

State Infrastructure Plan

Part B: Program – 2017 update





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Foreword

The Queensland Government has initiated and delivered a range of economic and jobs-boosting infrastructure throughout Queensland since the release of the State Infrastructure Plan in 2016.

Reflecting our commitment to a strong pipeline of infrastructure investment over the next four years the Palaszczuk Government has budgeted more than \$42 billion in infrastructure funding. Investing in a clear pipeline means we deliver the infrastructure we need, when we need it, and importantly, it gives industry the certainty and confidence to invest in our state.

In this annual update of SIP Part B, we outline the \$10.2 billion to be invested in 2017–18, which will support 29,000 jobs, and the updated 1–4 year program.

Queensland’s number one infrastructure project, Cross River Rail, has progressed to a fully-funded project with delivery beginning in 2017. The Palaszczuk Government allocated \$2.8 billion in the 2017–18 State Budget over the next four years, with a further \$2.6 billion committed in future State Budgets.

Cross River Rail is the critical, missing link in the South East Queensland rail network, freeing up the bottleneck across Brisbane, increasing capacity, cutting travel times and easing both road and rail congestion. It is a city-shaping project with benefits that will flow to the whole south east corner and we are delivering it, fully funded.

The Queensland Government is also delivering a record spend on road infrastructure for the second year in a row with the Queensland Transport and Roads Investment Program 2017–18 to 2020–21 outlining close to \$21 billion of investment over the next four years.

The Palaszczuk Government recognises the importance of infrastructure investment in the regions to drive jobs and economic growth. In 2017–18, \$4.8 billion will be spent on regional infrastructure. In our regions, programs such as Works for Queensland are delivering projects faster to create jobs and drive economic productivity. The 2017–18 State Budget saw an additional \$200 million over two years allocated to this program to ensure our regional councils can continue to deliver job creating projects.

Through the Maturing the Infrastructure Pipeline Program we are supporting the development of a robust project pipeline and enabling projects to be matured from ideas into solid proposals.

The draft *ShapingSEQ* – South East Queensland Regional Plan informed this 2017 SIP Part B update and other regional plans, such as the North Queensland Regional Plan, will be considered in future updates.

Updating the State Infrastructure Plan every year is important because it reflects how our infrastructure needs grow and evolve as our population does.

Through the State Infrastructure Plan we are delivering for the future needs of our community with clarity and purpose. It is through this plan that we will deliver jobs, boost our economy and maintain our great way of life for the benefit of all Queenslanders.

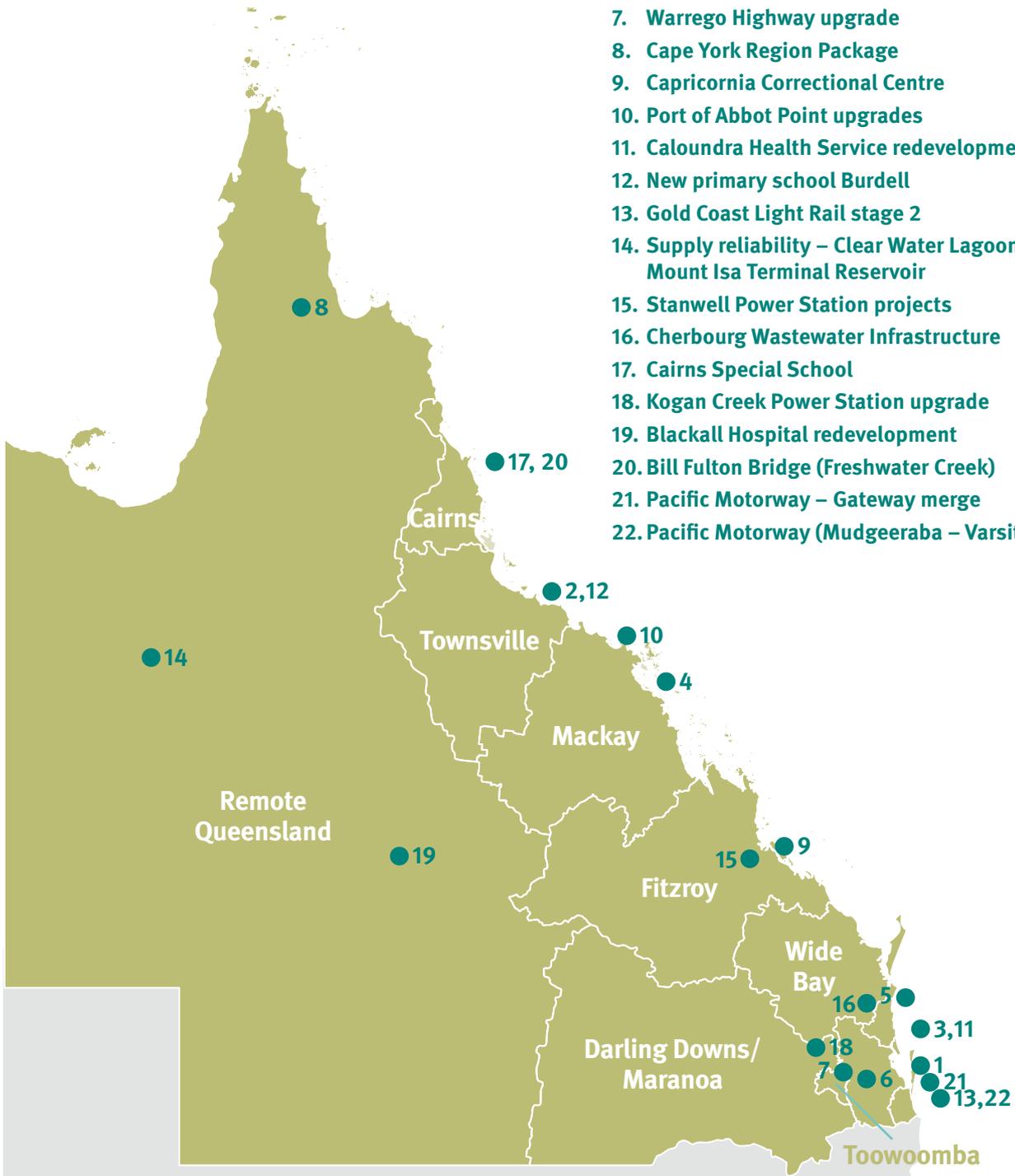


A handwritten signature in black ink, appearing to read 'Jackie Trad'.

THE HONOURABLE JACKIE TRAD MP
Deputy Premier,
Minister for Transport and
Minister for Infrastructure
and Planning

Queensland infrastructure project highlights

1. Cross River Rail
2. North Queensland Stadium
3. Bruce Highway – Caloundra to Sunshine Motorway
4. Bruce Highway – Mackay Ring Road stage 1
5. Bruce Highway – Cooroy to Curra
6. Toowoomba Second Range Crossing
7. Warrego Highway upgrade
8. Cape York Region Package
9. Capricornia Correctional Centre
10. Port of Abbot Point upgrades
11. Caloundra Health Service redevelopment
12. New primary school Burdell
13. Gold Coast Light Rail stage 2
14. Supply reliability – Clear Water Lagoon to Mount Isa Terminal Reservoir
15. Stanwell Power Station projects
16. Cherbourg Wastewater Infrastructure
17. Cairns Special School
18. Kogan Creek Power Station upgrade
19. Blackall Hospital redevelopment
20. Bill Fulton Bridge (Freshwater Creek)
21. Pacific Motorway – Gateway merge
22. Pacific Motorway (Mudgeeraba – Varsity Lakes)



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Cross-government	41
Transport	55
Energy	75
Water	87
Health	97
Education and training	109
Digital	121
Justice and public safety	131
Arts, culture and recreation	143
Social housing	155

2016–17 achievements



402

construction projects
completed or underway



\$1.6 B

committed from State
Infrastructure Fund



\$13 B

tourism infrastructure
pipeline facilitated



\$320 M

infrastructure delivered
for Gold Coast
Commonwealth Games



700

local government
projects in regional
areas through Works
for Queensland

2016–17 highlights

2 new

Priority
Development Areas

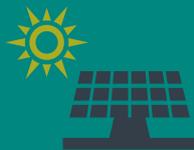


129 km

of state-controlled
road constructed

1200 Mw

renewable energy
projects confirmed
(18 months to June 2017)



185 new

social housing
units

110+

government services
added online



Cross River Rail



\$5.4 B
committed to
fully fund

Reduce
18,500
car trips by 2036



Approx.
1500 jobs
per year for 5 years
of construction

Passengers will get to
the southern CBD up to
15 minutes
faster



2017 SIP at a glance

\$10.2 B
infrastructure
investment in
2017–18

\$5.4 B in
South East
QLD

\$4.8 B in
regional
QLD



29,000
jobs supported

490
1–4 year
program items

\$42.7 B
over the next
four years
↑ \$1.9 B

FUNDING BY ASSET CLASS:



\$1.1 B
Cross-government



\$4 B
Transport



\$1.8 B
Energy



\$270 M
Water



\$770 M
Health



\$702 M
Education
and training



\$179 M
Digital



\$488 M
Justice and
public safety



\$325 M
Arts, culture
and recreation



\$505 M
Social housing

Note: Figures may not add up due to rounding

3 new
hospitals



4 new
schools

Introduction

The State Infrastructure Plan (SIP) Parts A and B outline the Queensland infrastructure priorities to grow the economy, create jobs and provide quality services to Queenslanders. It provides a framework to allow government to plan and prioritise infrastructure investment and delivery in a fiscally responsible way. The SIP provides confidence to industry and the community on the future direction of infrastructure provision statewide.

The first SIP Part A: Strategy and Part B: Program were released in March 2016, with Part A to be reviewed every five years and Part B to be reviewed and updated annually in line with the State Budget.

This 2017 update of SIP Part B confirms the Queensland Government's current infrastructure program for each asset class. It also details additional Future opportunities to address the challenges and objectives outlined in SIP Part A.

The asset classes are:

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

This 2017 update of SIP Part B also provides an update on policies and initiatives established to support the implementation of the SIP. These include several initiatives being delivered through the State Infrastructure Fund.

The Proposals raised through consultation and Future opportunities in the 2016 SIP Part B have been assigned a level of maturity through the Maturing the Infrastructure Pipeline Program, a State Infrastructure Fund initiative. The level of maturity is outlined in the Proposals raised through consultation section and the Future opportunities within each asset class.

A review of the Implementation actions in the 2016 SIP has been conducted as part of the overall performance measurement of the SIP. A framework has been developed to assess the delivery of initiatives within the State Infrastructure Fund. It has also been used to align 2016 SIP 1–4 year program and Future opportunities against the responses for each asset class. The results of this assessment are included throughout this SIP update.

The structure of the SIP is outlined in figure 1.

Examining each asset class

Each asset class section provides a snapshot of the role infrastructure plays in achieving the Queensland Government's objectives for the community and reiterates the responses outlined in SIP Part A.

1–4 year program

The four-year forward program details projects in planning, approaching procurement or under construction. It also includes key capital maintenance and upgrade programs. The 1–4 year program aligns with the 2017–18 State Budget (Budget Paper 3) and details the total estimated cost of the project and funding contributions by various levels of government and private enterprise.

Where project expenditure is programmed for later years, the funding amount is indicative only. The funding profile will become more certain as projects progress from planning to delivery.

Future opportunities

This section outlines opportunities to address future infrastructure or service needs identified in the 2016 SIP Part B. In some asset classes, new opportunities have also emerged. Future opportunities are currently unfunded and are categorised as either short or medium/long-term. As planning and development advances and funding options become certain, these opportunities will transition into a project or initiative within the 1–4 year program.



Port of Mackay (image courtesy North Queensland Bulk Ports Ltd)

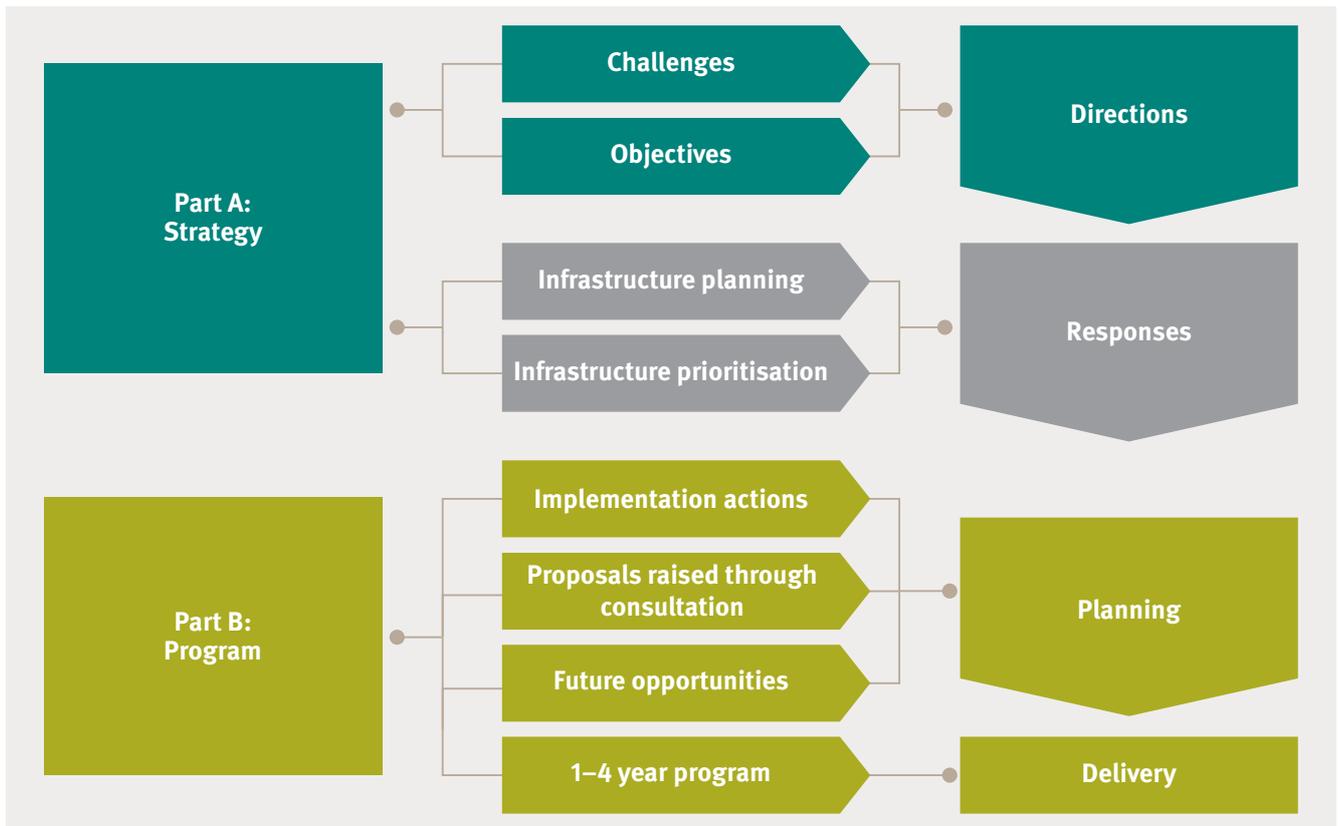


Figure 1: Structure of the SIP

New in 2017 SIP Part B

The **Queensland infrastructure pipeline** is a new visualisation of the Queensland Government's infrastructure planning and funding phases. It demonstrates how proposals and opportunities mature from early concept to a funded project by moving through various planning and investment decision phases.

A summary of **Building Queensland's Infrastructure Pipeline** is also included. It outlines independent, priority infrastructure recommendations for planning or funding consideration by the Queensland Government.

Cross River Rail is the Queensland Government's highest priority infrastructure project. The \$5.4 billion project is included as a feature project.

A feature on **regional plans** highlights the link between these key land use planning strategies and the SIP. Key government infrastructure priorities outlined in regional plans will be reflected in the SIP as they mature. In 2017, the priorities contained within the draft *ShapingSEQ – South East Queensland Regional Plan* have been included.

Consultation

In developing the SIP in 2016, the Queensland Government undertook extensive consultation with industry and local government on the *Delivering an Infrastructure Plan for Queensland – Directions Paper* (released in June 2015) and the *Draft State Infrastructure Plan* (released in October 2015). As this 2017 SIP Part B is an update of the Queensland Government's infrastructure commitments, broad consultation has not been undertaken again.

The Department of Infrastructure, Local Government and Planning has continued to consult with the infrastructure industry, including the Infrastructure Association of Queensland, Engineers Australia and the Queensland Major Contractors Association.

Targeted consultation has also occurred with local governments and the Local Government Association of Queensland to inform key government strategies including the draft *ShapingSEQ – South East Queensland Regional Plan*, *City Deals*, and infrastructure coordination plans. These consultations have been drawn upon to inform this SIP Part B update.

Queensland infrastructure pipeline

The Queensland infrastructure pipeline has been developed to illustrate how proposals mature from a concept to a funded government project.

The pipeline provides a coordinated and integrated approach to planning, prioritising, funding and delivering infrastructure in Queensland.

The stages within the pipeline are aligned with the Queensland Government's Project Assessment Framework. The framework is used to ensure a common, rigorous approach to assessing projects is used at critical stages in the planning lifecycle – from the initial assessment of the service required through to delivery. At each stage, the project's progress and quality is assessed to ensure the project meets strategic objectives and achieves value-for-money.

About the pipeline

The Queensland infrastructure pipeline brings together the elements of the SIP including the 1–4 year program, Proposals raised through consultation (Queensland Government-led) and Future opportunities within the various project lifecycle stages – planning, investment and delivery.

In addition, the planning stage of the pipeline also captures proposals in the Building Queensland pipeline and Infrastructure Australia's Infrastructure Priority List. The pipeline does not capture Proposals raised through consultation which are being progressed by other levels of government or the private sector.

Typically, proposals have a defined problem and solution but are not funded, while Future opportunities are associated with a problem but do not yet have a clear solution or funding.

Proposals and Future opportunities can enter the pipeline as:

- ▶ a conceptual idea arising through state or local government strategic plans, or raised by the private sector
- ▶ strategic assessment of economic drivers and service delivery needs, consistent with the Project Assessment Framework, to demonstrate an infrastructure deficiency exists
- ▶ preliminary evaluation undertaking rigorous assessment of potential solutions, consistent with the Project Assessment Framework
- ▶ a business case consistent with the Project Assessment Framework or Building Queensland's Business Case Development Framework.

Investment decisions are made through existing government mechanisms. The delivery phase of the pipeline reflects the 2017–18 Queensland Government capital program as shown in the SIP 1–4 year program and Budget Paper 3.

The pipeline does not include non-infrastructure solutions, which can often be identified to resolve an infrastructure challenge. These may involve policy reform or better use of infrastructure, and can sometimes be found by re-testing infrastructure proposals. Land use and corridor preservation is an example of a non-infrastructure solution to an identified future need, which does not progress through the Project Assessment Framework. These are represented as Future opportunities in the asset classes.

The pipeline is conceptualised in figure 2. A diagram is also included within each asset class.

Infrastructure pipelines

There are a number of other public and private sector infrastructure pipelines. The Building Queensland Infrastructure Pipeline (page 15) presents an independent view of proposals valued at more than \$50 million. The National Infrastructure Construction Schedule includes construction projects at \$50 million and above. The Australia and New Zealand Infrastructure Pipeline focuses on construction activity greater than \$300 million, along with investable greenfield and brownfield opportunities. More information is available on these and other pipelines at dilgp.qld.gov.au

Private sector investment

The Queensland Government is fostering greater private sector involvement in developing and funding infrastructure solutions. This is enabled through initiatives such as public private partnerships and market-led proposals. The 2017 Major Projects Pipeline Report: Queensland Engineering Construction Outlook identified \$39.1 billion of major engineering project work in Queensland, of which almost \$20 billion is contributed through private funding. The report takes a five-year outlook of funded and unfunded, public and private sector projects.

Note: This report represents the engineering values within major projects, however, the total project values are higher.

Source: Queensland Major Contractors Association, Construction Skills Queensland, Infrastructure Association of Queensland 2017 Major Projects Pipeline Report: Queensland Engineering Construction Outlook

Queensland infrastructure pipeline

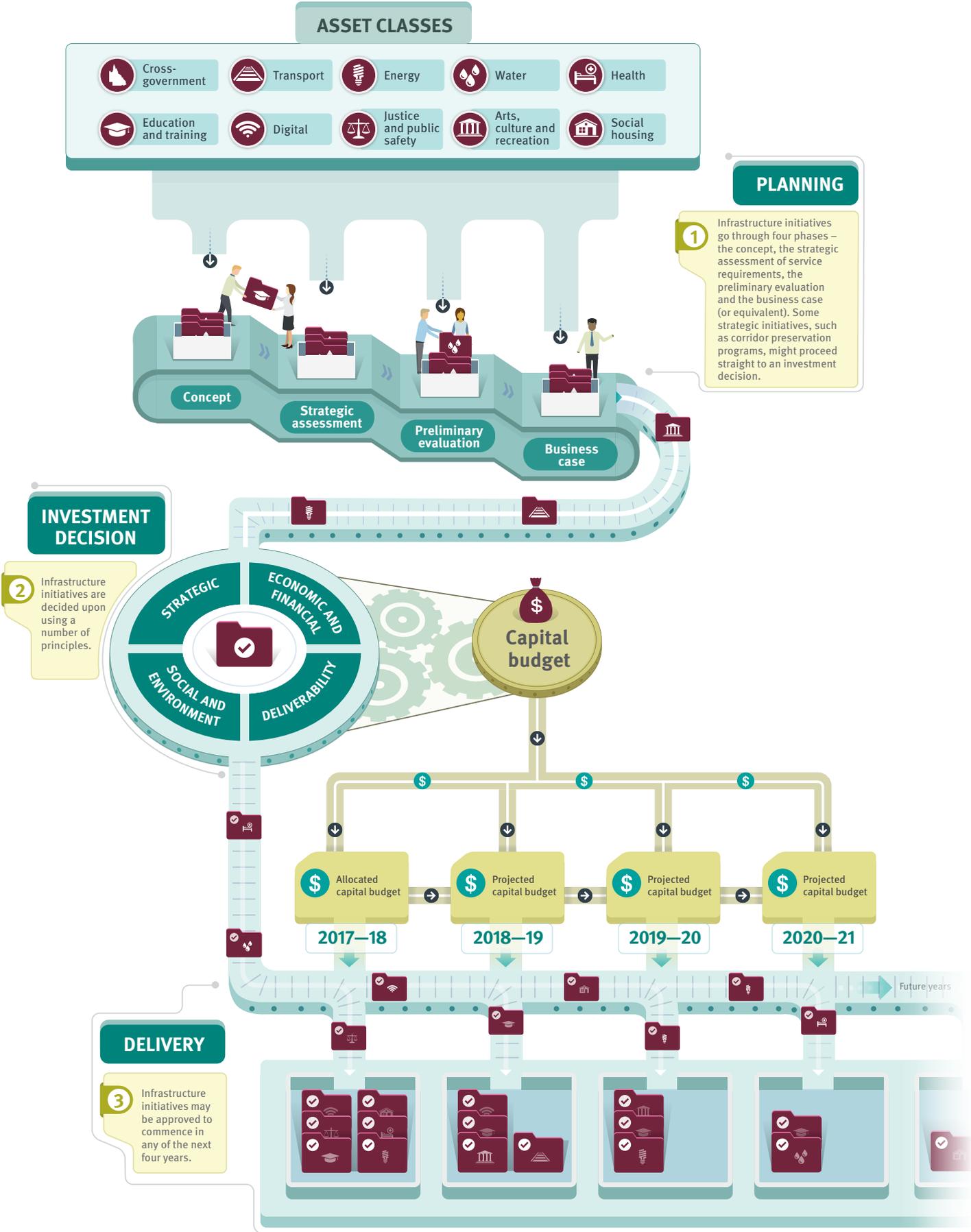


Figure 2: Queensland infrastructure pipeline

Government commitments

Job growth and security is crucial to the Queensland economy. In 2017–18, the Queensland Government has committed \$10.2 billion in infrastructure to deliver community services, maintain government assets and support economic growth. This investment will support 29,000 jobs. Over the next four years, this investment will be \$42.7 billion.

State Infrastructure Fund

The \$2.2 billion State Infrastructure Fund was established to boost infrastructure investment and increase business confidence. The State Infrastructure Fund is allocated to infrastructure investment and allows the government to make timely infrastructure investment decisions while maintaining fiscal discipline. The fund continues to focus on infrastructure projects that enhance productivity, support jobs and maintain liveability.

Through the fund, the Queensland Government made a commitment of \$850 million toward the delivery of Cross River Rail, which has increased in the 2017–18 State Budget to fully fund the project. In addition, \$44 million was allocated to the Pacific Motorway upgrade between Mudgeeraba and Varsity Lakes.

The following programs were also established under the State Infrastructure Fund.

Priority Economic Works Productivity Program

The \$300 million Priority Economic Works Productivity Program focuses on infrastructure that improves productivity, connects communities and markets, and makes better use of existing assets. There are seven major road and rail infrastructure projects, targeting productivity lifting and capacity improvements, that will be progressively delivered through to December 2020. All projects within the program are either under construction or have commenced the design stage, with the final project receiving Australian Government funding in March 2017.

 **7 of 7**
projects
underway

 **\$62 M**
expended

EXAMPLE PROJECTS

North Coast Line Capacity Improvement Project
\$95 million (PEWPP funding)
Multi-region

Ipswich Motorway, Rocklea to Darra stage 1 upgrade
\$88.4 million (PEWPP funding), supporting 471 jobs
Greater Brisbane

Significant Regional Infrastructure Projects Program

The \$180 million Significant Regional Infrastructure Projects Program is delivering social and economic infrastructure projects in key regional centres across Queensland. The program will support 600 jobs.



25
projects completed
or commenced



\$47 M
expended

EXAMPLE PROJECTS

Bill Fulton Bridge (Freshwater Creek)
\$34.2 million (SRIPP funding), supporting 98 jobs
Cairns

Mon Repos Turtle Centre redevelopment
\$10 million (SRIPP funding), supporting 100 jobs
Wide Bay



Townsville affordable housing development funded through the Significant Regional Infrastructure Projects Program

Maturing the Infrastructure Pipeline Program

The \$20 million Maturing the Infrastructure Pipeline Program supports the development of a robust project pipeline and enables projects to be matured from concepts into proposals capable of further development and ultimately an investment decision.

Through the program, all Proposals raised through consultation and Future opportunities identified in 2016 SIP Part B have been assessed.

Rapid assessments produced 243 reports informing infrastructure planning, budgetary consideration, grant applications and to attract private investment.

In late 2016, proposals received from local governments were drawn upon with an additional 48 proposals identified. These proposals have been assessed to determine their maturity and if further planning should be undertaken to develop the proposal. For more information see the Proposals raised through consultation section.

A further \$10 million was allocated to the program in the 2017–18 State Budget, taking the total program value to \$30 million.

 **48**
new proposals

 **\$10 M**
additional funding

Works for Queensland

The \$200 million Works for Queensland program, announced in January 2017, recognises that priority maintenance and minor infrastructure works across 65 local governments can be some of the most efficient forms of infrastructure investment. The program prioritises areas outside South East Queensland that are experiencing higher unemployment rates. More than 700 projects have been approved for delivery during 2017. A further \$200 million was allocated to the program in the 2017–18 State Budget, taking the total program value to \$400 million.

 **80%**
projects underway

 **651**
projects completed or commenced

EXAMPLE PROJECTS

Mary Valley Heritage Rail (The Valley Rattler) Infrastructure
\$4.7 million (W4Q funding), supporting 22 jobs
Wide Bay

Lions Park – a sensory haven for people of all abilities
\$3.32 million (W4Q funding), supporting 31 jobs
Fitzroy



North Rockhampton Road Train Access funded through the Priority Economic Works Productivity Program

Government commitments

Accelerated Works Program

The Accelerated Works Program was announced by the Queensland Government at the beginning of 2016 in response to subdued economic conditions affecting parts of regional Queensland. The program is fast-tracking delivery of more than \$440 million worth of new regional infrastructure projects, supporting an estimated 950 jobs over the life of the program.



132
projects
completed



24
projects
underway



\$224 M
expended

EXAMPLE PROJECTS

Townsville (Garbutt) depot upgrade stage 2
\$42.5 million (AWP funding), supporting 60 jobs
Townsville

Landsborough Highway (Blackall–Barcaldine), widening
\$12.5 million (AWP funding), supporting 38 jobs
Remote Queensland

Market-led proposals

Market-led proposals were introduced in the 2015–16 State Budget as part of the Queensland Government’s plan to create jobs and stimulate the economy. A market-led proposal is a submission from the private sector seeking a commercial arrangement with government to provide a service or infrastructure that will meet a community need. They are usually ‘low-risk, low-cost’ to government and must present a clear case for direct negotiation with the Queensland Government.

The continued use of the market-led proposal framework was identified as an Implementation action in 2016 SIP Part B. Since the market-led proposal framework has been established, the Queensland Treasury market-led proposal team has discussed preliminary proposals with proponents from every sector. Out of these concept discussions: 44 stage 1 initial proposals have been submitted for formal consideration, with six proposals progressing to stage 2 detailed proposal or beyond. One of these, the Logan Motorway Enhancement Project, has reached contractual close.

Where a good idea is not successful as a market-led proposal, it can be progressed in another way. Of the preliminary proposals closed to-date, six are being considered, or are progressing through a competitive process, and three have been referred to existing government funding programs or for other government support.

The market-led proposal guidelines have been improved to build on their success to date, making it easier to engage with the process and to understand what is required. In response to feedback from stakeholders, this includes streamlining the approval process and consolidating the assessment criteria. New supplementary guidance, with practical examples, will also help proponents to submit submissions that are more likely to be successful.

Building Queensland Infrastructure Pipeline

Building Queensland is an independent statutory body, established in December 2015. Building Queensland leads the development of business cases for state infrastructure proposals with an estimated capital cost greater than \$100 million and assists with those between \$50 million and \$100 million. Building Queensland's Infrastructure Pipeline report provides an appraisal of the maturity of unfunded infrastructure proposals.

Building Queensland's pipeline of priority proposals (figure 3) helps inform investment decisions. Once a project receives Queensland Government funding, it moves out of Building Queensland's pipeline and into the SIP's 1–4 year program. A number of projects previously included in the pipeline, as ready for government investment consideration, have received government funding. The phases of the Building Queensland pipeline, while titled differently, are equivalent to the Queensland Government's Project Assessment Framework.

Building Queensland – June 2017 pipeline of priority proposals

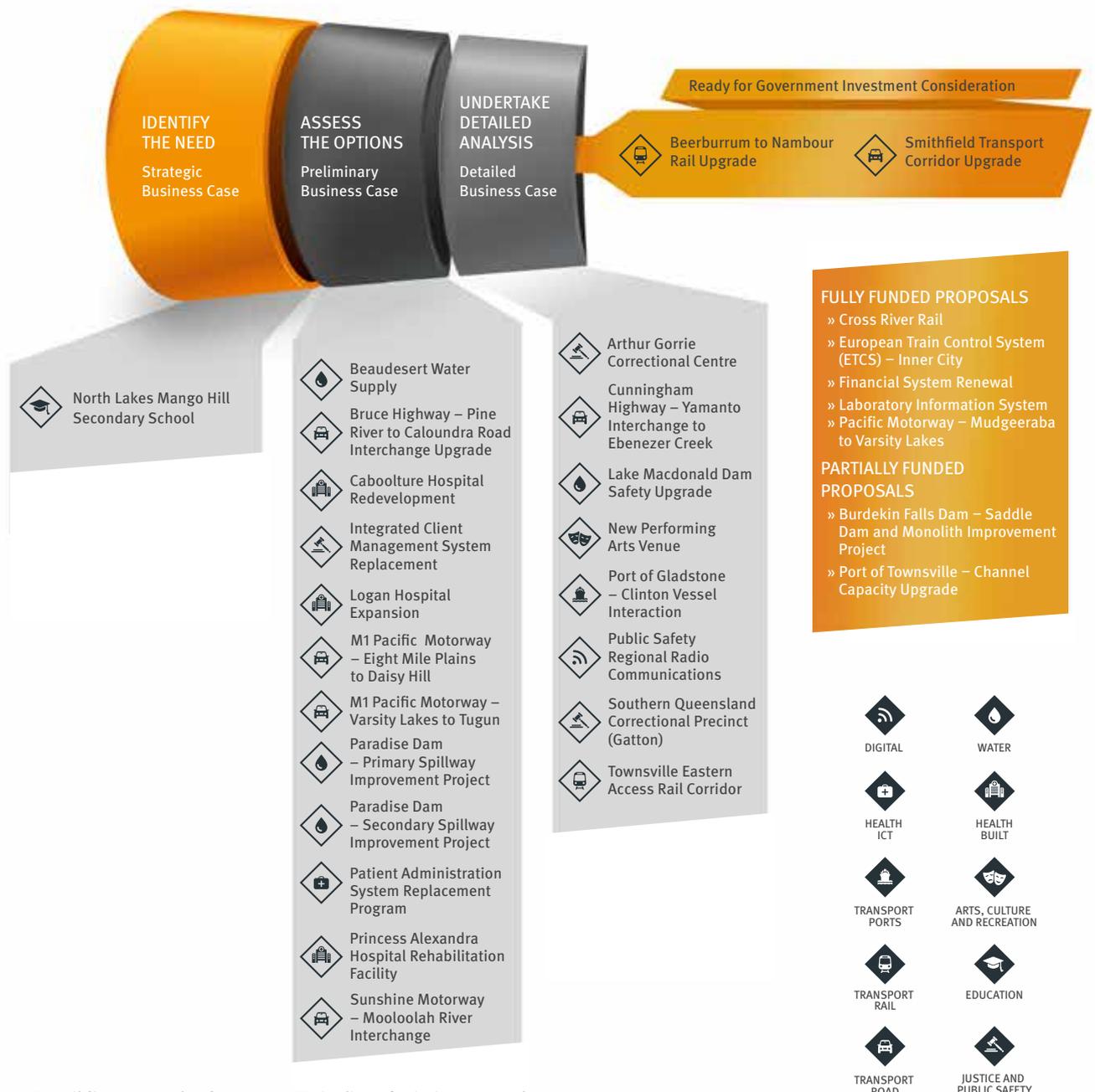


Figure 3: Building Queensland's June 2017 pipeline of priority proposals

Government commitments

Cross River Rail

Cross River Rail is the key to transforming South East Queensland's transport network to fully integrate road, rail and bus networks. It will allow people to be moved quickly into and out of the inner city, and between regional centres. These more frequent and reliable options will make it easier to use public transport across the region.

With all passenger rail lines using the same four inner city stations and a single central business district (CBD) rail crossing of the Brisbane River, there is a bottleneck at the core of South East Queensland's transport system. This bottleneck limits the number of services that can be provided, making passenger rail a less attractive alternative to private vehicles. Over-reliance on private vehicles leads to traffic congestion which also slows down buses and freight. Cross River Rail will ease congestion by taking 18,500 car trips off the road by 2036 – the equivalent of more than 300 full buses a day.

Cross River Rail will deliver a new 10.2 kilometre rail line between Dutton Park and Bowen Hills (figure 4), including 5.9 kilometres of tunnel under the Brisbane River and CBD. New, high-capacity stations at Boggo Road, Woolloongabba, Albert Street and Roma Street, and an upgrade of Exhibition Station, will provide direct access to more places of work, study and recreation.

Cross River Rail will provide easier access to jobs, hospitals and other services right across South East Queensland. By opening up the inner city rail network and improving transport connections across the region, it will boost South East Queensland's economy and create thousands of construction jobs. Further economic benefits are outlined in figure 5.

Innovation precincts around the project corridor will support thousands of high-value, knowledge-based jobs, providing new opportunities for Queenslanders.

In the past 18 months, an updated business case was completed, environmental approvals were progressed and the Cross River Rail Delivery Authority was established. Each of these milestones brings the project closer to construction.

The Queensland Government has committed to fully fund Cross River Rail at a delivery cost of \$5.4 billion.

Connecting Brisbane

Connecting Brisbane was released in June 2017 and outlines a road map for the future of Brisbane's public transport system. The vision is for a high-frequency public transport 'trunk' service with feeder services, that promotes the complementarity of the Cross River Rail and Brisbane Metro projects. The Queensland Government developed Connecting Brisbane in partnership with the Brisbane City Council and in consultation with the Australian Government Department of Infrastructure and Regional Development.



Artist impression of Woolloongabba Station

Government commitments

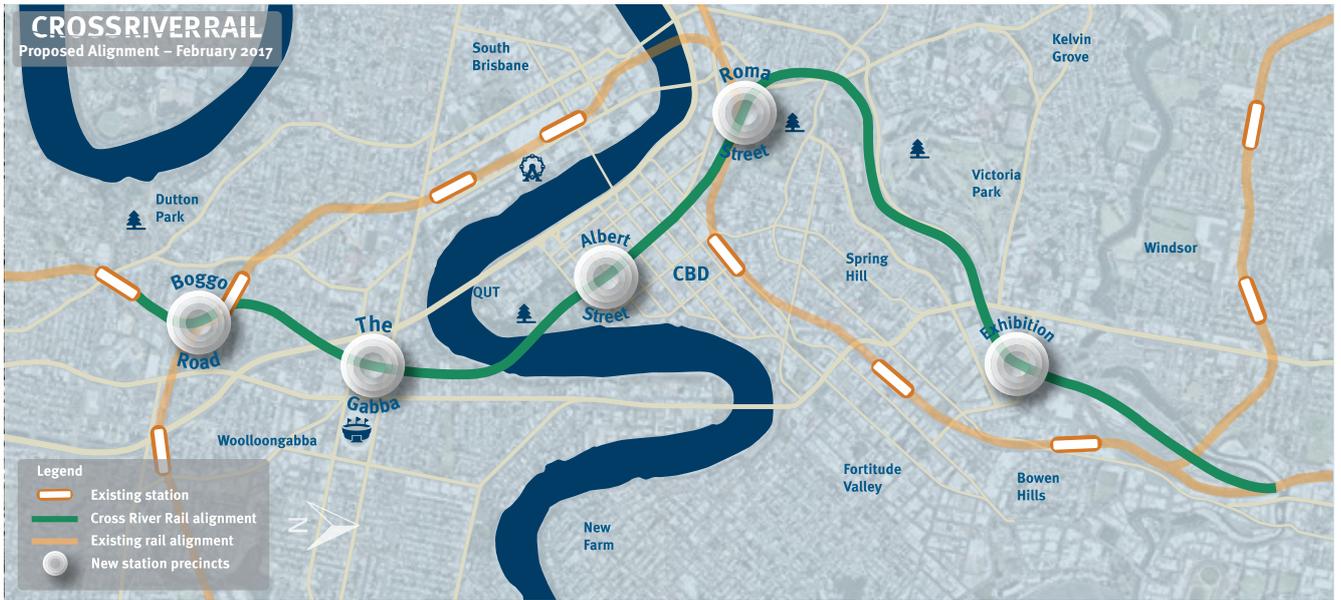


Figure 4: Cross River Rail proposed alignment map

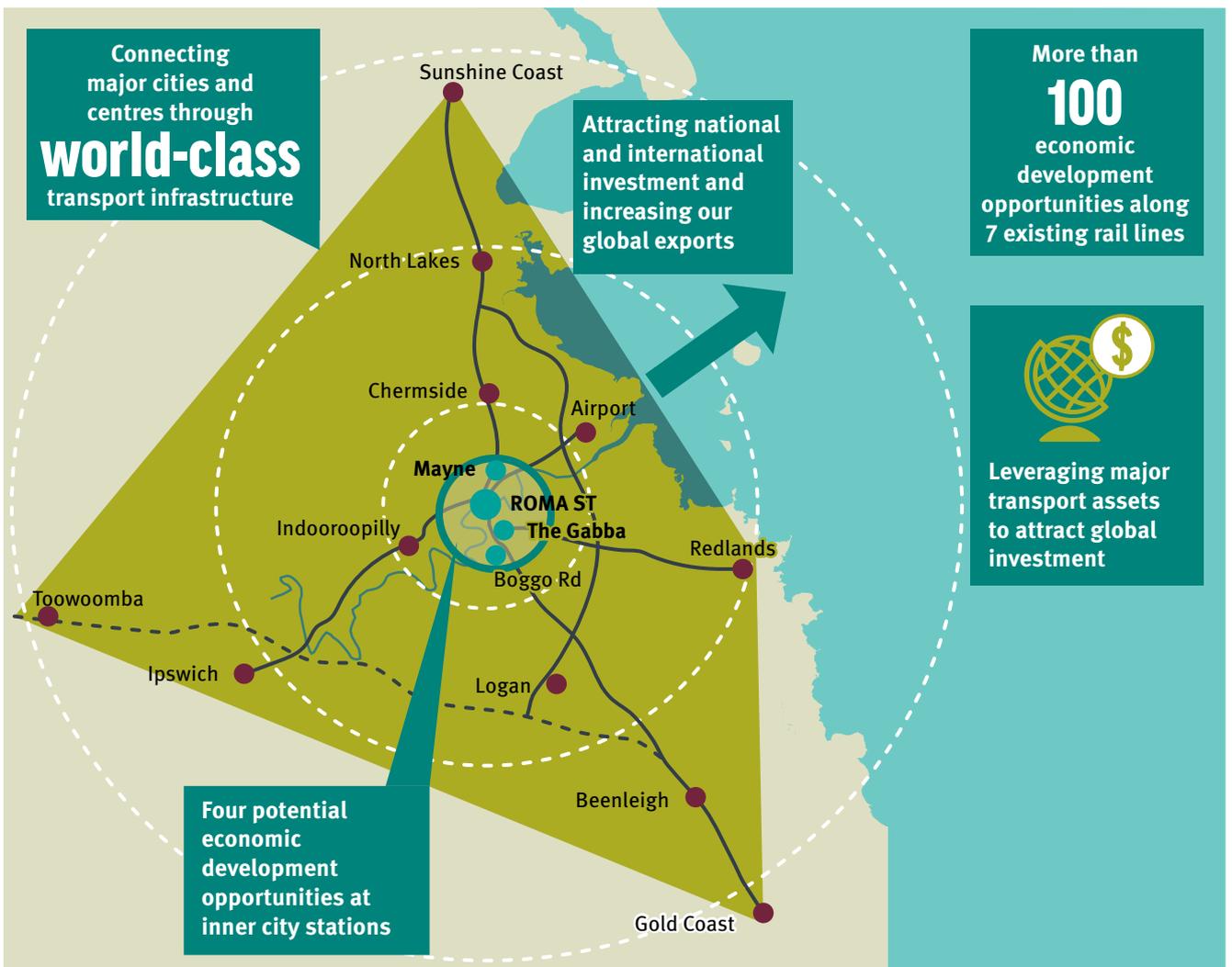


Figure 5: Cross River Rail economic benefits

Government commitments

Regional plans

Queensland’s regional plans provide strategic direction through land use planning to achieve economic, social and environmental outcomes. Through the draft *ShapingSEQ – South East Queensland Regional Plan* and the forthcoming *North Queensland Regional Plan*, the Queensland Government is delivering a more integrated approach to planning for the future of regions. These regional plans identify region-shaping infrastructure required to service existing development and support growth.

Regional plans have a significantly longer planning horizon than the SIP – which focuses on more immediate infrastructure delivery. Infrastructure priorities within regional plans move into the SIP 1–4 year program after consideration by relevant agencies, and when triggered by community growth and economic development.

This SIP update has been informed by the draft *ShapingSEQ* regional plan. Future SIP updates will be informed by future regional plans when available. This approach improves coordination and integration of land use and infrastructure planning and delivery. Figure 6 outlines the relationship between SIP and regional plans.

North Queensland Regional Plan

The draft North Queensland Regional Plan is due for release in mid-2017, with a final regional plan expected to be released in 2018. It will identify regional priorities likely to require an infrastructure solution over the next 25 years, building upon the commitments of the Townsville City Deal.

