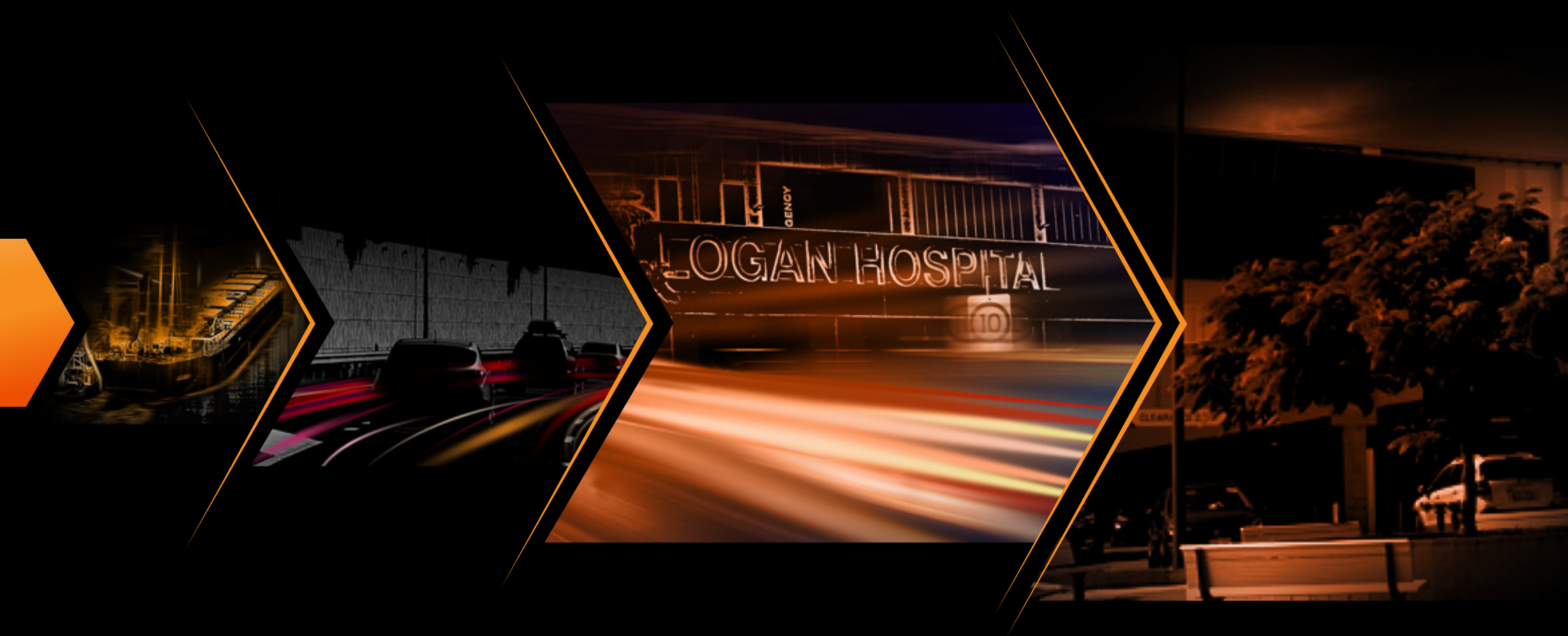


INFRASTRUCTURE PIPELINE REPORT

JUNE 2017





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OUR MANDATE

Building Queensland was established as an independent statutory body on 3 December 2015 under the *Building Queensland Act 2015*.

Governed by an eight-member Board, the majority from the private sector, Building Queensland provides independent expert advice to Queensland Government agencies, government-owned corporations and nominated statutory authorities to enable better infrastructure decisions.

Building Queensland's core functions are to:

- » provide strategic advice on infrastructure matters
- » assist with the early stage development of proposals
- » assist with Business Case development for proposals with a capital value of \$50–\$100 million
- » lead the development of rigorous Business Cases, including cost benefit analyses, for proposals over \$100 million
- » develop and publish an Infrastructure Pipeline of priority proposals.



Logan Hospital (Image courtesy of Luke Anderson)

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INDUSTRY ENDORSEMENT

“Identifying the state’s priorities and detailing a sound pathway to progress proposals is critical to ensure the timely delivery of key projects. Infrastructure Partnerships Australia strongly supports Building Queensland’s Infrastructure Pipeline Report, which we see supplementing more independent, evidence-based decision-making on the state’s infrastructure priorities.”

Brendan Lyon
Chief Executive, Infrastructure Partnerships Australia



Port of Gladstone (Image courtesy of Gladstone Ports Corporation)

CHAIR'S FOREWORD

The Infrastructure Pipeline Report is central to Building Queensland's purpose as it provides the government with independent advice on the development of the state's major infrastructure proposals. It looks across a broad range of infrastructure sectors and identifies proposals for priority consideration.

In the 12 months since the release of the first report, many important proposals have progressed from the earliest stages of development to the Detailed Business Case stage, and others for government investment consideration.

This third Infrastructure Pipeline Report reaffirms Building Queensland's commitment to better

inform the Queensland Government's decisions on major infrastructure.

Proposals in the Pipeline include a balanced mix of infrastructure across many sectors. These proposals examine options to expand or renew existing infrastructure, new build, as well as technology upgrades.

We know the state has significant infrastructure challenges. To meet these challenges, it will take investment and those investments must be considered and strategic.

We believe our advice provides the foundation for Queensland Government departments, government-

owned corporations and statutory authorities to bring forward the right solutions to the state's infrastructure needs.

We trust this report will serve as an informed precursor to the Queensland Government investment program in the State Infrastructure Plan.



Alan Millhouse
Chair,
Building Queensland Board



CHIEF EXECUTIVE OFFICER'S STATEMENT

Building Queensland continues to work closely with the Queensland Government to develop the right public infrastructure as a platform for economic and social development.

Significant progress on the development of quality infrastructure proposals has been made through application of our Business Case Development Framework.

We are ensuring our Framework is fit for purpose and, where appropriate, introducing supplementary guidance. That is why we introduced the Investment Logic Mapping Guide, Social Impact Evaluation Supplementary Guidance and Benefits Management Framework late last year.

We are continuing to develop guidance material to further inform the application of our Framework across government.

By engaging our government partners early in the proposal development process, we have been able to apply our Framework to ensure the right proposals are further developed. To date, Building Queensland has been involved in the development of more than 50 infrastructure proposals, some of which we have led in partnership with departments, government-owned corporations and statutory authorities.

Many of the proposals Building Queensland has been involved in have received full or partial funding. We are

encouraged by the government's response to our independent advice.

On behalf of Building Queensland, I wish to thank all the agencies that have contributed their time and expertise to the Pipeline process but also the development of solutions to the state's infrastructure needs.



Damian Gould
Chief Executive Officer,
Building Queensland



PART 1: THE PRIORITIES



THE INFRASTRUCTURE PIPELINE

The Infrastructure Pipeline is Building Queensland's independent assessment of infrastructure proposals under development by Queensland Government agencies, including departments, government-owned corporations and nominated statutory authorities.

The aim of the Infrastructure Pipeline is to inform the Queensland Government's infrastructure investment decision-making. The proposals in the Pipeline have been brought forward by government agencies and include unfunded infrastructure opportunities with a minimum capital value of \$50 million.

Building Queensland ensures these proposals are compared on a consistent basis and recommends the most compelling proposals for further development. Only when a Detailed Business Case has been completed is a proposal recommended for investment consideration (see Figure 1).

This is the third edition of the Infrastructure Pipeline Report. To date, the state government has provided

full or partial funding commitments to seven proposals Building Queensland has recommended as priorities for the state:

- » Cross River Rail (Transport—Rail)
- » Burdekin Falls Dam—Saddle Dam & Monolith Improvement Project (Water)
- » European Train Control System (ETCS)—Inner City (Transport—Rail)
- » Financial System Renewal (Health—ICT)
- » Laboratory Information System (Health—ICT)
- » Pacific Motorway—Mudgeeraba to Varsity Lakes (Transport—Road)
- » Port of Townsville—Channel Capacity Upgrade (Transport—Port).

