provision of cycling facilities and contribute to the Queensland Government's vision of an interconnected, efficient road network for the Western Corridor, connecting regional activity centres with the Ipswich CBD.

Projects underway

The duplication of the Centenary Highway from Ipswich Motorway to the Logan Motorway, the upgrade of the Ipswich Motorway (Dinmore to Goodna), the Corinda to Darra Rail Upgrade and the Darra to Springfield Transport Corridor project will improve safety, connectivity and reduce congestion. The work will also enhance access to rail stations, provide improved facilities for pedestrians and cyclists and deliver extensive service roads and local connectors to remove local trips from the motorway.

Detailed planning for a 3 kilometre realignment of the Cunningham Highway has commenced to determine final design for the new Amberley Interchange. This project will improve safety at the intersection of Ipswich-Rosewood Road and increase capacity to accommodate growth

Projects such as the new passenger rail line from Richlands to Springfield and the Cunningham Highway Amberley interchange – which will include a 3 kilometre deviation and the expansion of the Cunningham Highway between Ripley Road to Ebenezer—will ensure infrastructure needs are delivered in a timely fashion to cater for emerging demand.

Projects planned

The Queensland Government is actively working to meet the future transport infrastructure needs of Western Corridor and Western South East Queensland through the identification of growth areas and potential transport corridors.

Health

The Queensland Government is working towards providing new and refurbished health facilities across the Western Corridor. This will ensure residents have access to services and programs that effectively maintain and improve their overall health and wellbeing and provide them with a good quality of life.

By improving and increasing the services available within the Ipswich precinct, self-containment and liveability is greatly increased. In addition, the Queensland Government is looking at alternative methods of delivering these services in the home, workplace or the community to allow public hospitals to focus on those most in need.

The redevelopment of the Ipswich Hospital and service planning for high priority areas incorporating Ipswich and the Western Corridor will help deliver the necessary infrastructure needed for this high growth area.

Health precincts are a new service approach designed to provide convenient and flexible access to a range of community and ambulatory health services in major urban and regional growth areas.

Population growth and an ageing population are core considerations when it comes to delivering health services. The health infrastructure planning goals for Western Corridor include:

- reducing waiting times for public hospital services
- reducing inequities that exist across specific population groups
- providing high quality, safe and sustainable health services to meet the needs of the community
- better utilising people and resources to improve the overall health and wellbeing of Queenslanders.

The demand for health services has been reflected in bed pressures, elective surgery waiting lists and emergency department attendances and waiting times. It has also had a significant impact in terms of infrastructure capacity, driving both the demand for new infrastructure and efforts to ensure existing space is utilised efficiently.

Projects underway

Master planning is underway for the expansion of the Ipswich Hospital site to create an additional 90 beds (including six paediatric short stay beds).

An upgrade to the emergency department at the Toowoomba Hospital is also underway to provide a new 12 person transit lounge for use by people awaiting discharge or transfer by ambulance.

In addition, five projects identified and funded under the Queensland Mental Health Plan are being progressed to provide 35 new beds and 35 replacement beds within the region.

Projects planned

The changing demographic profile of the Western Corridor and Western South East Queensland has identified the need for greater children's health services and birthing centres. The expansion of the Ipswich Hospital Paediatric Emergency Services department and the new birthing suite at the Toowoomba Hospital will assist in meeting this growing demand, while two new health precincts in Ipswich will provide additional services for all residents.

Education and training

Early childhood education and care

Local and international research shows high quality education early in life gives children the best start and a solid foundation for their development.

The priority is to provide access to a kindergarten program for all children turning four by 30 June in the year before Prep. To do this, Queensland must have the infrastructure required to meet demand for high-quality, accessible, affordable and integrated early childhood services.

The extra kindergarten services will double the capacity of the Queensland community kindergarten sector and cater for the 12 000 children not currently accessing any centre-based early education or care services.

As employment opportunities in the Western corridor of South East Queensland grow, so will the demand for early childhood education and care services. Early childhood education and care services will be provided to match the growing demand in identified high-growth areas.

Projects completed

A Best Start early childhood education and care centre was completed at Toowoomba North in October 2009 on the site of the former pre-school.

An early learning and care centre was opened on the site of Amberley District State School in March 2010.

Projects underway

A project for a new kindergarten facility is currently underway at Fairview Heights State School in Toowoomba and is due for completion in time for first term in 2011.

Projects planned

The Queensland Government has announced plans to develop new kindergartens on the following sites to be operational for first term in 2012:

- Gabbinbar State School, Toowoomba
- St Augustine's College, Springfield
- St Francis Xavier's School, Goodna

A children and family centre is planned for Ipswich and is expected to be operational by 2011.

Primary and secondary education

The Western Corridor is expected to double in size over the next 20 years.

Demand for primary and secondary education facilities is expected to increase significantly within this region as increased employment opportunities grow.

Schools are closely linked with the planning process, with provision of schools aligned to the settlement pattern of the state. A 20-year plan of new schools is maintained and rolled out.

There is an increasing need to emphasise both new schools in greenfield areas and the renewal of current schools serving older areas. The Queensland Government continues to closely monitor trends such as what household structures favour medium-density dwelling types and whether or not these tend to be families with school-aged children.

Projects completed

Springfield Lakes State School opened in 2007 and the replacement Amberley District State School opened in 2010 within Ipswich city area.

Projects underway

The relocation of Bremer State High School (Ipswich) is to be completed for opening in 2011. Further primary and secondary facilities are to open within the strong growth areas of Ipswich in 2011.

Projects planned

Three primary schools and one additional secondary school are planned for delivery between 2015 and 2020. From 2021 to 2031, eight further primary schools and three further secondary schools are to be provided.

Vocational education and training

Queensland's continuing economic strength depends on the state's workforce possessing the skills to meet the dynamic needs of business and industry.

The Queensland Government's vision is for a highly skilled, flexible workforce that will underpin the state's continuing growth and prosperity. The Queensland Skills Plan 2008 is a major investment in achieving this vision. To meet the needs of business and industry, the government is building workforce capacity and skills—particularly professional capacity and skills—to meet workplace requirements.

The Queensland Government is implementing the Queensland Skills Plan to deliver 17 000 training places a year by 2010. In addition, the government will invest more than $124 million to help create nearly 150 000 training places over the next four years in a record expansion of the Queensland skills base.

The successful implementation of the initiatives within SEQIPP relies heavily on the availability of a skilled workforce.


Ipswich Magistrates Court

Planned projects

There are trade training projects identified in Western Corridor and Western South East Queensland that may be funded in future rounds of the Trade Training Centres in Schools program.

Community services

Queensland Police Service

The increase in demand for Queensland police services within the Western Corridor and Western South East Queensland is directly correlated to the population growth and settlement pattern of the region.

To meet these demands and ensure police stations are equipped with appropriate technology, existing facilities will be progressively reviewed and upgraded and new facilities are being planned and progressed.

New infrastructure will be developed in line with population growth, demand and settlement patterns. This will ensure Queensland policing services are easily accessible, integrated and fit-for-purpose.

Projects completed

A newly completed replacement police station and watch house at Ipswich and new police stations at Crestmead and Springfield, are part of the Queensland Government's plan to ensure community safety for the growing Western Corridor population.

Projects planned

Upgrades of the Goodna Police Station and Richlands watch house are planned to meet community needs.

Emergency services

The provision of emergency services infrastructure shadows population and may be delivered either through the enhancement of existing assets or the development of new facilities.

Emergency services infrastructure includes the provision of fire, ambulance and emergency management facilities, appliances and equipment, supporting essential service delivery and contributing to the achievement of safe, resilient and sustainable communities.

The aim is to provide infrastructure that will support the achievement of safe, resilient and sustainable communities.

As population growth in South East Queensland continues, the need for emergency services will increase, particularly in and around the major development areas identified in the SEQ Regional Plan. Higher density development could also impact on urban permeability and emergency service delivery.

The Queensland Government is addressing these challenges by providing a network of emergency services infrastructure. New or enhanced fire and ambulance services are produced in direct response to current and projected service delivery needs.

Projects Underway

The Ipswich Regional Ambulance Station is due for completion in 2010. The project will significantly improve service delivery in direct response to the demands of growth in Ipswich. A new ambulance station is also being constructed at Springfield to meet the needs of this growing population.

Corrective services

The Queensland Government aims to provide South East Queensland with high quality, state-of-the-art facilities that support demand, encourage rehabilitation and provide adequate protection for staff, inmates and the surrounding community. In addition, facilities should encourage self-containment and sustainability.

The Southern Queensland Correctional Precinct at Gatton will service the prisoner population growth within South East Queensland for the duration of this plan.

Corrective Services is faced with the ongoing challenge of developing effective and efficient correctional facilities that address future demands for the prison population.

Projects completed

The capacity for male prisoners in South East Queensland was increased by 720 in 2008 following the completion of the redevelopment of Brisbane Correctional Centre and the expansion of the Arthur Gorrie Correctional Centre.

Projects Underway

The first stage of the South Queensland Correctional Precinct will provide a new 300 bed centre including a secure perimeter and gatehouse, visitor facilities, buildings for education and rehabilitation programs, a sports hall and sports field. Construction of this stage is due for completion by December 2011.

Projects Planned

The South Queensland Correctional Precinct, incorporating a number of correctional centres, will ultimately have the capacity to accommodate approximately 3000 beds.

Justice services

Western Corridor and Western South East Queensland areas are expected to double in size over the next 20 years. Justice services ensure the community operates in safe, fair and productive work environments which contribute to the social and economic wellbeing of all Queenslanders.

The recently completed Ipswich courthouse will provide improved access to justice services in the Western Corridor and Western South East Queensland over the next 30 years. The new courthouse is approximately twice the size of the previous courthouse and has been designed to meet the substantial growth in this region.