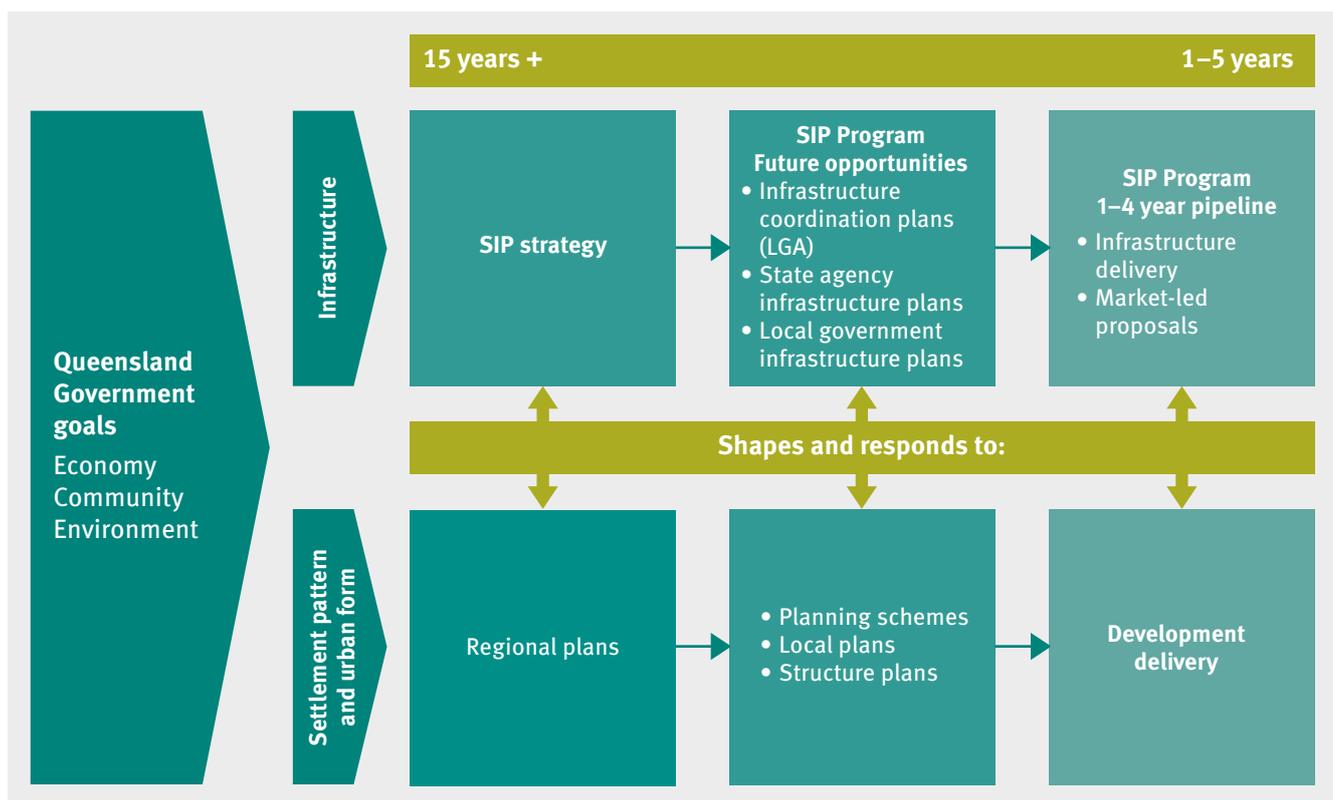


Figure 6: Regional plans and SIP relationship

Draft ShapingSEQ – South East Queensland Regional Plan

(Information from the draft *ShapingSEQ*)

The draft *ShapingSEQ* is the Queensland Government's plan to guide the future of South East Queensland and respond to the region's projected growth. The draft regional plan, including the submissions received, have been drawn upon to inform this SIP Part B update.

Planning and delivery of infrastructure to accommodate growth, support private investment and provide essential services will underpin the sustainability and liveability of the region. Community consultation undertaken to inform the draft *ShapingSEQ* identified a strong community desire to deliver infrastructure in line with growth.

The draft *ShapingSEQ* identifies dwelling supply benchmarks and employment planning baselines to deliver growth within consolidation and expansion areas to 2041. A greater focus on consolidating growth will enable better use of infrastructure, facilitate higher levels of service, enhance economic growth and optimise public transport patronage.

The draft *ShapingSEQ* identifies the South East Queensland City Deal as a key implementation mechanism. The City Deal will provide a critical connection between the draft *ShapingSEQ*, the annual SIP Part B update and the annual State Budget to ensure the state is driving consistent economic outcomes alongside the Australian and local governments.

Draft ShapingSEQ region-shaping infrastructure

The draft *ShapingSEQ* identifies priority region-shaping infrastructure to service existing development and support projected growth. Some near-term priorities for South East Queensland are outlined below and in the infrastructure pipeline in figure 7.

Optimising the rail network

Increasing network capacity to move people, facilitate employment growth in the city centre, deliver economic agglomeration benefits and support residential consolidation. Future rail links are also required to service expansion areas.

1 Cross River Rail

Cross River Rail is the key to transforming South East Queensland's transport network to fully integrate road, rail and bus networks. A business case has been completed by Building Queensland. The project will move into delivery phase during 2017–18.

2 Ipswich and Springfield public transport corridor (including public transport corridor extension to Ripley Valley)

Corridor studies have been undertaken and this corridor is likely to be constructed in stages as the population grows and, after the construction of Cross River Rail, as funding options become certain. This priority is in concept phase.

3 Extension of the Gold Coast Light Rail from Broadbeach to Coolangatta (stage 3)

The Department of Transport and Main Roads is collaborating with the City of Gold Coast to produce a business case for stage 3.

4 Salisbury to Beaudesert passenger rail (following the Salisbury to Beaudesert public transport corridor)

Planning is being undertaken by the Department of Transport and Main Roads to review the proposed cross-section and alignment, and preserve the corridor. This priority is in concept phase.

Expanding rapid bus transit

Busway network expansion will improve public transport safety, efficiency and reliability for commuters. It will also support increased dwelling densities and employment growth.

5 Northern Busway extension to Bracken Ridge (as busway or other priority corridor)

Initial planning for the extension between Kedron and Bracken Ridge has been undertaken by the Department of Transport and Main Roads. Further planning is required as funding options become certain. Implementation of bus priority measures, including transitways, are the preferred interim solution, with busways introduced as network demand warrants. This priority is in concept phase.

6 Eastern Busway extension to Carindale and Capalaba (as busway or other priority corridor)

Initial planning for the extension between Coorparoo and Capalaba has been undertaken by the Department of Transport and Main Roads. Further planning is required as funding options become certain. Implementation of bus priority measures, including transitways, are the preferred interim solution, with busways introduced as network demand warrants. This priority is in concept phase.

Government commitments

7 South East Busway extension to Springwood (as busway or other priority corridor)

The South East Busway extension forms part of the M1 Pacific Motorway – Gateway to Logan Motorway upgrade (eight laning) project. Technical studies that identify and protect a future busway corridor between Rochedale and Springwood have been completed. Delivery is subject to funding and will be prioritised based on planned investments and upgrades in the region. The project is currently at the preliminary evaluation phase.

8 High-frequency public transport connection from Browns Plains to the South East Busway

To improve access between Browns Plains and the inner city, priority bus infrastructure projects should be explored to identify opportunities for improved passenger transport outcomes in the short to medium-term. This priority is in concept phase.

9 Improved inner city distribution (to complement Cross River Rail)

Planning is underway for improvements to the inner-Brisbane public transport network, including the busway network. Projects such as the Brisbane City Council's Brisbane Metro proposal will complement Cross River Rail by helping to address inner city bus congestion, as outlined in Connecting Brisbane. Brisbane Metro is in business case phase.

10 New high-frequency public transport connection linking Broadbeach via Bond University to Robina

The Department of Transport and Main Roads will continue to investigate opportunities to enhance high-frequency passenger transport connectivity, as demand warrants.

Enhancing freight capacity and supply chain efficiency

Investing in a strategic freight network has flow-on benefits in terms of economic development, improved safety and reduced impact on local road networks.

11 Dedicated rail freight corridor between Acacia Ridge and the Port of Brisbane

The Department of Transport and Main Roads is working with the Australian Government to investigate requirements.

12 Toowoomba Second Range Crossing

The \$1.6 billion bypass route is in delivery and is due for completion in December 2018, delivered in partnership with the Australian Government.

13 Inland Rail from Melbourne to Brisbane

The Australian Government project will increase capacity to manage freight through South East Queensland and increase economic activity in the region.

14 Mount Lindesay Highway upgrade and Bromelton Deviation

The Department of Transport and Main Roads continues to plan and deliver staged upgrades of the Mount Lindesay Highway, with \$41.6 million invested over the next four years which will support freight growth in the Bromelton State Development Area.

Identifying and protecting future passenger transport corridors

Connecting major gaps in the existing transport network and better managing it as one network will improve connectivity and efficiency.

15 High-frequency public transport services between Maroochydore, Caloundra to Beerwah

The CoastConnect concept design and impact management plan have been finalised. The Department of Transport and Main Roads is reviewing this planning as part of a wider investigation into options for passenger transport infrastructure in the southern Sunshine Coast. This priority is in concept phase.

16 Frequent public transport services to planned major expansion growth areas at Greater Flagstone, Caboolture and Yarrabilba

Greater Flagstone: Detailed passenger transport demand studies will be undertaken to assist in preserving trunk routes. Any long-term solution would require further planning, design and funding options.

Caboolture: The Department of Transport and Main Roads is working with Moreton Bay Regional Council to develop a broad transport infrastructure strategy. As planning and development advances and funding options become certain, this priority will progress.

Yarrabilba: Long-term planning indicates the need for future investigation of priority infrastructure requirements, such as detailed corridor studies. Any long-term solution would require further planning, design and funding options.

This priority is in concept phase, with a strategy being developed.

Government commitments

Preliminary region-shaping priorities pipeline – 15 year horizon

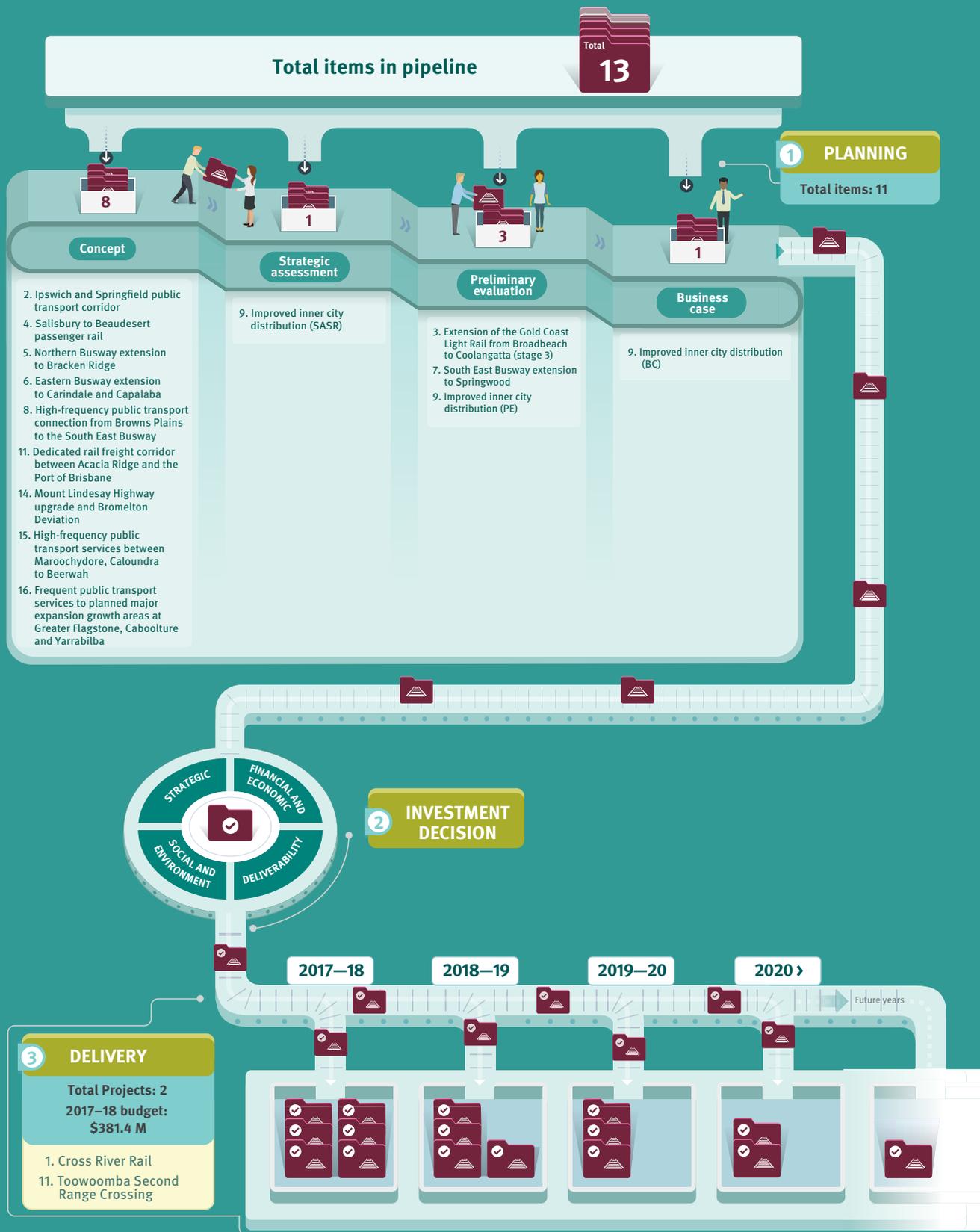


Figure 7: Regional plan infrastructure pipeline highlighting the draft *ShapingSEQ* region-shaping priorities
 Note: This pipeline will be updated to include priorities within other regional plans as they are completed.
 Note: Items at various planning stages are captured in each phase, however, are only counted once in the total items.

Australian Infrastructure Plan

The Australian Infrastructure Plan (AIP), released by Infrastructure Australia in February 2016, outlines national infrastructure reform and investment priorities for the next 15 years.

The AIP, which made 78 recommendations for infrastructure reform, is aimed at delivering productivity growth and enhanced living standards, and ensuring Australian cities remain world-class.

The Australian Government's response to the AIP supported 69 of the recommendations. The Australian Government also acknowledged that many of the recommendations related to reforms that are primarily the responsibility of state and territory governments.

The Australian Government has committed to four key initiatives stemming from the AIP:

- ▶ Undertaking an independent inquiry to look at how the productivity and efficiency of Australia's freight and supply chain infrastructure can be lifted.
- ▶ Working with state governments to develop urban rail plans for Australia's five largest cities (including their surrounding regions).
- ▶ Establishing a study, led by an eminent Australian, into the potential benefits and impacts of road user charging for light vehicles, and progressing next steps for heavy vehicle reform with states and territories.
- ▶ Developing a technology plan to improve data collection for all users, the private sector and government across all transport modes.

The Queensland Government will work with the Australian Government to progress these initiatives where they align with the state's strategic direction.

The Australian Government's response also reaffirms its commitment to invest in infrastructure and support more innovative funding and finance solutions, including public private partnerships, balance sheet leveraging and value capture.

The Queensland Government welcomes the Australian Government's commitment to take a stronger role in leveraging its financial capacity to support infrastructure investment. This will be particularly relevant for projects which have strong commercial opportunities.

The SIP is delivering on key aspects of the AIP by providing direction for infrastructure investment. Key reform recommendations made by the AIP are embedded in the SIP, with several included as Implementation actions. The following initiatives demonstrate how the SIP is delivering on the AIP recommendations:

- ▶ Improved coordination and integration of infrastructure and land use planning.
- ▶ Better use of existing assets.
- ▶ Investigation and potential application of value capture and innovative funding and financing arrangements.
- ▶ Encouraging innovative solutions to infrastructure challenges.

Infrastructure Priority List

Alongside the AIP, the Infrastructure Priority List (IPL) provides direction on nationally significant infrastructure investments needed to underpin Australia's continued prosperity. The IPL is updated regularly.

Queensland inclusions

The February 2017 release of the IPL included five new entries for Queensland – two projects and three initiatives. There are a total of 16 Queensland-specific proposals on the list (five projects and 11 initiatives) as well as a number of national initiatives relevant to Queensland.

The IPL confirms Cross River Rail as a near-term project and one of Australia's highest infrastructure priorities – it is the Queensland Government's number one priority.

Projects identified in the IPL as priorities are reflected in the SIP 1–4 year program.

The upgrade of the Bruce Highway is identified by Infrastructure Australia as a national priority, with two new Queensland projects jointly funded and therefore now reflected in the SIP 1–4 year program:

- ▶ Bruce Highway upgrade – Mackay Ring Road stage 1
- ▶ Bruce Highway upgrade – Cooroy to Curra section C.

Australian Infrastructure Plan

Infrastructure Priority List – Queensland projects¹

Proposed project/initiative ²	Location	Timeframe ³	Pipeline phase ⁵
High priority project			
Ipswich Motorway Rocklea – Darra stage 1c	Western Brisbane	Near-term	Delivery
High priority initiative			
Cross River Rail	Brisbane	Near-term	Business case assessment
Ipswich Motorway Rocklea – Darra (remaining sections)	Western Brisbane	Near-term	Business case development
Port of Brisbane dedicated freight rail connection	Brisbane	Medium-term	Strategic assessment
National Freight Supply Chain Strategy	National	Near-term	Preliminary evaluation
Network Optimisation Portfolio	National	Near-term	Conceptual
Preserve corridor for east coast high-speed rail	Melbourne to Brisbane	Near-term	Business case
Priority project			
M1 Pacific Motorway – Gateway Motorway merge upgrade	South East Brisbane	Near-term	Delivery
Bruce Highway upgrade – Cooroy to Curra section C ⁴	Wide Bay–Burnett	Near-term	Delivery
Bruce Highway upgrade – Mackay Ring Road stage 1 ⁴	Mackay	Near-term	Delivery
M1 Pacific Motorway upgrade – Mudgeeraba to Varsity Lakes	Gold Coast	Near-term	Delivery
Inland Rail (Melbourne to Brisbane via inland NSW)	National	Longer-term	Various
Priority initiative			
Brisbane to Gold Coast transport corridor upgrades	Brisbane–Gold Coast	Near-term	Various
Beerburum to Nambour rail upgrade	Sunshine Coast to Brisbane	Near-term	Business case development
Cunningham Highway – Yamanto to Ebenezer/Amberley upgrade	Yamanto to Ebenezer	Near-term	Business case development
Bruce Highway upgrade	Brisbane to Cairns	Various	Various
Mount Isa – Townsville rail corridor upgrade	North Queensland	Medium-term	Business case development
Gladstone Port land and sea access upgrade	Gladstone	Medium-term	Preliminary evaluation
Preserve corridor for Salisbury to Beaudesert rail connection	Brisbane–Beaudesert	Near-term	Preliminary evaluation
Lower Fitzroy River water infrastructure development	Central Queensland	Near-term	Business case
Advanced Train Management System (ATMS) implementation on ARTC network	National	Near-term	Business case
Connect gas suppliers to eastern gas markets	National	Near-term	Various

Notes:

¹ IPL as at February 2017. Includes some national projects which have application in Queensland

² For project/initiative summaries visit: infrastructureaustralia.gov.au/projects/infrastructure-priority-list.aspx

³ Near-term: within 5 years; medium-term: within 10 years; longer-term: within 15 years

⁴ Bruce Highway projects have been funded and are in the 1–4 year program – to be removed from subsequent IPLs.

⁵ The pipeline phase is aligned to the Queensland infrastructure pipeline.

Proposals raised through consultation

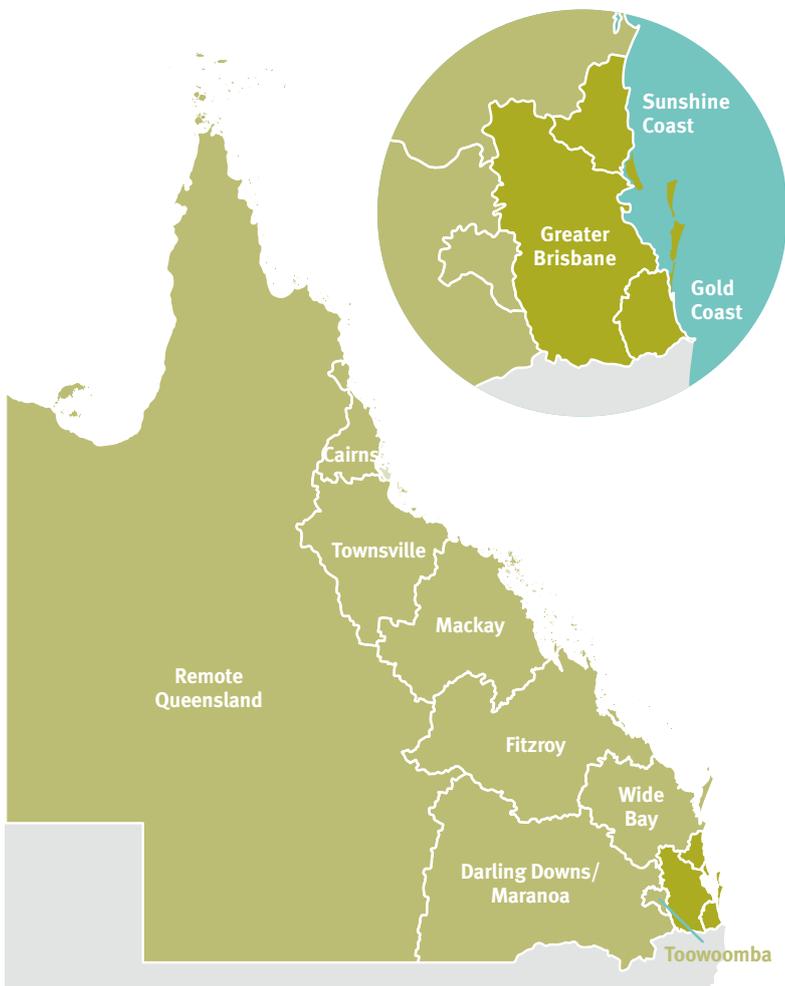
Queensland communities continue to be strong advocates for investment in their regions, which has helped to secure public and private investment across the state. The Queensland Government supports investigating opportunities to improve liveability and productivity in Queensland’s regions.

In late 2015, the Queensland Government undertook consultation on the draft SIP, which identified 103 Proposals raised through consultation, which were included in the 2016 SIP Part B. These Proposals raised through consultation were raised by various stakeholders, including local governments, communities and industry.

While these Proposals raised through consultation are not necessarily reflective of existing government priorities, it is acknowledged that they are important to local communities. 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.

An assessment of the maturity of Proposals raised through consultation has been undertaken through the Maturing the Infrastructure Pipeline Program. The outputs of this assessment may inform state and local government infrastructure planning and budgeting processes, future grant applications and attract private investment. Outcomes have been described in terms of the Project Assessment Framework phases or equivalent, and also include non-infrastructure solutions. Some Proposals raised through consultation were found to have a longer-term requirement and may be progressed at a later date.

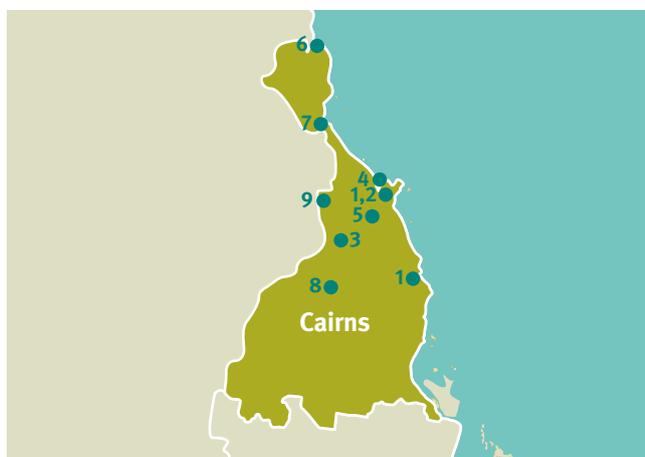
In late 2016, submissions received from local governments were drawn upon with an additional 48 proposals identified. These proposals have been assessed to determine their maturity and if further planning should be undertaken to develop the proposal. It is expected that these, and new Proposals raised through consultation that emerge, will continue to be assessed in future rounds of the Maturing the Infrastructure Pipeline Program and included in future SIP Part B updates. The Proposals raised through consultation are outlined in this section by region.



Proposals raised through consultation

Cairns

#	Project	Status
1	Cairns Active Transport Network extension	This proposal is being progressed through business case phase by Cairns Regional Council. This is supported by the Queensland Government's comprehensive planning and investment framework to deliver cycling infrastructure across the state, delivered in collaboration with local governments, through the Queensland Cycling Strategy, Cycling Infrastructure Policy and Principal Cycle Network Plans.
2	Cairns shipping development project	Preliminary evaluation is being undertaken by Ports North and Building Queensland. The Queensland Government will contribute \$60 million over two years from 2018–19 to widen and deepen Trinity Inlet Channel and swing basin at the Port of Cairns, subject to an Environmental Impact Study and business case approval.
3	Nullinga Dam	Equivalent of a strategic assessment of service requirement completed. A preliminary evaluation is being progressed by Building Queensland.
4	Cairns Airport upgrade	Progressing through concept phase with Cairns Airport Land Use Plan, which is currently being reviewed. The plan will inform the need for further upgrades. Future stages could attract market investment opportunities.
5	Mount Peter water infrastructure	This proposal will be progressed to preliminary evaluation phase (or equivalent) with Cairns Regional Council.
6	Douglas Shire water resilience	This proposal will be progressed to strategic assessment phase (or equivalent) with Douglas Shire Council.
7	Wangetti Trail	This proposal will be progressed to preliminary evaluation phase (or equivalent) with Douglas Shire Council.
8	Ravenshoe water supply scheme	This proposal will be progressed to strategic assessment phase (or equivalent) with Tablelands Regional Council.
9	Mareeba water pressure improvement	This proposal will be progressed to preliminary evaluation phase (or equivalent) with Mareeba Shire Council.



Cairns city (image courtesy Tourism and Events Queensland)

Proposals raised through consultation

Townsville

#	Project	Status
1	North Queensland Stadium	In delivery and due for completion in 2020.
2	Infrastructure to support Townsville City Waterfront Priority Development Area	Program of work progressing with specific projects at various levels of maturity. Could attract industry contribution.
3	Development of a Northern Queensland Energy Investment Plan (not mapped)	Under the Powering North Queensland Plan, the Queensland Government is investing \$386 million to strengthen and diversify North Queensland's energy supply and create a North Queensland clean energy hub.
4	Expansion of the Port of Townsville	The channel capacity upgrade project is the first stage of the Port of Townsville expansion project and the completion of a business case for stage 1 is a commitment in the Townsville City Deal. The port expansion has been identified as a future opportunity within the Townsville City Deal and future stages of the expansion have the potential to attract market investment.
5	Long-term water security (Haughton pipeline duplication)	The Townsville Water Security Taskforce formed as part of the Townsville City Deal will consider short, medium and long-term solutions for water security for Townsville, which may include the Haughton pipeline duplication. In the 2017–18 State Budget, \$225 million was committed over four years to assist with water security measures.
6	Lucinda long-term marina access project	This proposal will be progressed to strategic assessment phase (or equivalent) with Hinchinbrook Shire Council.
7	Herbert River intake weir and treatment system	This proposal will be progressed to preliminary evaluation phase (or equivalent) with Hinchinbrook Shire Council.
8	Forrest Beach sewerage scheme – staged approach	This proposal will be progressed to strategic assessment phase (or equivalent) with Hinchinbrook Shire Council.
9	Townsville Entertainment and Convention Centre	This proposal will be progressed to preliminary evaluation phase (or equivalent) with Townsville City Council.



Townsville City Waterfront Priority Development Area

Proposals raised through consultation

Mackay

#	Project	Status
1	Mackay to Bowen Basin services corridor including Peak Downs Highway upgrade and Walkerston Bypass	Walkerston Bypass is funded with construction to commence once the Bruce Highway: Mackay Ring Road stage 1 nears completion. Future investment on Peak Downs Highway is at various stages of planning maturity.
2	Whitsunday Coast Airport expansion	The Queensland Government has allocated \$15 million towards this proposal in the 2017–18 State Budget. This project may attract market interest.
3	Connors River Dam and pipelines	Progress is dependent on need, such as industry demand for bulk water storage.



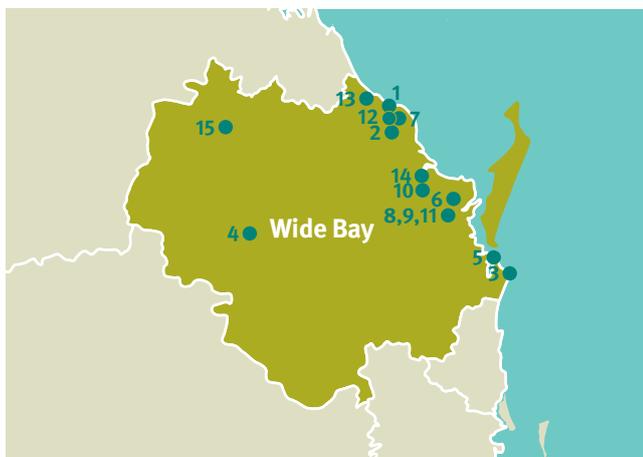
Fitzroy

#	Project	Status
1	Rockhampton Convention Centre	The equivalent of strategic assessment of service requirement has been completed. Further work on the proposal has been deferred by Rockhampton Regional Council.
2	Rockhampton Hospital carpark	Project being delivered, with construction expected to commence in 2017.
3	Moura Link–Aldoga Rail project	Progress is dependent on coal demand and industry needs. This is an industry-led proposal.
4	Type 1 road vehicle access through Rockhampton	Project is being delivered through Priority Economic Works and Productivity Program and the Northern Australia Roads Programme.
5	Fitzroy to Gladstone pipeline	Project dependent on business case for Lower Fitzroy River water infrastructure, refer to the Infrastructure Priority List.
6	Duplication of Capricorn Highway (Bruce Highway to Gracemere)	The project (also known as Capricorn Highway duplication (Rockhampton – Gracemere)) is funded under the Northern Australia Roads Programme and is in delivery phase.
7	Emerald Entertainment, Events and Evacuation Centre	This proposal will be progressed to strategic assessment phase (or equivalent) with Central Highlands Regional Council.
8	Emerald Saleyards upgrade	This proposal will be progressed to preliminary evaluation phase (or equivalent) with Central Highlands Regional Council.
9	Bedford Weir Crossing	This proposal will be progressed to preliminary evaluation phase (or equivalent) with Central Highlands Regional Council.
10	Causeway Lake revitalisation and development project	This proposal will be progressed to strategic assessment phase (or equivalent) with Livingstone Shire Council.
11	Parkhurst strategic road network	This proposal will be progressed to strategic assessment phase (or equivalent) with Rockhampton Regional Council.
12	Mount Morgan water supply security	This proposal will be progressed to preliminary evaluation phase (or equivalent) with Rockhampton Regional Council.
13	North Rockhampton sewerage treatment plant – stage 1 augmentation	This proposal will be progressed to preliminary evaluation phase (or equivalent) with Rockhampton Regional Council.
14	Rockhampton regional industrial estate and intermodal logistics hub	This proposal will be progressed to strategic assessment phase (or equivalent) with Rockhampton Regional Council.

Proposals raised through consultation

Wide Bay

#	Project	Status
1	Mon Repos Turtle Centre expansion	Project is currently being delivered, funded through Significant Regional Infrastructure Projects Program.
2	Flood proofing key community assets such as the hospital	Strategic assessment is being progressed through Queensland Health's Investment Management Framework.
3	Rainbow Beach helipad	Proposal is being progressed by Gympie Regional Council.
4	Boyne River Mundubbera Bridge betterment project	Business case completed in 2012. Investment decision subject to other potential value-for-money options, competing statewide priorities and available funding.
5	Coastal ecotourist drive between Rainbow Beach and the Town of 1770	The Australian and Queensland governments' have committed \$8.5 billion over 10 years (2013–14 to 2022–23) to upgrade capacity, safety and flood immunity on the Bruce Highway (Brisbane – Cairns). Upgrading this national link is a key priority and will improve the drive-tourism experience along Queensland's east coast.
6	Maryborough/Hervey Bay Road upgrade	Progress deferred until link strategies between Hervey Bay and Maryborough are investigated.
7	Port of Bundaberg development	The Bundaberg State Development Area was declared in February 2017 in response to growing demand for port-related and industrial land.
8	Hervey Bay and Maryborough water networks interconnection	A strategic assessment of service requirement will be progressed as part of the Maturing the Infrastructure Pipeline Program. This proposal was nominated by Fraser Coast Regional Council.
9	Upgrade Maryborough Hospital	Emergency department and specialist outpatient refurbishment proposals are funded and being progressed for the Maryborough Hospital through Queensland Health's Investment Management Framework.
10	Howard and Torbanlea to be seweraged	Business case developed for sewerage for Howard. Proposal progressing to investment decision through local government with investment from Building our Regions program and industry.
11	Upgrade Granville Bridge	As planning and development advances and funding options become certain, this proposal will be further considered.
12	LiveFire – Bundaberg Arts and Innovation Hub	This proposal will be progressed to strategic assessment phase (or equivalent) with Bundaberg Regional Council.
13	Bundaberg ANZAC Park precinct redevelopment	This proposal will be progressed to strategic assessment phase (or equivalent) with Bundaberg Regional Council.
14	Burnett River (Paradise Dam) to Howard water supply pipeline – staged approach	This proposal will be progressed to preliminary evaluation phase (or equivalent) with Fraser Coast Regional Council.
15	Monto Biohub Project	This proposal will be progressed to strategic assessment phase (or equivalent) with North Burnett Regional Council.

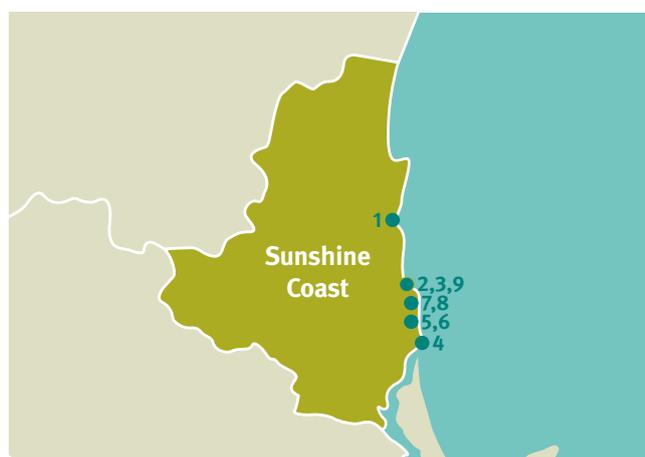


Port of Bundaberg

Proposals raised through consultation

Sunshine Coast

#	Project	Status
1	Sunshine Coast Airport expansion	Project construction being progressed with investment from industry and the Australian Government.
2	Convention, exhibition and performing arts centre	Initial planning completed and strategic assessment of service requirement (convention and exhibition centre) to follow as part of the Maturing the Infrastructure Pipeline Program. The project may attract market interest. This proposal was nominated by Sunshine Coast Regional Council.
3	Infrastructure to support the Maroochydore Priority Development Area	Program of work progressing with specific projects at various levels of maturity. May attract market interest.
4	Undersea data cable	Proposal progressing through concept phase to explore opportunities for private sector investment.
5	Sunshine Coast light rail project	Sunshine Coast Regional Council is leading this proposal. The equivalent of preliminary evaluation has been completed. The next step is a business case, which may be supported by market interest.
6	High-quality bus connection between Caloundra and Maroochydore	A comprehensive public transport strategy for the southern Sunshine Coast is under development, including investigation of options for enhanced and/or rapid bus services between Caloundra and Maroochydore through the CoastConnect: Caloundra to Maroochydore Quality Bus Corridor initiative.
7	Sunshine Motorway (Mooloolah River Interchange)	A preliminary evaluation has been completed.
8	Improve transport connections to the Sunshine Coast University Hospital	Road infrastructure to improve access to the Sunshine Coast University Hospital has been completed with Priority Economic Works and Productivity Program funding. Public transport services to the hospital are being addressed. A new bus route and additional services on a number of existing routes were introduced in January 2017 to provide comprehensive public transport connections to the new hospital.
9	Regional library to support the Maroochydore Priority Development Area	This proposal will be progressed to strategic assessment phase (or equivalent) with Sunshine Coast Regional Council.

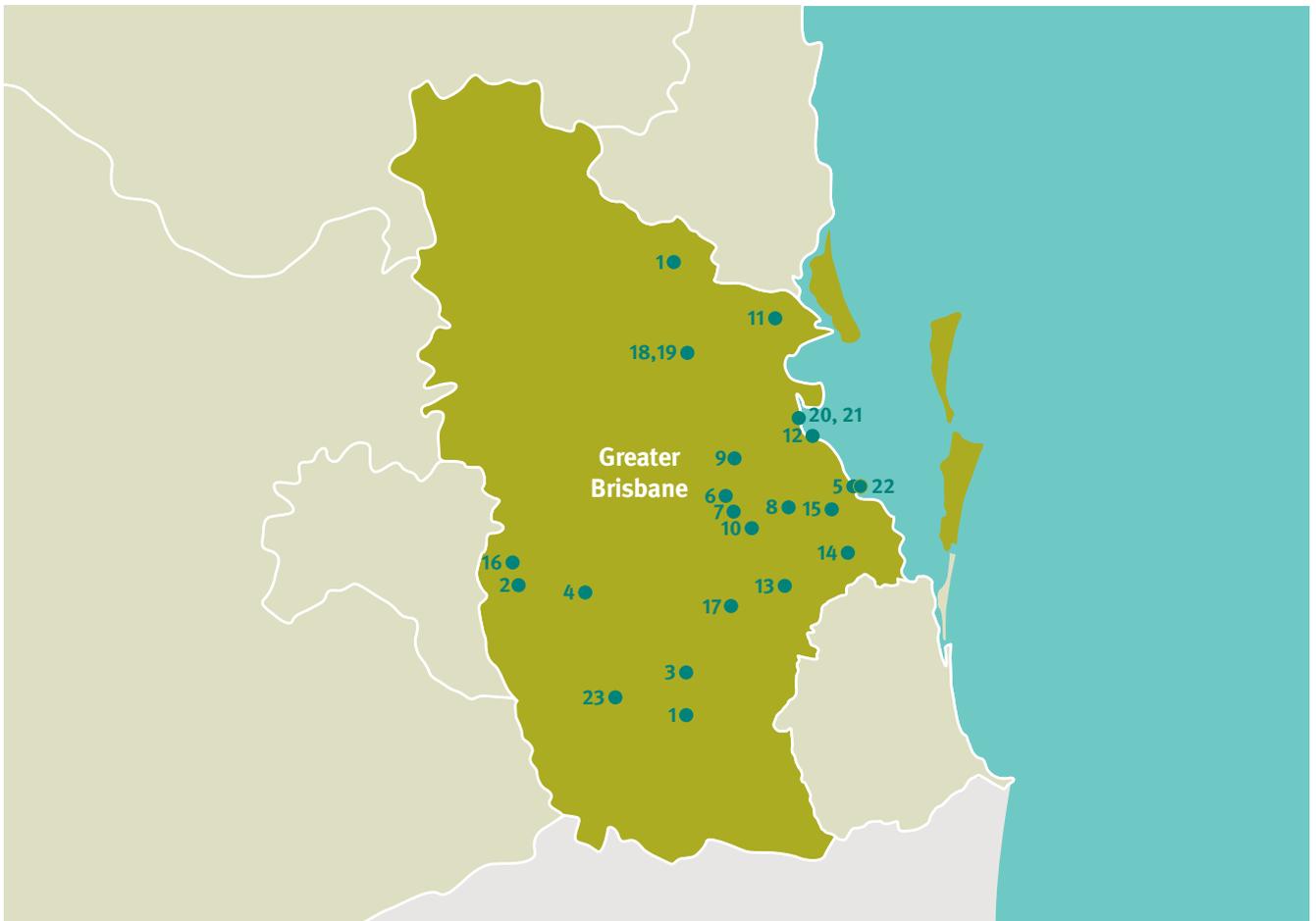


Proposals raised through consultation

Greater Brisbane

#	Project	Status
1	Infrastructure to support Flagstone, Caboolture West and other growth areas	Proposals for each area are progressing through a program of work with specific projects at various levels of maturity. The project may attract market interest.
2	Ipswich Performing Arts Centre	The equivalent of strategic assessment of service requirement has been completed. The proposal is being progressed through a preliminary evaluation by the Ipswich City Council.
3	Salisbury to Beaudesert passenger rail	Planning is being undertaken to review the proposed cross-section and alignment, and to preserve the corridor. Refer to <i>ShapingSEQ</i> region-shaping infrastructure on page 19 for details.
4	Springfield to Redbank rail extension	Corridor has been preserved and it is likely to be constructed in stages as the population grows, and after Cross River Rail is constructed.
5	Manly to Cleveland rail duplication	Planning is being undertaken to investigate required rail infrastructure on the Cleveland Line between Park Road and Cleveland.
6	Inner city bus capacity solutions	The proposal is being incorporated in other projects such as Brisbane Metro, including links with Cross River Rail. Refer to <i>ShapingSEQ</i> region-shaping infrastructure on page 19 for details.
7	Upgrade of key bus/rail interchanges	Program is to be developed to investigate and prioritise bus rail interchange projects.
8a	Eastern Busway	Proposal adopted as a region-shaping priority within <i>ShapingSEQ</i> . Refer to <i>ShapingSEQ</i> region-shaping infrastructure on page 19 for details.
8b	Eastern transitway	Preliminary planning has been undertaken for the Eastern transitway proposal.
9a	Northern transitway	Previous stages have been completed connecting the CBD to Kedron.
9b	Northern Busway	Proposal adopted as a region-shaping priority within <i>ShapingSEQ</i> . Refer to <i>ShapingSEQ</i> region-shaping infrastructure on page 19 for details.
10	South East Busway extension	The South East Busway extension forms part of the M1 Pacific Motorway – Gateway to Logan Motorway upgrade (eight laning) project. The project is at preliminary evaluation phase. Refer to <i>ShapingSEQ</i> region-shaping infrastructure on page 19 for details.
11	New rail freight terminal at Elimbah	Progressing through concept phase to identify an appropriate site for a rail freight terminal in the northern area of the region.
12	Brisbane cruise ship terminal	Proposal approved to progress through a market-led proposal process by Queensland Treasury.
13	Pacific Motorway widening through Logan	A strategic assessment of service requirement has been completed and the proposal is progressing through preliminary evaluation by the Department of Transport and Main Roads.
14	Redland City/Gateway Motorway Corridor	Initial planning studies have been completed. The next step is a strategic assessment of service requirement.
15	Tilley Road extension (Redland City to Port of Brisbane)	Brisbane City Council is leading this proposal. The corridor for the Tilley Road extension has been preserved and the proposal is progressing in a staged approach through planning.
16	Warrego Highway/Brisbane Valley Highway (Bayley Road extension)	Proposal is progressing through concept phase subject to Ipswich City Council priorities and available funding.
17	Protection of infrastructure corridors (Southern Infrastructure Corridor and extension of Park Ridge Corridor)	The proposal is in early stages of planning to preserve the corridor for future infrastructure requirements.
18	East Petrie bypass	Planning to preserve a future state-controlled transport corridor is underway and expected to be established by late 2017.
19	Moreton Bay Region University Precinct (Petrie)	Progressing through concept phase as the Moreton Bay campus of the University of the Sunshine Coast. The Queensland Government recently declared The Mill at Moreton Bay Priority Development Area to facilitate this project.
20	Brisbane River access hub	This proposal will be progressed to preliminary evaluation phase (or equivalent) with Brisbane City Council.
21	Brisbane inner city broadband fast track	This proposal will be progressed to strategic assessment phase (or equivalent) with Brisbane City Council.
22	Cleveland Innovation Precinct	This proposal will be progressed to strategic assessment phase (or equivalent) with Redland City Council.
23	Coulson crossing upgrade	This proposal will be progressed to strategic assessment phase (or equivalent) with Scenic Rim Regional Council.

Proposals raised through consultation



Proposals raised through consultation

Gold Coast

#	Project	Status
1	Gold Coast transit/bikeway upgrades	This is a City of Gold Coast proposal. The Queensland Government has a comprehensive planning and investment framework to deliver cycling infrastructure. This is delivered in collaboration with local governments across the state, including the Queensland Cycling Strategy, Cycling Infrastructure Policy and Principal Cycle Network Plans.
2	Gold Coast Light Rail – stage 3 Broadbeach to Burleigh Heads	Proposal adopted as a region-shaping priority within <i>ShapingSEQ</i> , and is being progressed by the Department of Transport and Main Roads in collaboration with the City of Gold Coast. Refer to <i>ShapingSEQ</i> region-shaping infrastructure on page 19 for details.
3	Varsity Lakes to Elanora passenger rail extension	Corridor has been preserved and it is likely to be constructed in stages following construction of Cross River Rail. As planning and development advances and funding options become certain, this proposal will progress.



Gold Coast Light Rail

Toowoomba

#	Project	Status
1	Bus and passenger rail connection to Brisbane	Toowoomba Regional Council and Lockyer Valley Regional Council, in partnership with the private sector, will continue to advance the proposal for bus services. The rail component of the proposal could attract future private sector interest.
2	Intermodal hubs at Inglewood and Toowoomba	Progress is dependent on the results of the route alignment study for the Queensland portion of the Inland Rail Project.
3	Toowoomba Enterprise Hub central precinct connection project	This proposal will be progressed to strategic assessment phase (or equivalent) with Toowoomba Regional Council.
4	Highfields/Gowrie growth areas (northern communities) connection project	This proposal will be progressed to strategic assessment phase (or equivalent) with Toowoomba Regional Council.
5	Boundary Street (north) Toowoomba Second Range Crossing arterial link project	This proposal will be progressed to strategic assessment phase (or equivalent) with Toowoomba Regional Council.