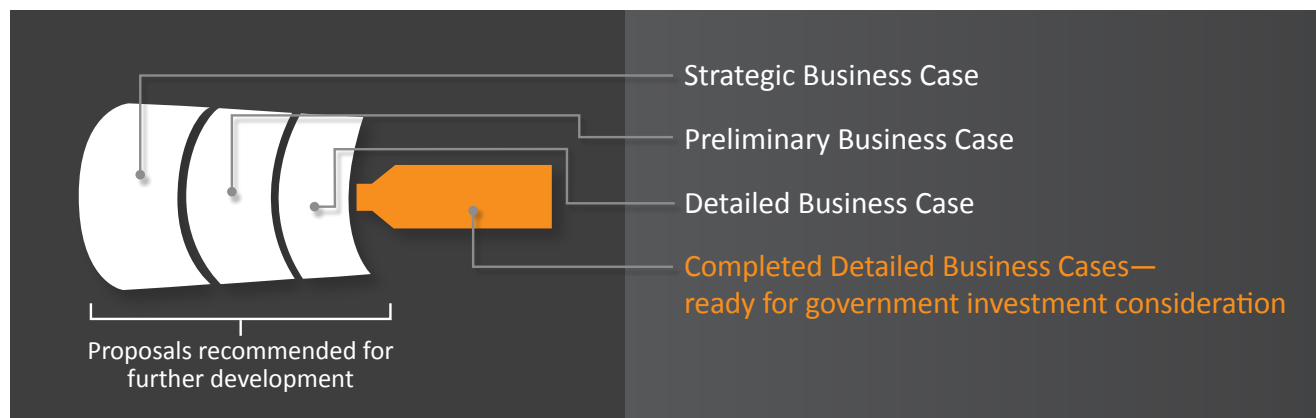
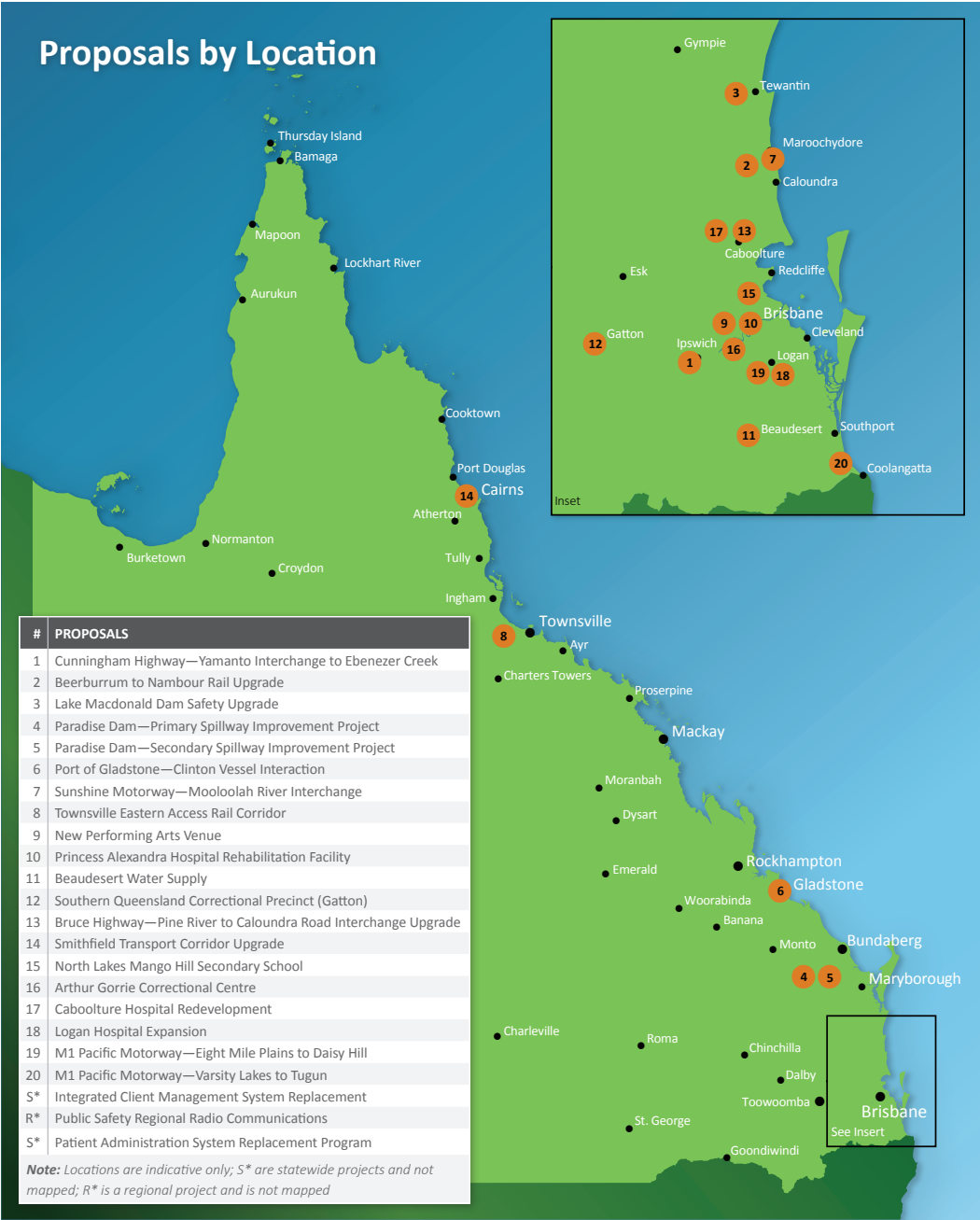
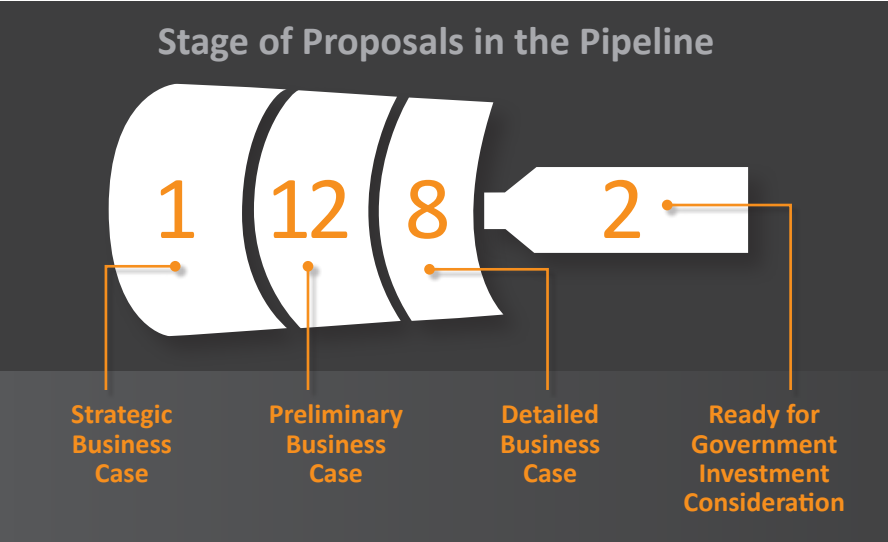


Figure 1. Status of Proposals in the Pipeline



Caboolture Hospital (Image courtesy of Queensland Government)

SUMMARY OF PRIORITY PROPOSALS



Map courtesy of Spatial Services Unit, Department of State Development

JUNE 2017 PIPELINE OF PRIORITY PROPOSALS



WHAT'S CHANGED

Since the release of our first Infrastructure Pipeline Report in June 2016, what started as a list of 16 priority proposals grew to 20 six months later. Now, one year on, 23 priority proposals have been identified. Importantly, this Pipeline does not propose that all 23 proposals are ready for investment.