The challenge for justice services is to fully utilise the improved infrastructure to ensure a high level of service is maintained.

Projects completed

The recently completed Ipswich courthouse project included the creation of 12 courtrooms for the District Court and Magistrates Courts, a court registry, judges and magistrates chambers, court support facilities and office accommodation for the Director of Public Prosecution and the State Reporting Bureau. The new courthouse provides diverse employment opportunities for the region.

Projects Underway

The refurbishment and expansion of the Toowoomba courthouse will be completed in the second half of 2010. This will provide an additional courtroom and expanded court support services and will meet the needs of the increasing population for the short to medium-term.

Sport and recreation

The Queensland Government supports the development of healthy and socially inclusive communities through sport and recreation activities and programs, the development of the state's elite athletes and grants to support construction of sport and recreation facilities.

The Queensland Government encourages Queenslanders to lead active and healthy lifestyles, from participation at a community level through to enhanced achievement at elite levels. Linked to this is a commitment to increase the land dedicated to nature conservation and public recreation by 50 per cent.

Rapid population growth in South East Queensland has contributed to an increase in the demand for community sporting facilities. The availability of land and a range of complex land tenures for outdoor recreation have also led to increased demand levels for sport and recreation infrastructure.

This increased demand requires both the construction of new infrastructure and the most efficient use of existing space.

Projects completed

Projects such as the recently completed Highfields indoor multi-purpose auditorium are part of the Queensland Government's work to encourage sport and recreation activities for South East Queensland. This is a jointly funded project with the Australian Government through the Building the Education Revolution program. This community facility will provide a venue for sport, recreation, dance and cultural community programs.

Projects underway

Continuing works on the 148 kilometre Brisbane Valley Rail Trail project will provide a walking, cycling and horse riding track through Fernvale, Lowood, Esk, Toogooloawah, Harlin, Moore and Linville that will provide a family friendly outdoor recreation facility for residents and visitors.

A 745 hectare block of Queensland Government land at Wyaralong, near Beaudesert, has been set aside for South East Queensland's first dedicated off road motorcycling facility. Jointly funded by the Queensland Government and the Council of Mayors (SEQ), the project will give the community a place to legally ride their motorbikes. Construction of the first stage is expected to be complete in 2011.

Projects planned

Future planning for sport and recreation in Western Corridor and Western South East Queensland include development of stage one of a multi-purpose facility including fields, clubhouse, change rooms and recreation areas for AFL, cricket, athletics, soccer, rugby league and rugby union at Tivoli.

A project to create 12 international standard tennis courts, club house, a centre court, centre court seating and night lights is planned for the University of Southern Queensland.

Construction of a community-based, off-road criterium cycling track at Toowoomba will provide the community with enhanced opportunities for participation in off road cycling in a safe environment.

The Gatton Aquatic Centre is planned to include a 50-metre swimming pool, a 25-metre heated training pool and amenities. The development of this pool will provide the local community with a place to gather for swimming, training and recreation.

South Queensland Correctional Precinct

Key infrastructure projects

South Queensland Correctional Precinct—Stage One

Status:	Stage one under construction
Description:	Construction of an environmentally sustainable correctional facility that will ultimately accommodate approximately 3000 inmates, dog squad training facility and staff training centre at Spring Creek
Cost:	$486 million
Delivery:	Stage one due for completion in 2011
Key benefit:	The correctional facility will inject an estimated $19.5 million per annum into the region's economy and will provide employment for more than 200 staff

Ipswich Hospital—Additional Bed Capacity

Status:	In planning
Description:	Increase bed capacity by an additional 84 beds
Cost:	$122 million
Delivery:	Due for completion in 2016
Key benefit:	The project will mean shorter waiting times for patients

Ipswich Motorway Upgrade—Dinmore to Goodna

Status:	Under construction
Description:	Upgrade of 8 kilometres of the Ipswich Motorway between Dinmore and Goodna funded by the Australian Government (including a cycleway)
Cost:	$1.95 billion
Delivery:	Construction started in mid 2009 and is due for completion in 2012
Key benefit:	The upgrade will provide additional traffic capacity and improve safety by diverting at least 50 per cent of the vehicles currently using the motorway

Darra to Springfield Transport Corridor Stage One

Status:	Under construction
Description:	New rail track from Darra to Richlands and duplicated Centenary Highway from Ipswich Motorway to Logan Motorway. This is a combination of the Springfield Passenger Rail Line—Darra to Richlands and Centenary Highway—Ipswich Motorway to Logan Motorway projects
Cost:	$805 million
Delivery:	Due for completion in 2011
Key benefit:	It will provide improved transport connectivity and address the future transport needs of the growing region west of Brisbane

Western Corridor and Western South East Queensland infrastructure 2010–2014

Map ref	Project	Estimate category	Estimated investment $M	Subject to federal funding	Delivery timeframe 2010–11	2011–12	2012–13	2013–14	Project continues in later years
TRANSPORT									
Public transport network									
WC1	Ipswich Rail Line - Corinda to Darra third track	Market	219		●	●			
WC2	Springfield Passenger Rail Line - Darra to Richlands	Market	390		●				
	Springfield Passenger Rail Line - Richlands to Springfield	Concept	650		●	●	●	●	
Strategic road network									
WC3	Centenary Highway - Ipswich Motorway to Logan Motorway - four lanes	Market	415		●	●			
WC4	Centenary Highway - Ipswich Motorway to Toowong - bus priority/transit lanes	Pre-project	400		●	●	●		→
WC5	Gatton to Esk road upgrade	Pre-market	35		●	●			
WC6	Ipswich Motorway Upgrade - Goodna Bypass - Corridor Preservation	Pre-market	70	▲	●				
	Ipswich Motorway Upgrade - Dinmore to Goodna	Market	1,950	▲	●	●	●		
	Ipswich Motorway Upgrade - Progress Road interchange	Market	470	▲	●	●	●	●	→
	Ipswich Motorway Upgrade - Rocklea to Darra	Concept	1,100	▲	●	●	●	●	→
	Ipswich Motorway Upgrade - Wacol to Darra	Market	824	▲	●				
WC7	Ipswich Regional Centre Strategy - Bremer River Crossing (ICC project)	Pre-project	11		●	●	●		
–	Southern Infrastructure Corridor - Yatala to Cunningham Highway - Investigation	Concept	2		●	●			
–	Toowoomba Bypass - Investigation	Pre-market	2		●				
WC8	Warrego Highway-Brisbane Valley Highway Interchange	Pre-market	70	▲	●	●			
WC9	Warrego Highway - Ipswich to Gatton - safety improvements	Pre-market	40		●				
WC10	Warrego Highway - Toowoomba intersection upgrades	Pre-project	85	▲				●	→
WC11	Western Ipswich Bypass - Cunningham Highway Amberley - New Interchange and 3km Deviation	Concept	200	▲	●	●			→
HEALTH									
WC12	Emergency Department Upgrades - Ipswich and Toowoomba	Concept	9		●	●	●	●	→
WC13	Ipswich Hospital - additional bed capacity	Pre-project	122		●	●	●	●	→
EDUCATION AND TRAINING									
–	State school infrastructure in Western Corridor	Ongoing program	950		●	●	●	●	→
WC14	Campus modernisation - Bremer TAFE	Pre-market	18		●	●			
COMMUNITY SERVICES									
WC15	South Queensland Correctional Precinct - Stage 1	Market	486		●	●			
WC16	Boonah to Ipswich Trail	Market	3		●	●			
WC17	Brisbane Valley Rail Trail	Market	4		●	●			
WC18	Gatton Aquatic Centre	Pre-market	3			●			
WC20	Regional Tennis Facility - University of Southern Queensland	Pre-market	3		●				
WC21	Tivoli Multi-Purpose Facility - Stage 1	Concept	4			●			

Total estimated investment of projects underway in 2010–2014 = $8535 million

Western Corridor and Western South East Queensland planned infrastructure 2014–2031

Map ref	Project	Subject to federal funding	Indicative delivery timeframe		
			2014–15 to 2019–20	2020–21 to 2025–26	2026–27 to 2030–31
TRANSPORT					
Public transport network					
WC22	Gowrie to Grandchester rail line				●
WC1	Ipswich rail line - Darra to Redbank third rail track			●	
WC23	Ipswich to Springfield rail line			●	
Strategic road network					
WC3	Centenary Highway - Logan Motorway to Springfield - four lanes		●		
WC24	Cunningham Highway four lanes - Ripley Road to Ebenezer - Stage 1 and 2	▲	●		
WC25	Cunningham Highway to Warrego Highway Connection		●		
–	Southern Infrastructure Corridor - Yatala to Cunningham Highway - Corridor Preservation		●		
WC26	Toowoomba Bypass			●	
WC27	Warrego Highway - Muirlea interchange and service roads	▲	●		
WC28	Western Ipswich Bypass - Five Mile Creek and approaches		●		
WC11	Western Ipswich Bypass - new road, interchange and four lane bypass			●	
HEALTH					
WC29	Health Precincts x 2 - Ipswich area			●	
	Ipswich Hospital redevelopment		●		
COMMUNITY SERVICES					
WC15	South Queensland Correctional Precinct - Stage 2, 3 and 4			●	

Total planned investment = $9900 million

1. The table identifies planned infrastructure projects to 2031 in Western Corridor and Western South East Queensland.
2. Projects listed in the longer-term planning horizon may change to better reflect the emerging needs of the region.
3. The indicative delivery timeframe outlines the estimated timeframe for completion of the project. However, project planning or commencement may occur before this timeframe.

