

South East Queensland

Infrastructure Plan and Program
2009 2026

Foreword



A handwritten signature in black ink, appearing to read 'Stirling Hinchliffe'.

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



Foreword from the Minister			
Highlights	2	Gold Coast	39
What's updated in this SEQ Infrastructure Plan	3	Priority infrastructure projects	39
Job creation	4	Progress on transport projects	40
Project achievements	6	Sunshine Coast	43
Part A – Context of the SEQ Infrastructure Plan	10	Priority infrastructure projects	43
About the SEQ Infrastructure Plan	11	Progress on transport projects	44
About the SEQ region	11	Transport investigations	45
SEQ Regional Plan review	11	Freight	48
Infrastructure priorities	13	Activity centre renewal and transit oriented development	50
Funding the SEQ Infrastructure Plan	14	Industry development	52
Partnerships	14	Information and communication technology	55
Federal government contributions	15	Water	56
Delivering the SEQ Infrastructure Plan	16	Establishing a water-efficient community	57
Driving delivery of the SEQ Infrastructure Plan	16	Diversification of our water supplies	58
Working together with industry	16	Energy	64
Improving government processes	17	Electricity	65
Summary of infrastructure investment	18	Gas	69
How to read the SEQ Infrastructure Plan	18	Health	73
Cost estimates used in this SEQ Infrastructure Plan	19	Education and training	76
Part B – Infrastructure classes	20	Early childhood education and care	76
Transport	21	Primary and secondary education	77
Tackling urban congestion	21	Vocational education and training	79
Public transport initiatives	24	Community services	81
Western Corridor	26	Queensland Police Service	81
Priority infrastructure projects	26	Emergency services	82
Progress on transport projects	27	Justice services	83
Transport investigations	27	Social housing	83
Greater Brisbane	31	Corrective services	83
Priority infrastructure projects	31	Infrastructure for rural development	84
Progress on transport projects	33	Regional sport and recreation	86
Transport investigations	33	Outdoor recreation	87
Port of Brisbane	38	Part C – Appendices	91
World-class port	38	Appendix one - useful websites	92
Progress on Port of Brisbane projects	38	Appendix two - index of tables, figures and maps	94

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 \$12.4 billion until 2026. This includes \$9.4 billion in road, rail and public transport projects and studies, over \$1.6 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 Beerburum duplication completed in April 2009
- The major reconstruction of the Ipswich Motorway/Logan Motorway interchange at Gailles and a 2-kilometre stretch of the Ipswich Motorway between Goodna and Gailles is well advanced
- The Northern Busway, from the Royal Childrens Hospital at Herston to Windsor, and a new cycle centre near the Royal Brisbane Womens 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 Plans 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

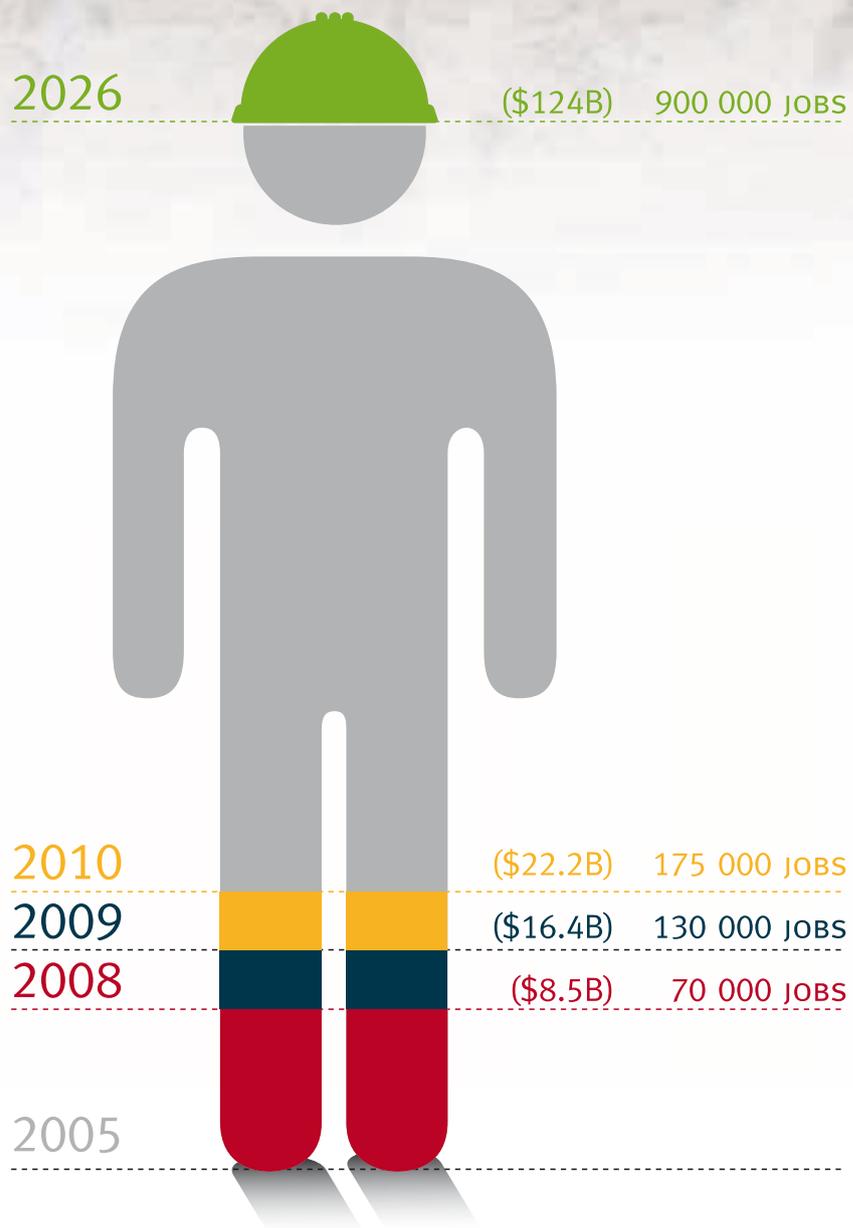
- Developing and supporting new industries such as liquefied natural gas (LNG) and solar

- 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 Springbrook 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