In this Pipeline, Detailed Business Cases have been completed for two proposals which are ready for investment consideration. A further 8 proposals in the Detailed Business Case stage are scheduled to be completed in the next 12–18 months.

The Pipeline continues to be front weighted with more proposals sitting towards the end of the Preliminary Business Case stage and within the Detailed Business Case stage. Building Queensland has reviewed several Strategic Business Cases over the past six months and all but one have now progressed to the Preliminary Business Case stage.

Building Queensland acknowledges that Strategic Business Cases can be developed in a relatively short period. The focus of this stage is on understanding the need—not solutions—in which case the preferred solution is unknown. Building Queensland is working with agencies to help them progress a more structured approach to the development of Strategic Business Cases.

The application of Building Queensland's Business Case Development Framework processes, such as Investment Logic Mapping, is increasing the rigour and efficiency of Strategic Business Cases. Ultimately, this approach allows for the development of solutions and options in the Preliminary Business Case stage.



WHAT'S CHANGED



New Proposal



Proposal that has progressed



Proposal that has been removed



Proposal that has received partial funding

STRATEGIC BUSINESS CASE

PRELIMINARY BUSINESS CASE

DETAILED BUSINESS CASE

READY FOR GOVERNMENT INVESTMENT CONSIDERATION



Bruce Highway—Pine River to Caloundra Road Interchange Upgrade



Caboolture Hospital Redevelopment



Integrated Client Management System Replacement



Logan Hospital Expansion



M1 Pacific Motorway—Eight Mile Plains to Daisy Hill



M1 Pacific Motorway—Varsity Lakes to Tugun



Port of Gladstone—Clinton Vessel Interaction



Arthur Gorrie Correctional Centre



Smithfield Transport Corridor Upgrade



ERP/EAM Joint Business Transformation*



Burdekin Falls Dam—Saddle Dam & Monolith Improvement Project



Port of Townsville—Channel Capacity Upgrade

Figure 2. Key Changes in the Pipeline Since December 2016

*Proposal now does not meet the scope requirements for inclusion in the Pipeline.





WHAT'S MOVED

Key changes in the Pipeline since December 2016 are reflected in Figure 2 (see Page 8).

Partial funding for the Burdekin Falls Dam—Saddle Dam & Monolith Improvement Project and the Port of Townsville—Channel Capacity Upgrade was announced in the 2017–18 Queensland Budget. Being partially funded, these proposals no longer appear in the Pipeline as they are no longer in scope.

A Detailed Business Case has now been completed for the Smithfield Transport Corridor Upgrade. This proposal is ready for government investment consideration, along with the Beerburrum to Nambour Rail Upgrade which was identified in the December 2016 Pipeline.

The Port of Gladstone—Clinton Vessel Interaction proposal has progressed with a Detailed Business Case

now underway. Similarly, the Bruce Highway—Pine River to Caloundra Road Interchange Upgrade proposal has progressed to the Preliminary Business Case stage.

The ERP/EAM Joint Business Transformation proposal is the first proposal that has been removed from the Pipeline because of a revised approach to delivery. This proposal is being re-scoped into smaller incremental packages to deliver a more fit-for-purpose solution addressing all requirements.

WHAT'S NEW

Six new proposals have entered the Pipeline for the first time—most of which are in the Preliminary Business Case stage. The inflow of Health proposals is most notable with the inclusion of Caboolture Hospital and Logan Hospital. Queensland Health is continuing to refine service need analysis as part of a system-wide

approach to putting plans and strategies into effect. A system-wide approach ensures the impacts beyond the immediate project are considered.

Two M1 Pacific Motorway proposals were assessed for first time consideration in the Pipeline—Eight Mile Plains to Daisy Hill and Varsity Lakes to Tugun. These proposals, currently at the Preliminary Business Case stage, address the dual role of the M1 as an interstate freight corridor and important commuter traffic route.

The Department of Communities, Child Safety and Disability Services presented a clear case for a technological solution to improve outcomes for children and young people. A Preliminary Business Case to replace the department's Integrated Client Management System will soon be finalised before the proposal is expected to progress to the Detailed Business Case stage.



M1 Pacific Motorway—Varsity Lakes to Tugun (Image courtesy of Queensland Government)

Building Queensland is leading the development of a Detailed Business Case for the Arthur Gorrie Correctional Centre. This proposal has been identified as a priority to help relieve current capacity constraints throughout the prison network in southern Queensland and recognises specific requirements to accommodate growing numbers of remand prisoners. The inclusion of the proposal in the Pipeline follows the addition of the Southern Queensland Correctional Precinct (Gatton) in December 2016.

WHAT'S STILL UNDERWAY

Many proposals are progressing through the government's and Building Queensland's processes; however, without reaching milestones these proposals have remained in the same stage of the Pipeline. The Detailed Business Case stage requires detailed

investigations and can take approximately 12–18 months to develop—hence some proposals may not progress in the Pipeline for a small number of updates.

Consider for example the Lake Macdonald Dam Safety Upgrade proposal. The proposal remains in the Detailed Business Case stage while additional geotechnical analysis is being undertaken to confirm the preferred option addresses operational issues.

Similarly, the Detailed Business Case for the New Performing Arts Venue is undergoing further analysis to ensure all operating costs and potential delivery options are fully explored before finalising the proposal.

The Public Safety Regional Radio Communications proposal is also still in the Detailed Business Case stage. An investigation into the operational requirements and technical specifications for the regional network is

continuing. The Detailed Business Case is expected to be completed in Q4 2017.

Furthermore, additional site condition investigations have been undertaken for the Paradise Dam proposals. The findings may result in an update to the Preliminary Business Cases.

The Department of Transport and Main Roads is finalising an update of the cost estimate, traffic modelling and economic analysis for the Cunningham Highway—Yamanto Interchange to Ebenezer Creek proposal. The Detailed Business Case is scheduled to be completed in Q2 2017.

PROPOSAL SUMMARIES

The following infrastructure proposals are presented in order of their stage of development, with those ready for government investment consideration appearing first. Proposals are then listed alphabetically within each stage. Proposals are not presented in order of priority. The ultimate decision about which proposals are funded rests with the state government.

All cost estimates are indicative. Cost figures are provided by responsible agencies, with the exception of figures for Detailed Business Cases led by Building Queensland. Proposals with a cost range indicate that several options are still being considered. The location of proposals is broadly identified as South East Queensland (SEQ), regional or statewide.

Where a Detailed Business Case commenced prior to Building Queensland's formal establishment, the Responsible Agency has continued to lead the development of the proposal to avoid unnecessary delays or additional costs.