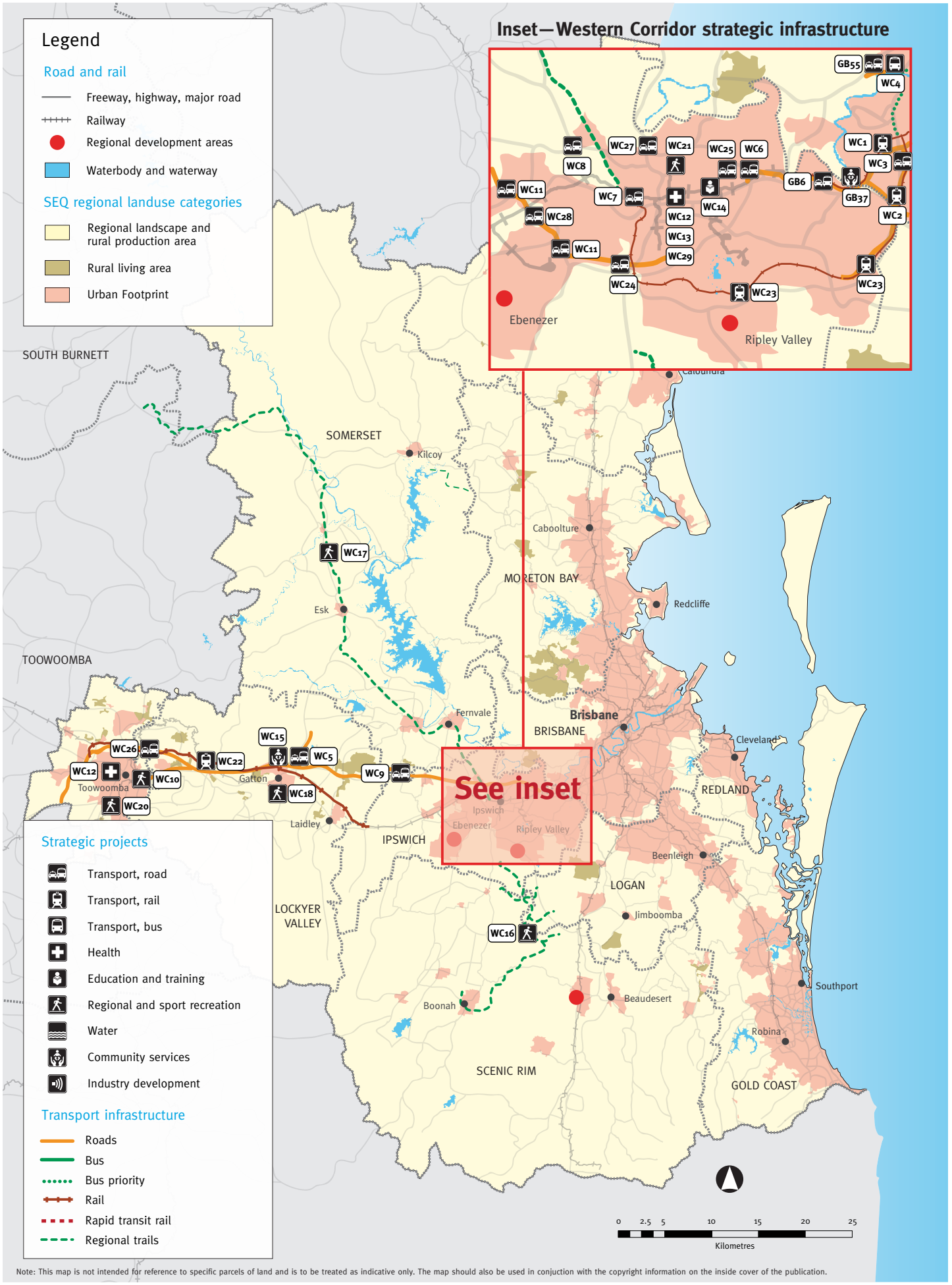
▲ Subject to federal funding

Notes and keys for table on page 46

1. The table identifies infrastructure projects to 2014 in Western Corridor and Western South East Queensland.
2. Estimates in the state budget and other documents may differ, as they may incorporate costs that reflect anticipated changes in input prices between initial planning and the time of construction. Estimated investment includes funds already expended on projects.
3. Where funding is required from other sources other than the Queensland Government, their estimated costs have been included.
4. For an explanation of estimate categories, refer to page 15.
5. State school infrastructure includes 19 planned schools in Western Corridor and Western South East Queensland to 2031.
6. Estimated investment for projects within this table refer to the total project cost, which may be beyond the four year period. This is relevant for projects with an arrow in the last column.
7. Ipswich Regional Centre Strategy - Bremer River Crossing is subject to Ipswich City Council funding.

● Investigation/study projects ● Corridor preservation projects ● Infrastructure construction projects ▲ Subject to federal funding → Project continues in later years

Map 6—Western Corridor and Western South East Queensland strategic infrastructure



Note: This map is not intended for reference to specific parcels of land and is to be treated as indicative only. The map should also be used in conjuction with the copyright information on the inside cover of the publication.

Gold Coast

Artist impression of Gold Coast University Hospital

Population:	466 500 (2006), 749 000 (2031)
Estimated no. of projects to 2031:	59
Estimated investment to 2031:	$14.2 billion
Estimated per capita spend to 2031:	$31 000
Key regional projects:	Gold Coast University Hospital, Gold Coast Stadium at Carrara, Gold Coast Rapid Transit, Robina Hospital Expansion and Robina Health Precinct, Pacific Motorway Upgrade: Nerang to Stewart Road, Gold Coast Highway Upgrade: Government Road to Stevens Street
Regional development areas:	Coomera

Regional outcomes

The Gold Coast area extends from Yatala in the north to the New South Wales border in the south. It is the second largest region in South East Queensland with urban development concentrated between Yatala and Coolangatta.

The SEQ Regional Plan ensures growth is managed to protect the Gold Coast's coastal, estuarine, river and hinterland environments.

The supply of broadhectare land is limited, therefore infill development will play a significant role in meeting the demands of growth on the Gold Coast.

Infrastructure priorities for the region include accommodating growth and employment within established urban areas in close proximity to activity centres such as Southport, Robina, Surfers Paradise, Broadbeach, Coolangatta, Nerang, Helensvale and Bundall.

These priorities will be achieved by linking major destinations and regional activity centres through improved public transport services and upgrading of the road network.

Future extensions of the Gold Coast heavy rail line will improve public transport in the southern Gold Coast region. In addition, the Gold Coast Rapid Transit system will run along the high-density coastal spine from Helensvale, Southport, Broadbeach, Burleigh and Coolangatta, with bus services providing local connections. The rapid transit system will also link into the new 750 bed Gold Coast University Hospital due for completion in 2012.

In addition, upgrades to the Gold Coast Highway, Nerang-Broadbeach Road and the Pacific Motorway will assist in linking destinations, particularly to new broadhectare development land.

Broadhectare development will focus around the Brisbane-Gold Coast transport corridor along the Pacific Motorway and Brisbane-Gold Coast rail line, linking areas such as Coomera, Hope Island, Pimpama, Ormeau, Maudsland and Reedy Creek to the rest of South East Queensland.

Coomera is also recognised as a priority area for delivery of residential land and the establishment of a regional activity centre to accommodate employment. Infrastructure such as the Pacific Motorway additional Coomera interchange and Coomera TAFE will be prioritised to accommodate this growth.

While it has been traditionally reliant on a tourism and recreation-based economy, new employment growth in the Gold Coast will focus on a range of science, health, education and training opportunities. The Gold Coast Health and Knowledge Precinct and Robina Hospital projects will stimulate new economic opportunities.

The Gold Coast Stadium Redevelopment at Carrara will not only provide a sporting facility capable of hosting national and international premier events, but is also expected to create up to 1100 full-time equivalent positions during construction.

The Queensland Government is focusing on a balance between ensuring the lifestyle of the easy living Gold Coast community is maintained while building infrastructure to support growth, jobs and the economy.

Pacific Motorway upgrade

Infrastructure goals

Transport

Quality public transport links are required to connect major centres and developing areas on the Gold Coast. Road projects will support additional investment in public transport services by providing additional corridor space for public transport. This will also benefit local and inter-regional road freight movements.

Transport infrastructure planning goals for the Gold Coast include:

- linking major destinations and coastal activity centres with improved transport services
- connecting new development areas such as Coomera to the coast
- improving passenger rail services on the Gold Coast rail line
- upgrading the Pacific Motorway and other roads to alleviate congestion
- accelerating the development of the Principal Cycle Network
- preserving transport corridors to cater for future growth
- new arterial links to service growth areas and reduce local trips on the motorway network
- infrastructure improvements such as implementing the high occupancy vehicle (HOV) network program to help increase accessibility to employment centres and services.

In delivering these priorities, there are a range of challenges to be overcome including:

- planning for significant increases in transport activity during peak tourist periods
- ensuring that public transport, walking and cycling plays an increasing role in moving people efficiently to ensure accessibility
- increasing capacity on Gold Coast to Brisbane passenger rail services, especially in peak periods
- consideration of the traditional north-south settlement pattern and creating east-west public transport links to enhance accessibility between growing residential areas in the west and major centres in the east
- an over-reliance on the Pacific Motorway for local trips due to lack of urban arterial roads providing connections to centres.

Projects completed

The completed $150 million Gold Coast Highway upgrade includes 24-hour T2 transit lanes running from Broad Street down to the Loder Creek bridges. The transit lanes provide priority and faster passage for high-occupancy vehicles such as taxis and buses.

Existing residential areas are also benefiting from better city links with the recently completed extension of the 4.1 kilometre dual track rail line south from Robina to Varsity Lakes and the construction of a new station at Varsity Lakes.

Projects underway

Priority projects, such as the Gold Coast Rapid Transit Project—linking Griffith University, Parkwood via Southport and Broadbeach—will provide an efficient, accessible light rail system connecting commuters with important educational, business and entertainment areas.

The widening of sections of the Pacific Motorway between Pappas Way, Nerang and the Worongary interchange (Exit 77) are underway as well as upgrades to the Varsity Lakes and Mudgeeraba interchanges along the Pacific Motorway.

