

State Infrastructure Plan

Part B: Program
March 2016





King George Square busway station, Brisbane

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Introduction

The State Infrastructure Plan (SIP) provides confidence and certainty to industry, the community and all levels of government about the future direction for infrastructure provision in Queensland.

Part B outlines how the SIP will be implemented, immediate and longer term projects and opportunities and priorities for each region.

An important component of the SIP is an annual infrastructure program. The program is a blueprint for the Queensland Government's infrastructure priorities across each asset class and includes future opportunities and a list of projects nearing the procurement or construction stages.

In the short-term, the program helps industry with its own planning and workforce management and informs decision-making across other levels of government. Over the longer term, the program sets bold new strategic directions for planning and delivering infrastructure in Queensland.

The infrastructure program is designed to be read in conjunction with Part A of the SIP. The 1–4 year projects and future opportunities in Part B address the challenges and objectives outlined in Part A, and align with the responses for each asset class.

These asset classes are:

- ▶ cross-government
- ▶ transport
- ▶ energy
- ▶ water
- ▶ health
- ▶ education and training
- ▶ digital
- ▶ justice and public safety
- ▶ arts, culture and recreation
- ▶ social housing.



Bruce Highway Cooroy to Curra upgrade

Each year following the state budget, Part B will be updated to reflect the funding commitments for the next four years.

Part B also identifies a number of policies and initiatives that government will undertake to support implementation of the SIP.

It outlines, by region, potential future projects to support liveability and productivity in regional Queensland, including projects that are at various levels of maturity. Many of these are currently unfunded, but represent potential projects for future investment, either by varying levels of government or the private sector.

Examining each asset class

For each asset class, the program outlines the following:

Introduction and snapshot

This section provides a snapshot of the asset class, outlining the role infrastructure plays in achieving the government's objectives for the community. It also provides a summary of the key challenges that will impact future infrastructure provision and identifies ways government can respond to these challenges. It also reiterates the responses set out in Part A.

1–4 year program

This is a four-year forward program of projects that are either in planning, approaching procurement and construction or underway and includes key maintenance programs.

It details the total estimated cost for each project, indicates whether other levels of government or the private sector are contributing funding and outlines the level of funding over the next four years. It reflects the government's current capital works program as outlined in the state budget and forward estimates. The majority of these projects and programs have firm funding commitments for 2015–16 through the state budget. However, where projects are programmed for the later years, the funding amount is indicative only. The level of funding will become more certain as the projects progress from the planning to delivery stages.

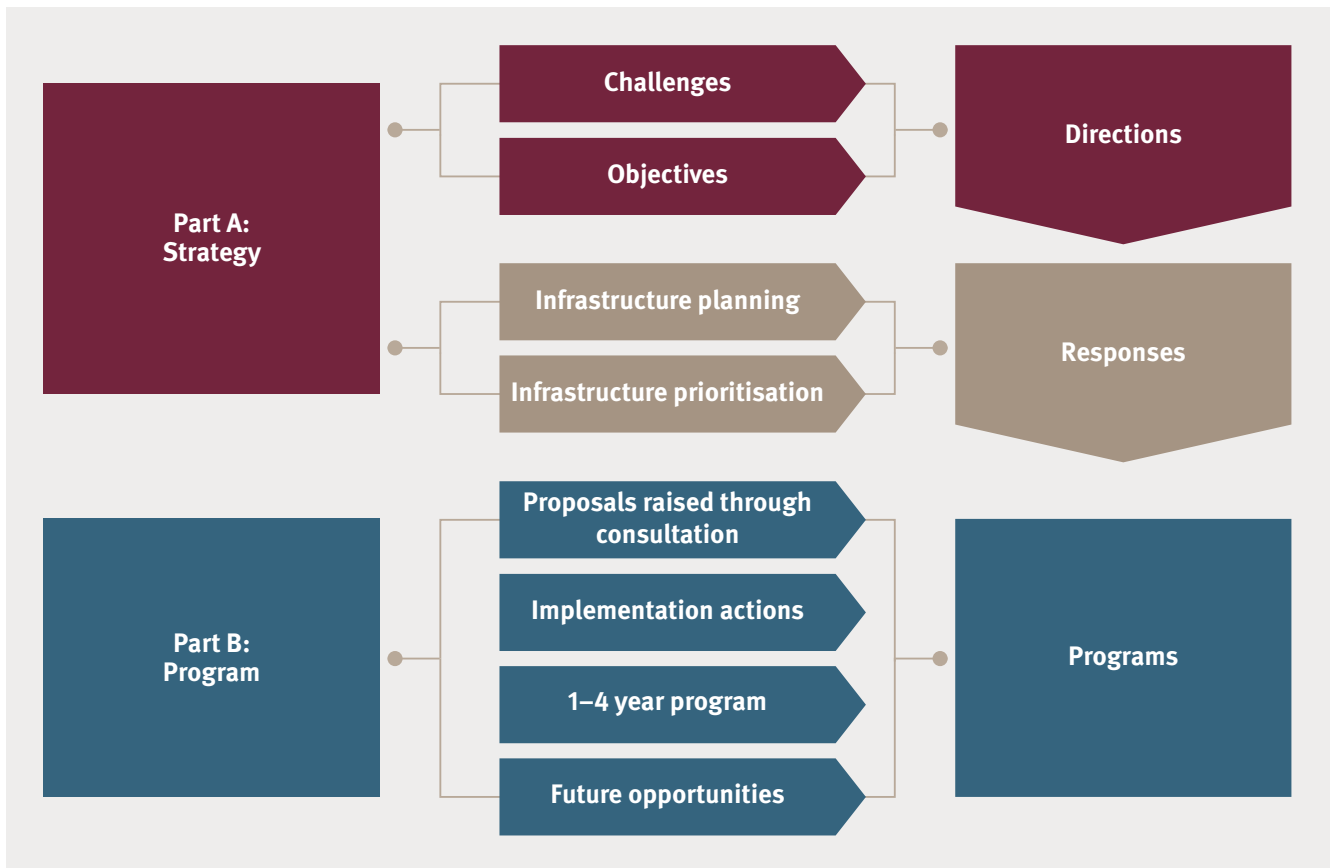


Figure 1: Structure of the State Infrastructure Plan

Future opportunities

This section outlines the infrastructure service gaps and future opportunities, and Queensland Government's strategic direction for infrastructure. While these future priority projects and programs reflect the government's strategic direction for infrastructure, they are currently unfunded. Innovative or alternative funding solutions, including market-led proposals and partnerships with other levels of government and the private sector, may be required to make these a reality.

These opportunities have been categorised as either short, or medium/long-term within the indicative 15-year timeframe of the document. This categorisation is reflective of the level of investigation already undertaken by government and also relative to the need for the potential projects.

As planning and development advances and funding options become certain, these opportunities will transition into the 1-4 year program in annual updates. As annual updates are prepared, the government intends to better articulate these future opportunities, and any solutions being explored, to assist with more integrated planning (particularly with local governments) and targeted market-led proposals.

Government commitments

State Infrastructure Fund

To provide an immediate boost to infrastructure investment and increase business confidence, a State Infrastructure Fund (SIF) with an initial investment of \$500 million will be established. This will support the implementation of the SIP and further demonstrates this government's commitment to planning and delivering infrastructure. This new fund will focus on infrastructure projects that will enhance productivity, support jobs and are ready to be brought to market quickly, so that we continue to underpin productivity and jobs growth in Queensland.

New programs being established under the SIF are:

- ▶ **Maturing the Infrastructure Pipeline Program, \$20 million**—aimed at fast tracking early stages of the infrastructure project pipeline by developing strategic assessments and preliminary evaluations for projects identified through SIP consultation. This will initially target those projects highlighted in the proposals raised through consultation outlined in Part B.
- ▶ **Priority Economic Works and Productivity Program, \$300 million**—targeting productivity lifting and capacity improving infrastructure. This supports a range of themes in Part A including infrastructure that connects our communities and markets, and better use of existing assets.
- ▶ **Significant Regional Infrastructure Projects Program, \$180 million**—significant infrastructure projects in key regional centres that respond to a community need or provide increased economic opportunities. This also supports a range of themes in Part A including infrastructure that leads and supports growth.
- ▶ Initial projects to be funded through the Priority Economic Works and Productivity Program include:
 - ▶ Ipswich Motorway (Rocklea to Darra)—Stage 1
 - ▶ Pacific Motorway—Gateway Motorway Merge Upgrade (southbound lanes)
 - ▶ North Coast Line Capacity Improvement Project
 - ▶ Dawson Highway (Gladstone—Biloela)—timber bridge replacement package
 - ▶ Rockhampton Road Train Access—Stage 1
 - ▶ Kawana Way and Nicklin Way—Sunshine Coast University Hospital intersection upgrades package
 - ▶ Riverway Drive duplication (Gollogly Lane—Allambie Lane).

Accelerated Works Program

The Queensland Government understands how important job security and new jobs are to support communities across Queensland. In the 12 months to end of January 2016, more than 71,000 new jobs were created in Queensland, with the state government's \$10.1 billion capital works program supporting 27,500 jobs.

However, some parts of Queensland are experiencing subdued economic conditions due to a number of factors. In response, the state government has outlined an Accelerated Works Program (AWP) to maintain local economies and bring forward employment opportunities while other jobs or industries emerge.

The AWP will fast-track jobs and economic activity by getting projects underway sooner. These projects are part of government's commitment to drive the economy and sustain and create new jobs in regional Queensland.

The Queensland Government has announced the acceleration of more than \$440 million in projects supporting more than 950 jobs. The AWP has initially been targeted at Northern Queensland, but will also be extended to other regions. Selected AWP projects are shown in the following tables.

Government commitments

Townsville region (\$210 million in projects supporting more than 486 jobs):

Project	Budget
Arnot Creek Bridge Upgrade	\$10 million
Masters Road–Lansens Road Upgrade	\$5.1 million
Berth 4 upgrade	\$55 million
Townsville (Garbutt) depot upgrade Stage 2	\$42.5 million
Bulk earthworks and trunk and civil works at the Village, Oonoonba, Townsville	\$9 million
Northern access intersection interim safety work	\$10 million
Bannisters Bog to Didgeridoo Lagoon new southbound overtaking lane	\$5.86 million
West Barrita Road to Jerona Road overtaking lanes north and south	\$9.8 million
Scovazzlos Road to Como Road overtaking lanes	\$9.6 million
Rollingside Weighpad to Hencamp Creek overtaking lanes	\$6.8 million
Alligator Creek Road to Alendale Drive overtaking lane	\$9.84 million
Wide centre line treatment Herveys Range Road	\$6.17 million
Bruce Highway widening and rehabilitation works including Didgeridoo Creek to East Barratta Creek, East Barratta Creek to West Barratta Creek, and Lochinvar Station Road to Collinsons Lagoon	\$8.8 million
James Cook University village infrastructure	\$5 million
School refurbishments, walking tracks in Magnetic Island and Bowling Green National Parks and Townsville Sports and Recreation Precinct	\$5.6 million

Cairns region (\$68 million in projects supporting more than 159 jobs):

Project	Budget
Cairns Special School	\$25 million
Repair and replace parts of the Cairns Convention Centre roof	\$13 million
Upgrades of Ergon depot at McLeod Street and Lake Street offices	\$12 million
Replacement police station at Gordonvale	\$4.5 million
Gordonvale fire station	\$3.5 million
Bruce Highway works between Innisfail and Cairns	\$2.5 million
Special Emergency Response Team (SERT) and Road Policing Command (RPC) Facility at Cairns	\$7.2 million

Mackay region (\$75 million in projects supporting 177 jobs):

Project	Budget
Overtaking lanes on the Bruce Highway including Thomsetts Road	\$8.15 million
Upgrade of the police station at Bowen	\$5.15 million
Abbot Point material offloading facility	\$4.25 million
Hay Point material offloading facility	\$2.5 million
Maintenance projects in eight schools across Mackay and the Bowen Basin	\$3.9 million
Overtaking lanes on the Bruce Highway between Dingo Creek to Emu Creek	\$7 million
Vines Creek Bridge	\$28 million
Woodlands Estate, Andergrove (Stage 7)	\$1.71 million
Woodlands Estate, Andergrove (Stage 8)	\$2.93 million
Wharf 4 and 5–Fender and Wharf upgrades	\$8.5 million

Government commitments

Fitzroy region (\$27 million in projects supporting 67 jobs):

Project	Budget
Civil and road works associated with Powerlink substations across the region, including Stanwell, Strathmore, Biloela, Moura and Nebo	\$9.3 million
Queensland Fire and Emergency Services operations in North Rockhampton	\$2.5 million
Allocated maintenance projects at three schools in Rockhampton—Warraburra State School, North Rockhampton State High School and Allenstown State School—and Yeppoon State High School	\$600,000
Works at the Hillclose Residential Estate at Gladstone	\$9.4 million
Gladstone Area Water Board works	\$4.7 million

Wide Bay region (\$36 million in projects supporting 13 jobs):

Project	Budget
Replacement of Childers Fire Station	\$2 million
School maintenance across the region	\$3 million
Queensland Rail works at the North Coast Line South, and Tamaree to Parana re-railing	\$31 million

Remote Queensland (\$27 million in projects supporting 50 jobs):

Project	Budget
Expansion of the Thursday Island fire station	\$700,000
Refurbishment of Mount Isa Fire Station	\$1 million
Queensland Rail culvert renewals at Mount Isa	\$12.6 million
Pavement strengthening and widening of Landsborough Highway (sections Blackall–Barcaldine)	\$12.5 million

Approved projects

Since the beginning of 2015, the Queensland Government has approved almost \$2 billion in infrastructure spending commitments. These include:

Investment	Budget
Building our Regions program	\$200 million
Townsville primary school/planning for new school	\$90 million
Cairns Special School	\$25 million
School infrastructure enhancement program	\$300 million
Non-state schools (capital grants)	\$124 million
Enhancing Regional Hospitals program	\$180 million
Western Roads Upgrades Program	\$40 million
Marine infrastructure funding boost	\$30 million
Gold Coast 2018 Commonwealth Games road upgrades	\$161 million
Support development of the North Queensland Stadium	\$100 million
Queensland State Netball Centre	\$30 million
Cultural Precinct infrastructure expansion and renewal	\$29 million
Recommissioning the Borallon Training and Correctional Centre	\$56 million
New Schools at Caloundra South, Coomera, Yarrabilba and Calliope	\$207 million
Rockhampton Riverfront and Yeppoon Foreshore Revitalisation	\$40 million
Gold Coast Light Rail Stage 2	Currently subject to commercial negotiation

Australian Infrastructure Plan

Released on 17 February 2016, the 15-year Australian Infrastructure Plan, prepared by Infrastructure Australia, lays out reforms focused on improving the way we invest in, deliver and use infrastructure.

The associated Infrastructure Priority List has also been renewed and confirms the high priority of many Queensland infrastructure projects. The Queensland Government welcomes the release of the Australian Infrastructure Plan and new Infrastructure Priority List.

The plan contains 78 recommendations under four themes:

- ▶ productive cities, productive regions
- ▶ efficient infrastructure markets
- ▶ sustainable and equitable infrastructure
- ▶ better decisions and better delivery.

The plan aspires to be a long-term strategy that lays the foundation for a more productive Australia over the next 15 years and beyond.

Australian Infrastructure Plan recommendations

Many of the Australian Infrastructure Plan's recommendations for infrastructure reform will be supported by the Queensland Government, as they are consistent with our approach to smarter infrastructure planning and investment. However, the Queensland Government does not support asset sales and will not support the recommendation that Queensland should consider divesting all electricity network assets.



Cairns State High School

Infrastructure Priority List

The Australian Infrastructure Plan is accompanied by an Infrastructure Priority List to give structured guidance to decision makers, visibility to industry and transparency for the community. The full list can be found at <http://infrastructureaustralia.gov.au/projects/infrastructure-priority-list.aspx>.

The Infrastructure Priority List is broadly grouped as:

- ▶ **Initiatives:** priorities that have been identified to address a nationally significant need, but require further development and rigorous assessment to determine and evaluate the most appropriate option for delivery.
- ▶ **Projects:** priorities that have undergone a full business case assessment by Infrastructure Australia and that will address a nationally significant problem and deliver robust economic, social or environmental outcomes.

Each project and initiative on the Infrastructure Priority List includes a broad indication of when the project is likely to be delivered or have a material impact on national productivity. These timeframes are defined as:

- ▶ Within 5 years (near-term)
- ▶ Within 10 years (medium-term)
- ▶ Within 15 years (longer-term)
- ▶ Expected to be more than 15 years (future).

The Infrastructure Priority List is a 'rolling' list which will be updated periodically as proposals move through stages of development and delivery and to respond to emerging challenges and opportunities.

Queensland's inclusions on the Infrastructure Priority List

The Queensland Government is pleased that the Infrastructure Priority List includes 10 of the 12 initiatives from its September 2015 submission to Infrastructure Australia. The list confirms Cross River Rail as one of Australia's highest priority infrastructure initiatives, reinforcing the Queensland Government's view that it is our number one priority.

The Queensland Government will continue its dialogue with Infrastructure Australia and the Australian Government to ensure all of Queensland's priorities on the Infrastructure Priority List are progressed to the project stage, and that the Australian Government will play its part in helping to fund these priorities. We will also work to ensure more Queensland initiatives and projects are included on this list as Infrastructure Australia makes periodic updates.

Australian Infrastructure Plan

Infrastructure Priority List—Queensland projects

Proposed initiative	Classification	Location	Problem Classification	Nominator
Cross River Rail (passenger rail connection to and through Brisbane CBD)	High priority	Brisbane	Near-term	Queensland Government
Ipswich Motorway—Rocklea to Darra	High priority	Ipswich/ Brisbane	Near-term	Queensland Government
Network Optimisation Portfolio ¹	High Priority	National	Near-term	Infrastructure Australia Audit identified gap
Port of Brisbane dedicated freight rail connection ²	High priority	Brisbane	Near-term	Infrastructure Australia Audit identified gap
National Freight and Supply Chain Strategy ³	High Priority	National	Near-term	Infrastructure Australia Audit identified gap
Preserve corridor for East Coast High Speed Rail ⁴	High Priority	Eastern seaboard: Melbourne to Brisbane	Near-term	Infrastructure Australia Audit identified gap
Gold Coast Light Rail Stage 2 (connecting existing Gold Coast Light Rail to Brisbane heavy rail at Helensvale)	Priority	Gold Coast	Near-term	Queensland Government
M1 Pacific Motorway—Gateway Motorway merge upgrade	Priority	Brisbane – Gold Coast	Near-term	Queensland Government
M1 Pacific Motorway upgrade—Mudgeeraba to Varsity Lakes	Priority	Gold Coast	Near-term	Queensland Government
Bruce Highway upgrade ⁵	Priority	Statewide: Brisbane to Cairns	Near-term	Queensland Government
Beerburum to Nambour rail upgrade	Priority	Sunshine Coast	Near-term	Queensland Government
Gladstone Port land and sea access upgrade	Priority	Gladstone and surrounding area	Medium-term	Gladstone Ports Corporation
Mount Isa—Townsville rail corridor upgrade ⁶	Priority	Far North Queensland	Medium-term	Queensland Government
Cunningham Highway—Yamanto to Ebenezer/ Amberley upgrade	Priority	Ipswich	Near-term	Queensland Government
Inland Rail (Melbourne to Brisbane via inland NSW)	Priority	National	Longer-term	Department of Infrastructure and Regional Development (Australian Government)
Advanced Train Management System (ATMS) implementation on ARTC network ⁷	Priority	Australian interstate rail network	Near-term	Australian Rail Track Corporation
Lower Fitzroy River water infrastructure development	Priority	Central Queensland	Medium-term	Infrastructure Australia Audit identified gap
Connect gas suppliers to eastern gas markets	Priority	National	Near-term	NT Government

Australian Infrastructure Plan

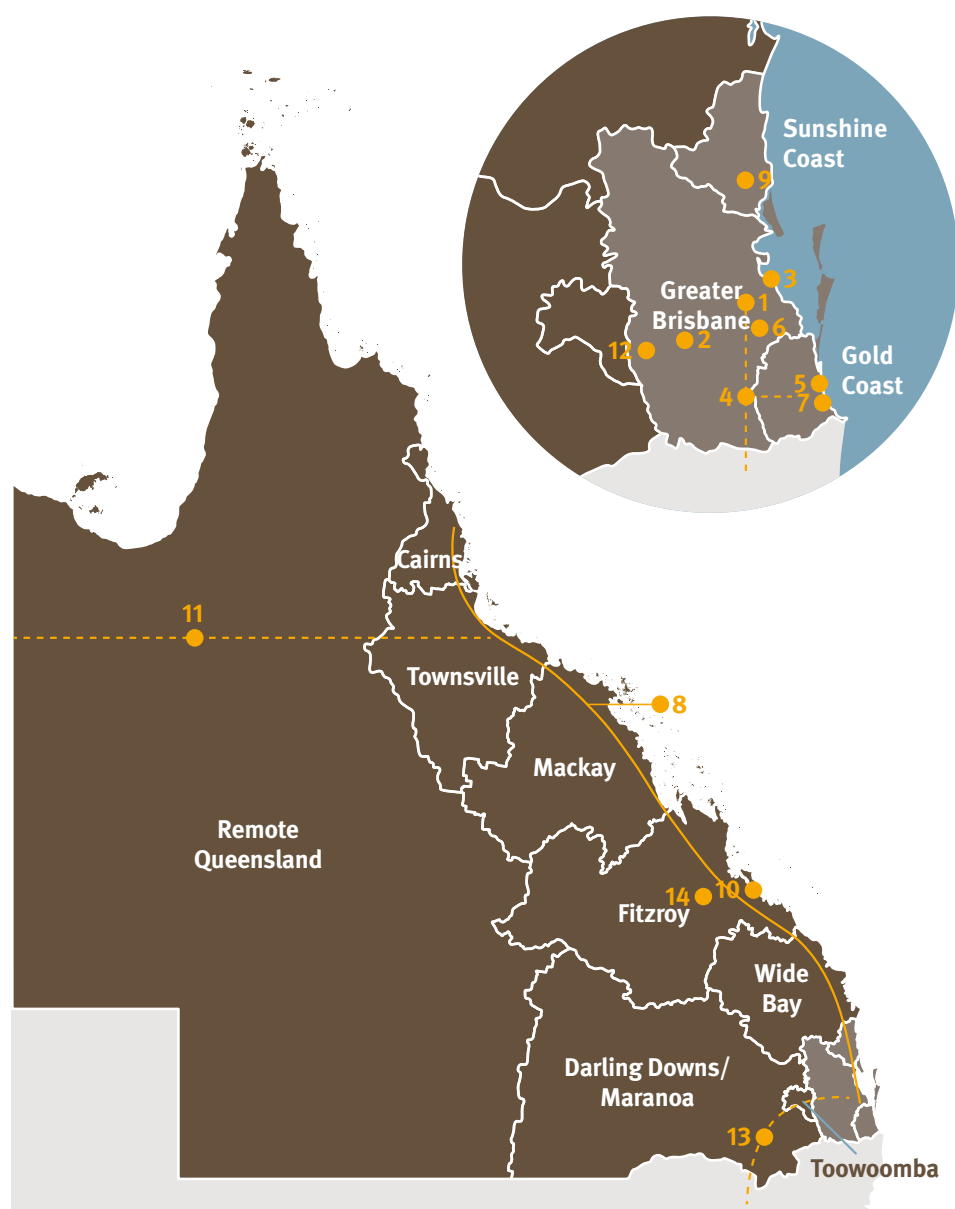
Footnotes:

- ¹ The initiative would involve a portfolio of works focused on addressing congestion on urban road networks with comparatively high public transport and freight use. These works could use data and technology to improve network operations by optimising traffic flow through intersection treatments, traffic light sequencing, clearways and incident management. It would focus on urban motorways, major urban arterials, and access to central business districts.
- ² The proposed initiative would improve connectivity between the Port of Brisbane and freight terminals in the Brisbane region by preserving, and ultimately, constructing a dedicated freight rail corridor. The initiative should aim to meet the projected increase in freight volumes and capitalise on economic opportunities while encouraging a modal shift from road to rail.
- ³ The strategy would build on existing work, adopting a holistic approach to the planning and performance of the national freight and supply chain networks. The strategy will provide appropriate frameworks to support end to end planning of key freight and supply chains. It will:
 - guide future investment
 - support better use from existing infrastructure assets
 - recommend a program of regulatory reforms and capital initiatives.
- ⁴ Confirm and begin the preservation of a corridor, based on the corridor set out in the Australian Government’s High Speed Rail Study Phase 2, for a high speed rail link between Melbourne, Sydney and Brisbane.
- ⁵ Progressive priority upgrades to the Bruce Highway to address specific capacity constraints, flood resilience and safety concerns.
- ⁶ Includes construction of a new Townsville Eastern Access Rail Corridor to provide direct access to export facilities at the Port of Townsville for longer trains.
- ⁷ ATMS is a wireless satellite communications-based train control system, to replace line-side signalling, allowing:
 - more train paths on single tracks
 - improved line capacities
 - reduced transit times and improve competition with road
 - improved rail safety
 - improved system reliability.



Bruce Highway at Ambrose

Australian Infrastructure Plan



#	PROPOSED INITIATIVE	#	PROPOSED INITIATIVE
1	Cross River Rail	8	Bruce Highway Upgrade
2	Ipswich Motorway–Rocklea to Darra (Stage 1)	9	Beerburrum to Nambour rail upgrade
Unmapped	Network Optimisation Portfolio	10	Gladstone Port land and sea access upgrade
3	Port of Brisbane dedicated freight rail connection	11	Mount Isa–Townsville rail corridor upgrade
Unmapped	National Freight and Supply Chain Strategy	12	Cunningham Highway–Yamanto to Ebenezer/Amberley upgrade
4	Preserve corridor for East Coast High Speed Rail	13	Inland Rail
5	Gold Coast Light Rail Stage 2	Unmapped	Advanced Train Management System (ATMS) implementation on ARTC network
6	M1 Pacific Motorway–Gateway Motorway merge upgrade	14	Lower Fitzroy River water infrastructure development
7	M1 Pacific Motorway upgrade–Mudgeeraba to Varsity Lakes	Unmapped	Connect gas suppliers to eastern gas markets

Proposals raised through consultation

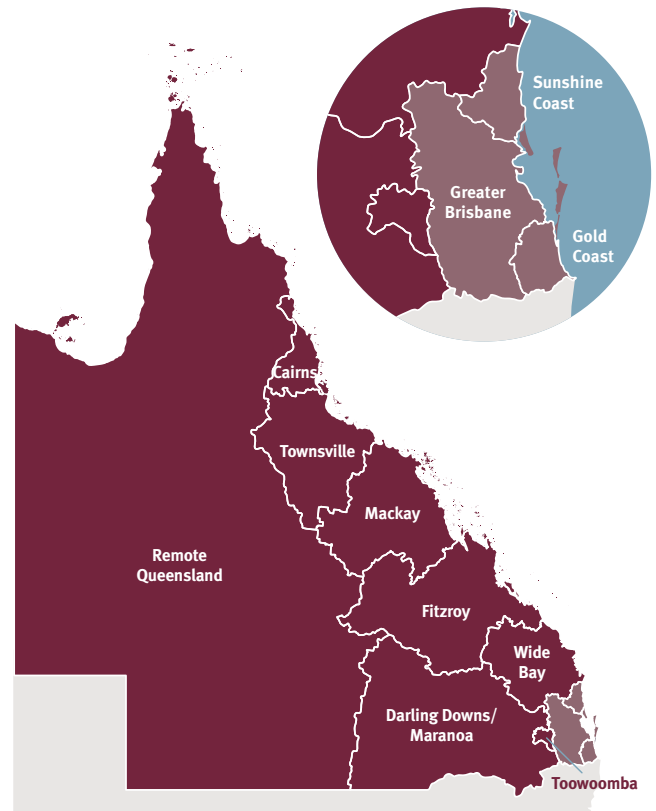
Part B lists the projects and programs that are currently outlined in forward funding estimates, as well as future opportunities to address the challenges identified in Part A. In a fiscally-constrained environment, there will always be greater demand on government expenditure than can be met.

Queenslanders have long been strong advocates for investment in their regions, particularly for infrastructure that generates economic development or supports population growth. This advocacy has helped to secure public and private investment in Queensland.

In late 2015, the Queensland Government undertook consultation on the draft SIP. The projects and initiatives listed below were raised by stakeholders through this consultation. They are at varying levels of maturity from early concepts to more advanced proposals seeking investment. The list is based on input received during consultation on the draft SIP, and does not reflect Queensland Government priorities. Projects have not been assessed or endorsed by government.

The state is supportive of investigating opportunities that can improve liveability and productivity in Queensland's regions. Creative thinking and partnerships will be required to identify how best to assess these priorities as expressed by regional stakeholders and fund solutions where the project proves to be feasible and economically sound. For the private sector, these provide opportunities to be considered by those interested in investing in Queensland and as potential market-led proposals.

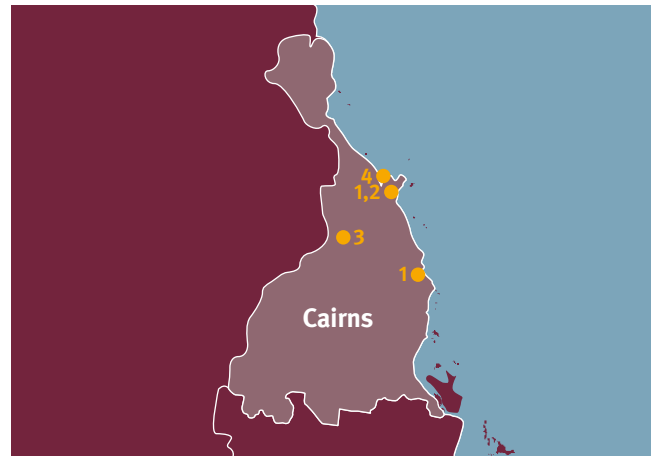
The Queensland Government acknowledges that various stakeholders including councils, communities and industry believe these proposals are important to their local area.