Proposals raised through consultation

Darling Downs

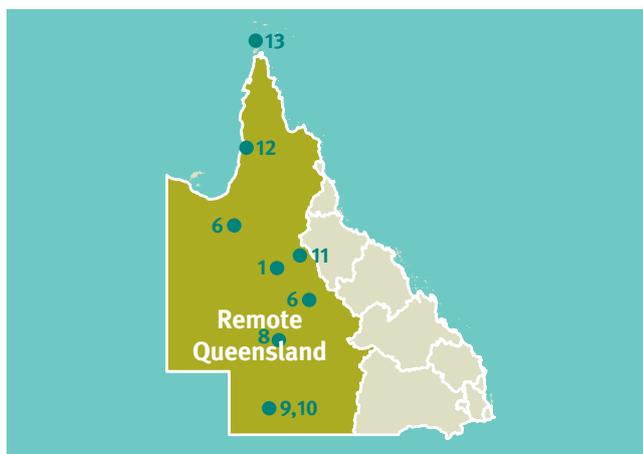
#	Project	Status
1	Energy supply to the Granite Belt – gas plus transmission	Southern Downs Regional Council to progress the natural gas proposal through planning. At present, further investment in power transmission is not required.
2	New England Highway – Warwick to the NSW border	Proposal is being progressed through strategic assessment by the Department of Transport and Main Roads.
3	Warwick heavy vehicle bypass	Planning is underway through the Maturing the Infrastructure Pipeline Program to identify if there is a requirement for a future Warwick Bypass corridor.
4	Gore Highway (Millmerran to Goondiwindi) pavement widening and strengthening	Planning is being undertaken by the Department of Transport and Main Roads to progress through to strategic assessment.
5	Condamine River Road – upgrade of 14 river crossings	This proposal will be progressed to strategic assessment phase (or equivalent) with Southern Downs Regional Council.
6	Allora wastewater project	This proposal will be progressed to strategic assessment phase (or equivalent) with Southern Downs Regional Council.
7	Morgan Park effluent reuse water pipe	This proposal will be progressed to strategic assessment phase (or equivalent) with Southern Downs Regional Council.
8	Building renewable energy capacity in Southern Downs	This proposal will be progressed to strategic assessment phase (or equivalent) with Southern Downs Regional Council.
9	Social Housing Killarney	This proposal will be progressed to strategic assessment phase (or equivalent) with Southern Downs Regional Council.
10	Warwick Show and Rodeo Society indoor conference and exhibition facility	This proposal will be progressed to preliminary evaluation phase (or equivalent) with Southern Downs Regional Council.
11	Prickly Pear Crossing (Old Chinchilla Road bridge)	This proposal will be progressed to strategic assessment phase (or equivalent) with Western Downs Regional Council.
12	Stormwater drainage – Chinchilla	This proposal will be progressed to strategic assessment phase (or equivalent) with Western Downs Regional Council.



Proposals raised through consultation

Remote Queensland

#	Project	Status
1	Kennedy Developmental Road (Hann Highway) sealing	Progressive sealing of the Kennedy Developmental Road (Hann Highway) is being delivered under the Northern Australia Roads Programme.
2	Connecting remote communities through optic fibre technology (various locations – not mapped)	Progressing proposal through concept phase to develop future strategies.
3	Water quality improvements for island-based indigenous communities (various locations – not mapped)	Continuing through concept phase, dependent on preliminary investigation of water quality results.
4	Upgrade of ageing health assets (various locations – not mapped)	Project is being delivered as part of an ongoing program of work.
5	Improve drive tourism support infrastructure (various locations – not mapped)	Program of work is progressing with specific projects at various stages of maturity.
6	New surface water storages (Galilee Basin, Gilbert and Flinders catchments)	Local governments are progressing proposals through concept phase to better understand the regions' need. There are opportunities for market investment.
7	Long distance coach infrastructure improvements (various locations – not mapped)	The Queensland Government will continue to investigate opportunities to improve long distance coach infrastructure as part of urban bus network planning.
8	Geo-thermal power generation concept design	This proposal will be progressed to preliminary evaluation phase (or equivalent) with Blackall-Tambo Regional Council.
9	Thargomindah multipurpose centre	This proposal will be progressed to strategic assessment phase (or equivalent) with Bulloo Shire Council.
10	Pelican Point restoration study	This proposal will be progressed to strategic assessment phase (or equivalent) with Bulloo Shire Council.
11	Porcupine Gorge National Park tourism infrastructure project	This proposal will be progressed to strategic assessment phase (or equivalent) with Flinders Shire Council.
12	Community prioritisation plan	This proposal will be progressed to strategic assessment phase (or equivalent) with Kowanyama Aboriginal Shire Council.
13	Torres Strait regional tourist information and business centre, Thursday Island	This proposal will be progressed to strategic assessment phase (or equivalent) with Torres Shire Council.



Proposals raised through consultation

Multi-region

#	Project	Status
1	Public safety regional radio communications network	Building Queensland is developing a detailed business case.
2	North Coast Line upgrades (more/larger passing loops, increased speeds)	Queensland Rail is delivering the project which will identify and implement an optimised mix of capacity-enhancing infrastructure upgrades. The proposal is funded through the Priority Economic Works and Productivity Program. The 2016 SIP included \$100 million towards upgrades on the North Coast Line with priorities to be informed by North Coast Line Action Plan, which is being developed.
3	Transport infrastructure to support development of the Galilee Basin	Activities to support the development of the Galilee Basin are ongoing, with specific projects for road and rail/port progressing at various levels of maturity. Some proposals could attract market interest.
4	Transport infrastructure to support development of the Surat Basin	Activities to support the development of the Surat Basin are ongoing, with specific projects for road and rail/port progressing at various levels of maturity. Some proposals may attract market interest.
5	Increased park 'n' ride capacity	Program of work progressing with specific projects at various stages of maturity.
6	Additional Bruce Highway upgrades (capacity around major centres, flood mitigation)	Program of work progressing with specific projects at various stages of maturity.
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)	Planning is underway to identify key road freight routes and opportunities to increase high-productivity vehicle access to these routes to reduce road freight costs.
8	Smart Road Infrastructure for South East Queensland – managed motorways	Program of work progressing with specific projects at various stages of maturity.
9	Rail station upgrades	Queensland Rail is delivering a program of works to deliver accessibility upgrades at 14 high-priority stations across South East Queensland. These upgrades will improve access to stations for all customers including those with disabilities, the elderly, and people with prams.
10	Connecting the North Queensland gas pipeline to the Queensland gas pipeline (Wallumbilla to Gladstone/Rockhampton)	This industry-led proposal has been placed on indefinite hold by the proponent.
11	Energy generation in North Queensland to reduce prices and improve reliability/resilience	Under the Powering North Queensland Plan, the Queensland Government is investing \$386 million to strengthen and diversify North Queensland's energy supply and create a North Queensland clean energy hub.
12	Transmission lines – Northern Galilee Basin and Kennedy Energy Park	Project is being progressed by Powerlink Queensland.
13	Nathan Dam and pipelines	Insufficient demand to progress proposal at this time. Likely to be monitored by SunWater.
14	Burdekin Falls Dam safety upgrade	A detailed business case is being progressed through Building Queensland.

These proposals are not mapped.

Proposals raised through consultation

Statewide

#	Project	Status
1	Active transport projects (walking/cycling)	The Queensland Government has a comprehensive planning and investment framework to deliver cycling infrastructure across the state, in collaboration with local government. This includes the Queensland Cycling Strategy, Cycling Infrastructure Policy and Principal Cycle Network Plans.
2	Bridge replacement (timber/single lane)	This proposal will be subject to funding and government priority as planning and development advances.
3	Open level crossing elimination in urban areas	Planning is being undertaken to develop an investment strategy to prioritise upgrades to key open level crossings in the Brisbane area.
4	Intermodal hubs	The Queensland Government is completing a statewide freight strategy that will consider this proposal.
5	Wastewater upgrades	Defer progress of the proposal until the problem has been better defined with local government by the Department of Infrastructure, Local government and Planning.
6	Mobile blackspot and broadband improvements	The Mobile Blackspot Program round 2 is being delivered.
7	Next generation ticketing	This project is being delivered by the Department of Transport and Main Roads.
8	Registration and licensing modernisation program	Business case completed and as planning and development advances and funding options become certain, this proposal will progress.
9	Pipeline infrastructure to unlock existing capacity in dams/groundwater	A number of proposals have been identified as continuing through early stages of planning, but progress is dependent on need, such as increased demand for water.

These proposals are not mapped.



Cyclists in Mackay

A series of actions were identified to guide the implementation of the 2016 SIP Part B. These actions are at various stages of completion. The following summary provides a status update for each action.

Finding the right solutions: Better planning and assessment

1 Improved infrastructure and land use planning, coordination and integration

An Infrastructure Portfolio Office will be established to plan and coordinate infrastructure, and integrate the links between economic, regional and infrastructure planning.

Status: Underway

The Infrastructure Portfolio Office was established in 2016. Key progress has included:

- ▶ Development of five strategic infrastructure documents – water, energy, digital, transport and social infrastructure – due for release from mid-2017.
- ▶ A pilot infrastructure coordination plan has commenced with Moreton Bay Regional Council.
- ▶ Preliminary scoping work for the strategic corridors plans with development beginning in 2017–18.
- ▶ An ‘infrastructure integration’ state interest has been included in the State Planning Policy, to help ensure planning schemes and processes are integrated to support improved economic, social and environmental outcomes for communities.

2 Regional planning committees

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

Status: Ongoing

The role of regional planning committees has been enhanced to better align state and local government priorities. The Queensland Government’s approach of engaging with committees throughout the development of regional plans ensures diverse perspectives and stakeholder interests are considered.

The South East Queensland regional planning committee has agreed to meet twice yearly post release of the final draft *ShapingSEQ* to discuss and monitor 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.

Status: Underway

Through the *Planning Act 2016*, community infrastructure designation powers have been consolidated to the Planning Minister. Designations will be monitored over the next 12 months before this action is completed.

4 Establish an Infrastructure Cabinet Committee

The Infrastructure Cabinet Committee will drive and oversee the state’s infrastructure delivery program, ensuring whole-of-government integration in relation to infrastructure matters.

Status: Completed

The committee was established in early 2016 and provides direction and advice on infrastructure and priorities to support productivity and liveability.

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.

Status: Underway

Scope and criteria for evaluations is currently in development with a pilot to commence in 2017.

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.

Status: Ongoing

Infrastructure proposals lodged as part of the budget process are considered together with the SIP priorities, objectives and asset class responses.

The alignment between the SIP 1–4 year program tables and Budget Paper 3 has been improved.

Implementation actions

7 Better understanding of project benefits

Queensland Government business cases will include an assessment of who ultimately pays for and benefits from infrastructure project investments over the long-term.

Status: Completed

Building Queensland's Business Case Development Framework addresses project benefit assessments.

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.

Status: Underway

An infrastructure reporting database has been developed and underpins monthly reporting to the Infrastructure Cabinet Committee.

A project sequencing and prioritisation framework is currently being scoped.

The most effective funding and financing options available

9 Value capture and alternative funding and financing

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

Status: Underway

A Value Sharing Symposium was held in March 2016. It was supported by an independent research paper on alternative infrastructure funding and financing options and their applicability to Queensland.

Innovative financing and value capture opportunities are also being jointly investigated as part of the establishment and delivery of City Deals for Queensland.

Alternative funding and financing considerations have been addressed through Infrastructure Australia and in Building Queensland's Business Case Development Framework.

10 Leveraging funding

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

Status: Underway

The Queensland Government is continuing to work with the Australian Government in support of Queensland-based proposals.

Support from the Australian Government for investment in major Queensland infrastructure is also leveraged through Infrastructure Australia's Infrastructure Priority List.

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.

Status: Underway

Infrastructure grant funding arrangements to local governments have been reviewed. The Queensland Government will consider the findings during 2017.

12 Deputy Premier's Infrastructure Innovation Challenge

Challenge industry to put forward innovative solutions to the infrastructure challenges outlined in the SIP.

Status: Underway

The Infrastructure Innovation Challenge will seek innovative solutions from industry to address infrastructure challenges.

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.

Status: Ongoing

The market-led proposal guidelines have been improved to build on their success to date. Since the release of the SIP in 2016, six proposals have progressed to stage 2 detailed proposal or beyond. One of these, the Logan Motorway Enhancement Project, has reached contractual close.

The most efficient procurement and better use of existing assets

14 Establish a joint industry-government Infrastructure Innovation Taskforce

The Queensland Government will establish a taskforce to examine and report back to government on a range of matters including: the use of local contractors; whole-of-life costing models; better informing industry of projects and opportunities; improving early market engagement and simplifying procurement; technology and data opportunities and non-asset based solutions.

Status: Completed

The Infrastructure Innovation Taskforce was established in June 2017. The taskforce will examine and report back to government on matters associated with infrastructure planning, delivery and utilisation.

Initially the taskforce will focus on more efficient procurement processes, examining the benefits of integrating technological solutions into infrastructure planning and delivery, and whole-of-life cost modelling benefits to improve the use of existing assets.

15 Implement Building Information Modelling

The Queensland Government will progressively implement the use of Building Information Modelling into all major state infrastructure projects by 2023.

Status: Underway

The draft Building Information Modelling policy and principles statement was released for public consultation in early 2017.

16 Sustainability assessments

Queensland 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.

Status: Completed

The Infrastructure Sustainability Council of Australia is developing the second version of an infrastructure sustainability assessment tool relevant to Queensland. Government agencies will be encouraged to use sustainability assessments for state government projects.

Building Queensland's Business Case Development Framework now addresses sustainability assessments.

17 Better asset use

The Queensland Government will improve the use of Queensland's public assets by rolling out strategic asset management plans, undertaking an independent audit of assets to identify underutilised capacity, and partnering with the Local Government Association of Queensland to develop and deliver an education program aimed at building asset management.

Status: Underway

The Strategic Asset Management Framework is being developed with proposed implementation across Queensland Government agencies commencing in 2017–18.

Approaches to assessing asset underutilisation and delivering an education program to lift asset management capability are being developed.

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.

Status: Underway

A Strategy for Social Infrastructure is being developed to promote multi-sector collaboration and innovation in the planning, design and use of social infrastructure.

Place-based infrastructure planning is being delivered through the Community Hubs and Partnerships program.

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 will: make recommendations on engagement; determine how to help the community understand infrastructure issues and costs; liaise with universities and peak bodies to establish best practice, pilots and industry champions; assist in developing a program of opportunities for sustainability and social outcomes; and explore the need for a social impact unit to standardise approaches and benchmarks.

Status: Completed

The Community Infrastructure Reference Group was established in May 2017 with an initial focus on community attitudes to infrastructure and research into social return on investment has commenced.

Measuring performance

Infrastructure is often considered to be an enabler of service delivery, and provides benefit to the economy and the community during construction and throughout the life of the asset.

In 2016, the Queensland Government committed to measuring the performance of the SIP and has developed a reporting framework to measure implementation progress.

Over time, progress will be assessed in two parts to align with the review timeframes of the SIP:

- ▶ An annual assessment of the projects and deliverables within the SIP Part B: Program.
- ▶ A five-year report on achieving the longer-term objectives within the SIP Part A: Strategy.

During 2017, a review of the Implementation actions and the programs within the State Infrastructure Fund, and alignment of the 2016 SIP 1–4 year program and Future opportunities against the responses in each asset class has been undertaken.

The results for the State Infrastructure Fund programs are outlined in the Government commitments section.

The annual assessment of these components is essential to ensure infrastructure planning is improving and delivering critical infrastructure for growth.

Implementation actions



100%
of the 19 actions
delivered or in delivery

4 completed
15 underway

State Infrastructure Fund



\$2.2 billion
total fund

\$1.6 billion
committed

Maturing the Infrastructure Pipeline Program



243
reports of Proposals raised
through consultation
and Future opportunities
completed

1–4 year program



490
1–4 year program items



\$10.2 billion
infrastructure investment
in 2017–18



117
ongoing programs valued at
\$2.4 billion
in 2017–18

Cross-government



Rockhampton revitalisation project

The planning and delivery of infrastructure across Queensland requires a state government-wide approach to enable economic efficiencies, harness opportunities and create sustainable communities. Infrastructure solutions often span across multiple asset classes but also require response from other levels of government, industry and the private sector. A collaborative approach improves infrastructure delivery to support economic development and ensure it is prioritised in areas of high growth and strategic importance.

The Queensland Government is fostering the establishment of collaborative solutions with the private sector through its market-led proposals framework and its support of the National Public Private Partnership Policy.

The Queensland Government's Priority Development Areas and State Development Areas further support this by allowing government investment to be maximised and providing confidence to project proponents through greater planning and development certainty and integrated infrastructure and land use planning.

Cross-government leadership is essential to drive innovation and identify smarter solutions to infrastructure challenges. Coordination of infrastructure and land use planning across state agencies and all levels of government is critical. This is particularly essential for seaports, airports and cross-border transport networks to ensure the efficient and effective movement of people, goods and services. These facilities and networks, which are critical to the economic prosperity of the state, must be well-planned to provide quality connections.

This leadership can include policy and reform agendas or collaboration across state agencies to develop infrastructure solutions. These can include non-infrastructure solutions such as embracing digital developments in the place of built infrastructure.

The Advancing our cities and regions strategy is an innovative approach to renew and repurpose surplus and underutilised government property to achieve better community outcomes, create jobs and drive economic growth. Through community engagement, sensitive land use planning and strategic development management, the strategy will create iconic projects and diversify Queensland cities and regions.

Meeting the infrastructure needs of emerging and growth sectors, such as resources in the North West Minerals Province, renewable energy, the knowledge economy, an expanding tourism sector and increasing agricultural productivity, will require careful sequencing to ensure new economic opportunities are maximised. For example, supporting infrastructure including freight containerisation at intermodal terminals, ports and airports, and supply chain competitiveness, is vital to ensuring the agricultural sector grows.

Through a range of grant programs and loans in partnership with other levels of government, the Queensland Government supports local government to meet the infrastructure needs of communities, for example, the Natural Disaster Relief and Recovery Arrangements. This supports better places to live, work and play for growing communities and is particularly important for those communities affected by natural disasters, or with a small rate base. This investment can create jobs, boost local economies and build resilience.

Cross-government projects, proposals and Future opportunities are illustrated in the infrastructure pipeline in figure 8.



Bundaberg Multiplex Centre funded through Building our Regions (image courtesy Bundaberg Regional Council)

Priority Development Areas (PDAs):

Parcels of land identified for specific accelerated development with a focus on community development and economic growth. 28 PDAs with approximately:

- ▶ 20,000 hectares combined area
- ▶ up to 180,000 dwellings
- ▶ up to 452,000 residents
- ▶ up to 132,000 local jobs.

PDAs and significant growth areas:

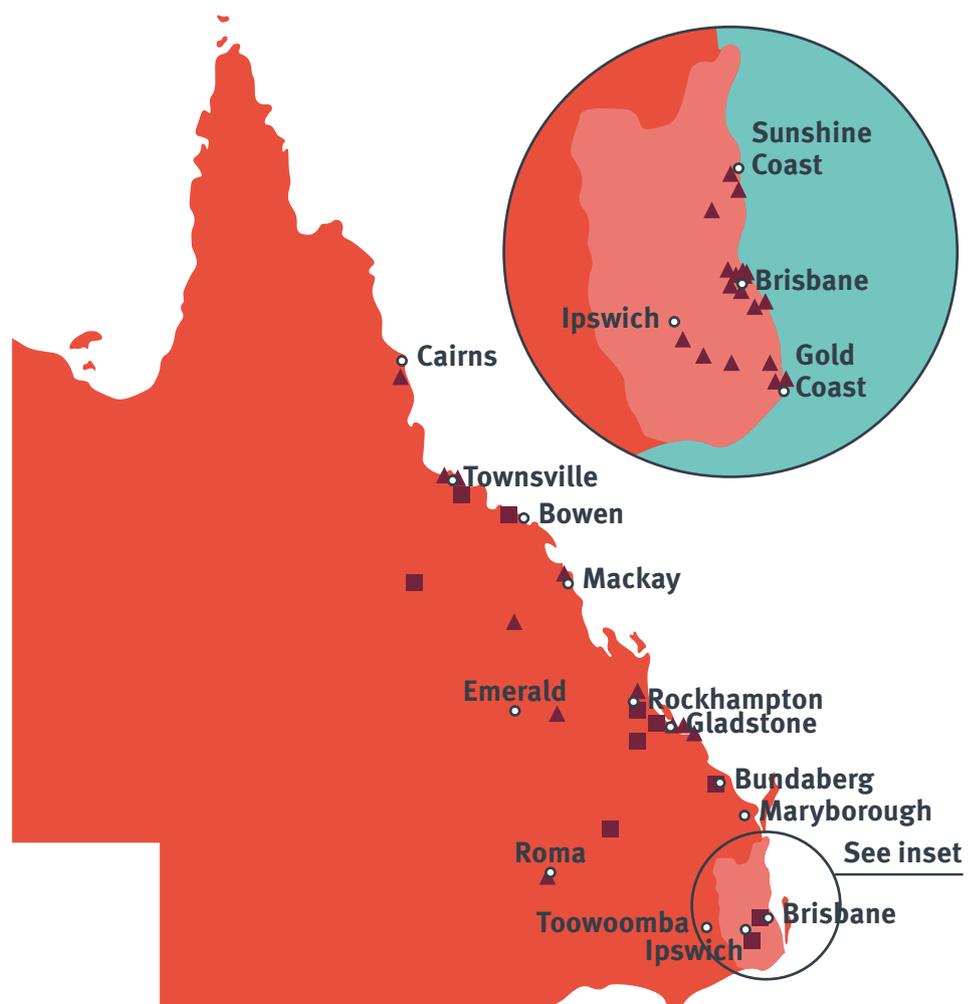
- ▲ Andergrove PDA, Mackay
- ▲ Blackwater PDA
- ▲ Blackwater East PDA
- ▲ Bowen Hills PDA, Brisbane
- ▲ Caboolture West
- ▲ Caloundra South PDA
- ▲ Central Queensland University (CQU) Rockhampton PDA
- ▲ Clinton PDA, Gladstone
- ▲ Coomera Town Centre
- ▲ Fitzgibbon PDA, Brisbane
- ▲ Herston Quarter PDA, Brisbane **New**
- ▲ 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
- ▲ The Mill at Moreton Bay PDA **New**
- ▲ Toolooa PDA
- ▲ Toondah Harbour PDA
- ▲ Toowoomba Railway Parklands PDA
- ▲ Townsville City Waterfront PDA
- ▲ Weinam Creek PDA
- ▲ Woolloongabba 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 10 SDAs:

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



2016 SIP Part B strategic alignment

In the SIP Part A, the Queensland Government identified strategic directions to address the infrastructure challenges and objectives for each asset class. These strategic directions inform SIP Part B, and allow government to align investments with these strategic directions. The number of 1–4 year program items and Future opportunities from the 2016 SIP which align to each response, are outlined below.

CROSS-GOVERNMENT RESPONSES					
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.
Number of 2016 SIP Part B 1–4 year program items					
15	5	4	–	5	5
Number of 2016 SIP Part B Future opportunities					
2	3	7	2	8	1

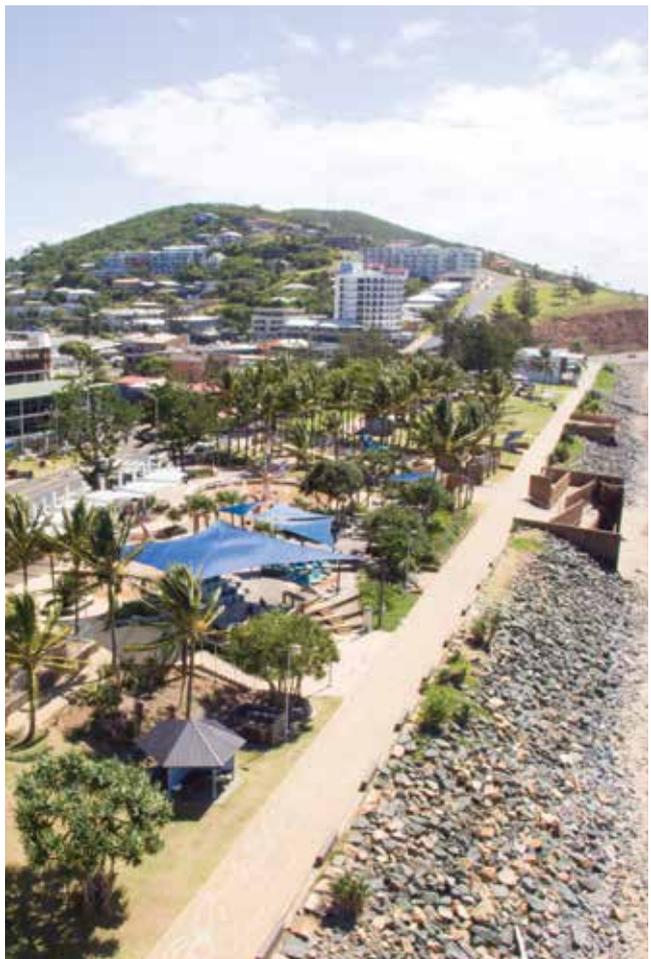
Strategy for Social Infrastructure

The Strategy for Social Infrastructure (SSI) will outline the government’s long-term direction for social infrastructure, promoting multi-sector collaboration and innovative approaches to better respond to evolving community needs and challenges. The strategy promotes better use of existing infrastructure and utilising new infrastructure developments to deliver more integrated, accessible, well-located, multi-functional and cost-effective social infrastructure.

The SSI enhances social infrastructure planning by encouraging holistic, cross-service solutions that reflect place-based approaches. The strategy will help inform regional planning to enable more effective positioning and use of social infrastructure within a region or community.

The strategy is focused on the social infrastructure that includes state facilities that support community health and wellbeing including health, education and training, arts and culture, sport and recreation, social housing, legal and public safety and emergency services.

The SSI is one of five strategic infrastructure documents outlined as Implementation action one in the 2016 SIP Part B.



Yeppoon revitalisation project

2017 pipeline

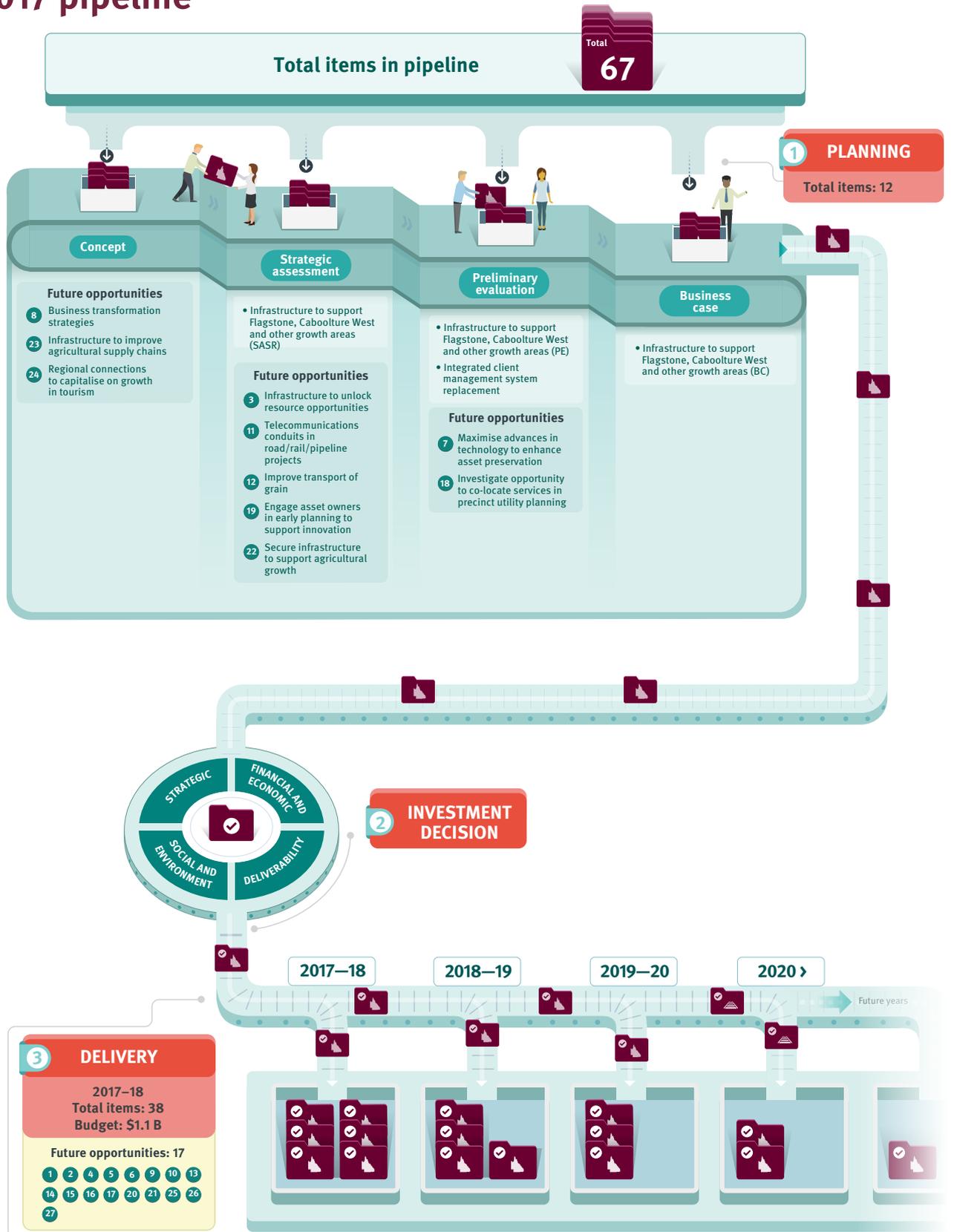


Figure 8: Infrastructure pipeline for Cross-government

Note: Items include: Queensland Government-led Proposals raised through consultation, Building Queensland proposals and proposals from Infrastructure Australia's Infrastructure Priority List.

Note: Items at various planning stages are captured in each phase, however, are only counted once in the total items.

1–4 year program

DELIVERY

Project	Total estimated cost (\$M)	Contributions				Expenditure to June 2017 (\$M)	Funding (\$M)			
		Fed	QG	LG	Priv		2017–18	2018–19	2019–20 to 2020–21	Beyond
South East Queensland										
Morayfield Child Safety Service Centre	1.200		●				1.200			
Neighbourhood, youth and community centres	11.700		●			0.060	2.490	2.410	6.740	
Parliament House – property, plant and equipment	14.085		●			9.491	4.294	0.300		
Carseldine Urban Village	30.536		●				0.878	9.670	8.459	11.529
Yeerongpilly Green Transit Oriented Development	72.523		●			16.449	31.777	2.068	2.145	20.084
Willowbank Industrial Development	73.971		●			15.981	1.000	4.590	30.000	22.400
Northshore Hamilton	350.954		●			61.618	24.829	24.172	27.482	212.853
Ecosciences and Health and Food Sciences Precincts fitout replacement program	Ongoing		●				0.881			
Library Board of Queensland ongoing programs	Ongoing		●		●		1.934			
Regional Queensland										
Texas Silver Mine state rehabilitation and management	2.000		●			0.400	1.600			
Mica Creek services	5.750		●			0.250	0.500		5.000	
Cape York Peninsula Tenure Resolution Program land acquisitions	6.000		●				6.000			
Salisbury Plains Industrial Precinct, Bowen	6.766		●			1.328	0.500	1.500	1.688	1.750
Refurbishment of Toowoomba Agriculture Facilities	7.350		●			1.050	3.800	2.500		
Townsville Regional Industrial Estate	9.750		●			4.200	0.500	0.500	4.050	0.500
Clinton Industrial Estate	11.695		●			0.445	0.500	1.000	7.250	2.500
Gladstone State Development Area	13.617		●			5.417	0.500	1.150	5.800	0.750
The Village Residential Estate, Oonoonba, Townsville	136.898		●			86.972	4.246	7.300	19.130	19.249
Environmental health infrastructure program	15.000		●			3.750	3.750	3.750	3.750	

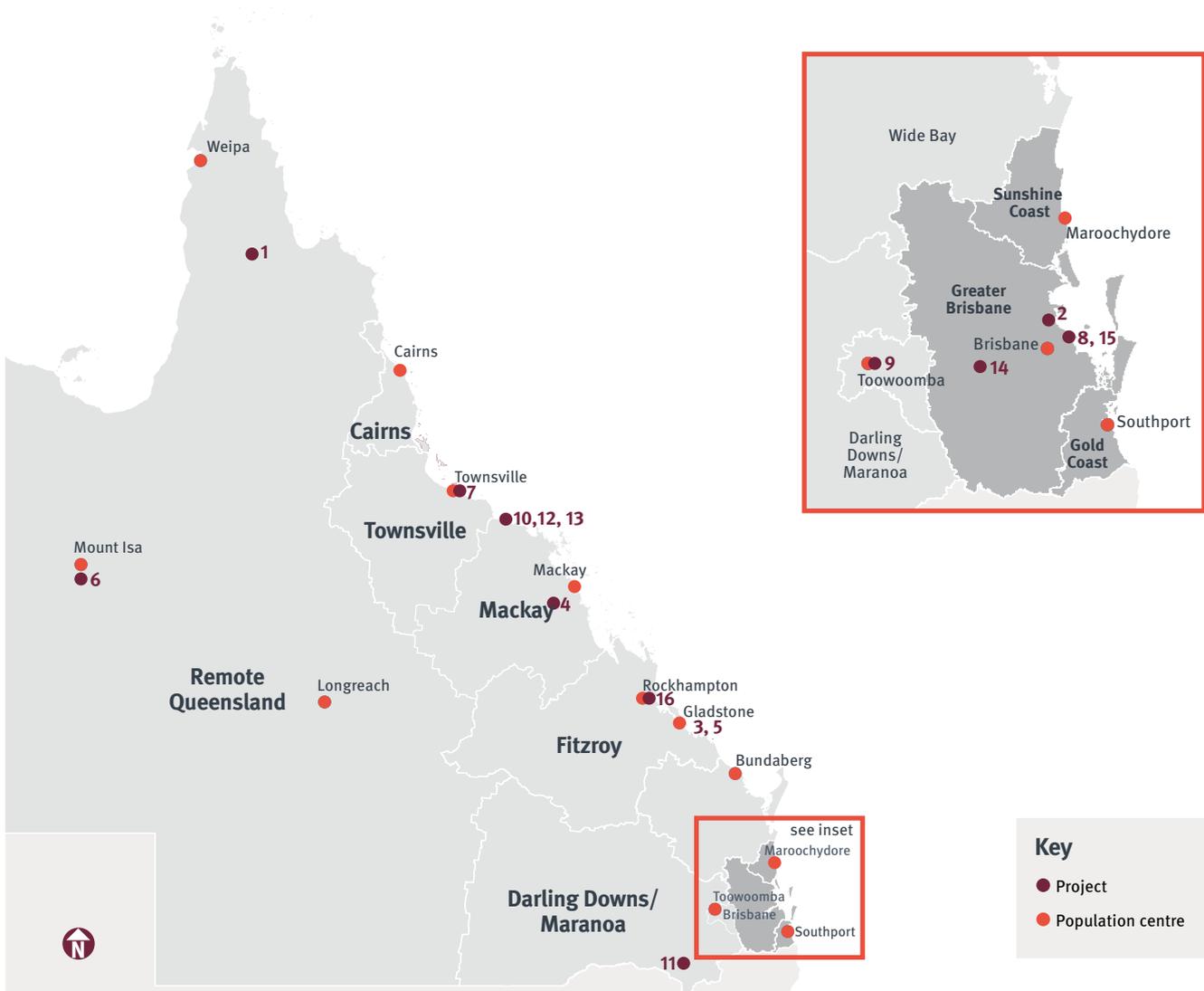
Cross-government

Project	Total estimated cost (\$M)	Contributions				Expenditure to June 2017 (\$M)	Funding (\$M)			
		Fed	QG	LG	Priv		2017-18	2018-19	2019-20 to 2020-21	Beyond
Statewide										
Ageing in place	2.400		●			0.071	2.329			
RSPCA capital grant	3.000		●			0.244	1.342	1.414		
Strategic Resources Exploration Program	7.125		●				2.595	3.545	0.985	
Neighbourhood, youth and community centres	12.250		●		●	1.052	5.028	2.370	3.800	
Yeppoon and Rockhampton Revitalisation Project	40.000		●			25.666	14.334			
Community Resilience Fund	41.500		●			35.878	5.622			
Natural Disaster Resilience Program	58.830	●	●			38.318	19.169	1.343		
Indigenous State Infrastructure Program	61.022		●			59.137	1.885			
Royalties for the Regions	89.545		●			38.597	28.588	20.360	2.000	
Indigenous land and infrastructure programs	100.318	●	●			91.001	9.317			
Government employee housing	170.373		●			26.169	50.516	47.717	45.971	
Building our Regions	215.406		●			40.951	111.263	33.959	29.233	
Works for Queensland	400.000		●			120.000	180.000	100.000		
Natural Disaster Relief and Recovery Arrangements – local government authorities	1084.429		●			372.611	317.933	278.345	115.540	
Statewide Neighbourhood Centre Renewal Program	Ongoing		●				1.940			
Local Government Grants and Subsidies programs	Ongoing		●				28.953			
Statewide strategic land acquisitions	74.617		●			68.140	1.125	5.352		
Ongoing programs	Ongoing		●				204.222			
Other property, plant and equipment	96.018		●		●	63.365	19.572	5.096	7.208	0.777

Selected 1–4 year program highlights

DELIVERY

#	PROJECT	#	PROJECT
1	Cape York Peninsula Tenure Resolution Program land acquisitions	9	Refurbishment of Toowoomba Agriculture Facilities
2	Carseldine Urban Village	10	Salisbury Plains Industrial Precinct, Bowen
3	Clinton Industrial Estate	11	Texas Silver Mine state rehabilitation and management
4	Construction of Moranbah Youth and Community Centre	12	The Village Residential Estate, Oonoonba, Townsville
5	Gladstone State Development Area	13	Townsville Regional Industrial Estate
6	Mica Creek services	14	Willowbank Industrial Development
7	North Queensland Stadium	15	Yeerongpilly Green Transit Orientated Development
8	Northshore Hamilton	16	Yeppoon and Rockhampton Revitalisation Project



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 (State Development Areas and Priority Development Areas).

Status update: The Department of State Development and Economic Development Queensland continue to plan for State Development Areas and Priority Development Areas respectively through the implementation of development schemes and interim land use plans.

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.

Status update: The sequencing of infrastructure for new growth areas is delivered through the regional planning program, local government planning schemes, infrastructure funding programs and other mechanisms designed to maximise the effect of 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 under explored gas reserves in the Cooper Basin.

Status update: The Department of State Development and the Department of Transport and Main Roads are progressing various opportunities, which will contribute to the broader transport and supply chain planning landscape.

Opportunity 4

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

Status update: This opportunity is being progressed by the Office of Climate Change Queensland through the implementation of the Queensland Climate Adaptation Strategy.

Opportunity 5

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

Status update: The opportunity is being progressed by the Office of Climate Change Queensland through the implementation of the Climate Change Adaptation Strategy.

Opportunity 6

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

Status update: The Department of Environment and Heritage Protection recently amended the *Queensland Heritage Act 1992* and is progressing a coordinated approach utilising the whole-of-government framework for managing heritage assets in Queensland.

Opportunity 7

Maximise advances in technology to enhance asset preservation.

Status update: The opportunity is being progressed through the Building Information Modelling project (Implementation action 15).

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.

Status update: The Strategy for Social Infrastructure and best practice guide, which is under development, outlines strategies for social infrastructure planning. This plan provides the basis for a cross-sector integrated approach to infrastructure planning, in accordance with Implementation action 1, and outlines actions to address key challenges.

The Community Hubs and Partnerships program is engaging state agencies, local government, community groups and industry to embed a coordinated cross-agency approach to social infrastructure planning, sequencing and delivery to maximise government investment and community benefit.

Future opportunities – short-term cont.

PLANNING

Opportunity 9

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

Status update: Work is underway through the Community Hubs and Partnerships program to coordinate investment and integrate service delivery in Queensland communities, such as the work undertaken in Priority Development Areas.

Additionally, a pilot infrastructure coordination plan has commenced with Moreton Bay Regional Council, as outlined in Implementation action 1.

Opportunity 10

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

Status update: The opportunity is being progressed through the Building Information Modelling project. (Implementation action 15).

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.

Status update: The opportunity is being progressed as a coordinated approach through the development of the Queensland Digital Infrastructure Plan, and will be addressed through existing opportunity 18 in future SIP updates.

Opportunity 12

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

Status update: This opportunity is being reframed following the investigation of super depots as an idea, which indicated a growing trend towards a decentralisation storage model.

Opportunity 13

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

Status update: Work is underway to advance suitable opportunities under the *Northern Australian Infrastructure Facility Act 2016*.

Opportunity 14

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

Status update: Master planning processes are underway for the four priority ports in accordance with the *Sustainable Ports Development Act 2015*.

Opportunity 15

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

Status update: This opportunity will be addressed through existing opportunity 19 in future SIP updates.

Opportunity 16

Investigate the suitability of a Bundaberg Port State Development Area.

Status update: An State Development Area was established around the Port of Bundaberg in February 2017, in response to growing demand for port-related and industrial land. Preparation of a draft development scheme has commenced.

Opportunity 17

Plan and deliver infrastructure to service existing Priority Development Areas.

Status update: Economic Development Queensland continues to work with government agencies to plan and deliver infrastructure to service Priority Development Areas, with 28 areas under development.

Opportunity 18

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

Status update: The Department of Science, Information Technology and Innovation, through the development of the Queensland Digital Infrastructure Plan, sets out an approach for making better use of existing government-owned or controlled digital infrastructure. It ensures when digital infrastructure is being considered, that other forms of infrastructure (water, energy, transport and social) are taken into account.

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).

Status update: The Queensland Government's approach to infrastructure planning, as outlined in the SIP Part A, recognises there is typically more than one way to solve a problem. This is evident in the Queensland Digital Infrastructure Plan (as outlined in the digital asset class), where a number of opportunities for digital innovation are being explored.

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.

Status update: The Department of Housing and Public Works is facilitating a coordinated government approach with local government and local service providers to facilitate infrastructure in regional communities.

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.

Status update: A services hub or 'one-stop-shop' has been established in Cairns to facilitate standardised service delivery, and provide assistance with grant submissions and development approvals coordination.

Opportunity 22

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

Status update: The need for a more efficient and low-cost supply chain is being explored, and related opportunities will be investigated that have the potential to make northern Queensland agriculture competitive in international markets.

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.

Status update: The Australian Export Grains Innovation Centre is currently developing studies on supply chain optimisation. The Department of Agriculture and Fisheries will leverage this research and progress opportunities (as required) focused on improving agricultural supply chains.

Future opportunities – medium/long-term

PLANNING

Opportunity 24

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

Status update: The opportunity has been researched and a cross-government coordinated approach is being defined by the Department of State Development to determine the current state of existing infrastructure, including the identification of future service needs of the relevant sectors.

Opportunity 25

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

Status update: The opportunity is being progressed by the Department of State Development working across government to implement the Biofutures 10-year Roadmap and Action Plan.

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).

Status update: Cement Sustainability Initiative research is being leveraged, and a number of Queensland Government agencies are progressing various opportunities, such as the Department of Transport and Main Roads with laboratory stress tests, technology pilots and releasing specifications based on their research.

Opportunity 27

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

Status update: The Queensland Government's approach to infrastructure planning, as outlined in the SIP Part A, encourages creative thinking on solutions that reform and reuse infrastructure rather than building new. Technological advances such the Energy Savers Plus Program (funded by the Queensland Government is designed to help farmers identify where they can make significant savings for their on-farm energy use), and ramp metering/variable speed limit signs (which improves the efficiency of existing road infrastructure). More than 500 government services are now available online, up from 390 in the 2016 SIP Part B.

Infrastructure coordination plans

Quality and cost-efficient infrastructure and land use planning requires coordination between all levels of government. Infrastructure coordination plans will demonstrate a new approach to the coordination and integration of infrastructure, economic and land use planning. The long-term service needs for infrastructure planning, coordination and alignment between state and local government will be the focus of the plans. Developed in collaboration with local governments, the plans will become an important element in the state's infrastructure planning process.

A pilot infrastructure coordination plan has commenced with Moreton Bay Regional Council. It will be used to inform a program of plans across South East Queensland.

New 2017 Future opportunities

PLANNING

Opportunity 28

Focus on minor works or upgrade programs that make existing infrastructure fit-for-purpose to meet current standards and accommodate future requirements.

Case study: City Deals

Queensland is at the forefront of City Deal development in Australia. City Deals are collective plans for economic growth tailored for a city or region that commit to actions, investments, reforms and the governance needed to implement them.

City Deals are a core tenet of the Australian Government’s Smart Cities Plan, to coordinate and leverage local, state and federal government investment into an agreed set of projects and associated outcomes. Under the Smart Cities Plan, a Memorandum of Understanding (MOU) for developing City Deals between the Australian and Queensland Governments was established in late 2016.