STAGE OF DEVELOPMENT

READY FOR GOVERNMENT INVESTMENT CONSIDERATION

DETAILED BUSINESS CASE

PRELIMINARY BUSINESS CASE

STRATEGIC BUSINESS CASE

PROPOSAL NAME

SECTOR

LOCATION

PAGE

Beerburrum to Nambour Rail Upgrade



Transport—Rail

SEQ

13

Smithfield Transport Corridor Upgrade



Transport—Road

Regional

14

Arthur Gorrie Correctional Centre



Justice and Public Safety

SEQ

15

Cunningham Highway—Yamanto Interchange to Ebenezer Creek



Transport—Road

SEQ

16

Lake Macdonald Dam Safety Upgrade



Water

SEQ

17

New Performing Arts Venue



Arts, Culture and Recreation

SEQ

18

Port of Gladstone—Clinton Vessel Interaction



Transport—Port

Regional

19

Public Safety Regional Radio Communications



Digital

Regional

20

Southern Queensland Correctional Precinct (Gatton)



Justice and Public Safety

SEQ

21

Townsville Eastern Access Rail Corridor



Transport—Rail

Regional

22

Beaudesert Water Supply



Water

SEQ

23

Bruce Highway—Pine River to Caloundra Road Interchange Upgrade



Transport—Road

SEQ

24

Caboolture Hospital Redevelopment



Health—Built

SEQ

25

Integrated Client Management System Replacement



Justice and Public Safety

Statewide

26

Logan Hospital Expansion



Health—Built

SEQ

27

M1 Pacific Motorway—Eight Mile Plains to Daisy Hill



Transport—Road

SEQ

28

M1 Pacific Motorway—Varsity Lakes to Tugun



Transport—Road

SEQ

29

Paradise Dam—Primary Spillway Improvement Project



Water

Regional

30

Paradise Dam—Secondary Spillway Improvement Project



Water

Regional

31

Patient Administration System Replacement Program



Health—ICT

Statewide

32

Princess Alexandra Hospital Rehabilitation Facility



Health—Built

SEQ

33

Sunshine Motorway—Mooloolah River Interchange



Transport—Road

SEQ

34

North Lakes Mango Hill Secondary School



Education

SEQ

35

BEERBURRUM TO NAMBOUR RAIL UPGRADE

RESPONSIBLE AGENCY

DEPARTMENT OF
TRANSPORT AND
MAIN ROADS

PROPOSAL STAGE OF DEVELOPMENT

DETAILED BUSINESS
CASE COMPLETE

BUILDING QUEENSLAND'S ROLE

LED DETAILED
BUSINESS CASE

PLANNED STAGE END DATE

NOT APPLICABLE

ESTIMATED COST OF DELIVERY

\$780 MILLION*



NEED

The 39-kilometre section of North Coast Line rail track between Beerburrum and Nambour carries a complex mixture of commuter, freight and long distance passenger trains on a single line track with passing loops at stations only. The infrastructure constraints on this section of the line include:

- » insufficient capacity to meet future freight and passenger demand due to the single-track configuration, single platforms at stations between Landsborough and Nambour, and inadequate parking facilities and passing loops
- » competition between freight and passenger services, and high track utilisation rates, which impact service reliability
- » current track configuration which allows only three peak-direction train services (plus one contra-peak) per hour.

Freight train paths that meet supply chain needs are expected to reach capacity by 2023. Without the project, freight will likely be required to switch to road-based transport beyond this time to meet supply chain requirements.

PROPOSAL

The proposal has assessed a duplication of the North Coast Line between Beerburrum and Landsborough (approximately 20 kilometres in length) and a range of upgrades to the existing rail infrastructure between Landsborough and Nambour including passing loop extensions, provision of dual platforms at stations connected by lifts and pedestrian bridges, and additional car parking at some stations. The proposal also assessed the elimination of level crossings at Barrs Road near Glass House Mountains and Caloundra Street in Landsborough.

The proposal is expected to deliver a more integrated transport system with increased capacity and travel time savings for freight and passenger services, and increased passenger service reliability. The project is also expected to reduce maintenance and improve overall rail whole-of-life cost.

NEXT STEPS

Queensland Government investment consideration

**Nominal cost in Australian dollars, Building Queensland Detailed Business Case 2016.*

SMITHFIELD TRANSPORT CORRIDOR UPGRADE

RESPONSIBLE AGENCY

DEPARTMENT OF
TRANSPORT AND
MAIN ROADS

PROPOSAL STAGE OF DEVELOPMENT

DETAILED BUSINESS
CASE COMPLETE

BUILDING QUEENSLAND'S ROLE

LED DETAILED
BUSINESS CASE

PLANNED STAGE END DATE

NOT APPLICABLE

ESTIMATED COST OF DELIVERY

\$150 MILLION*



NEED

The Smithfield Transport Corridor Upgrade is a proposed new 3.8-kilometre road bypass to the east of the Captain Cook Highway between Yorkeys Knob Road roundabout and McGregor Road roundabout north of Cairns. The section of the Captain Cook Highway under investigation has reported a high crash rate and there is significant congestion in morning and afternoon peaks, resulting in increased travel times and reduced trip reliability. Forecast traffic growth is beyond the reliable capacity of the existing infrastructure.

PROPOSAL

The proposal investigated:

- » upgrading the existing Yorkeys Knob roundabout with a four-legged (four-phase) signalised intersection to cater for the addition of the bypass route traffic
- » a northbound left off only exit ramp from the bypass route at Cattana Road
- » exit and entry ramps to a proposed future designated road at the northern end of the bypass route
- » a two-lane bi-directional overpass at McGregor Road roundabout
- » an off-road cycle path.

The project is expected to:

- » improve travel times and reduce travel costs for all road users
- » improve freight, high occupancy vehicles and tourism vehicle efficiency
- » reduce number and severity of crashes
- » facilitate planned growth in residential, commercial and industrial land uses, and increase local employment opportunities through more efficient transport
- » improve community amenity.

NEXT STEPS

Queensland Government investment consideration

**Nominal cost in Australian dollars, Building Queensland Detailed Business Case 2017.*

ARTHUR GORRIE CORRECTIONAL CENTRE

RESPONSIBLE AGENCY

DEPARTMENT OF JUSTICE AND ATTORNEY-GENERAL

PROPOSAL STAGE OF DEVELOPMENT

DETAILED BUSINESS CASE UNDERWAY

BUILDING QUEENSLAND'S ROLE

LEADING DETAILED BUSINESS CASE

PLANNED STAGE END DATE

Q3 2017

ESTIMATED COST OF DELIVERY

\$560–\$610 MILLION*



NEED

The Arthur Gorrie Correctional Centre (AGCC) is the male remand centre for southern Queensland. Remandees are prisoners awaiting sentencing in custody and require accommodation that is segregated from convicted prisoners and located close to court facilities and social services.

The built capacity at AGCC has been exceeded by 35 per cent resulting in more than 600 remandees sharing cells for single occupation. Capacity constraints can lead to remandees being transported to and accommodated at non-remandee correctional centres which are also constrained.

PROPOSAL

The proposal is investigating:

- » reform options to reduce forecast demand
- » better use of existing infrastructure, including reviewing the role and function of southern Queensland correctional centres
- » ways to improve existing infrastructure to expand current capacity, including construction of new cell blocks and upgraded and expanded prisoner support services facilities
- » construction of cells at a new greenfield site.

The project is expected to:

- » decrease violence between prisoners, and prisoners and staff
- » deliver more flexibility to manage the allocation of prisoners to the most appropriate facility
- » increase access to remand-specific programs and health services to better prepare remandees for potential release following court proceedings
- » reduce strain on building facilities with less risk of service failures.

NEXT STEPS

Complete Detailed Business Case

**A range is provided by Building Queensland as a number of options are still being considered.*

CUNNINGHAM HIGHWAY—YAMANTO INTERCHANGE TO EBENEZER CREEK

RESPONSIBLE AGENCY

DEPARTMENT OF
TRANSPORT AND
MAIN ROADS

PROPOSAL STAGE OF DEVELOPMENT

DETAILED BUSINESS
CASE UPDATE

BUILDING QUEENSLAND'S ROLE

ASSISTING WITH
DETAILED BUSINESS
CASE UPDATE*

PLANNED STAGE END DATE

Q2 2017

ESTIMATED COST OF DELIVERY

\$340 MILLION**



NEED

Increases in travel demand and expected developments along parts of the Cunningham Highway are likely to create additional safety considerations and capacity constraints, particularly at the intersection with Ipswich–Rosewood Road.

PROPOSAL

The proposal involves strategic upgrades to a 4.75-kilometre section of the Cunningham Highway between Warwick Road at Yamanto and Ebenezer Creek, to the south west of Ipswich.