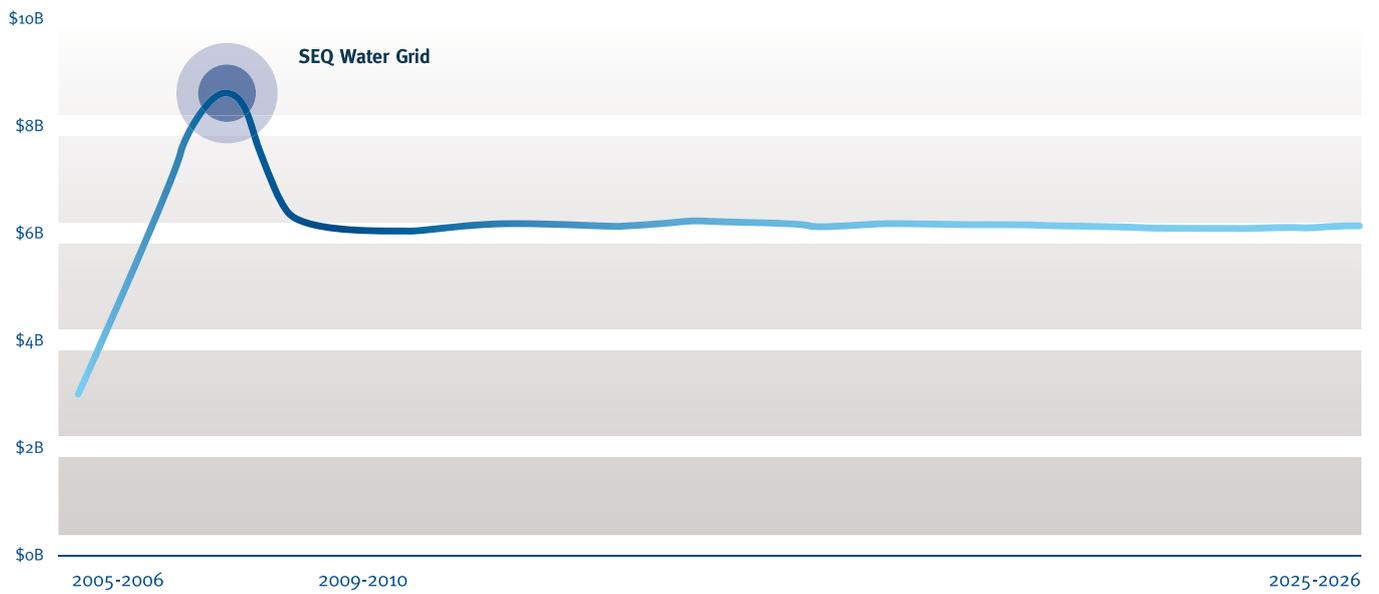
Clive Berghofer Stadium: Toowoomba upgrade

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.



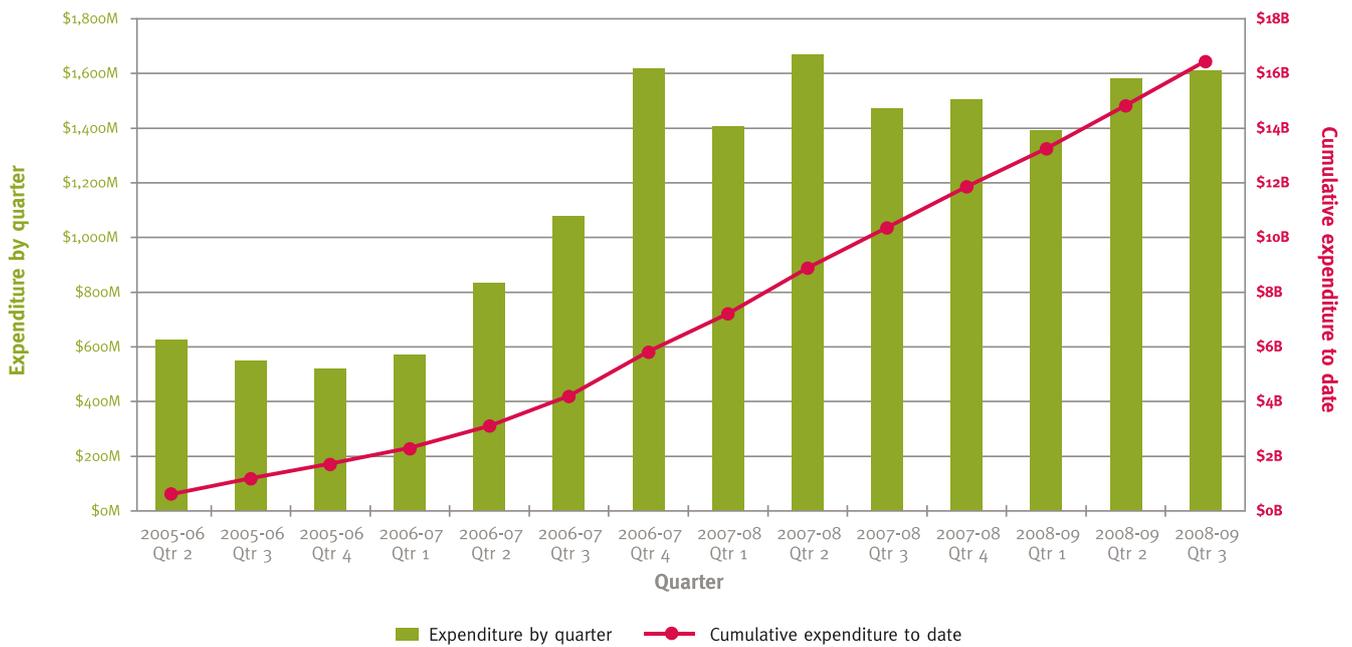
Figure 3 Indicative activity of SEQ Infrastructure Plan to 2026



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.