Townsville is Australia's first City Deal between the Australian and Queensland governments, and Townsville City Council.

The 15-year deal includes 16 commitments and nine future opportunities that will drive economic growth, unlock potential in the region and encourage business and industry development.

It will help Townsville become:

- ▶ the economic gateway to Asia and Northern Australia
- ▶ a global leader in tropical and marine research and innovation
- ▶ a prosperous and highly-liveable city for residents and visitors.

South East Queensland is set to become Queensland’s second City Deal. The 2017 Federal Budget includes the Australian Government’s commitment to working with the Queensland Government and Council of Mayors South East Queensland to develop an South East Queensland City Deals strategy – the first step to a comprehensive City Deal for the South East Queensland region. This represents a unique opportunity to work together to transform the region. This commitment recognises the significant work already undertaken by the Queensland Government and the Council of Mayors South East Queensland over the past two years to identify a series of regional challenges and outcomes.

The Queensland Government is also continuing to work with the Australian Government and local governments to investigate opportunities for further City Deals in Queensland.



Townsville family at The Strand

Case study: Infrastructure investment strategy supporting jobs

The Queensland Government is securing long-term job opportunities for people in remote Aboriginal and Torres Strait Islander communities through strategic capital and infrastructure investment.

The Integrated Capital Works Strategy for Far North Queensland sequences planned Queensland Government capital investment to maximise continuity of work opportunities for local communities.

The Queensland Government works with remote Aboriginal and Torres Strait Islander communities to develop community capacity statements and skill profiles to inform the procurement phase for capital and maintenance projects within communities.

Through this local knowledge the Queensland Government is able to link candidates through the project's Indigenous Economic Opportunity Plan, which is required by the Queensland Building and Construction Training Policy.

For example, in Aurukun there are apprentices at various stages of training who could complete their apprenticeships if continuing work opportunities are made available. The Queensland Government is working with employment and training providers to coordinate these opportunities.

Planned capital programs have also created opportunities for small businesses to make investment decisions that can be incorporated via the Indigenous Economic Opportunity Plan for future projects, including new business development.

Across all remote communities this approach has achieved 261 job placements in 2016–17, including 80 trainees and apprentices.



Bulloo Park redevelopment funded by Building our Regions (image courtesy Quilpie Shire Council)

Transport



Queensland's transport system is the government's largest built asset and has experienced substantial growth over the past decade to keep pace with population and economic growth. It connects communities, cities and industries to each other, to the rest of Australia and to the world. The system's roads, railways, airports and ports are critical to moving people and freight throughout Queensland.

The transport system supports broader statewide objectives, including economic growth and improved liveability across regions by connecting places and communities. Improved coordination between land use planning and transport planning will support employment, economic and population growth, and reduce congestion and travel times. This can achieve efficiencies in the better use or improvement of the existing network, providing an alternative to costly upgrades or new infrastructure.

Delivering an optimised system that balances the needs of commuters, visitors and industry, will present ongoing challenges that will require a tailored approach. To achieve this, the Queensland Government will continue to work collaboratively with local governments on the development of regional transport plans. Regional transport plans articulate the transport system priorities at a regional level to respond to the unique challenges and opportunities of each region. Regional transport plans will consider regional demographic and industry changes, local government land use and transport planning, and respond to regional plans and the SIP. Each region has its own specific challenges, such as a decentralised population, managing impacts from extreme weather events and increasing congestion on roads and passenger transport networks.

Planning and infrastructure must also consider broader challenges such as changing demographics, expanding markets, distances between economic zones and key centres, as well as ageing infrastructure requiring upgrades and repairs.

Future investments will require smarter, value-for-money solutions that enable innovative, cost-effective connections between people and places. Incorporating technology into solutions will provide increased availability of real-time information, greater mode choice through advancements such as ride-share services and environmental benefits such as lower emissions. Finding new ways to plan, fund, build and maintain transport infrastructure, while working with industry and partners across the sector, is critical to achieving this. New technologies will transform transport demand management, better meet customer expectations and improve efficiency and safety.

Investments in safe and efficient active transport infrastructure will help manage congestion and provide health benefits to the community. There are about 802,000 Queenslanders who cycle each week.ⁱ The Queensland Government is committed to the vision of more cycling, more often and is expanding the state's dedicated cycling network to make it easier and safer for Queenslanders to cycle. Queensland's Cycling Infrastructure Program is a major funding initiative to speed up delivery of the principal cycle network, promoting and supporting collaboration between the state and local governments to achieve a 'one network' outcome for cycling.

Freight access across the state's supply chains will continue to be a priority with a focus on improved safety, increased capacity, transport efficiency and route reliability. Increased movement of freight by sea will also require focus on sustainable development and maintenance of shipping channels and berths, to ensure the safe and efficient operation of ports.

Improving integration between road, rail, air and port systems, which connect 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 projects, proposals and Future opportunities are illustrated in the infrastructure pipeline in figure 9.

2016–17 DELIVERY HIGHLIGHTS

- Townsville Ring Road section 4, Townsville
- Coomera Interchange Exit 54 upgrade, Gold Coast
- Brigalow to Chinchilla widening, Darling Downs

ⁱ Austroads 2017 National cycling Participation Survey 2017: Queensland

2016 SIP Part B strategic alignment

In the SIP Part A, the Queensland Government identified strategic directions to address the infrastructure challenges and objectives for each asset class. These strategic directions inform SIP Part B, and allow government to align investments with these strategic directions. The number of 1–4 year program items and Future opportunities from the 2016 SIP which align to each response, are outlined below.

TRANSPORT RESPONSES					
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 South East Queensland.	Digitally connected smart infrastructure to improve capacity, safety and security.	Connect regional communities with access to essential services and opportunities.
Number of 2016 SIP Part B 1–4 year program items					
25	16	1	17	9	49
Number of 2016 SIP Part B Future opportunities					
4	13	3	7	4	4

Queensland Transport Policy

The Queensland Transport Policy (QTP) is being developed as a 30-year strategy to ensure the transport system maximises economic, social and environmental benefits for Queensland in the long-term. The development of the QTP will provide individuals, communities, stakeholders and industry partners with the opportunity to engage in, and influence, the future of transport in Queensland.

Globally, transport systems are undergoing major changes, including increasing ride and vehicle sharing, and vehicle electrification and automation. The QTP will focus on the potential impact of these global, transformative changes on Queensland's transport system. The policy directions and actions of the QTP will inform infrastructure investment priorities, and more detailed transport planning, policy and delivery for the transport system.

The QTP is one of five strategic infrastructure documents outlined as Implementation action one in the 2016 SIP Part B.



Toowoomba Second Range Crossing

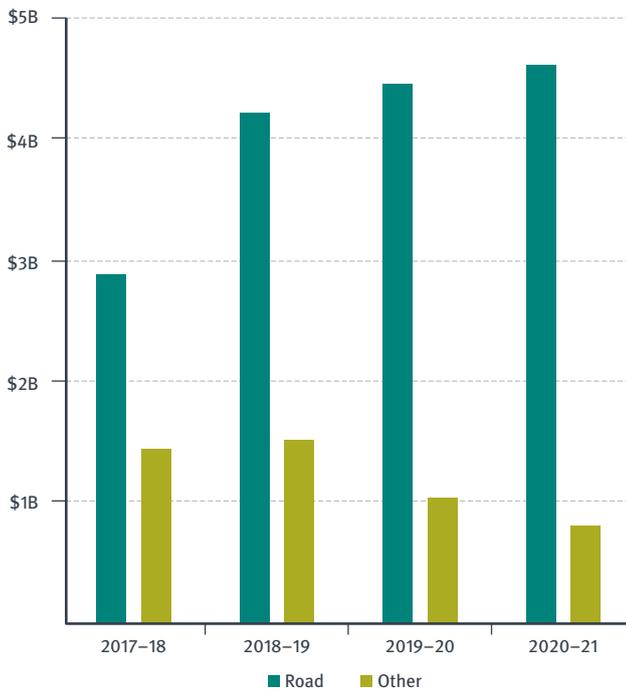
Queensland's state-controlled road network:

spans
33,353 km

carries
80%
of all road traffic

has a gross replacement
value of
\$83.38 B
(as at 30 June 2016)

QTRIP investment
(2017–18 to 2020–21)



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

Based on published QTRIP

Queensland Transport and Roads
Investment Program (QTRIP)
2017–18 to 2020–21 outlines approx.

\$21 B
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:

- ▶ The Department of Transport and Main Roads Strategic Plan 2016–2020
- ▶ Transport Coordination Plan 2017–2027 (draft)
- ▶ Moving Freight
- ▶ National 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 2017–2027
- ▶ Cycling Infrastructure Policy
- ▶ Bruce Highway Action Plan
- ▶ Warrego Highway Upgrade Strategy
- ▶ Connecting Brisbane
- ▶ Mackay Isaac Whitsunday Regional Transport Plan (draft)



11.99 M

passenger transport trips outside of South East Queensland in 2015–16

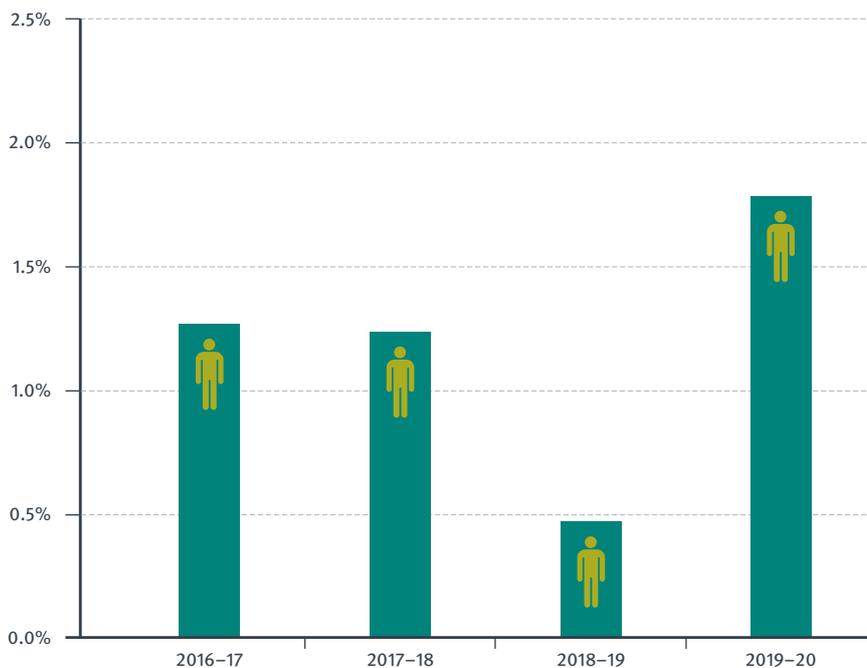


177.94 M

trips on bus, rail and ferry services within South East Queensland in 2015–16

Note: Estimated Actual from the 2017–18 Queensland State Budget – Service Delivery Statements – Department of Transport and Main Roads

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:



6050 km
of rail track



13 km
of light rail track



29 km
of busway

Queensland Rail operates and manages 7212 km of rail network across the state



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

2017 pipeline

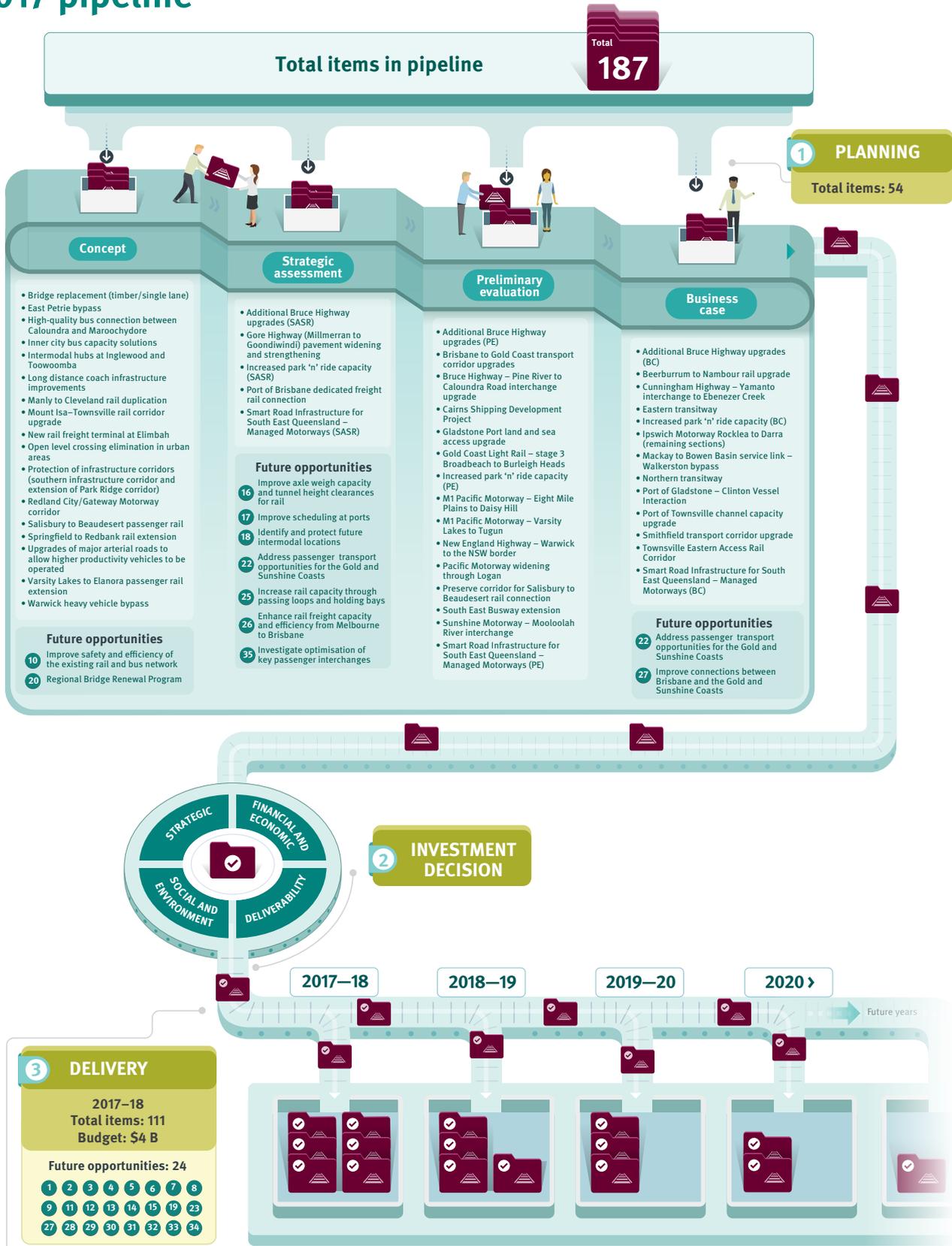


Figure 9: Infrastructure pipeline for Transport

Note: Items include: Queensland Government-led Proposals raised through consultation, Building Queensland proposals and proposals from Infrastructure Australia’s Infrastructure Priority List.

Note: Items at various planning stages are captured in each phase, however, are only counted once in the total items.

1–4 year program

DELIVERY

Project	Total estimated cost (\$M)	Contributions				Expenditure to June 2017 (\$M)	Funding (\$M)			
		Fed	QG	LG	Priv		2017–18	2018–19	2019–20 to 20–21	Beyond
South East Queensland										
Bruce Highway										
Caloundra Road to Sunshine Motorway	929.250	●	●			79.968	120.000	150.000	579.282	
Bruce Highway, Boundary Road Interchange	100.375	●	●			54.555	10.000	2.000	33.820	
Other road network projects										
Cunningham Highway (Ipswich – Warwick), Warrill View pavement rehabilitation	12.500	●	●			8.500	4.000			
Kawana Way (Sunshine Motorway – Nicklin Way), Sunshine Coast University Hospital roundabout upgrades	22.000		●			16.316	5.242	0.442		
Labrador – Carrara Road, Crestwood Drive to Nerang–Southport Road, widen to six lanes	22.500		●			12.348	10.152			
Beaudesert Town Centre Bypass	26.000		●			19.000	7.000			
Waterford–Tamborine Road (Logan Village) upgrade between Anzac Avenue to Hotz Road ¹	39.500				●	4.500	18.000	17.000		
Southport–Burleigh Road, Vespa Crescent to Nerang River Bridge	49.000		●			34.099	14.901			
Pacific Motorway (Rochedale South), Miles Platting Road to Rochedale Road (Gateway merge) ²	170.000	●	●			3.300	10.000	60.000	96.700	
Pacific Motorway (Mudgeeraba – Varsity Lakes), extra lanes ³	180.000	●	●			6.467	18.638	70.000	84.895	
Ipswich Motorway, Rocklea to Darra stage 1 upgrade	400.000	●	●			25.401	36.000	90.000	248.599	
Gateway Motorway North, upgrade to six lanes	1142.727	●	●			532.287	236.345	146.203	227.891	
Public and active transport										
North Brisbane Bikeway, stage 2 and 3, Somerset Street to Price Street design and construct	13.180		●			3.176	1.675	6.150	2.179	
Veloway 1, Pacific Motorway Cycleway (stage D)	23.721		●			13.055	3.739	1.465	5.461	

1–4 year program

DELIVERY

Project	Total estimated cost (\$M)	Contributions				Expenditure to June 2017 (\$M)	Funding (\$M)			
		Fed	QG	LG	Priv		2017–18	2018–19	Indicative 2019–20 to 20–21 Beyond	
South East Queensland										
Rail										
Morayfield Station upgrade	15.000		●			0.705	3.350	7.525	3.420	
Strathpine and Boondall Station upgrades	28.444		●			2.012	6.229	13.203	7.000	
Alderley and Newmarket Station upgrades	29.589		●			24.933	4.656			
Graceville and Dinmore Station upgrades	35.220		●			31.189	4.031			
Central Station upgrades and platform renewal	73.372		●			12.128	35.989	25.256		
North Coast Line Capacity Improvement Project (passing loops)	100.000		●			1.350	16.900	45.000	36.750	
Gold Coast Rail line – Coomera to Helensvale duplication	131.544		●			81.173	23.506	26.864		
Gold Coast Light Rail (stage 2) ⁴	420.000	●	●	●		104.246	233.542	30.864	27.864	23.484
European Train Control System level 2 – inner city	634.381		●			15.248	29.654	121.139	310.691	157.649
Cross River Rail ⁵	5409.000		●				129.000	733.000	1890.000	2657.000
New Generation Rollingstock ⁶	4155.705		●			352.679	406.965	590.386	147.189	2658.486
New Generation Rollingstock operational readiness ⁶	12.013		●				12.013			
New Generation Rollingstock power distribution ⁶	42.137		●			3.046	23.729	15.362		
New Generation Rollingstock stabling facilities ⁶	115.931		●			115.731	0.200			
New Generation Rollingstock business systems ⁶	36.143		●			31.980	4.164			
Marine										
Boating Infrastructure Program (Gold Coast Waterways Authority)	4.620		●			1.210	0.630	1.280	1.500	
Navigation access and safety (Gold Coast Waterways Authority)	12.263		●			3.410	5.503	0.800	2.550	
Plant, equipment and minor works	6.455		●			1.910	2.125	0.670	1.750	

Project	Total estimated cost (\$M)	Contributions				Expenditure to June 2017 (\$M)	Funding (\$M)			
		Fed	QG	LG	Priv		2017-18	2018-19	Indicative 2019-20 to 20-21 Beyond	
Regional Queensland										
Bruce Highway										
Bajool widening (Benaraby – Rockhampton)	16.950	●	●			9.338	7.612			
Burdekin River Bridge rehabilitation (Bowen – Ayr) ⁷	43.750	●			●	38.733	2.900	2.117		
Rockhampton Northern Access Upgrade stage 1	121.000	●	●			6.400	10.900	70.000	33.700	
Cooroy to Curra section C (Traveston Road – Keefton Road)	384.241	●	●			163.395	40.000	5.000	175.846	
Cattle Creek and Frances Creek upgrade (Townsville – Ingham)	118.900	●	●			21.821	42.800	11.164	43.115	
Formation widening (Innisfail – Cairns)	31.782	●	●			19.273	7.535	4.388	0.585	
Tinana Interchange upgrade	38.000	●	●			20.099	8.000	9.901		
Sandy Gully Bridge upgrade (Bowen – Ayr)	57.500	●	●			15.310	13.119	9.126	19.945	
Bruce Highway, Mackay Ring Road	497.810	●	●			50.426	70.000	141.000	236.384	
Cairns Southern Access Corridor stage 2 (Robert Road – Foster Road), widen to six lanes	58.000	●	●			18.973	9.172	24.455	5.400	
Warrego Highway										
Toowoomba Second Range Crossing ⁸	1606.250	●	●			411.503	252.463	531.175	155.199	255.910
Charlton to Kingsthorpe duplication	160.000	●	●			23.216	44.378	11.002	81.404	
Dalby Western access upgrade (stage 1)	59.000	●	●			8.832	17.539	20.468	12.161	
Dalby Eastern access upgrade	56.000	●	●			7.920	18.252	21.944	7.884	
Oakey to Dalby overtaking lanes	44.000	●	●			23.922	8.902	4.076	7.100	
Dalby to Miles overtaking lanes	35.000	●	●			2.037	25.893	3.070	4.000	
Oakey to Miles safety upgrade	40.000	●	●			6.630	11.966	15.405	6.000	
Miles Western Access upgrade	24.000	●	●			1.224	1.164	5.979	15.633	

1–4 year program

DELIVERY

Project	Total estimated cost (\$M)	Contributions				Expenditure to June 2017 (\$M)	Funding (\$M)			
		Fed	QG	LG	Priv		2017–18	2018–19	2019–20 to 20–21	Beyond
Regional Queensland										
Other road network projects										
Pialba–Burrum Heads Road, Scrub Hill Road and Wide Bay Drive intersection signalisation	26.000		●			4.944	6.500	10.500	4.056	
Mackay–Slade Point Road, Vines Creek Bridges replacement	28.000		●			5.333	6.807	8.013	7.847	
Rockhampton Road Train Access (stage 1)	30.000	●	●			4.000	9.000	17.000		
Bill Fulton Bridge (Freshwater Creek)	34.200		●			6.794	4.971	6.078	16.357	
Gregory Developmental Road, Cape River Bridge replacement	34.600		●			2.325	16.275	8.000	8.000	
Riverway Drive duplication	35.000		●			5.743	14.291	14.967		
Dawson Highway, timber bridge replacement package	40.000		●			7.194	16.806	10.000	6.000	
Gregory Developmental Road, Charters Towers – The Lynd, widening	42.280		●			4.406	10.000	15.000	12.874	
Kennedy Developmental Road (Hann Highway), The Lynd – Hughenden, sealing	50.000	●	●			4.000	16.000	16.000	14.000	
Landsborough Highway (Blackall – Barcaldine), widening	12.500	●	●			5.875	5.625	1.000		
Peak Downs Highway (Nebo – Mackay), timber bridge replacements	70.000	●	●			21.023	21.021	6.534	32.256	
Capricorn Highway duplication (Rockhampton – Gracemere)	74.990	●	●				5.000	40.000	29.990	
Peak Downs Highway – Eton Range realignment	189.200	●	●			53.031	36.388	30.860	68.921	
Ports										
Port of Weipa general development	0.350		●			0.050	0.120	0.070	0.110	
Horn Island Cargo Wharf Access Road	1.700		●				0.300	1.400		
Indigenous land user agreement (North Queensland Bulk Ports Corporation Limited)	3.483		●			0.474	0.580	0.589	1.214	0.625
Port of Cairns – marina reconfiguration and expansion	3.870		●			1.170	0.100	1.500	1.100	

Project	Total estimated cost (\$M)	Contributions				Expenditure to June 2017 (\$M)	Funding (\$M)			
		Fed	QG	LG	Priv		2017-18	2018-19	Indicative 2019-20 to 20-21 Beyond	
Ports										
Port of Hay Point upgrades and development	6.431		●			1.542	3.069	1.220	0.400	0.200
Louisa Creek acquisition program	8.616		●			1.252	1.052	1.052	2.104	3.156
Port of Mackay Wharf 4 and 5 fender upgrade	9.516		●			2.500	7.016			
Barney Point projects	14.320		●			0.026	6.984	3.310	4.000	
Port of Gladstone capacity maximisation	16.800		●			5.648	3.252	2.900	5.000	
Port of Townsville other works and equipment	17.314		●			3.689	5.510	3.815	3.300	1.000
Port of Abbot Point upgrades and development	21.018		●			8.672	5.121	6.325	0.900	
Port of Cairns foreshore development	21.180		●			19.180	1.000		1.000	
Port of Cairns development of Tingira St Precinct	21.290		●			3.140	3.750	3.000	11.400	
Port of Mackay other works	24.479		●			5.716	7.713	5.630	3.150	2.270
Fishermans Landing projects	33.400		●			3.191	5.609	8.000	16.600	
Auckland Point projects	33.800		●				3.000	15.800	15.000	
Port of Townsville Berth 4 upgrade ⁹	37.265		●			22.833	14.432			
Port of Gladstone conveyor life extension	50.825		●			8.920	10.155	13.750	18.000	
Port of Gladstone port services projects	63.673		●			17.973	8.801	19.130	17.769	
Port of Gladstone process control systems, stockpile management and upgrades	158.382		●			36.490	36.322	27.845	52.975	4.750
Port of Townsville plant, equipment and minor works	Ongoing		●				3.464			
Port of Cairns other works and equipment	5.258		●			3.988	0.750		0.520	
Port of Gladstone other works and equipment	66.643		●			7.895	24.199	10.432	24.117	
Port of Cairns ongoing programs	Ongoing		●				1.209			
Rail										
Toowoomba Range capacity and clearance upgrades	34.481		●			5.142	24.466	4.873		

1–4 year program

DELIVERY

Project	Total estimated cost (\$M)	Contributions				Expenditure to June 2017 (\$M)	Funding (\$M)			
		Fed	QG	LG	Priv		2017–18	2018–19	Indicative 2019–20 to 20–21 Beyond	
Statewide										
Other road network projects										
Transport and tourism connections	10.000		●				5.900	4.100		
Regional Roads Infrastructure Package	13.314		●			3.466	3.750	6.098		
Royalties for the Regions	19.541		●			12.594	4.105	2.842		
Cape York Region Package	260.500	●	●			143.850	63.023	51.954	1.672	
Natural disaster recovery and reconstruction works ¹⁰	400.000	●	●				105.000	245.000	50.000	
Bridges Renewal Program	40.161	●				29.274	9.787	1.100		
Transport Infrastructure Development Scheme ¹¹	Ongoing		●				70.000			
Black Spot Programme ¹¹	Ongoing	●					12.178			
Transport Corridor Acquisition Fund ¹¹	Ongoing		●				40.000			
Ongoing programs ¹¹	Ongoing	●	●				109.564			
Other construction works ¹¹	Ongoing	●	●				657.273			
Rail										
Rail operations – above rail cost optimisation	Ongoing		●				12.142			
Rail operations – above rail operational performance	Ongoing		●				76.165			
Network – below rail cost optimisation	Ongoing		●				28.871			
Network – below rail operational performance	Ongoing		●				266.338			
Safety program	Ongoing		●				9.857			
Statewide network management and enhancement	Ongoing		●				81.297			
ICT Programs	Ongoing		●				8.087			

Project	Total estimated cost (\$M)	Contributions				Expenditure to June 2017 (\$M)	Funding (\$M)			
		Fed	QG	LG	Priv		2017-18	Indicative		
								2018-19	2019-20 to 20-21	Beyond
Public and Active Transport										
Queensland School Bus Upgrade Program	Ongoing		●			16.572				
Cycling Grants Program	Ongoing		●			21.387				
Passenger Transport Facilities Program ¹²	Ongoing		●			24.488				
Marine										
Boating infrastructure minor works	Ongoing		●			8.938				
Maritime safety minor works	Ongoing		●			13.042				

Notes:

¹ The majority of funding for this work is provided through developer contributions.

² Indicative total project cost to be confirmed through the procurement process. Australian Government contribution capped at \$115 million, with the Queensland Government to fund the balance.

³ Indicative total project cost to be confirmed through the procurement process. Australian Government contribution capped at \$110 million, with the Queensland Government to fund the balance.

⁴ This project is being delivered under a Public Private Partnership (PPP) arrangement.

⁵ Project is being delivered by the Cross River Rail Delivery Authority.

⁶ Reflects 2017-18 funding allocation only. Ongoing funding allocations are not represented.

⁷ Includes an agreed contribution from Queensland Rail of \$18.7 million.

⁸ This project is being delivered under a Public Private Partnership (PPP) arrangement.

⁹ Total estimated cost has been revised to \$40.5 million.

¹⁰ Represents Capital works in response to the impact of Cyclone Debbie on Queensland transport infrastructure.

¹¹ Reflects 2017-18 funding allocation only. Ongoing funding allocations are not represented.

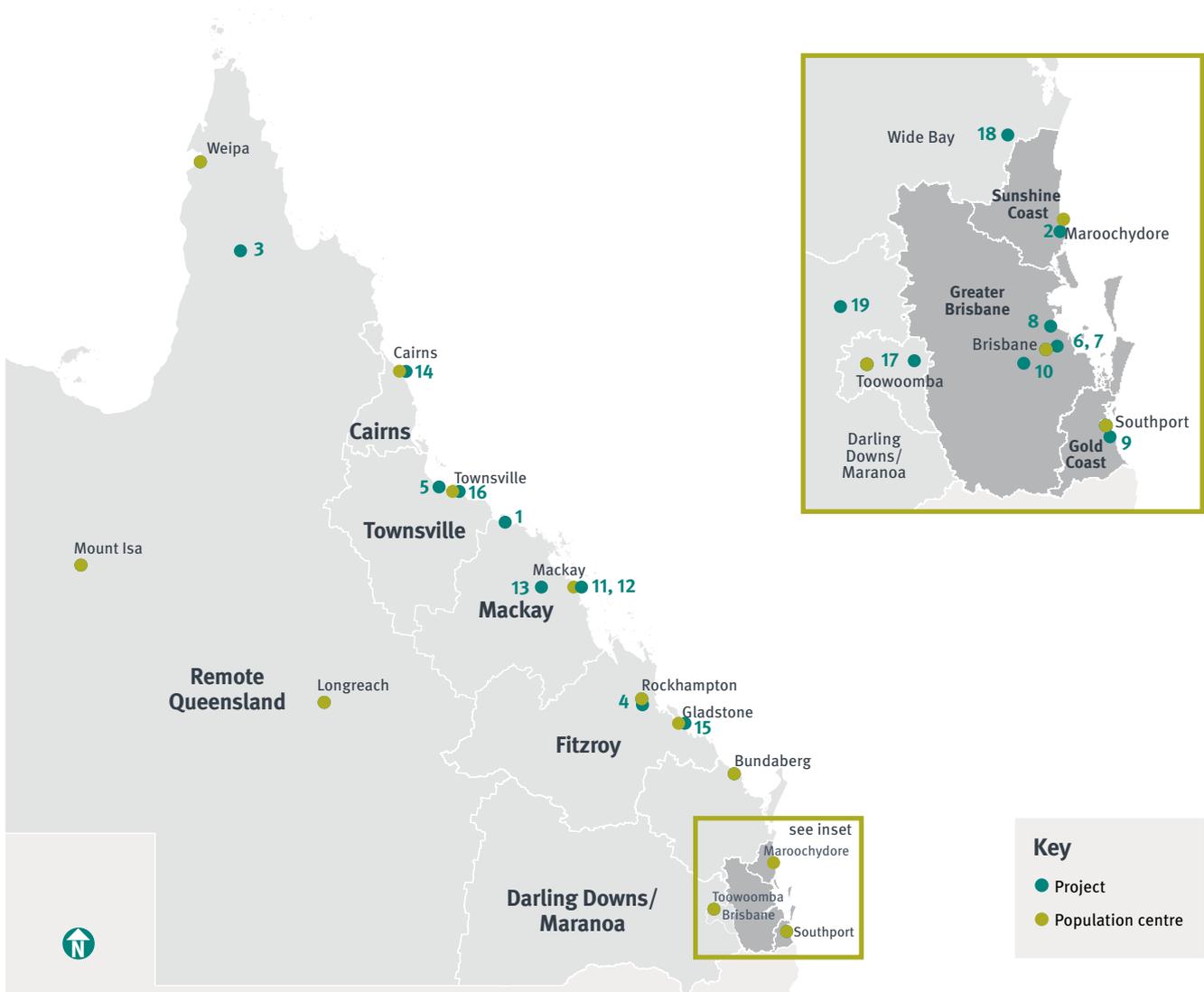
¹² Reflects both Capital grants and Works program.

Tender results have reduced some project budgets

Selected 1–4 year program highlights

DELIVERY

#	PROJECT	#	PROJECT
1	Port of Abbot Point upgrades and development	11	Bruce Highway, Mackay Ring Road
2	Bruce Highway, Caloundra Road to Sunshine Motorway	12	Mackay Wharf 5 fender upgrade
3	Cape York Region Package	13	Peak Downs Highway, (Nebo – Mackay) timber bridge replacements
4	Capricorn Highway duplication (Rockhampton – Gracemere)	14	Port of Cairns development of Tingira St Precinct
5	Cattle Creek and Frances Creek upgrade (Townsville – Ingham)	15	Port of Gladstone process control systems, stockpile management and upgrades
6	Central Station upgrades and platform renewal	16	Port of Townsville Berth 4 upgrade
7	Cross River Rail	17	Toowoomba Second Range Crossing
8	Gateway Motorway North	18	Cooroy to Curra section C (Traveston Road to Keefton Road)
9	Gold Coast Light Rail (stage 2)	19	Warrego Highway upgrade
10	Ipswich Motorway, Rocklea to Darra stage 1 upgrade		



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 South East Queensland.

Status update: This opportunity is being investigated and outcomes will inform Cross River Rail and inner city bus solutions.

Opportunity 2

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

Status update: Additional stabling capacity for new generation rollingstock is under construction, with four sites currently being delivered: Woombye, Elimbah, Robina and Banyo.

Opportunity 3

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

Status update: Program of work being delivered through the 1–4 year program. TransLink is investigating both policy-based and infrastructure solutions.

Opportunity 4

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.

Status update: The Department of Transport and Main Roads is planning the delivery of park ‘n’ rides including construction of new and upgraded facilities at Mains Road, Murarrie and Cannon Hill (rail station) in 2017–18.

Opportunity 5

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

Status update: The Department of Transport and Main Roads is planning and delivering various active passenger transport projects funded by Queensland Transport and Roads Investment Program, including further stages of the North Brisbane Bikeway and Veloway, and upgrades to the Helensvale, Victoria Point Central and Morayfield bus stations in 2017–18.

Opportunity 6

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

Status update: The North Coast Line Capacity Improvement Project is being delivered as part of Queensland Rail's capital program.

Opportunity 7

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

Status update: Regional Transport Plans are being developed by the Department of Transport and Main Roads and will consider growth in population and freight movement and planning required to identify and protect future transport corridors.

Opportunity 8

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

Status update: The Department of Transport and Main Roads' Targeted Road Safety Program is on track to deliver more than \$300 million worth of road safety infrastructure projects over the life of the 2015–17 Road Safety Action Plan. Initiatives targeting vulnerable road users have been a key priority of the program.

Opportunity 9

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

Status update: The Department of Transport and Main Roads is undertaking further investigation of this opportunity.

Future opportunities – short-term cont.

PLANNING

Opportunity 10

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

Status update: The European Train Control System is being delivered over the next five years to improve rail efficiency.

Opportunity 11

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.

Status update: Real-time passenger information displays are being rolled out at bus stations across South East Queensland as part of an ongoing Queensland Transport and Roads Investment Program.

Opportunity 12

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.

Status update: The Department of Transport and Main Roads has a comprehensive data and modelling program that utilises the latest and most efficient technology to gather and analyse data to improve resilience, efficiency, safety and operation of Queensland's transport networks.

Opportunity 13

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

Status update: The opportunity is being progressed through a number of channels by the Department of Transport and Main Roads.

Opportunity 14

Investigate opportunities to expedite the open level crossing elimination program.

Status update: A Level Crossing Prioritisation Project is being undertaken to develop a multi-criteria assessment framework to prioritise level crossings in Brisbane. Road network impacts (safety and efficiency) and economic analysis will be undertaken to determine the ranking of each site considered in the program.

Opportunity 15

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

Status update: A proposal is progressing to strategic assessment.

Opportunity 16

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

Status update: A proposal is progressing to strategic assessment.

Opportunity 17

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

Status update: A proposal is progressing to strategic assessment.

Opportunity 18

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

Status update: The opportunity is being progressed through a number of channels by the Department of Transport and Main Roads.

Opportunity 19

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

Status update: A number of site opportunities are being investigated by the Department of Transport and Main Roads.

Opportunity 20

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.

Status update: Development of the program is in planning phase and is subject to statewide priorities and funding.

Opportunity 21

Improve transport access to the Port of Townsville.

Status update: Channel capacity project progressing through assessment. The Townsville Eastern Access Rail Corridor business case is progressing through Building Queensland.

Opportunity 22

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

Status update: Gold Coast Light Rail stage 2 is being delivered, along with additional investment into the supporting bus network, with future stages of light rail being progressed. TransLink, through Queensland Rail, is currently delivering an upgrade to the Helensvale Passenger Interchange.

Further investment in services on the Sunshine Coast has recently been completed to coincide with the opening of the new hospital.

Opportunity 23

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

Status update: The opportunity is being progressed through a number of channels by the Department of Transport and Main Roads. (Opportunity 24 in 2016 SIP Part B).

Opportunity 24

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

Status update: The Department of Transport and Main Roads continues to plan and deliver improved access to public transport via active transport, feeder public transport services, kiss 'n' rides, personalised transport services, and park 'n' rides. These improvements increase the opportunities for interchange between modes and allow more customers to access the public transport system. (Opportunity 33 in 2016 SIP Part B).

Future opportunities – medium/long-term

PLANNING

Opportunity 25

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

Status update: Planning is underway to increase rail capacity, with the North Coast Line Capacity Improvement Project (passing loops) in the 1–4 year program.

Opportunity 26

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

Status update: Planning is underway for the Inland Rail Project, in conjunction with the Australian Government.

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.

Status update: Road network assessments are being undertaken to identify opportunities to utilise high productivity vehicles to reduce transport costs. Duplication of the Coomera to Helensvale section of the Gold Coast rail line is currently underway, which will allow for an increase in rail passenger services between Brisbane and the Gold Coast. The Beerburum to Nambour business case has been completed and is awaiting government consideration and funding decisions.

Opportunity 28

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

Status update: Planning is being progressed for proposed future capacity upgrades of the Cunningham Highway south of Warwick Road junction, and construction proceeding on the upgrading of the Ipswich Motorway near Oxley Creek.

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.

Status update: Various projects within Queensland Transport and Roads Investment Program are underway to improve freight efficiency on key freight routes.

Opportunity 30

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

Status update: The opportunity is being progressed through a number of channels by the Department of Transport and Main Roads, including the Queensland Transport Policy.

Opportunity 31

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

Status update: Road network assessments are being undertaken to identify opportunities to utilise high productivity vehicles to reduce transport costs for communities and industries.

Opportunity 32

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

Status update: The opportunity is being progressed through a number of channels by the Department of Transport and Main Roads.

Opportunity 33

Manage seaside access to support land freight needs.

Status update: Ports are progressively considering projects to optimise existing infrastructure and operations.

Opportunity 34

Investigate ways to better use port facilities in the Gulf of Carpentaria to meet community and industry demand.

Status update: Port authorities, Ports North and North Queensland Bulk Ports, are investigating increased opportunities for trade in gulf based ports.

Opportunity 35

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

Status update: The Department of Transport and Main Roads will continue to investigate opportunities to improve key passenger interchanges across the transport network as part of urban bus/rail network planning. (Opportunity 3 in 2016 SIP Part B).

New 2017 Future opportunities

PLANNING

Opportunity 36

Provide fit-for-purpose transport infrastructure to support economic productivity and population growth.

Case study: North Brisbane Bikeway

The North Brisbane Bikeway is an important strategic link in South East Queensland's cycle network that will connect the Brisbane CBD to Chermside. The project is being delivered in stages with the first stage, completed in 2015, providing a new underpass at Bowen Bridge Road between Gilchrist Avenue, Herston and the Royal National Association showgrounds.

The \$3.9 million link provides a separated pedestrian and cycling facility, and is a quick, safe alternative to the pedestrian crossing signals on Bowen Bridge Road.

More than 400 cyclists and pedestrians use the bikeway on an average weekday. Future extensions are expected to encourage further use.

Over the next two years, further stages will be constructed culminating in a 4.3 kilometre dedicated cycleway. It is anticipated that more than 5000 people a day will take advantage of the bikeway once it is fully constructed.

Approximately 760,000 Queenslanders ride to work or school each week.ⁱ Another 1.53 million said they would do so if the conditions were right.ⁱⁱ

Cycling reduces congestion and has significant benefits for health, environment and tourism as well as positive local impacts in connecting communities.

ⁱ Austroads 2015 *National Cycling Participation Survey: Queensland*

ⁱⁱ The Department of Transport and Main Roads 2011 *Sustainable Transport Survey Report One – Cycling Brisbane*



North Brisbane Bikeway



Gateway Motorway North

Energy



Tunnel work at the Wivenhoe Power Station (image courtesy CS Energy)

The Queensland Government recognises that a reliable and affordable supply of electricity is crucial to the Queensland economy and an essential service for industry, commerce and the community.

Queensland Government agencies do not plan, design or construct energy (electricity and gas) infrastructure. Their role is setting or contributing to state and national energy policy and regulatory frameworks that provide the stability and certainty private sector investors require to commit to Queensland infrastructure projects.

Queensland Government-owned corporations with energy assets respond to market signals and operate within the national regulatory space.

Australia's energy markets are facing significant challenges relating to electricity and gas prices, system security and gas availability. These challenges are resulting in higher prices for households and businesses, and if left unaddressed may threaten energy security and Australia's ability to meet its emissions reduction targets. The Queensland Government is addressing these challenges with the recently released Powering Queensland Plan (page 78).

The state's electricity generation, transmission and distribution infrastructure will need to keep pace with future demand from industrial and residential growth and be able to respond rapidly to advances in technology, and changes in the market.

Electricity generation in Queensland has historically been heavily reliant on fossil fuels, with renewable sources such as biomass and rooftop solar photovoltaic (PV) systems providing a small percentage of the state's overall generation. While investing in electricity generation (and network) infrastructure has historically been based on growing demand serviced primarily by large-scale generators connected to the transmission system, this approach is changing.

Renewable energy initiatives and new technology are helping to stimulate the economy, create employment opportunities and reduce dependency on coal-fired generation. The Queensland Government is helping to drive this transition with the Powering Queensland Plan and its commitment to a 50 per cent renewable energy target by 2030.

There is also a shift towards distributed generation driven by declining average residential demand, changing consumer behaviour and advances in technology. Some of the technologies used in distributed generation – for example, rooftop PV systems and residential battery storage – can help reduce the overall load on existing network infrastructure and provide a lower cost alternative to major network upgrades in remote areas. By reducing or deferring the need for major infrastructure upgrades, deployment of these technologies will allow investment to be directed at maintaining existing and replacing ageing network assets. Other technologies, such as digital meters and interactive household devices, could transform the network from a one-way conduit to a platform for multilateral trade.

Gas remains a vital energy source for industrial and manufacturing sectors. The private sector has made major investments in supply and pipeline networks in recent years, and the production of liquefied natural gas has become a major new export industry. The Queensland Government will continue to support initiatives aimed at encouraging greater utilisation of this important energy infrastructure. In late 2016, the Queensland Government released the Queensland Gas Supply and Demand Action Plan Discussion Paper for consultation. The feedback received will inform the final action plan that will outline a strategic approach to the gas sector, expected to be completed in mid-2017.

Energy projects, proposals and Future opportunities are illustrated in the infrastructure pipeline in figure 10.