Projects planned

Planned road projects for the region include the upgrading of 2.6 kilometres of the Gold Coast Highway to four lanes between the intersections of Brisbane Road/Government Road and Frank Street/Robert Street, Labrador. The two added lanes will be combined T2 transit lanes and cycle lanes.

Health

The Queensland Government is committed to increasing the capacity and provision of high quality, safe and sustainable health services to meet the needs of communities. This includes expanding the range of health services available in the home, workplace or community to allow public hospitals to focus on those most in need.

The priority for the Gold Coast is to complete the Gold Coast University Hospital and Robina Hospital Expansion and Health Precinct.

The demand for health services has been reflected in bed pressures, elective surgery waiting lists and emergency department attendances and waiting times. It has also had a significant impact in terms of infrastructure capacity, driving both the demand for new infrastructure and efforts to ensure existing space is utilised efficiently.

Projects completed

Existing health facilities are being upgraded, with an expansion of the Robina Hospital to be delivered in three stages. The Robina Hospital project will almost double the number of available beds from 185 to 364. Stage one of the Robina Hospital expansion was completed in 2007, delivering 25 beds.

Projects underway

Current health projects at the Gold Coast include the new 750 bed Gold Coast University Hospital, which will offer specialist cancer and cardiac services as well as neurosciences, trauma and neonatal intensive care by the end of 2012. The Gold Coast University Hospital will be the focal point of a new health and knowledge precinct, which is planned for a 130 hectare site adjacent to the hospital.

Stages two and three of the Robina Hospital Expansion are scheduled for completion in May 2011, with refurbishment of the existing buildings due for completion in mid 2012. The expansion will provide 154 additional beds, the refurbishment of two existing operating theatres and building of two additional operating theatres, which will increase service capacity to five operating theatres and one endoscopy suite. The project also includes expanded infrastructure services for mental health, coronary care, general medicine, intensive care, medical imaging, pathology and pharmacy to support the additional bed and operating theatre capacity.

A new health precinct to be delivered in Robina by late 2011 will complement the services being delivered by the Gold Coast University Hospital.

Projects planned

Land acquired by Queensland Health at Coomera is earmarked as the site of a future health facility to meet growing demand in the area.

Education and training

Early childhood education and care

Local and international research shows high quality education early in life gives children the best start and a solid foundation for their development.

The priority is to provide access to a kindergarten program for all children turning four by 30 June in the year before Prep. To do this, Queensland must have the infrastructure required to meet demand for high-quality, accessible, affordable and integrated early childhood services.

The extra kindergarten services will double the capacity of the Queensland community kindergarten sector and cater for the 12 000 children not currently accessing any centre-based early education or care services.

Projects completed

An early years centre was opened at Nerang in October 2008.

Projects underway

A new kindergarten facility is currently under construction at Mudgeeraba State School and is due for completion in July 2010.

Projects for new kindergartens are currently underway at Gaven and Flagstone State Schools. These projects are all expected to be operational for first term in 2011.

Projects planned

The Queensland Government has announced plans to develop new kindergartens on the following sites to be operational for first term in 2012:

- Coomera Springs State School
- Coomera State School
- Elanora State School
- Emmaus College, Jimboomba
- Norfolk Village State School
- Palm Beach State School
- Lutheran Ormeau Rivers District.

Primary and secondary education

Population growth is expected to continue over the next 20 years at the Gold Coast.

The region's settlement pattern has traditionally been along the coastal corridors, however in recent years, significant settlement has also occurred further inland.

Schools are closely linked with the planning process, with provision of schools aligned to the settlement pattern of the state. A 20-year plan of new schools is maintained and rolled out.

There is an increasing need to emphasise both new schools in greenfield areas and the renewal of current schools serving older areas. The Queensland Government continues to closely monitor trends such as what household structures tend to favour medium-density dwelling types, and whether or not these tend to be families with school-age children.

The adequate and timely provision of education services is a critical factor in serving the region's existing and future communities.

Projects completed

Ormeau Woods State High School and Norfolk Village State Primary School opened in 2009.

Projects underway

Two further primary schools and a further secondary school will open between 2011 and 2014.

Projects planned

Future planning for education infrastructure at the Gold Coast includes two primary and one secondary school from 2015 to 2020 and two primary schools from 2021 to 2031.

Vocational education and training

Queensland's continuing economic strength depends on the state's workforce possessing the skills to meet the dynamic needs of business and industry.

The Queensland Government's vision is for a highly skilled, flexible workforce that will underpin the state's continuing growth and prosperity. The Queensland Skills Plan 2008 is a major investment in achieving this vision. To meet the needs of business

Artist impression of Gold Coast Stadium, Carrara

and industry, the government is building capacity and skills, particularly professional, to meet workplace requirements.

The Queensland Government is implementing the Queensland Skills Plan to deliver 17 000 training places a year by 2010. In addition, the government will invest more than $124 million to help create nearly 150 000 training places over the next four years in a record expansion of the Queensland skills base.

The successful implementation of the initiatives within SEQIPP relies heavily on the availability of a skilled workforce.

Projects underway

Some training courses at the Gold Coast TAFE will be moved to a new campus at Coomera closer to transport-centred locations with better access to employment and lifestyle areas.

Projects Planned

Some of the projects planned at the Gold Coast include hospitality facilities through a Trade Training Centre on the southern Gold Coast.

Community services

Queensland Police Service

The growing need for police services within the Gold Coast region is in proportion with population growth and settlement patterns. Infrastructure within the region is constantly being assessed and updated to ensure the facilities support current, emerging and new challenges faced by the police service.

Additional facilities are being planned and progressed across the greater region as demand increases.

The Queensland Police Service is working closely with other agencies including local government to ensure the safety and security of communities.

Strong investment in infrastructure ensures the community has ready access to policing services and that police response times are timely and effective.

Projects completed

A new police station at Robina and the new Coomera District Headquarters will continue to assist in delivering high quality policing services in South East Queensland.

Projects underway

Infrastructure projects to meet the demand for police services at the Gold Coast include upgrades to the police facility at Burleigh Heads.

Emergency services

The provision of emergency services infrastructure shadows population and may be delivered either through the enhancement of existing assets or the development of new facilities.

Emergency services infrastructure includes the provision of fire, ambulance and emergency management facilities, appliances and equipment, supporting essential service delivery and contributing to the achievement of safe, resilient and sustainable communities.

The aim is to provide infrastructure that will support the achievement of safe, resilient and sustainable communities.

As population growth in South East Queensland continues, the need for emergency services will increase, particularly in and around the major development areas identified in the SEQ Regional Plan. Higher density development could impact on urban permeability and emergency service delivery.

The Queensland Government is addressing these challenges by providing a network of emergency services infrastructure. New or enhanced fire and ambulance services are provided in direct response to current and projected service delivery needs.

Projects completed

The Southport station upgrade was completed in February 2010 in line with the latest technological and operational standards and will improve emergency service capability across the region.

Projects underway

The fire station at Nerang is scheduled for completion in 2010.

Justice services

The Queensland Government's aim is to provide justice services to the increasing population to support social interaction and business activity.

The Southport courthouse will remain the major courthouse in this region and its capacity to cope with the increased population will be maintained. The smaller Coolangatta courthouse has capacity to provide support for the southern part of the region.

The challenge is to utilise the existing expanded infrastructure to meet the needs of the growing population.

Projects underway

An expansion of Southport courthouse commenced in early 2010. This extension will increase the number of courtrooms by three and expand the size of the large arrest court. Additional accommodation will also be provided for magistrates.

Sport and recreation

The Queensland Government supports the development of healthy and socially inclusive communities through sport and recreation activities and programs, the development of the state's elite athletes and grants to support construction of sport and recreation facilities.

The government's sport and recreation services encourage Queenslanders to lead active and healthy lifestyles, from participation at a community level through to enhanced achievement at elite levels. Linked to this is a commitment to increase the land dedicated to nature conservation and public recreation by 50 per cent.

Rapid population growth in South East Queensland has contributed to an increase in the demand for community sporting facilities. The availability of land and a range of complex land tenures for outdoor recreation have also led to increased demand levels for sport and recreation infrastructure.

This increased demand requires both the construction of new infrastructure and the most efficient use of existing space.

Projects completed

Construction of a skate park facility at Arthur Earl Park, Nerang, is complete. It is one of three skate parks developed on the Gold Coast to provide local skaters with different skills and an environment to learn new skills from more experienced skaters.

Projects underway

The Runaway Bay Sports Complex will be home to local sporting competition. The Runaway Bay project will provide six new irrigated fields, maximising existing land designated for sport and recreation purposes. The development is part of an integrated sport and recreation precinct of more than 60 hectares for sport, recreation and community activities.

The Gold Coast Stadium Redevelopment at Carrara will provide a sporting facility capable of hosting national and international premier events. The stadium will host home fixtures of the new Gold Coast team in the AFL competition, commencing in 2011.

The stadium will provide a significant flow-on effect for the Gold Coast economy, not just during construction, but in the longer term as the venue hosts events that will bring visitors to the region. It is projected that the economic benefits from this completed project to the local economy will be $340 million over 10 years.

Projects planned

Construction of a motorcycle sporting precinct including a motocross track with pit area, marshalling areas, safety exclusion barriers, race control tower, club administration building and amenities block is planned at Stapylton. This precinct will provide a long-term solution for motorsport for the Gold Coast and surrounding areas.