Proposals raised through consultation

Cairns

- 1 Cairns Active Transport Network extension
- 2 Cairns Shipping Development Project
- 3 Cairns water security–Nullinga Dam
- 4 Cairns Airport upgrade



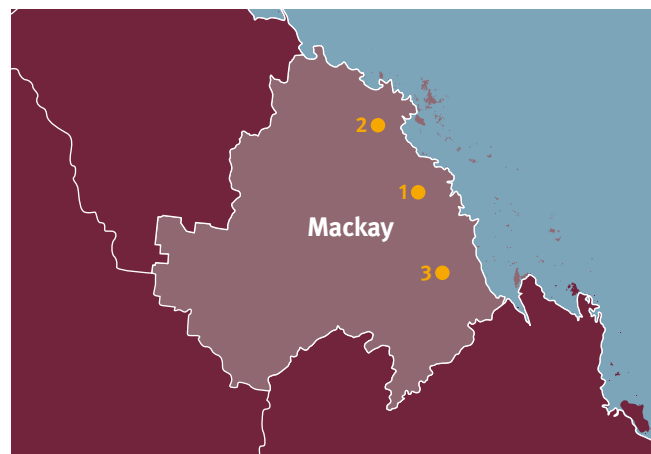
Townsville

- 1 North Queensland Stadium
- 2 Infrastructure to support Townsville City Waterfront Priority Development Area
- 3 Development of a Northern Queensland Energy Investment Plan (not mapped)
- 4 Expansion of the Port of Townsville
- 5 Haughton pipeline duplications



Mackay

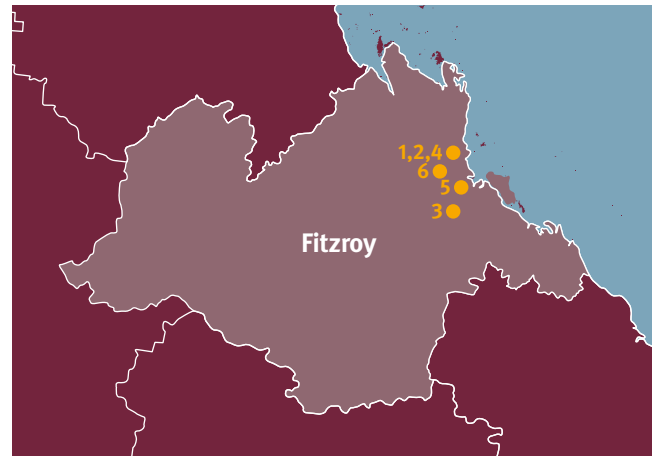
- 1 Mackay to Bowen Basin services corridor including Peak Downs Highway upgrade and Walkerston Bypass
- 2 Whitsunday Coast Airport expansion
- 3 Connors River Dam and pipelines



Proposals raised through consultation

Fitzroy

- 1 Rockhampton Convention Centre
- 2 Rockhampton Base Hospital carpark
- 3 Moura Link–Aldoga Rail project
- 4 Type 1 road vehicle access through Rockhampton
- 5 Fitzroy to Gladstone pipeline
- 6 Duplication of Capricorn Highway (Bruce Highway to Gracemere)



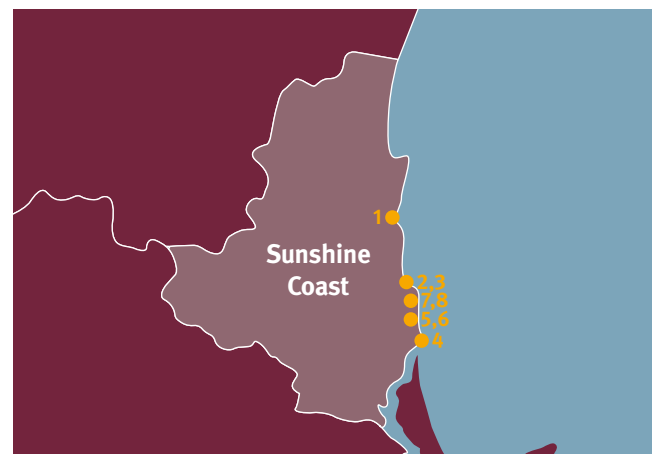
Wide Bay

- 1 Mon Repos Turtle Centre expansion
- 2 Flood proofing key community assets such as the hospital
- 3 Rainbow Beach helipad
- 4 Boyne River Mundubbera Bridge betterment project
- 5 Coastal ecotourist drive between Rainbow Beach and the Town of 1770
- 6 Maryborough/Hervey Bay Road upgrade
- 7 Port of Bundaberg expansion
- 8 Hervey Bay and Maryborough water networks interconnection
- 9 Upgrade Maryborough Hospital
- 10 Howard and Torbanlea to be sewered
- 11 Upgrade Granville Bridge



Sunshine Coast

- 1 Sunshine Coast Airport expansion
- 2 Convention, exhibition and performing arts centre
- 3 Infrastructure to support the Maroochydhore Priority Development Area
- 4 Undersea data cable
- 5 Sunshine Coast light rail project
- 6 High quality bus connection between Caloundra and Maroochydhore
- 7 Sunshine Motorway (Mooloolah River Interchange)
- 8 Improve transport connections to the Sunshine Coast University Hospital



Proposals raised through consultation

Greater Brisbane

Cross-government

- 1 Infrastructure to support Flagstone, Caboolture West and other growth areas

Arts, culture and recreation

- 2 Ipswich Performing Arts Centre

Transport

- 3 Salisbury to Beaudesert passenger rail
- 4 Springfield to Redbank rail extension
- 5 Manly to Cleveland rail duplication
- 6 Inner city bus capacity solutions
- 7 Upgrade of key bus/rail interchanges
- 8 Eastern Busway/transitway
- 9 Northern Busway/transitway
- 10 South East Busway extension

- 11 New rail freight terminal at Elimbah

- 12 Cruise ship terminal

- 13 Pacific Motorway widening through Logan

- 14 Redland City/Gateway Motorway Corridor

- 15 Tilley Road extension (Redland City to Port of Brisbane)

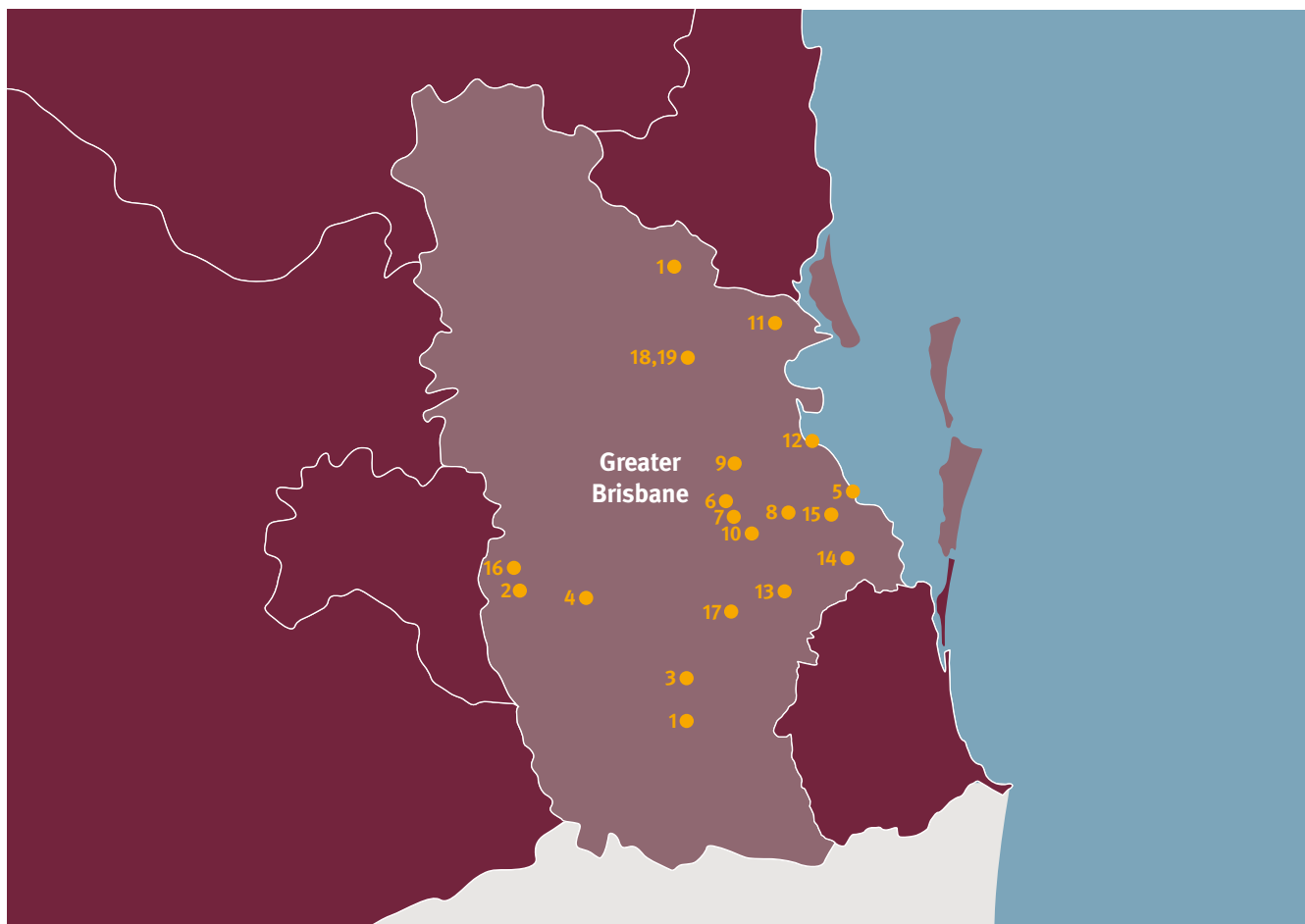
- 16 Warrego Highway/Brisbane Valley Highway (Bayley Road extension)

- 17 Protection of infrastructure corridors (Southern Infrastructure Corridor and extension of Park Ridge Corridor)

- 18 East Petrie bypass

Education

- 19 Moreton Bay Region University Precinct (Petrie)



Proposals raised through consultation

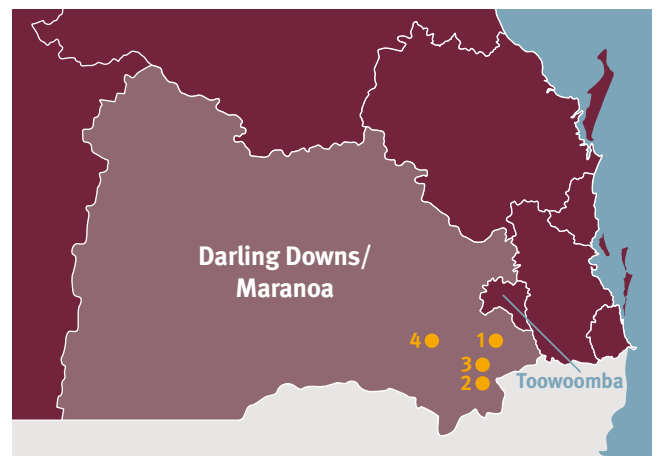
Gold Coast

- 1 Gold Coast transit/bikeway upgrades
- 2 Gold Coast Light Rail–Stage 3 Broadbeach to Burleigh Heads
- 3 Varsity Lakes to Elanora passenger rail extension



Darling Downs

- 1 Energy supply to the Granite Belt–gas plus transmission
- 2 New England Highway–Warwick to the NSW border
- 3 Warwick heavy vehicle bypass
- 4 Gore Highway (Millmerran to Goondiwindi) pavement widening and strengthening



Toowoomba

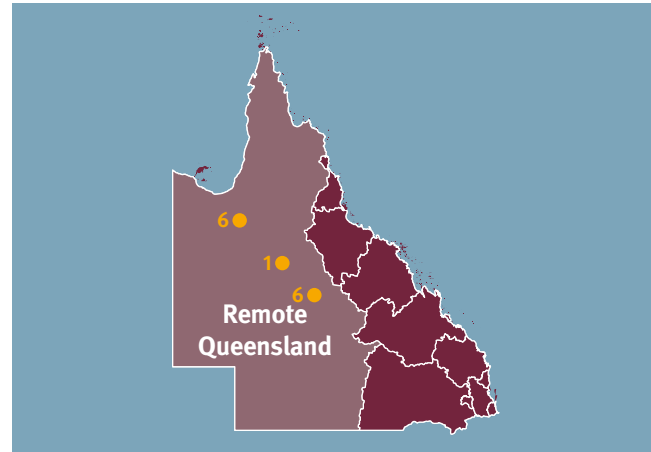
- 1 Bus and passenger rail connection to Brisbane
- 2 Intermodal hubs at Inglewood and Toowoomba



Proposals raised through consultation

Remote Queensland

- 1 Kennedy Developmental Road (Hann Highway) sealing
- 2 Connecting remote communities through optic fibre technology (various locations—not mapped)
- 3 Water quality improvements for island-based indigenous communities (various locations—not mapped)
- 4 Upgrade of ageing health assets (various locations—not mapped)
- 5 Improve drive tourism support infrastructure (various locations—not mapped)
- 6 New surface water storages (Galilee Basin, Gilbert and Flinders catchments)
- 7 Long distance coach infrastructure improvements (various locations—not mapped)



Multi-region

Justice and public safety

- 1 Public safety regional radio communications network

Transport

- 2 North Coast Line upgrades (more/larger passing loops, increased speeds)
- 3 Transport infrastructure to support development of the Galilee Basin
- 4 Transport infrastructure to support development of the Surat Basin
- 5 Increased park 'n' ride capacity
- 6 Additional Bruce Highway upgrades (capacity around major centres, flood mitigation)
- 7 Upgrades of major arterial roads to allow higher productivity vehicles to be operated (e.g. Type 2 road trains from Clermont to Roma and Type 1 road trains from Gracemere to Rockhampton)

- 8 Smart Road Infrastructure for SEQ–Managed Motorways

- 9 Rail station upgrades

Energy

- 10 Connecting the North Queensland gas pipeline to the Queensland gas pipeline (Wallumbilla to Gladstone/Rockhampton)
- 11 Energy generation in North Queensland to reduce prices and improve reliability/resilience
- 12 Transmission lines–Northern Galilee Basin and Kennedy Energy Park

Water

- 13 Nathan Dam and pipelines
- 14 Burdekin Falls Dam upgrade

These initiatives are not mapped.

Statewide

- 1 Active transport projects (walking/cycling)
- 2 Bridge replacement (timber/single lane)
- 3 Open level crossing elimination in urban areas
- 4 Intermodal hubs
- 5 Wastewater upgrades
- 6 Mobile blackspot and broadband improvements

- 7 Next generation ticketing
- 8 Registration and licencing modernisation program
- 9 Pipeline infrastructure to unlock existing capacity in dams/groundwater

These initiatives are not mapped.

Finding the right solutions: better planning and assessment

1 Improved infrastructure and land-use planning, coordination and integration

An Infrastructure Portfolio Office (IPO) will be established to plan and coordinate infrastructure, and integrate the links between economic, regional and infrastructure planning. The IPO will be located within the Department of Infrastructure, Local Government and Planning and will undertake a program management function, including the coordination of infrastructure projects across government. Its functions will include:

- ▶ a broad infrastructure coordination and alignment role
- ▶ monitoring implementation of the SIP
- ▶ monitoring and reporting on the implementation of major infrastructure projects and programs
- ▶ integrating the development of key strategic infrastructure assessments, in partnership with delivery agencies, to inform future regional plans:
 - ▶ Queensland future water security strategy
 - ▶ Queensland digital infrastructure plan
 - ▶ Queensland transport strategy
 - ▶ Queensland energy policy framework
 - ▶ Social infrastructure strategy

- ▶ driving infrastructure innovation and best-practice within government
- ▶ coordinating infrastructure engagement, taskforces and external expertise
- ▶ provide data analytics and modelling capability to improve infrastructure demand forecasting.

The IPO's coordination and integration functions will include:

- ▶ integrating regional land-use plans with regional transport plans and economic plans, commencing with SEQ and North Queensland
- ▶ overseeing a program of infrastructure coordination plans for SEQ local government areas to inform the SEQ regional plan
- ▶ coordinating strategic infrastructure corridor plans focused on the long-term transport needs for:
 - ▶ Queensland coast from Brisbane to Cairns
 - ▶ the Surat Basin
 - ▶ Mount Isa to Townsville
 - ▶ Central Queensland
 - ▶ key SEQ transport corridors.

2 Regional planning committees

Enhance the role of regional planning committees to oversee the alignment of state and local government infrastructure priorities.



James Cook University tropical research (image courtesy of James Cook University)

Implementation actions

3 Infrastructure Designation review

Building on current planning reforms, establish a working group to review the apportionment of infrastructure works and charges for all state infrastructure subject to an Infrastructure Designation.

4 Establish an Infrastructure Cabinet Committee (ICC)

The ICC will drive and oversee the state's infrastructure delivery program, ensuring whole-of-government integration in relation to infrastructure matters.

5 Ex-post evaluations

Develop a scope and criteria for ex-post evaluations of significant projects and pilot at least two ex-post evaluations on strategic projects using independent auditors. Ex-post evaluations will then be embedded into government practice for very large projects, through Building Queensland.

6 Integration through the budget process

Government agency proposals submitted through the annual budgeting process will be required to demonstrate that opportunities outlined in the SIP are being addressed.

7 Better understanding of project benefits

State government business cases will include an assessment of who ultimately pays for and benefits from infrastructure project investments over the long-term. This information will assist with identifying value capture opportunities, and managing the state's fiscal exposure.

8 Project sequencing and prioritisation

Project sequencing and prioritisation will be improved by developing an infrastructure database that also supports state infrastructure coordination and asset management.

The most effective funding and financing options available

9 Value capture and alternative funding and financing

The state will enhance its ability to fund and finance infrastructure by establishing a value capture capability and improving alternative funding and financing options.

Actions in relation to value capture include:

- ▶ development and implementation of a value capture/sharing policy
- ▶ improving capability to apply value capture to infrastructure project development and delivery
- ▶ piloting new value capture models
- ▶ incorporating value capture into major infrastructure proposals as part of business case development, in conjunction with Building Queensland
- ▶ increasing awareness of value capture through research and stakeholder events.

Actions in relation to alternative funding and financing options include:

- ▶ improving capability to apply alternative finance and funding methods to infrastructure project development and delivery
- ▶ consideration of arrangements to facilitate private investment, including interaction with private sector participants and, if appropriate, establishing a panel
- ▶ incorporating alternative funding and financing approaches into major infrastructure proposals, in conjunction with Building Queensland
- ▶ working with local government and the private sector to investigate alternative infrastructure funding and financing options including superannuation funds and infrastructure bonds.

10 Leveraging funding

Secure funds for infrastructure projects from sources including the Northern Australian Infrastructure Facility and the Clean Energy Finance Corporation.

11 Review grant programs

Review fragmented infrastructure grant programs to local governments to optimise prioritisation, reduce overlap and duplication and improve alignment with the SIP. This review will also consider alternative allocation models such as the UK City Deals approach.

12 Deputy Premier's Infrastructure Innovation Challenge

Challenge industry to put forward innovative solutions to the infrastructure challenges outlined in the SIP. The challenge will leverage off the state's Advance Queensland initiatives by providing dedicated funding to develop innovative infrastructure ideas.

13 Market-led proposals

Continue to use the market-led proposals process to engage with industry in relation to innovative solutions to the state's infrastructure challenges and appropriately manage risk.

The most efficient procurement and better use of existing assets

14 Establish a joint industry-government Infrastructure Innovation Taskforce

The state will establish a taskforce to examine and report back to government on a range of matters including:

- ▶ appropriate contract structuring and the use of local contractors for infrastructure delivery to enhance local economic outcomes
- ▶ how best to consider whole-of-life or "totex" costing models for state government infrastructure
- ▶ how to better make industry aware of upcoming projects and future opportunities, to maximise partnering opportunities for a wide range of businesses
- ▶ how to improve early market engagement, simplify infrastructure procurement contracts and streamline approvals

- ▶ opportunities in relation to using technology and data analytics to better use infrastructure
- ▶ non-asset based solutions to better use underutilised assets.

15 Implement Building Information Management (BIM)

The state will progressively implement the use of BIM into all major state infrastructure projects by 2023.

16 Sustainability assessments

All state government projects of greater than \$100 million in value will include a sustainability assessment. For projects worth less than \$100 million, assessments will also be encouraged.

17 Better asset use

The state will improve the use of Queensland's public assets by:

- ▶ progressively rolling out strategic asset management plans (SAMPs) across all Queensland Government agencies, including statutory authorities
- ▶ undertaking an independent audit of Queensland Government agency (including statutory authorities) assets to identify underutilised capacity
- ▶ partnering with the Local Government Association of Queensland to develop and deliver an education program aimed at building asset management capability in Queensland Government agencies and local governments.

18 Develop a community needs focus on infrastructure use

Place-based infrastructure planning will be improved by partnering with community groups, industry and all levels of government to facilitate more collaborative and cost-efficient uses of state social infrastructure assets (for example, co-location and shared use).

Implementation actions

Better engagement: understanding needs and setting expectations

19 Pursue better community engagement and outcomes in our infrastructure activities

A Community Infrastructure Reference Group (CIRG) will undertake a number of activities including:

- ▶ making recommendations about the best way of supporting engagement in rural, regional and metropolitan areas of the state
- ▶ determining how to help the broader community understand infrastructure issues and costs
- ▶ liaising with universities and peak bodies to establish best practice, pilots and industry champions
- ▶ work with government agencies to develop a program of opportunities and link with Working Queensland initiatives and Skilling Queenslanders for Work for potential sustainability and social outcomes
- ▶ Explore the need for a social impact unit to standardise approaches and benchmarks for major projects across industry and government.



State Library of Queensland

Measuring our performance

As infrastructure is typically an enabler of a service it can be measured in many different ways. In its simplest form this can include measuring inputs such as dollars spent by industry and region. However as infrastructure projects produce a physical asset it can also be measured as an output (e.g. a measure of the asset quality such as planned versus actual degradation) and indirectly as a contribution to a broader outcome (e.g. a measure of the service delivered using that infrastructure).

At a state economic level, infrastructure investment is a significant driver of economic prosperity and social outcomes. For long-term infrastructure programs,

it will be important to measure progress against the government's objectives. For example, the government's objectives for the community highlight creating jobs and a diverse economy.

Baseline indicators and success measures for each of the responses will be developed collaboratively with state agencies in accordance with the infrastructure class. These will be included in the 2017–18 first revision of the SIP to enable ongoing measurement.

A focus on measurement against responses will provide an indication of progress in implementing the SIP.

Cross-government



Building new infrastructure for a growing state

State Infrastructure Plan Part B: Program

A state government-wide approach to the planning and delivery of infrastructure plays a vital role in managing growth, harnessing economic opportunities and supporting healthy, active communities. Many of the future infrastructure challenges Queensland faces will require responses that span across infrastructure classes, levels of government, industry and the private sector.

Central to this is ensuring infrastructure is properly planned and sequenced in areas of high growth, future economic development or strategic importance, such as Priority Development Areas (PDAs) and State Development Areas (SDAs). This requires a coordinated approach that provides greater planning and development certainty for project proponents, integrates land-use and infrastructure planning, and ensures government's investment in infrastructure is maximised.

Providing leadership across asset classes is also critical to drive innovation and deliver smarter solutions to Queensland's infrastructure challenges. Policy and reform agendas that span beyond a single portfolio can be used to manage demand, optimise existing assets and develop collaborative solutions. One example of this is the Community Hubs and Partnerships program. This program facilitates opportunities for all levels of government, as well as the private and community sectors, to collaborate and plan the integration and delivery of services that benefit Queensland communities.

The state provides important services to build safe, caring and connected communities. These services ensure vulnerable Queenslanders participate in our economy and society, that families, children and young people thrive and social services are sustainable. As part of this, the state owns and funds the operation of 122 neighbourhood centres throughout Queensland, with funding of approximately \$13.7 million per year.

Cross-government leadership will drive new ways of addressing Queensland's infrastructure needs, particularly in times of increasing fiscal constraint.



Repair work to Collards Creek Bridge No. 1 on the Dawson Highway, between Gladstone and Biloela

This may include embracing innovative market-led proposals or digital solutions in place of built infrastructure. Meeting the infrastructure needs of emerging sectors, such as the Galilee Basin, renewable energy, the knowledge economy, an expanding tourism sector and increasing agricultural productivity, will require careful sequencing to ensure new economic opportunities are maximised.

Infrastructure and land-use planning for seaports and airports also requires coordination between levels of government. These facilities are essential to the economic prosperity of the state and are serviced and supported by state and local government infrastructure. In particular, transport networks across boundaries need to be efficient and effective for governments to leverage their economic building capacity.

The Queensland Government plays an important role in assisting local governments to meet their community infrastructure needs. Through targeted grant programs and loans, often in partnership with other levels of government, the Queensland Government can help support and grow local communities. This support is particularly important for councils affected by natural disasters and those with a small rates base. The programs play an important role in creating jobs, developing local economies, building resilience and improving the liveability of communities, particularly in regional and remote areas.

CROSS-GOVERNMENT RESPONSES

The Queensland Government has developed responses to address identified challenges and guide investment across both the 1–4 year program and future opportunities. Most projects or opportunities relate to at least one response, however some will relate to more than one response. As the SIP matures, the relationship between responses and these programs will strengthen.

Integrate land-use and infrastructure planning to assist major projects and facilitate market-led proposals.	Early definition of infrastructure needs for regions and major projects.	Coordinate infrastructure to support critical domestic and export supply chains, key market sectors and high growth areas.	A digital-first approach to deliver higher quality services and manage demand.	Cross-government coordination to optimise government investment.	Focus on preserving the existing asset base.
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Priority Development Areas (PDAs):

Parcels of land identified for specific accelerated development with a focus on economic growth.

26 PDAs:

- ▶ a combined area of 19,889 hectares
- ▶ up to 176,232 dwellings
- ▶ up to 416,354 residents
- ▶ up to 125,000 local jobs.

PDAs and significant growth areas:

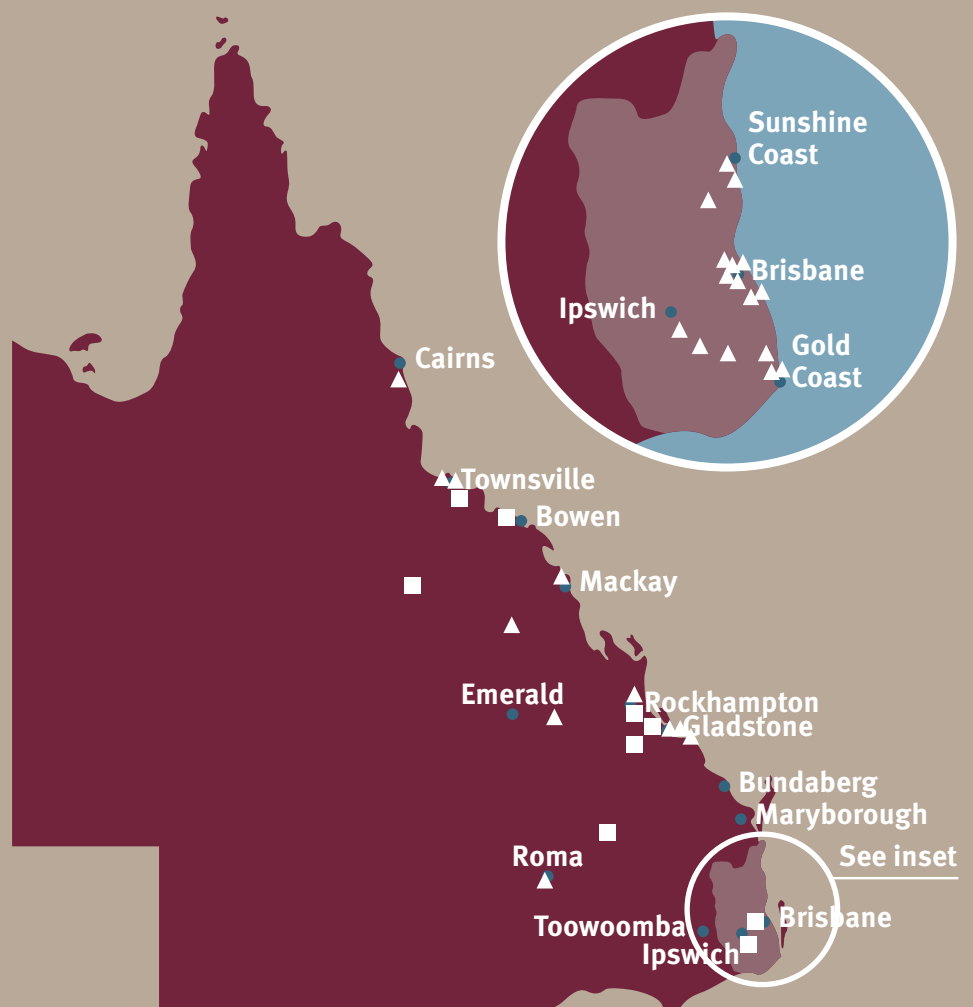
- ▲ Andergrove PDA, Mackay
- ▲ Blackwater PDA
- ▲ Blackwater East PDA
- ▲ Bowen Hills PDA, Brisbane
- ▲ Caboolture West
- ▲ Caloundra South PDA
- ▲ Central Queensland University (CQU) Rockhampton PDA
- ▲ Clinton PDA, Gladstone
- ▲ Coomera Town Centre
- ▲ Fitzgibbon PDA, Brisbane
- ▲ Greater Flagstone PDA, Logan
- ▲ Maroochydore City Centre PDA
- ▲ Moranbah PDA
- ▲ Mount Peter, Cairns
- ▲ Northshore Hamilton PDA, Brisbane
- ▲ Oonoonba PDA, Townsville
- ▲ Parklands PDA, Gold Coast
- ▲ Queen's Wharf Brisbane PDA
- ▲ Ripley Valley PDA, Ipswich
- ▲ Roma PDA
- ▲ Southport PDA
- ▲ Tannum Sands PDA
- ▲ Toolooa PDA
- ▲ Toondah Harbour PDA
- ▲ Toowoomba Railway Parklands PDA
- ▲ Townsville City Waterfront PDA
- ▲ Weinam Creek PDA
- ▲ Woollongabba PDA (Brisbane)
- ▲ Yarrabilba PDA, Logan

State Development Areas (SDAs)

Defined areas of land established by the Coordinator-General to promote economic development, including industrial hubs for large-scale, heavy industry, multi-user infrastructure corridors and major public infrastructure sites.