The proposal is investigating the delivery of a highway interchange and new alignment connecting the Cunningham Highway, Centenary Motorway extension and the Western Ipswich Bypass.

The project is expected to:

- » deliver travel time cost savings
- » deliver vehicle operating cost savings
- » lower accident rates
- » enhance opportunity for major economic and defence-related development earmarked for the region.

NEXT STEPS

Complete Detailed Business Case

**Initial Business Case completed prior to the establishment of Building Queensland. Responsible Agency currently undertaking an update of cost estimate and economic analysis.*

***Nominal cost in Australian dollars, Responsible Agency Business Case 2012.*

LAKE MACDONALD DAM SAFETY UPGRADE

RESPONSIBLE AGENCY

SEQWATER

PROPOSAL STAGE OF DEVELOPMENT

DETAILED BUSINESS CASE UNDERWAY

BUILDING QUEENSLAND'S ROLE

ASSISTING WITH DETAILED BUSINESS CASE

PLANNED STAGE END DATE

Q3 2017

ESTIMATED COST OF DELIVERY

\$80 MILLION*



NEED

Lake Macdonald Dam on Six Mile Creek on the Sunshine Coast requires an upgrade to meet modern standards and the performance requirements of the Queensland dam safety regulations into the future.

The assessment of Lake Macdonald considered:

- » population growth downstream of the dam
- » advances in dam design and development of consistent methodologies for assessment of dam safety
- » the latest estimates of extreme rainfall
- » data from recent major weather events and updated modelling
- » improved understanding of earthquake probabilities and loads.

PROPOSAL

The proposal is investigating options to reduce dam safety risks by improving the spillway discharge capacity and earthquake stability, while maintaining water supply security.

Studies have considered a range of options including decommissioning of the dam, retrofit of strengthening works and new build options.

NEXT STEPS

Complete Detailed Business Case

**Nominal Cost in Australian Dollars 2016, estimate provided by Responsible Agency.*

NEW PERFORMING ARTS VENUE

RESPONSIBLE AGENCY

ARTS QUEENSLAND

PROPOSAL STAGE OF DEVELOPMENT

DETAILED BUSINESS CASE UNDERWAY

BUILDING QUEENSLAND'S ROLE

ASSISTING WITH DETAILED BUSINESS CASE

PLANNED STAGE END DATE

Q4 2017

ESTIMATED COST OF DELIVERY

TO BE DETERMINED*



NEED

Brisbane's major performing arts venues are currently at capacity and there is increasing pressure on the largest venues to satisfy demand from touring producers and audiences.

PROPOSAL

The proposal is to deliver a 1,700-seat performing arts venue in proximity to Brisbane's existing cultural precincts.

The project is expected to:

- » meet demand from the arts sector for greater access to Brisbane venues
- » increase economic activity driven by touring productions and tourists
- » showcase Queensland's home companies to wider audiences and attract talent to Queensland
- » grow the range of performing arts experiences available to Brisbane
- » strengthen Brisbane's cultural tourism offering and reinforce the state's cultural credentials.

NEXT STEPS

Complete Detailed Business Case

**Subject to selection of the preferred site, delivery and operating model.*

PORT OF GLADSTONE—CLINTON VESSEL INTERACTION

RESPONSIBLE AGENCY

GLADSTONE PORTS CORPORATION

PROPOSAL STAGE OF DEVELOPMENT

DETAILED BUSINESS CASE UNDERWAY

BUILDING QUEENSLAND'S ROLE

ASSISTING WITH DETAILED BUSINESS CASE

PLANNED STAGE END DATE

Q3 2017

ESTIMATED COST OF DELIVERY

\$65–\$80 MILLION*



NEED

The movement of larger vessels (draft over 14 metres) through the Clinton Channel at the Port of Gladstone is resulting in interaction of forces between the passing vessel and vessels berthed at the RG Tanna Coal Terminal. These forces impact on the safe mooring and operations at the terminal.

PROPOSAL

Proposal options being investigated include:

- » making better use of existing infrastructure, including controlling transit speed and utilising tugs to control vessels berthed at time of transit, and introducing a new mooring system
- » improving existing infrastructure, such as deepening the Clinton Bypass Channel and widening the Clinton Channel.

The project is expected to improve the efficiency of:

- » ship loading
- » the allocation of port infrastructure and resources
- » passage through the Clinton Channel.

It is also expected to create a safer environment as these activities will no longer be impacted by the passage of larger vessels.

NEXT STEPS

Complete Detailed Business Case

**A range is provided by Responsible Agency as a number of options are still being considered.*

PUBLIC SAFETY REGIONAL RADIO COMMUNICATIONS

RESPONSIBLE AGENCY

DEPARTMENT OF SCIENCE, INFORMATION TECHNOLOGY AND INNOVATION

PROPOSAL STAGE OF DEVELOPMENT

DETAILED BUSINESS CASE UNDERWAY

BUILDING QUEENSLAND'S ROLE

LEADING DETAILED BUSINESS CASE

PLANNED STAGE END DATE

Q4 2017

ESTIMATED COST OF DELIVERY

\$400–\$600 MILLION*



NEED

Outside of South East Queensland, Public Safety Agencies rely on ageing analogue networks and equipment that do not meet the requirements of modern emergency services. The networks are not secure, do not allow for cross-agency communication and have coverage limitations in some areas. In addition, equipment is nearing end-of-life and requires upgrading. In some areas equipment does not comply with Australian Communications and Media Authority licensing requirements.

PROPOSAL

The proposal is undertaking a Concept of Operations Review to ensure the Detailed Business Case assesses the most suitable delivery model and value for money options for the provision of a fit-for-purpose radio communications network for Public Safety Agencies in regional Queensland. Australian Communications and Media Authority radio spectrum compliance is being taken into consideration as well as the utilisation of existing infrastructure and state resources.

The proposal is expected to:

- » increase Public Safety Agency collaboration and performance
- » increase officer safety and enhance operational effectiveness
- » improve alignment to mission critical communication standards
- » improve operational resource management
- » enhance data to inform future operational and strategic plans, policies and procedures.

NEXT STEPS

Complete Detailed Business Case

**Nominal cost in Australian dollars 2016, Preliminary Business Case estimate provided by Responsible Agency.*

SOUTHERN QUEENSLAND CORRECTIONAL PRECINCT_(GATTON)

RESPONSIBLE AGENCY

DEPARTMENT
OF JUSTICE AND
ATTORNEY-GENERAL

PROPOSAL STAGE OF DEVELOPMENT

DETAILED BUSINESS
CASE UNDERWAY

BUILDING QUEENSLAND'S ROLE

ASSISTING
WITH DETAILED
BUSINESS CASE*

PLANNED STAGE END DATE

Q3 2017

ESTIMATED COST OF DELIVERY

\$740 MILLION**



NEED

After a period of high growth in the prisoner population, the capacity of the southern Queensland male high-security correctional facilities is constrained, with capacity exceeded by more than 25 per cent resulting in more than 2,000 prisoners sharing cells designed for single occupation.

PROPOSAL

The objective of the proposal is to improve safety and reduce pressure on existing facilities in southern Queensland.

Expansion of the Southern Queensland Correctional Precinct is being investigated as there is already a Master Plan for a larger facility at this site that could help to relieve capacity constraints at other facilities in southern Queensland. The proposal is investigating the construction of Stage 2 of the Southern Queensland Correctional Precinct near Gatton to provide a new 1,004 cell, high-security facility for male prisoners.

The project is expected to:

- » decrease violence between prisoners, and prisoners and staff
- » deliver more flexibility to manage the allocation of prisoners to the most appropriate facility
- » increase access to education, programs, and prison employment opportunities to provide employable skills and readiness for community reintegration in order to lower rates of recidivism
- » reduce strain on building facilities with less risk of service failures.