Gold Coast Rapid Transit proposed site

Key infrastructure projects

Gold Coast Rapid Transit	
Status:	Stage one underway
Description:	Stage one of this light rail project links Griffith University, Parkwood to Broadbeach via the key activity centres of Southport and Surfers Paradise
Cost:	$950 million
Delivery:	Stage one is planned for completion in 2014
Key benefit:	The rapid transit system will provide high quality, frequent passenger services on the busy coastal corridor. Construction of the project will create 6300 jobs

Gold Coast Stadium at Carrara	
Status:	Under construction
Description:	Sporting stadium and facilities
Cost:	$144 million
Delivery:	Due for completion in 2011
Key benefit:	The project will provide up to 950 full time jobs during construction and up to 700 jobs an event once operational. Seating at the stadium will be increased to 25 000 seats

Gold Coast Highway—Government Road to Stevens Street—additional lanes	
Status:	Under construction
Description:	Widening of the highway to two lanes in each direction
Cost:	$151 million
Delivery:	Due for completion in 2011
Key benefit:	Additional road capacity will be provided for Gold Coast commuters and 396 direct and indirect jobs will be generated

Gold Coast University Hospital	
Status:	Under construction
Description:	750 bed hospital, offering specialist cancer and cardiac services, neurosciences, trauma and neonatal intensive care
Cost:	$1.76 billion
Delivery:	Completion is expected in late 2012
Key benefit:	The project will create 9847 jobs and will support provision of specialist health services for Gold Coast residents

Robina Hospital Expansion	
Status:	Under construction
Description:	Three stage expansion to provide an additional 179 beds, refurbishment of two existing operating theatres and the provision of two new operating theatres and expanded mental health, coronary care, general medicine, intensive care, medical imaging, pathology and pharmacy to support the additional bed and operating theatre capacity
Cost:	$274 million
Delivery:	Due for completion in 2012
Key benefit:	The expansion will create 1506 jobs over life of project

Gold Coast infrastructure 2010–2014

Map ref	Project	Estimate category	Estimated investment $M	Subject to federal funding	Delivery timeframe 2010–11	2011–12	2012–13	2013–14	Project continues in later years
TRANSPORT									
Public transport network									
GC1	Gold Coast Rapid Transit - Griffith University to Broadbeach	Pre-market	950	▲	●	●	●	●	→
Strategic road network									
GC2	Gold Coast Highway - Government Road to Stevens Street - additional lanes	Market	151		●	●			
GC3	Gold Coast University Hospital access improvements	Concept	140		●	●	●	●	→
GC4	Hope Island Road - Pacific Motorway to Columbus Drive - additional lanes	Market	71		●				
GC5	Intra-Regional Transport Corridor - Nerang to Stapylton - Corridor Preservation	Concept	30		●	●			
GC6	Pacific Motorway additional lanes and interchange upgrades - Nerang to Varsity	Market	233	▲	●	●	●		
	Pacific Motorway additional lanes and interchange upgrades - Nerang to Stewart Road	Market	3,790	▲	●	●	●	●	→
GC7	Pacific Motorway - Coomera Interchange - Foxwell Road - Stage 1	Market	19		●				
GC8	Smith Street - Pacific Motorway to Olsen Avenue - additional lanes	Concept	70					●	→
GC9	Southport–Nerang Road - Minnie Street to Queen Street - Corridor Preservation	Concept	40		●	●	●		→
HEALTH									
GC10	Gold Coast University Hospital	Market	1,762		●	●	●		
GC11	Robina Health Precinct	Concept	36		●	●			
GC12	Robina Hospital expansion	Market	274		●	●			
EDUCATION AND TRAINING									
–	State school infrastructure in Gold Coast	Ongoing program	400		●	●	●	●	→
GC13	New Gold Coast TAFE campus - Coomera	Market	26		●				
COMMUNITY SERVICES									
GC14	Gold Coast Stadium redevelopment - Carrara	Market	144		●				
GC15	Motorcycle Sporting Precinct - Northern Gold Coast	Concept	3			●			
GC16	Runaway Bay Sports Precinct - new playing fields	Concept	4		●				

Total estimated investment in projects underway in 2010–2014 = $8143 million

1. The table identifies infrastructure projects to 2014 on the Gold Coast.
2. Estimated investment includes funds already expended on projects.
3. Where funding is required from other sources other than the Queensland Government, their estimated costs have been included.
4. For an explanation of estimate categories, refer to page 15.
5. State school infrastructure includes eight planned schools on the Gold Coast to 2031.
6. Estimated investment for projects within this table refer to the total project cost, which may be beyond the four year period. This is relevant for projects with an arrow in the last column.

● Investigation/study projects ● Corridor preservation projects ● Infrastructure construction projects ▲ Subject to federal funding → Project continues in later years

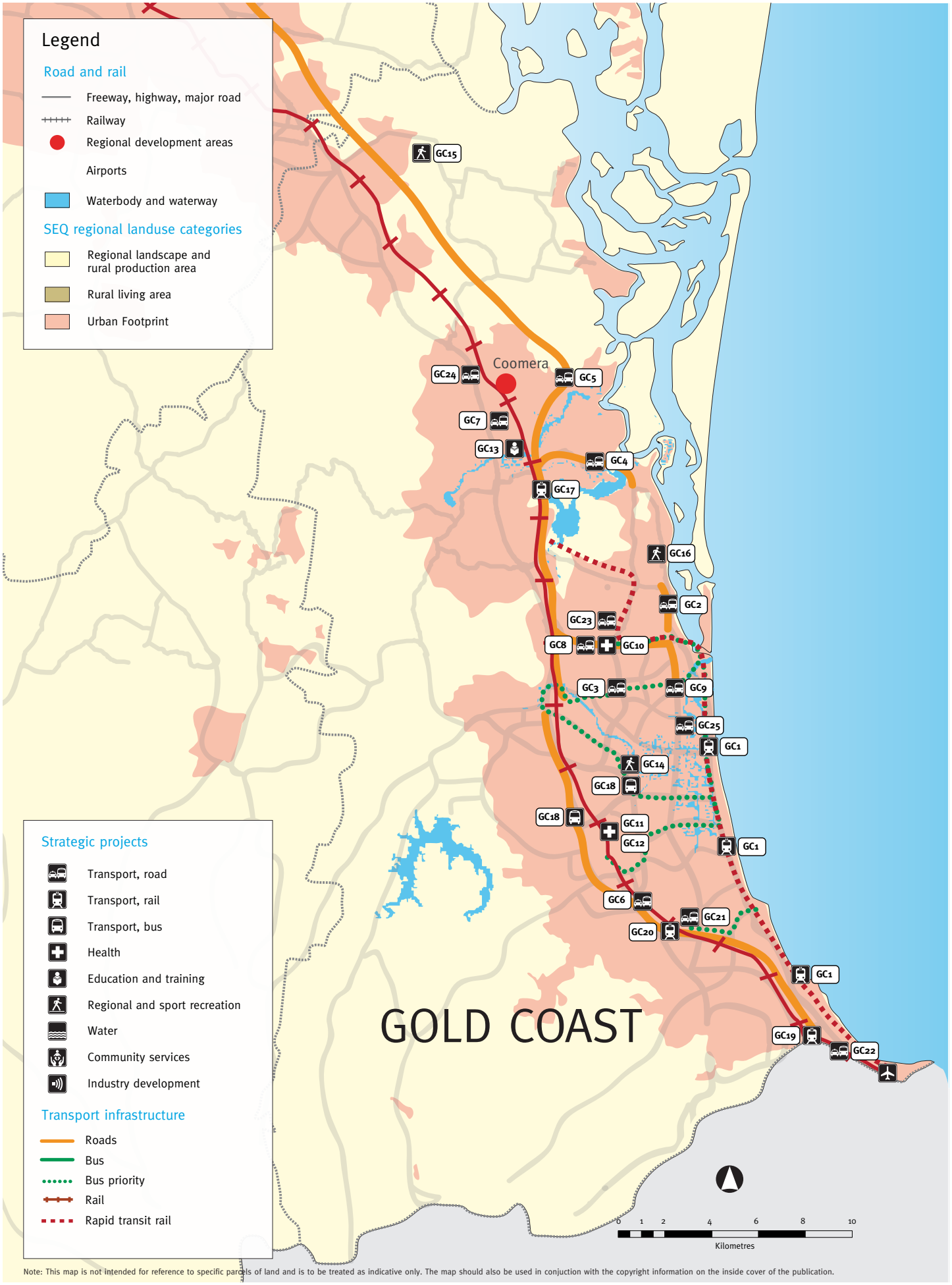
Gold Coast planned infrastructure 2014–2031

Map ref	Project	Subject to federal funding	Indicative delivery timeframe		
			2014–15 to 2019–20	2020–21 to 2025–26	2026–27 to 2030–31
TRANSPORT					
Public transport network					
GC17	Coomera to Helensvale - second track		●		
GC1	Gold Coast Rapid Transit - Helensvale to Griffith University and Broadbeach to Coolangatta			●	
GC18	Nerang–Broadbeach Road upgrades - bus lanes		●		
GC19	Southern extension of rail line - Elanora to Coolangatta				●
GC20	Southern extension of rail line - Varsity Lakes to Elanora			●	
Strategic road network					
GC21	Burleigh Connection Road - Mattocks Road to Kortum Drive - additional lanes		●		
GC22	Gold Coast Airport Access Upgrade		●		
GC23	Gold Coast Knowledge Precinct Access		●		
GC4	Hope Island Road - Duplicate Coombabah Creek Bridges		●		
GC7	Pacific Motorway - Coomera Interchange - Foxwell Road - Stage 2 and 3		●		
GC24	Pacific Motorway - Coomera North Interchange	▲		●	
GC25	Southport–Burleigh Road - intersection upgrades			●	
GC9	Southport–Nerang Road - Minnie Street to Queen Street - additional lanes			●	
		Total planned investment = $4088 million			

1. The table identifies planned infrastructure projects to 2031 at the Gold Coast.
2. Projects listed in the longer-term planning horizon may change to better reflect the emerging needs of the region.
3. The indicative delivery timeframe outlines the estimated timeframe for completion of the project. However, project planning or commencement may occur before this timeframe.