There are currently nine SDAs:

- Abbot Point
- Bromelton
- Callide Infrastructure Corridor
- Galilee Basin
- Gladstone
- Queensland Children's Hospital
- Stanwell to Gladstone Infrastructure Corridor
- Surat Basin Infrastructure Corridor
- Townsville



1–4 year program

Project	Total estimated cost (\$M)	Contributions				Expenditure to June 2015 (\$M)	Funding (\$M)			
		Fed	QG	LG	Priv		2015–16	Indicative		
								2016–17	2017–18 to 2018–19	Beyond
South East Queensland										
Willowbank Industrial Park	74.534		●			10.634	1.500	5.000	37.400	20.000
Northshore Hamilton Urban Renewal Precinct, Brisbane ¹	131.600		●				35.500	44.000	52.100	
Yeerongpilly Green Urban Residential Village, Brisbane ¹	32.350		●				11.000	12.300	9.050	
Toondah Harbour Mixed Use Revitalisation, Redlands ²	90.650		●		●			5.450	16.200	49.000
Fitzgibbon Chase Residential Estate Development, Brisbane	188.700		●		●	167.700	15.700	4.300	0.300	0.700
Regional Queensland										
Torres Strait Major Infrastructure Program– Seawalls	9.600		●				9.600			
Abbot Point State Development Area Industrial Development ³	6.507		●			0.507	0.500	2.500	2.750	
Gladstone State Development Area Industrial Development ³	12.601		●			1.601	2.000	0.500	5.500	
Cairns Regional Industrial Estate Development	10.200		●					0.200	10.000	
Clinton Industrial Estate Development, Gladstone	11.695		●			0.195	1.000	5.000	3.000	2.500
Mackay Regional Industrial Estate Development	6.300		●					3.300	3.000	
Townsville Regional Industrial Estate Development	9.750		●				0.250	4.000	5.000	0.500
The Village Residential Estate, Oonoonba, Townsville ⁴	158.600		●		●	69.300	18.500	17.000	30.400	23.400
HillClose Residential Estate, Gladstone	43.000		●		●	30.400	1.500	0.500	6.900	3.700
Tannum Blue Residential Estate, Tannum Sands	31.900		●		●	22.800	1.900	1.500	3.300	2.400
Clearview Rise Residential Estate, Roma	19.400		●		●	16.700	0.800	0.100	0.390	1.410
Bushlark Grove Residential Estate, Moranbah	22.000		●		●	20.100	0.200	0.100	0.200	1.400
Blue Ridge Residential Estate, Blackwater	15.600		●		●	13.200	0.200	0.200	0.400	1.600
Woodlands Residential Estate, Mackay	29.700		●		●	22.100	0.900	0.400	2.200	4.100

Project	Total estimated cost (\$M)	Contributions				Expenditure to June 2015 (\$M)	Funding (\$M)			
		Fed	QG	LG	Priv		2015–16	Indicative		
								2016–17	2017–18 to 2018–19	Beyond
Statewide										
Natural Disaster Relief and Recovery—restoration funding ⁵	4547.000	●	●			3880.000	403.000	234.000	30.000	
Natural Disaster Relief and Recovery—2015 betterment funding	20.000	●	●				6.000	12.000	2.000	
Building our Regions program	200.000		●				100.000	100.000		
Local Government Grants and Subsidies Program	Ongoing		●				36.061			
Community Resilience Fund	40.000		●				40.000			
National Disaster Resilience Program	47.633	●	●			23.010	10.517	14.106		
Indigenous State Infrastructure Program	62.952		●			55.862	7.090			
Catalyst Infrastructure Program	59.350		●				20.000	20.000	19.350	
Minor works in industrial estates	12.000		●				3.000	3.000	6.000	Ongoing
Build and maintain neighbourhood centres and crisis shelters	25.890		●			5.740	5.950	7.700	6.500	
Office accommodation capital works statewide	34.504		●				16.177	7.923	10.404	
Office accommodation maintenance statewide	75.559		●				25.348	16.737	33.474	
Government employee housing capital works statewide	35.983	●	●				21.282	9.449	5.252	
Government employee housing maintenance statewide	88.856		●				23.130	22.496	43.230	
Waste management and landfill projects at various locations ⁶	12.350		●	●	●		0.445	5.355	0.575	
Flood mitigation projects at various locations ⁶	11.760		●	●			0.562	6.777	0.669	

Notes:

¹ Total estimated costs based on current approved project business case. Estimated costs beyond 2018–19 cannot be determined at this point due to the long-term strategic nature of the project.

² Total estimated costs based on current approved project business case, and combined private sector and government investment. The Queensland Government will contribute land (approximate value \$20M) to the private sector investor and assist with project facilitation, which is expected to yield a minimum of \$130M in infrastructure for the community, ranging from parkland to water-based infrastructure.

³ Total estimated costs based on Capital Statement 2015–16. Estimated costs beyond 2018–19 cannot be determined at this point due to the long-term strategic nature of the project.

⁴ The Queensland Government has implemented an Accelerated Works Program for regional Queensland. Some of the announced projects are individually highlighted in this document, while others may be embedded in a larger program of work.

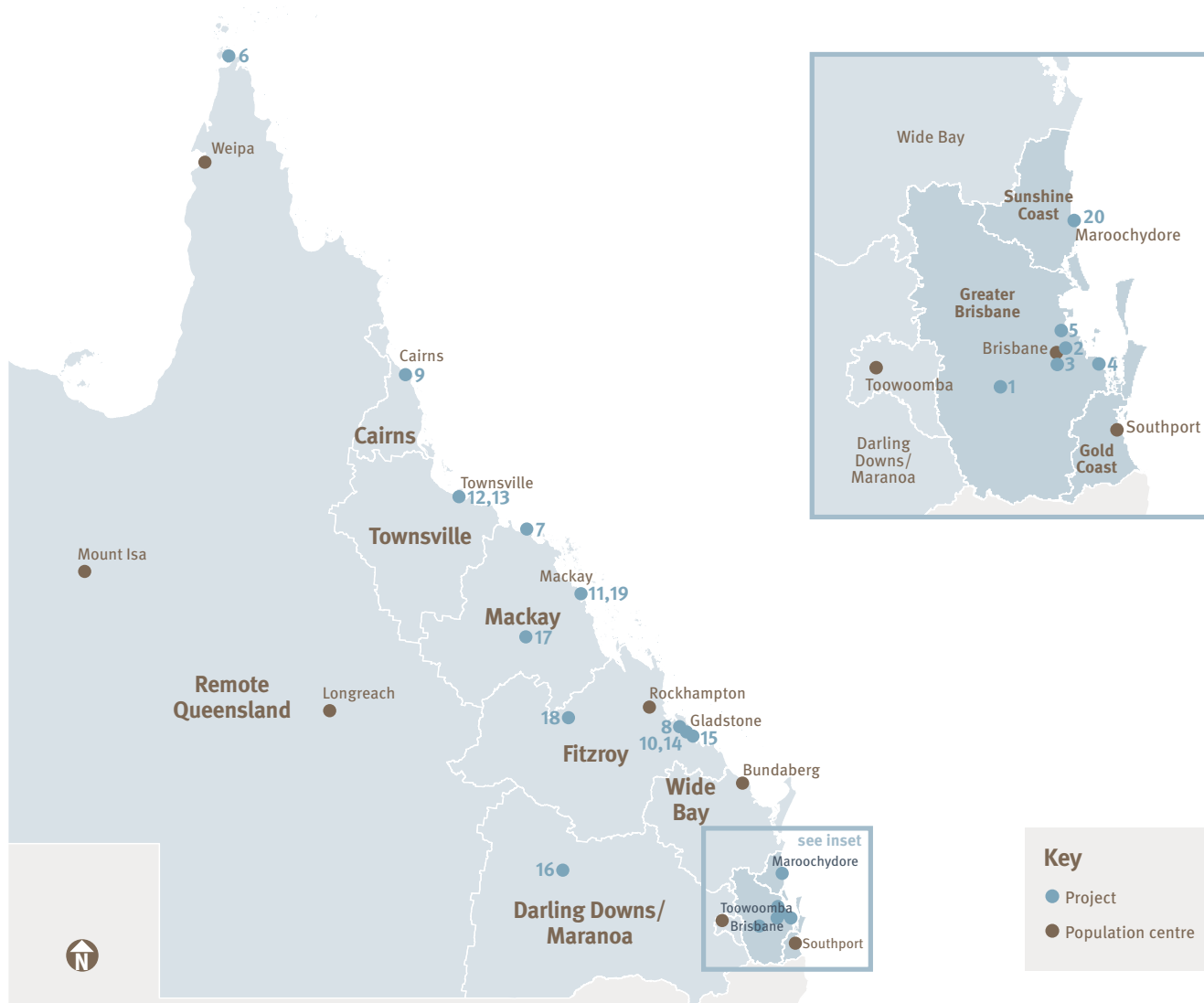
⁵ Represents NDRRA funding to councils by the Queensland Reconstruction Authority for events that occurred in the 2010 to 2015 financial years. Additional funding for NDRRA has been paid to the Department of Transport and Main Roads and other state agencies.

⁶ The sum of the cashflows does not equal Total Estimated Cost because cashflows are Queensland Government cashflows only.



Selected projects 1–4 year program

#	PROJECT	#	PROJECT
1	Willowbank Industrial Park	11	Mackay Regional Industrial Estate Development
2	Northshore Hamilton Urban Renewal Precinct	12	Townsville Regional Industrial Estate Development
3	Yeerongpilly Green Urban Residential Village	13	The Village Residential Estate, Oonoonba, Townsville
4	Toondah Harbour Mixed Use Revitalisation	14	Hill Close Residential Estate, Gladstone
5	Fitzgibbon Chase Residential Estate Development	15	Tannum Blue Residential Estate, Tannum Sands
6	Torres Strait Major Infrastructure Program – Seawalls	16	Clearview Rise Residential Estate, Roma
7	Abbot Point State Development Area Industrial Development	17	Bushlark Grove Residential Estate, Moranbah
8	Gladstone State Development Area Industrial Development	18	Blue Ridge Residential Estate, Blackwater
9	Cairns Regional Industrial Estate Development	19	Woodlands Residential Estate, Mackay
10	Clinton Industrial Estate Development	20	Maroochydore PDA, Sunshine Coast



Future opportunities—short-term

Opportunity 1

Sequence infrastructure planning and work with industry to secure critical infrastructure to activate the state's key development and high growth areas (SDAs and PDAs).

Opportunity 2

Incentivise the sequencing of the delivery of new growth areas to maximise the use of existing infrastructure and manage capital expenditure on new infrastructure.

Opportunity 3

Secure transport, port facilities, water infrastructure and community amenities to unlock thermal coal in the Galilee and Surat basins, bauxite deposits near Aurukun and underexplored gas reserves in the Cooper Basin.

Opportunity 4

Investigate the impacts of climate change on existing and proposed state infrastructure and implement appropriate mitigation measures.

Opportunity 5

Investigate impacts on the Great Barrier Reef and prioritise infrastructure to support water quality improvements.

Opportunity 6

Implement strategies to protect the heritage values of the state's heritage-listed courthouses, and health and education facilities.

Opportunity 7

Maximise advances in technology to enhance asset preservation.

Opportunity 8

Implement business transformation strategies to embed a coordinated cross-agency approach to social infrastructure planning, sequencing and delivery to maximise government investment and community benefit.

Opportunity 9

Explore opportunities to better use assets through co-location, better coordination and joined-up service delivery.

Opportunity 10

In partnership with industry, build Queensland's public and private sector capability to move towards a mandatory adoption of BIM on building projects by 2020 and on major infrastructure by 2023.

Opportunity 11

Consider the potential to lay telecommunications conduits as part of major new road/rail/pipeline projects on a cost recovery basis from telecommunications carriers.

Opportunity 12

Improve the transport of grain to port by investigating the suitability of super depots.

Opportunity 13

Partner with the private sector to capitalise on the Northern Australia Infrastructure Fund to deliver economic infrastructure to northern Queensland.

Opportunity 14

Develop port master plans which integrate with adjoining infrastructure and land-use planning documents.

Opportunity 15

Ensure that business cases for future assets include alternative ways of achieving the outcome using digital means.

Opportunity 16

Investigate the suitability of a Bundaberg Port State Development Area.



Future opportunities—short-term cont.

Opportunity 17

Plan and deliver infrastructure to service existing PDAs.

Opportunity 18

In partnership with utility suppliers, investigate opportunities through precinct utility planning to co-locate services (e.g. water, energy, telecommunication infrastructure).

Opportunity 19

Engage with asset owners early in the planning process to identify opportunities for innovation (e.g. opportunities for precinct-wide approaches to water recycling or access to transport corridors).

Opportunity 20

Increase engagement with local government and local service providers in the construction and maintenance of state government infrastructure, such as housing and other government facilities.

Opportunity 21

Engage with Aboriginal and Torres Strait Islander local governments to develop strategies to eliminate the duplication of services and administration provided by the state and Australian Government agencies and non-government organisations.

Opportunity 22

Secure transport, port facilities, water infrastructure and other relevant infrastructure to support agricultural growth in northern Queensland.

Opportunity 23

Invest in infrastructure that will improve the efficiency, reliability and flexibility of agricultural supply chains in order to better serve existing and new export markets.

Future opportunities—medium/long-term

Opportunity 24

Secure appropriate infrastructure and develop regional connections to enable Queensland to capitalise on growth in drive, rail, cruise and aviation tourism sectors.

Opportunity 25

Identify catalytic infrastructure to support new agricultural, biowaste and biorefinery hubs across regional Queensland.

Opportunity 26

Investigate opportunities to improve material, manufacturing and construction practices that reduce energy consumption and greenhouse gas emissions and improve sustainable construction (e.g. the Cement Sustainability Initiative).

Opportunity 27

Embrace technological advances for improved delivery/ use of public services particularly those that decrease demand for investment in hard infrastructure.

Case study SunCentral Maroochydore

SunCentral Maroochydore represents a once-in-a-lifetime opportunity to establish a greenfield CBD for the Sunshine Coast. The Sunshine Coast Regional Council has established a separate entity, SunCentral Maroochydore Pty Ltd, to drive the design and delivery of the new city centre, with innovation and technology embedded in bold and exciting urban design.

The project represents a major city-making opportunity, with the unique circumstances of the site and the project delivery model presenting significant opportunities. These include opportunities for whole-of-government coordination of infrastructure, services and technology delivery, providing confidence for private sector investment.

The 53 hectare parcel of golf course land in the heart of Maroochydore is forecast to create more than 15,000 jobs by 2025. It is estimated to accommodate more than 4000 residents and produce \$5.9 billion in output to the Queensland economy.

Embedded smart city technology will enable:

- ▶ high speed connectivity for business, residents and visitors
- ▶ full wi-fi accessibility
- ▶ open data initiatives
- ▶ traffic/car parking information and management capability
- ▶ real-time information for public transport, public safety/emergency services, city guides and other community announcements
- ▶ charging stations for electric vehicles and other technology.

It will also enable Australia's first central city underground pneumatic waste system.



The Sunshine Coast Regional Council has committed \$100 million to the project to date, with the Australian Government providing grant funding to conduct feasibility into a light rail system that would ultimately connect the city centre to the new Sunshine Coast University Hospital at Kawana and Caloundra.

In addition, the Queensland Government has designated the passenger rail corridor connecting to Brisbane, with alignment of the corridor into the new city centre site. The construction timetables for the passenger rail line (Beerwah to Maroochydore) and other public transport connections and services are to be confirmed, including a bus forerunner service in advance of light rail.

Case study Tourism infrastructure planning

Investment in infrastructure that underpins tourism and encourages visitor expenditure is key to being able to accommodate future growth and support job creation across Queensland. To drive tourism development in their region, Queensland's 13 regional tourism organisations have developed destinations tourism plans, which use a regional approach to identifying tourism infrastructure priorities.

The Department of Tourism, Major Events, Small Business and the Commonwealth Games has been working with each organisation and across

government to refine and prioritise the infrastructure projects proposed in each plan. Regional tourism is also being supported through the Queensland Drive Tourism Strategy and the Tourism Transport Priorities Roundtable, where industry and government work together to identify tourism transport priorities.

These efforts will help identify tourism priorities throughout the state and will inform government's consideration of tourism in its infrastructure planning.



Sunset at Australian Age of Dinosaurs, Winton (image courtesy of Tourism and Events Queensland)

Transport



Springfield Central Station

Queensland's transport system is the backbone of our vast state. Our roads, bridges, railways and ports connect the state's communities, regions and industries to each other, the rest of Australia and the world. This network of transport infrastructure is the Queensland Government's biggest built asset and plays a critical role in moving people and freight across the state. The past decade has seen substantial investment in transport infrastructure to keep pace with population and economic growth.

Changing demographics and expanding markets make it increasingly challenging to meet the needs of both industry and the community. Managing growth is made even more difficult due to our decentralised population, extreme weather events and the distances between centres and economic zones. Adding to the challenge is ageing infrastructure in need of repair and upgrade, and increasing congestion on our roads and public transport networks.

Future investments will require smarter, value-for-money solutions that provide cost-effective connections between people and places. This includes factoring in technology change that is expected to result in lower emissions. Finding new ways to plan, fund, build and maintain transport infrastructure, while working with partners across the sector, will be critical to achieving this. New technologies will play a greater role in managing transport demand and improving efficiency and safety. Investments in safe and efficient active transport infrastructure will help manage congestion and provide health benefits to the community.

Enhanced planning and decision-making will also address transport challenges, while achieving broader objectives such as economic development. Methods such as land-use and public transport accessibility index modelling can be used to identify locations where the transport system can be better utilised to support employment and population growth. Changes in land-use should encourage development in these areas, providing alternatives to costly upgrades or new infrastructure in other areas. Creating more



Cairns City bus station

employment opportunities closer to where people live will reduce travel times and decrease congestion.

Over the next 15 years, freight transport will continue to grow across the state. The Queensland Government will work to improve safety, increase capacity and transport efficiency, and boost flood immunity and reliability on key freight routes. Investment will be targeted at unlocking the transport system's role in supply chains.

The state will continue to work collaboratively with local governments to ensure planning, funding and development of regional freight networks occurs. Increased movement of freight by sea will also require focus on maintenance of shipping channels and berths to ensure safe and efficient operation of ports, enabling import and export industries to operate and compete in global markets.

Improving integration between the road, rail, air and port systems connecting our major economic zones with interstate and overseas markets is critical to improving Queensland's global competitiveness and economic performance. This includes taking account of the increase in containerisation and development of multi-modal hubs. The optimisation of port activity at the four priority ports, the Port of Brisbane and airports will support the state's economy through better functioning supply chains and increased productivity, as well as having positive environmental impacts in regional areas.

TRANSPORT RESPONSES

The Queensland Government has developed responses to address identified challenges and guide investment across both the 1–4 year program and future opportunities. Most projects or opportunities relate to at least one response, however some will relate to more than one response. As the SIP matures, the relationship between responses and these programs will strengthen.

Focus on maintenance and rehabilitation of existing infrastructure to reduce the long-term cost of repair and improve network resilience.	Unlock the potential of critical supply chains by identifying and improving the freight network.	Seek innovation and technology solutions to create a better performing and lower emissions transport system.	Seek public transport solutions including demand management to address the strong growth of SEQ.	Digitally connected smart infrastructure to improve capacity, safety and security.	Connect regional communities with access to essential services and opportunities.
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Case study Modal shift on the North Coast Line

Queensland's North Coast Line (NCL) is a vital north-south rail route that links distribution centres in the south east to major population centres in central and northern Queensland. It supports a range of freight functions including intermodal containerised freight services and the haulage of coal, livestock and industrial products.

Despite continuing regional population growth and economic activity within the central and north Queensland regions, demand for rail freight on this corridor has been in decline in recent years. This can be attributed to a shift from rail to road freight as a result of significant advancements in high productivity vehicles, together with a need for more investment and upgrades on the rail network.

In response, the Department of Transport and Main Roads is identifying potential infrastructure and non-infrastructure enhancements to facilitate an increase in freight volumes on the NCL. A preliminary NCL Action Plan is being developed that will propose a 10-year program covering a range of investment initiatives to address corridor deficiencies, increase rail capacity and improve rail operational performance. These initiatives will aim to support a modal shift from road to rail freight to better equip Queensland's freight network to support continued growth on this corridor.



Spirit of Queensland, Queensland Rail Travel

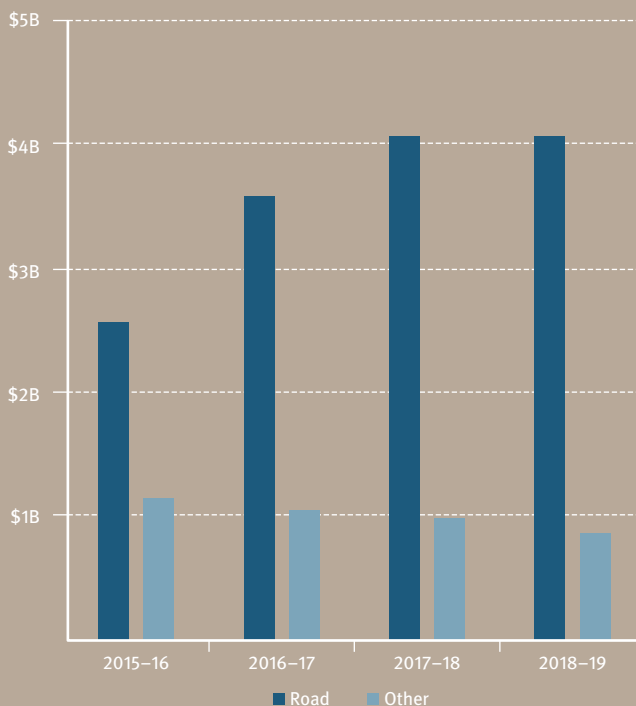
Queensland's state-controlled road network:

spans
33,343 km

carries
80%
of all road traffic

has a gross replacement
value of
\$69.8B
(as at 30 June 2015)

QTRIP investment
(2015–16 to 2018–19)







Note:
This is indicative analysis that includes state and federal funds.

Based on published QTRIP

Queensland Transport and Roads Investment Program (QTRIP) 2015–16 to 2018–19 outlines

\$18.8B
of investment in
transport infrastructure

Queensland has
15
trading ports
and
4
priority ports

 **Townsville**
 **Abbot Point**
 **Hay Point
and Mackay**
 **Gladstone**

Plans and strategies that inform transport infrastructure investment in Queensland:

- ▶ Transport and Main Roads Strategic Plan 2015–2019
- ▶ Moving Freight
- ▶ National Ports Strategy
- ▶ Queensland Ports Strategy
- ▶ Queensland Road System Performance Plan
- ▶ Safer Roads, Safer Queensland: Queensland's Road Safety Strategy 2015–2021
- ▶ Safer Roads, Safer Queensland: Queensland's Road Safety Action Plan
- ▶ Queensland Cycle Strategy 2011–2021
- ▶ Bruce Highway Action Plan
- ▶ Warrego Highway Upgrade Strategy
- ▶ South East Queensland Passenger Transport Strategy (draft)
- ▶ Heavy Vehicle Action Plan (draft)



12.26M

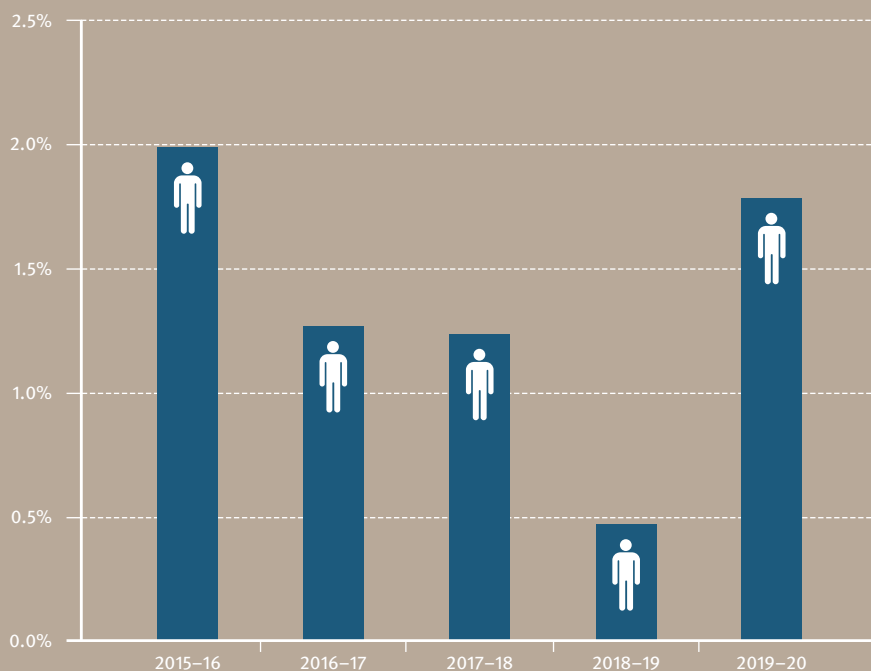
passenger transport
trips outside of South
East Queensland in
2014–15



176.27M

trips on bus, rail and
ferry services within
South East Queensland
in 2014–15

South East Queensland Public Transport
Projected Patronage Growth to 2019–20
(year-on-year change)



Note:
South East Queensland public transport patronage over the next five years is estimated to grow with population growth.

Passenger transport
services in
Queensland
operate across:



5236 km
of rail track

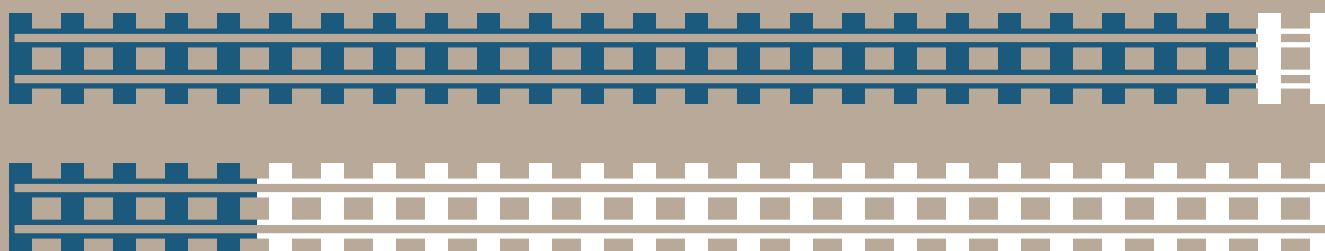


13 km
of light rail track



29 km
of busway

Queensland Rail operates and manages 6585 km of rail network across the state



Privately-owned Aurizon operates and manages access to the 2670 km
central Queensland coal rail network.