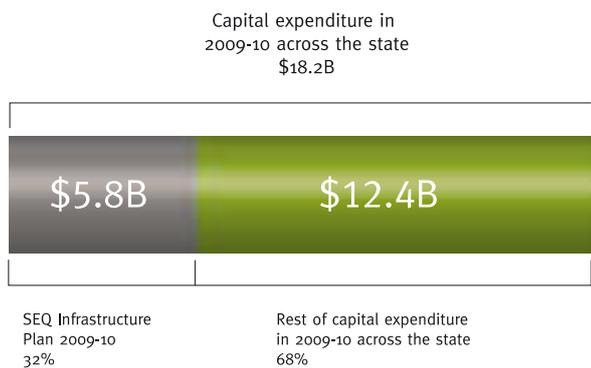
Improving government processes

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 Womens 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.

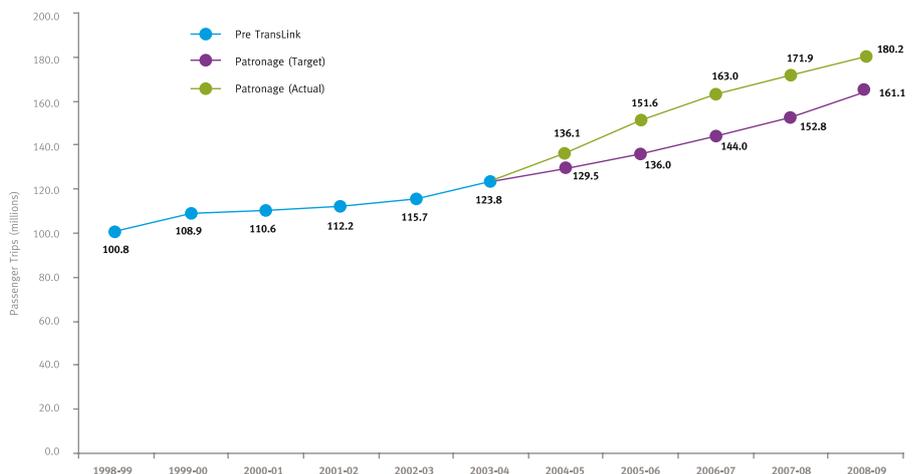
TransLink Transit Authority

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.