NEXT STEPS

Complete Detailed Business Case

**Detailed Business Case commenced prior to the establishment of Building Queensland.*

***Nominal cost in Australian dollars 2016, estimate provided by Responsible Agency.*

TOWNSVILLE EASTERN ACCESS RAIL CORRIDOR

RESPONSIBLE AGENCY

DEPARTMENT OF
TRANSPORT AND
MAIN ROADS

PROPOSAL STAGE OF DEVELOPMENT

DETAILED BUSINESS
CASE UNDERWAY

BUILDING QUEENSLAND'S ROLE

LEADING DETAILED
BUSINESS CASE

PLANNED STAGE END DATE

Q4 2017

ESTIMATED COST OF DELIVERY

\$500–\$700 MILLION*



NEED

Infrastructure constraints limit the use of longer trains on the existing rail network to the Port of Townsville. These constraints are impacting freight throughput on the road and rail networks, affecting the cost and efficiency of freight movements. The rail corridor requires trains to traverse the Townsville urban area to access the Port of Townsville, creating safety issues and congestion at open level crossings, and environmental and amenity issues in residential areas. Currently, 1,000-metre trains operating in the rail corridor must be broken up before entering the port precinct, which also contributes to the inefficient movement of trains.

PROPOSAL

The proposal is investigating options for a new freight rail link with greater capacity connecting the Mount Isa Line and North Coast Line, through the Townsville State Development Area to the Port of Townsville.

The project is expected to:

- » enhance regional development as well as state and national economic prosperity by effectively moving increasing volumes of freight—primarily for export
- » eliminate supply chain constraints and bottlenecks affecting the region's ability to expand its productive capacity
- » improve management of community amenity, safety, sustainability and congestion impacts associated with future increases in rail freight moving through the Townsville urban area
- » protect freight corridors for current and future use.

NEXT STEPS

Complete Detailed Business Case

**A range is provided by Responsible Agency based on 2011 Preliminary Business Case.*

BEAUDESERT WATER SUPPLY

RESPONSIBLE AGENCY

SEQWATER

PROPOSAL STAGE OF DEVELOPMENT

PRELIMINARY BUSINESS CASE COMPLETE

BUILDING QUEENSLAND'S ROLE

TO BE DETERMINED*

PLANNED STAGE END DATE

NOT APPLICABLE

ESTIMATED COST OF DELIVERY

\$70–\$130 MILLION**



NEED

The projected bulk water demand from the Beaudesert township is expected to exceed capacity by 2022 and increase significantly thereafter due to significant growth in the area, particularly within the Bromelton State Development Area. There is also significant growth predicted in the adjacent Logan City Council area of South Logan (including Yarrabilba and Flagstone).

Water supply to the Beaudesert township is currently provided by the Beaudesert Water Treatment Plant. The Plant is a stand-alone water supply that extracts raw water from the Logan River, which has highly variable water quality. It is not connected to the South East Queensland Water Grid. The Water Treatment Plant was refurbished in 2014 to increase its water treatment capacity to four megalitres per day.

PROPOSAL

The proposal investigated options to augment the bulk water supply for the region. Two strategic options were considered viable and investigated in more detail. These options included a new connection from the Southern Regional Water Pipeline to Beaudesert and a pipeline connection via a new Wyaralong Water Treatment Plant. Either would allow the existing Beaudesert Water Treatment Plant to be decommissioned.

Further investigation of corridor requirements has shown that the pipeline connection via a new Wyaralong Water Treatment Plant is the preferred strategic option. The Southern Regional Water Pipeline connection project would be delivered first to meet short-term needs in the Beaudesert area. The treatment plant project would then be delivered based on demand triggers.

The preferred option is expected to meet the future demand of the Beaudesert township and provide water supply security to growth areas in the Logan City Council area. It also has the strategic benefit of providing an additional source of water to the grid, increasing bulk water supply reliability in South East Queensland.

NEXT STEPS

Commence Detailed Business Case

**Building Queensland's role subject to further development of technical specifications.*

***A range is provided by Responsible Agency as a number of technical specifications are still being considered.*

BRUCE HIGHWAY—PINE RIVER TO CALOUNDRA ROAD INTERCHANGE UPGRADE

RESPONSIBLE AGENCY

DEPARTMENT OF
TRANSPORT AND
MAIN ROADS

PROPOSAL STAGE OF DEVELOPMENT

PRELIMINARY
BUSINESS CASE
UNDERWAY

BUILDING QUEENSLAND'S ROLE

ASSISTING WITH
PRELIMINARY
BUSINESS CASE

PLANNED STAGE END DATE

Q4 2017

ESTIMATED COST OF DELIVERY

TO BE DETERMINED*



NEED

The existing section of the Bruce Highway from Pine River to Caloundra Road lacks capacity to accommodate current morning and afternoon peak demand, resulting in congestion and an increase in motor vehicle incidents. The section of the Bruce Highway between Caboolture and Steve Irwin Way is also prone to flooding.

PROPOSAL

The proposal for the 60-kilometre section of the Bruce Highway from Pine River to Caloundra Road is likely to be progressed as a number of packages. Flood mitigation, road safety and capacity improvements will be investigated for this section of the highway.

A number of options will be considered across the packages including non-infrastructure solutions for existing assets, improvements to existing assets such as flood immunity and new assets such as additional lanes.

Each package is expected to:

- » improve transport system reliability and efficiency
- » improve safety outcomes through a reduction in the number and severity of crashes on the highway
- » improve flood immunity
- » support economic growth in the Sunshine Coast and Moreton Bay regions by more efficient transport.

NEXT STEPS

Complete Preliminary Business Case

**An estimate will be provided once the proposal has been developed further, as the project may be split into smaller packages of work.*

CABOOLTURE HOSPITAL REDEVELOPMENT

RESPONSIBLE AGENCY

QUEENSLAND HEALTH, METRO NORTH HOSPITAL AND HEALTH SERVICE

PROPOSAL STAGE OF DEVELOPMENT

PRELIMINARY BUSINESS CASE COMPLETE

BUILDING QUEENSLAND'S ROLE

TO LEAD DETAILED BUSINESS CASE

PLANNED STAGE END DATE

NOT APPLICABLE

ESTIMATED COST OF DELIVERY

\$240–\$260 MILLION*



NEED

The infrastructure at Caboolture Hospital is operating at capacity in a number of areas, and the hospital currently faces long Emergency Department waiting times and overcrowding. The current asset condition and functionality is not supporting the efficient and effective delivery of contemporary health services at the hospital. Forecast demand, driven by a growing and ageing population and high levels of chronic disease, is expected to place further pressure on the hospital.

PROPOSAL

The options investigated in the proposal include a combination of a new build and refurbishment of existing facilities. The preferred option is to construct a new outpatient building and adjacent car park, and refurbish the paediatric outpatient area to expand the Emergency Department on the existing Caboolture Hospital site.

The project is expected to:

- » improve community health outcomes
- » reduce travel cost for patients
- » increase workforce sustainability
- » improve operating efficiencies, safety and functionality of the hospital.

NEXT STEPS

Commence Detailed Business Case

**A range has been provided by the Responsible Agency as a number of options are still being considered.*

INTEGRATED CLIENT MANAGEMENT SYSTEM REPLACEMENT

RESPONSIBLE AGENCY

DEPARTMENT OF COMMUNITIES, CHILD SAFETY AND DISABILITY SERVICES

PROPOSAL STAGE OF DEVELOPMENT

PRELIMINARY BUSINESS CASE UNDERWAY

BUILDING QUEENSLAND'S ROLE

ASSISTING WITH PRELIMINARY BUSINESS CASE

PLANNED STAGE END DATE

Q3 2017

ESTIMATED COST OF DELIVERY

TO BE DETERMINED*



NEED

Sharing relevant information at the right time is critical to the safety and wellbeing of at-risk children and young people, as well as to maintain confidentiality of information.