1–4 year program

Project	Total estimated cost (\$M)	Contributions				Expenditure to June 2015 (\$M)	Funding (\$M)			
		Fed	QG	LG	Priv		Indicative			
							2015–16	2016–17	2017–18 to 2018–19	Beyond
South East Queensland										
Bruce Highway										
Six laning–Caloundra Road to Sunshine Motorway	1134.000	●	●			24.500	6.500	182.000	575.500	345.500
Maroochydore Road interchange upgrade	187.000	●	●							187.000
Boundary Road interchange upgrade (includes early works)	120.500	●	●		●	15.619	6.881	64.000	34.000	
Managed Motorways–Gateway Motorway to Caboolture	105.000	●	●					26.250	52.500	26.250
Pumicestone Road upgrade	88.850	●	●			59.766	19.884	9.200		
Other road network projects										
Gateway Upgrade North	1161.975	●	●			62.400	175.940	313.260	550.795	59.580
Ipswich Motorway–Rocklea to Darra ¹	390.600	●	●			3.270	1.000	30.730	259.000	96.600
Gold Coast 2018 Commonwealth Games road upgrades	160.700		●				50.600	75.100	35.000	
Coomera Interchange Exit 54 upgrade	74.700	●	●		●	1.700	48.000	25.000		
Waterford Tamborine Road–Anzac Avenue to Hotz Road duplication	39.500		●			0.050	1.550	2.900	35.000	
Mount Lindesay Highway–Beaudesert Road Bypass ²	27.500		●	●		0.050	3.360	21.090	3.000	
Caboolture River Bridge upgrade (as part of Bridges Renewal Program)	17.137	●	●				7.000	10.137		
D'Aguilar Highway safety improvements	16.000	●				0.406	9.594	4.410	1.590	
Cunningham Highway upgrade (part of National Highway Upgrade Program)	12.500	●	●				0.500	8.000	4.000	
Rail										
New Generation Rollingstock	4040.201		●		●	9.747	6.300	121.232	741.172	3161.749
New Generation Rollingstock stabling facilities	110.749		●			5.254	51.632	51.940	1.923	
New Generation Rollingstock maintenance service centre	115.504		●		●	15.057	71.800	3.000	25.647	
New Generation Rollingstock connection works	73.042		●			46.454	26.188	0.400		
New Generation Rollingstock operational readiness	43.370		●			4.020	17.024	12.774	9.552	
Moreton Bay Rail Link	988.000	●	●	●		656.734	136.762	194.504		

Project	Total estimated cost (\$M)	Contributions				Expenditure to June 2015 (\$M)	Funding (\$M)			
		Fed	QG	LG	Priv		2015–16	Indicative		
								2016–17	2017–18 to 2018–19	Beyond
Rail										
Caboolture rail line–Lawnton and Petrie third track	167.572		●			76.873	72.559	18.140		
Gold Coast Light Rail Stage 2	TBC	●	●	●	●	Currently subject to commercial negotiation				
Gold Coast rail line–Coomera to Helensvale duplication	163.257		●			0.880	63.373	54.400	44.604	
Citytrain Rollingstock Overhauls	393.873		●			135.520	53.671	23.276	72.687	108.718
South East Queensland–Bridge Replacement and Renewal	152.724		●				31.949	31.527	54.215	35.033
South East Queensland–Network Management and Enhancement	429.026		●				92.665	82.840	164.472	89.050
South East Queensland–Other Network Renewal	134.816		●				26.080	37.531	54.347	16.858
South East Queensland–Passenger Safety and Accessibility	249.312		●				42.585	60.639	102.316	43.773
South East Queensland–Track Replacement and Renewal	78.308		●				12.937	13.827	33.283	18.261
South East Queensland–Concrete Resleepering	97.359		●			57.359	30.000	10.000		
South East Queensland–Turnout Replacement and Renewal	96.512		●				15.535	16.127	43.236	21.615
Public transport										
Park 'n' Ride construction and upgrades	21.280		●			0.280	3.000	6.000	12.000	
Active Transport										
Veloway 1–Stage D (O'Keefe Street–Lewisham Street)	25.222		●			0.360	5.900	9.701	9.261	
North Brisbane Bikeway Stages 1, 2 and 3	24.789		●			6.847	2.942	5.000	10.000	
Regional Queensland										
Toowoomba Second Range Crossing ³	1606.250	●	●			16.045	172.055	375.000	1043.150	
Bruce Highway										
Cooroy to Curra Section C upgrade	692.147	●	●			48.065	41.382	166.200	436.500	
Cooroy to Curra Section A upgrade	490.000	●	●			189.453	113.065	187.482		
Cooroy to Curra Section D upgrade	114.203	●	●			49.763	7.405	7.035		50.000

1–4 year program

Project	Total estimated cost (\$M)	Contributions				Expenditure to June 2015 (\$M)	Funding (\$M)			
		Fed	QG	LG	Priv		Indicative			
							2015–16	2016–17	2017–18 to 2018–19	Beyond
Regional Queensland										
Bruce Highway										
Mackay Ring Road Stage 1 (includes planning)	570.000	●	●			10.146	33.000	25.854	431.000	70.000
Mackay northern access upgrade	80.000	●	●			0.422	0.478	5.500	73.600	
Rockhampton northern access upgrade (stage 1)	121.000	●	●							121.000
Rockhampton bypass planning	65.000	●	●							65.000
Tiaro flood immunity upgrade	107.000	●	●							107.000
Saltwater Creek upgrade	103.000	●	●							103.000
Sandy Gully bridge upgrade	57.500	●	●			1.100	4.000	32.000	20.400	
Tinana interchange	38.000	●	●			0.582	1.500	28.000	7.918	
Jumper Creek upgrade	23.000	●	●							23.000
Hay Point Road intersection upgrade	15.000	●				2.491	9.874	2.635		
Goorganga Plains planning	15.000	●	●							15.000
Sarina northern access upgrade	11.000	●	●				0.200	0.800	10.000	
Caboolture to St Lawrence pavement widening (Hebbards Road–North South Road)	17.000	●	●				0.250	11.750	5.000	
Haughton River floodplain improvements	515.000	●	●				1.000	7.000	73.250	433.750
Edmonton and Gordonvale duplication	481.000	●	●							481.000
Townsville Ring Road Section 4	200.000	●	●			49.055	72.183	78.762		
Townsville northern access intersection upgrades	72.000	●	●							72.000
Cattle Creek and Frances Creek Bridge upgrade	174.000	●	●			0.150	5.902	21.135	146.813	
Yellow Gin Creek Bridge upgrade	45.000	●	●			2.400	20.800	21.800		
Arnot Creek Bridge upgrade ⁴	10.000	●	●			0.070	2.500	7.430		
Cairns Southern Access Corridor (Stage 3)	135.000	●	●							135.000
Cairns Southern Access Corridor (Stage 2)	58.000	●	●			0.250	13.250	22.500	22.000	
Burdekin Deviation planning	48.000	●	●							48.000
Ingham to Cardwell Range Deviation planning	48.000	●	●							48.000

Project	Total estimated cost (\$M)	Contributions				Expenditure to June 2015 (\$M)	Funding (\$M)			
		Fed	QG	LG	Priv		2015–16	Indicative		
								2016–17	2017–18 to 2018–19	Beyond
Bruce Highway										
Bowen to Ayr bridge and culvert upgrades	43.750	●			●	30.263	4.355	9.132		
Upgrade Bruce Highway at Central Queensland University	8.500		●				4.000	4.500		
Peak Downs Highway										
Eton Range Realignment Project	189.200	●	●			10.530	11.200	81.660	85.810	
Peak Downs Highway bridge replacements between Nebo and Mackay (as part of the Bridges Renewal Program)	70.000	●	●				12.916	40.000	17.084	
Other road and transport projects										
Warrego Highway Upgrade Program	635.000	●	●			22.944	107.811	70.875	433.369	
North West District highway upgrade (as part of the National Highway Upgrade Program)	25.000	●	●				12.300	12.700		
New England Highway upgrades (as part of the National Highway Upgrade Program)	11.625	●	●				0.325	5.000	6.300	
Landsborough Highway (Blackall-Barcaldine) upgrades (as part of the National Highway Upgrade Program)	12.500	●	●			0.010	0.865	5.000	6.625	
Yeppoon Western Bypass Stage 2 ⁵	30.000		●	●		9.000	9.000	8.000	4.000	
Cape York Region Package	260.500	●	●			26.046	55.303	77.052	102.100	
Kogan Creek Bridge upgrade (as part of the Bridges Renewal Program)	6.880	●	●				6.880			
Vines Creek bridges upgrade ⁴	28.000		●			0.726	0.274	0.300	26.700	
Kin Kora intersection upgrade	25.050	●	●			5.350	11.700	8.000		
Western Roads Upgrade Program	40.000		●				19.300	20.700		
Dalrymple Road–Bohle River Bridge ⁶	40.000	●	●	●		6.500	18.000	15.500		
Mission Beach Safe Boating Project	20.767		●	●		1.623	9.000	10.144		
Mareeba Airport upgrade ⁷	13.000		●				1.300	4.550	7.150	

1–4 year program

Project	Total estimated cost (\$M)	Contributions				Expenditure to June 2015 (\$M)	Funding (\$M)			
		Fed	QG	LG	Priv		2015–16	Indicative		
								2016–17	2017–18 to 2018–19	Beyond
Regional Queensland										
Other road and transport projects										
Royalties for the Regions–Far North Queensland ⁷	8.530	●	●	●				6.869		
Royalties for the Regions–Northern Queensland ⁷	7.970	●	●	●	●			4.833		
Royalties for the Regions–Central Queensland ⁷	1.000		●	●			0.800			
Royalties for the Regions–Darling Downs South West ⁷	11.781		●	●	●		4.042	4.808		
Gayndah, Monto and Mundubbera aerodrome upgrades ⁷	13.708	●	●	●				8.235		
Scrub Hill Road/Wide Bay Drive/Burrum Heads Road intersections ⁷	26.000		●					10.000	16.000	
Fraser Coast Airport upgrade ⁷	0.700		●	●				0.525		
Rail										
Regional Queensland–Bridge Replacement and Renewal	159.840		●				43.197	30.134	60.175	26.335
Regional Queensland–Network Management and Enhancement	294.474		●				49.489	74.393	114.126	56.466
Toowoomba Range Capacity and Clearance Upgrades	58.144		●			2.149	55.735	0.260		
Port of Cairns										
Tingira Street Subdivision Development	32.521		●			2.757	0.703	2.700	4.960	21.401
Foreshore Development	22.092		●			19.452	1.640	1.000		
Port of Mackay										
Various (Gen Develop and Fuel Line)	2.962		●				1.472	1.490		
Port of Gladstone										
RG Tanna Coal Terminal Upgrades	99.639		●			28.394	62.320	8.925		
Port Services Projects	26.756		●			15.750	11.006			
Fisherman's Landing (earthworks)	6.500		●			1.050	5.450			
Port of Townsville										
Berth 4 Upgrade ⁴	55.150		●				10.150	25.000	20.000	
Miscellaneous (pile encap and b/water mod and truck port access)	3.969		●			0.061	2.610	1.298		

Project	Total estimated cost (\$M)	Contributions				Expenditure to June 2015 (\$M)	Funding (\$M)			
		Fed	QG	LG	Priv		2015–16	Indicative		
								2016–17	2017–18 to 2018–19	Beyond
Statewide										
Road network projects										
Bruce Highway—other projects ⁸	1648.704	●	●				165.467	166.250	498.177	818.810
Bruce Highway Safety Package Program	736.200	●	●			1.569	12.340	26.460	69.631	626.200
Bruce Highway Overtaking Lanes Program	275.000	●				4.234	29.263	13.963	62.540	165.000
State Road Network improvement works	875.264	●	●		●	328.114	210.358	166.895	168.497	1.400
National Land Transport Network—projects ⁹	559.598	●	●				33.398	50.656	475.544	
Targeted Road Safety Programs (excluding Black Spot Program)	450.501		●				149.087	113.296	188.118	
Black Spot Program	90.196	●					28.441	37.271	24.483	
Heavy Vehicle Safety and Productivity Package	79.890	●	●			1.076	10.184	32.390	36.241	
Statewide bridges upgrade (as part of the Bridges Renewal Program)	21.592	●	●				5.376		16.216	
Cattle Supply Chains improvements	62.010	●						21.792	40.218	
Rail										
Rollingstock Improvements	66.557		●				28.417	21.094	9.564	7.481
Statewide Network Management and Enhancement	80.130		●				12.267	14.469	34.392	19.001
Traveltrain Rollingstock Overhaul	94.014		●				38.081	5.556	36.928	13.449
Public transport										
Statewide Bus Infrastructure Program	110.630		●				25.742	29.738	55.150	
Queensland School Bus Upgrade Program	84.978		●				23.190	21.582	40.206	
Passenger Transport Accessible Infrastructure Program	20.304		●				5.076	5.076	10.152	
Statewide infrastructure program to assist people with disabilities	19.170		●				4.470	4.694	10.006	
Active Transport										
Cycling Program	120.427		●				28.113	31.642	60.672	
Marine										
Boating Program	106.062		●				34.082	27.740	44.240	
Marine Safety Program	40.291		●				8.807	9.515	14.646	7.323

1–4 year program

Project	Total estimated cost (\$M)	Contributions				Expenditure to June 2015 (\$M)	Funding (\$M)			
		Fed	QG	LG	Priv		2015–16	Indicative		
								2016–17	2017–18 to 2018–19	Beyond
Statewide										
Transport planning										
Transport Corridor Acquisition Fund	283.614		●				70.000	70.000	143.614	
Transport System Planning Program	211.200	●	●				67.217	53.689	90.294	
Other road and transport projects										
Maintenance, Preservation and Environment Program	2631.714	●	●				515.507	580.438	1535.769	
Road operations projects	514.904	●	●	●			122.036	121.011	271.857	
Natural Disaster Relief and Recovery Arrangements (2014 and 2015 events) ¹⁰	127.223	●	●				116.877	10.346		
Transport Infrastructure Development Scheme ¹¹	215.528	●	●	●			68.541	68.917	78.070	
Supporting Drive Tourism Package	20.000		●					10.000	10.000	
Local Government Grants –other	64.578	●	●	●		6.595	37.154	17.042	3.787	
Statewide Traffic Signal– LED lamp replacement	17.500		●				8.750	8.750		
Emergency Vehicle Priority System rollout	13.500		●				1.480	2.890	9.130	

Notes:

¹ Funding arrangements are currently under negotiation with the Australian Government.

² QTRIP Published Budget \$26M. Total Estimated Cost and cashflow increased to include \$1.5M contribution from local government.

³ Being delivered as a public private partnership.

⁴ The Queensland Government has implemented an Accelerated Works Program for regional Queensland. Some of the announced projects are individually highlighted in this document, while others may be embedded in a larger program of work.

⁵ QTRIP Published Budget \$15M. Total Estimated Cost and cashflow increased to include \$15M contribution from local government.

⁶ QTRIP Published Budget \$25M. Total Estimated Cost and cashflow increased to include \$15M contribution from local government.

⁷ The sum of the cashflows may not equal Total Estimated Cost because cashflows are Queensland Government cashflows only. In addition, note that the Royalties for the Regions spend showing by region does not include all projects because some projects are instead included in the larger road programs.

⁸ Includes 2015–16 and 2016–17 funding allocation for Bruce Highway Cooroy to Curra Section B upgrade.

⁹ Includes 2015–16 funding allocation for Gold Coast Light Rail Stage 1.

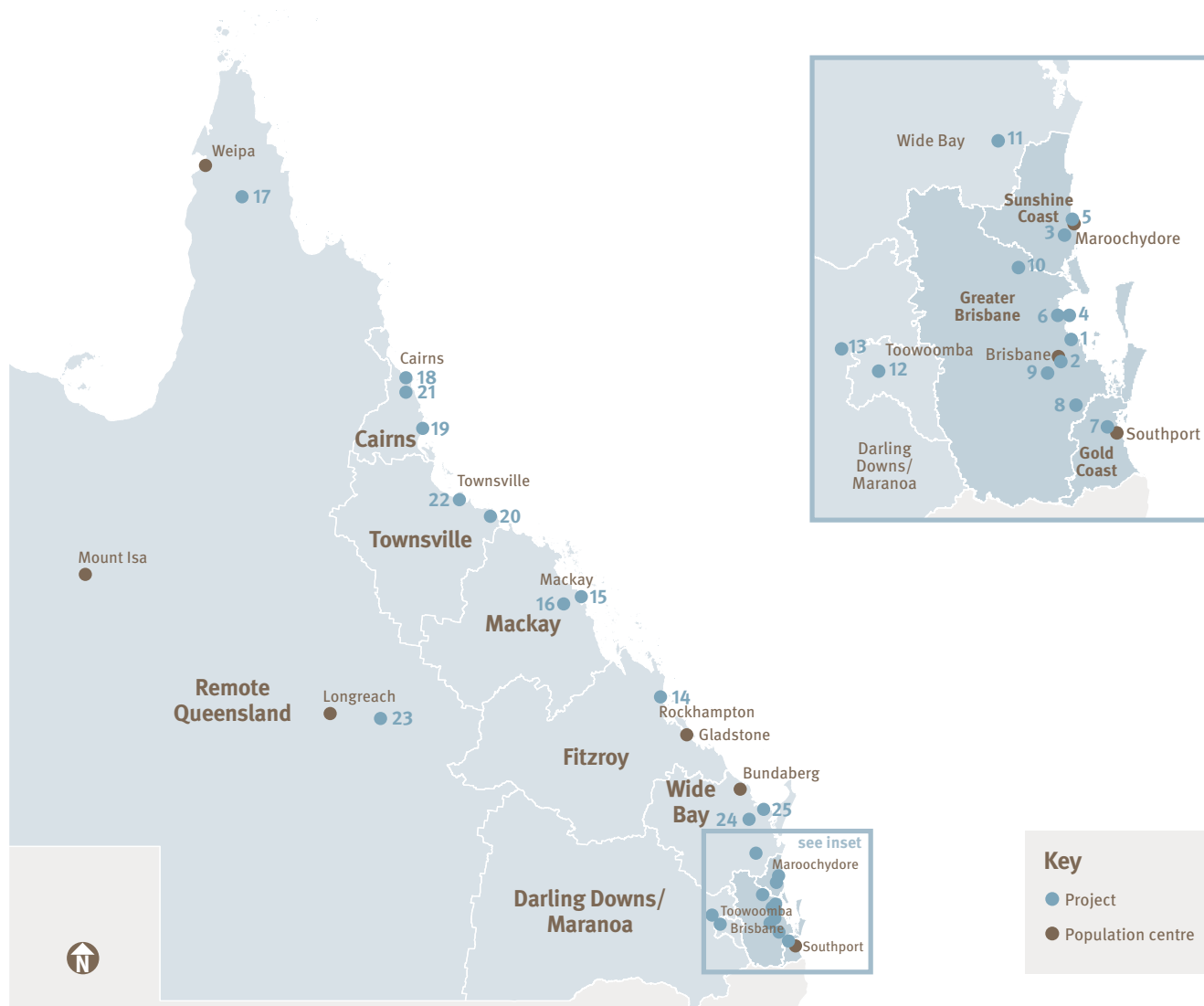
¹⁰ Excludes ineligible (which are captured as part of Transport and Main Roads' Maintenance, Preservation and Environment Program).

¹¹ Includes \$60m over 2015–16 to 2016–17 from Building our Regions.

Additional information about most projects is available in QTRIP 2015–16 to 2018–19 Published. QTRIP 2016–17 to 2019–20 will be published in mid-2016 in line with the next state budget.

Selected projects 1–4 year program

#	PROJECT	#	PROJECT
1	Gateway Upgrade North	14	Yeppoon Western Bypass Stage 2
2	Veloway 1–Stage D (O’Keefe Street–Lewisham Street)	15	Bruce Highway Mackay Ring Road Stage 1
3	Bruce Highway six laning–Caloundra Road to Sunshine Motorway	16	Eton Range Realignment Project
4	Moreton Bay Rail Link	17	Cape York Region Package
5	Bruce Highway Maroochydore Road interchange upgrade	18	Bruce Highway Cairns Southern Access Corridor Stage 3
6	Bruce Highway Managed Motorways–Gateway Motorway to Caboolture	19	Mission Beach Safe Boating Project
7	Gold Coast rail line–Coomera to Helensvale duplication	20	Bruce Highway Houghton River floodplain improvements
8	Waterford Tamborine Road–Anzac Avenue to Hotz Road duplication	21	Bruce Highway Edmonton and Gordonvale duplication
9	Ipswich Motorway–Rocklea to Darra	22	Bruce Highway Townsville Ring Road Section 4
10	D’Aguilar Highway safety improvements	23	Landsborough Highway (Blackall–Barcaldine) upgrades
11	Bruce Highway Cooroy to Curra upgrade	24	Bruce Highway Tiaro flood immunity upgrade
12	Toowoomba Second Range Crossing	25	Scrub Hill Road/Wide Bay Drive/Burrum Heads road intersections
13	Warrego Highway Upgrade Program		



Future opportunities—short-term

Opportunity 1

Focus on innovative infrastructure solutions to relieve capacity constraints in the core inner city rail network to meet the expected passenger demands in SEQ.

Opportunity 2

Improve rail service efficiency and reliability by increasing inner and outer network stabling options.

Opportunity 3

Investigate optimisation/upgrades to key passenger interchanges across the transport network to improve reliability and efficiency and deliver better passenger outcomes.

Opportunity 4

Improve service efficiency, reliability and resilience across the bus network through bus priority interventions and busway maintenance.

Opportunity 5

Delivery of strategic park ‘n’ rides at appropriate network locations to support increases in patronage, manage congestion and improve access to public transport for those with limited alternatives.

Opportunity 6

Maximise the use of active and passenger transport infrastructure to manage congestion and maximise the existing infrastructure in the transport network.

Opportunity 7

Improve regional rail performance, particularly on the North Coast Line, to increase rail freight movements.

Opportunity 8

Respond to growth in population and freight movement by identifying and protecting future transport corridors.

Opportunity 9

Continue to address identified safety deficiencies on the transport network and improve safety of vulnerable road users.

Opportunity 10

Identify opportunities to enhance regulatory frameworks that optimise efficiency of supply chains and integration of transport modes including coastal shipping.

Opportunity 11

Improve safety and efficiency of the existing rail and bus network by implementing network-wide signalling upgrades such as European Train Control System Level 2.

Opportunity 12

Utilise the latest and most accessible technology to improve the communication and dissemination of real-time travel data to empower customers to make the best decisions in using the transport system.

Opportunity 13

Access the latest and most efficient technology to assist in gathering and analysing travel and freight data, asset condition and to improve resilience, efficiency, safety and operation of Queensland’s transport networks.

Opportunity 14

Increase focus on maintenance of existing infrastructure to realise asset design life and delay the need for costly new infrastructure.

Opportunity 15

Investigate opportunities to expedite the open level crossing elimination program.

Opportunity 16

Investigate cost-effective transport solutions for small volume regional products to access ports.

Opportunity 17

Improve axle weight capacity and tunnel height clearances as a means of improving rail capacity.

Future opportunities—short-term cont.

Opportunity 18

Improve scheduling at ports to increase port efficiencies and reduce offshore queuing.

Opportunity 19

Identify and protect suitable future intermodal locations that will improve connections with ports and improve supply chain efficiency.

Opportunity 20

Investigate opportunities to enable appropriate development above urban public transport infrastructure.

Opportunity 21

Initiate a Regional Bridge Renewal Program to replace timber bridges and older concrete and steel structures, which are deteriorating due to age and increased use, and impede the use of freight-efficient vehicles.

Opportunity 22

Improve transport access to the Port of Townsville.

Opportunity 23

Continue to address passenger transport opportunities for the Gold and Sunshine coasts.



Queensland Rail freight train (image courtesy of Tourism and Events Queensland)

Future opportunities—medium/long-term

Opportunity 24

Encourage patronage growth on the SEQ passenger transport network during off-peak times to fully utilise existing infrastructure.

Opportunity 25

Increase rail capacity by investing in passing loops and holding bays on the rail network.

Opportunity 26

Enhance freight capacity and supply chain efficiency by assisting in the delivery of the Melbourne to Brisbane rail solution.

Opportunity 27

Improve passenger and freight movements between Brisbane and the Gold and Sunshine coasts by increasing capacity and efficiency on roads and public transport services as well as extending rail linkages.

Opportunity 28

Improve passenger and freight movements between Brisbane and Ipswich by increasing capacity on the Ipswich Motorway and related rail corridors.

Opportunity 29

Enhance freight efficiency by removing capacity constraints on key freight routes such as:

- ▶ Bruce Highway
- ▶ Warrego Highway
- ▶ Peak Downs/Gregory highways
- ▶ Flinders/Barkly highways
- ▶ Capricorn Highway
- ▶ Dawson Highway.

Opportunity 30

Prepare the transport network for connected/autonomous passenger and freight vehicles.

Opportunity 31

Enhance inter-regional connections to support regional development such as tourism, maritime and agricultural activities.

Opportunity 32

Support Queensland's continued economic development through the long-term sustainable development of key ports.

Opportunity 33

Investigate opportunities to improve connections between active and public transport modes to increase accessibility and promote patronage growth.

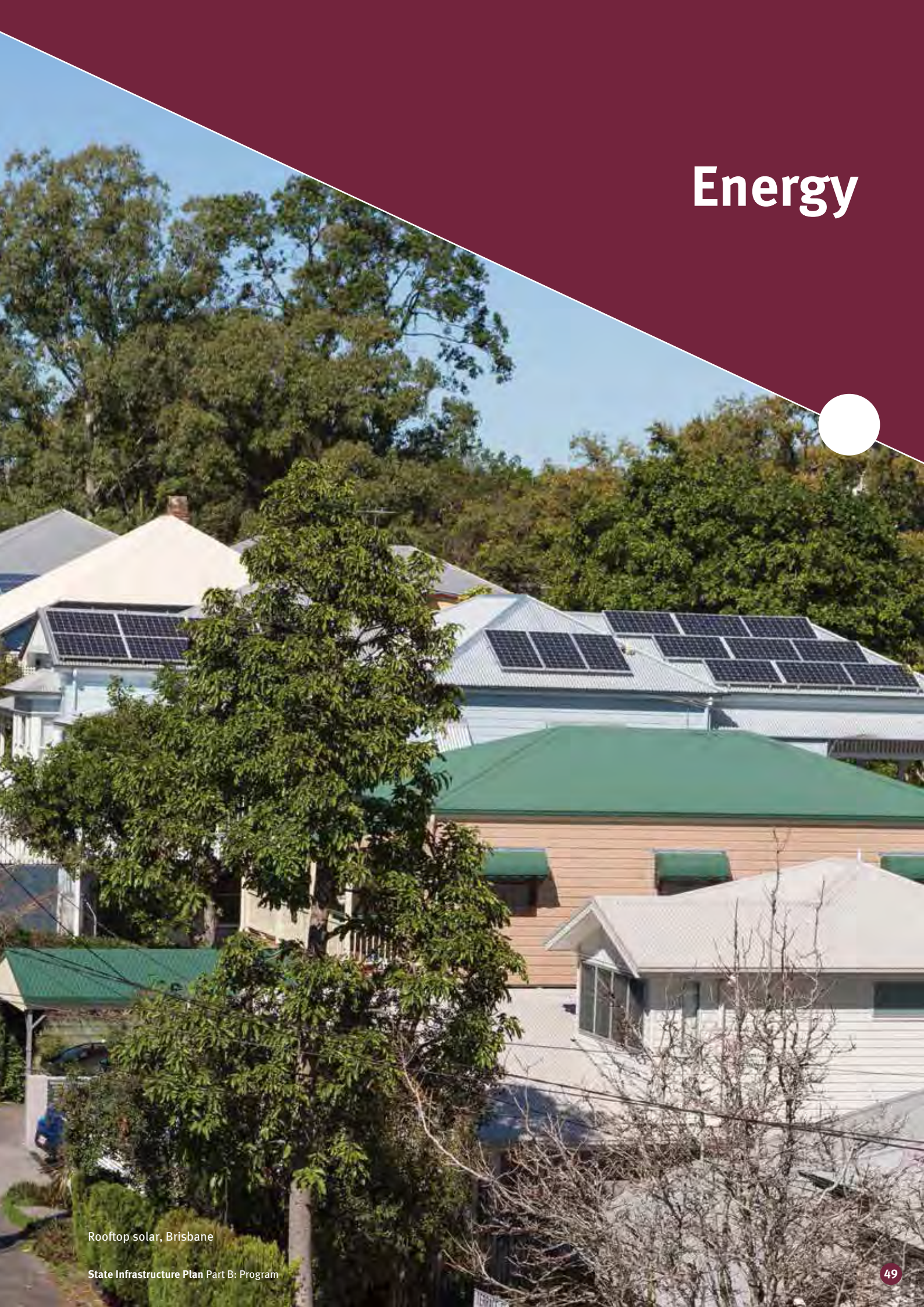
Opportunity 34

Manage seaside access to support land freight needs.

Opportunity 35

Investigate ways to better use port facilities in the Gulf of Carpentaria.

Energy



Rooftop solar, Brisbane

Queensland's energy infrastructure powers the state's economy. Access to reliable and cost-effective electricity is critical to the economy and provides an essential service to industry and the broader community.

We need to ensure electricity generation, transmission and distribution keeps pace with future demand from industrial and residential growth, while responding to rapid advancements in technology and market changes across the sector.

Currently, electricity generation in Queensland is heavily reliant on coal and gas, with renewable sources such as biomass and rooftop solar photovoltaic (PV) systems providing a small percentage of the state's commercially-generated electricity. Going forward, the Queensland Government will seek to take advantage of the wealth of renewable energy resources by encouraging investment in new technologies and alternative ways of meeting our electricity needs.

Government is undertaking the one million solar rooftops or 3000 megawatts of solar PV by 2020 initiative and an inquiry into a 50 per cent renewable energy target by 2030. These are important steps in helping the state diversify its energy mix and reduce its carbon emissions.

Until recently, investment in electricity generation and distribution infrastructure has been based on growing demand serviced by centralised generation, transmission and distribution. Declining average demand, changing consumer behaviour and technological advancements are driving a shift towards distributed generation infrastructure. Technologies such as rooftop solar systems and residential battery storage can help reduce overall load on the electricity network and increase the efficiency of electricity delivery. In remote areas, they can provide a lower cost alternative to centralised transmission and distribution.

Adopting these technologies can reduce or defer the need for major infrastructure upgrades. Investment can instead be directed at maintaining existing assets and replacing ageing assets across the transmission and distribution network. Other innovations in technology,



Powerline maintenance

including smart meters and interactive household devices, have the potential to transform the network from a one-way conduit to a platform for multilateral trade. The Queensland Government also supports investment in large-scale renewable energy projects, such as the Solar 60 program which supports up to 60 megawatts of solar power generation in Queensland, to drive growth in renewable energy investment. This program and other innovations will help stimulate the economy, create employment opportunities and reduce dependency on coal-fired generation.

Gas remains a vital energy source for Queensland's industrial and manufacturing sectors, and the production of liquefied natural gas (LNG) has become a major new export industry. In recent years, the private sector has made major investments in supply and pipeline networks. The Queensland Government will continue to support supply-side and market initiatives that encourage greater utilisation of this energy infrastructure.

ENERGY RESPONSES

The Queensland Government has developed responses to address identified challenges and guide investment across both the 1–4 year program and future opportunities. Most projects or opportunities relate to at least one response, however some will relate to more than one response. As the SIP matures, the relationship between responses and these programs will strengthen.

Pursue a renewable energy future and continued demand management.

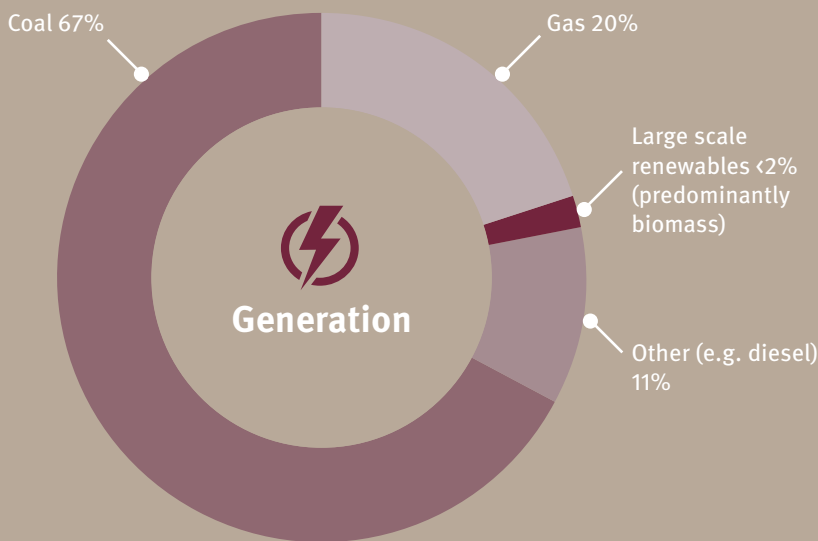
Maximise growth opportunities by improving the functioning of the gas market in Queensland.