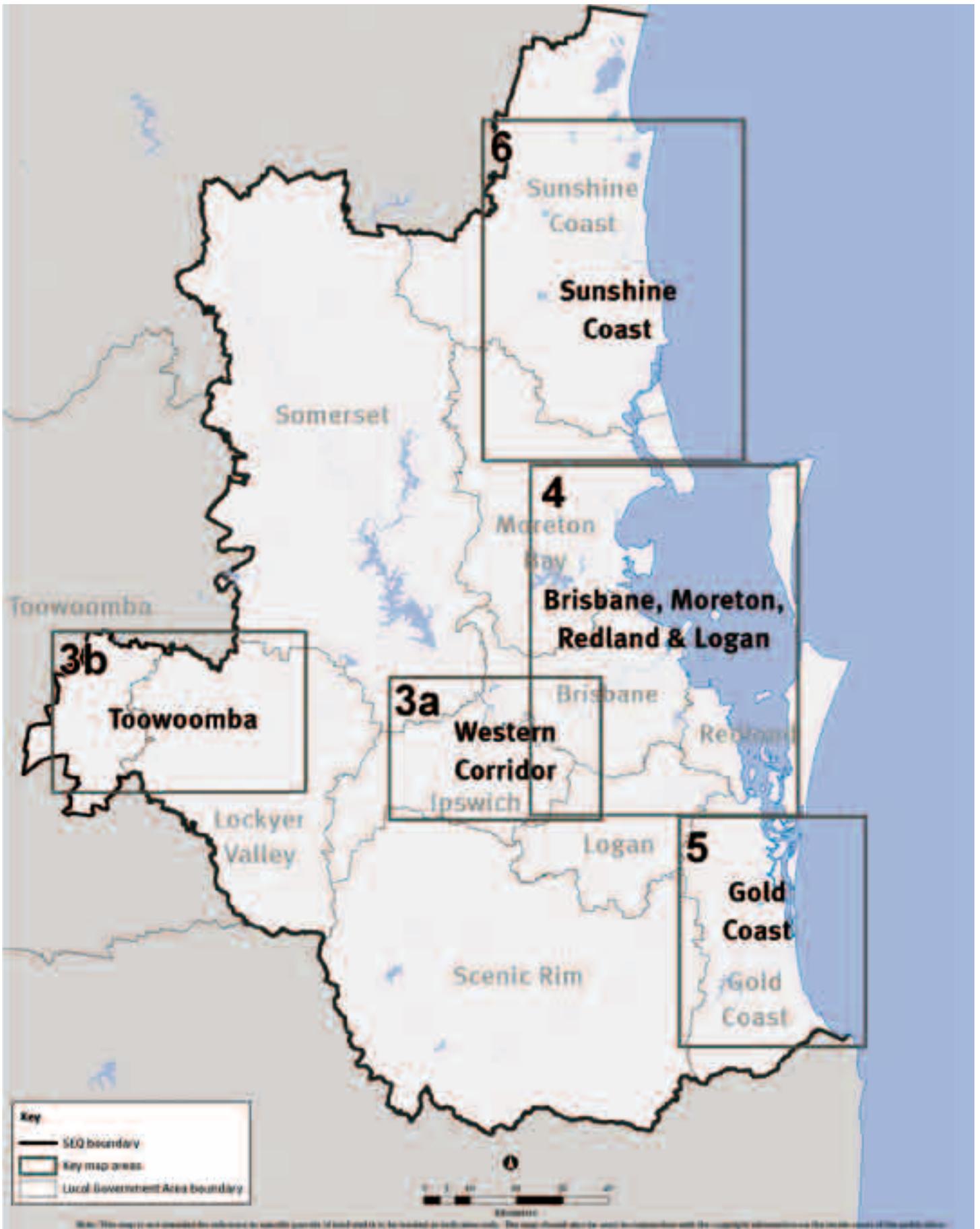
Figure 7 – Public transport patronage



(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*

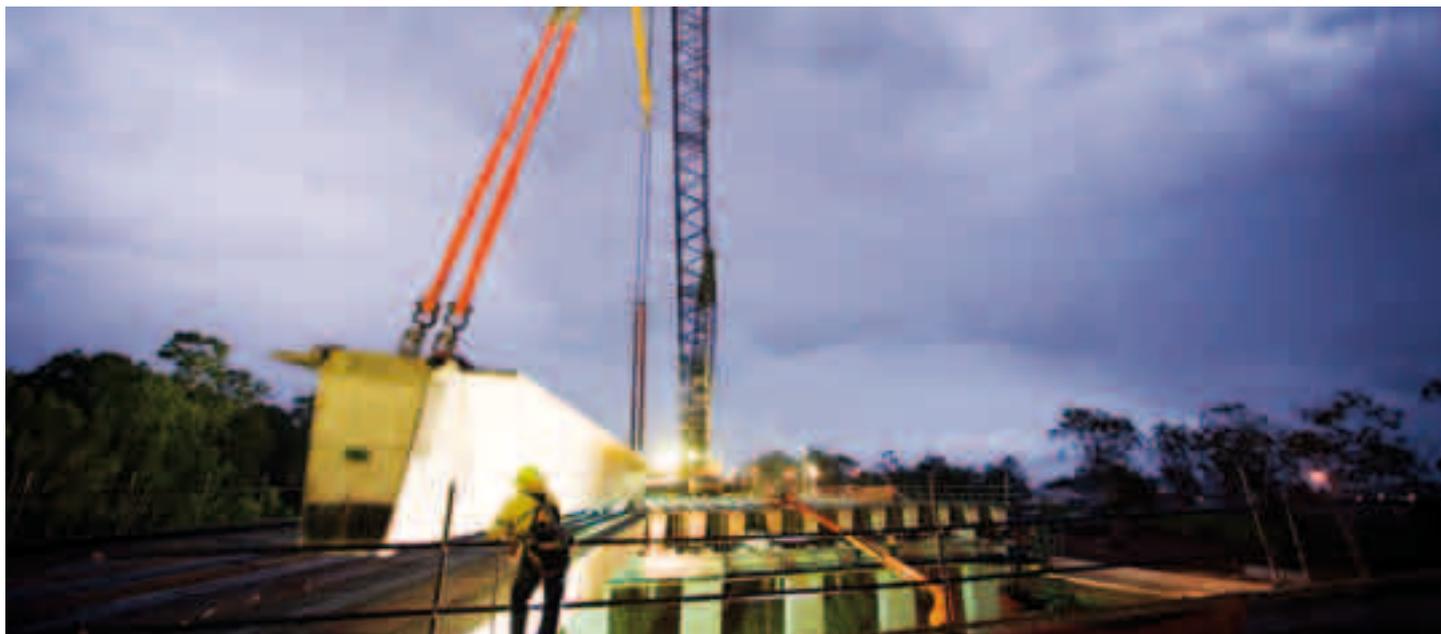
The efficiency and safety of the Ipswich Motorway is paramount. It is a key interstate and inter-regional commuter and freight route linking the Western Corridor to the rest of South East Queensland. A partnership between the Queensland and federal governments will deliver the Dinmore to Gailes section 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*

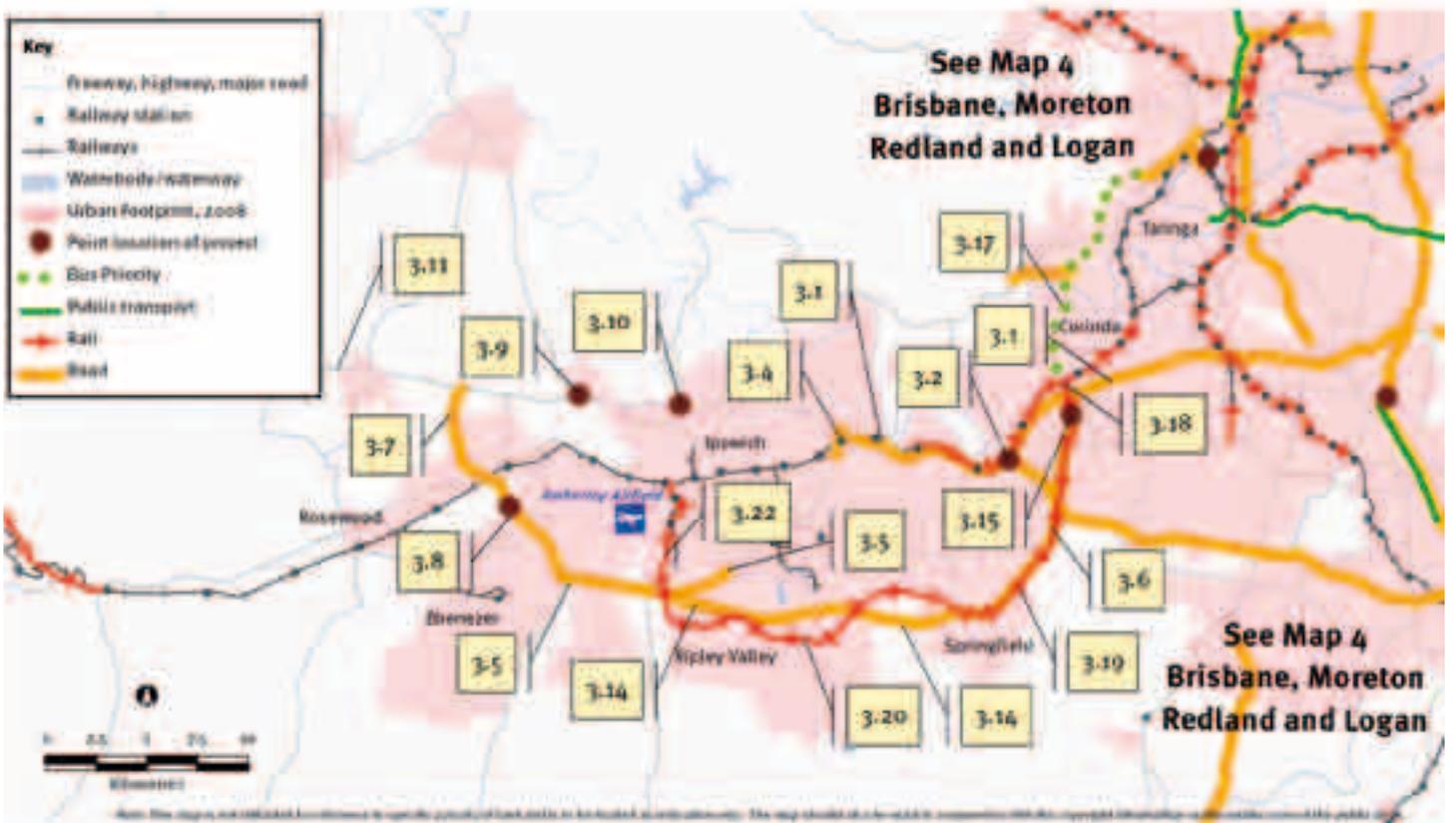
To boost future rail freight capacity in the region, and separate freight activity from sensitive residential areas, a study of the preferred alignment for a dedicated freight-only corridor is being finalised. This corridor, eventually comprising a preferred dual-gauge freight rail line would connect 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