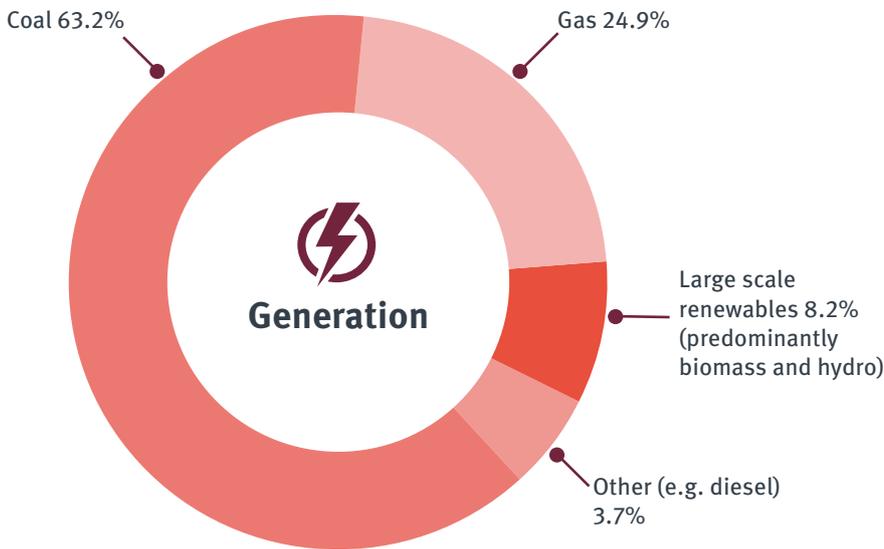
2016–17 DELIVERY HIGHLIGHTS

Boyne Island feeder relocation, Fitzroy



Kearney Springs substation, Toowoomba (image courtesy Ergon Energy)

Queensland's electricity network



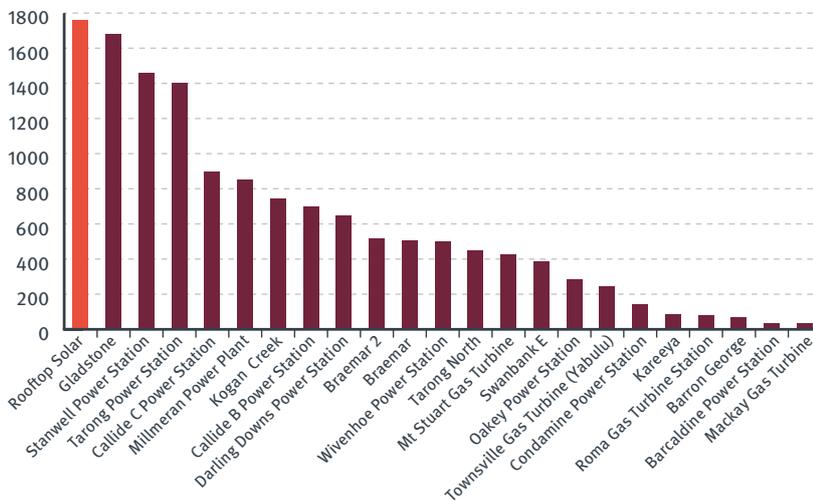
2.145 M
residential, business and industry customers

14,246 Mw
of total generation capacity

12,940 Mw
of national grid-connected generation capacity



Rooftop solar capacity



\$20 B
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

3 in 10
detached households have rooftop solar PVs

2000
systems are connected each month

Highest
installed capacity of rooftop solar in Australia

2016 SIP Part B strategic alignment

In the SIP Part A, the Queensland Government identified strategic directions to address the infrastructure challenges and objectives for each asset class. These strategic directions inform SIP Part B, and allow government to align investments with these strategic directions. The number of 1–4 year program items and Future opportunities from the 2016 SIP which align to each response, are outlined below.

ENERGY RESPONSES				
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.
Number of 2016 SIP Part B 1–4 year program items				
3	2	28	1	–
Number of 2016 SIP Part B Future opportunities				
6	2	6	1	2

Powering Queensland Plan

The Powering Queensland Plan is a comprehensive suite of documents setting out the Queensland Government’s strategy to guide the state through the short- and long-term challenges occurring in the energy market. The plan aims to deliver stable energy prices, ensure long-term security of electricity supply, lead the transition to a cleaner energy sector and create new investment and jobs.

Under the plan the Queensland Government will:

- ▶ Provide immediate electricity bill relief by investing \$770 million to cover the cost of the Solar Bonus Scheme.
- ▶ Place downward pressure on wholesale prices by returning the Swanbank E gas-fired power station to service, directing Stanwell to alter its bidding strategies, and investigating the restructure of the government-owned generators.
- ▶ The Queensland Government will investigate a restructure of government-owned generators, including considering the establishment of a separate ‘CleanCo’ generator to operate Queensland’s existing renewable and low-emissions energy generation assets and develop new renewable energy projects.

- ▶ Maintain strong growth in the state’s renewable sector by reaffirming the government’s commitment to a 50 per cent renewable energy target by 2030, and undertaking a reverse auction for up to 400 megawatts of diversified renewable energy capacity.
- ▶ Invest \$386 million to strengthen and diversify North Queensland’s energy and water supply including through the development of a clean energy hub and improvements to Burdekin Falls Dam.
- ▶ Ensure Queensland consumers continue to access secure and reliable electricity supply by appointing an Energy Security Taskforce.
- ▶ Increase gas supply in the Australian market through the implementation of the Queensland Gas Action Plan, including the release of land for gas development to supply the east coast Australian market.

By identifying energy infrastructure priorities the Powering Queensland Plan supports the intent of Implementation action one in the 2016 SIP Part B. Work to link the infrastructure components of the Powering Queensland Plan to the SIP and better inform stakeholders will be completed and released by the end of 2017.

2017 pipeline

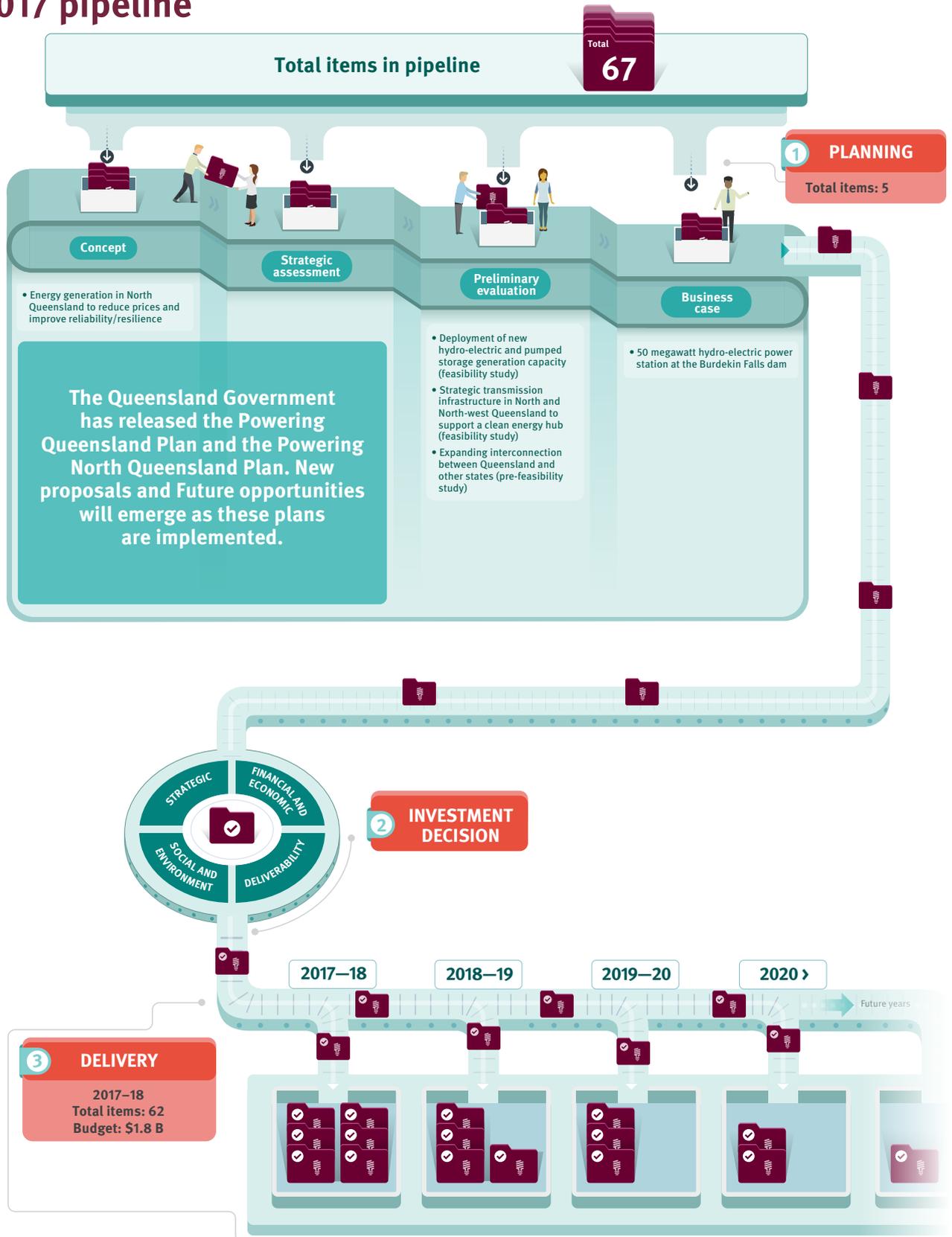


Figure 10: Infrastructure pipeline for Energy

Note: Items include: Queensland Government-led Proposals raised through consultation, Building Queensland proposals and proposals from Infrastructure Australia's Infrastructure Priority List.

Note: Items at various planning stages are captured in each phase, however, are only counted once in the total items.

1–4 year program

DELIVERY

Project	Total estimated cost (\$M)	Contributions				Expenditure to June 2017 (\$M)	Funding (\$M)			
		Fed	QG	LG	Priv		2017–18	2018–19	2019–20 to 2020–21	Beyond
South East Queensland										
Swanbank Power Station minor works	Ongoing				●		0.473			
Wivenhoe Power Station minor works	0.056				●		0.056			
Power supply upgrade between South Pine and Hays Inlet Substation	4.523		●			1.917	0.099	2.507		
Caboolture West Substation upgrade	10.630		●			7.873	2.297	0.460		
Blackwall Substation secondary systems replacement	33.100		●			28.023	1.800	3.277		
Wivenhoe Power Station overhauls	63.606				●	9.332	12.312	2.662	17.340	21.959
SunCoast powerline project Palmwoods to Maroochydore	89.339		●			19.143	6.897	34.498	28.801	
Rocklea Substation secondary systems replacement	Ongoing		●				6.000			
Other works and equipment	24.614				●	4.285	6.195	5.955	4.370	3.810
Regional Queensland										
Coconut Island solar installation	0.313		●				0.313			
Aurukun generator replacement	1.169		●				1.167	0.002		
Murray Island generator replacement	1.849		●			0.210	1.639			
Mica Creek Power Station overhauls	2.110				●		2.110			
Community based projects	5.999		●			1.963	4.036			
Kogan Creek Mine developments and refurbishment	13.748				●	1.246	8.231	1.529	2.483	0.260
McLeod Street Depot condition upgrade	14.625		●			0.226	5.233	9.166		
Isolated systems capital works Geothermal Plant Birdsville	15.100		●			4.486	7.357	3.257		
Isolated systems capital works Palm Island Power Station upgrade	15.607		●			14.625	0.982			
Moura Switchyard replacement	24.500		●			20.334	1.600	2.566		
Nebo 275/132kV transformer replacement	24.800		●			19.513	3.700	1.587		
Ross Substation secondary systems replacement	27.000		●			19.204	3.600	4.196		
Braemar Substation secondary systems replacement	29.200		●			26.839	1.700	0.661		

Project	Total estimated cost (\$M)	Contributions				Expenditure to June 2017 (\$M)	Funding (\$M)			
		Fed	QG	LG	Priv		2017-18	Indicative		
								2018-19	2019-20 to 2020-21	Beyond
Radio communication safety upgrades	30.407		●			6.732	16.348	7.327		
South Street Toowoomba redevelopment	32.178		●			15.865	16.313			
Searle Street Maryborough redevelopment	41.193		●				6.478	15.586	19.129	
Garbutt Depot and Logistics Centre redevelopment stage 2	42.500		●			21.939	20.561			
Kogan Creek Power Station overhauls	167.039				●	4.958	11.799	74.675	8.873	66.734
Callide Power Station overhauls	332.103				●	48.618	55.105	99.595	73.267	55.518
Torres Strait Power Station upgrades	Ongoing		●				1.928			
Callide A/Calvale 132kV network reinvestment	Ongoing		●				7.965			
Collinsville to Proserpine transmission line refit	Ongoing		●				8.281			
Mackay Substation replacement	Ongoing		●				8.600			
Stanwell Substation secondary systems replacement	Ongoing		●				1.500			
Nebo Substation primary plant replacement	Ongoing		●				2.300			
Calvale and Callide B Substation secondary systems replacement	Ongoing		●				4.000			
Nebo Substation secondary systems replacement	Ongoing		●				3.000			
Stanwell Power Station overhauls	Ongoing				●		24.341			
Barron Gorge Power Station minor works	Ongoing				●		0.355			
Kareeya Power Station minor works	Ongoing				●		1.647			
Koombooloomba Power Station minor works	Ongoing				●		0.404			
Mica Creek Power Station works	Ongoing				●		0.868			
Tarong Power Station works	Ongoing				●		6.893			
Tarong Power Station overhauls	Ongoing				●		8.000			
Stanwell Power Station ongoing works	Ongoing				●		7.707			
Meandu Mine development program	Ongoing				●		19.192			
Meandu Mine infrastructure upgrades and replacements	Ongoing				●		31.087			
Stanwell Power Station Works	98.743				●	45.214	21.791	21.642	10.096	
Meandu Mine exploration and evaluation	Ongoing				●		0.250			

1–4 year program

DELIVERY

Project	Total estimated cost (\$M)	Contributions				Expenditure to June 2017 (\$M)	Funding (\$M)			
		Fed	QG	LG	Priv		2017–18	2018–19	2019–20 to 2020–21	Beyond
Statewide										
Conductor clearance works	27.088		●			0.285	26.803			
Other works and equipment	33.526		●			3.885	29.641			
Substation security upgrades	40.000		●			23.198	16.000	0.802		
Substation upgrades	108.920		●			47.085	42.117	19.718		
Metering Dynamics	Ongoing		●				27.192			
General augmentation and asset replacement at isolated power stations	Ongoing		●				10.153			
Low voltage small copper replacement (stage 2 and 3)	Ongoing		●				39.946			
Capital works to connect new customers	Ongoing		●				247.666			
Other ongoing works	Ongoing		●				272.083			
General augmentation and asset replacement	Ongoing		●				426.062			
Network augmentation and other projects	Ongoing		●				126.464			
Gas Supply Strategy	Ongoing				●		4.694			
Ongoing programs	Ongoing				●		19.205			
Other regulated network initiated capital work	Ongoing		●				198.926			

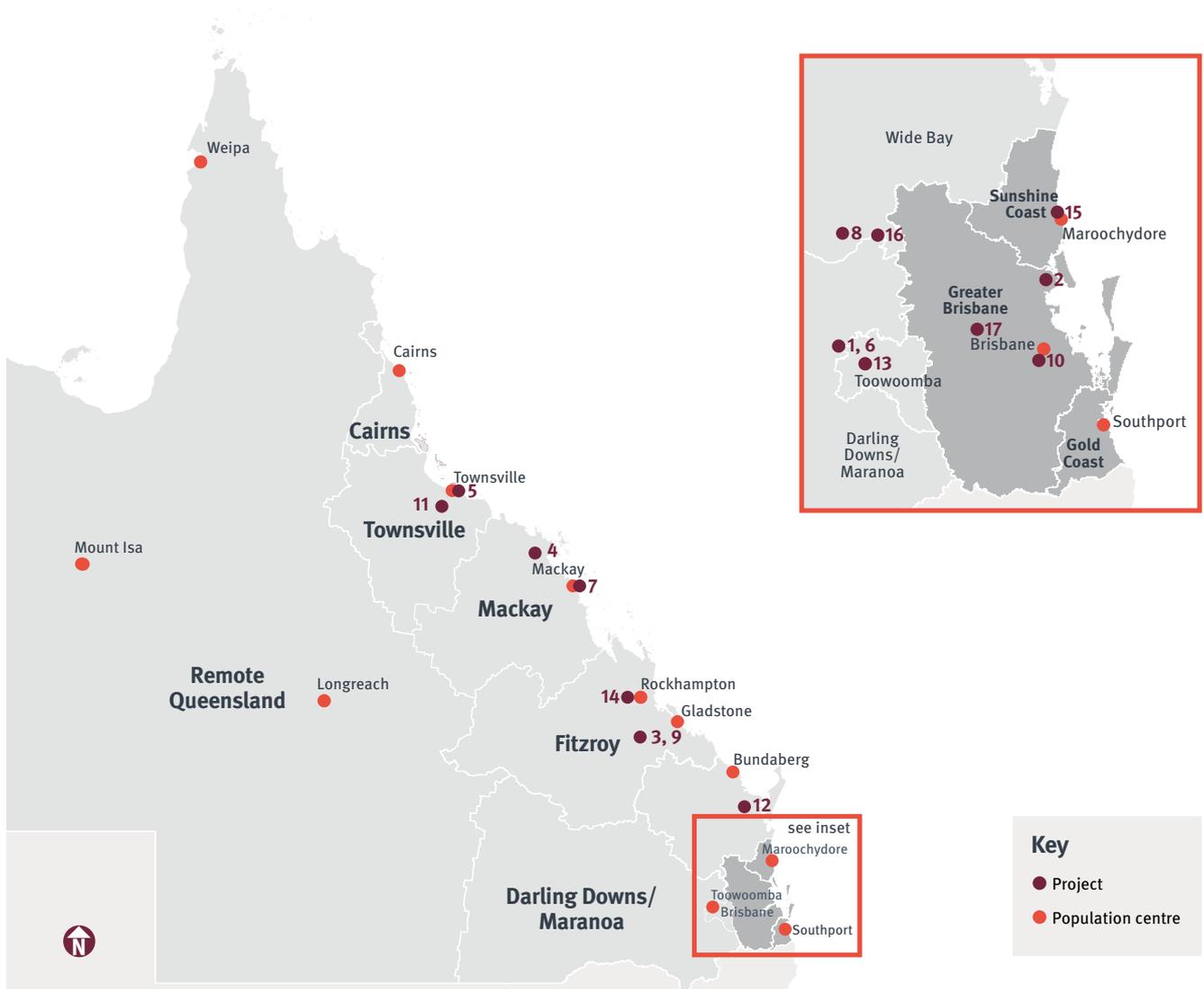


Coopers Gap Wind Farm

Selected 1–4 year program highlights

DELIVERY

#	PROJECT	#	PROJECT
1	Braemar Substation secondary systems replacement	10	Rocklea Substation secondary systems replacement
2	Caboolture West Substation upgrade	11	Ross Substation secondary systems replacement
3	Callide Power Station overhauls	12	Searle Street Maryborough redevelopment
4	Collinsville to Proserpine transmission line refit	13	South Street Toowoomba redevelopment
5	Garbutt Depot and Logistics Centre redevelopment stage 2	14	Stanwell Power Station works
6	Kogan Creek Power Station overhauls	15	SunCoast powerline project Palmwoods to Maroochydore
7	Mackay Substation Replacement	16	Tarong Power Station overhauls
8	Meandu Mine infrastructure upgrades and replacements	17	Wivenhoe Power Station overhauls
9	Moura Switchyard replacement		



Future opportunities – short-term

Opportunity 1

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

Status update: Following successful trials, Total Energy Planning practices will now be embedded into the design approach for a number of master planned communities in Queensland.

Opportunity 2

Implement outcomes from the Gas Supply and Demand Action Plan.

Status update: The Gas Action Plan is planned for release mid-2017.

Opportunity 3

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

Status update: The Queensland Biofutures 10-year Roadmap and Action Plan was released in June 2016, and is now being implemented.

Opportunity 4

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

Status update: Work is underway to develop energy productivity measures as outlined in the COAG Energy Council National Energy Productivity Plan 2015–2030, such as a trial of LED street lighting undertaken through the Clean Technology Innovation Program trial.

Opportunity 5

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

Status update: This opportunity will be reassessed given the state disaster planning and recovery arrangements already in place.

Opportunity 6

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

Status update: The opportunity for inclusion of renewable energy in appropriate, new developments will be addressed through opportunity 1 in future SIP updates.

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.

Status update: The Department of Energy and Water Supply will progress implementation of recommendations as detailed in their response to the panel, published in June 2017.

Opportunity 8

Promote widespread use of energy sourced from renewable energy generation.

Status update: A number of projects are underway to promote use of renewable and other new technologies including solar PV, digital meters and energy efficiency across schools, public housing and regional Queensland households.

Opportunity 9

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

Status update: This opportunity will be addressed through opportunity 1 and 4 in future SIP updates.

Opportunity 10

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

Status update: Queensland is implementing national reforms in 2017 that will require broad adoption of these measures and delivering programs to drive take-up in specific customer segments.

Opportunity 11

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

Status update: The Queensland Government has partnered with the Australian Renewable Energy Agency (ARENA) on Solar 150 to successfully commission 148 megawatts of new solar to the Queensland market. The potential future role of Australian Government funding is noted in the Powering North Queensland Plan and Queensland Government's response to the Renewable Energy Expert Panel.

Future opportunities – medium/long-term

PLANNING

Opportunity 12

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

Status update: The Department of Energy and Water Supply is developing guidance information aimed at local councils to help them realise these opportunities and Energy Queensland is trialling new approaches to delivering electricity to remote communities to help reduce costs and improve reliability.

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.

Status update: The Department of Energy and Water Supply is working with Energy Queensland to trial solar PV and other technologies in isolated communities. This opportunity will be combined with opportunity 12 in future SIP updates.

Opportunity 14

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

Status update: This opportunity will be addressed through opportunity 12 in future SIP updates.

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.

Status update: The Department of Energy and Water Supply is delivering reform through its leadership of the Energy Council project team focused on emerging technologies, and will assess the role and impact of new technology in the state through the Queensland Energy Security Taskforce.

Opportunity 16

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

Status update: The Queensland Government has outlined a wide-ranging program of work in the Powering Queensland Plan that will ensure Queensland continues to have access to an affordable, secure and sustainable supply of electricity.

Opportunity 17

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

Status update: This opportunity is being assessed through national reform processes being led by COAG Energy Council, including under the emerging technologies project team.

Case study: Solar 150 creating renewable energy and jobs

The Queensland Government is committed to supporting 148 megawatts of solar power generation through its Solar 150 program. The program is providing practical assistance for the roll-out of large-scale renewable generation in collaboration with the Australian Renewable Energy Agency (ARENA). Through the Solar 150 program, the Queensland Government provides long-term revenue contracts to recipients of ARENA funding to support large-scale solar growth.

The combination of ARENA funding and Solar 150 support reduces the cost and risk of future renewable energy projects by demonstrating financial and technology feasibility. It also provides tangible learnings across development and supply chains to facilitate future renewable energy developments.

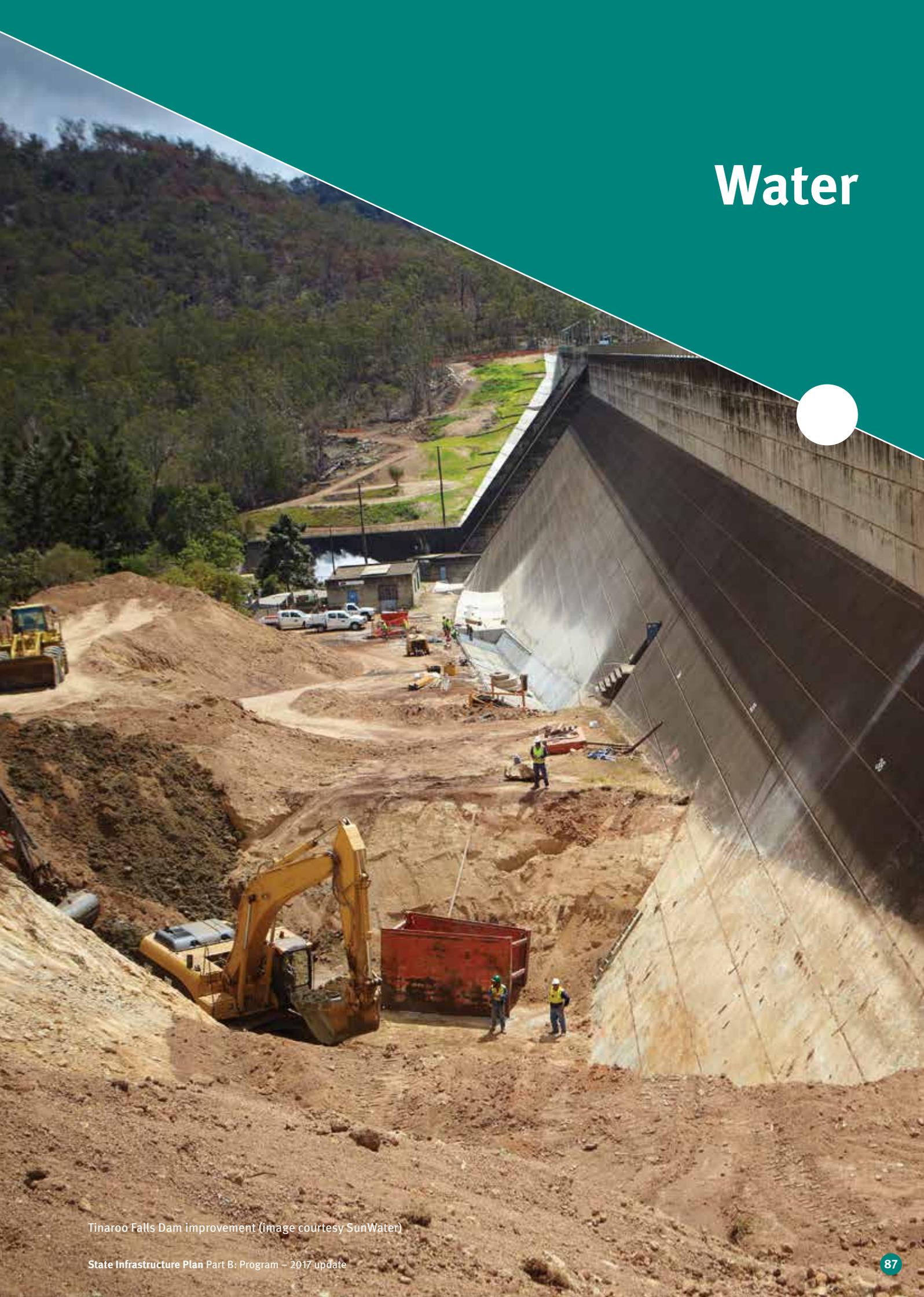
Four Queensland projects have successfully received ARENA funding and Solar 150 program support, these projects are:

- ▶ Whitsunday Solar Farm – \$122.4 million, 58 megawatt generation capacity, 116 direct jobs
- ▶ Kidston Solar Farm – \$126.2 million, 50 megawatt generation capacity, 100 direct jobs
- ▶ Oakey Solar Farm – \$47.5 million, 25 megawatt generation capacity, 50 direct jobs
- ▶ Longreach Solar Farm – \$28.7 million, 15 megawatt generation capacity, 30 direct jobs.



Solar monitoring at Kidston

Water



Tinaroo Falls Dam improvement (image courtesy SunWater)

As one of the most precious resources globally, water must be used sustainably and secured for future generations. It is critical to agriculture, business and industry, as well as everyday living. Infrastructure that is affordable and delivers a clean, secure and accessible water supply helps maximise Queensland’s economic development potential. Water infrastructure also provides an essential environmental service by enabling stormwater, sewerage management and dam releases.

Communities across Queensland are reliant on the availability of a secure water supply. Water supplies, particularly those used for agricultural purposes, are regularly threatened. Currently, more than 70 per cent of Queensland is drought declared and widespread droughts are occurring more frequently.

Water infrastructure involves both water supply and wastewater treatment. As water is heavy and expensive to transport, it is more efficient to connect isolated urban centres with nearby water sources. This continues to be the Queensland Government’s preferred approach for supply of water and wastewater infrastructure.

Queensland’s vast geography and diverse climate can make it challenging to manage a secure water supply. 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 demands on resources increase, rigorous assessment and planning will be essential to ensure sustainable and cost-effective access to water.

Effective water supply planning and viable funding models are essential to provide appropriate water solutions in the future. Effective water planning also ensures traditional sources of water, such as rivers, lakes and springs, are managed to safeguard the health of the water source for long-term supply and ecological sustainability.

Smarter water supply solutions can help overcome challenges including climate change, population growth and a constrained fiscal environment. In some situations, modular, mobile and low-cost water infrastructure may be an appropriate response to such challenges. Adaptive infrastructure will be required to keep pace with demand and ensure greater value is extracted from water infrastructure, which will mean greater efficiency and less cost for consumers.

Innovative technology has the ability to improve water efficiency in homes, farms and industries and allow customers to make better decisions about how and when they use this valuable resource.

Water projects, proposals and Future opportunities are illustrated in the infrastructure pipeline in figure 11.

2016–17 DELIVERY HIGHLIGHTS

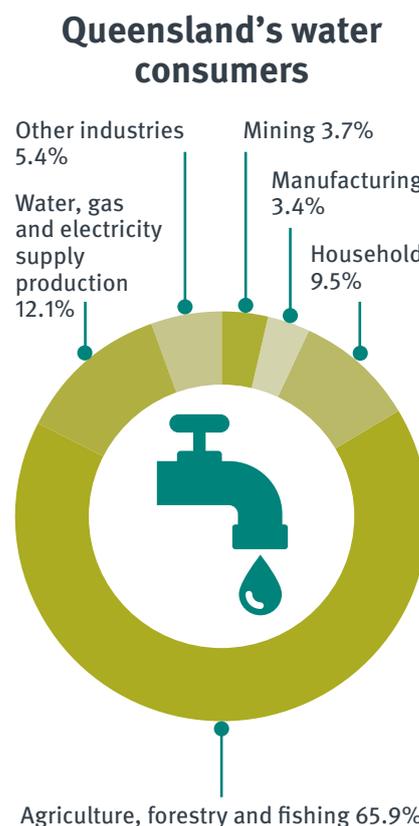
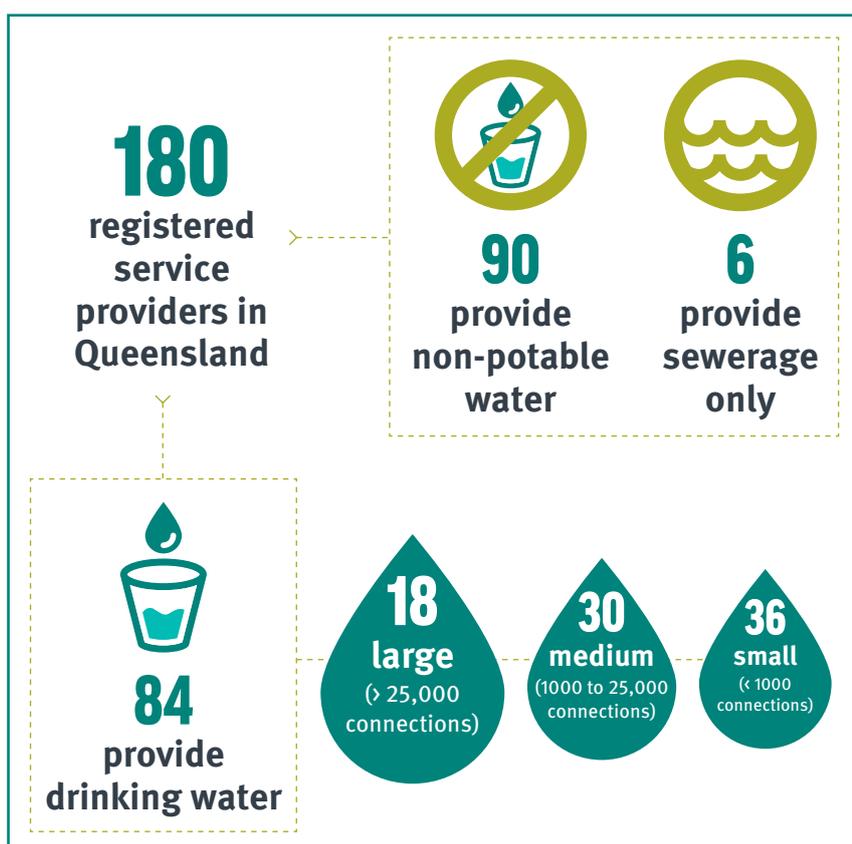
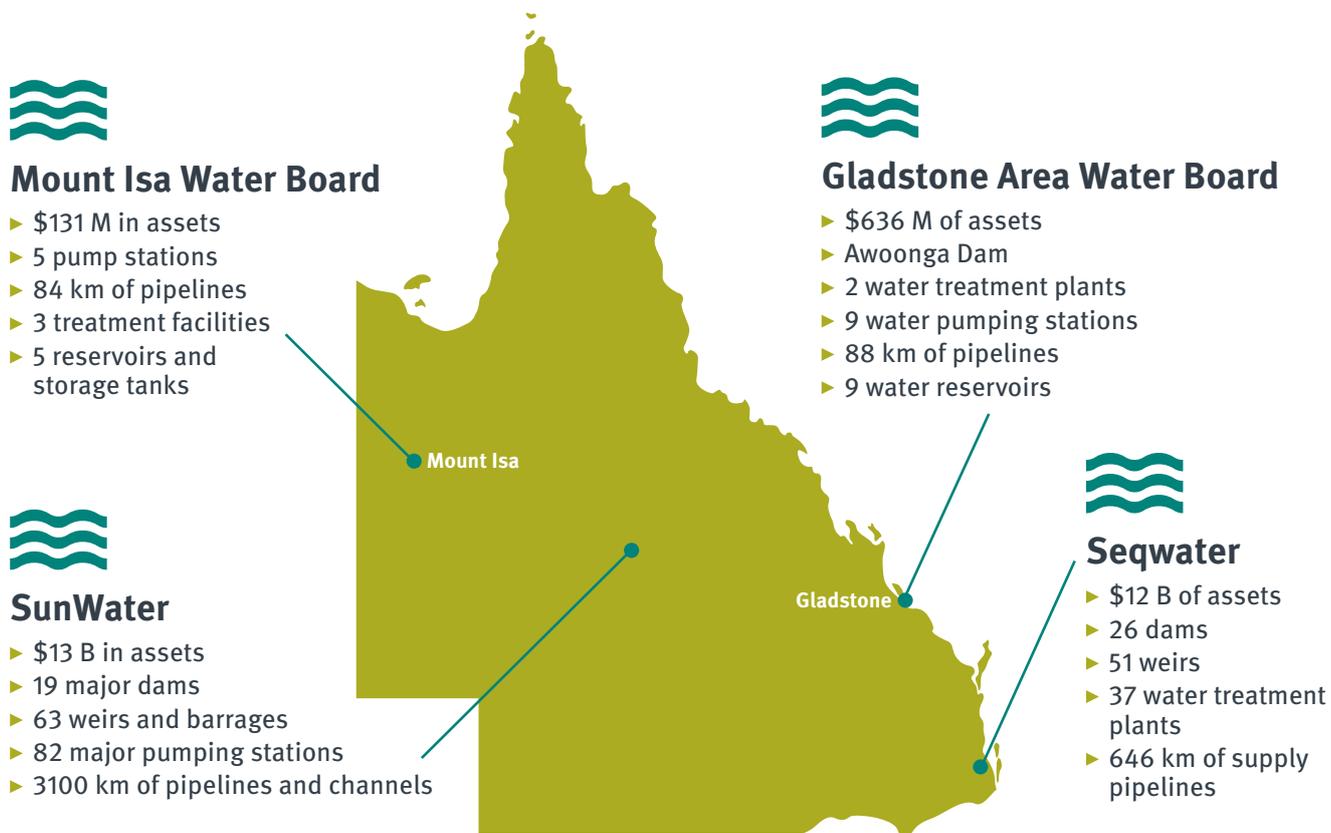
Gladstone Water Treatment Plant/Yarwun Water Treatment Plant System interconnection project, Fitzroy

Awoonga Dam Variable Frequency Drives replacement, Fitzroy



Woleebee Creek to Glebe weir pipeline (image courtesy SunWater)

Queensland's water supply network



2016 SIP Part B strategic alignment

In the SIP Part A, the Queensland Government identified strategic directions to address the infrastructure challenges and objectives for each asset class. These strategic directions inform SIP Part B, and allow government to align investments with these strategic directions. The number of 1–4 year program items and Future opportunities from the 2016 SIP which align to each response, are outlined below.

WATER RESPONSES					
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 planning to support infrastructure decision-making.	Strengthen the coordination and planning of water infrastructure.
Number of 2016 SIP Part B 1–4 year program items					
24	–	7	–	–	–
Number of 2016 SIP Part B Future opportunities					
2	3	1	2	1	1

Case study: Townsville Water Security Taskforce

The Townsville Water Security Taskforce is a vital element of the Townsville City Deal. A Townsville water security, supply and use strategy is a key component of the Enabling Infrastructure Initiative within the City Deal and seeks to ensure a sustainable, secure long-term water supply for Townsville to support future population and industry growth.

In March 2017, an independently-chaired intergovernmental taskforce was appointed to investigate short, medium and long-term solutions to water security, considering investment in water supply infrastructure and management of demand.

The taskforce is engaging with community, industry and other relevant stakeholders to identify preferred options to improve Townsville’s water security and support the city’s future growth. These will include options to improve the security of water supply and amend water service standards and pricing. This will be complemented by local water efficiency programs and new technologies that will support Townsville residents and businesses to save water.

The taskforce released an interim report on 30 June 2017 which recommends a suite of infrastructure and non-infrastructure measures over the short, medium and long-term to improve Townsville’s water supply security. The taskforce is due to deliver a final report by the 30 September 2018 to the Prime Minister and the Premier for the Australian and Queensland governments’ further consideration.

The Queensland Government has committed \$225 million over four years to ensure the state is prepared to act on the findings of the taskforce and support sustainable and secure long-term water supply and create jobs for Townsville.

Further information on the taskforce is available at watersecuritytownsville.org.au and information on the Townsville City Deal is available at: cities.dpmpc.gov.au/townsville-city-deal

2017 pipeline

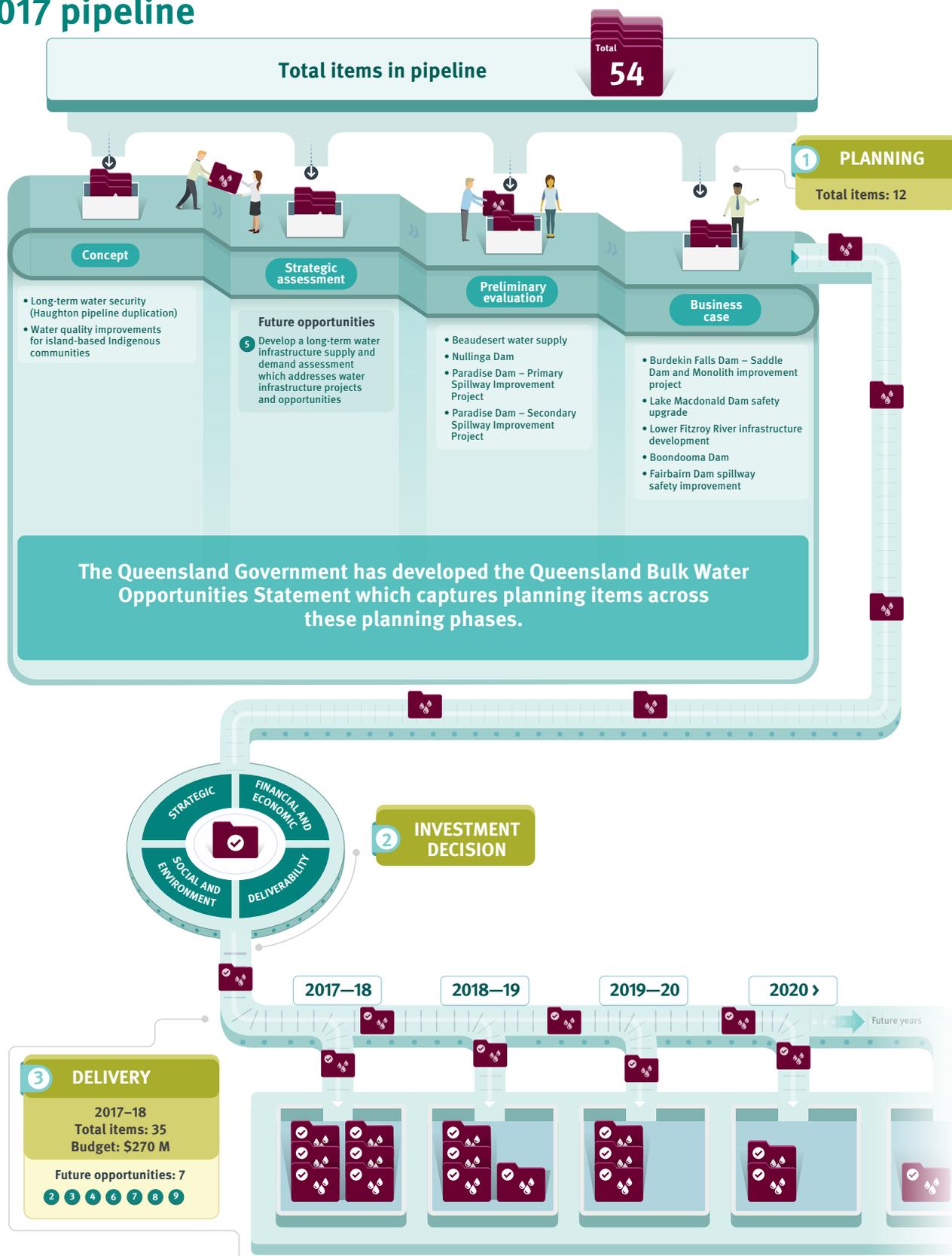


Figure 11: Infrastructure pipeline for Water

Note: Items include: Queensland Government-led Proposals raised through consultation, Building Queensland proposals and proposals from Infrastructure Australia's Infrastructure Priority List.

Note: Items at various planning stages are captured in each phase, however, are only counted once in the total items.