Improve the efficiency of network businesses.

Manage the benefits of new technology and innovation.

Enable an adaptive, resilient and cost-effective energy sector in Queensland.

Queensland's electricity network



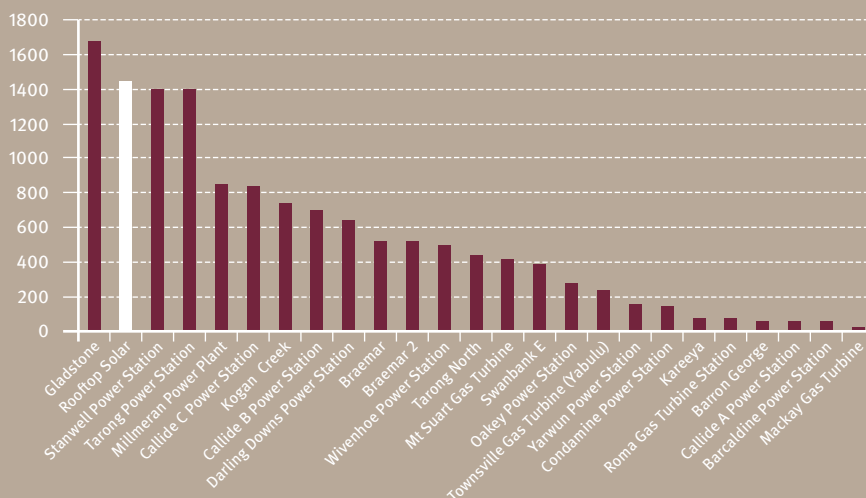
2 million
residential customers

26,000
industrial, commercial
and business customers

14,000 MW
of grid-connected
generation capacity



Rooftop solar capacity



\$20B
of private sector
investment in
the last
10 years

Gas transmission and distribution

- ▶ 6 high pressure transmission pipelines
- ▶ 15,000 km of gas gathering pipeline
- ▶ 2 underground storage facilities
- ▶ 8 water treatment plants
- ▶ 10 processing hubs

1 in 4
households
have rooftop
solar PVs

3000
systems are
connected
each month

Highest
installed capacity
of rooftop solar
in Australia

1–4 year program

Project	Total estimated cost (\$M)	Contributions				Expenditure to June 2015 (\$M)	Funding (\$M)			
		Fed	QG	LG	Priv		2015–16	Indicative		
								2016–17	2017–18 to 2018–19	Beyond
South East Queensland										
Rocklea Secondary Systems replacement	17.400		●			2.000	3.600	8.300	3.500	
SunCoast Powerline project–Palmwoods to Maroochydore	80.314		●			11.569	2.072	4.844	52.789	9.040
Kingston to Jimboomba Network upgrade	57.912		●			26.696	19.186	12.030		
Jimboomba to Jimboomba West–new 33kV powerlines	9.619		●						2.343	7.277
Springfield Central Substation–33/11kV	41.829		●			40.837	0.967	0.025		
Substation upgrades at various SEQ locations	202.520		●			137.940	22.457	18.544	19.097	4.482
Nudgee to Hendra cable upgrade	14.675		●			10.618	4.057			
Consolidate Brisbane Enterprise Program of Work	11.400		●				9.400	2.000		
Wivenhoe Hydro Power Station works	37.943		●			5.756	8.219	9.025	10.347	4.596
Powerlink augmentation and asset replacement¹	1124.197		●			857.654	266.543			
Energex augmentation and asset replacement	434.320		●				434.320			
Regional Queensland										
Mackay Substation rebuild and Nebo Primary Plant replacement	54.800		●			9.700	8.100	25.600	11.400	
Blackall iPASS Secondary Systems replacement	26.200		●			17.500	6.200	1.500	1.000	
Stanwell and Ross Secondary Systems replacement	43.200		●			25.400	4.700	8.400	4.700	
Bulli Creek and Braemar iPASS Secondary Systems replacement	51.100		●			43.000	4.100	4.000		
Moura and Callide A Switchyard replacement	59.300		●			10.500	27.100	21.700		
Gladstone South Zone Substation upgrade	19.100		●			2.100	16.000	1.000		
East Warwick Zone Substation upgrade	33.390		●			23.752	9.602	0.036		
Central Toowoomba Zone Substation upgrade	84.487		●			66.769	17.718			
Grid Utility Support System (GUSS)	12.245		●			5.106	7.140			
General augmentation and asset replacement	1972.957		●				339.267	408.422	816.845	408.422
General augmentation and asset replacement at isolated power stations	98.012		●				13.199	21.203	42.407	21.203

Project	Total estimated cost (\$M)	Contributions				Expenditure to June 2015 (\$M)	Funding (\$M)			
		Fed	QG	LG	Priv		2015–16	Indicative		
								2016–17	2017–18 to 2018–19	Beyond
Regional Queensland										
Capital works to connect new customers	1187.546		●				213.284	243.566	487.131	243.566
Works on unregulated networks	34.073		●				8.742	6.333	12.665	6.333
Bunaberg Port Gas Pipeline ²	18.000		●			0.374	9.000	8.626		
Palm Island Renewable Ready Power Station	17.900		●				12.577	5.323		
Coconut Island 35kV Solar installation	0.062		●				0.062			
Camooweal Solar Project	0.307		●				0.307			
Various smaller projects throughout Queensland	55.969		●			26.670	24.761	3.157	1.380	
Stanwell Power Station works	205.600		●			18.200	38.900	48.000	92.100	8.400
Tarong and Tarong North Power Station works	124.500		●				39.100	17.600	55.400	12.400
Mica Creek Power Station overhauls	11.200		●				7.200	4.000		
Meandu Mine infrastructure maintenance and replacement	129.400		●				20.300	42.400	48.200	18.500
Kogan Creek Power Station and coal mine works	158.143		●			17.080	55.056	16.323	58.678	11.006
Callide Power Station works	279.791		●			15.993	36.450	31.237	168.135	27.976

Notes:

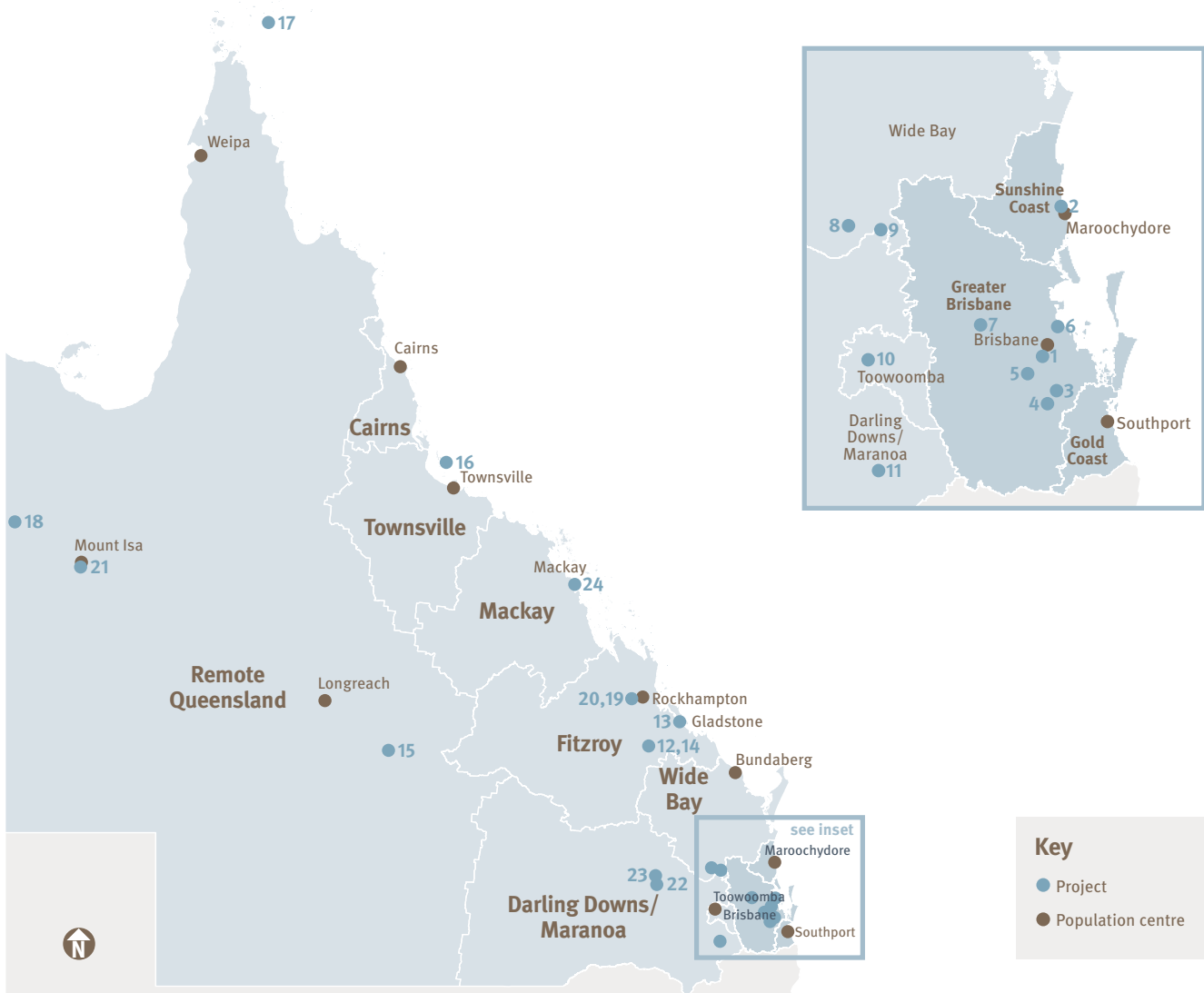
¹ This program incorporates Powerlink minor projects across Queensland.

² The private sector will build, own and operate the pipeline.

The Queensland Government has implemented an Accelerated Works Program for regional Queensland. Some of the announced projects are individually highlighted in this document, while others may be embedded in a larger program of work.

Selected projects 1–4 year program

#	PROJECT	#	PROJECT
1	Rocklea Secondary Systems replacement	13	Gladstone South Zone Substation upgrade
2	SunCoast Powerline project–Palmwoods to Maroochydore	14	Callide Power Station works
3	Kingston to Jimboomba Network upgrade	15	Blackall iPASS Secondary Systems replacement
4	Jimboomba to Jimboomba West–new 33kV	16	Palm Island Renewable Ready Power Station
5	Springfield Central Substation–33/11kV	17	Coconut Island 35kV Solar Installation
6	Nudgee to Hendra cable upgrade	18	Camooweal Solar Project
7	Wivenhoe Hydro Power Station works	19	Stanwell Power Station works
8	Meandu Mine infrastructure maintenance and replacement	20	Stanwell and Ross Secondary Systems replacement
9	Tarong and Tarong North Power Station works	21	Mica Creek Power Station overhauls
10	Central Toowoomba Zone Substation upgrade	22	Bulli Creek and Braemar iPASS Secondary Systems replacement
11	East Warwick Zone Substation upgrade	23	Kogan Creek Power Station and coal mine works
12	Moura and Callide A Switchyard replacement	24	Mackay Substation rebuild and Nebo Primary Plant replacement



Future opportunities—short-term

Opportunity 1

Trial Total Energy Planning (TEP) practices for new residential and commercial developments to deliver lower energy consumption and costs, and reduce infrastructure requirements for developers and utilities.

Opportunity 2

Implement outcomes from the Gas Supply and Demand Action Plan.

Opportunity 3

Explore opportunities to establish research and pre-commercial biorefinery to build on Queensland's competitive advantage in this sector.

Opportunity 4

Examine opportunities to improve the energy productivity of the sector in Queensland.

Opportunity 5

Develop and leverage intelligence and resilience of the electricity network in relation to severe weather events such as cyclones.

Opportunity 6

Include renewable energy and gas supply in the planning of new developments, where appropriate.

Opportunity 7

Implement agreed government actions following the completion of the independent review to consider a credible pathway to achieving a 50 per cent renewable energy target by 2030 for Queensland.

Opportunity 8

Promote widespread use of energy sourced from renewable energy generation.

Opportunity 9

Investigate opportunities to incorporate energy efficiency and demand management into major infrastructure projects.

Opportunity 10

Facilitate and provide policy settings to accelerate uptake of cost reflective tariffs and advanced metering.

Opportunity 11

Work with Australian Renewable Energy Agency and the Clean Energy Finance Corporation to target renewable energy and distributed energy investment into Queensland.

Future opportunities—medium/long-term

Opportunity 12

Examine opportunities for more cost-effective localised solutions for rural and regional communities.

Opportunity 13

Examine opportunities to replace Queensland's 34 isolated power systems, including many diesel systems that service remote communities, with more efficient and sustainable supplies.

Opportunity 14

Examine opportunities for rural and regional communities to be more involved in decision-making regarding energy infrastructure.

Opportunity 15

Work at regional, state and national level to identify the opportunities and risks with the transformation of the energy sector with respect to distributed generation and battery storage.

Future opportunities—medium/long-term cont.

Opportunity 16

Investigate how to best utilise Queensland's changing generation mix in a low cost and sustainable manner.

Opportunity 17

Investigate managing decentralised generation controls in a similar way to demand-side peak management.



Powerlink's new substation at Yuleba North

Case study Reducing energy consumption and optimising existing infrastructure

The Queensland Government is supporting and promoting trials of Total Energy Planning (TEP) practices for new residential and commercial developments. TEP aims to deliver lower energy consumption and costs to consumers, which in turn reduces infrastructure requirements for developers and utilities.

Modelling indicates TEP can potentially reduce peak electricity demand by more than 50 per cent in comparison to existing developments. Reductions in peak demand and total consumption are achieved through higher energy rating standards for new dwellings, energy efficient hot water and air conditioning, and lot and dwelling diversity, which leads to greater cooling efficiencies for occupants.

Lower peak demand means potentially less capital expenditure is required to provide electricity to a new development and may also allow increased residential development before future electricity network capital expenditure is required.

The state is undertaking innovative, commercially viable demonstration projects, such as The Village at Oonoonba near Townsville, to prove TEP innovations can be applied in the wider development industry. The Village is delivering lower total energy consumption and lower peak demand compared to existing and other new residential developments, providing ongoing savings for customers.

Water



Kenya to Chinchilla Weir Pipeline, commissioned 2013 (image courtesy SunWater)

Water plays a vital role in supporting households, agriculture, business and industry. Infrastructure that delivers a clean, secure and accessible water supply is a key enabler of population growth and maximises Queensland's economic development potential. It also provides essential environmental stewardship by managing catchments, dams, stormwater and sewerage releases.

Communities across Queensland are reliant on the availability of a secure water supply. The security of water supplies is not only required for urban, agricultural and industrial needs, but also the construction, operation and maintenance of their support systems. These needs are regularly threatened in Queensland—particularly for agricultural use—as evidenced by the current Queensland drought covering more than 86 per cent of the state—the largest on record—and droughts occurring on average once every 18 years. Water infrastructure is therefore a critical foundation on which all other infrastructure depends.

However, water planning must consider both water supply and wastewater treatment. Water is heavy and expensive to transport, so it is rarely cost-effective to connect geographically isolated urban centres and water sources. This is important as it provides context and defines expectations for the water and wastewater infrastructure that is in place, and the state's commitment to better plan for infrastructure in the future.

Queensland's vast geography and diverse climate makes planning and managing a secure water supply complex. While much of the state can be affected by extended periods of drought, seasonal rains can quickly bring flooding and inundation to both coastal and inland communities. As the demands on our resources increase, rigorous assessment and planning will be essential to ensure sustainable and cost-effective access to water services.



Irrigation, Lockyer Valley

Reactive water infrastructure solutions could prove to be a more costly way to provide long-term water security. Viable funding models will be essential to enable future infrastructure to be properly planned, built when needed and targeted at the right users. Effective water resource planning will also ensure traditional sources of water supply—such as rivers, lakes and springs—are managed to safeguard the health of the water source for long-term use and ecological sustainability.

Given the challenges faced by a changing climate, population growth and constrained capital, smarter water solutions will also be required. Modular, mobile and low-cost water infrastructure will be used to meet changes in the economy and population growth. Adaptive infrastructure will be required to move with demand and ensure greater value is extracted from water infrastructure. This will mean greater efficiency and less cost for consumers.

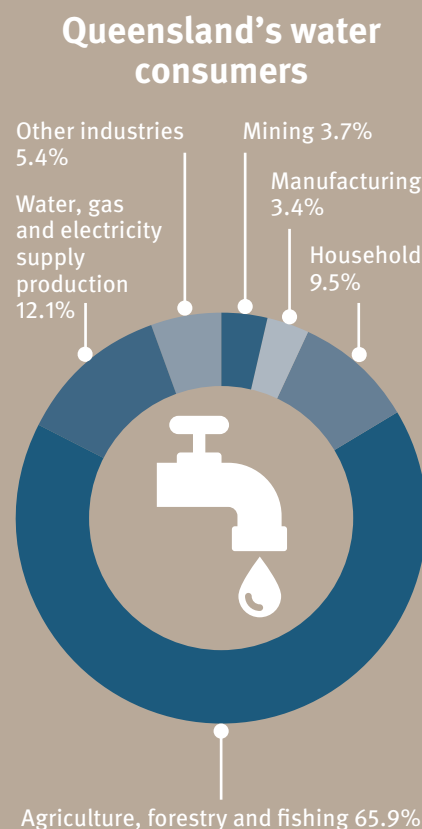
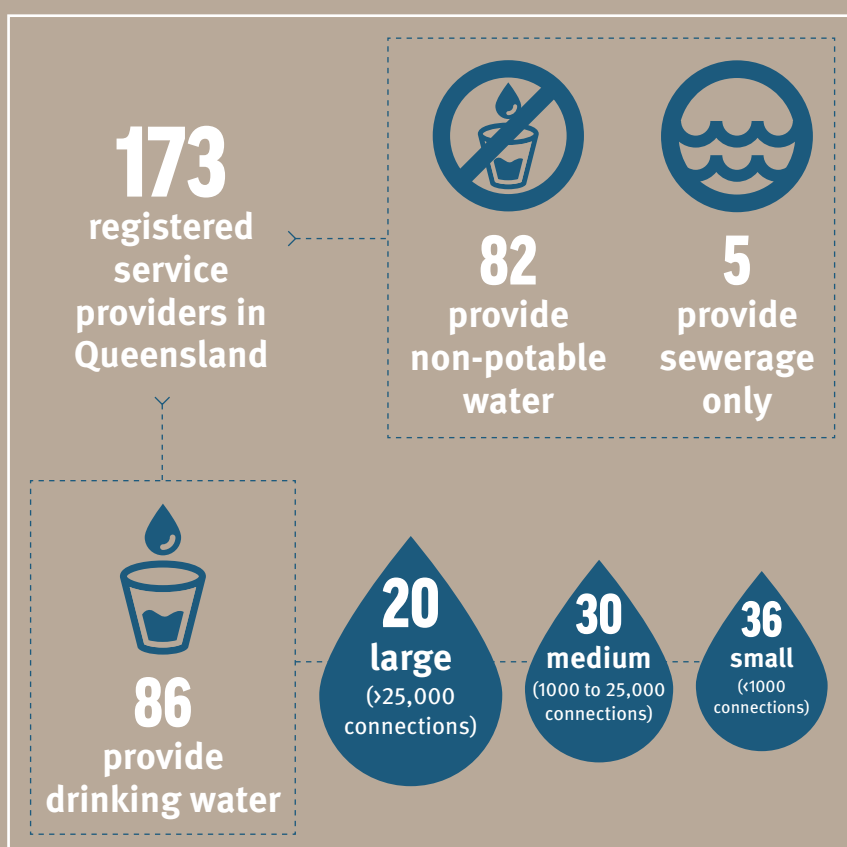
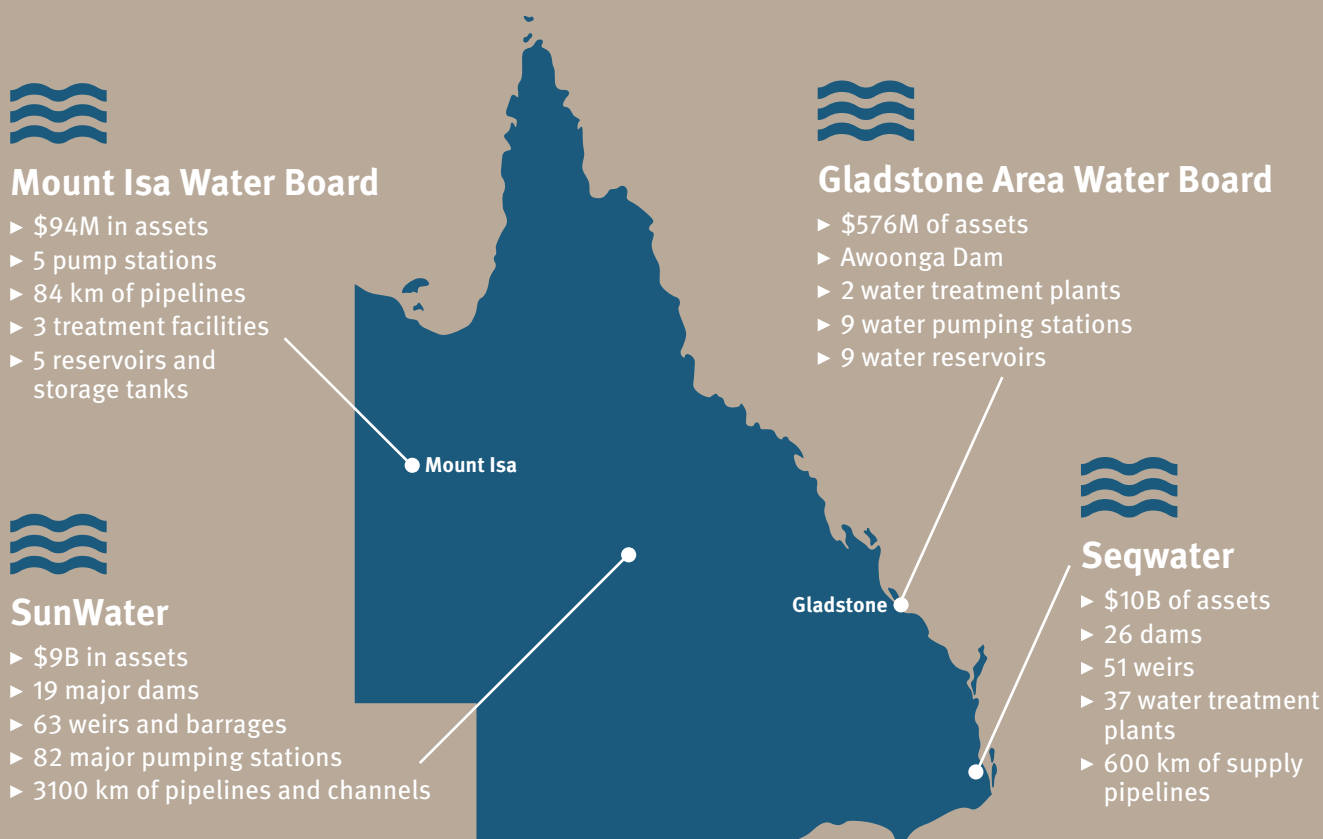
Innovative technology supporting water efficiency will play a crucial future role in our homes and industries. This means customers will be able to make better decisions about how and when they use the valuable resource. Advanced water technologies will also help cities recycle and reuse water locally and reduce the energy used to transport water.

WATER RESPONSES

The Queensland Government has developed responses to address identified challenges and guide investment across both the 1–4 year program and future opportunities. Most projects or opportunities relate to at least one response, however some will relate to more than one response. As the SIP matures, the relationship between responses and these programs will strengthen.

Working with customers and providers, identify potential infrastructure to support future water needs and economic opportunities.	Delay the need for new infrastructure by being more efficient and using alternative water sources.	Progress dam safety and capacity upgrades.	Encourage technologies in homes, farms, businesses and communities to reduce water use, improve water quality and communicate flood risks.	Use scientific-based water resource planning to support infrastructure decision-making.	Strengthen the coordination and planning of water infrastructure.
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Queensland's water supply network



1–4 year program

Project	Total estimated cost (\$M)	Contributions				Expenditure to June 2015 (\$M)	Funding (\$M)			
		Fed	QG	LG	Priv		Indicative			
							2015–16	2016–17	2017–18 to 2018–19	Beyond
South East Queensland										
Mt Crosby Water Treatment Plant upgrade	53.836		●			9.496	19.230	7.000	18.110	
North Pine Water Treatment Plant upgrade	17.919		●			1.497	6.905	9.517		
Landers Shute Water Treatment Plant upgrade	9.344		●			0.280	5.380	3.684		
Lowood Water Treatment Plant upgrade	17.569		●			0.299	2.500	10.000	4.770	
Lake Macdonald Dam upgrade	66.362		●			0.471	2.381	32.000	31.510	
Leslie Harrison Dam upgrade	50.778		●			0.269	1.047	2.000	25.000	22.462
Seqwater infrastructure other capital works	Ongoing		●				51.263			
Regional Queensland										
Paradise Dam safety upgrade	25.000		●				25.000			
Burdekin Dam safety upgrade	17.480		●						17.480	
Teemburra Dam safety upgrade	9.463		●						9.463	
Lake Julius power reliability improvements	2.345		●				0.750	0.750	0.495	0.350
Lake Julius power pole replacement	1.679		●			0.179	0.300	0.300	0.600	0.300
Moondarra to MITR Pipeline upgrade	1.300		●				0.550	0.750		
Moondarra pipeline system upgrade	8.000		●					0.400	7.600	
Mount Isa Water Board other projects	6.213		●				2.493	0.855	1.365	1.500
Gladstone to Fitzroy Pipeline Project	34.302		●			33.353	0.453	0.034	0.462	
Toolooa Bends Offline Storage and Repump Station	22.851		●			1.525	4.220	17.106		
Lower Fitzroy Infrastructure	8.523		●			7.723	0.318	0.083	0.399	

Project	Total estimated cost (\$M)	Contributions				Expenditure to June 2015 (\$M)	Funding (\$M)			
		Fed	QG	LG	Priv		2015–16	Indicative		
							2015–16	2016–17	2017–18 to 2018–19	Beyond
Regional Queensland										
Gladstone North Industrial Area water supply upgrade	6.671		●				6.671			
Awoonga Dam Pump Station upgrade	5.720		●			1.338	4.382			
Gladstone Water Treatment Plant upgrade	5.053		●			0.240	0.925	3.888		
Gladstone Water Treatment Plant to South Gladstone Reservoir Pipeline replacement	3.480		●				0.582		2.898	
Gladstone Area Water Board capital works–water treatment plants	3.249		●				0.275	0.863	1.434	0.677
Gladstone Area Water Board Boat Creek Reservoir expansion	2.078		●					2.078		
Gladstone Area Water Board other projects	39.470		●			0.237	14.719	8.421	12.149	3.944
Cairns/Mt Peter sewer upgrade	11.200		●		●			6.700	4.500	
Kingaroy Wastewater Treatment Plant upgrade ¹	26.318		●	●			0.500	5.240	4.260	
Townsville Sewage Treatment Plant upgrade ¹	51.000		●	●				5.000	15.000	
Rubyanna Wastewater Treatment Plant (RWWTP)–Stage 1 ¹	62.050		●	●				2.500	2.500	
Port Douglas Water Supply Reservoir ¹	13.491		●	●				5.000		
Mareeba Wastewater Treatment Plant upgrade–treatment plant works ¹	15.000	●	●	●				5.000		
Chinchilla Potable Water Treatment Plant upgrade Stage 1 ¹	21.500		●	●				5.000		
Various water infrastructure projects ¹	79.014		●	●	●		5.834	34.031	1.425	

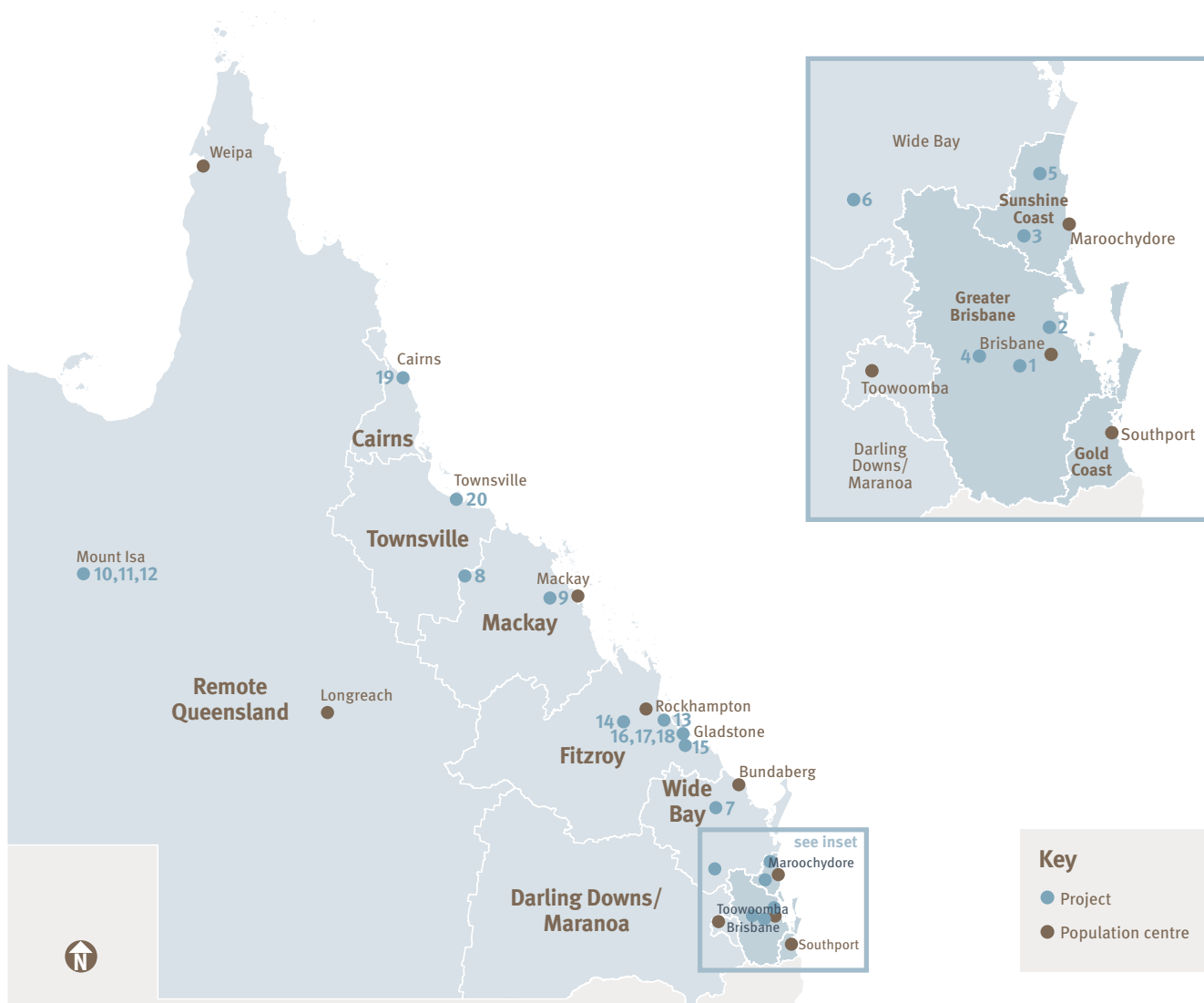
Notes:

¹ The sum of the cashflows does not equal Total Estimated Cost because cashflows are Queensland Government cashflows only.