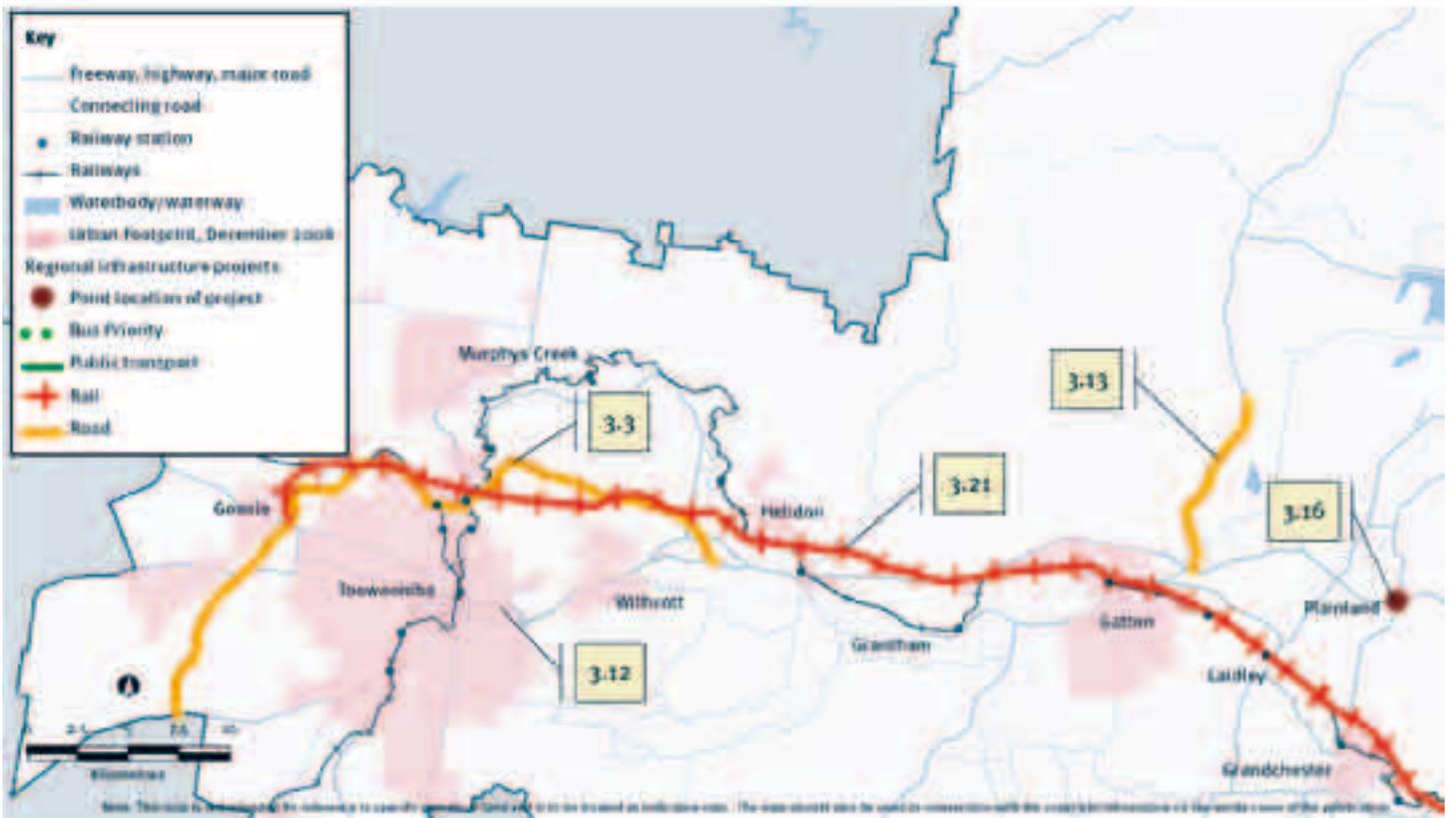


Table 3 - Western Corridor and Toowoomba transport infrastructure

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

- The table identifies the expected delivery timeframe for each infrastructure project. The darker shade represents projects that are under construction at 1 July 2009.
- 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.
- 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.
- For an explanation of estimate categories, refer to page 19.
- 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.wbntni.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.

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

- The table identifies the expected delivery timeframe for each infrastructure project. The darker shade represents projects that are under construction at 1 July 2009.
- 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.
- 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.
- For an explanation of estimate categories, refer to page 19.
- Where a project has been completed or a stage of a project completed, it is noted in the table.
- 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