▲ Subject to federal funding

Map 7—Gold Coast strategic infrastructure



Note: This map is not intended for reference to specific parcels of land and is to be treated as indicative only. The map should also be used in conjuction with the copyright information on the inside cover of the publication.

Sunshine Coast

Caboolture to Beerburrum rail line and station

Population:	295 000 (2006), 497 000 (2031)
Estimated no. of projects to 2031:	64
Estimated investment to 2031:	$20.9 billion
Estimated per capita spend to 2031:	$57 000
Key regional projects:	Bruce Highway Upgrade Cooroy to Gympie, MMTC, Caboolture to Landsborough Rail Upgrades, Nambour Hospital, Sunshine Coast University Hospital and Caloundra to Maroochydore Corridor Study
Regional development areas:	Maroochydore, Palmview and Caloundra South

Regional outcomes

The Sunshine Coast greater region incorporates the former shires of Noosa and Maroochy and the City of Caloundra.

The Sunshine Coast's settlement pattern is diverse. The majority of settlement is located within close proximity to the beaches and foreshore.

The principal activity centre for the region is Maroochydore which accommodates the key business, service and retail enterprises. Other major centres in the region are Caloundra, Nambour and Noosa.

The Sunshine Coast is expected to experience significant growth. The provision of infrastructure in line with growth is integral to protecting the quality of life for the Sunshine Coast.

Growth will be accommodated by developing existing urban-zoned land and the major long-term regional growth areas of Caloundra South and Palmview.

Broadhectare has been identified as the primary residential source for growth within the next 15 years, while infill is expected to enhance investment and tourism within the region.

As the region's permanent population grows, increased employment and economic opportunities are emerging.

The Sunshine Coast Airport runway extension will ensure continued diversification of the economic base of the Sunshine Coast, promoting further employment growth in the greater-region.

As the population increases, so will the demand for public transport and pressure on the road system.

By securing infrastructure corridors now, infrastructure can be planned in advance and provided as required. This is particularly relevant for areas identified as significant areas of growth, such as Caloundra South and Palmview. It will also enable future connectivity of Caloundra South and other broadhectare areas with regional activity centres such as Kawana and Maroochydore.

Transport projects currently under construction or recently completed include the upgrade of the Bruce Highway between Cooroy and Gympie, the Sunshine Motorway from Pacific Paradise to Doonan, Steve Irwin Way and the Nambour Connection roads. In addition to this, the Caloundra to Mooloolaba roads and the Caboolture to Beerburrum rail lines were duplicated to improve accessibility and increase capacity throughout the Sunshine Coast region.

Social infrastructure such as health, education and community services are also being planned for the region. The Sunshine Coast University Hospital, the modernisation of the Nambour and Mooloolaba TAFEs and additional schools are currently being planned or are in progress across the region.

The Queensland Government is investing in infrastructure to ensure current and future infrastructure needs are met, while ensuring the lifestyle of the region is maintained. In order to protect this enviable lifestyle, environmental protection and sustainability are paramount.

Steve Irwin Way upgrade

Infrastructure goals

Transport

As the resident population expands and employment activity expands on the Sunshine Coast, particularly in the emerging areas of Sippy Downs and Caloundra South, transport demand will increase and its focus will change.

The transport network on the Sunshine Coast must mature to cater for future growth and provide adequate access between key community facilities, emerging residential areas and the existing coastal activity centres

The transport infrastructure program at the Sunshine Coast focuses on:

- providing improved access between Maroochydore and Caloundra and emerging population centres, including improved public transport
- increasing the capacity of the north coast rail line and upgrading connections between the rail line and coastal activity centres
- enhancing the safety and efficiency of the Bruce Highway, part of the national transport network
- accelerating development of the principal cycle network
- investigating the long-term transport requirements and preserving transport corridors to cater for future growth.

In delivering these priorities, there are a range of challenges to be overcome including:

- relatively dispersed residential areas and centres located along an extensive coast spine that are difficult to service with public transport
- significant increases in transport activity during peak tourist periods
- a lack of arterial road network to cater for local trips, forcing use of the Bruce Highway for many local trips and compromising the function of the highway
- an ageing population, presenting a major challenge to ensure people can continue to access health care facilities and recreational opportunities, particularly when they are no longer able to drive.

Projects completed

Recently completed projects such as the $73 million Beerwah grade separation and $283 million Sunshine Motorway Upgrade have improved safety and accessibility in the region.

Projects underway

The Sankeys Road to Traveston Road project will upgrade a priority section of the Bruce Highway to a four lane grade-separated motorway standard, meeting safety and capacity needs.

Duplication of the Steve Irwin Way between the Mooloolah Connection Road and the Caloundra Interchange at Landsborough is underway. This project will improve safety for road users, reduce congestion, cater for future growth and improve flood immunity.

Projects planned

The Queensland Government is also actively working to meet the future transport infrastructure needs on the Sunshine Coast through planning for projects.

The CoastConnect bus corridor from Maroochydore to Caloundra via Kawana Town Centre, will provide frequent fast, efficient and reliable bus services between Maroochydore and Caloundra South.

Other projects in planning include a new arterial road from Caloundra west to Sunshine Motorway via Creekside Boulevard (MMTC), the duplication of the rail line from Beerburrum to Landsborough and a new rail line from Beerwah to Maroochydore.

Health

The Queensland Government is aiming to provide new and refurbished facilities to ensure Sunshine Coast residents have access to good health services and programs that effectively maintain and improve their overall health and wellbeing and provide them with a good quality of life.

Expansion of existing facilities at the Sunshine Coast is in progress alongside planning for the new Sunshine Coast University Hospital.

Demand for health services has been reflected in bed pressures, elective surgery waiting lists and emergency department attendances and waiting times. It has also had a significant impact in terms of infrastructure capacity, driving both demand for new infrastructure and efforts to ensure existing space is utilised efficiently.

Projects completed

A new 45 bed residential aged care facility at Nambour was completed in early 2010.

Stages one and two of the Sunshine Coast Health Services District additional bed capacity project at Nambour and Caloundra were completed in 2008. These stages have provided a new ante-natal clinic, 30 additional beds and bed alternatives, additional car parking at the Nambour Hospital and an additional 30 beds and bed alternatives at Caloundra Hospital.

Projects underway

Stage three of the Sunshine Coast Health Services District additional bed capacity project involves construction of a new 103 bed ward block, provision of a specialist outpatient department, training and development centre, and refurbishment of clinical support areas at the Nambour Hospital.

Projects planned

The Sunshine Coast University Hospital will provide 450 overnight beds by 2016 and 738 beds by 2021. The project is one part of a major expansion of Sunshine Coast health services to meet the future health care needs of a growing region and its people.

New services will be developed at Nambour Hospital in 2011 including the development of new procedural suites for endoscopy, vascular surgery and a cardiac catheterisation laboratory. An expansion of the Caloundra Hospital Emergency Department is also planned in 2011.

A tender process for a co-located private hospital on the Sunshine Coast University Hospital site at Kawana is now underway. Construction will commence in mid 2011 with the new facility due to open in 2013. The Queensland Government will provide 70 public beds in 2013 and 110 beds by the following year.

Education and training

Early childhood education and care

Local and international research shows high quality education early in life gives children the best start and a solid foundation for their development.

The priority is to provide access to a kindergarten program for all children turning four by 30 June in the year before Prep. To do this, Queensland must have the infrastructure required to meet demand for high-quality, accessible, affordable and integrated early childhood services.

As employment opportunities at the Sunshine Coast grow, so will demand for early childhood education and care services. Early childhood education and care services will be provided to match the growing demand in identified high growth areas.

The extra kindergarten services will double the capacity of the Queensland community kindergarten sector and cater for the 12 000 children not currently accessing any centre-based early education or care services.

Projects completed

An early years centre was opened on the site of Caboolture East State School in October 2008.

A Best Start early childhood education and care centre was completed at Nanango in September 2009 on the site of the former pre-school.

Projects underway

A single unit kindergarten facility is currently under construction at Woodford State School and is due for completion in July 2010.

Projects planned

The Queensland Government has announced plans to develop new kindergartens on the following sites to be operational for first term in 2012:

- Kawana Waters State College
- Pacific Lutheran College, Caloundra
- Peregian Springs State School
- Yandina State School.

Primary and secondary education

Population growth on the Sunshine Coast is expected to continue. The region's median population age is also increasing.

The region's traditional settlement pattern has been on the coastal corridor, while population increases in identified growth areas such as Palmwoods and along transport corridors are expected to continue.

The challenge will be to provide affordable and accessible education facilities for the dispersed inland community. Demand will be met through greater utilisation of existing facilities and the establishment of new facilities.

There is an increasing need to emphasise both new schools in broadhectare areas and the renewal of current schools serving older areas. The government continues to closely monitor factors such as what household structures tend to favour different dwelling types and their implications on school planning.

Projects completed

Peregian Springs State School opened in 2010.

Projects underway

Two primary schools are planned for opening in the short-term.

Projects planned

Planned education infrastructure includes two primary schools and one secondary school to be constructed between 2015 and 2020, and four primary schools and one secondary school to be constructed between 2021 and 2031.

Vocational education and training

Queensland's continuing economic strength depends on the state's workforce possessing the skills to meet the dynamic needs of business and industry.

The Queensland Government's vision is for a highly skilled, flexible workforce that will underpin the state's continuing growth and prosperity. The Queensland Skills Plan 2008 is a major investment in achieving this vision. To meet the needs of business and industry, the government is building capacity and skills, particularly professional, to meet workplace requirements.

The Queensland Government is implementing the Queensland Skills Plan to deliver 17 000 training places a year by 2010. In addition, the government will invest over $124 million to help create nearly 150 000 training places over the next four years in a record expansion of the Queensland skills base.

The successful implementation of the initiatives within SEQIPP relies heavily on the availability of a skilled workforce.