The Queensland Government has implemented an Accelerated Works Program for regional Queensland. Some of the announced projects are individually highlighted in this document, while others may be embedded in a larger program of work.

Selected projects 1–4 year program

#	PROJECT	#	PROJECT
1	Mt Crosby Water Treatment Plant upgrade	11	Mount Isa Water Board other projects
2	North Pine Water Treatment Plant upgrade	12	Moondarra pipeline system upgrade
3	Landers Shute Water Treatment Plant upgrade	13	Gladstone to Fitzroy Pipeline Project
4	Lowood Water Treatment Plant upgrade	14	Lower Fitzroy Infrastructure
5	Lake Macdonald Dam upgrade	15	Awoonga Dam Pump Station upgrade
6	Kingaroy Wastewater Treatment Plant upgrade	16	Gladstone North Industrial Area water supply upgrade
7	Paradise Dam safety upgrade	17	Gladstone Water Treatment Plan upgrade
8	Burdekin Dam safety upgrade	18	Gladstone Water Treatment Plant to South Gladstone Reservoir Pipeline replacement
9	Teemburra Dam safety upgrade	19	Cairns/Mount Peter sewer upgrade
10	Lake Julius power reliability improvements	20	Townsville Sewage Treatment Plant upgrade



Future opportunities—short-term

Opportunity 1

Provide clear, transparent and science-based mechanisms to identify and make available water resources to support resource, agricultural and industrial expansion and development.

Opportunity 2

Work with local government on water supply solutions for communities with projected water supply shortfalls resulting from increased growth or drought.

Opportunity 3

Support and encourage innovative water efficient and waterless technology for domestic, industrial and agricultural use to delay or avoid the need to construct costly additional water infrastructure.

Opportunity 4

Maintain water supplies to meet requirements, minimise flood risks and keep dams safe.

Opportunity 5

Develop a long-term water infrastructure supply and demand assessment which addresses water infrastructure projects and opportunities.

Opportunity 6

In partnership with local governments and water utilities, assess options to provide new water sources to the northern part of SEQ where demand is forecast to exceed supply beyond 2030.

Case study Improving infrastructure efficiency through smart metering technology

In order to produce accurate forecasts for water usage, a good understanding of current water usage patterns is needed. The residential sector consumes about 70 per cent of the water used in SEQ, therefore understanding usage patterns of residential water customers is a key driver in producing accurate water usage forecasts.

Many of the current assumptions used to forecast water usage were established prior to or during the SEQ Millennium Drought. There have been significant behavioural and structural changes as a result of this drought and therefore these assumptions may no longer be valid. Forecasts based on these assumptions are therefore unlikely to be accurate, creating risks in terms of efficient infrastructure investments and revenue generation.

Demand forecasts are critical to the planning of future infrastructure, assessing demand management measures and pricing. Differences between actual and forecast usage can lead to potential over-investment, incurring unnecessary costs or under-investment that results to service shortfalls.

To address this situation Seqwater, in collaboration with other SEQ service providers and Griffith University, has commenced a trial of smart meters on selected water connections. This will allow the collection of more detailed data to better understand residential water use behaviour, including changes in daily use associated with rainfall and temperature, and peak water demand patterns. In particular, data from these trials will be used to monitor changes in water usage due to changes in prices, climatic conditions, population and demand management measures.

The data will allow more reliable forecasts and better decision-making in terms of future planning for infrastructure investment. It will enable service providers and Seqwater to accurately assess a wide range of infrastructure utilisation options. The data will also provide Seqwater with early awareness of any 'rebound' in demand following the drought and prepare for changes in demand, rather than needing to be reactive.

Future opportunities—medium/long-term

Opportunity 7

Facilitate more efficient use of existing water resources and infrastructure assets and optimise access through continued expansion of water trading and flexible water sharing arrangements across the state.

Opportunity 8

Leverage infrastructure innovation and water conservation by encouraging the take-up of technology such as:

- ▶ alternative water use technologies for stormwater and water recycling, including smart systems that prevent run-off and treat water for fit-for-purpose reuse opportunities
- ▶ advanced water technologies to recycle and reuse water locally, and reduce the energy used to transport water
- ▶ solutions for sewage treatment plants to generate energy, rather than just using it
- ▶ water supply to on-site energy generation solutions
- ▶ modular, mobile and low-cost water supply and sewage management infrastructure.

Opportunity 9

Maximise the use of alternative water sources and supplies, such as treated industrial water.

Case study Mackay Regional Council's Smart Metering Technology

Smart meter technology is helping the occupants of 35,000 households across the Mackay region to save water and money by monitoring their consumption in real-time via mobile phones and computers.

Developed by Taggle Systems Pty Ltd and adopted, installed and expanded by the Mackay Regional Council after a pilot program in 2011, the automated meter reading (AMR) devices are fitted to water meters. The devices relay hourly consumption data back to a central database for analysis and decision making.

The data, analysed using algorithms developed by Mackay Regional Council, is then made available to individual consumers via a specialised website, www.myh2o.qld.gov.au. It can be accessed using personal technology such as tablets and smart phones. The site also facilitates a set of alerts which can notify consumers of leaks and high consumption via SMS and emails.

According to recent data, over 500 leaks are being detected every month across the region.

Smart meter technology has proven to be a valuable tool in Mackay Regional Council's demand management program, which is currently in its third year. The program has delivered around 10 per cent reduction in consumption, which in turn has helped the council to significantly defer planned capital expenditure on capacity expansion.

This technology is being expanded to remotely monitor several other items such as sewer manholes, storm water levels, rainfall, and soil moisture. This project, along with other initiatives currently being deployed, will form the basis for Mackay's Smart City initiative.

The Smart Metering Technology was named as a finalist at the Premier's 2014 Sustainability Awards.

Health



As Queensland's population continues to grow, so does the community's expectation for improved and timely access to health services. Over recent years, the state has made significant investments in health infrastructure through a range of major capital projects. This includes new world-class teaching hospitals—Gold Coast University Hospital, Sunshine Coast University Hospital and the Lady Cilento Children's Hospital—as well as redeveloped hospitals and enhanced facilities in regional centres such as Cairns, Townsville and Mackay.

The provision of safe, sustainable health services into the future will be impacted by a number of significant pressures including changing demographics, an ageing population and increasing levels of obesity and chronic disease. To continue delivering affordable, quality care, we need health infrastructure with the flexibility and capacity to meet the future needs of the community. This demands a shift away from intensive capital investments to better utilisation of existing facilities and new models of care.

Going forward, investment in health infrastructure will increasingly be targeted at maintaining and improving existing assets. Currently much of the building stock in the health portfolio is ageing. To meet modern clinical standards these buildings will require ongoing refurbishment and upgrade work, and where appropriate replacement.

Innovation in health service delivery can also provide alternatives to investment in new infrastructure. This includes providing more care in the home or in community settings, improved telehealth services in regional and rural areas, and targeted hospital avoidance programs. Opportunities also exist to partner with non-government organisations and the private sector to better utilise existing facilities or jointly deliver new assets.



Townsville Hospital

Harnessing the potential of rapid advancements in technology will also enable more integrated, quality and safe health services. As technology evolves, patients will be able to access health care services in new and innovative ways. It will also provide clinicians with better access to patient information and the ability to offer previously unavailable treatment options.

Despite advances in technology and the benefits of alternative service delivery, additional built infrastructure will still be required to meet increasing demand for health services.

HEALTH RESPONSES

The Queensland Government has developed responses to address identified challenges and guide investment across both the 1–4 year program and future opportunities. Most projects or opportunities relate to at least one response, however some will relate to more than one response. As the SIP matures, the relationship between responses and these programs will strengthen.

Focus more on prevention to reduce demand on strained resources.

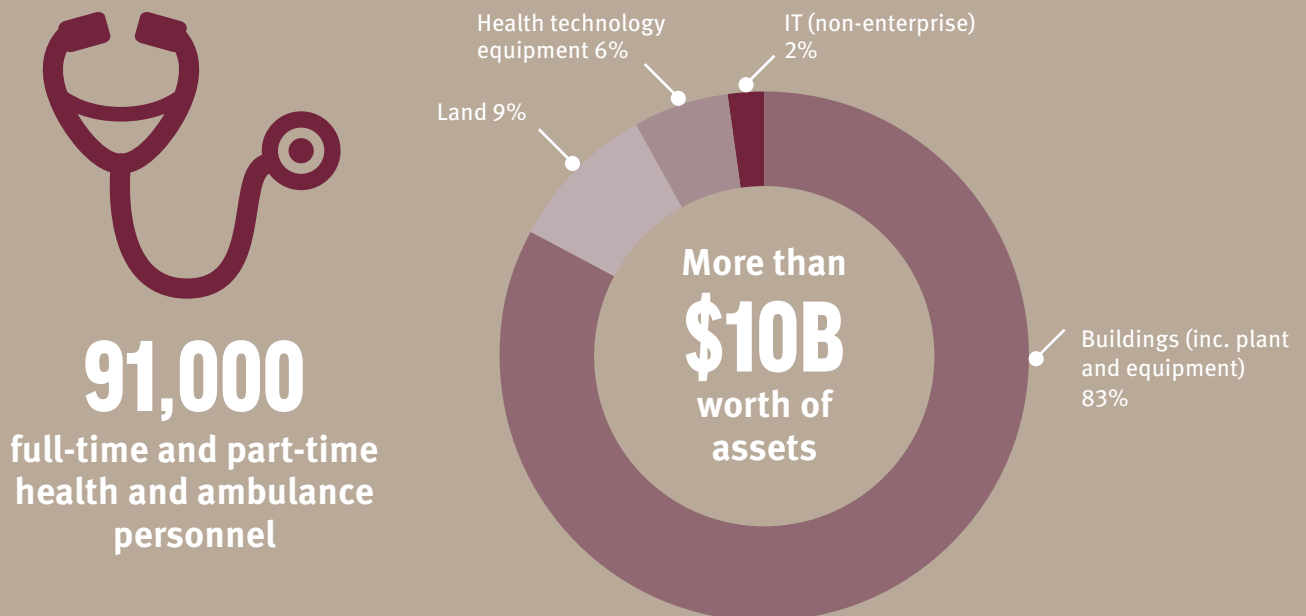
Employ more alternative service delivery models to improve access and patient experience and delay the need for new infrastructure.

Seek innovative partnerships with industry to deliver health services and fit-for-purpose health facilities.

Use new digital infrastructure that improves efficiency and the patient experience.

Deliver adaptive infrastructure that flexibly responds to changing service needs.

Queensland's public health system



120
hospitals



32
multi-purpose health services

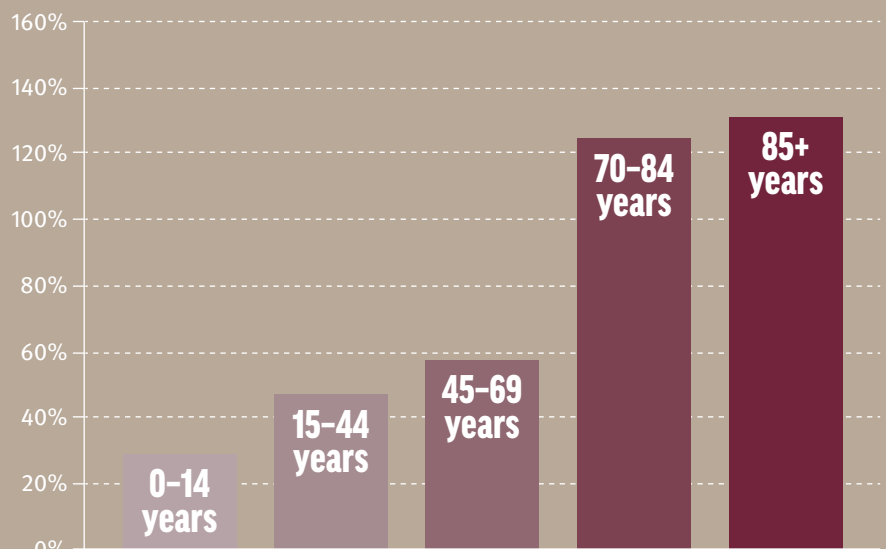
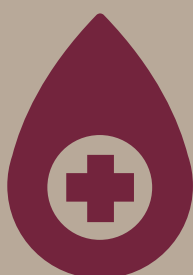


75
rural community clinics



7
ambulance communication centres and 290 response locations

Overall demand for acute public hospital services is predicted to grow by **64%** to 2026–27



Projected growth in demand for acute admitted public hospital services from 2012–13 to 2026–27 by age group

1–4 year program

Project	Total estimated cost (\$M)	Contributions				Expenditure to June 2015 (\$M)	Funding (\$M)			
		Fed	QG	LG	Priv		2015–16	Indicative		
								2016–17	2017–18 to 2018–19	Beyond
South East Queensland										
Lady Cilento Children's Hospital completion	1433.145		●			1364.798	41.000	27.347		
Gold Coast University Hospital completion	1761.853		●			1710.049	31.804	20.000		
Sunshine Coast University Hospital completion	1872.151		●			617.896	488.717	178.545	38.213	548.780
Ipswich Hospital–additional beds	113.000		●			111.310	1.690			
Southern Queensland Centre of Excellence Stage 2	10.000		●			0.350	8.850	0.800		
Centre for Children's Health Research	125.000		●			107.470	10.530	7.000		
Hummingbird House–Palliative Care Hospice for Children	3.000	●	●				3.000			
Children's Health Queensland HHS various projects ¹	Ongoing		●				1.668			
Metro North HHS various projects ¹	Ongoing		●				14.364			
Metro South HHS various projects ¹	Ongoing		●				11.086			
Gold Coast HHS various projects ¹	Ongoing		●				3.543			
Sunshine Coast HHS various projects ¹	Ongoing		●				2.969			
West Moreton HHS various projects ¹	Ongoing		●				2.488			
Queensland Ambulance Service										
Birtinya Station	6.000		●				2.000	3.000	1.000	
Yandina Station	2.200		●				0.100	2.100		
Kenilworth Station	1.500		●				0.100	1.000	0.400	
Coral Gardens Station replacement	3.000		●				0.100	0.900	2.000	
Russell Island Station and residence replacement	1.318		●			0.729	0.589			
Regional Queensland										
Cairns Hospital redevelopment	446.300		●			400.953	40.000	5.347		
Mackay Base Hospital expansion completion	408.285		●			392.957	8.516	6.812		
Rockhampton Hospital expansion	173.064	●	●			166.925	5.139	1.000		
Rockhampton Hospital helipad	5.000		●			2.478	2.522			
Rockhampton Intensive Care Unit	12.674		●			6.223	6.451			

Project	Total estimated cost (\$M)	Contributions				Expenditure to June 2015 (\$M)	Funding (\$M)			
		Fed	QG	LG	Priv		2015–16	Indicative		
								2016–17	2017–18 to 2018–19	Beyond
Regional Queensland										
Townsville Hospital expansion	334.000	●	●			308.587	18.413	7.000		
Mount Isa Health Campus redevelopment	62.575		●			46.271	10.000	6.304		
Alpha Hospital and Co-located Emergency Services	17.500		●			1.144	14.356	2.000		
Kowanyama staff accommodation	1.375	●	●			0.100	1.275			
Palm Island Home and Community Care facility and Cape York Primary Health Care Centre improvements completion	0.691	●	●				0.691			
Enhancing Regional Hospitals Program (Roma, Hervey Bay, Gladstone and Caloundra)	180.000		●				20.600	113.400	46.000	
Health and Hospital Fund–Regional Priority Round	108.528	●				59.866	40.455	5.207	3.000	
Rural and Remote Infrastructure Rectification Works	51.580		●			49.068	2.512			
Cairns and Hinterland HHS various projects ¹	Ongoing		●				3.096			
Central Queensland HHS various projects ¹	Ongoing		●				2.274			
Central West HHS various projects ¹	Ongoing		●				1.155			
Darling Downs HHS various projects ¹	Ongoing		●				7.783			
Mackay HHS various projects ¹	Ongoing		●				1.489			
North West HHS various projects ¹	Ongoing		●				0.869			
South West HHS various projects ¹	Ongoing		●				0.882			
Torres and Cape HHS various projects ¹	Ongoing		●				1.434			
Townsville HHS various projects ¹	Ongoing		●				4.763			
Wide Bay HHS various projects ¹	Ongoing		●				2.125			

1–4 year program

Project	Total estimated cost (\$M)	Contributions				Expenditure to June 2015 (\$M)	Funding (\$M)			
		Fed	QG	LG	Priv		2015–16	Indicative		
								2016–17	2017–18 to 2018–19	Beyond
Regional Queensland										
Queensland Ambulance Service										
Rainbow Beach Station	1.500		●			0.020	0.300	1.180		
Bundaberg Station	5.000		●			0.992	2.000	2.008		
Collinsville Station replacement	1.800		●			0.054	1.046	0.700		
Miriam Vale Station replacement	2.000		●			0.030	1.970			
Thursday Island Station and relief accommodation	5.100		●				0.200	2.100	2.800	
Statewide										
Area Health Demand Management (minor infrastructure projects)	297.500		●			277.309	8.000	12.191		
Faster Emergency Care in Queensland Public Hospitals initiative	147.187	●				142.377	4.810			
Regional Cancer Centres	164.120	●				156.234	7.279	0.607		
National Partnership Agreement Improving Public Hospitals	192.686	●				181.781	10.905			
Community Mental Health Program—housing refurbishment	4.851		●			0.798	4.053			
Queensland Plan for Mental Health—new facilities	130.562		●			117.615	4.000	8.947		
Telehealth (regional, rural and remote)	2.000		●			0.680	1.320			
Backlog Maintenance Remediation Program	326.816		●			209.737	58.540	58.540		
Capital Program Land Acquisition	4.162		●				4.162			
Housing stock upgrades (staff accommodation)	Ongoing		●				1.000	2.694	2.000	
Master planning studies	Ongoing		●				0.850	2.965	1.700	
Priority Capital Program	Ongoing		●				45.000	80.000	305.827	
Emergent Works Program	Ongoing		●				23.240	116.524	40.000	
Minor capital projects and acquisitions ¹	Ongoing		●				33.557	80.000	160.000	
Queensland Ambulance Service										
QAS minor works	Ongoing		●				3.000	3.000	6.000	
Strategic land acquisitions	2.500		●				2.500			

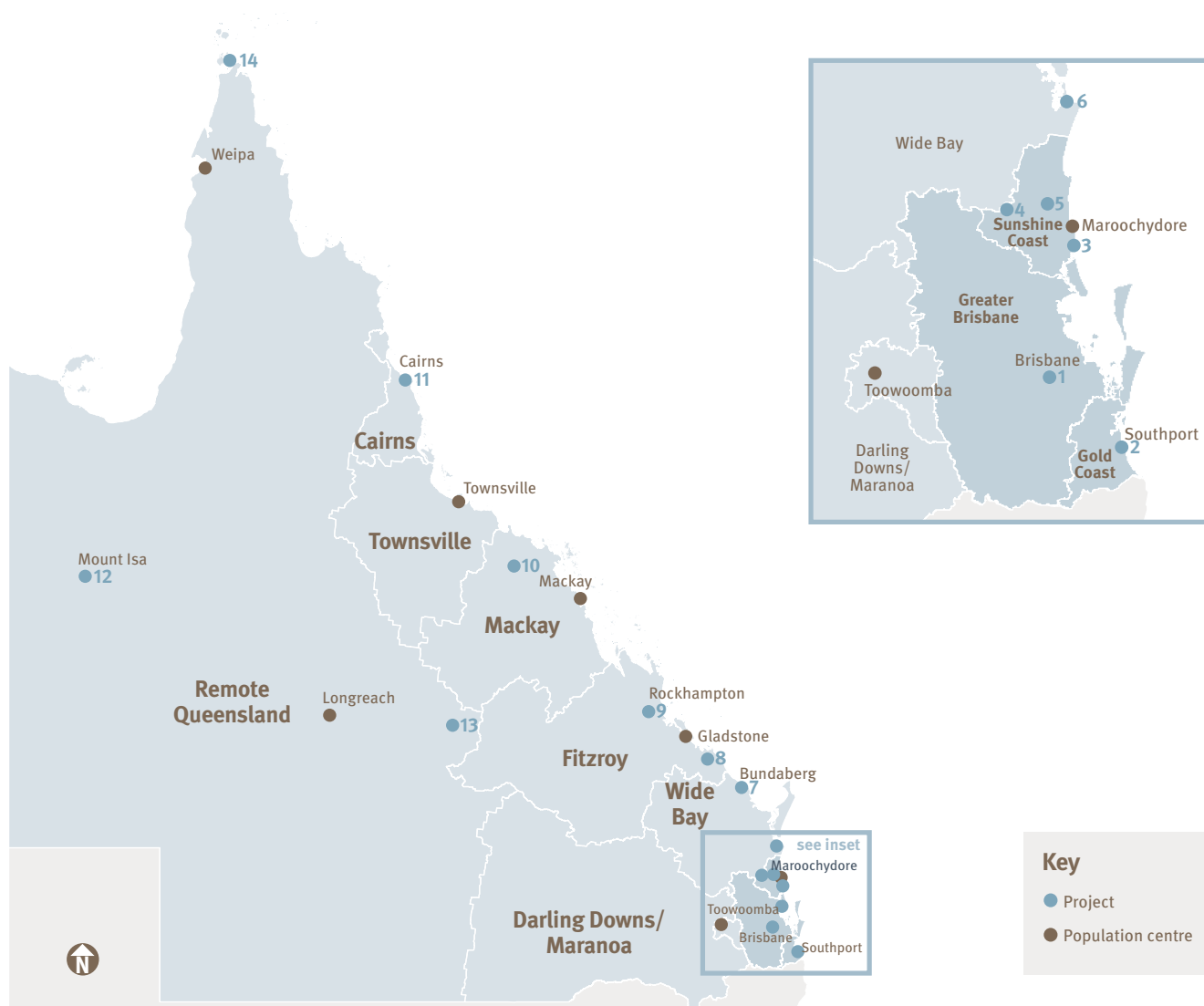
Notes:

¹ Statewide funding has been included but has not yet been allocated to Hospital and Health Services beyond 2015–16.

The Queensland Government has implemented an Accelerated Works Program for regional Queensland. Some of the announced projects are individually highlighted in this document, while others may be embedded in a larger program of work.

Selected projects 1–4 year program

#	PROJECT	#	PROJECT
1	Southern Queensland Centre of Excellence Stage 2	8	Miriam Vale QAS Station replacement
2	Coral Gardens QAS Station replacement	9	Rockhampton Intensive Care Unit
3	Sunshine Coast University Hospital	10	Collinsville QAS Station replacement
4	Kenilworth QAS Station	11	Cairns Hospital redevelopment
5	Yandina QAS Station	12	Mount Isa Health Campus redevelopment
6	Rainbow Beach QAS Station	13	Alpha Hospital and Co-located Emergency Services
7	Bundaberg QAS Station	14	Thursday Island QAS Station and relief accommodation



Future opportunities—short-term

Opportunity 1

Work with primary health care networks, primary care providers and the non-government sector to promote health, wellbeing and disease prevention to reduce hospital admissions.

Opportunity 2

Reduce reliance on physical infrastructure through increased use of alternative service delivery models or locations that support provision of health care in non-hospital settings. This may include community-based solutions, increased use of day services and ‘virtual’ models of care including ‘hospital in the home’.

Opportunity 3

Leverage current and future capacity in the private health sector for treating public patients through the measured use of private sector service agreements.

Opportunity 4

Improve health outcomes for people in rural and remote Queensland through telehealth services that improve access and quality of clinical services.

Opportunity 5

Align the current built asset portfolio with anticipated future asset needs by developing maintenance, refurbishment and renewal plans that assist in repurposing, multi-use or sharing of facilities.



Cleveland Ambulance Station

Future opportunities—medium/long-term

Opportunity 6

Create integrated care models by utilising aged care facilities, working with private hospitals and mobile delivery services to meet changing demographic needs such as an ageing population.

Opportunity 7

Develop a broad range of approaches to address high levels of anticipated growth in SEQ.

Opportunity 8

Increase the use of mobile delivery models, personal health devices and remote monitoring technology to support efficient and effective health service delivery.

Opportunity 9

Collaborate with other government agencies to deliver agile infrastructure solutions to meet growth and changing health demands across Queensland.

Case study Bringing health services closer to home

The greatest growth in demand for renal dialysis is in the Metro South Health region, with existing infrastructure already at capacity. In order to meet demand, Metro South Health will open its first stand-alone renal dialysis unit at Brookwater, south west of Brisbane.

This facility, operated in partnership with Mater Health Services, is located in the Brookwater Village Shopping Centre. The new renal dialysis unit will provide seven public renal dialysis chairs for patients who currently visit either the Princess Alexandra Hospital or Ipswich Hospital. Each additional chair creates capacity to treat four extra dialysis patients.

As well as increasing the number of renal dialysis chairs available, it will enable patients to receive services closer to home, with immediate access to retail and other services. The use of similar alternative delivery models will continue to be considered in planning to meet future demand for health services.

Case study Sunshine Coast University Hospital

Currently under construction, the \$1.87 billion Sunshine Coast University Hospital (SCUH) will be the focus of the new 20 hectare Oceanside Kawana Health Precinct. It will transform the way health care is delivered on the Sunshine Coast. Along with the SCUH, the precinct will be home to the Skills, Academic and Research Centre and the Sunshine Coast University Private Hospital. The precinct will also provide opportunities for health-related commercial developments.

When complete, SCUH will open with 450 beds but can be expanded to meet the needs of the growing region. It will offer a range of new and expanded free

public hospital services to patients with complex or life-threatening conditions. This means the 10,000 patients who currently travel to Brisbane for treatment each year will be safely cared for on the Sunshine Coast.

The campus model will provide Sunshine Coast patients with highly-trained staff that will be able to work across the public and private hospitals and have easy access to teaching and research opportunities. The project is providing a boost to the local economy and is a catalyst for local commercial and residential development.



Aerial photo supplied by Lend Lease provides an update of the construction progress at the Sunshine Coast University Hospital site (23 December 2015)

Education and training



Classroom learning, Millmerran State School

High quality education is the cornerstone for preparing Queenslanders to participate successfully in society. Across the state, education infrastructure supports the delivery of early childhood programs, primary and secondary schooling, and vocational training to more than half a million students.

Queensland continues to experience increased demand for education services in line with population growth. These have included the number of children participating in kindergarten, increases in Year 12 completion, compulsory Prep enrolment, as well as increases in special school enrolments and the number of students accessing special education programs and services.

In response to this service demand, the state has continued to invest in education infrastructure across urban, rural and remote school and training locations. Some of the more significant education capital projects in recent years have included provision of infrastructure for the move of Year 7 students into secondary school, addressing maintenance needs through the School Infrastructure Enhancement program, investment in new schools in Mackay, Toowoomba, Pimpama and Burpengary, the announcement of a new special school in Cairns and a new primary school in Townsville, as well as a range of renewal projects in other regional centres.

The future provision of education will be impacted by many challenges that are expected to place additional pressures on early childhood, school and training infrastructure. These challenges include population growth, delivering on the priorities of the Advancing Education Action Plan, Closing the Gap and NAPLAN, as well as national curriculum requirements.

To address these, we will need assets that are high quality, flexible and future focused. This will entail ongoing investment as many of Queensland's education assets are ageing, affecting overall quality and suitability to respond to the future of education. We will need to be judicious in our planning methods, prioritising investment according to highest need as well as adopting innovative



Integrated learning, Mackay (image courtesy Central Queensland University)

solutions that accommodate our growing need for education infrastructure. Some of these innovative models may include public private partnerships, community partnerships, co-investment and co-location opportunities. In addition, innovative asset management arrangements for TAFE Queensland will ensure priority access to state-owned training assets, to support the delivery of quality training that boosts the skills of Queensland's workforce.