1–4 year program

DELIVERY

Project	Total estimated cost (\$M)	Contributions				Expenditure to June 2017 (\$M)	Funding (\$M)			
		Fed	QG	LG	Priv		2017–18	Indicative		
South East Queensland										
Petrie new water supply connection	9.959		●			6.015	3.945			
North Pine Water Treatment Plant sludge handling upgrade	10.165		●			3.665	6.000	0.500		
Somerset Hydro refurbishment	12.083		●			11.083	1.000			
Lowood Water Treatment Plant stage 1 upgrade	17.094		●			2.094	2.000	10.000	3.000	
Sideling Creek Dam safety upgrade stage 1	18.000		●			1.456	2.000	12.700	1.844	
Mount Crosby East Bank Water Pump Station flood resilience works	31.610		●				1.800	10.000	19.810	
Mount Crosby East Bank Water Treatment Plant filtration upgrade	34.000		●			0.837	1.775	12.500	18.888	
Beaudesert Water Supply zone upgrade	80.083		●			0.034	0.269	1.012	40.497	38.270
Lake McDonald Dam upgrade stage 2	88.521		●			2.321	2.000	2.400	75.000	6.800
Seqwater capital works	Ongoing		●				14.079			
Seqwater ongoing programs	Ongoing		●				83.634			
Regional Queensland										
Gladstone Area Water Board – Moura rail line crossing	1.069		●			0.669	0.400			
Gladstone Area Water Board – water treatment plant upgrades	1.550		●			1.450	0.100			
Moondarra power reliability improvements	1.733		●			0.334	1.399			
Mount Isa Terminal Reservoir storage tanks	1.919		●			0.150	1.769			
Palm Island wastewater infrastructure	5.476		●			2.940	2.536			
Gladstone to Fitzroy Pipeline Project	5.685		●			5.635	0.050			
Awoonga Dam spillway upgrades	8.592		●			8.392	0.200			
Burdekin Falls Dam – Dam Safety Improvement Program	10.059				●	2.699	4.569	2.791		
Cherbourg wastewater infrastructure	14.900		●			3.511	11.389			
Supply reliability – Clear Water Lagoon to Mount Isa Terminal Reservoir	17.450		●				7.948	9.502		
Gladstone Area Water Board offline storage and repump station	29.952		●			7.608	20.183	2.161		

Project	Total estimated cost (\$M)	Contributions				Expenditure to June 2017 (\$M)	Funding (\$M)			
		Fed	QG	LG	Priv		2017-18	Indicative		
								2018-19	2019-20 to 20-21	Beyond
Paradise Dam – Dam Safety Improvement Program, project 2	36.666				●	26.500	2.431	7.735		
Boondooma Dam spillway and side wall repair	46.159				●	25.197	12.937	8.025		
Townsville water security measures	225.000		●				10.000	15.000	200.000	
Lake Julius power pole replacement	Ongoing		●				0.580			
Lake Julius solar power supply	Ongoing		●				1.000			
Statewide										
Pompuraaw Drinking Water Security Project	2.400		●			0.200	2.200			
Fluoridation Infrastructure Grants Program	5.000		●				2.500	2.500		
Indigenous Water Infrastructure Program	120.000		●			30.000	30.000	30.000	30.000	
Emergency management response plan	Ongoing				●		4.046			
SunWater various programs	Ongoing				●		24.720			
Gladstone Area Water Board various projects	15.019		●			7.646	6.199	0.587	0.587	
Mount Isa Water Board various projects	Ongoing		●				3.253			
Mount Isa Water Board various projects	3.976		●				1.243	2.000	0.733	

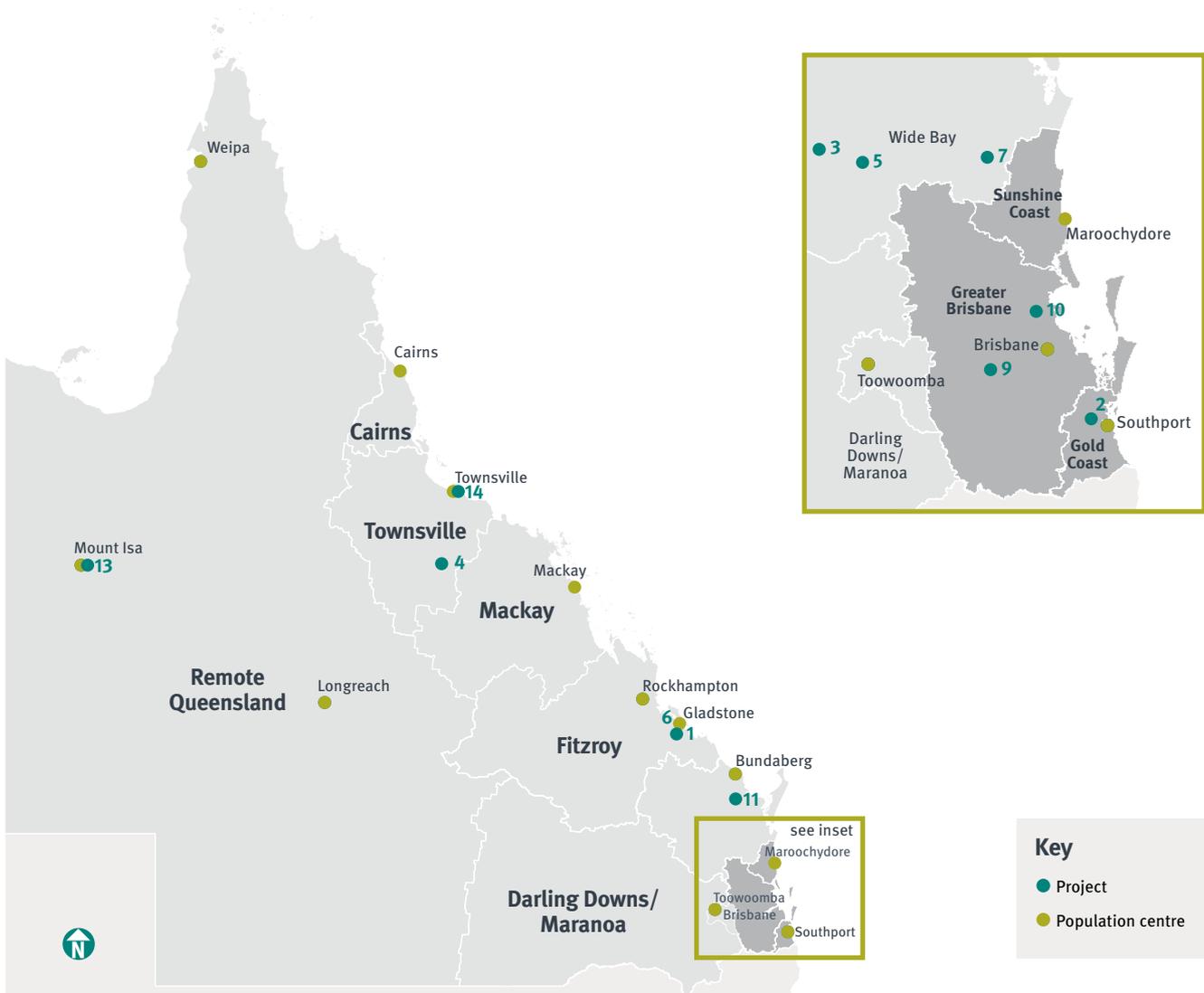


Burdekin Falls Dam

Selected 1–4 year program highlights

DELIVERY

#	PROJECT	#	PROJECT
1	Awoonga Dam spillway upgrades	8	Lowood Water Treatment Plant stage 1 upgrade
2	Beaudesert Water Supply zone upgrade	9	Mount Crosby East Bank Water Treatment Plant filtration upgrade and Pump Station flood resilience works
3	Boondooma Dam spillway and side wall repair	10	North Pine Water Treatment Plant sludge handling upgrade
4	Burdekin Falls Dam – Dam Safety Improvement Program	11	Paradise Dam – Dam Safety Improvement Program, project 2
5	Cherbourg wastewater infrastructure	12	Somerset Hydro refurbishment
6	Gladstone Area Water Board offline storage and repump station	13	Supply reliability – Clear Water Lagoon to Mount Isa Terminal Reservoir
7	Lake McDonald Dam upgrade stage 2	14	Townsville water security measures



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.

Status update: A range of solutions have been investigated, and the opportunity will be progressed through a number of channels. For example, there is significant potential to continue to use the water planning and water allocation framework under the Water Act to make water available, informed by robust science and community consultation. Operational and policy innovations are being investigated to more readily support development opportunities.

Opportunity 2

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

Status update: Eleven regional water supply security assessments have been finalised and nine are underway. The Department of State Development is working with local government, industry and other partners to identify and facilitate water supply opportunities to support economic growth (e.g. Rookwood Weir and Port of Abbott Point). This has occurred through use and application of the Coordinator-General's powers under the *State Development and Public Works Organisation Act 1971*.

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.

Status update: This proposal has encouraged innovative water solutions, such as the smart metering technology, which is being utilised by local governments and service providers.

Opportunity 4

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

Status update: SunWater and Seqwater maintain dams through dam safety improvement programs. A number of dams will be improved in the longer-term, some have been completed such as Wappa Dam and others are commencing improvement, for example, Burdekin Falls Dam and Paradise Dam. Recent dam safety legislative amendments improve the way dam owners manage dam safety and reduce regulatory burden.

Opportunity 5

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

Status update: The Queensland Bulk Water Opportunities Statement, developed as the future water security strategy for Queensland, identifies new water infrastructure projects currently under investigation and considers the better use of existing infrastructure.

Opportunity 6

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

Status update: South East Queensland's Water Security Program 2016–2046 (Water for Life) was released in March 2017. It has assessed demand, supply, operation of the grid, and future water security options to secure the region's future water supply, with the next new source expected in the region's north.

Future opportunities – medium/long-term

PLANNING

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.

Status update: The Queensland Bulk Water Opportunities Statement contains initiatives to drive more efficient use of resources and assets. While the state's water planning has established tradeable water allocations, there are opportunities to create greater flexibility in the market and trading rules that would drive further efficiency of use.

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.

Status update: This opportunity will be addressed through opportunity 10 in future SIP updates.

New 2017 Future opportunities

Opportunity 10

Maximise the use of alternative water sources and advanced water technologies to recycle and reuse water, and leverage innovation such as modular, mobile, and low-cost infrastructure.

Status update: Five regional alliances have been formed under the Queensland Water Regional Alliance Program, encompassing approximately 30 local governments, to investigate a range of alternative and collaborative arrangements for managing urban water and sewerage services. Potential alternative water sources for the bulk water sector are being considered as part of the Queensland Bulk Water Opportunities Statement.

Opportunity 9

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

Status update: This opportunity is being progressed through the Queensland Bulk Water Opportunities Statement and will now be addressed through opportunity 10 in future SIP updates.

Queensland Bulk Water Opportunities Statement

The Queensland Bulk Water Opportunities Statement (QBWOS) is the 'future water security strategy' for Queensland. It provides the opportunity for broad discussion with community and the water sector on bulk water issues. The QBWOS provides a framework through which the Queensland Government can support and contribute to sustainable regional economic development. QBWOS presents a framework and actions for achieving a balance between better using existing assets and considering future projects.

The QBWOS provides a clear statement of the Queensland Government's objectives for bulk water supply. To support these objectives, clear principles are outlined for considering state investment in bulk water supply infrastructure.

The focus is on reducing the barriers to using available water within existing bulk water supply infrastructure and considering new projects with demonstrable economic benefits within the context of all competing budget constraints.

The QBWOS identifies new water infrastructure projects that are currently under investigation and considers the better use of existing infrastructure. It also includes initiatives aimed at enhancing transparency of bulk water market information and provides direction and context for the development of bulk water supply infrastructure in Queensland.

The QBWOS is one of five strategic infrastructure documents outlined as Implementation action one in the 2016 SIP Part B.

Health



Queensland’s population is changing, and community expectations are increasing around improved and timely access to health services. A sustainable health system needs to embrace new and emerging technology, innovative thinking and new models of care through evidence and best practice. Understanding the current clinical capability, demography, epidemiology and fiscal constraints will allow for optimisation and transformation of current services, and inform infrastructure and technology investment.

Providing sustainable health services will be impacted by a number of pressures. These include a growing and ageing population, rising obesity rates and increasing rates of chronic disease. The delivery of sustainable, high-quality healthcare will require flexible infrastructure which meets the future demands of Queensland communities. There will be a continued focus on mitigating growing demand for healthcare while providing equitable access and improved health outcomes. This will require balancing intensive capital investments with capitalising on emerging technology, new models of care and untapped workforce skills.

Responsible and high-value investment in health services and infrastructure will be targeted at reforming, making better use of, and improving existing delivery models and assets. Many health buildings are more than 30 years old and will require ongoing upgrade, and where appropriate replacement, to effectively support health service delivery.

Integrated planning is being undertaken across workforce, infrastructure, e-health and service delivery, to better respond to demand and inform directions in innovation both locally and statewide. Investment in innovation can transform health systems through integrated models of care, telehealth expansion and digital health, which will create an interconnected network of public and private health services. Opportunities for further innovation also exist through partnerships with non-government organisations and the private sector to improve the use of existing facilities and cooperatively deliver new assets.

There will be opportunities to maximise health outcomes through innovative solutions. This can be harnessed by identifying advancements in service delivery, adopting new technologies, increasing interconnectedness of information and facilitating digital capability. As new technology is adopted, existing resources can be used more efficiently, clinicians can be provided with better access to patient information and patient outcomes will be improved.

Advances in technology and the benefits of alternative service delivery will support the efficient delivery of health services across Queensland. However, it is important to note that additional built infrastructure will still be required to effectively meet the challenges of increasing population growth and rising demand for health services.

Health projects, proposals and Future opportunities are illustrated in the infrastructure pipeline in figure 12.



Quality nursing care

2016–17 DELIVERY HIGHLIGHTS

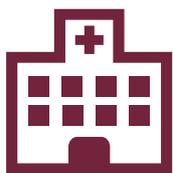
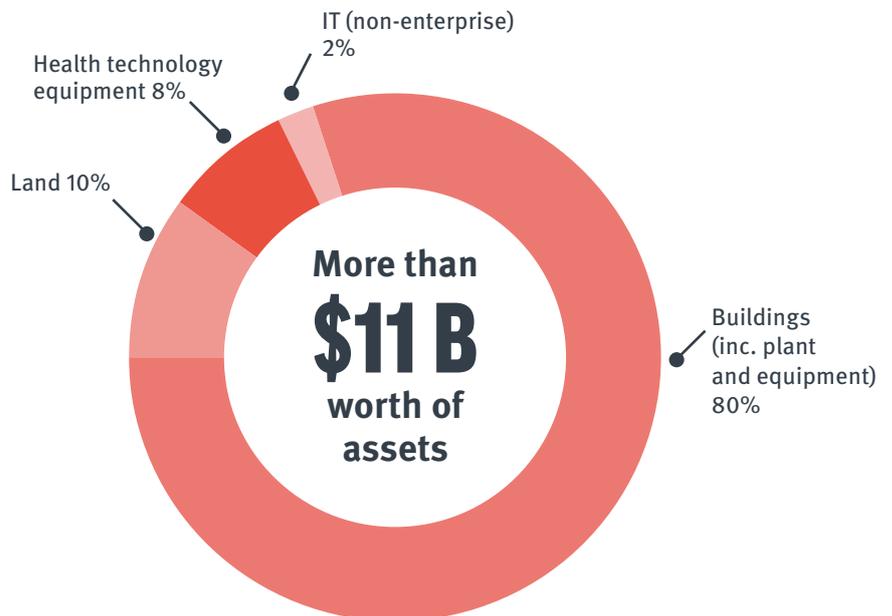
Sunshine Coast University Hospital, Sunshine Coast
Mount Isa Hospital redevelopment, Remote Queensland
Rockhampton Hospital Intensive Care Unit, Fitzroy
Caboolture Hospital 32-bed ward stage 2, Greater Brisbane

Queensland's public health system



95,573

full-time and part-time health and ambulance personnel



123

hospitals



70

primary healthcare centres



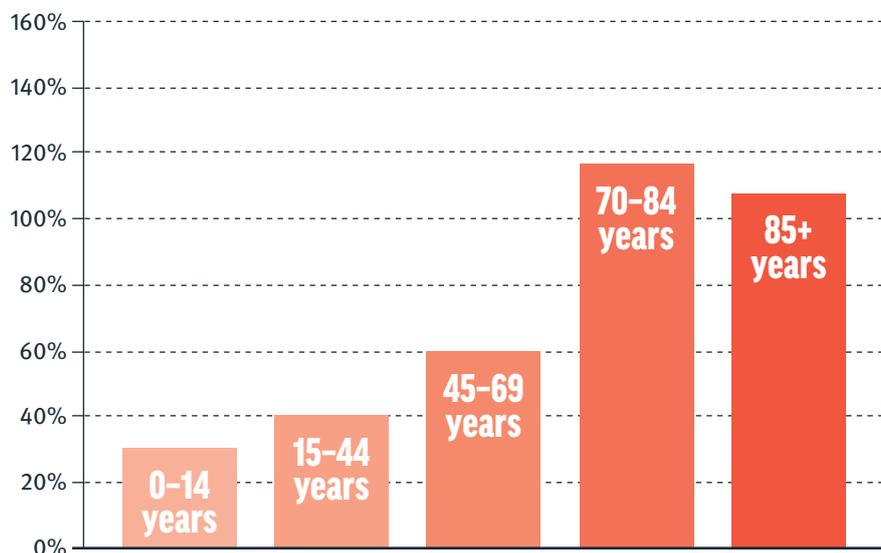
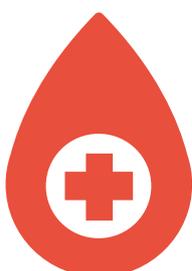
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ambulance communication centres and 290 response locations

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

2016 SIP Part B strategic alignment

In the SIP Part A, the Queensland Government identified strategic directions to address the infrastructure challenges and objectives for each asset class. These strategic directions inform SIP Part B, and allow government to align investments with these strategic directions. The number of 1–4 year program items and Future opportunities from the 2016 SIP which align to each response, are outlined below.

HEALTH RESPONSES				
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.
Number of 2016 SIP Part B 1–4 year program items				
1	2	3	3	53
Number of 2016 SIP Part B Future opportunities				
1	2	2	1	3

Case study: Herston Quarter redevelopment

Herston Quarter is a five hectare site adjacent to the Royal Brisbane and Women’s Hospital that became available for redevelopment following the relocation of children’s health services to the Lady Cilento Children’s Hospital. After a competitive procurement process, Australian Unity was engaged as the master developer for the redevelopment of Herston Quarter.

The project will see Herston Quarter developed into a \$1.1 billion mixed-use precinct for health, residential, commercial and recreational activity.

The master planned project will be delivered in stages over 10 years and will include a new 132-bed public health facility. Stage 1 site preparation works are underway.

The project will deliver a private hospital, aged care, retirement living, residential accommodation, and public space. The heritage buildings on the site, which are an important part of Brisbane’s health heritage, will undergo a multi-million dollar refurbishment to support their adaptive reuse.

The new public health facility will comprise 100 rehabilitation support areas and a surgical inpatient unit, seven operating theatres, three endoscopy rooms and recovery spaces. The construction of the new public health facility is anticipated to commence in early 2018 and be completed in late 2020. Herston Quarter has been declared a Priority Development Area to enable streamlined development.



Herston Quarter redevelopment artist impression (image courtesy Hassell)

2017 pipeline

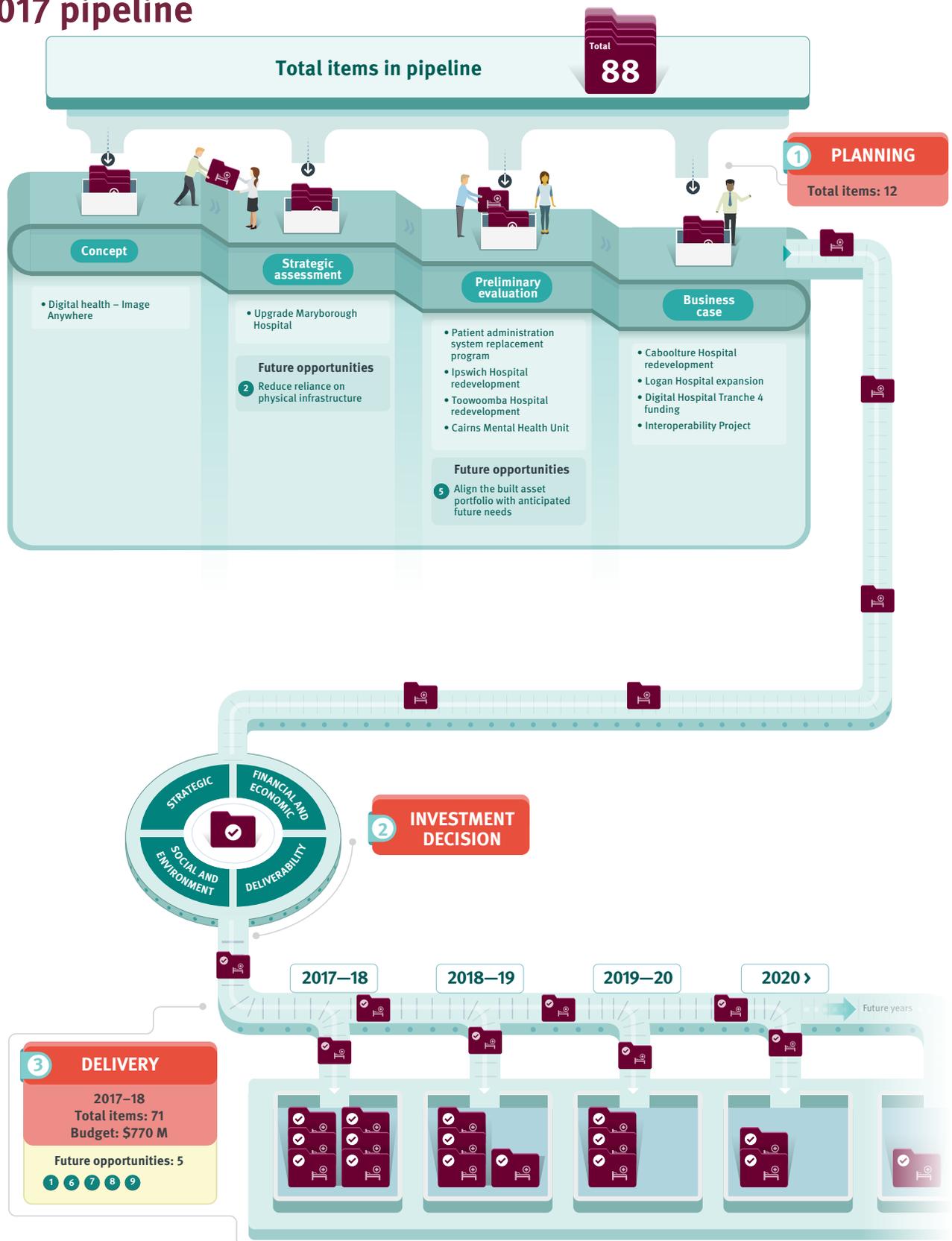


Figure 12: Infrastructure pipeline for Health

Note: Items include: Queensland Government-led Proposals raised through consultation, Building Queensland proposals and proposals from Infrastructure Australia’s Infrastructure Priority List.

Note: Items at various planning stages are captured in each phase, however, are only counted once in the total items.

1–4 year program

DELIVERY

Project	Total estimated cost (\$M)	Contributions				Expenditure to June 2017 (\$M)	Funding (\$M)			
		Fed	QG	LG	Priv		2017–18	2018–19	2019–20 to 2020–21	Beyond
South East Queensland										
Royal Brisbane Women's Hospital capital works	6.110		●			0.649	5.279	0.182		
Children's Health Queensland HHS various projects	8.647		●			1.729	6.918			
Lady Cilento Children's Hospital completion	1433.145		●			1381.179	10.000	41.966		
Sunshine Coast University Hospital	1872.151		●			1725.948	64.737	22.511	46.238	12.717
Adolescent mental health facilities	68.237		●			0.958	8.713	45.320	13.246	
Sunshine Coast HHS various projects	29.850		●			18.236	5.311	6.303		
Sunshine Coast HHS ongoing programs	Ongoing		●				9.639			
West Moreton HHS ongoing programs	Ongoing		●				5.397			
Metro South HHS various projects	23.835		●			19.314	4.521			
Metro South HHS ongoing programs	Ongoing		●				31.015			
Metro North HHS various projects	83.430		●			30.796	47.982	4.652		
Metro North HHS ongoing programs	Ongoing		●				35.141			
Gold Coast HHS ongoing programs	Ongoing		●				4.496			
Queensland Ambulance Service										
Kenilworth Station upgrade	1.866		●			0.367	1.499			
Birtinya Station	4.396		●			2.734	1.662			
Wynnum Station replacement	4.600		●			0.050	4.550			
Coral Gardens Station replacement	4.700		●			0.209	4.491			
Regional Queensland										
Kowanyama – staff accommodation	3.404		●			0.118	3.286			
Mackay Adult Step-Up Step-Down Facility	4.000		●			0.465	3.535			
Mer (Murray) Island Primary Health Care Centre replacement	7.000		●				1.000	2.500	3.500	
McKinlay Multi Purpose Health Service refurbishment	5.000		●			0.230	4.770			
Sarina Hospital redevelopment	16.500		●				1.000	4.000	11.500	
Staff accommodation program	13.000		●				13.000			

Project	Total estimated cost (\$M)	Contributions				Expenditure to June 2017 (\$M)	Funding (\$M)			
		Fed	QG	LG	Priv		2017–18	2018–19	2019–20 to 2020–21	Beyond
Palm Island Primary Care Centre	16.500		●			0.800	7.700	8.000		
Blackall Hospital redevelopment	17.900		●				5.000	10.000	2.900	
Rockhampton Hospital carpark	25.500		●			0.500	6.580	18.420		
Kingaroy Hospital redevelopment	62.000		●				8.000	20.000	34.000	
Rockhampton Hospital expansion	178.364	●	●			175.400	2.964			
Cairns Hospital redevelopment	446.300		●			436.800	9.500			
Aurukun Primary Health Care Centre redevelopment	6.653		●			1.413	5.240			
Townsville Hospital expansion	334.000	●	●			325.416	8.584			
Mackay HHS various projects	7.600		●			4.148	3.452			
Mackay HHS ongoing programs	Ongoing		●				3.901			
Townsville HHS various projects	18.600		●			3.982	9.218	5.400		
Townsville HHS ongoing programs	Ongoing		●				11.540			
Cairns and Hinterland HHS various projects	74.453		●			1.569	5.884	10.000	57.000	
Cairns and Hinterland HHS ongoing programs	Ongoing		●				9.866			
Wide Bay HHS various projects	14.000		●			0.465	13.535			
Wide Bay HHS ongoing programs	Ongoing		●				4.545			
Central West HHS various projects	5.045		●			1.907	3.138			
Central West HHS ongoing programs	Ongoing		●				1.196			
North West HHS ongoing programs	Ongoing		●				1.554			
Torres and Cape HHS ongoing programs	Ongoing		●				2.601			
Central Queensland HHS various projects	4.000		●			0.465	3.535			
Central Queensland HHS ongoing programs	Ongoing		●				6.572			
Darling Downs HHS ongoing programs	Ongoing		●				8.002			
South West HHS various projects	0.950		●			0.610	0.340			
South West HHS ongoing programs	Ongoing		●				1.378			

1–4 year program

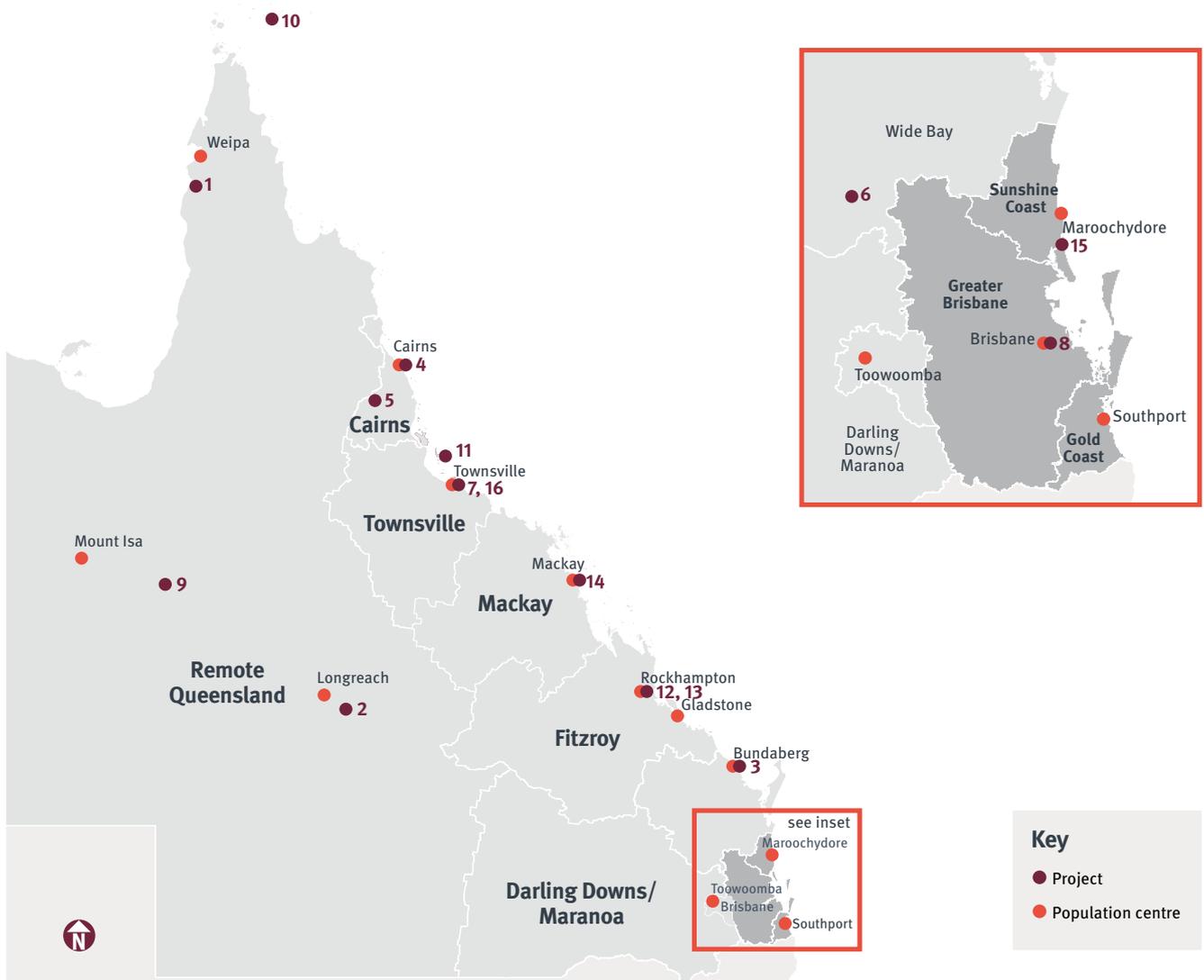
DELIVERY

Project	Total estimated cost (\$M)	Contributions				Expenditure to June 2017 (\$M)	Funding (\$M)			
		Fed	QG	LG	Priv		2017–18	Indicative		
Regional Queensland										
Queensland Ambulance Service										
Thursday Island Station replacement	2.814		●			0.260	2.554			
New Hervey Bay Station	3.500		●				0.100	3.400		
New Drayton Station	4.000		●				0.100	1.800	2.100	
Rockhampton Station and Operations Centre redevelopment	5.000		●				0.500	2.200	2.300	
Kirwan Station replacement	5.000		●				0.200	3.800	1.000	
Bundaberg Station replacement	5.150		●			4.115	1.035			
Cairns Station and Operations Centre redevelopment	5.600		●				0.200	2.000	3.400	
Statewide										
Telehealth (revitalisation of regional, rural and remote health services)	2.000		●			1.280	0.360	0.360		
Community Mental Health Program	5.151		●			1.957	3.194			
Laboratory information system	60.905		●			5.500	20.500	24.300	10.605	
Business cases and preparatory work	112.163		●				9.000	10.000	93.163	
Enhancing Regional Hospitals Program	180.000		●			5.648	61.091	39.574	70.130	3.557
Advancing Queensland Health Infrastructure Program	230.000		●			8.381	24.814	76.201	120.604	
Financial systems replacement	105.000		●			15.000	65.000	25.000		
Building works capital project management	Ongoing		●				1.460			
Priority capital program	Ongoing		●				80.000			
Master planning studies	Ongoing		●				2.379			
Building works	Ongoing		●				0.850			
Children's Health Queensland HHS ongoing programs	Ongoing		●				4.827			
Ongoing programs	Ongoing		●				18.384			
Queensland Ambulance Service										
Ongoing programs	Ongoing		●				41.712			
Statewide strategic land acquisitions	Ongoing		●				4.000			
Minor works	Ongoing		●				6.433			

Selected 1–4 year program highlights

DELIVERY

#	PROJECT	#	PROJECT
1	Aurukun Primary Health Care Centre redevelopment	9	McKinlay Multi-Purpose Health Service refurbishment
2	Blackall Hospital redevelopment	10	Mer (Murray) Island Primary Health Care Centre replacement
3	Bundaberg Ambulance Station replacement	11	Palm Island Primary Care Centre
4	Cairns Ambulance Station and Operations Centre redevelopment	12	Rockhampton Ambulance Station and Operations Centre redevelopment
5	Atherton Hospital emergency department and operating theatre redevelopment	13	Rockhampton Hospital carpark
6	Kingaroy Hospital redevelopment	14	Sarina Hospital redevelopment
7	Kirwan Ambulance Station replacement	15	Caloundra Health Service redevelopment
8	Adolescent Extended Treatment Facility	16	Townsville Hospital expansion



Future opportunities – short-term

PLANNING

Opportunity 1

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

Status update: Queensland Health is managing growth in health service needs and demands by investigating and implementing changing models of care, changing locations of care, new service delivery models with partners, and renewal of essential ageing infrastructure. This will be addressed through opportunity 10 in future SIP updates.

Opportunity 2

Reduce reliance on physical infrastructure through increased use of alternative service delivery models or locations that support provision of healthcare 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’.

Status update: A coordinated program of work is being developed to implement alternative models of care, partnering with primary health networks and other organisations. This will be addressed through opportunity 12 in future SIP updates.

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.

Status update: Regional planning will consider localised challenges and opportunities and reform for collaborative service provision. This will be addressed through opportunity 10 in future SIP updates.

Opportunity 4

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

Status update: Work continues to be delivered under the telehealth program to maximise the delivery of rural and remote health services and this will continue to be addressed through opportunity 12 in future SIP updates.

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.

Status update: Regional planning will consider community infrastructure opportunities through the Community Hubs and Partnership program. This will be addressed through opportunity 11 in future SIP updates.



Physiotherapy patient in hospital

Future opportunities – medium/long-term

PLANNING

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.

Status update: A number of projects are underway, and a coordinated program of work is being developed to implement alternative models of care, partnering with primary health networks and other organisations. This will be addressed through opportunity 12 in future SIP updates.

Opportunity 7

Develop a broad range of approaches to address high levels of anticipated growth in South East Queensland.

Status update: Queensland Health is managing growth in health service needs and demands by investigating and implementing changing models of care, changing locations of care, new service delivery models with partners, and renewal of essential ageing infrastructure. This will be addressed through opportunity 10 in future SIP updates.

Opportunity 8

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

Status update: Queensland Health is advancing integration through the digital hospitals initiative that will provide a platform for more innovative and integrated models of care. This will continue to be addressed through opportunity 12 in future SIP updates.

Opportunity 9

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

Status update: Regional planning will consider community infrastructure opportunities through the Community Hubs and Partnership program. This will be addressed through opportunity 11 in future SIP updates.

Case study: Digital Hospital Program

The Queensland Government has made significant advances in the provision of improved healthcare through its investment in the Digital Hospital Program, which has delivered digital capability to five public hospitals to date.

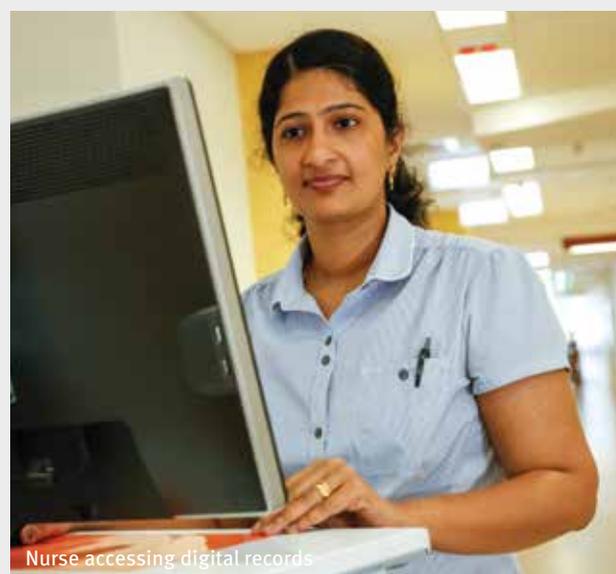
A key component of the eHealth Investment Strategy is the integrated electronic Medical Record (ieMR) Program which is addressing the limitations of the current paper-based medical record system.

In Queensland public hospitals, patient medical records largely exist as a paper medical chart, often duplicated by different facilities, with limited information sharing. This creates a range of risks, for example, availability and accessibility of the record, currency, incorrect details and illegible information.

In November 2015, Brisbane's Princess Alexandra Hospital rolled out the ieMR solution and in doing so became Australia's first large-scale digital hospital, heralding a revolution in the way healthcare will be delivered in Queensland. Rollout of the project required training nearly 6000 staff and integrating more than 1600 new digital devices across the hospital.

Mackay Base, Townsville, Logan, QEII, Redlands, Royal Brisbane and Women's and Lady Cilento Children's hospitals have also commenced their digital hospital journeys.

Twenty-four hospitals across Queensland's 16 Hospital and Health Services, covering around 80 per cent of acute patient activity, will have full digital hospital capability by June 2020.



Nurse accessing digital records

New 2017 Future opportunities

PLANNING

Opportunity 10

Strategically respond to the increasing demand for healthcare services (10-year horizon) through delivery of efficient healthcare infrastructure involving better use and reuse of facilities and changing models of care.

Status update: Regional planning will consider localised challenges and opportunities and reform for collaborative service provision with a focus on optimising current services, improving use of emerging technology and implementing new models of care.

Opportunity 11

Renewal and utilisation of the ageing health asset base over a 10-year horizon through investment in renewing an ageing asset base to promote performance and reduce operating costs.

Status update: The renewal of Queensland Health Infrastructure will be guided by regional planning and the Total Asset Management Planning process.

Opportunity 12

To achieve innovation in delivery of health infrastructure solutions through smart infrastructure and new models of service to future proof healthcare provision in Queensland.

Status update: Queensland Health is developing a coordinated program of work to implement alternative models of care, partnering with primary health networks and other organisations. For example, Queensland Health is working collaboratively with stakeholders to deliver:

- ▶ a statewide network of telehealth enabled facilities (delivery of health services and information using telecommunication technology)
- ▶ an increase in the scope of hospital in the home (providing care in the community for acute conditions requiring medical governance, and input/monitoring that would otherwise require inpatient bed care)
- ▶ integration through the digital hospitals initiative that will provide a platform for new and more innovative and integrated models of care.

Education and training



More than half a million Queensland students attend early childhood programs, primary and secondary schooling, and vocational training at government education and training facilities.

Queensland continues to experience increased demand for education services in line with population growth. Other factors include an increase in the number of children participating in kindergarten, higher Year 12 completion rates, compulsory prep enrolment, as well as increases in special school enrolments and the number of students accessing special education programs and services.

The high levels of investment in education and training infrastructure to support the delivery of services continues, with \$702 million committed in 2017–18 across multiple Queensland Government agencies.

To address current and future education challenges, assets need to be high-quality, flexible and future focused. This will require ongoing investment in renewal of education assets as many of Queensland’s education facilities are ageing, affecting overall quality and suitability to respond to the future of education. This includes flexible learning areas and other specialist spaces to support the delivery of curriculum such as science, technology, engineering and mathematics (STEM) and support Queensland Government programs such as Advance Queensland.

The Queensland Government’s investment in education infrastructure will include innovative, alternate models that are cost effective and support the education needs of all Queenslanders. Infrastructure solutions will continue to be planned and prioritised according to the highest need in consideration of statewide priorities.

The adoption of innovative solutions such as public private partnerships, community partnerships, co-investment and co-location opportunities, will provide opportunities for greater investment to meet demand. Through public private partnerships, nine new schools have been constructed and opened between 2015 and 2017.

In addition, innovative asset management arrangements will deliver priority access to state-owned training assets by TAFE Queensland, to support quality training.

The Queensland Government has 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 construction projects.

As well as delivery of new assets, the Queensland Government is taking a long-term approach to maintenance. More than 500 schools and state-owned training sites have undergone lifecycle assessments. The assessments will support future maintenance planning over the next 10 years, informing future investment decisions. Specialist maintenance needs are also being addressed through such programs as the asbestos removal program and swimming pool maintenance program.

The Queensland Government continues to support the provision of early childhood education and care services, tertiary institutions, training facilities, and agricultural training colleges, with delivery predominantly undertaken by the private and not-for-profit sectors.

Education and training projects, proposals and Future opportunities are illustrated in the infrastructure pipeline in figure 13.

2016–17 DELIVERY HIGHLIGHTS

Cairns Special School, Cairns

Pumicestone State School, Greater Brisbane

Fernbrooke State School, Greater Brisbane

Bellbird Park Secondary College, Greater Brisbane



Fernbrooke State School

Education and training

92
combined
schools



174
early
childhood



\$18 B
total of
education
and training
assets



917
primary
schools



46
special
schools



1239
state schools
in Queensland



184
secondary
schools



Over the next
15 years,
state school
enrollments
will increase by
around

28%



643
training buildings

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

20
years



\$500 M
Building Future
Schools Fund



2016 SIP Part B strategic alignment

In the SIP Part A, the Queensland Government identified strategic directions to address the infrastructure challenges and objectives for each asset class. These strategic directions inform SIP Part B, and allow government to align investments with these strategic directions. The number of 1–4 year program items and Future opportunities from the 2016 SIP which align to each response, are outlined below.

EDUCATION AND TRAINING RESPONSES					
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.
Number of 2016 SIP Part B 1–4 year program items					
–	12	1	–	3	–
Number of 2016 SIP Part B Future opportunities					
3	4	–	1	1	1

Advancing Queensland State Schools program

The Queensland Government is committed to building fit-for-purpose learning environments that support educational outcomes. The Advancing Queensland State Schools program is an additional capital investment of \$200 million which includes land acquisitions for new schools, new and refurbished school halls and accelerated capital projects including administration and special education upgrades. This program will see projects delivered in over 90 schools.

Over \$100 million will be invested in new school halls and upgrading existing halls at 30 state schools. Over 60 additional schools will benefit from a range of capital works including upgrades to existing classrooms, administration facilities, special education facilities and new shade structures or covered learning areas.



Griffin State School

2017 pipeline

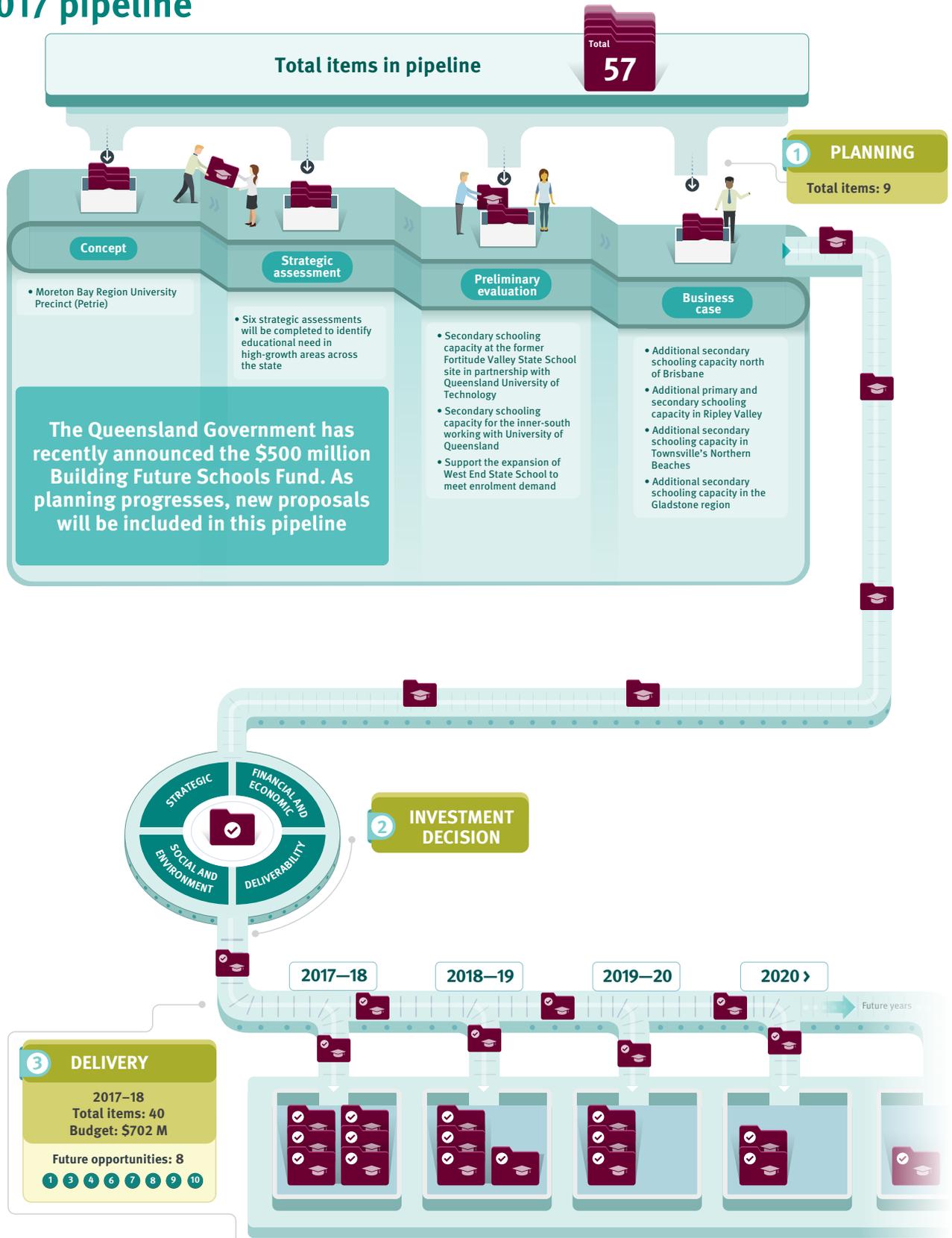


Figure 13: Infrastructure pipeline for Education and training

Note: Items include: Queensland Government-led Proposals raised through consultation, Building Queensland proposals and proposals from Infrastructure Australia's Infrastructure Priority List, and other Queensland Government initiatives.

Note: Items at various planning stages are captured in each phase, however, are only counted once in the total items.

Note: The items identified in each planning stage indicate where the project will progress to in the 2017 calendar year.