Mooloolaba TAFE campus modernisation

Projects underway

Vocational education and training master planning is underway for the upgrade of Trade Training Facilities at Nambour (Sunshine Coast Institute of TAFE).

Projects planned

The Coastal Cookery at Maroochydore involves constructing a purpose-built commercial training kitchen and restaurant facility at a local state high school. Funding will also be used to purchase equipment and upgrade hospitality facilities at other Sunshine Coast state high schools.

The Sunshine Coast Technical Trade and Training Centre at Caloundra includes construction of a Trade Training Centre at a local state high school to facilitate building and construction qualifications including: bricklaying, carpentry, plastering, painting, decorating and wall and floor tiling. The funding will also be used to purchase course equipment.

Community services

Queensland Police Service

Establishing and maintaining infrastructure is an essential component of the Queensland Police Service's approach to delivering high quality policing services. The Sunshine Coast region incorporates onshore and offshore policing. With an increasing population and the popularity of water activities, identified demand areas such as Caloundra South, Beerwah, Palmview, Kawana and Maroochydore will be provided with appropriate services through the upgrade of existing facilities, relocation of facilities to more centralised locations, or new facilities. The relocation of the Sunshine Coast District Water police to a more strategic location is currently being progressed.

In order to deliver high quality, innovative, progressive and responsive policing services across the region, the Queensland Police Service is constantly reviewing and upgrading existing facilities. In addition, new facilities are being planned in high growth areas and where increased demand is identified.

Projects completed

New police stations at Burpengary and Sippy Downs and the upgrade of the Bribie Island Police Station are part of the Queensland Government's work to ensure community safety for the Sunshine Coast.

Projects underway

The relocation of the Sunshine Coast Water Police will provide continued high quality policing services.

Sport and recreation

The Queensland Government supports the development of healthy and socially inclusive communities through sport and recreation activities and programs, the development of the state's elite athletes and grants to support construction of sport and recreation facilities.

The government's sport and recreation services encourage Queenslanders to lead active and healthy lifestyles, from participation at a community level through to enhanced achievement at elite levels. Linked to this is a commitment to increase the land dedicated to nature conservation and public recreation by 50 per cent.

Projects completed

The Conondale Great Walk is the last of the Great Walks to be completed as part of the Queensland Government's commitment to spend $16.5 million over 10 years to develop 10 world-class walking tracks. It is set among the natural beauty of the Conondale Range and required careful consideration of the unique flora and fauna found in the area. This Great Walk is the only one to have an Art+Place component to help create a space where visitors can appreciate another dimension to nature.

Projects underway

Upgrade of a 25 metre heated swimming pool at Caloundra Aquatic Lifestyle Centre at Caloundra is part of the central park master plan.

Projects planned

Construction of an Olympic swimming pool at the University of the Sunshine Coast at Sippy Downs will provide community access for competition, training and general recreation. It will also enable enhanced and increased teaching and research opportunities for the university.

The Queensland Government has contributed funding to the Sunshine Coast Regional Council to construct a multi-use sports complex for soccer, little athletics and cycling at Noosa. This project is expected to be complete in mid 2012.

Artist impression of Sunshine Coast University Hospital

Key infrastructure projects

Northern Pipeline Interconnector – Stage Two

Status:	Under construction
Description:	A two directional 48 kilometre water pipeline from Landers Shute water treatment plant near Eudlo to the Noosa water treatment plant near Cooroy
Cost:	$450 million
Delivery:	Due for completion in December 2011
Key benefit:	The pipeline will secure water supply for the region by supplying up to 65 megalitres a day of treated water in either direction between the Sunshine Coast and Brisbane

Sunshine Coast University Hospital

Status:	In planning
Description:	A tertiary referral facility for the Sunshine Coast and surrounding areas
Cost:	$1.97 billion
Delivery:	Planned delivery date is late 2016
Key benefit:	The hospital will provide 450 overnight beds with room to expand to 650 beds plus a range of specialist clinical services and acute care facilities to the region

Bruce Highway upgrade—Cooroy to Gympie—Sankeys Road to Traveston Road

Status:	Under Construction
Description:	Construction of the Bruce Highway to a four lane grade-separated motorway standard between Sankeys Road and Traveston Road
Cost:	$673 million
Delivery:	The Sankeys Road and Traveston Road stage is planned for completion in 2014
Key benefit:	This project, ultimately, will provide an upgrade of 65 kilometres of the Bruce Highway between Cooroy and Curra

Nambour TAFE campus modernisation

Status:	In planning
Description:	Modernisation of trade training facilities at Nambour
Cost:	$12 million
Delivery:	Planned delivery date is 2011
Key benefit:	The project will provide a facility to produce skilled Queenslanders

Sunshine Coast Health Services—expansion of existing facilities

Status:	Under construction
Description:	To increase the bed capacity across Nambour and Caloundra Hospitals by 175 bed and bed alternatives
Cost:	$191 million
Delivery:	Staged delivery to end 2011
Key benefit:	The expansion includes increased bed capacity and creation of 792 jobs over the life of project

Sunshine Coast infrastructure 2010–2014

Map ref	Project	Estimate category	Estimated investment $M	Subject to federal funding	Delivery timeframe 2010–11	2011–12	2012–13	2013–14	Project continues in later years
TRANSPORT									
Public transport network									
–	MMTC - Creekside Boulevard to Kawana Town Centre - Corridor Preservation	Concept	35		●				
Strategic road network									
SC1	Bells Creek connection - Bruce Highway to Caloundra Road - Investigation	Pre-project	5		●	●			
SC2	Bruce Highway interchanges - Johnstone Road to Bells Creek Road	Pre-project	110	▲	●	●	●		
SC3	Bruce Highway - Cooroy to Gympie - Corridor Preservation	Pre-project	250		●	●			
	Bruce Highway - Cooroy to Gympie - Sankeys Road to Traveston Road (including access road for Bruce Highway)	Market	673	▲	●	●	●	●	
	Bruce Highway - Cooroy to Gympie - Cooroy to Sankeys Road and Traveston Road to Keefton Road	Pre-market	1,800	▲		●	●	●	→
SC4	East–West links - Steve Irwin Way upgrade - Mooloola Connection Road to Caloundra Road interchange	Market	48		●				
SC5	Maroochydore Road - Bruce Highway to Martins Creek - additional lanes	Market	18		●				
Airports									
SC6	General Aviation Strategy - Replacement Aerodrome Study for Caloundra and Caboolture Aerodromes	Market	1		●				
SC7	Sunshine Coast Airport Masterplan Implementation Project (SCRC project)	Concept	440		●	●	●	●	→
HEALTH									
SC9 & SC10	Sunshine Coast - expansion of existing facilities	Market	191		●	●			
SC8	Sunshine Coast Health Precinct	Pre-project	28				●	●	→
SC9	Sunshine Coast Interim Service Enhancements - Caloundra Hospital Emergency Department Expansion	Market	12		●	●			
SC10	Sunshine Coast Interim Service Enhancements - Nambour Hospital Elective Surgery	Market	15		●	●			
SC11	Sunshine Coast University Hospital	Pre-market	1,972		●	●	●	●	→
EDUCATION AND TRAINING									
–	State school infrastructure in Sunshine Coast	Ongoing program	480		●	●	●	●	→
SC12	Campus modernisation - Mooloolaba	Pre-market	5		●				
SC13	Campus modernisation - Nambour	Pre-market	12		●	●			
COMMUNITY SERVICES									
SC14	Aquatic Centre - University of the Sunshine Coast	Concept	3			●			
SC15	Maroochy River Canoe Trail	Market	1		●				

Total estimated investment in projects underway in 2010–2014 = $6099 million

1. The table identifies infrastructure projects to 2014 at the Sunshine Coast.
2. Estimates in the state budget and other documents may differ, as they may incorporate costs that reflect anticipated changes in input prices between initial planning and the time of construction. Estimated investment includes funds already expended on projects.
3. Where funding is required from other sources other than the Queensland Government, their estimated costs have been included.
4. For an explanation of estimate categories, refer to page 15.
5. State school infrastructure includes 10 planned schools on the Sunshine Coast to 2031.
6. Estimated investment for projects within this table refer to the total project cost, which may be beyond the four year period. This is relevant for projects with an arrow in the last column.