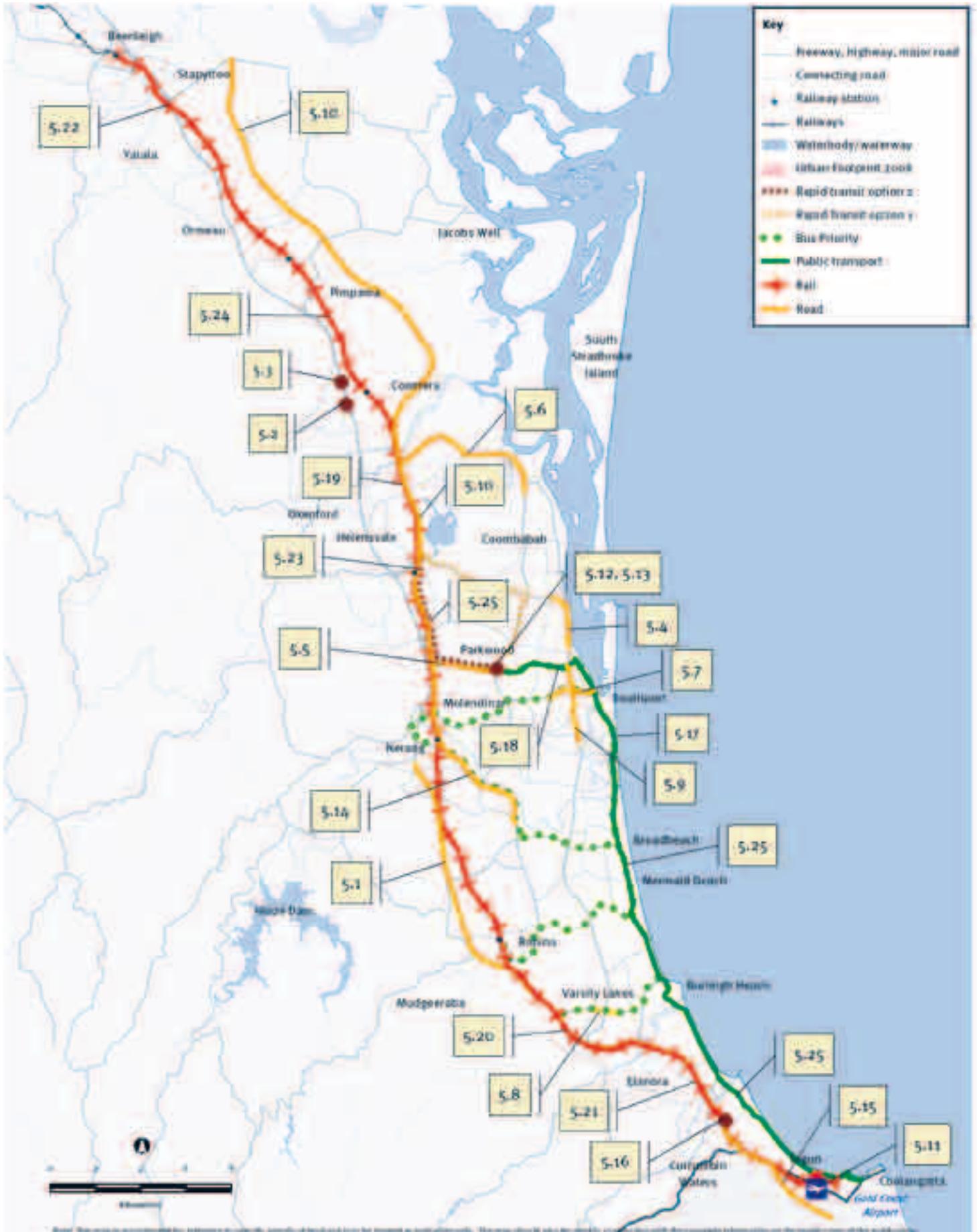


Table 5 – Gold Coast transport infrastructure

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 Maroochyore, 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 Maroochyore 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 Maroochyore and Caloundra and emerging population centres, including improved public transport*

The CoastConnect Caloundra to Maroochyore project is being developed to provide a quality public transport network between Caloundra and Maroochyore. 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 Beerburum, 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 Beerburum and Landsborough. This will reduce travel times between these centres. Further improvements in the tracks 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 Beerburum 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 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 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 Nautilus 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	Maroochy 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: Maroochy 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 Maroochy 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 Maroochy	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.



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

- The table identifies the expected delivery timeframe for each infrastructure project. The darker shade represents projects that are under construction at 1 July 2009.
- 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.
- 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.
- For an explanation of estimate categories, refer to page 19.
- 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.