Despite significant resources being spent on maintaining and upgrading the current Integrated Client Management System (ICMS), several opportunities for improvement have been identified. The technology is reaching the end of its useful life and integration with new technology (e.g. Windows operating systems and productivity tools) is becoming increasingly complex. Furthermore, there are opportunities to enhance information sharing capacity with other government and non-government organisations.

PROPOSAL

The proposal is investigating tranches of work to improve the delivery of frontline child safety and youth justice services for at-risk children and young people living in Queensland. In the current stage, solutions are being analysed with prototypes from vendors being considered.

The project is expected to:

- » improve capacity for more integrated, informed, prioritised and targeted service delivery to meet clients' core needs
- » combine cross-system targets and outcomes to improve collaboration amongst service providers
- » improve outcomes for children and young people, their families and the community
- » improve value for money in achieving business objectives, as service providers will be able to spend more time on individualised service delivery.

NEXT STEPS

Complete Preliminary Business Case

**An estimate will be provided once the proposal has been developed further.*

LOGAN HOSPITAL EXPANSION

RESPONSIBLE AGENCY

QUEENSLAND
HEALTH, METRO
SOUTH HOSPITAL
AND HEALTH SERVICE

PROPOSAL STAGE OF DEVELOPMENT

PRELIMINARY
BUSINESS CASE
COMPLETE

BUILDING QUEENSLAND'S ROLE

TO LEAD DETAILED
BUSINESS CASE

PLANNED STAGE END DATE

NOT APPLICABLE

ESTIMATED COST OF DELIVERY

\$260–\$280 MILLION*



NEED

The scope and scale of Logan Hospital's services and physical infrastructure are insufficient to meet existing demand. Factors driving this demand include a growing and ageing population, and disproportionate demand for emergency services. Capacity constraints have resulted in extended Emergency Department and outpatient waiting times, Emergency Department overcrowding and delays in provision of care.

PROPOSAL

The proposal investigates options to improve existing facilities by building a new Emergency Department either as a standalone facility or on top of existing buildings.

The project is expected to:

- » increase service access at Logan Hospital and reduce burden on out of locality services
- » reduce reliance on Emergency Department short-stay
- » improve facilities and health care services
- » improve work conditions for staff and staff retention
- » improve education opportunities.

NEXT STEPS

Commence Detailed Business Case

**A range is provided by Responsible Agency as a number of options are still being considered.*

M1 PACIFIC MOTORWAY—EIGHT MILE PLAINS TO DAISY HILL

RESPONSIBLE AGENCY

DEPARTMENT OF
TRANSPORT AND
MAIN ROADS

PROPOSAL STAGE OF DEVELOPMENT

PRELIMINARY
BUSINESS CASE
UNDERWAY

BUILDING QUEENSLAND'S ROLE

ASSISTING WITH
PRELIMINARY
BUSINESS CASE

PLANNED STAGE END DATE

Q3 2017

ESTIMATED COST OF DELIVERY

TO BE DETERMINED*



NEED

Traffic volumes on the M1 Motorway are exceeding capacity, causing extended periods of congestion on a daily basis. Forecast increases in travel demand will further extend traffic delays, increasing travel times, decreasing reliability and risking road safety on the 8-kilometre section of the M1 between Eight Mile Plains and Daisy Hill. Busway services use this section and forecast increases in traffic congestion will further impact bus travel time reliability and customer satisfaction. The cycle network is also disconnected on this section, reducing alternatives for local traffic.

PROPOSAL

The proposal is investigating the following options:

- » managed motorways, including ramp metering
- » eight-lane option on M1 Motorway
- » extension of the South East Busway to Springwood, including new cycle infrastructure.

The project is expected to:

- » improve motorway capacity, travel times, reliability and safety
- » optimise efficiency for freight and commercial transport
- » promote travel behaviour change and mode shifts to public and active transport.

NEXT STEPS

Complete Preliminary Business Case

**An estimate will be provided once the proposal has been developed further.*

M1 PACIFIC MOTORWAY—VARSITY LAKES TO TUGUN

RESPONSIBLE AGENCY

DEPARTMENT OF
TRANSPORT AND
MAIN ROADS

PROPOSAL STAGE OF DEVELOPMENT

PRELIMINARY
BUSINESS CASE
UNDERWAY

BUILDING QUEENSLAND'S ROLE

ASSISTING WITH
PRELIMINARY
BUSINESS CASE

PLANNED STAGE END DATE

Q4 2017

ESTIMATED COST OF DELIVERY

TO BE DETERMINED*



NEED

Traffic volumes on the 10-kilometre section of the M1 Motorway between Varsity Lakes and Tugun are exceeding capacity during the morning, afternoon, weekend and holiday periods causing high levels of congestion on a daily basis. Forecast increases in travel demand (including freight, tourism and airport related traffic) will further extend traffic delays, increasing travel times, decreasing reliability and risking road safety.

PROPOSAL

The proposal is investigating the following options:

- » managed motorways, including ramp metering
- » minor infrastructure upgrades
- » partial six-lane option on M1 Motorway.

The project is expected to:

- » improve capacity, travel times, reliability and safety
- » optimise efficiency for freight, commercial and tourism transport
- » allow for future provision and integration of a heavy rail extension south from Varsity Lakes Station.

NEXT STEPS

Complete Preliminary Business Case

**An estimate will be provided once the proposal has been developed further.*

PARADISE DAM—PRIMARY SPILLWAY IMPROVEMENT PROJECT

RESPONSIBLE AGENCY

SUNWATER

PROPOSAL STAGE OF DEVELOPMENT

PRELIMINARY BUSINESS CASE UNDERWAY

BUILDING QUEENSLAND'S ROLE

ASSISTING WITH PRELIMINARY BUSINESS CASE

PLANNED STAGE END DATE

Q4 2017

ESTIMATED COST OF DELIVERY

\$260 MILLION*



NEED

Paradise Dam is located approximately 80 kilometres south west of Bundaberg on the Burnett River. It is a key component of the Bundaberg Water Supply Scheme—holding up to 300,000 megalitres of water for the city of Bundaberg and farmland irrigation.

During the 2013 floods, extensive scour occurred downstream of the primary spillway. SunWater immediately repaired the scour and downstream toe of the dam, and investigated options to prevent scour occurring in future extreme weather events.

This investigation identified necessary improvements to the primary spillway. Improvement works are being proposed to maintain efficient and safe operation of the primary spillway during extreme weather events.

The Primary Spillway Improvement Project represents the highest priority for this storage beyond the works currently under construction, based on SunWater's portfolio risk assessment.

PROPOSAL

The proposal investigated options to improve the safety of Paradise Dam. Improvements to the primary spillway are proposed to prevent significant scour occurring downstream of the toe of the dam in major flood events. These works will address energy dissipation in the primary spillway and improve the primary spillway apron and dissipator.

Improvement works will ensure the dam continues to function as intended in line with best management practices for large dams, including guidelines from the Australian National Committee on Large Dams Incorporated (ANCOLD). Works are not expected to impact landholders adjacent to the dam, irrigation customers or recreational users wanting to access boat ramps, picnic areas and other dam amenities.

NEXT STEPS

Complete Preliminary Business Case

**Nominal Cost in Australian dollars 2015, estimate provided by Responsible Agency.*

PARADISE DAM—SECONDARY SPILLWAY IMPROVEMENT PROJECT

RESPONSIBLE AGENCY

SUNWATER

PROPOSAL STAGE OF DEVELOPMENT

PRELIMINARY BUSINESS CASE UNDERWAY

BUILDING QUEENSLAND'S ROLE

ASSISTING WITH PRELIMINARY BUSINESS CASE

PLANNED STAGE END DATE

Q4 2017

ESTIMATED COST OF DELIVERY

\$160 MILLION*



NEED

Paradise Dam is located approximately 80 kilometres south west of Bundaberg on the Burnett River. It is a key component of the Bundaberg Water Supply Scheme—holding up to 300,000 megalitres of water for the city of Bundaberg and farmland irrigation.