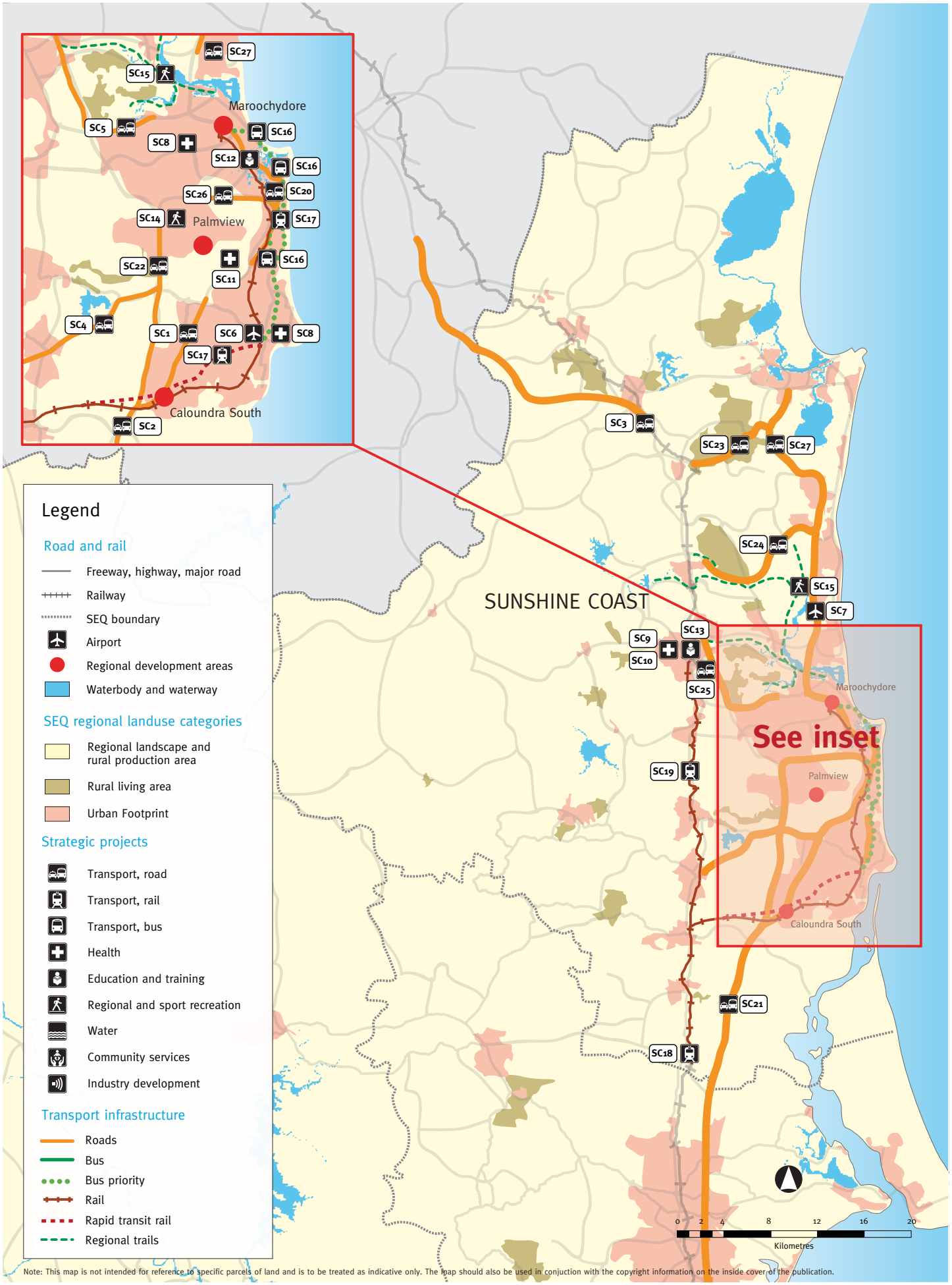
● Investigation/study projects ● Corridor preservation projects ● Infrastructure construction projects ▲ Subject to federal funding → Project continues in later years

Sunshine Coast planned infrastructure 2014–2031

Map ref	Project	Subject to federal funding	Indicative delivery timeframe		
			2014–15 to 2019–20	2020–21 to 2025–26	2026–27 to 2030–31
TRANSPORT					
Public transport network					
SC16	CoastConnect - Caloundra to Maroochydore - quality bus corridor		●		
SC17	CAMCOS - Beerwah to Maroochydore			●	
SC18	Beerburrum to Landsborough - additional rail line		●		
SC19	Landsborough to Nambour - additional rail line				●
SC20	MMTC - Caloundra–Mooloolaba Road duplication - Creekside Boulevard to Maroochy Boulevard (including Mooloolah River Bridge)			●	
Strategic road network					
SC1	Bells Creek connection - Bruce Highway to Caloundra Road			●	
SC21	Bruce Highway upgrade - Caboolture to Caloundra Road - Investigation		●		
SC22	Bruce Highway upgrade - Caloundra Road to Sunshine Motorway	▲	●		
SC3	Bruce Highway upgrade - Cooroy to Gympie - remaining stages	▲	●		
SC23	East–West links - Eumundi to Noosa Road			●	
SC4	East–West links - Steve Irwin Way upgrade - Landsborough to Mooloolah Connection Road		●		
SC24	East–West links - Yandina to Coolum			●	
SC25	Nambour Connection Road upgrades			●	
SC26	Sunshine Motorway extension - Mooloolah River to Kawana Way		●		
SC27	Sunshine Motorway upgrade - Pacific Paradise to Doonan - Yandina-Coolum Road to Walter Hay Drive			●	
		Total planned investment = $13 368 million			

1. The table identifies planned infrastructure projects to 2031 on the Sunshine Coast.
2. Projects listed in the longer-term planning horizon may change to better reflect the emerging needs of the region.
3. The indicative delivery timeframe outlines the estimated timeframe for completion of the project. However, project planning or commencement may occur before this timeframe.

▲ Subject to federal funding



Note: This map is not intended for reference to specific parcels of land and is to be treated as indicative only. The map should also be used in conjuction with the copyright information on the inside cover of the publication.

Part C
Appendixes

Boggo Road Busway

Glossary of terms

Active transport

Non-motorised travel, such as walking and cycling.

Broadhectare

Broadhectare land refers to undeveloped land zoned for residential development on the fringe of the established metropolitan area. These areas are generally used for rural purposes until residential subdivision takes place. This type of land is also referred to as 'greenfield'.

Compact settlement

Consolidating growth in existing areas close to public transport to encourage reduced car use and help manage congestion.

Forward estimates (FE)

Forward Estimates represent the projected annual position for each year of a five-year planning horizon (i.e. current year, next budget year, plus three out years). Forward estimates are produced on a departmental basis.

Greenfield

Greenfield land is undeveloped land in an Urban Footprint that has been identified as being potentially suitable for future urban development. It is generally found on the fringes of existing urban areas.

High occupancy vehicle (HOV)

A vehicle carrying multiple passengers. T2, T3 and bus lanes are examples of HOV-focussed infrastructure.

Infill development

New development that occurs within established urban areas where the site or area is either vacant or has previously been used for another urban purpose. The scale of development can range from the creation of one additional residential lot to a major, mixed-use redevelopment.

Orbital network

The network of roads or motorways around the edges of the urban area designed to allow the movement of traffic

Transport modes

The different types of transport such as walking, cycling, private car and public transport (includes buses, trains and ferries).

Urban Footprint

The Urban Footprint includes established urban areas, broadhectare and remnant broadhectare areas that could be suitable for future urban development. It incorporates the full range of urban uses, including housing, industry, business, infrastructure, community facilities and urban open space.

Useful websites

Project	Website
Regional planning and infrastructure projects	
SEQ Regional Plan	www.dip.qld.gov.au/regional-planning
Major projects and infrastructure	www.dip.qld.gov.au
Transport	
Transport and Main Roads	www.tmr.qld.gov.au
Gateway Upgrade Project	www.gatewayupgradeproject.com.au
Bus and busway projects	www.translink.com.au
Airport Link	www.airportlink.com.au
Gold Coast Rapid Transit	www.tmr.qld.gov.au
Cross River Rail	www.crossriverrail.qld.gov.au
Rail projects	www.qr.com.au/seqip
Water	
Queensland Water Commission	www.qwc.qld.gov.au
South East Queensland Water Grid	www.dip.qld.gov.au/seqwatergrid
Energy	
Department of Employment, Economic Development and Innovation (mines and energy)	www.dme.qld.gov.au
CS Energy	www.csenergy.com.au
ENERGEX	www.energex.com.au
Ergon Energy	www.ergon.com.au
National Electricity Market Management Company (NEMMCO)	www.nemmco.com.au
Origin Energy	www.originenergy.com.au
Powerlink Queensland	www.powerlink.com.au
Tarong Energy	www.tarongenergy.com.au
Information and communication technology	
Queensland Telecommunications Strategic Framework	www.qgcio.qld.gov.au

Project	Website
Health	
Queensland Health	www.health.qld.gov.au
Queensland Children's Hospital	www.health.qld.gov.au/buildinghealth
Gold Coast University Hospital	www.health.qld.gov.au/buildinghealth
Sunshine Coast Hospital	www.health.qld.gov.au/buildinghealth
Health Action Plan	www.health.qld.gov.au/publications/corporate/action_plan.asp
Health Precincts	www.health.qld.gov.au/publications
Smart State Medical Research Centre	www.smartstate.qld.gov.au/resources/publications/ss_strategy/building.shtm
Education and training	
Department of Education and Training	www.education.qld.gov.au
Queensland Smart State Academies	www.qldacademies.eq.edu.au
South East Queensland Schools Project	www.education.qld.gov.au/seqschoolsproject/
Brisbane Convention and Exhibition Centre Expansion	www.bcec.com.au
Queensland Skills Plan	www.trainandemploy.qld.gov.au
Community safety and justice	
Department of Community Safety	www.emergency.qld.gov.au
Queensland Police Service	www.police.qld.gov.au
Courthouse upgrades	www.justice.qld.gov.au
South Queensland Correctional Precinct	www.correctiveservices.qld.gov.au
Sport and recreation	
Sport and recreation funding programs	www.sportrec.qld.gov.au
Trails and great walks	www.epa.qld.gov.au/parks_and_forests
South East Queensland Regional Outdoor Recreation Strategy	www.dip.qld.gov.au
Robina–Gold Coast Football Stadium (Skilled Park)	www.msfa.qld.gov.au
Infrastructure for rural development	
South East Queensland Rural Futures Strategy	www.dip.qld.gov.au/regional-planning/rural-futures.html

Notes

Images courtesy of: Chay Doleman Photography, City North Infrastructure, Courier Mail, Daniel Wallace, David Sandison, Department of Community Safety, Department of Education and Training, Department of Environment and Resource Management, Department of Justice and Attorney-General, Department of Public Works, Department of Transport and Main Roads, Florian Groehn, Gold Coast Rapid Transit Project, Hutchinson Builders, Laing O'Rourke, Lime Corporate and Advertising Pictures, Matt Palmer, Origin Alliance, Port of Brisbane Corporation, Powerlink, Queensland Health, Queensland Motorways Limited, Queensland Rail, RiverCity Motorway Group, Stadium Queensland, Tourism Queensland, Vaughan Whitworth.

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