The government will continue to support the provision of early childhood education and care services and training facilities, with delivery predominantly undertaken by the private and not-for-profit sectors. The Queensland Government has recently expanded and strengthened the Building and Construction Training Policy to maximise apprenticeship and traineeship opportunities, and increased economic benefits for Aboriginal and Torres Strait Islander people. The policy represents a partnership between the building and construction industry and the Queensland Government to develop the industry's skills base and future workforce capability on government building and civil construction projects.

The future of investment in education infrastructure will not only include built assets, but will also embrace innovative, alternate models that are cost effective, provide maximum benefit and appropriately support the educational needs of the Queensland community.

EDUCATION AND TRAINING RESPONSES

The Queensland Government has developed responses to address identified challenges and guide investment across both the 1–4 year program and future opportunities. Most projects or opportunities relate to at least one response, however some will relate to more than one response. As the SIP matures, the relationship between responses and these programs will strengthen.

Create knowledge precincts on the sites we control by co-locating education with industry and local communities.	Provide fit-for-purpose and future focused infrastructure that maximises educational outcomes.	Support infrastructure that maximises export earnings from education.	Increase the use of digital service delivery to delay the need for new infrastructure.	Adopt a 'renew before new' approach to infrastructure to meet the demand for education.	Protect Queensland's education heritage.
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Education and training

90
combined
schools



42
special
schools



170
early
childhood



916
primary
schools



183
secondary
schools



3
academies



\$608M
will be invested in
education, training,
early childhood
education, and
pre-prep learning
facilities
during 2015–16

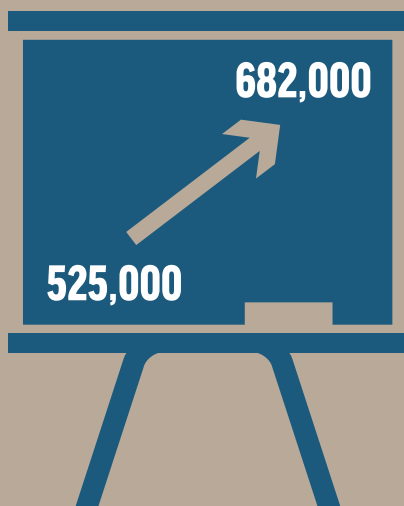


40
training facilities

An additional
60 to 70
new schools
may be required
over the next
10 to 20
years



Over the next
15 years,
state school
enrolments
will increase by
around
30%



1–4 year program

Project	Total estimated cost (\$M)	Contributions				Expenditure to June 2015 (\$M)	Funding (\$M)			
		Fed	QG	LG	Priv		Indicative			
							2015–16	2016–17	2017–18 to 2018–19	Beyond
South East Queensland										
Construction of 10 new schools in South East Queensland ¹	420.312		●			48.911	108.222	37.143	36.597	189.439
Pimpama State Secondary College Stage 3	10.000		●				8.000	2.000		
Springfield Central State High School Stage 3	15.000		●				9.000	6.000		
Brisbane State High School redevelopment	26.703		●			20.763	5.940			
Minor capital works projects	30.000		●				10.000	10.000	10.000	
Serviceton South early years service	2.350		●			0.015	2.203	0.132		
Regional Queensland										
Highfields State Secondary College Stage 2	15.000		●				3.000	12.000		
Cairns Special School ²	25.000		●				8.000	17.000		
Townsville primary school and planning for new secondary school	90.000		●				10.000	25.000	55.000	
Gordonvale early years centre	2.050		●			0.166	1.884			
Statewide										
School Infrastructure Enhancement Program	300.000		●				70.000	73.000	157.000	
Maintenance and facilities service payments	1230.637		●				115.536	129.344	288.015	697.742
Statewide growth in learning spaces ^{3, 4}	460.650		●				116.399	117.638	226.613	
Statewide maintenance program—training assets ⁵	11.890		●				11.890			
TAFE facilities upgrade	2.500		●				2.500			
Capital grants to non-state schools in Queensland	359.100		●				122.575	92.575	143.950	

Notes:

¹ 10 new schools: Pimpama State Primary College; Burpengary State Secondary College; Pallara State School (relocated to new site); Bellmere State School; Deebing Heights State School; Griffin State School; new primary school in Redbank Plains; new primary school in Springfield; new primary school in Caboolture North East; and new high school in Bellbird Park.

² The Queensland Government has implemented an Accelerated Works Program for regional Queensland. Some of the announced projects are individually highlighted in this document, while others may be embedded in a larger program of work.

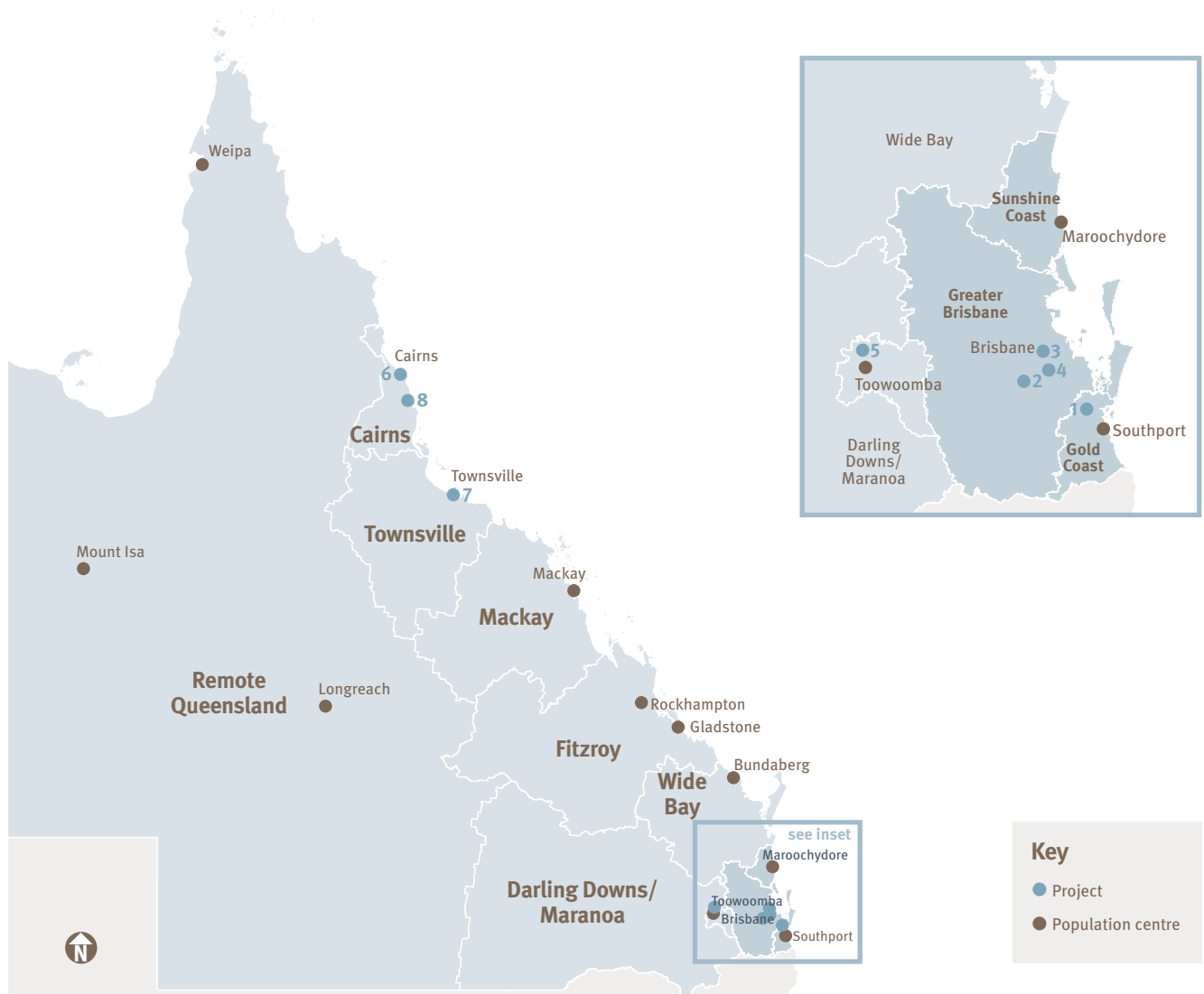
³ 2015–16 figure sourced from Department of Education and Training Capital Acquisition Statement 1 July 2015.

⁴ Estimates provided for 2016–17 through to 2018–19 are for in-school growth (planned classroom requirement and emergent requirement).

⁵ Department of Education and Training is currently developing a Strategic Asset Management Plan. Projections are for 2015–16 only with an update to the program expected in 2016–17 to align with implementation of the plan.

Selected projects 1–4 year program

#	PROJECT
1	Pimpama State Secondary College Stage 3
2	Springfield Central State High School Stage 3
3	Brisbane State High School redevelopment
4	Serviceton South early years service
5	Highfields State Secondary College Stage 2
6	Cairns Special School
7	Townsville primary school and planning for new secondary school
8	Gordonvale early years service



Future opportunities—short-term

Opportunity 1

Employ non-infrastructure solutions to improve the management of over and under-utilised education and training facilities.

Opportunity 2

Increase third party, including community, use of existing buildings and facilities by examining and challenging traditional operating models, including the use of sports and recreation facilities at state schools.

Opportunity 3

Implement asset lifecycle assessment programs for all state schools, providing schools with information to support long-term maintenance planning.

Opportunity 4

Investigate the feasibility of sharing surplus or under-utilised education and training facilities with other government departments.

Opportunity 5

Support schools to establish strategic infrastructure plans that align curriculum and education outcomes to future school infrastructure needs.



Trinity Bay State High School

Future opportunities—medium/long-term

Opportunity 6

Focus on minor works or upgrade programs that make existing infrastructure fit-for-purpose to meet current and future teaching requirements, including incorporating new technologies.

Opportunity 7

Ensure all education facilities identified as being of historical significance or heritage value are appropriately used and protected.

Opportunity 8

Work with local government, developers and other government agencies to collaboratively plan to meet the needs of growing and changing communities by delivering agile shared infrastructure solutions.

Opportunity 9

Encourage alternative capital investment mechanisms to support growth and service demand pressures impacting on the education and training sectors.

Opportunity 10

Partner with other education providers to meet the education and training needs of communities through co-sharing or co-location of facilities.

Case study Roma State College integrated infrastructure delivery trial

A four-year project is underway across some Queensland schools to trial a more strategic and integrated approach to investment, maintenance, renewal and capital projects. The trial will provide schools with greater autonomy over maintenance investment to improve the suitability of facilities to meet the needs of individual schools.

In July 2015, an Integrated Infrastructure Delivery Trial commenced at Roma State College. The trial explored a new approach to infrastructure maintenance, and aimed to achieve greater value and autonomy for

the school in relation to its maintenance budget. The college worked collaboratively with the Department of Housing and Public Works and the Department of Education and Training to develop a school strategic infrastructure plan.

The plan outlines a four-year program of renewal and refurbishment needs and assessed the suitability of the school's infrastructure to deliver future curriculum needs. It also included an asset lifecycle assessment, which identified infrastructure investment priorities.



Digital



Digitally connected community with access anywhere anytime

State Infrastructure Plan Part B: Program

Secure, reliable and cost-effective digital infrastructure is a fundamental enabler of social and economic development in the digital age. It connects communities and markets, and provides the opportunity for people to improve their livelihoods and lifestyles.

The emergence of the digital economy offers exciting opportunities for all Queenslanders to benefit from improved government services and innovation, and productivity gains across the economy.

While telecommunication networks are regulated by the Australian Government and delivered largely by the private sector, the Queensland Government plays a vital role in ensuring the state has access to world-class digital infrastructure. This is fundamental to achieving the government's Advance Queensland vision to create the knowledge-based jobs of the future and build a strong innovation and entrepreneurial culture.

Governments at all levels are increasingly using a 'digital first' approach to the design and delivery of future infrastructure and services. In a decentralised state like Queensland, there is enormous potential to improve service delivery by optimising the use of existing technology. Initiatives such as the One-Stop-Shop approach will provide Queenslanders with simple, consistent access to a host of government services, regardless of where they live.

The state is also leveraging the potential of digital technology to transform operations across a broad range of sectors. Our public safety agencies and frontline police and emergency services personnel are benefiting from more reliable and secure communications through the rollout of the Government Wireless Network in SEQ. Opportunities to provide critical information to officers in the field are also being explored.

In addition, the Queensland Government is working with providers and the Australian Government to facilitate improvements in the state's digital infrastructure to improve communication and reduce blackspots.



Government Wireless Network

There are also opportunities to leverage and optimise existing and planned investments in public infrastructure including fibre, cellular, radio, microwave and wireless networks to reduce government costs.

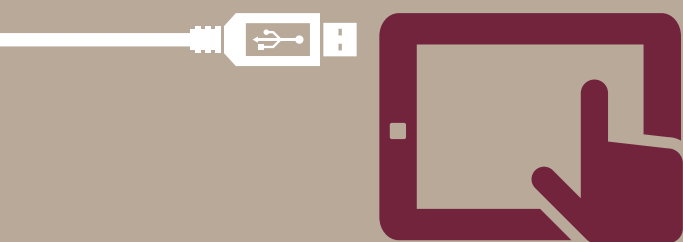
In other sectors, such as health and education, more reliable and accessible digital infrastructure is helping to improve outcomes and reduce costs. Students can access more digital learning resources and greater collaboration and communication among schools, teachers and students can be achieved. Services such as telehealth can be used to deliver more care and treatment within the home, and digital health tools can help patients better self-manage their conditions and services.

Broadband services and innovation in digital, mobile and cloud technologies are also changing the nature of work. Opportunities for remote or distributed working arrangements via telecommuting or flexible work centres continue to grow. Investments in smart digital technology are also enabling consumers, government and industry to make better decisions that can reduce energy consumption, traffic congestion and impacts on the environment.

DIGITAL RESPONSES

The Queensland Government has developed responses to address identified challenges and guide investment across both the 1–4 year program and future opportunities. Most projects or opportunities relate to at least one response, however some will relate to more than one response. As the SIP matures, the relationship between responses and these programs will strengthen.

Work with providers and the Australian Government to improve digital infrastructure.	Develop infrastructure in regions that promotes digital inclusion.	Use government's purchasing power to drive digital transformations across all asset classes.			
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Visits to **qld.gov.au** increased
from 8.8M in 2013–14 to

13.7M
in 2014–15



In May 2015, NBN services
were available to almost

200,000

premises in Queensland



In 2012–13 of Queenslanders aged 15 years+

97% accessed the internet at home

44% accessed the internet at work

By 2019, it is predicted that:



video traffic will be
80%
of all consumer
internet traffic,
up from 64%
in 2014



nearly
2 years
of video content
will cross
the network
every second



smartphones
will be
responsible for
3/4
of mobile
data traffic



global fixed
broadband speeds
will reach
43 Mbps,
up from
20 Mbps in 2014

1–4 year program

Project	Total estimated cost (\$M)	Contributions				Expenditure to June 2015 (\$M)	Funding (\$M)			
		Fed	QG	LG	Priv		2015–16	Indicative		
							2015–16	2016–17	2017–18 to 2018–19	Beyond
South East Queensland										
Government Wireless Network	565.000	●	●			61.500	57.000	41.000	68.000	337.500
Regional Queensland										
Capital grant to connect remote communities in Central West Queensland ¹	16.500	●	●	●				6.250		
Statewide										
Mobile Black Spot Programme ²	53.850	●	●	●			2.000	5.000	3.000	
Broadband Upgrade Project—fibre optic cabling for schools	137.000		●				27.400	27.400	54.800	27.400

Notes:

¹ The Queensland Government has committed \$6.25 million towards a project in the Barcoo–Diamantina region that will link the towns of Windorah, Birdsville, Bedourie, Jundah and Stonehenge through an optic fibre network and provide high speed internet and 4G mobile service to the region. Funding for the project will be provided by the two shires and the Queensland and Australian Governments (via Round 2 of the National Stronger Regions Fund).

² The sum of the cashflows does not equal Total Estimated Cost because cashflows are Queensland Government cashflows only. State commitment is \$10M however the yearly splits shown are estimates only because the rollout schedule for the towers is still to be determined.

The Queensland Government has implemented an Accelerated Works Program for regional Queensland. Some of the announced projects are individually highlighted in this document, while others may be embedded in a larger program of work.

Case study Covering Queensland's mobile black spots

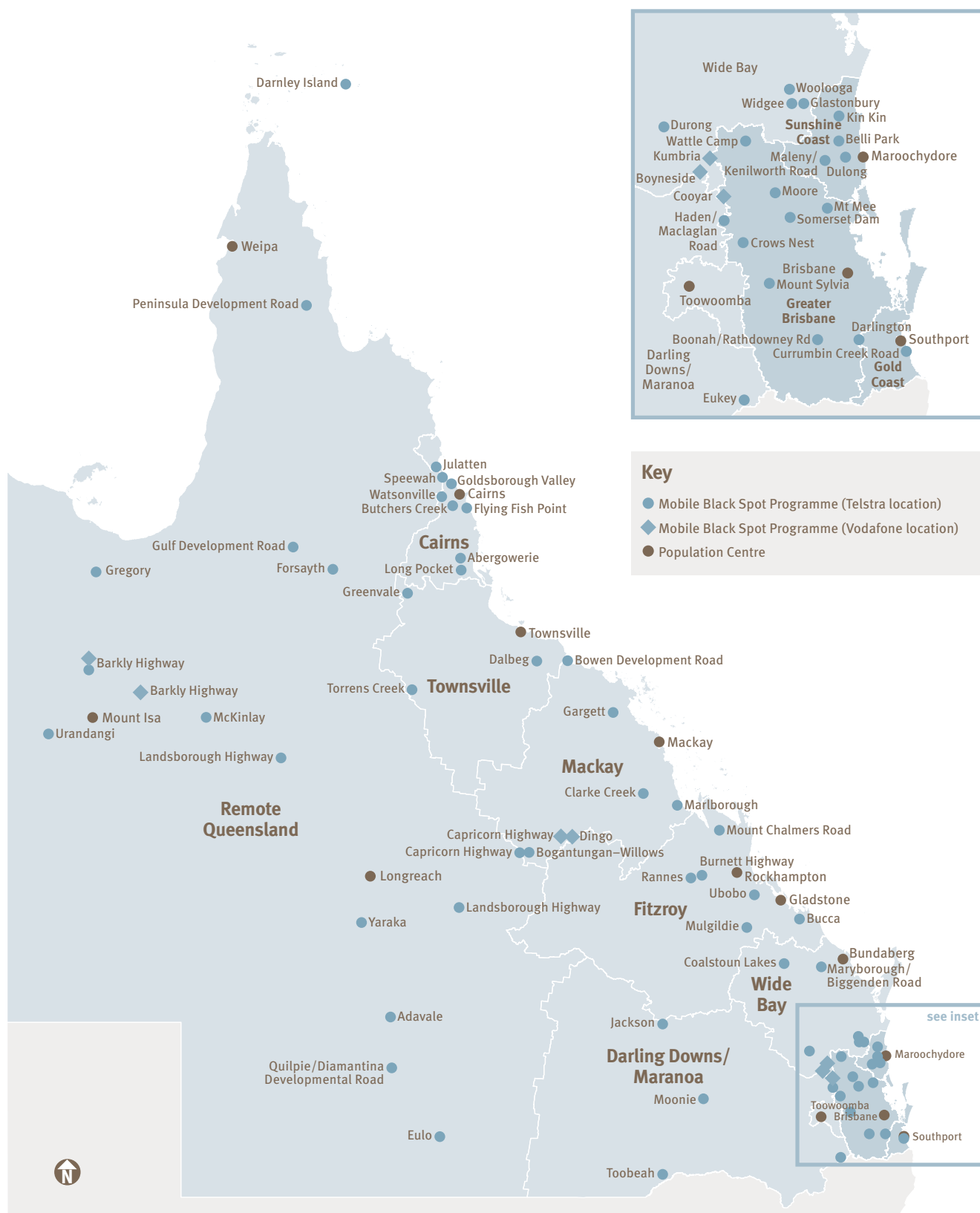
Queensland has a higher percentage of rural and remote households than other states in Australia, and sometimes long distances between telecommunications towers. Providing appropriate, reliable telecommunications to these regions is often not commercially viable without co-funding assistance from governments, councils and major industry operators in these regions.

The Queensland Government is committed to working with the Australian Government and providers to improve telecommunications connectivity in regional Queensland. This commitment is demonstrated by its recent \$10 million co-contribution towards improving mobile coverage for Queenslanders.

With this contribution, and that of other parties, a total of \$53.85 million will be invested in Queensland through the Australian Government's Mobile Black Spot Programme. This will see significant improvements in mobile coverage with 68 new or upgraded mobile towers. As part of the arrangement with Telstra, Queensland will also receive 50 4G small cells to boost coverage in heavily-trafficked areas.

The Australian Government has also announced a second round of the programme, with funding over two years from 2016. It is anticipated that this will deliver additional mobile towers to Queensland.

Mobile Black Spot Programme selected locations



Future opportunities—short-term

Opportunity 1

Engage with the Australian Government and telecommunications providers to improve digital inclusion in rural and remote parts of Queensland, including optimum coverage of the National Broadband Network (NBN).

Opportunity 2

Identify opportunities to address areas where mobile coverage or NBN technology is insufficient to meet community needs, particularly in public buildings like schools, health facilities and libraries.

Opportunity 3

Consider ways to leverage state-owned fibre assets for broader community and economic benefit.

Opportunity 4

Quantify the likely impacts of digital disruption on future demand for government infrastructure and services, in collaboration with academia.

Opportunity 5

Identify opportunities to increase teleworking in the public and private sectors as a means of reducing congestion on transport networks in Queensland's cities.

Opportunity 6

Develop more responsive and effective emergency services through improved technology, coverage, security and interoperability for public safety communications in Queensland.

Opportunity 7

Accelerate smart infrastructure deployment with sensor and wi-fi networks to improve efficiency, safety and liveability, with real-time information to enable better management and use of infrastructure.

Opportunity 8

Improve infrastructure planning and management by using big data, open data, data analytics and machine learning.

Future opportunities—medium/long-term

Opportunity 9

Harvest the benefits of new and emerging technology digital disruptions that may reduce the demand for future infrastructure (e.g. autonomous vehicles, solar battery storage and telehealth).

Opportunity 10

Leverage Queensland Government's digital purchasing power to improve digital outcomes for the state.

Opportunity 11

Identify opportunities to leverage existing and proposed connectivity into Queensland's schools for broader community and government benefit.

Opportunity 12

Integrate digital networks and sensors into all new infrastructure projects as standard.

Opportunity 13

Develop a plan to retrofit brownfield infrastructure with digital networks and sensors, focusing on key pieces of infrastructure.

Justice and public safety



The modern and efficient Brisbane Magistrates Court

State Infrastructure Plan Part B: Program



Justice and public safety

Responsive public safety services and an effective justice system play a critical role in ensuring our communities are safe, inclusive and sustainable. Through a network of infrastructure across the state, the Queensland Government provides the community with fair and timely justice services, secure custodial detention and correctional facilities, and essential police, emergency response and disaster management services.

Queensland's public safety and justice assets include prisons, courts, police and emergency service stations, training facilities and extensive ICT networks. In recent years, irregular growth in prisoner numbers and prison capacity and facilities that are ageing or not fit-for-purpose has resulted in significant pressure on justice infrastructure. Public safety agencies have primarily focused on investing in locations and service delivery that helps improve emergency response times.

A range of demand drivers will influence the need for future infrastructure investment. These include a growing and ageing population, an increase in the severity and frequency of natural disasters and changing community expectations of government services. An increasing array of emerging social issues and crime trends must also be addressed. This includes domestic and family violence, mental health issues and substance abuse, as well as the threat of terrorism and cyber-crime.

The predicted increase in the frequency and severity of extreme weather events, including the possibility of southward movement of tropical cyclones into more densely populated areas of Queensland, will pose significant challenges to public safety agencies in the future.

A renewed focus on whole-of-government approaches that recognise and address the causes of crime may help reduce demand on services over time. Improved community supervision and diversionary justice processes also have a role to play. Addressing changes in the profile of prison and youth justice populations, including more women prisoners, an ageing prisoner profile and detainees with mental illness or complex needs, may require targeted investment in special purpose infrastructure.



Emergency services integrated response

New technology increasingly provides opportunities for improvements to electronic intelligence capabilities, online service provision and greater use of electronic communication, such as videoconferencing, to deliver services to the community. However, these advances, along with the age and complexity of existing infrastructure, further reinforce the need to undertake maintenance or upgrades.

While some new infrastructure will be required in the future, particularly to accommodate population growth south-west of Brisbane, increased access to digital services and changes to service delivery models provides an opportunity to optimise existing infrastructure where it is more cost-effective prior to making new investments. In regional and remote communities, this may include multi-agency service delivery under one roof, improving the sustainability of assets and enhancing their community amenity.

JUSTICE AND PUBLIC SAFETY RESPONSES

The Queensland Government has developed responses to address identified challenges and guide investment across both the 1–4 year program and future opportunities. Most projects or opportunities relate to at least one response, however some will relate to more than one response. As the SIP matures, the relationship between responses and these programs will strengthen.

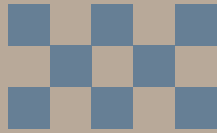
Innovatively manage the need for new infrastructure using demand management strategies.

Increase the use of technology to integrate services.

Rationalise under-utilised facilities and those that are no longer fit-for-purpose.

Enhance community safety through digital capabilities.

Queensland's justice and public safety assets



Queensland
Police Service

335

police
stations

2

police
hubs

48

neighbourhood
police beats

43

police beat
shopfronts



Queensland Fire and
Emergency Services

242

stations

433

rural
stations



Courthouses

87

courthouses

4

community
justice centres



Youth detention

2

centres



Correctional services

10

high security
correctional
centres

6

low security
correctional
centres

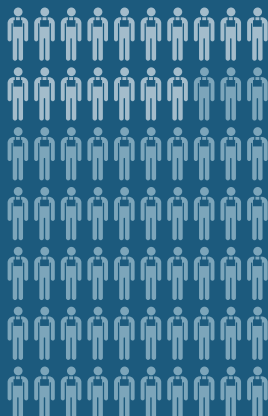
13

work
camps

Between January 2012
and June 2015 Queensland
experienced a

**31%
increase**

in prisoner numbers
(5598 to 7344 prisoners)



In 2014–15
high security centres
were operating at

105%



built bed capacity
for male prisoners and

125%

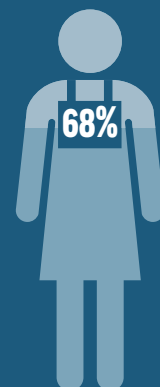


for female prisoners

Between January 2012
and June 2015
Queensland experienced

**68%
growth**

in average daily prisoner
population for women
(424 to 713 prisoners)





1–4 year program

Project	Total estimated cost (\$M)	Contributions				Expenditure to June 2015 (\$M)	Funding (\$M)			
		Fed	QG	LG	Priv		2015–16	Indicative		
								2016–17	2017–18 to 2018–19	Beyond
South East Queensland										
Corrective Services and Youth Justice										
Borallon Training and Correctional Centre recommission	56.250		●			46.534	9.716			
Perimeter Security Upgrade–South East Queensland	51.118		●			0.008	3.799	10.500	31.000	5.811
Southern Queensland Correctional Centre upgrade	11.080		●			9.187	1.893			
Brisbane Youth Detention Centre security upgrade	9.344		●			0.426	6.148	2.770		
Public Trustee										
Public trustee facilities maintenance throughout South East Queensland	8.800		●				8.800			
Police										
Police Communications Centre and Forensics Service facility upgrade	4.923		●			3.033	1.890			
Fire and Emergency Services										
Bundamba Station upgrade	1.923		●			0.050	1.873			
Burleigh Station upgrade	1.817		●			0.250	1.567			
Kemp Place Station upgrade	1.400		●			0.050	1.350			
Morningside warehouse fitout	0.970		●			0.020	0.950			
Petrie Station replacement	4.100		●			0.040	4.060			
State Disaster Coordination Centre enhancement	1.180		●			0.380	0.800			
West Logan Station replacement	3.000		●					0.500	2.500	
Dayboro Auxiliary Station replacement	0.650		●			0.050	0.600			

Justice and public safety

Project	Total estimated cost (\$M)	Contributions				Expenditure to June 2015 (\$M)	Funding (\$M)			
		Fed	QG	LG	Priv		2015–16	Indicative		
								2016–17	2017–18 to 2018–19	Beyond
Regional Queensland										
Corrective Services and Youth Justice										
Perimeter Security Upgrade—Regional Queensland	25.461		●			0.018	6.973	1.751	13.730	2.989
Lotus Glen Correctional Centre upgrade	7.000		●			4.690	2.310			
Cleveland Youth Detention Centre building security upgrade	3.400		●			0.602	2.798			
Public Trustee										
Public trustee facilities maintenance throughout Central Queensland	1.015		●				1.015			
Courthouses										
Kingaroy and Nanango Courthouses upgrade	4.500		●				2.080	2.420		
Police										
Kingaroy Police Station and Watchhouse replacement	8.300		●			1.411	6.889			
Nanango Police Station upgrade	1.000		●			0.200	0.800			
Bowen Station upgrade ¹	5.150		●				0.050	2.100	3.000	
Gordonvale Station replacement ¹	4.500		●				0.500	2.000	2.000	
Thursday Island Police Station and Watchhouse upgrade	3.300		●			2.500	0.800			
Bamaga Police residential accommodation	1.480		●			0.150	1.330			
Fire and Emergency Services										
Bundaberg Station replacement	6.500		●			0.050	3.950	2.500		
Cunnamulla Auxiliary Station replacement	1.500		●				0.350	1.150		
Gordonvale Auxiliary Station replacement ¹	3.500		●					1.500	2.000	
Roma Auxiliary Station upgrade	3.600		●				0.600	3.000		
Thursday Island Station extension ¹	0.700		●					0.700		

Project	Total estimated cost (\$M)	Contributions				Expenditure to June 2015 (\$M)	Funding (\$M)			
		Fed	QG	LG	Priv		Indicative			
							2015–16	2016–17	2017–18 to 2018–19	Beyond
Statewide										
Corrective Services and Youth Justice										
Correctional/parole facilities maintenance throughout Queensland	53.975		●			7.560	23.912	7.501	15.002	
Youth detention centre maintenance throughout Queensland	32.843		●				9.629	7.738	15.476	
Courthouses										
Courthouse maintenance throughout Queensland	37.478		●				14.764	5.958	16.756	
Police										
Queensland Police Service minor works	8.905		●				8.905			
Closed circuit camera system upgrade at various watchhouses	2.420		●				2.420			
Fire and Emergency Services										
Statewide minor works	3.825		●				3.825			
Statewide strategic land acquisitions	4.445		●				4.445			

Notes:

¹ The Queensland Government has implemented an Accelerated Works Program for regional Queensland. Some of the announced projects are individually highlighted in this document, while others may be embedded in a larger program of work.