1–4 year program

DELIVERY

Project	Total estimated cost (\$M)	Contributions				Expenditure to June 2017 (\$M)	Funding (\$M)			
		Fed	QG	LG	Priv		2017–18	2018–19	Indicative 2019–20 to 2020–21	Beyond
South East Queensland										
Capalaba State College	1.554		●			0.127	1.427			
Redcliffe State High School	6.008		●			1.403	4.605			
Redcliffe Special School	6.012		●			1.465	4.547			
Caboolture Special School	6.994		●			2.697	4.297			
Southport Special School	7.207		●			4.376	2.830			
Kelvin Grove State College	7.235		●			5.827	1.408			
Ipswich West Special School	7.440		●			1.156	6.272	0.012		
Claremont Special School	8.174		●			2.755	5.419			
Currimundi Special School	9.486		●			0.316	6.584	2.586		
West End State School	9.525		●			5.616	3.909			
North Lakes State College	13.950		●			0.513	8.969	4.467		
New primary school Caloundra South	31.953		●			8.818	11.907	2.847	8.381	
New primary school Coomera East	32.742		●			8.862	11.780	3.644	8.457	
New primary school Yarrabilba	36.024		●			6.459	14.044	5.097	10.424	
Regional Queensland										
Cairns engineering laboratories	1.000		●		●	0.520	0.451	0.029		
Tara Shire State College	1.907		●				1.342	0.565		
Eimeo Road State School	6.650		●			0.496	5.867	0.286		
Mackay Northern Beaches State High School	6.696		●				1.116	5.580		
Gympie Special School	7.440		●			1.314	6.126			
Centenary Heights State High School	9.765		●			0.465	0.930	8.370		
Highfields State Secondary College	11.160		●				1.860	9.300		
New primary school Burdell	43.226		●			6.287	21.312	6.505	9.122	

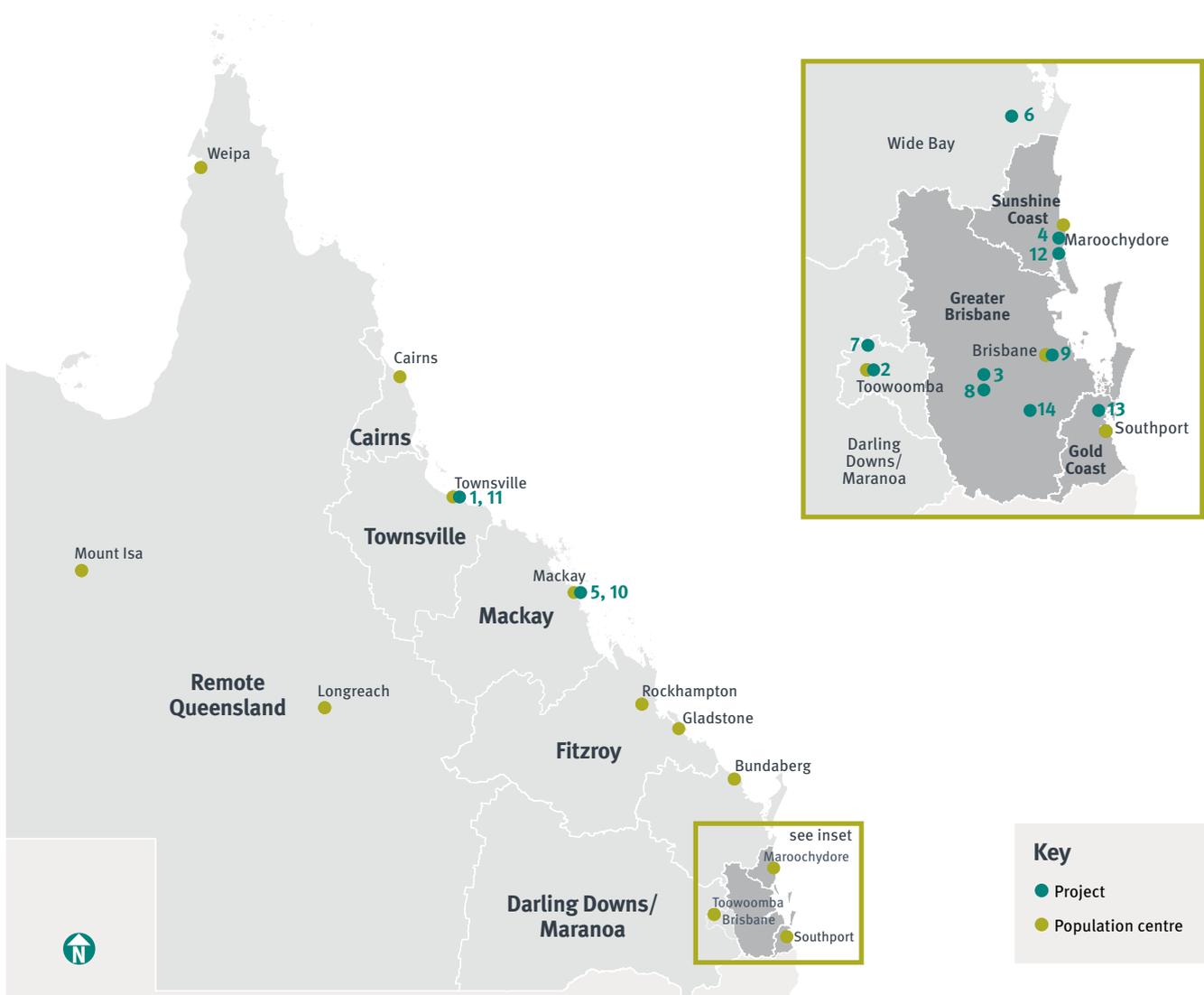
Education and training

Project	Total estimated cost (\$M)	Contributions				Expenditure to June 2017 (\$M)	Funding (\$M)			
		Fed	QG	LG	Priv		2017-18	Indicative		
Statewide										
Australian Institute of Tropical Health and Medicine capital grant	34.320		●		●	32.320	2.000			
Statewide school capital works	Ongoing		●				173.124			
Building Future Schools Fund	500.000		●				28.000	75.000	215.000	182.000
Capital grants non-state schools	Ongoing		●				92.675			
Statewide school general and minor works	Ongoing		●				42.447			
Statewide early childhood education and care general and minor works	Ongoing		●				1.486			
Statewide strategic land acquisitions	Ongoing		●				69.019			
Public private partnerships	Ongoing		●				44.011			
School infrastructure enhancement capital contribution	Ongoing		●				11.000			
School subsidy scheme	Ongoing		●				4.650			
Significant Regional Infrastructure Projects Program	Ongoing		●				19.023			
Training assets – asset replacement program	Ongoing		●				5.500			
Training assets – emergent replacement	Ongoing		●				1.000			
Training assets – property management program	Ongoing		●				1.500			
Training assets – renewal and reinvigoration	Ongoing		●				9.250			
Other property, plant and equipment	Ongoing		●				24.015			
Queensland Agricultural Training Colleges ongoing programs	Ongoing		●				2.342			
Ongoing programs	Ongoing		●				44.028			

Selected 1–4 year program highlights

DELIVERY

#	PROJECT	#	PROJECT
1	Australian Institute of Tropical Health and Medicine capital grant	8	Ipswich West Special School
2	Centenary Heights State High School	9	Kelvin Grove State College
3	Claremont Special School	10	Mackay Northern Beaches State High School
4	Currimundi Special School	11	New primary school Burdell
5	Eimeo Road State School	12	New primary school Caloundra South
6	Gympie Special School	13	New primary school Coomera East
7	Highfields State Secondary College	14	New primary school Yarrabilba



Future opportunities – short-term

Opportunity 1

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

Status update: The Department of Education and Training continues to manage and optimise asset utilisation through effective demand management, increased community use of facilities and leasing and hire of underutilised facilities. For example, demand management through implementation of school Enrolment Management Plans enables schools to meet their in-catchment enrolment demand in high-growth communities, minimising the need to invest in additional built infrastructure.

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.

Status update: The community use of school facilities policy outlines the administration and management requirements for access to state school facilities. The policy provides opportunities for organisations and individuals in the local community to access school buildings and sport and recreation facilities outside school hours for appropriate purposes.

Opportunity 3

Implement asset lifecycle assessment programs for state schools and training sites, providing information to support long-term maintenance planning.

Status update: The asset life cycle assessment program is progressively being implemented to all active state-owned education and training sites. More than 500 schools and 40 training sites are scheduled to complete their assessment by the end of 2017. The assessment provides maintenance planning information over 10 years to support future investment in asset renewal and maintenance. All sites are scheduled to complete their assessment by the end of 2018.

Opportunity 4

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

Status update: Education and training assets play an important part, and are being used to, support the delivery of Queensland Government services. For example, the underutilised Ashmore TAFE campus is currently being used by the Gold Coast 2018 Commonwealth Games Corporation.

Opportunity 5

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

Status update: The Strategic School Infrastructure Plan initiative which commenced in 2015, provides a framework for schools and regional educational planners to use when considering the future infrastructure needs of the school to meet their changing curriculum requirements. Over 520 schools have completed their plan. This important planning process enables schools to identify and prioritise their asset need to support curriculum delivery and future investment decisions for provision of priority education investments.

Building Future Schools Fund

The \$500 million Building Future Schools Fund is a record funding program to build new schools and classrooms in Queensland over the next five years. Through the fund, the Advancing Inner City Schools initiative will see the construction of the first inner-Brisbane high school since 1963. The initiative will include a new secondary school at the former Fortitude Valley State School, a new high school in the inner-south, and expansion of the West End State School.

Future opportunities – medium/long-term

PLANNING

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.

Status update: Investment planning to facilitate the upgrade of education and training assets to ensure they are fit-for-purpose is being supported through the implementation of the School Strategic Infrastructure Plans and asset life cycle assessments. This approach enables education and training providers to identify and prioritise their future asset investment needs to meet changing curriculum directions.

Opportunity 7

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

Status update: Protecting educational facilities of historical significance is being managed through the implementation of a Schools Heritage Strategy, to ensure both protection and appropriate use of these facilities, with over 100 sites of historical significance identified for inclusion in the Queensland Heritage Register.

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.

Status update: Approaches for co-location, shared-use and place-based planning to meet community needs are being investigated through the Strategy for Social Infrastructure. Planning with the Community Hubs and Partnerships program is underway to deliver more integrated planning for educational facilities in collaboration with local and state government agencies.

Opportunity 9

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

Status update: Through the Queensland Schools Public Private Partnership, nine new schools have been constructed and opened between 2015 and 2017 across Queensland. Three new state schools opened in South East Queensland at the start of 2017.

Opportunity 10

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

Status update: The Community Hubs and Partnerships program is facilitating partnership opportunities with non-government education sectors, state government agencies and local governments through the Non-Government Education Sector Partnerships Project. Through this project, models for facilities sharing and construction partnerships are being analysed, with a view to piloting in growth areas.



Gordonvale Early Years Centre

Case study: Bellbird Park State Secondary College

Queensland continues to experience significant growth of state school enrolments. The Queensland Government ensures that all students have access to high-quality educational facilities, and is building new schools and educational facilities where they are most needed. To help achieve this, the Queensland Government is delivering 10 new schools under public private partnerships arrangements.

The Queensland Government's investment through the Queensland Schools Public Private Partnership has seen two schools open in 2015, four schools open in 2016, and three schools open in 2017.

One of these new schools, Bellbird Park State Secondary College (stage 1), opened in Ipswich at the beginning of 2017. Bellbird Park State Secondary College is a Year 7–12 school and will expand a year level at a time until year 12 is implemented in 2022. The school has enrolment capacity for 1900 students and the location of the school will also help relieve existing schools in the Ipswich area.

The decision to build the school is part of the Queensland Government's response to anticipated population growth over the next 10 to 20 years.



Bellbird Park State Secondary College

Digital



Digital hub on the Sunshine Coast

State Infrastructure Plan Part B: Program – 2017 update

Secure, reliable and cost-effective digital infrastructure and services are essential to connect communities, access information and for business to access markets, exchange information, and operate efficiently.

The digital economy – representing all of those activities that rely on digital technology in its various forms – offers 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 adopting 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 Queensland Government’s 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. 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 South East Queensland. Opportunities to provide critical information to officers in the field are also being explored.

In addition, the Queensland Government has developed a Queensland Digital Infrastructure Plan to identify gaps in critical digital infrastructure, so it can work with service providers and the Australian Government to improve digital services and reduce blackspots.

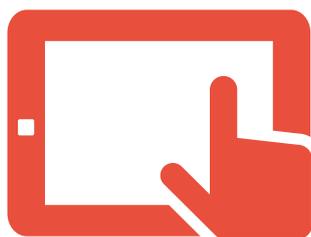
The coordination and leverage of government networks and investments has the potential to reduce costs and increase benefits for the public. In sectors, such as health and education, more reliable and accessible digital infrastructure is helping to improve outcomes and reduce costs. Students can access more digital learning resources and greater collaboration is enabled between schools, teachers and students. Services such as telehealth can be used to deliver more care and treatment within the home, and digital health tools can help patients self-manage their conditions.

Digital projects, proposals and Future opportunities are illustrated in the infrastructure pipeline in figure 14.

2016–17 DELIVERY HIGHLIGHTS
Mobile Blackspot Program: 38 base stations co-funded, Multi-region
Whole-of-government digital identity rolled out to over 270,000 Queenslanders, Statewide

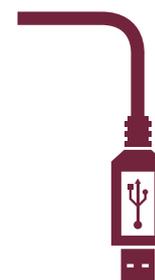


Mobile Blackspot Program improving digital connections in rural areas



Visits to qld.gov.au increased from 24.2 M in 2014–15 to

41.2 M
in 2015–16



Businesses with advanced digital engagement are **8 times** more likely to create jobs and have **20%** higher growth for each step up the digital engagement ladder

Source: Connected Small Business 2016, Deloitte Access Economics



More than **500** Queensland Government services can be accessed via qld.gov.au

Australia's digital economy is worth around **\$79 B** it is forecast to grow to **\$139 B** by 2020

Source: CCIQ Digital Readiness Study 2016, Chamber of Commerce and Industry Queensland (CCIQ)

In April 2017, NBN services were available to almost **974,000** premises in Queensland



The number of households with access to the internet reached **7.7 M (86%)** in 2014–15 up from 83% in 2012–13

By 2020, it is predicted that:



video traffic will be **82%** of all internet traffic



nearly **1 M minutes** of video content will cross the network per second



Wi-Fi and smartphones will be responsible for **60%** of IP traffic



global fixed broadband speeds will nearly double to **47.7 Mbps**, up from 24.7 Mbps in 2015

2016 SIP Part B strategic alignment

In the SIP Part A, the Queensland Government identified strategic directions to address the infrastructure challenges and objectives for each asset class. These strategic directions inform SIP Part B, and allow government to align investments with these strategic directions. The number of 1–4 year program items and Future opportunities from the 2016 SIP which align to each response, are outlined below.

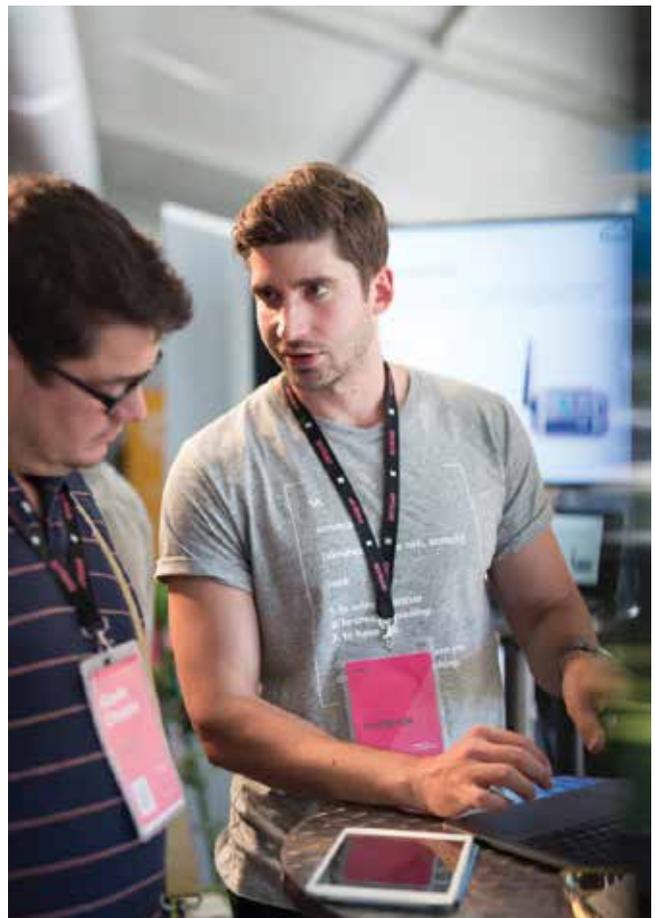
DIGITAL RESPONSES		
Work with providers and the Australian Government to improve digital infrastructure.	Develop infrastructure in regions that promotes digital inclusion.	Use government’s purchasing power to drive digital transformations across all asset classes.
Number of 2016 SIP Part B 1–4 year program items		
1	2	1
Number of 2016 SIP Part B Future opportunities		
4	3	6

Queensland Digital Infrastructure Plan

The Queensland Digital Infrastructure Plan (QDIP) assesses the current capability of Queensland’s digital infrastructure to support digital service delivery for communities, industry and business. The QDIP also identifies opportunities to enhance digital infrastructure to further drive the digital economy, increase productivity, and create jobs and growth.

The QDIP outlines the Queensland Government’s willingness to work across state agencies, with telecommunication providers, other levels of government, industry and the Queensland community – to better coordinate the state’s digital infrastructure and position Queensland to meet its future digital needs.

The QDIP is one of five strategic infrastructure documents outlined as Implementation action one in 2016 SIP Part B.



Myraid Festival 2017 fostering digital innovation

2017 pipeline

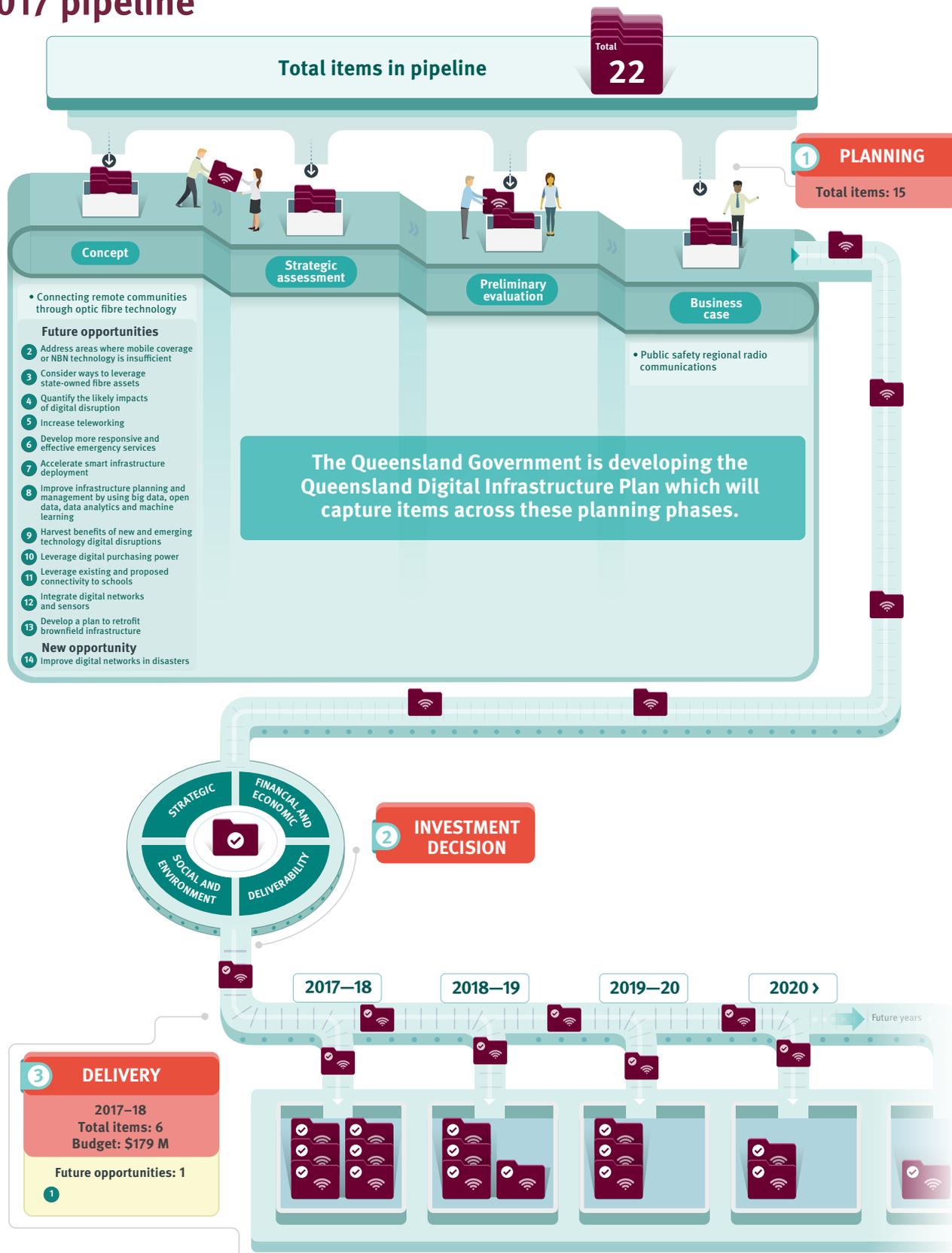


Figure 14: Infrastructure pipeline for Digital

Note: Items include: Queensland Government-led Proposals raised through consultation, Building Queensland proposals and proposals from Infrastructure Australia's Infrastructure Priority List.

Note: Items at various planning stages are captured in each phase, however, are only counted once in the total items.

1–4 year program

DELIVERY

Project	Total estimated cost (\$M)	Contributions				Expenditure to June 2017 (\$M)	Funding (\$M)			
		Fed	QG	LG	Priv		2017–18	Indicative		
								2018–19	2019–20 to 2020–21	Beyond
South East Queensland										
Office of State Revenue Transformation Program	17.739		●			11.699	5.479	0.561		
Council of the Queensland Institute of Medical Research	Ongoing		●			11.963				
Statewide										
Our Child – Missing child interagency ICT system	2.620		●			0.786	1.834			
Strategic Election Management Systems Replacement project	6.306		●			6.306				
Health information communications, technology and equipment	354.502		●			135.402	72.650	146.450		
Regional eHealth Project	34.950	●			5.250	12.765	15.935	1.000		

Case study: Screen Queensland app

The new Screen Queensland Location, Crew and Facilities app is an excellent example of how an app can provide global reach.

The app allows local governments and individuals to promote unique landscapes they have to offer for filmmakers, by uploading their own amateur photos with a basic description. It also allows local governments to promote their ability to support the filmmaker supply chain by highlighting their local capabilities.

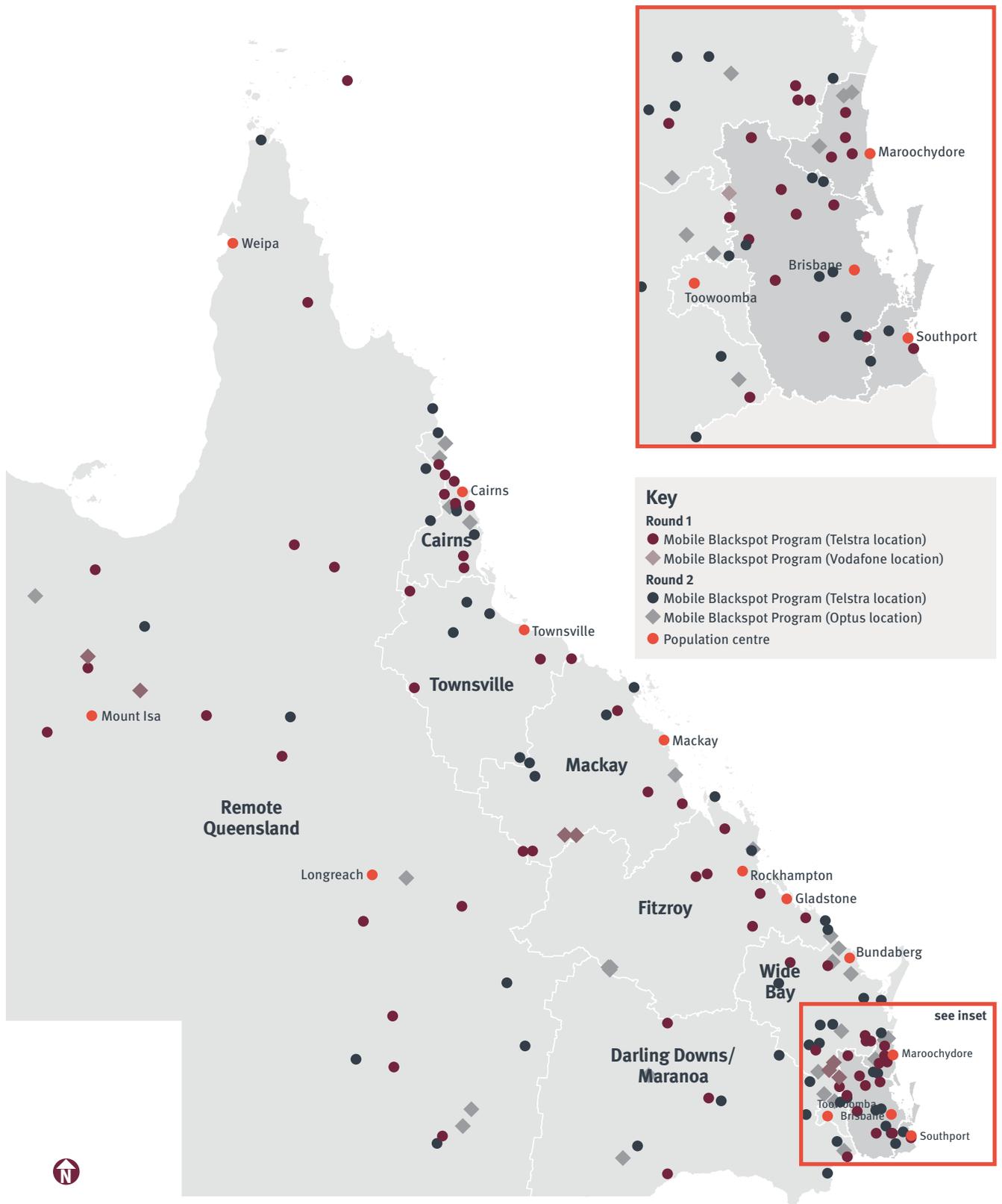
Active promotion by Screen Queensland provides a global reach to international filmmakers. The unique landscapes of regional Queensland can be very attractive to film-makers and the benefit to the local economy is significant. This app is enabled by widely available mobile broadband data services with high download and upload speeds.



Screen Queensland app

Mobile Blackspot Program selected locations

DELIVERY



Note: Funding for the Mobile Blackspot Program continues to be allocated by the Queensland Government, co-funded with the Australian Government, but does not appear in the SIP 1–4 year program or Budget Paper 3

Future opportunities – short-term

PLANNING

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).

Status update: The Queensland Government is actively engaged with the NBN Co to optimise the coverage and roll out of the 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.

Status update: The Queensland Government is actively engaged with the NBN Co and the Australian Government to improve mobile and NBN coverage.

Opportunity 3

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

Status update: This opportunity is addressed in the Queensland Digital Infrastructure Plan.

Opportunity 4

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

Status update: This opportunity is addressed in the Queensland Digital Infrastructure Plan.

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.

Status update: An approach is being defined to progress this opportunity.

Opportunity 6

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

Status update: This opportunity is addressed in the Queensland Digital Infrastructure Plan.

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.

Status update: This opportunity is addressed in the Queensland Digital Infrastructure Plan.

Opportunity 8

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

Status update: This opportunity is addressed in the Queensland Digital Infrastructure Plan.

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).

Status update: This opportunity is addressed in the Queensland Digital Infrastructure Plan.

Opportunity 10

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

Status update: This opportunity is addressed in the Queensland Digital Infrastructure Plan.

Opportunity 11

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

Status update: The opportunity is being investigated to determine community demand for leveraging Queensland school connectivity.

Opportunity 12

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

Status update: This opportunity is addressed in the Queensland Digital Infrastructure Plan.

Opportunity 13

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

Status update: This opportunity is addressed in the Queensland Digital Infrastructure Plan.

New 2017 Future opportunity

Opportunity 14

Improve the reliability, availability, and maintainability of Queensland's digital networks in the face of disasters and other extreme events.

Status update: An approach is being defined to progress this opportunity.

Case study: Digital Scorecard

The Queensland Government's Digital Scorecard is helping businesses identify ways to improve their digital capability and be more competitive in a global digital economy.

The Digital Scorecard is an online assessment and benchmarking tool to help businesses improve their digital capability and be more competitive in a global digital economy. It can support business to adopt technology to enhance their productivity and profitability, with the potential of transforming them into nationally and globally competitive enterprises.

Businesses that complete their Digital Scorecard will be invited to Digital Business Workshops to focus on areas where they can improve their level of digital capability and develop a digital action plan.

The Digital Scorecard was developed by the Department of Science, Information Technology and Innovation in collaboration with Regional Development Australia Sunshine Coast.

Businesses can access the Digital Scorecard on the Business Queensland website at business.qld.gov.au/digitalscorecard



Building digital business capability

Justice and public safety





Justice and public safety

The safety and wellbeing of Queenslanders is a key priority for the Queensland Government. This is achieved with the provision of quality police, emergency response and disaster management services.

Infrastructure assets that support the delivery of Queensland’s justice and public safety include police and emergency service stations, courts, prisons, youth detention centres, training facilities and extensive information and communication technology (ICT) networks. Through these networks, the Queensland Government provides effective, fair and timely justice services, safe, humane and secure custodial detention and correctional facilities.

A growing and ageing population, an increase in the frequency and severity of natural disasters and growing community expectation of government services influence demand for public safety services and facilities. Similarly, crime and anti-social behaviour continue to generate a greater need for these services.

An increasing rate of social issues creates further demand on the system. It is vital that these challenges are tackled through prevention strategies. These challenges include mental health issues, domestic and family violence, substance abuse issues, as well as the threat of terrorism and cyber-crime. Safety investment is targeted to locations and initiatives that will enable improved response times.

Continuing significant growth in prisoner numbers is also driving demand for infrastructure with all secure correctional centres in Queensland operating at over 100 per cent capacity. This increased demand is coupled with changing prisoner demographics including an ageing prisoner profile, significant growth in female and male prisoners and detainees with mental illness or complex needs that may require special purpose infrastructure.

Further, the changing profile of young people in youth detention facilities also highlights the need to provide appropriate infrastructure to keep the community safe while also providing programs and services to address complex needs. A renewed focus on crime prevention such as the comprehensive overhaul of the state’s parole system and investment in early intervention strategies may help slow growth in demand on judicial services and facilities over the longer-term. A renewed focus on crime prevention such as the comprehensive overhaul of the state’s parole system can help reduce demand on judicial services and facilities over time.

Investment in digital technology presents opportunities to efficiently manage the justice and public safety system through initiatives such as the implementation of the geographic information system (GIS) to enhance electronic monitoring capabilities and electronic communication such as videoconferencing. These initiatives can present cost and time efficiencies and the opportunity to optimise existing infrastructure before building new facilities. High-quality and robust communication networks are also critical in establishing resilient communities that can respond to, and recover from, extreme weather events. These communication networks also support public safety agencies to deliver high-quality and effective response to the community through initiatives such as the Government Wireless Network.

Justice and public safety projects, proposals and Future opportunities are illustrated in the infrastructure pipeline in figure 15.

2016–17 DELIVERY HIGHLIGHTS

Cunnamulla Fire Station, Remote Queensland

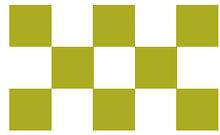
Kingaroy replacement station and watch-house, Wide Bay



Browns Plains Police Station

Queensland's justice and public safety assets

60
police
watch-houses



**Queensland
Police Service**

43
police beat
shopfronts



**Queensland Fire and
Emergency Services**

335
police
stations

2
police
hubs

49
neighbourhood
police beats

242
stations

465
rural
stations



Courthouses

87
courthouses

4
community
justice centres



Youth detention

2
centres



Correctional services

11
high security
correctional
centres

6
low security
correctional
centres

13
work
camps

Between June 2015
and June 2017, Queensland
experienced a

**17%
increase**

in prisoner numbers
(7292 to 8504 prisoners)



In 2016–17,
high security centres
were operating at:



121%
built cell capacity
for male
prisoners

132%
built cell capacity
for female
prisoners



Between June 2015
and June 2017,
Queensland experienced

**1%
reduction**

in average daily prisoner
population for women
(713 to 704 prisoners)





2016 SIP Part B strategic alignment

In the SIP Part A, the Queensland Government identified strategic directions to address the infrastructure challenges and objectives for each asset class. These strategic directions inform SIP Part B, and allow government to align investments with these strategic directions. The number of 1–4 year program items and Future opportunities from the 2016 SIP which align to each response, are outlined below.

JUSTICE AND PUBLIC SAFETY RESPONSES			
Innovatively manage the need for new infrastructure using demand management strategies.	Increase the use of technology to integrate services.	Rationalise underutilised facilities and those that are no longer fit-for-purpose.	Enhance community safety through digital capabilities.
Number of 2016 SIP Part B 1–4 year program items			
20	–	15	1
Number of 2016 SIP Part B Future opportunities			
4	2	4	1

Case study: Audio visual technology improves court processes

Investments in audio visual technology to improve court processes continue to enable more efficient delivery of justice services. Audio visual technologies encompass a range of capabilities, including videoconferencing and telephone conferencing, electronic evidence presentation, pre-recording evidence, hearing assistance, sound amplification and recording of audio from court hearings.

Some courtrooms also have the ability to conduct fully paperless trials, making large and complex hearings up to 20 per cent shorter. Using videoconferencing can reduce the risk to the community and save costs of prisoner transfers.

The Integrated Criminal Justice videoconferencing program focuses on improving end-to-end processes and removing any barriers to increase the number of in-custody defendants appearing at court hearings without leaving prison. The number of matters completed by videoconference for in-custody adult defendants has risen to 70 per cent during 2016–17.

Over time, investment in videoconferencing and other technologies is expected to reduce exclusive reliance on built infrastructure and transport activities, and to meet future demand.

Case study: Counter-Terrorism and Community Safety Centre

Queensland’s frontline police officers are expected to have the skills and capabilities to enable them to operate effectively as first responders in a complex and ever-changing environment. Increasingly, situations that previously would have been resolved by specialist teams are now being handled by frontline first response police officers.

In order to meet this challenge the Queensland Government has committed to the construction of a contemporary Counter-Terrorism and Community Safety Centre at the Westgate Police Academy. This facility will be a purpose built training centre and will include an indoor firearms range, a simunition training area, scenario village, and office accommodation.

The facility will bring Queensland in line with other Australian policing jurisdictions, many of which have dedicated firearms and use of force training facilities. Westgate will also incorporate the Police Driving Skills Centre, enabling training for contemporary and emerging issues including weaponised vehicle attacks.

Westgate will provide an integrated and co-located facility which will support flexible and innovative skills development.

2017 pipeline

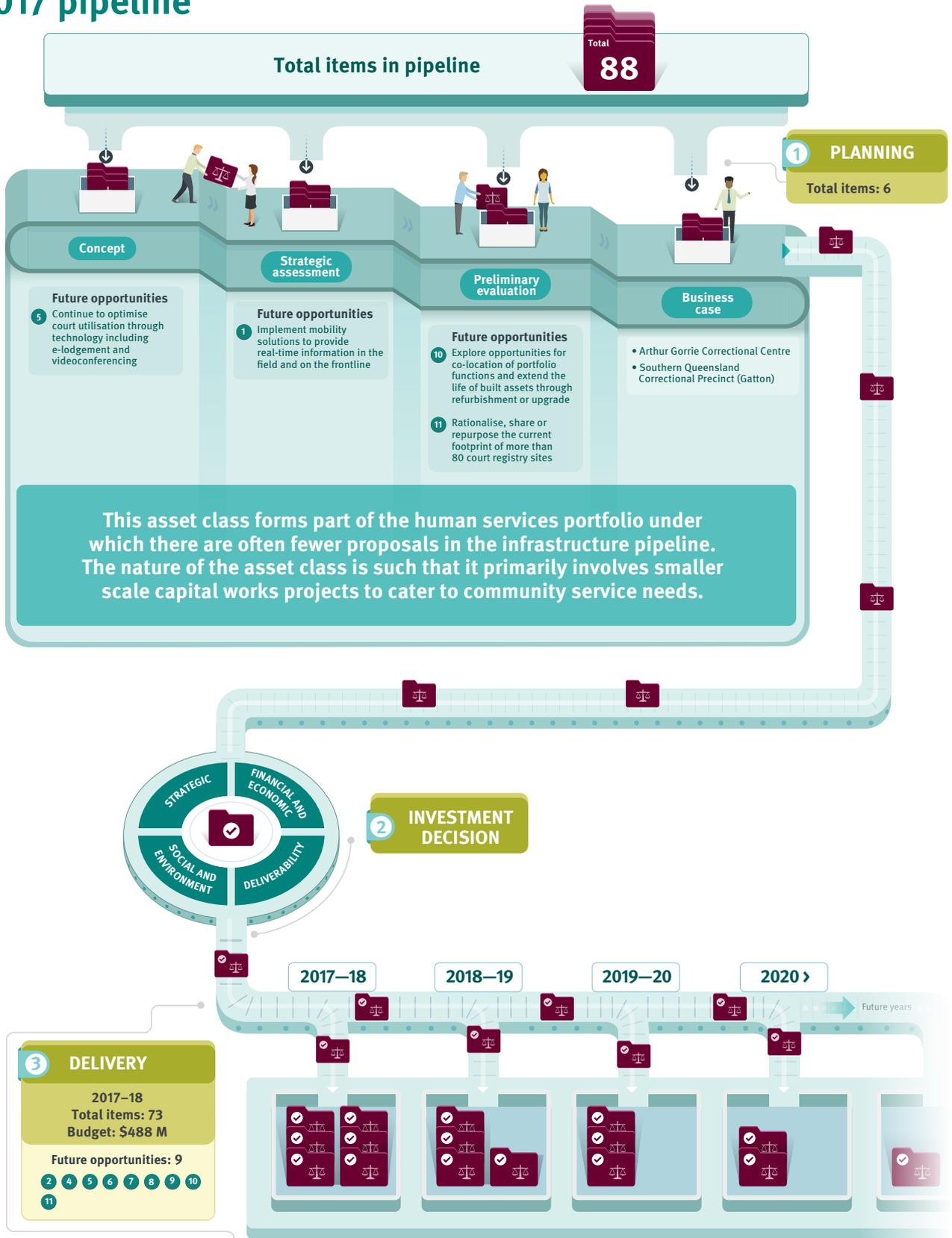


Figure 15: Infrastructure pipeline for Justice and public safety

Note: Items include: Queensland Government-led Proposals raised through consultation, Building Queensland proposals and proposals from Infrastructure Australia's Infrastructure Priority List.

Note: Items at various planning stages are captured in each phase, however, are only counted once in the total items.



1–4 year program

DELIVERY

Project	Total estimated cost (\$M)	Contributions				Expenditure to June 2017 (\$M)	Funding (\$M)			
		Fed	QG	LG	Priv		2017–18	2018–19	2019–20 to 2020–21	Beyond
South East Queensland										
Corrective Services and Youth Justice										
Woodford Correctional Centre	8.011		●			2.377	5.634			
Brisbane Women's Correctional Centre	22.000		●			0.500	13.500	8.000		
Brisbane Youth Detention Centre – Security Management System Upgrade	23.411		●			2.925	15.819	4.667		
Borallon Training and Correctional Centre	126.900		●			84.828	42.072			
Youth justice facilities	Ongoing		●				11.305			
Courthouses										
Beenleigh Courthouse upgrade	11.000		●				5.500	5.500		
Fire and Emergency Services										
Mount Ommaney Station upgrade	0.800		●				0.050	0.750		
Rathdowney replacement auxiliary station	1.800		●				0.800	1.000		
Bundamba Station replacement	3.640		●			1.190	2.450			
Police										
Kilcoy Station replacement	1.965		●			0.115	0.100	1.750		
Coolum Station replacement	2.700		●				0.100	2.600		
Beaudesert Station replacement	8.390		●			0.290	0.100	3.000	2.500	
Old Caboolture Station and Watch-house refurbishment	6.533		●			0.033	0.300	0.500	5.700	
Nambour Station replacement	9.040		●			0.040	0.300	5.000	3.700	
Wacol heritage building refurbishment	11.200		●				0.600	2.800	5.600	2.200
New Caboolture Station and District Headquarters	16.358		●			0.700	5.500	10.000	0.079	
Westgate Counter-Terrorism and Community Safety Training Centre	46.700		●				3.500	24.200	19.000	
Police Headquarters renewal project	Ongoing		●				3.500			

Justice and public safety

Project	Total estimated cost (\$M)	Contributions				Expenditure to June 2017 (\$M)	Funding (\$M)			
		Fed	QG	LG	Priv		2017-18	2018-19	2019-20 to 2020-21	Beyond
Regional Queensland										
Corrective Services and Youth Justice										
Capricornia Correctional Centre Expansion	200.000		●				7.500	21.000	157.000	14.500
Courthouses										
Townsville Courthouse upgrade	9.000		●				4.500	4.500		
Kingaroy Courthouse upgrade	5.260		●			0.952	4.308			
Rockhampton Courthouse upgrade	12.000		●			0.165	5.835	6.000		
Fire and Emergency Services										
Toowoomba State Air Operations hangar fit-out	0.500		●				0.500			
Charlton regional headquarters upgrade	0.750		●			0.120	0.630			
North Rockhampton specialist response and training facility upgrade	1.000		●				1.000			
Mount Isa Station upgrade	1.000		●			0.211	0.789			
Oakey Auxiliary Station replacement	1.330		●			0.451	0.879			
Goombungee Auxiliary Station replacement	1.600		●			0.050	1.550			
Kilkivan Auxiliary Station replacement	1.800		●				0.900	0.900		
Tara Auxiliary Station replacement	1.801		●			0.051	0.150	1.600		
Richmond Auxiliary Station replacement	2.201		●			0.051	2.150			
Herberton Auxiliary Station replacement	2.706		●			0.482	2.224			
Horn Island combined rural fire station and SES upgrade	2.800		●				2.800			
Smithfield Station replacement	2.826		●			1.265	1.561			
Charleville Station replacement	3.012		●			0.477	2.535			
Gordonvale Auxiliary Station replacement	3.064		●			1.514	1.550			
Proserpine Auxiliary Station replacement	3.205		●			0.894	2.311			
Mount Isa area office replacement	3.500		●				1.000	2.500		
Rockhampton Station upgrade and communications centre	3.786		●			0.862	2.924			



1–4 year program

DELIVERY

Project	Total estimated cost (\$M)	Contributions				Expenditure to June 2017 (\$M)	Funding (\$M)			
		Fed	QG	LG	Priv		2017–18	2018–19	Indicative	
Regional Queensland										
Fire and Emergency Services										
Childers Auxiliary Station replacement	3.960		●			0.466	3.494			
Mount Isa rural fire and SES facility upgrade	4.000		●				0.100	3.900		
Howard Rural Fire Station and SES facility – co-located with QPS	4.892		●			0.912	3.980			
Roma Station and SES facility replacement	5.240		●			4.540	0.700			
Bundaberg Station replacement	7.046		●			5.772	1.274			
Mackay Station replacement	7.527		●			1.093	6.434			
Police										
Mount Morgan Station replacement	2.100		●				0.100	2.000		
Aurukun residential accommodation	2.750		●				2.750			
New Highfields Station	2.770		●			0.070	0.100	2.600		
Howard Station replacement – co-located with QFES	3.896		●			0.722	3.174			
Gordonvale Station replacement	4.127		●			0.338	3.789			
Cairns special emergency response team and road policing new facility	6.000		●			0.404	5.596			
Atherton Station upgrade	6.190		●			0.040	0.150	3.000	3.000	
Aurukun Station and Watch-house upgrade	6.700		●				0.200	1.500	5.000	
Bowen Station and Watch-house replacement	8.000		●			1.050	6.950			
Porpuraaw Station and Watch-house replacement	8.200		●				0.300	5.000	2.900	

Justice and public safety

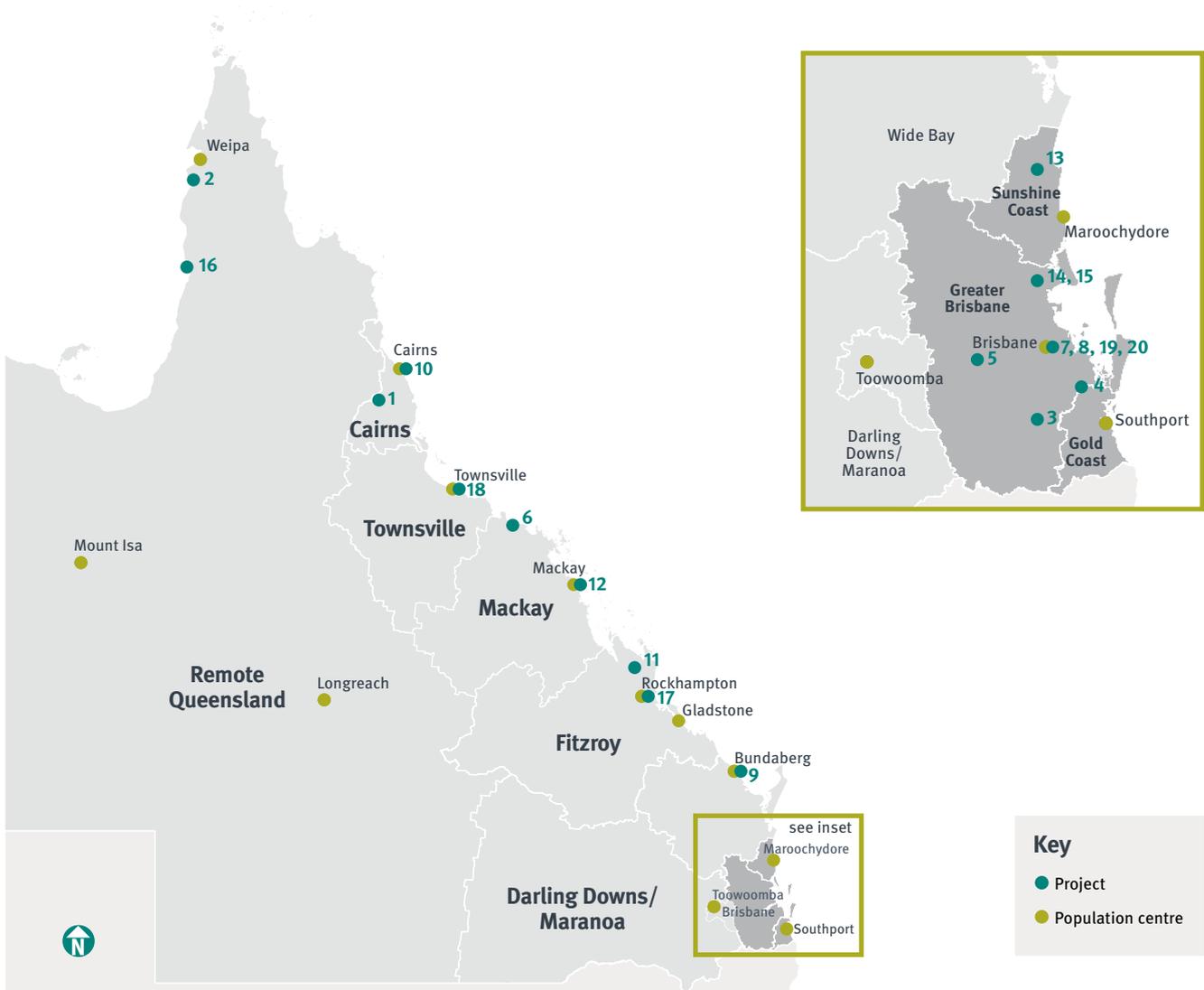
Project	Total estimated cost (\$M)	Contributions				Expenditure to June 2017 (\$M)	Funding (\$M)			
		Fed	QG	LG	Priv		2017-18	2018-19	2019-20 to 20-21	Beyond
Statewide										
Statewide Crime and Corruption Commission infrastructure upgrades	13.692		●				8.465	1.861	3.366	
Statewide Legal Aid Queensland infrastructure upgrades	Ongoing		●				1.327			
Statewide Public Trustee infrastructure upgrades	Ongoing		●				13.481			
Corrective Services and Youth Justice										
Prison infrastructure	14.923		●			9.796	5.127			
Transition of 17 year olds to the youth justice system	16.886		●				16.886			
Perimeter security upgrades – stage 2	76.579		●			17.049	26.801	23.929	8.800	
Probation and parole office accommodation	Ongoing		●				2.394			
Ongoing programs	Ongoing		●				21.872			
Courthouses										
Statewide Courthouse infrastructure upgrades	Ongoing		●				14.880			
Fire and Emergency Services										
Statewide minor works	Ongoing		●				4.280			
Other property, plant and equipment	Ongoing		●				56.298			
Statewide strategic land acquisitions	Ongoing		●				5.709			
Ongoing programs	Ongoing		●				4.000			
Police										
Improving counter-terrorism capability and capacity	0.788		●			0.186	0.602			
Statewide minor works	Ongoing		●				16.270			
Statewide residential accommodation upgrades	Ongoing		●				1.000			
Statewide strategic land acquisitions	Ongoing		●				3.000			
Ongoing programs	Ongoing		●				87.431			



Selected 1–4 year program highlights

DELIVERY

#	PROJECT	#	PROJECT
1	Atherton Station upgrade (QPS)	11	Capricornia Correctional Centre Expansion
2	Aurukun Station and Watch-house upgrade	12	Mackay Station replacement (QFES)
3	Beaudesert Station replacement (QPS)	13	Nambour Station replacement (QPS)
4	Beenleigh Courthouse upgrade	14	New Caboolture Station and District Headquarters (QPS)
5	Borallon Training and Correctional Centre	15	Old Caboolture Station and Watch-house refurbishment (QPS)
6	Bowen Station and Watch-house replacement	16	Pormpuraaw Station and Watch-house replacement
7	Brisbane Women's Correctional Centre	17	Rockhampton Courthouse upgrade
8	Brisbane Youth Detention Centre – Security management system upgrade	18	Townsville Courthouse upgrade
9	Bundaberg Station replacement (QFES)	19	Wacol heritage building refurbishment
10	Cairns special emergency response team and road policing new facility	20	Westgate Counter-Terrorism and Community Safety Training Centre



Future opportunities – short-term

PLANNING

Opportunity 1

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

Status update: Queensland Corrective Services continues to explore technology solutions to increase staff mobility and allow real-time information to be accessed. This includes an increased use of videoconferencing and expanded use of global positioning systems (GPS) technology to monitor parolees.