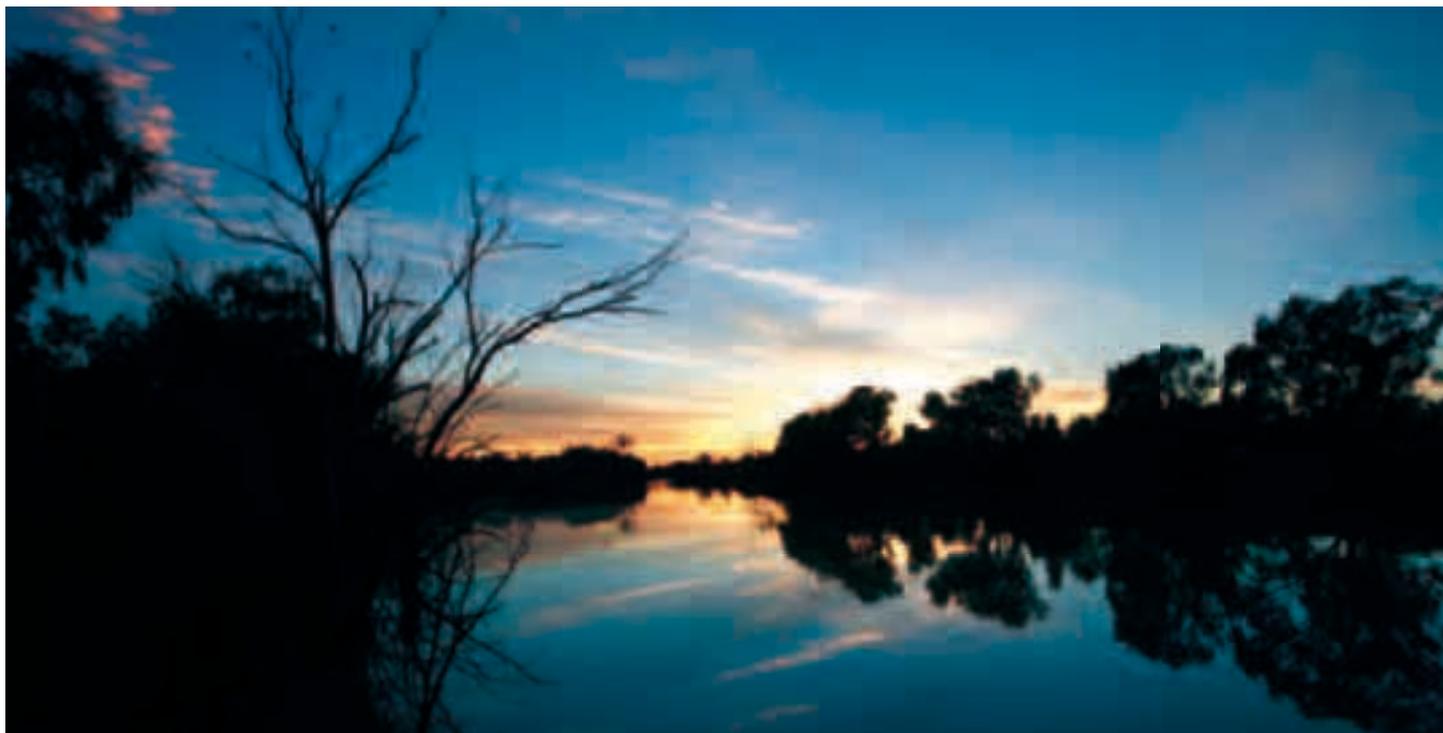
South East Queensland Water Strategy

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 regions 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.



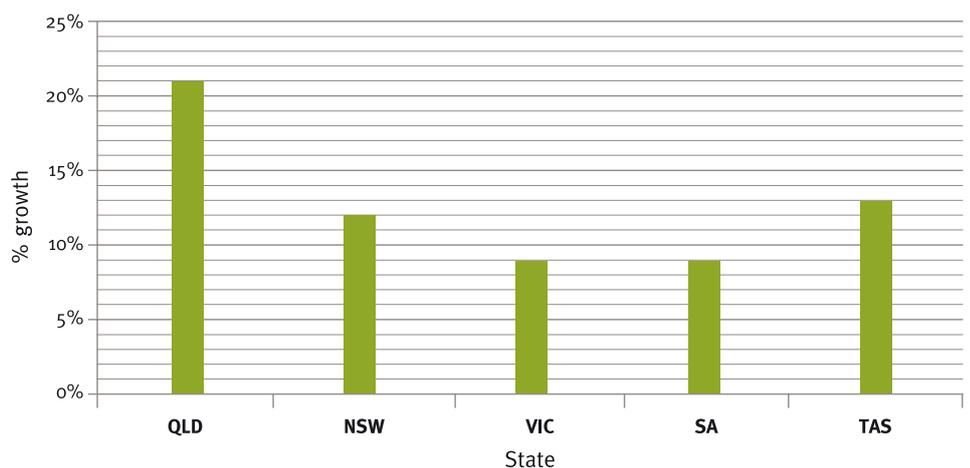
Energy

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 states electricity demand. The regions 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 region's 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	207	4			
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)					
Major transmission upgrades completed 2007-08	137.5	4			
Construction of a new transmission line between Middle Ridge (Toowoomba) and Greenbank (Logan).					
Major transmission upgrades completed 2008-09	96	4			
Abermain substation (\$25m)					
Greenbank substation (\$35m)					
South Pine substation (\$36m)					
Total investment since 2005	440.5				

Construction started

Notes:

- The table identifies the expected delivery timeframe for each infrastructure project. The darker shade represents projects that are under construction at 1 July 2009.
- 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.
- 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.
- For an explanation of estimate categories, refer to page 19.
- Where a project has been completed, it is noted in the table.
- 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.
- Energy authorities budget on a five-year basis. Project costs beyond that period are not included.
- 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.
- kV = Kilovolt.
- 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					
Myrtle town: 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	42	4					
New zone substations in Wacol South (\$10m), Holland Park (\$10m) and Currumundi (\$10m)							
Underground subtransmission cables between Crestmead and Browns Plains North substations (\$12m)							
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 Childrens Hospital commenced in February 2009. The schematic design for the new Queensland Childrens 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 Childrens 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, childrens 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 Childrens Hospital	1,200	1				
11.4	Queensland Childrens 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

- The table identifies the expected delivery timeframe for each infrastructure project. The darker shade represents projects that are under construction at 1 July 2009.
- 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.
- 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.
- For an explanation of estimate categories, refer to page 19.
- Where a project has been completed, it is noted in the table.
- 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

- The table identifies the expected delivery timeframe for each infrastructure project. The darker shade represents projects that are under construction at 1 July 2009.
- 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.
- 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.
- For an explanation of estimate categories, refer to page 19.
- 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 000 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 Social housing Corrective 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.

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 Maroochydhore 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