Case study Videoconferencing improves effectiveness of court processes

New investments in video conferencing technology and changes to court process are enabling more efficient delivery of justice services. The benefits of using videoconferencing include reduced risk to the community from prisoner transfers, costs savings in prison transfers and allowing police and correctional services staff to focus on frontline duties.

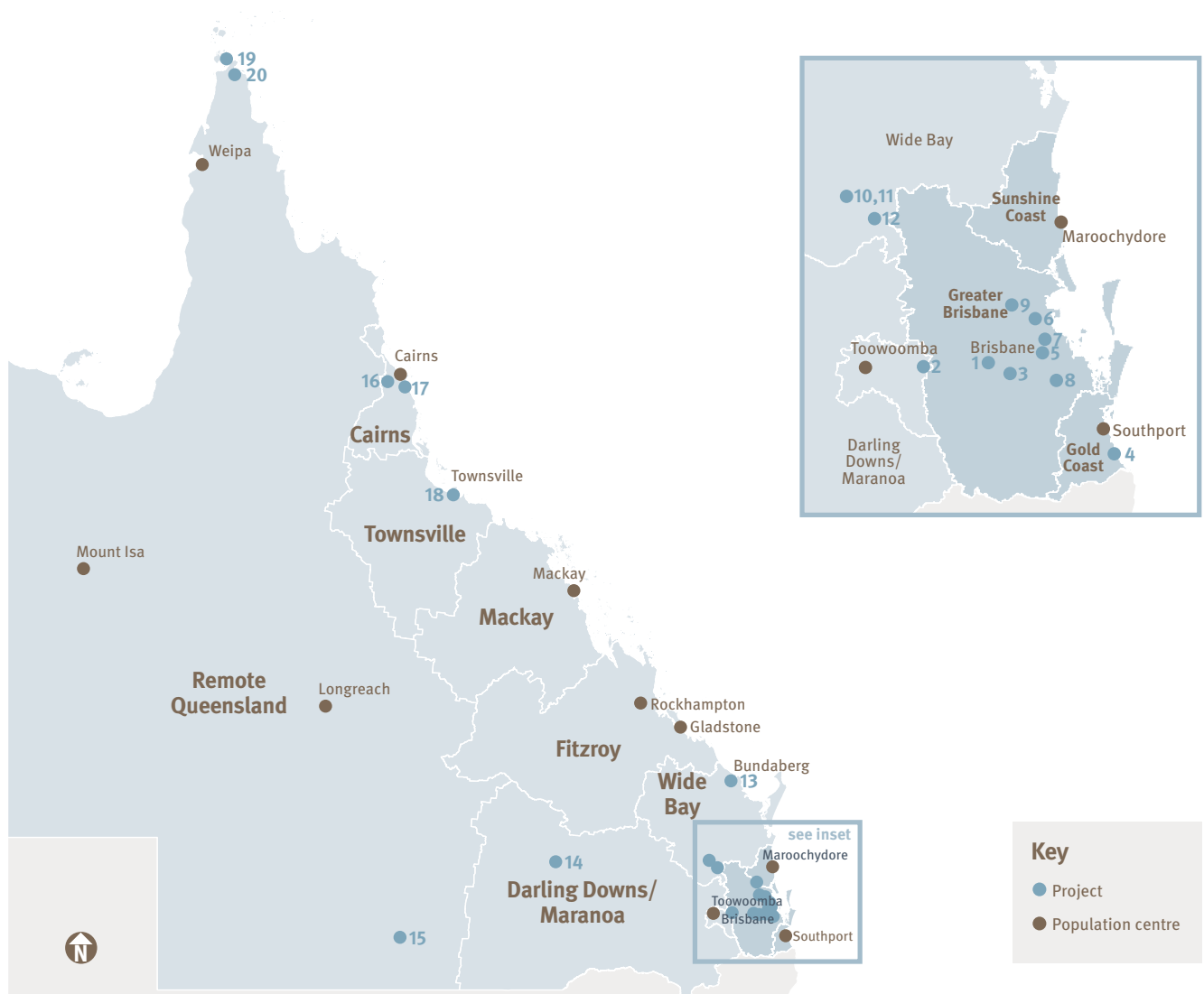
During 2014–15, the Integrated Criminal Justice videoconferencing program focused on improving end-to-end just processes and removing any barriers to increase the number of in-custody defendants appearing at court hearings without leaving prison. The proportion of matters completed by videoconference for in-custody adult defendants rose from 50 per cent when the program commenced, to be consistently above 60 per cent during 2014–15.

Several successful trials have also given a small number of legal practitioners the ability to consult with in-custody clients via videoconference using standard office equipment.

A dedicated videoconferencing court, where all matters are heard by videoconference with in-custody defendants, has also been trialled at the Brisbane Magistrates Court during 2015. Over time, investment in videoconferencing and court technology is expected to reduce exclusive reliance on built infrastructure and transport assets.

Selected projects 1–4 year program

#	PROJECT	#	PROJECT
1	Borallon Training and Correctional Centre recommission	11	Kingaroy Police Station and Watchhouse replacement
2	Southern Queensland Correctional Centre upgrade	12	Nanango Police Station upgrade
3	Bundamba QFES Station upgrade	13	Bundaberg QFES Station replacement
4	Burleigh QFES Station upgrade	14	Roma QFES Auxiliary Station upgrade
5	Kemp Place QFES Station upgrade	15	Cunnamulla QFES Auxiliary Station replacement
6	Petrie QFES Station replacement	16	Lotus Glen Correctional Centre upgrade
7	QFES State Disaster Coordination Centre enhancement	17	Gordonvale QFES Auxiliary Station replacement
8	West Logan QFES Station replacement	18	Cleveland Youth Detention Centre Security upgrade
9	Dayboro QFES Auxiliary Station replacement	19	Thursday Island Police Station and Watchhouse upgrade
10	Kingaroy and Nanango Courthouse upgrades	20	Bamaga Police residential accommodation





Future opportunities—short-term

Opportunity 1

Implement mobility solutions to provide real-time information in the field and on the frontline.

Opportunity 2

Improve coordinated responses and service delivery through electronic intelligence capabilities, online service provision, greater use of electronic communication and linking of multiple data.

Opportunity 3

Review the use of the former Children's Court in Brisbane.

Opportunity 4

Review and reshape the service delivery model at some courthouses in regional and remote communities, including through improved multi-agency service delivery under one roof.

Opportunity 5

Continue to optimise court utilisation through technology including e-lodgement and videoconferencing.

Opportunity 6

Optimise the use of built prison facilities by balancing prisoner numbers with community-based offender management and through technology enablers.

Opportunity 7

Identify and implement a strategy to manage peak prisoner numbers.

Future opportunities—medium/long-term

Opportunity 8

Manage demand and improve efficiency by implementing integrated service delivery models to respond to increasing demand.

Opportunity 9

Support integrated service delivery, through a range of communication channels, including new technology and alternate contact models.

Opportunity 10

Explore opportunities for co-location of portfolio functions and extend the life of built assets through refurbishment or upgrade.

Opportunity 11

Rationalise, share or repurpose the current footprint of more than 80 court registry sites.

Case study Mobile services program

The mobile services program is using mobile devices to provide police officers with essential real-time information, improving police and community safety.

Police officers can complete reports and other administrative activities on the devices, saving each officer up to 30 minutes per shift by reducing time spent at the station. The ability to capture information on the spot also allows police to respond move quickly in the field.

Currently, the devices enable police to search Queensland and national databases in relation to

people, vehicles and licence details. The devices are increasingly accessing streamed CCTV footage which will further contribute to public safety. In 2015–16, further new capabilities are being trialled which will support police being able to respond to calls for service from mobile devices.

The opportunities to enhance service delivery provided by mobile technology will have positive benefits, such as allowing officers to spend less time at the station and more time delivering frontline services in the community.

Arts, culture and recreation



Across Queensland, arts and culture have been instrumental in connecting communities and reviving cities, towns and regions. They attract people to places to visit and live, and create a powerful sense of belonging. Similarly, sport and outdoor recreation provide communities with improved health and wellbeing, social connection and opportunities for shared celebrations, while our World Heritage areas and national parks attract millions of domestic and international visitors each year.

A diverse portfolio of infrastructure allows Queenslanders and visitors to enjoy a range of unique cultural, recreational and outdoor experiences. This includes world-class performances and exhibitions, local and statewide festivals, major sporting championships and pristine natural environments.

By providing employment, attracting tourists and drawing high-profile acts and events to the state, this infrastructure makes a considerable contribution to our economy. The visitor economy is also heavily reliant on appropriate investment in supporting infrastructure, such as airports, rail networks and cruise ship terminals. The quality and delivery of these facilities greatly impacts the visitor experience.

One of the key challenges for government is ensuring existing infrastructure is developed or adapted to address changing and growing community needs. Much of our existing arts and cultural infrastructure was developed in the 1970s and 1980s and has been subject to ongoing upgrades and renovations to improve the visitor experience. In regional and remote communities, touring by Queensland arts companies is limited by access to suitable performance venues.

The Queensland Government will continue to support the delivery of arts and cultural infrastructure, particularly in regional areas, including partnerships with local and federal governments. Collaboration with the private sector and market-led proposals that align with government priorities and demonstrate enhanced value will be encouraged. While continuing to provide support across the regions, the Queensland Government also recognises the important role Brisbane plays as a key centre for arts and culture and home to the state's major cultural institutions.



Queensland Music Festival, Miles

The sport and recreation industry faces a number of challenges over the next 15 years that will modify traditional consumption models. Some of these challenges include a move away from organised sport to independent recreation, changing work patterns and time pressures, the ageing population and population growth, increasing popularity of extreme sports, commercialisation of the industry and growth of sports tourism, changing volunteer patterns and ageing sports infrastructure. Ultimately these challenges will shape the way the Queensland Government works with local government, clubs and industry organisations to support opportunities in sport and active recreation in the future.

Significant investments in sports and community infrastructure, including venues for the 2018 Gold Coast Commonwealth Games, are underway. These will drive long-term economic benefits by attracting elite athletes and world-class events to Queensland.

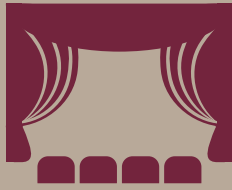
Better use of innovation and technology will also be critical in supporting future infrastructure needs. Future trends include spaces that combine sports and community uses with arts and cultural facilities, increased use of temporary infrastructure and outdoor spaces, and delivering arts and culture through digital channels and mobile services.

ARTS, CULTURE AND RECREATION RESPONSES

The Queensland Government has developed responses to address identified challenges and guide investment across both the 1–4 year program and future opportunities. Most projects or opportunities relate to at least one response, however some will relate to more than one response. As the SIP matures, the relationship between responses and these programs will strengthen.

Deliver the Commonwealth Games legacy infrastructure program.	Work with industry to deliver infrastructure that drives visitor expenditure.	Protect the state's most treasured collections.	Deliver dedicated infrastructure for indigenous and regional art and culture.	Promote a coordinated approach to supporting infrastructure that elevates Queensland's tourism offering and delivers an exceptional journey for every visitor.
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Arts, culture and recreation



4.7M

visits annually to
our major cultural
facilities

In 2014–15 the
Playing Queensland
Fund delivered

46 tours

to

134

communities in
regional Queensland



In the past
3 years



QAGOMA has
hosted

6

exclusive

to Brisbane
exhibitions



Queensland
Museum has
discovered

500
new
species



Over the next
4 years

the Queensland
Government has
committed

\$29M

to expand and
renew essential
services at the
Cultural Precinct

Queensland Parks and Wildlife Service manages



1000

parks and
forests



2000 km

of walking
trails



470

camping
areas



200

day use
sites

Visitors who include a National Park
in their holiday contribute



\$4.43B

to Queensland's economy





Arts, culture and recreation

1–4 year program

Project	Total estimated cost (\$M)	Contributions				Expenditure to June 2015 (\$M)	Funding (\$M)			
		Fed	QG	LG	Priv		2015–16	Indicative		
								2016–17	2017–18 to 2018–19	Beyond
South East Queensland										
Commonwealth Games venues	338.342	●	●	●		73.691	182.387	72.923	9.341	
Commonwealth Games Village ¹	264.154		●		●	37.681	48.474	60.514	98.344	19.141
Nathan–Queensland State Netball Centre	30.000		●				5.000	20.000	5.000	
Queensland Museum–more space for Anzac Gallery	14.290	●	●		●	0.619	2.000	7.158	4.513	
Cultural Precinct infrastructure expansion and renewal	29.000		●				7.210	10.650	11.140	
Brisbane Racing Club–Eagle Farm track upgrade	10.000		●			7.920	2.080			
Brisbane Racing Club–Eagle Farm infield works	12.000		●				12.000			
National Park infrastructure										
South East Queensland upgrades	Ongoing		●		●	Ongoing	5.760	2.809	5.879	Ongoing
Sunshine Coast/Fraser Island upgrades	Ongoing		●			Ongoing	4.017	1.959	4.100	Ongoing
South East Queensland maintenance	Ongoing		●			Ongoing	1.372	1.372	2.743	Ongoing
Sunshine Coast/Fraser Island maintenance	Ongoing		●			Ongoing	1.739	1.739	3.478	Ongoing
Regional Queensland										
Support development of the North Queensland Stadium	100.000		●				5.000	25.000	70.000	
Rockhampton Riverfront and Yeppoon Foreshore Revitalisation	40.000		●				16.000	24.000		
Yeppoon Foreshore Revitalisation–Stage 3 ²	5.000		●	●				2.500		
Cluden Park Racecourse upgrade	7.000		●			5.172	1.828			
Julia Creek Community and Cultural Precinct ²	2.222		●	●	●		0.422	0.800		
Burdekin multi-tenant service centre extension ²	0.778		●		●		0.065	0.585		
Karumba Swimming Pool ²	2.500		●	●	●			1.000		
Jericho Swimming Pool ²	1.025		●	●				0.065	0.585	
Bundaberg Region Multi-use Sports and Community Centre ²	14.500		●	●			2.500	2.500		
Mary Valley Rattler restoration	2.600		●			0.151	2.449			
South Burnett Rail Trail	2.000		●					1.400	0.600	

Arts, culture and recreation

Project	Total estimated cost (\$M)	Contributions				Expenditure to June 2015 (\$M)	Funding (\$M)			
		Fed	QG	LG	Priv		2015–16	Indicative		
								2016–17	2017–18 to 2018–19	Beyond
Regional Queensland										
National Park infrastructure										
Central Queensland upgrades	Ongoing		●			Ongoing	0.825	0.402	0.842	Ongoing
Great Barrier Reef area upgrades	Ongoing	●	●		●	Ongoing	1.387	0.676	1.415	Ongoing
North Queensland upgrades	Ongoing		●			Ongoing	6.537	3.188	6.673	Ongoing
South West Queensland upgrades	Ongoing		●		●	Ongoing	2.815	1.373	2.873	Ongoing
Central Queensland maintenance	Ongoing		●			Ongoing	1.505	1.505	3.009	Ongoing
Great Barrier Reef area maintenance	Ongoing		●			Ongoing	0.773	0.773	1.546	Ongoing
North Queensland maintenance	Ongoing		●			Ongoing	1.517	1.517	3.035	Ongoing
South West Queensland maintenance	Ongoing		●			Ongoing	1.169	1.169	2.339	Ongoing
Statewide										
Get Playing Plus—major projects capital grants	42.635		●				14.050	12.500	16.085	
Get Playing Places and Spaces	64.230		●			23.853	13.377	10.000	16.000	1.000
Statewide National Park infrastructure upgrades	Ongoing		●			Ongoing	3.268	1.594	3.336	Ongoing

Notes:

¹ Total Estimated Cost and cashflows do not include the private sector contribution.

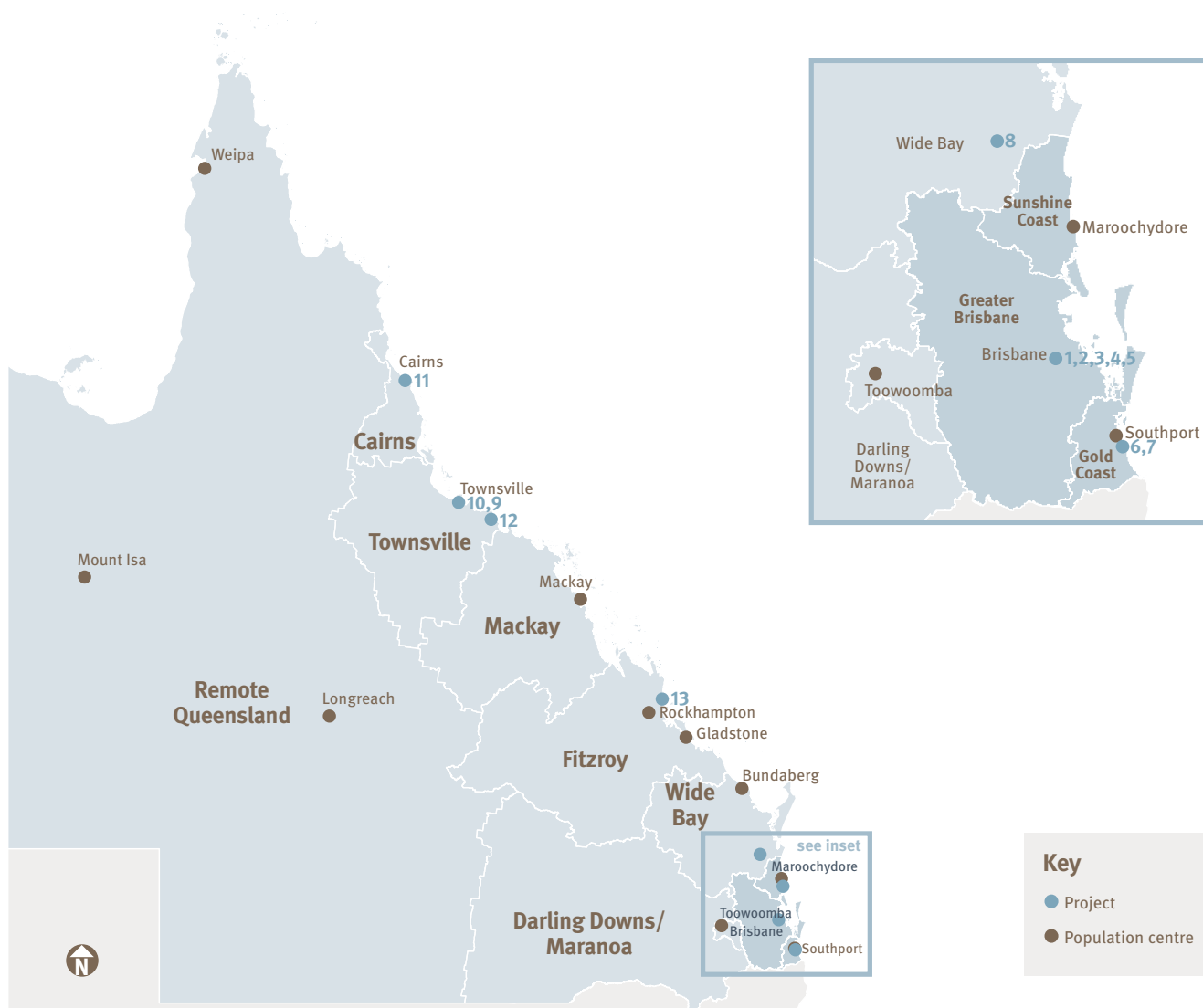
² The sum of the cashflows does not equal Total estimated cost because cashflows are Queensland Government cashflows only.

The Cronulla Park project remains on hold pending outcomes from the Queensland Greyhound Racing Industry Commission of Inquiry.

The Queensland Government has implemented an Accelerated Works Program for regional Queensland. Some of the announced projects are individually highlighted in this document, while others may be embedded in a larger program of work.

Selected projects 1–4 year program

#	PROJECT	#	PROJECT
1	Queensland Museum—more space for Anzac Gallery	8	Mary Valley Rattler restoration
2	Cultural Precinct infrastructure expansion and renewal	9	Cluden Park Racecourse upgrade
3	Brisbane Racing Club—Eagle Farm track upgrade	10	Support development of the North Queensland Stadium
4	Brisbane Racing Club—Eagle Farm infield works	11	National Park infrastructure upgrade—Great Barrier Reef area
5	Nathan—Queensland State Netball Centre	12	Burdekin multi-tenant service centre extension
6	Commonwealth Games venues	13	Yeppoon Foreshore Revitalisation—Stage 3
7	Commonwealth Games Village		



Future opportunities—short-term

Opportunity 1

Ensure infrastructure delivered for the Gold Coast 2018 Commonwealth Games creates positive and lasting benefits that can be leveraged following the event.

Opportunity 2

Develop a priority order for the investment in destination-based arts and cultural touring infrastructure based on economic and community return.

Future opportunities—medium/long-term

Opportunity 3

Implement on-site and off-site storage strategies for new and existing arts and cultural facilities.

Opportunity 5

Identify and progressively implement a program of multi-use sports infrastructure.

Opportunity 4

Upgrade or renovate facilities to meet modern service standards and growing community needs.

Case study Gold Coast 2018 Commonwealth Games venues

In preparation for the Gold Coast 2018 Commonwealth Games, the Queensland Government is implementing a \$320 million venue infrastructure program that includes three new world-class competition venues and major upgrades to a further eight venues. This investment will provide Queenslanders with access to important sport and community facilities for years to come.

The Commonwealth Games Village, currently under development at the Parklands site at Southport, will also provide a significant legacy for the Gold Coast. The project, which includes 1252 apartments and townhouses and seven hectares of parks and open space, will play host to 6500 athletes and officials during the Commonwealth Games.

Following the Commonwealth Games, it will provide a modern, mixed-use community and a new business hub for health and knowledge, commercial and retail use. The Parklands redevelopment is one of the largest urban renewal projects ever undertaken on the Gold Coast.



Construction of Queensland State Velodrome

Social housing



Social housing, Brisbane

State Infrastructure Plan Part B: Program

Social and supported housing is provided by the Queensland Government and non-government organisations to assist people who are unable to secure and sustain accommodation in the private market.

The government's extensive portfolio of social housing properties plays a critical role in this system. Tenants receive housing assistance through government owned and managed public housing properties, as well as properties managed by community housing organisations and local authorities, and assistance to rent in the private market. This includes a significant number of properties that provide dedicated housing support to people living in remote Aboriginal and Torres Strait Islander communities.

Meeting the overwhelming demand for social housing and the changing needs of tenants poses a number of challenges. Increasingly, properties must be able to meet higher standards in terms of accessibility, safety and flexibility, particularly for tenants with a disability or complex needs. Housing should ideally be located close to transport and community facilities to provide tenants with access to support services and employment opportunities.

The characteristics of households in high need have changed over time, and the level of need is highest for one and two bedroom accommodation. Much of the existing portfolio is larger three and four bedroom houses, many of which have long-term tenancies. Redevelopment of existing properties or the construction of new properties will be required to meet the needs of tenants into the future. Due to the age and scale of the social housing portfolio, there is a considerable requirement for maintenance and upgrades, which will require ongoing funding.

With the growing capacity of the community housing sector, there are increasing opportunities to deliver social housing in partnership with the non-government sector. Other initiatives, such as bond loans and the redirection of lower need households into affordable



New housing development

housing initiatives, may help reduce the overall cost of service delivery by providing alternatives to the direct provision of social housing.

Social housing rents are highly subsidised through the state and Australian Government. The rental income the state receives is insufficient to support large capital works programs and cover the cost of operations, including dwelling maintenance.

The Australian Government has initiated a process to examine the reallocation of federal and state roles and responsibilities in relation to housing assistance and homelessness services. Future funding and service provision arrangements for social housing will be dependent on the outcome of this reform process.

In relation to residential dwellings for people with disabilities and accommodation facilities for children and young people, there are opportunities to align built assets with future asset needs by developing upgrade and maintenance programs that prolong the useful life of these assets.

From 1 July 2016, funding and delivery of disability services will undergo substantial change with the introduction of the National Disability Insurance Scheme (NDIS). This may impact on the delivery of services and the capital portfolio.

SOCIAL HOUSING RESPONSES

The Queensland Government has developed responses to address identified challenges and guide investment across both the 1–4 year program and future opportunities. Most projects or opportunities relate to at least one response, however some will relate to more than one response. As the SIP matures, the relationship between responses and these programs will strengthen.

Realign the housing portfolio to improve its service capacity.

Renew the property portfolio to align with housing needs and reduce maintenance costs.

Leverage the capacity of non-government organisations and the private sector in the delivery of services.

In 2015–16

\$299M



will be invested
in new social
housing

\$370M

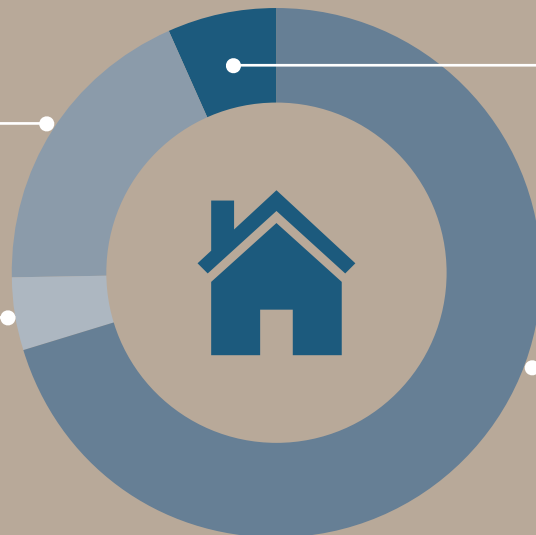


will be invested in
maintaining and
upgrading social
housing

There are
71,850
social housing
dwellings in
Queensland

Community housing
dwellings 13,321

Government owned
and managed
Aboriginal and
Torres Strait Islander
dwellings 3350



Aboriginal
and Torres
Strait Islander
community
housing
dwellings
4676

Government
owned and
managed
dwellings
50,519

In 2015–16, the Queensland Government will invest more than
\$24.6M in disability housing

\$6.585M



to provide
sustainable living
arrangements
for adults with a
disability when
they can no longer
be cared for by
their elderly
parents

\$6M



to deliver housing
solutions for
people with a
disability for
whom other
housing options
do not present
a sustainable
solution

\$3.1M



to build
or purchase
suitable
supported
accommodation
options for
people with
high and
complex needs

\$8.959M



to build and
upgrade
accommodation
for people with
an intellectual
or cognitive
disability who
exhibit severely
challenging
behaviours

1–4 year program

Project	Total estimated cost (\$M)	Contributions				Expenditure to June 2015 (\$M)	Funding (\$M)			
		Fed	QG	LG	Priv		2015–16	Indicative		
								2016–17	2017–18 to 2018–19	Beyond
Statewide										
Build social housing throughout Queensland	481.572	●	●				118.747	133.927	228.898	
Maintain and upgrade social housing throughout Queensland	1165.755		●				280.083	287.565	598.107	
Build Indigenous community housing throughout Queensland ¹	407.124	●	●				180.667	119.812	106.645	
Maintain and upgrade Indigenous community housing throughout Queensland	350.641	●	●				90.087	81.894	178.660	
Build and maintain accommodation for children and young people	11.087		●			1.126	2.067	4.994	2.900	
Build and maintain accommodation for people with a disability	38.912		●			4.567	8.959	9.130	16.256	

Notes:

¹ The reduction in the funding of Indigenous housing in 2017–18 to 2018–19 reflects the scheduled completion of the Australian Government funded National Partnership Agreement on Remote Indigenous Housing (NPARIH) program.

The Queensland Government has implemented an Accelerated Works Program for regional Queensland. Some of the announced projects are individually highlighted in this document, while others may be embedded in a larger program of work.

Future opportunities—short-term

Opportunity 1

Meet the changing household demographics of high and very high needs clients by ensuring one and two bedroom units are acquired to replace larger dwellings.

Opportunity 2

Reduce maintenance costs and maximise the value of underlying land assets by replacing older large detached dwellings with one and two bedroom dwellings for households in high need.

Opportunity 3

Engage with non-government and private enterprise in the renewal of social housing.

Future opportunities—medium/long-term

Opportunity 4

Meet changing demand through a mix of housing products including partnerships with non-government organisations and the private sector.

Opportunity 5

Work with the Australian Government in the reform of funding and delivery of housing and homelessness services.

Case study Partnering to deliver better social housing

The Department of Housing and Public Works has developed an innovative partnership arrangement with Defence Housing Australia (DHA) to better meet demand for social housing. Under the agreement, the department provides land equity to fund additional new social housing dwellings.

The department transfers land located in areas where there are already a high number of social housing dwellings to DHA, in exchange for the construction of dwellings in other locations.

To date, there have been 17 one and two bedroom apartments constructed through the partnership. This delivery method has a range of benefits, including the relocation of existing tenants to more suitable accommodation and better utilisation of the department's land assets.



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