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.

Status update: Queensland Corrective Services has implemented a geographic information system (GIS) which automates and interprets data points generated by a GPS. The GIS is able to analyse, in real-time, associations between offenders and automatically generate reports to assist with case management.

Opportunity 3

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

Status update: An options study was completed in 2017 for a bespoke building to house the Queensland Civil and Administrative Tribunal and other business units. The study identified the project would require approximately \$221 million in funding, therefore it is deemed unviable to proceed. This facility is currently being used for overflow office accommodation for Youth Justice Services and other business units/project teams.

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.

Status update: In 2017, an additional four courthouses were converted to Queensland Government Agent Program services outlets. This improves community access to a range of Queensland Government services at one location in rural, regional and remote communities. The Department of Justice and Attorney-General and the Department of Transport and Main Roads have collaborated to improve access to transport services in 31 communities. A range of minor works are being progressed by the Department of Transport and Main Roads to facilitate the provision of licensing services, including improvements to customer service counters.

Opportunity 5

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

Status update: The videoconferencing systems in 13 courtrooms were updated in 2016–17. E-lodgement capability has progressed and continues to present a significant opportunity to optimise court utilisation by enabling electronic court files.

Opportunity 6

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

Status update: In response to the Queensland Parole System Review, Queensland Corrective Services is expanding the use of GPS monitoring for offenders on parole. This approach will be adopted where it is safe to do so.

Opportunity 7

Identify and implement a strategy to manage peak prisoner numbers.

Status update: Queensland Corrective Services is continuing to provide advice on the strategies required to manage the growing prisoner population.



Future opportunities – medium/long-term

PLANNING

Opportunity 8

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

Status update: Queensland Corrective Services is implementing a prisoner support kiosk system that will improve the delivery of a range of prisoner related services in all correctional centres and create operational efficiencies.

The automatic exchange of domestic violence information between the Queensland Courts Service and the Queensland Police Service has reduced data entry, improved data quality and created efficiencies.

A pilot in Mackay commenced in June 2016 to provide SMS reminders to adult offenders before their court appearance. The pilot has had a positive impact on court attendance and reduced the number of Fail to Appear warrants being issued.

The Transition to Success program is providing opportunities for young people to engage with education, training and skills through a number of partnerships. This will address youth offending and place downward pressure on detention centre demand levels.

Opportunity 9

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

Status update: In response to the Queensland Parole System Review, Queensland Corrective Services will be establishing Parole and Assessment Units and increasing the use of videoconferencing during the parole application process to support integrated service delivery.

Opportunity 10

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

Status update: The Department of Justice and Attorney General is currently exploring opportunities to co-locate the Drug Court team which will include representatives from Justice Services, Queensland Corrective Services, Queensland Police Service and Queensland Health, to ensure the efficient use of built assets.

Opportunity 11

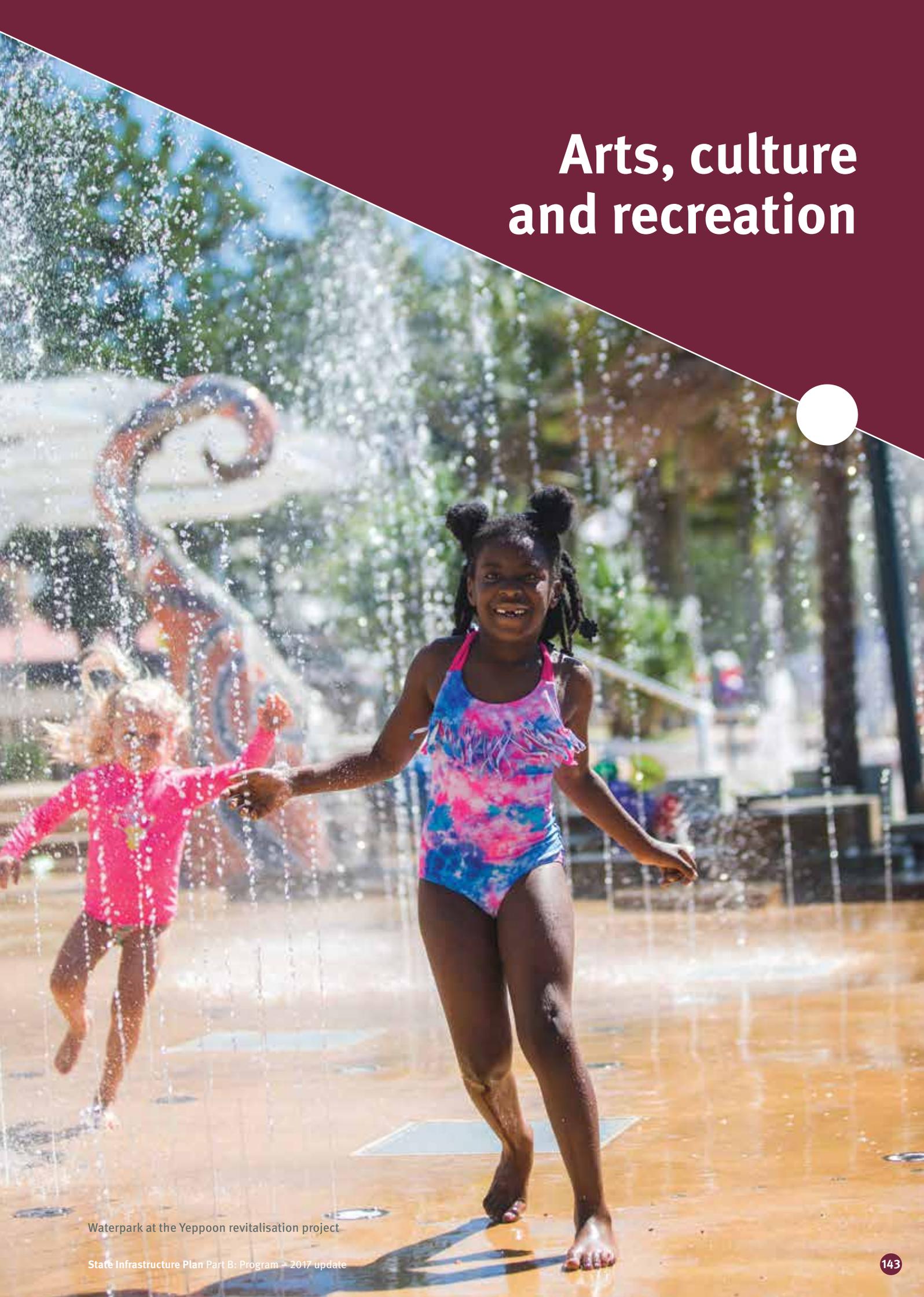
Rationalise, share or repurpose the current footprint of more than 80 court registry sites.

Status update: A Regional Service Outlets Pilot Project was implemented as a way to deliver government services that are co-located. Continued work on this opportunity is focused on community service delivery needs on a site-by-site basis. Justice Services continue to review and rationalise court registry sites through the completion of the Courts Audit and the Regional Service Outlets and Queensland Government Agent Program projects.

Capricornia Correctional Centre infrastructure expansion

The Queensland Government has committed \$200 million over four years for the Capricornia Correctional Centre expansion. The project is scheduled to commence in late 2017 and be completed in mid-2021. The procurement of local contractors for the project will be a high-priority, as will the employment of apprentices and trainees through the Queensland Government Building and Construction Training Policy.

Arts, culture and recreation



Waterpark at the Yeppoon revitalisation project

State Infrastructure Plan Part B: Program - 2017 update



Arts, culture and recreation

Access to quality arts, cultural and recreational experiences create vibrant and liveable communities for Queenslanders. A rich arts and cultural sector, and sport and recreational opportunities improve health, social connections and civic pride in communities. The arts and culture precincts and facilities, coupled with Queensland’s national parks and World Heritage areas, play a significant role in advancing Queensland communities.

Improving and expanding arts, cultural and recreational opportunities will support the state’s competitiveness in attracting visitors and appealing to, and retaining, a highly-skilled and innovative workforce. The Queensland Government will continue to support the delivery of arts and cultural infrastructure, particularly in regional areas, including through partnerships with other levels of government.

Investment in arts, cultural and recreational infrastructure supports education, lifestyle and community cohesion outcomes. Infrastructure investment also presents employment opportunities, revitalises urban centres and drives cultural tourism. For example, Brisbane’s Cultural Precinct, which was recently heritage listed, is a major arts and cultural hub for the state and contributes millions of cultural tourism dollars into the local economy each year. Ongoing maintenance, upgrade and expansion investment is essential.

The Queensland Government recently announced the \$17.5 million Arts Infrastructure Investment Fund to support priority projects to revitalise existing state-owned assets over the next four years.

Well planned sport and recreation infrastructure not only provides essential venues for sport but can also play a role in arts and cultural opportunities, such as hosting concerts by global artists. These facilities also support the highest standards of achievement by elite athletes and provide places for community.

Queensland’s parks and forests are major contributors to Queensland’s recreational opportunities and support the ecotourism industry. These areas host more than 58 million visits each year,¹ support 650 commercial tour operators and 15,000 direct tourism industry jobs.² Direct spending by tourists visiting national parks is approximately \$4.43 billion (\$749 million per annum in national park-generated spending),² or approximately 28 per cent of the total annual tourism expenditure in the state.² The infrastructure and visitor facilities that support world-class experiences must be high quality. These assets require active management to keep pace with technology advancements and remain resilient to severe weather and the impacts of climate change.

1 QPWS Community Survey – Newspoll Interim Report 2012

2 Based on average of Sustainable Tourism Cooperative Research Centre estimates for National Park Generated Value for Queensland

Currently, there is \$13 billion of tourism infrastructure investment planned across more than 30 significant projects for delivery by 2022. These investments benefit the state’s economy through job creation and making Queensland a more attractive destination for tourists. Projects such as the Queen’s Wharf development, Cairns Aquarium and Brisbane International Cruise Terminal will reshape the state’s tourism industry and also provide recreation facilities for Queenslanders.

The Queensland Government has recently delivered a \$320 million venue infrastructure program for the Gold Coast 2018 Commonwealth Games. This includes three world-class competition venues and major upgrades to seven venues. This investment will provide a leading edge in attracting future world-class sporting events and providing a legacy for Queenslanders through access to excellent sporting and community facilities and has been delivered well ahead of the Gold Coast 2018 Commonwealth Games.

Arts, culture and recreation projects, proposals and Future opportunities are illustrated in the infrastructure pipeline in figure 16.

2016–17 DELIVERY HIGHLIGHTS

Anna Meares Velodrome, Greater Brisbane

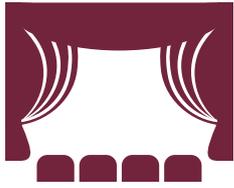
Rockhampton and Yeppoon revitalisation, Fitzroy

Bundaberg multiplex centre, Wide Bay



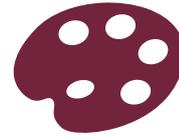
Tank construction at Cairns Aquarium

Arts, culture and recreation



6.5 M

visits to the Cultural Precinct South Bank in 2016–17



14

Indigenous Arts Centres supported through the Backing Indigenous Arts initiative



\$15 M
for the Cairns Performing Arts Centre



Queensland Museum loaned **72,979** objects to education centres in Queensland, accessed or used by **793,241** people in 2016–17

Queensland Parks and Wildlife Service manages:



2072 km

of walking trails



543

bookable camping areas



208

day use sites



48,040 km

of roads



1040

parks and forests across 12.89 million hectares



72,000 km²

of state marine parks



2016 SIP Part B strategic alignment

In the SIP Part A, the Queensland Government identified strategic directions to address the infrastructure challenges and objectives for each asset class. These strategic directions inform SIP Part B, and allow government to align investments with these strategic directions. The number of 1–4 year program items and Future opportunities from the 2016 SIP which align to each response, are outlined below.

ARTS, CULTURE AND RECREATION RESPONSES				
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.
Number of 2016 SIP Part B 1–4 year program items				
2	10	1	1	19
Number of 2016 SIP Part B Future opportunities				
1	1	1	–	2



Cultural performance (image courtesy Tourism and Events Queensland)

Arts, culture and recreation

2017 pipeline

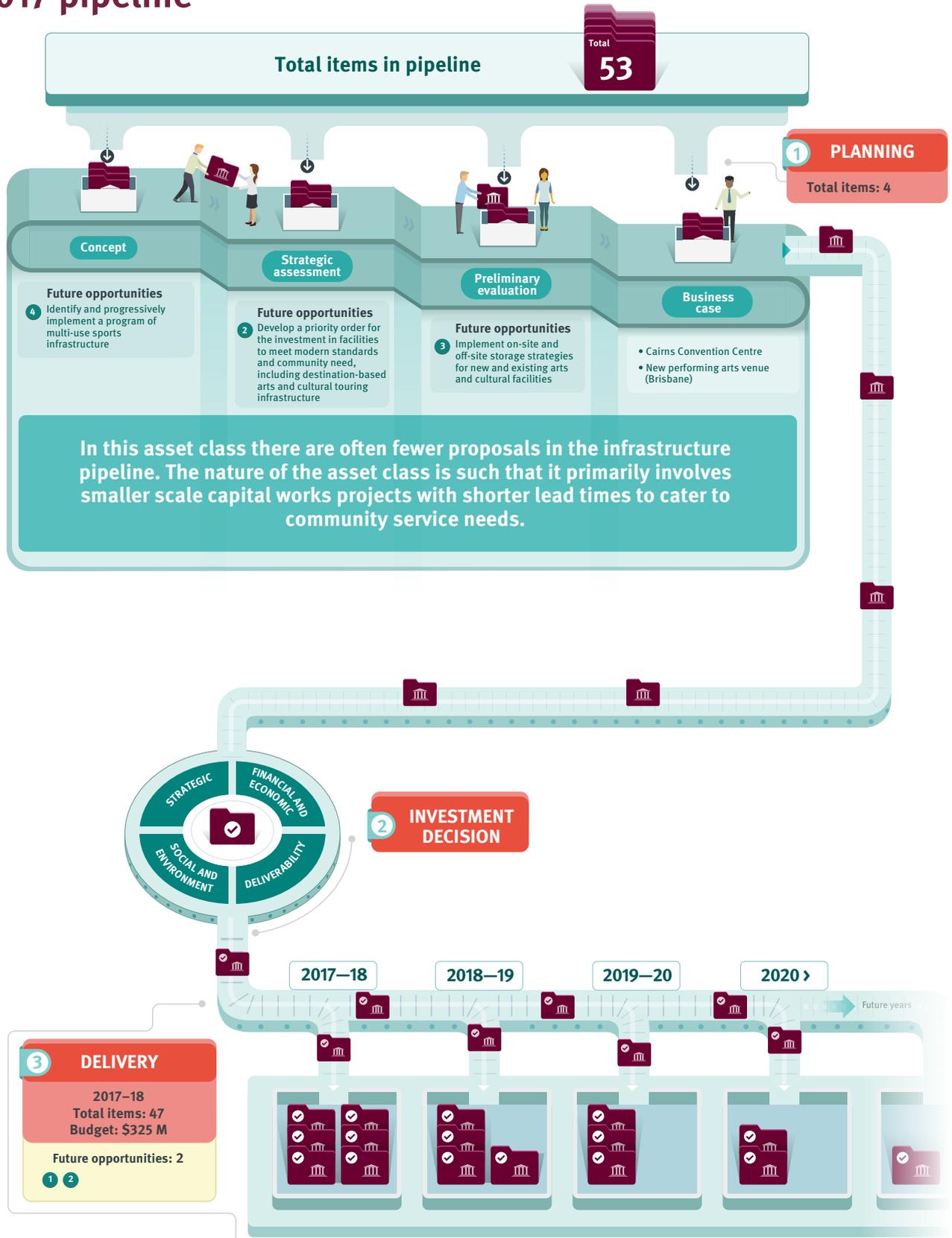


Figure 16: Infrastructure pipeline for Arts, culture and recreation

Note: Items include: Queensland Government-led Proposals raised through consultation, Building Queensland proposals and proposals from Infrastructure Australia's Infrastructure Priority List.

Note: Items at various planning stages are captured in each phase, however, are only counted once in the total items.



1–4 year program

DELIVERY

Project	Total estimated cost (\$M)	Contributions				Expenditure to June 2017 (\$M)	Funding (\$M)			
		Fed	QG	LG	Priv		2017–18	Indicative		
South East Queensland										
National Parks – North Stradbroke Island upgrades	Ongoing		●				1.299			
Queensland Art Gallery – other property, plant and equipment	1.450		●			1.200	0.250			
Cremorne Theatre Upgrade	2.250		●			0.845	1.405			
Daisy Hill Koala Bushland Precinct	3.300		●			0.500	2.800			
Anzac Legacy – Anzac Gallery at Queensland Museum South Bank	6.473		●			0.601	5.872			
Queensland Museum – Sciencentre Transformation	9.360		●			5.000	4.360			
Cultural Precinct Critical Infrastructure	22.856		●			14.201	5.995	2.660		
Cultural Precinct grants	30.260		●			19.100	10.560	0.600		
Queensland State Netball Centre	44.000	●	●			2.255	29.000	12.745		
Queensland Performing Arts Trust – ongoing programs	Ongoing		●				1.000			
Queensland Art Gallery – ongoing programs	Ongoing		●				3.947			
Roma Street Parklands	Ongoing		●				1.488			
South Bank Corporation – ongoing programs	Ongoing		●				15.860			
South Bank Corporation – various projects	5.320		●				5.320			
Commonwealth Games										
Nerang Mountain Bike Trails	3.041	●	●			2.451	0.590			
Carrara Stadium	5.579	●	●			5.175	0.404			
Village Roadshow Sound stage 9	11.000		●			9.750	1.250			
Gold Coast Hockey Centre	16.473	●	●	●		15.309	1.164			
Belmont Shooting Complex	16.965	●	●			15.238	1.727			
Coomera Indoor Sports Centre	40.164	●	●	●		38.644	1.520			
Gold Coast Aquatic Centre	41.391		●	●		41.200	0.191			
Queensland State Velodrome	59.984	●	●			59.465	0.519			
Commonwealth Games Village	72.860		●			60.747	12.113			
Carrara Precinct	119.165	●	●	●		112.242	6.923			
Other games projects	10.516	●	●	●		6.943	3.573			

Arts, culture and recreation

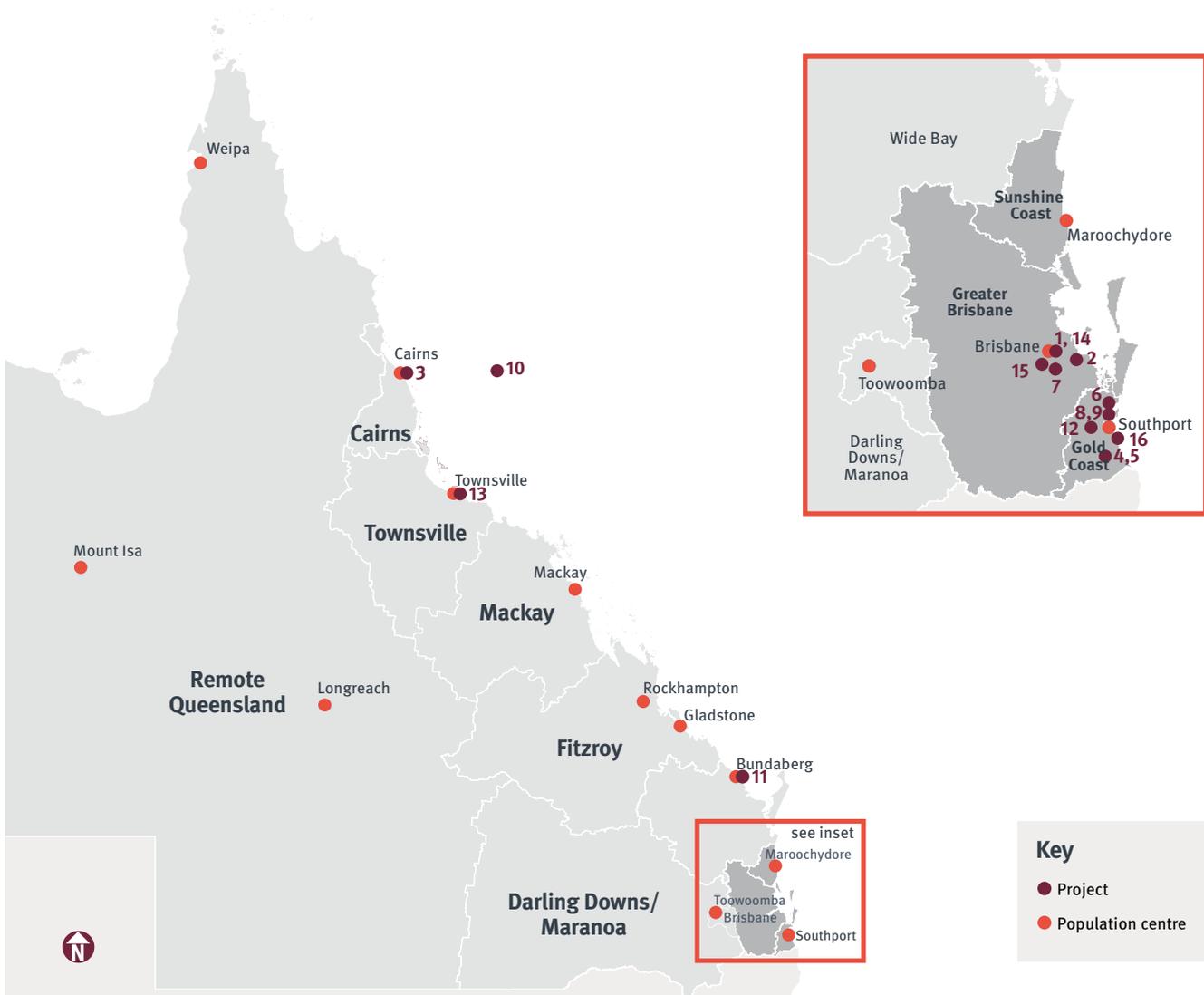
Project	Total estimated cost (\$M)	Contributions				Expenditure to June 2017 (\$M)	Funding (\$M)			
		Fed	QG	LG	Priv		2017-18	Indicative		
								2018-19	2019-20 to 2020-21	Beyond
Regional Queensland										
National Parks – Cape York upgrades	Ongoing		●				1.290			
Mt Inkerman Nature Tourism Development	0.541		●	●			0.541			
Mackay Tourism Visitor Information Centre	1.300		●	●			1.300			
Rockhampton Art Gallery	2.000		●				2.000			
Improving tourism and recreation use of the Great Barrier Reef – moorings	2.375		●			0.855	0.965	0.555		
Mon Repos Turtle Centre redevelopment	10.000		●			0.499	5.737	3.764		
Cairns Performing Arts Centre	15.000		●				14.000	1.000		
North Queensland Stadium	249.427	●	●		●	3.000	46.000	151.017	49.410	
Statewide										
Statewide National Park Infrastructure upgrades	Ongoing	●	●		●		12.809			
Queensland Museum – other property, plant and equipment	1.400		●				1.400			
Sport and recreation – various capital grants	1.600		●				1.600			
Environment and heritage – protected area land acquisitions	5.000		●			1.780	3.220			
Female Facilities Program	15.000		●				2.000	13.000		
Arts Infrastructure Investment Fund	17.500		●				6.000	4.000	7.500	
Revitalising National Parks	35.000		●				15.000	20.000		
Get Playing Rounds 4-6	41.000		●			15.950	16.986	8.064		
Get Playing Plus	60.250		●			23.797	22.507	13.946		
Racing Infrastructure Fund	125.088		●			12.647	25.000	30.740	32.350	24.350
Stadiums Queensland – capital works	Ongoing		●				13.203			
Queensland recreation centres, sports grounds and sport houses capital works	Ongoing		●				4.252			
Other property, plant and equipment	3.778		●			0.030	3.700	0.024	0.024	
Ongoing programs	Ongoing		●				6.802			



Selected 1–4 year program highlights

DELIVERY

#	PROJECT	#	PROJECT
1	Anzac Legacy – Anzac Gallery at Queensland Museum South Bank	9	Gold Coast Hockey Centre
2	Belmont Shooting Complex	10	Improving tourism and recreation use of the Great Barrier Reef – moorings
3	Cairns Performing Arts Centre	11	Mon Repos Turtle Centre redevelopment
4	Carrara Precinct	12	Nerang Mountain Bike Trails
5	Commonwealth Games Village	13	North Queensland Stadium
6	Coomera Indoor Sports Centre	14	Queensland Museum – Sciencentre Transformation
7	Daisy Hill Koala Bushland Precinct	15	Queensland State Netball Centre
8	Gold Coast Aquatic Centre	16	Village Roadshow Sound stage 9



Future opportunities – short-term

PLANNING

Opportunity 1

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

Status update: A benefits management approach has been established to maximise the use of games infrastructure. Many sporting events have already been scheduled to be held at Commonwealth Games venues in 2017 and post the games. These include international sporting events such as the major international badminton competition and the Queensland Volleyball State Championships.

Opportunity 2

Develop a priority order for the investment in facilities to meet modern standards and growing community need, including destination-based arts and cultural touring infrastructure based on economic and community return.

Status update: Opportunity 2 and 4 from 2016 SIP Part B have been combined as they have the same strategic intent. In the 2017–18 budget, \$17.5 million has been committed over four years for an Arts Infrastructure Investment Fund to invest in priority infrastructure projects at state-owned arts and cultural facilities. Investment decisions will be prioritised through the Arts Infrastructure Investment Framework and will deliver significant community benefits, grow the arts sector, and help generate new jobs for artists, arts workers and the construction industry.



Anna Meares State Velodrome



Future opportunities – medium/long-term

PLANNING

Opportunity 3

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

Status update: Arts Queensland is exploring a range of storage solutions for arts and cultural facilities. Short-term strategies include modernising existing on-site storage for state collecting institutions, with longer-term strategies being investigated, such as innovative storage solutions that allow greater public access to collections. Arts Queensland has delivered a new short-term solution for the Queensland Art Gallery and will be implementing upgrades to the Queensland Museum storage in 2017–18.

Opportunity 4

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

Status update: A number of examples currently exist of multi-use sports infrastructure, such as major sporting venues. This opportunity will be further considered in 2017–18. (Opportunity 5 in 2016 SIP Part B).

Case study: Mon Repos Turtle Centre

Bundaberg's Mon Repos Turtle Centre operates from November to March, when turtles lay their eggs and migrate back to the sea, and hatchlings emerge to make the perilous journey down the beach. During this period, the centre hosts more than 30,000 visitors on evening tours of the beach.

After extensive community consultation, a master plan was prepared and published in June 2015. Part of the master plan was a market sounding study identifying opportunities to augment the out of season experience. The plan proposed to operate, throughout the year, the upgraded facility by providing a café, an updated interpretive centre, opportunities to educate the public in marine turtles and equipment encouraging visitors to explore other areas of the conservation park.

In mid-2016, the Mon Repos Turtle Centre was granted \$10 million by the Queensland Government through the Significant Regional Infrastructure Projects Program to redevelop the site and provide Australia's best marine turtle experience with an iconic, year-round paid ecotourism attraction.

The lead architect/principal consultant and the interpretive consultant contracts have been awarded to Queensland companies. Consultation with the local community and Traditional Owners has been well received. Market sounding has been completed and confirms a deep interest by the local business community.



Turtle hatchling at Mon Repos Turtle Centre (image courtesy Tourism and Events Queensland)

New 2017 Future opportunities

PLANNING

Opportunity 5

Explore opportunities to better use assets through better coordination and management, and to support tourism.

Opportunity 6

Investigate opportunities for infrastructure investment and better management practices of recreation and parks facilities to encourage increased use and support tourism.

Opportunity 7

Strategic planning for new or expanded arts and cultural infrastructure.

Status update: In 2017–18, Arts Queensland will develop a strategy for future arts and cultural infrastructure needs for Queensland. This strategy will identify opportunities to grow Queensland's cultural reputation, cultural tourism offerings and improve access to arts and culture.

Case study: Cairns Performing Arts Centre

Audiences in tropical North Queensland are set to enjoy performances from leading national and international companies when the new Cairns Performing Arts Centre opens in mid-2018.

The Queensland Government has dedicated \$15 million to the \$66.5 million Cairns Regional Council development as part of its commitment to improving regional arts infrastructure and access. The project has also received \$10 million from the Australian Government.

Cairns Performing Arts Centre will provide a 940-seat theatre, as well as 400-seat black box theatre and greatly enhanced amenities for guests and performers – more than double the capacity of the Cairns Civic Centre.

The enlarged stage and seating capacity make it possible for some of Australia's best companies to perform in the city for the first time, bringing bigger productions to regional audiences. Leading Queensland-based companies, supported by the Queensland Government, such as the Queensland Theatre, Queensland Symphony Orchestra, Queensland Ballet and Circa are already planning seasons in the new theatre.

The cultural infrastructure project has also delivered local construction jobs, with 90 per cent of total works and materials supplied by local businesses and 95 per cent of trade contracts going to local companies.



Construction of Cairns Performing Arts Centre



Case study: North Queensland Stadium

North Queensland Stadium is a signature project to develop a nationally-recognised sporting precinct for the region. The project will revitalise Townsville's CBD and position it as the events capital of North Queensland.

Located within the Townsville City Waterfront Priority Development Area, this city-shaping project will provide a boost for the region's economy and is a priority project in the Advancing North Queensland Strategy. More than 80 per cent of hours spent building the stadium will be by locals and at least 80 per cent of the value of the project will be spent on local subcontractors and suppliers. It is expected more than 2000 people from the Townsville region will be involved in contracts related to the build of the stadium, with a target of 6.6 per cent of the construction workforce to be Aboriginal and Torres Strait Islander people.

A significant number of local businesses and contractors have expressed their interest in working on the project.

The Queensland Government has committed \$140 million to the project, which is jointly funded by the Australian Government, Townsville City Council and supported by the National Rugby League (NRL).

Once complete, the 25,000 seat stadium will be the home ground of the North Queensland Cowboys NRL team.

The detailed design of the stadium will be completed by the end of 2017. The project will be completed in time for the 2020 NRL season and forms part of the Townsville City Deal.



Social housing



Access to safe, secure and affordable housing is essential to foster social cohesion and create connected communities. In addition, housing is essential infrastructure that generates economic growth and local jobs.

The Queensland Government announced the Queensland Housing Strategy 2017–2027 in June 2017. Over the 10-year life of the strategy, the Queensland Government’s Housing Construction Jobs Program will deliver more than 5000 social and affordable dwellings. The strategy has a focus on boosting the growth of social and affordable housing and is supported by a \$1.6 billion Housing Construction Jobs Program. The Queensland Housing Strategy is further detailed on page 159 as it captures the infrastructure pipeline for social housing.

The Housing Construction Jobs Program will be delivered through partnerships with the private sector, local governments and non-government providers, to ensure government assets are effectively utilised and leveraged to deliver additional social infrastructure and better housing outcomes for Queenslanders.

A new Housing Partnership Office will lead the delivery of the Housing Construction Jobs Program, providing centralised coordination and collaboration with the private and non-government sectors on the development and redevelopment agenda. Enhanced and new partnerships will be formed to capitalise on catalytic investment in precincts of economic significance and demand for housing.

The Housing Construction Jobs Program will create a pipeline of development opportunities for local trades and builders by streamlining construction procurement processes and reducing tendering costs and delivery timeframes. This will help address Queensland’s long-term housing needs by supporting and accelerating new construction and precinct development.

The precinct redevelopment approach will see the Queensland Government’s housing portfolio transformed to ensure it is diverse, flexible and meets the needs of vulnerable Queenslanders and their communities.

Changing demographics, such as an ageing population, changing household compositions and an increase in the number of people requiring specialised health and disability support are influencing the types of housing needed in Queensland and require specific planning attention across the state.

This new investment in social infrastructure will build on and extend the Queensland Government’s, and non-government organisations, ability to deliver social housing for people who are unable to access suitable accommodation in the private rental market, including people living in remote Aboriginal and Torres Strait Islander communities.

2016–17 DELIVERY HIGHLIGHTS

NRL Cowboys House, Townsville

Supported accommodation, Townsville

Commenced construction of 641 new social housing dwellings



Family at home



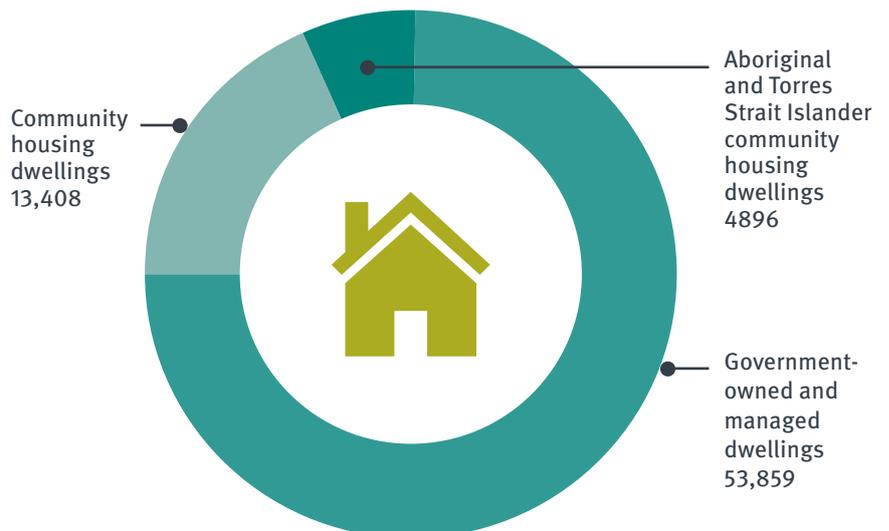
\$229.37 M

has been invested by the Queensland Government in new social housing in 2016–17*



\$391.47 M

has been invested by the Queensland Government in maintaining and upgrading social housing in 2016–17*



\$15.1 B

is the total value of the housing portfolio (state-owned land and building assets)



562 UNITS

added to the portfolio in 2016–17



3667

new households assisted in social housing in 2016

* Unaudited figures

2016 SIP Part B strategic alignment

In the SIP Part A, the Queensland Government identified strategic directions to address the infrastructure challenges and objectives for each asset class. These strategic directions inform SIP Part B, and allow government to align investments with these strategic directions. The number of 1–4 year program items and Future opportunities from the 2016 SIP which align to each response, are outlined below.

SOCIAL HOUSING RESPONSES		
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.
Number of 2016 SIP Part B 1–4 year program items		
–	6	–
Number of 2016 SIP Part B Future opportunities		
2	1	2

Case study: Better Neighbourhoods Logan

Better Neighbourhoods Logan is a commitment to renew and repurpose government land to deliver more affordable and diverse housing while creating jobs, economic growth and better community outcomes.

The Department of Housing and Public Works, in partnership with Economic Development Queensland, will collaborate with other government agencies, not-for-profit providers and private industry to improve housing diversity and better meet people's needs.

Better Neighbourhoods Logan will facilitate the delivery of more than 3000 new social and affordable dwellings in Logan over the next 20 years, generating investment of close to \$1 billion.

The Queensland Housing Strategy 2017–2027 will adapt this approach to deliver more social and affordable housing across the state through the creation of a pipeline of development.

The Housing Construction Jobs Program will help address the state's long-term housing needs by supporting and accelerating new construction and precinct development. Through an expression of interest process, the program will detail the range of opportunities available to the market across Queensland. The initial expression of interest released in June 2017 sought proposals for small, medium and large-scale projects and forecast opportunities for multi-year developments in Cairns, Townsville, Sunshine Coast, Moreton Bay, Brisbane, Gold Coast, Toowoomba and Ipswich.

2017 pipeline

The infrastructure pipeline for social housing is reflected in the recently released Queensland Housing Strategy 2017–2027, which redefines how the Queensland Government will deliver social housing.

Queensland Housing Strategy

The Queensland Housing Strategy 2017–2027 is a 10-year framework driving key reforms and targeted investment across the housing continuum.

The strategy will deliver housing to support urban renewal, generate new jobs, provide affordable housing and drive innovative housing design that responds to contemporary housing needs.

It also ensures those most in need are supported by a safety net of targeted early interventions, flexible packages of support, supportive social housing, and genuine wraparound services.

Our objective PLANNING

Every Queenslander has access to a safe, secure and affordable home that meets their needs and enables participation in the social and economic life of our prosperous state.

Our focus

Transformational development and opportunities



Growth

- ▶ More affordable and accessible housing
- ▶ Stronger partnerships to grow supply
- ▶ New and renewed neighbourhoods



Prosperity

- ▶ Reduced barriers to accessing and sustaining tenancies
- ▶ Pathways to independence
- ▶ Better futures through education and training

Safety net for those most in need



Connections

- ▶ Seamless service delivery
- ▶ A collaborative approach
- ▶ Person-centred responses



Confidence

- ▶ Review and reform
- ▶ Consumer protection
- ▶ Improved housing design

Delivering a better housing future across the state

DELIVERY

The Queensland Government is investing \$1.6 billion to deliver more social and affordable housing over the next 10 years. The Housing Construction Jobs Program is a key initiative of the Queensland Housing Strategy. A partnership approach to renewing and repurposing government land and delivering more social and affordable housing will create jobs, economic growth and better community outcomes.

Investment delivered across the state over five years

600
jobs per year

More than
\$1 B
worth of investments

1034
new affordable homes

2972
new social homes

Construction for growth

Precinct based investment for social housing*
(based on population growth and demand for housing)



*Development and renewal opportunities are based on zoning and proximity to services and public transport as well as existing social housing property holdings.

1–4 year program

DELIVERY

Project	Total estimated cost (\$M)	Contributions				Expenditure to June 2017 (\$M)	Funding (\$M)			
		Fed	QG	LG	Priv		2017–18	2018–19	Indicative 2019–20 to 20–21 Beyond	
South East Queensland										
High and complex needs accommodation	0.800		●			0.080	0.720			
Disability services – Bracken Ridge redevelopment	2.500		●			0.060	1.540	0.900		
Regional Queensland										
Elderly Parent Carer Innovation Initiative	0.438		●			0.088	0.350			
Statewide										
High and complex needs accommodation	1.600		●			0.560	1.040			
Elderly Parent Carer Innovation Initiative	3.820		●			1.997	1.823			
Build and refurbish accommodation for children and young people	13.200		●			2.000	11.200			
Build and refurbish accommodation for people with a disability	61.977		●			14.000	11.468	11.812	24.697	
Refurbish Indigenous community housing throughout Queensland	193.455	●	●			46.358	57.422	31.323	58.352	
Build Indigenous community housing throughout Queensland	245.143	●	●			60.089	157.297	11.800	15.957	
Refurbish social housing throughout Queensland	660.936		●			75.638	92.546	96.724	198.014	
Build social housing throughout Queensland	955.899	●	●		●	110.993	169.147	200.307	385.672	89.780
Disability Infrastructure Program	Ongoing		●				0.571			

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.

Status update: This opportunity aligns with the growth theme of the Queensland Housing Strategy 2017–2027 and will now be replaced by opportunity 6 in future SIP updates.

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.

Status update: This opportunity aligns with the growth theme of the Queensland Housing Strategy 2017–2027 and will now be replaced by opportunity 6 in future SIP updates.

Opportunity 3

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

Status update: This opportunity aligns with the growth theme of the Queensland Housing Strategy 2017–2027 and will now be replaced by opportunity 6 in future SIP updates.

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.

Status update: This opportunity aligns with the growth theme of the Queensland Housing Strategy 2017–2027 and will now be replaced by opportunity 6 in future SIP updates.

Opportunity 5

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

Status update: Due to a change of funding arrangements announced by the Australia Government as part of the 2017–18 Federal Budget, Opportunity 8 has been developed to address this in future SIP updates.

New 2017 Future opportunities

Opportunity 6

Deliver additional social and affordable housing dwellings under the Housing Construction Jobs Program to meet the needs of individual households and communities over the course of the 10-year Strategy.

Opportunity 7

Apply inclusionary requirements to surplus government land developed for residential purposes so that a proportion (5–25%) of new dwellings are designated for social and affordable housing.

Opportunity 8

Work with the Australian Government to reform funding and delivery of housing and homelessness services through a new National Housing and Homelessness Agreement.



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