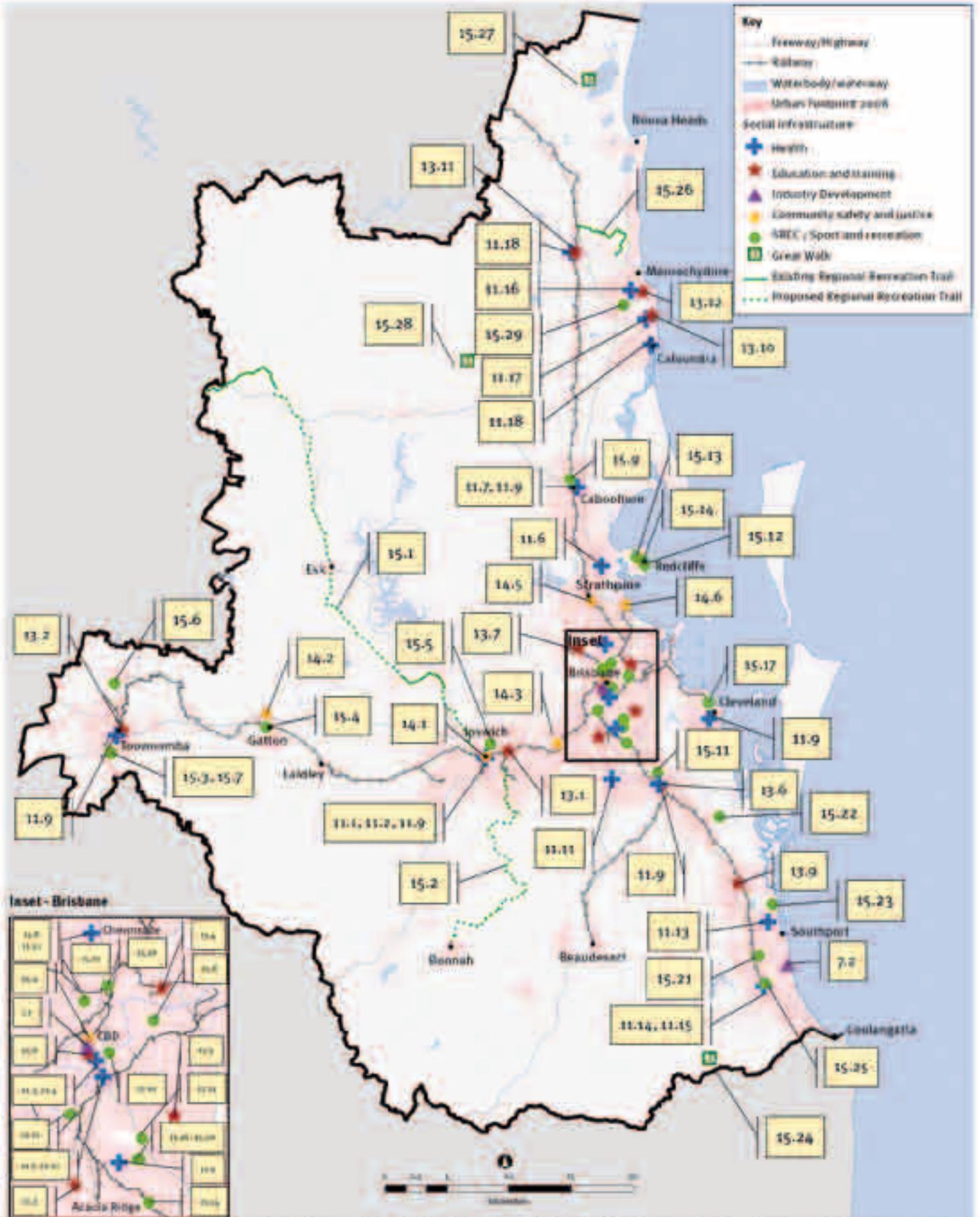
Map 10 ref no.	Project	Estimated investment \$M	Estimate category (see note D)	Completed projects \$M	Delivery timeframe		
					2009-10 to 2012-13	2013-14 to 2018-19	2019-20 to 2025-26
Western Corridor							
15.1	Brisbane Valley Rail Trail	3.6	3				
15.2	Boonah to Ipswich Trail	2.4	3				
15.3	Regional 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

- The table identifies the expected delivery timeframe for each infrastructure project. The darker shade represents projects that are under construction at 1 July 2009.
- 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.
- 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.
- For an explanation of estimate categories, refer to page 19.
- Where a project has been completed or a stage of a project completed, it is noted in the table.
- For consistency across this document, amounts less than \$20m remain unrounded.

Map 10 – Social and economic infrastructure



Notes: This map is not intended to inform on specific projects of land use or to be construed as indicative only. The map should only be used in conjunction with the supporting information and the documentation of the public consultation process.



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 Childrens 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		
Table 1	Program scorecard	9		
Table 2	Estimated investment identified in this infrastructure plan	19	Figure 1 South East Queensland infrastructure investment and jobs 5	
Table 3	Western Corridor and Toowoomba transport infrastructure	30	Figure 2 Delivered projects pipeline 6	
Table 4	Brisbane, Moreton, Redland and Logan transport infrastructure	36	Figure 3 Indicative activity of SEQ Infrastructure Plan to 2026 8	
Table 5	Gold Coast transport infrastructure	42	Figure 4 Program expenditure to date 9	
Table 6	Sunshine Coast transport infrastructure	47	Figure 5 Snapshot of infrastructure spending across the state 18	
Table 7	Industry development infrastructure	54	Figure 6 Cumulative expenditure to date by subregion 18	
Table 8	Regional water infrastructure	63	Figure 7 Public transport patronage 24	
Table 9	Powerlink upgrades in South East Queensland	71	Figure 8 Growth in electricity demand across Australia 2009-10 to 2013-14 64	
Table 10	ENERGEX network upgrades in South East Queensland	72		
Table 11	Regional health infrastructure	75	Maps	
Table 12	Regional state school infrastructure	78	Map 1 South East Queensland Region 12	
Table 13	Regional vocational education and training infrastructure	80	Map 2 Transport infrastructure subregions 25	
Table 14	Community services	83	Map 3a Western Corridor transport infrastructure 28	
Table 15	Regional sport and recreation infrastructure	89	Map 3b Toowoomba transport infrastructure 29	
			Map 4 Brisbane, Moreton, Redland and Logan transport infrastructure 35	
			Map 5 Gold Coast transport infrastructure 41	
			Map 6 Sunshine Coast transport infrastructure 46	
			Map 7 Regional freight infrastructure 49	
			Map 8 Regional water infrastructure 62	
			Map 9 Powerlink and ENERGEX infrastructure 70	
			Map 10 Social and economic infrastructure 90	

Published July 2009

ISBN: 978-0-9805449-0-9

©The State of Queensland
(Department of Infrastructure and Planning)

Copyright protects this publication. Except for purposes permitted by the *Copyright Act 1968*, no part may be reproduced by any means without the prior written permission of the department.

Images courtesy of:

Boggo Road Busway Alliance, ENERGEX, Gold Coast Convention and Exhibition Centre, The Courier Mail, Department of Communities, Department of Transport and Main Roads, Major Hospitals Projects Office, Port of Brisbane, Powerlink, Department of Education and Training, Queensland Health, Queensland Rail, Department of Public Works, Department of Justice and Attorney General, Queensland Water Infrastructure, Rebecca Patrick, Leighton Contractors, Redcliffe Leagues Club, Stadiums Queensland, Mark Straker Photography, Southbank Institute of Technology, Department of Infrastructure and Planning, Toowoomba Regional Council, Kylie Jackson and Mark Burgin.



Department of **Infrastructure and Planning**
PO Box 15009 City East Qld 4002 Australia
tel +61 7 3227 8548
fax +61 7 3224 4683
info@dip.qld.gov.au

www.dip.qld.gov.au