During the 2013 floods, extensive scour occurred downstream of the primary spillway. SunWater immediately repaired the scour and downstream toe of the dam, and investigated options to prevent scour from occurring in future extreme weather events.

This investigation identified necessary improvements to the secondary spillway. Improvement works are being proposed to maintain efficient and safe operation of the secondary spillway during extreme weather events.

The Secondary Spillway Improvement Project represents the second highest priority for this storage beyond the works currently under investigation, based on SunWater's portfolio risk assessment.

PROPOSAL

The proposal investigated options to improve the safety of Paradise Dam, including improvements to the secondary spillway to prevent significant scour in major flood events. Proposed upgrades include constructing a concrete apron and training wall in the secondary spillway to address the potential for scour.

The proposal will ensure the dam continues to function as intended in line with best management practices for large dams, including guidelines from the Australian National Committee on Large Dams Incorporated (ANCOLD). SunWater regularly conducts dam improvement projects in line with national industry guidelines to maintain safe and efficient dam operation.

NEXT STEPS

Complete Preliminary Business Case

**Nominal cost in Australian dollars 2015, estimate provided by Responsible Agency.*

PATIENT ADMINISTRATION SYSTEM REPLACEMENT PROGRAM

(FORMERLY QUEENSLAND CONNECTED PATIENT CARE PROGRAM)

RESPONSIBLE AGENCY	PROPOSAL STAGE OF DEVELOPMENT	BUILDING QUEENSLAND'S ROLE	PLANNED STAGE END DATE	ESTIMATED COST OF DELIVERY
QUEENSLAND HEALTH	PRELIMINARY BUSINESS CASE UNDERWAY	ASSISTING WITH PRELIMINARY BUSINESS CASE	Q3 2017	\$190 MILLION*



NEED

Queensland Health uses the Hospital Based Corporate Information System (HBCIS) as its Patient Administration System (PAS), to capture and manage both admitted and non-admitted patient, clinical and administrative data. HBCIS is an old system first implemented in the early 1980s using code that is now outdated and the system will not be supported after 2023.

In addition, integration with key systems such as integrated electronic Medical Record (ieMR), AUSLAB (Pathology Systems), i-Pharmacy and the Financial Management System presents major issues and impacts on workflow and productivity.

Queensland's healthcare system is evolving to patient-centric and accountable health management. HBCIS is not designed to support these evolving models of care.

PROPOSAL

The proposal is investigating replacement of HBCIS throughout Queensland Health's facilities with a contemporary patient administration solution. This would support contemporary models of healthcare and integrate effectively with key new capabilities provided by the ieMR, Financial System Renewal (FSR) and Laboratory Information System (LIS) programs.

The project is expected to:

- » improve patient flow through the healthcare system and patient safety through more effective measures to identify and manage patients
- » deliver better patient communication, reporting and analyses
- » enhance patient experience and patient choice
- » improve efficiency of resource allocation and support more accurate costing of activity and billing
- » reduce duplicate patient records.

NEXT STEPS

Complete Preliminary Business Case

**Nominal cost in Australian dollars 2016, estimate provided by Responsible Agency.*

PRINCESS ALEXANDRA HOSPITAL REHABILITATION FACILITY

RESPONSIBLE AGENCY

QUEENSLAND HEALTH, METRO SOUTH HOSPITAL AND HEALTH SERVICE

PROPOSAL STAGE OF DEVELOPMENT

PRELIMINARY BUSINESS CASE COMPLETE

BUILDING QUEENSLAND'S ROLE

TO LEAD DETAILED BUSINESS CASE

PLANNED STAGE END DATE

NOT APPLICABLE

ESTIMATED COST OF DELIVERY

\$150–\$250 MILLION*



NEED

The need for an infrastructure upgrade has been identified to provide for statewide spinal cord and brain injury rehabilitation as well as general rehabilitation services for patients utilising the Metro South Hospital and Health Service. This includes development of health solutions that provide flexibility to respond to changing models of care and future capacity growth.

PROPOSAL

The proposal is investigating options including improvement of existing buildings, construction of new buildings and/or purchasing of services through a service agreement.

Further development of the proposal will include site master planning and preparation of the project definition plan and schematic design.

The project is expected to:

- » reduce acute care type relative stay index
- » provide relief from bed block in the acute care setting within the main hospital
- » reduce in-hospital lengths of stay and hospital re-admissions
- » reduce risk of deconditioning
- » reduce entry numbers to higher levels of institutionalised care
- » reduce GP-type presentations to Emergency Departments as a proportion of total Metro South Hospitals Emergency Department activity
- » reduce Emergency Department re-admission rates and time between Emergency Department presentation and admission
- » reduce maintenance expenditure.

NEXT STEPS

Commence Detailed Business Case

**A range is provided by Responsible Agency as a number of options are still being considered.*

SUNSHINE MOTORWAY—MOOLOOLAH RIVER INTERCHANGE

RESPONSIBLE AGENCY

DEPARTMENT OF
TRANSPORT AND
MAIN ROADS

PROPOSAL STAGE OF DEVELOPMENT

PRELIMINARY
BUSINESS CASE
COMPLETE

BUILDING QUEENSLAND'S ROLE

TO LEAD DETAILED
BUSINESS CASE

PLANNED STAGE END DATE

NOT APPLICABLE

ESTIMATED COST OF DELIVERY

\$430 MILLION*



NEED

The existing Sunshine Motorway, Nicklin Way and Kawana Way transport infrastructure lacks capacity to accommodate forecast travel demand, resulting in significant congestion.

PROPOSAL

The proposal is investigating a range of roadworks in the area of the Mooloolah River Interchange of the Sunshine Motorway, including expanded lane connections, river crossings and intersection upgrades.

The project is expected to:

- » improve safety by reducing crashes and weaving behaviours at the Mooloolah River Interchange
- » increase capacity on the Sunshine Motorway between the Kawana Way interchange and the new Mooloolah River interchange
- » provide better connectivity between the Sunshine Coast University Hospital, Maroochydore, Kawana and Caloundra via a new Mooloolah River Crossing.

NEXT STEPS

Commence Detailed Business Case

**Nominal cost in Australian dollars 2015, estimate provided by Responsible Agency.*

NORTH LAKES MANGO HILL SECONDARY SCHOOL

(FORMERLY ADDITIONAL SECONDARY SCHOOLING CAPACITY NORTH OF BRISBANE)

RESPONSIBLE AGENCY

DEPARTMENT OF
EDUCATION AND
TRAINING

PROPOSAL STAGE OF DEVELOPMENT

STRATEGIC BUSINESS
CASE COMPLETE

BUILDING QUEENSLAND'S ROLE

TO ASSIST WITH
PRELIMINARY
BUSINESS CASE

PLANNED STAGE END DATE

NOT APPLICABLE

ESTIMATED COST OF DELIVERY

TO BE DETERMINED*



NEED

The capacity of the existing state schools in the area under investigation north of Brisbane is not considered sufficient to meet future enrolment demand. This area has experienced significant population growth over the past five years—particularly in the school-aged population. Rapid population growth is expected to continue due to the considerable degree of residential development in the area.

PROPOSAL

The proposal is investigating the delivery of additional state secondary schooling capacity for local students over the next five years. This may include augmenting the capacity of existing schools and/or delivering a new school.

The project is expected to:

- » improve educational outcomes
- » improve student wellbeing
- » improve teacher satisfaction
- » increase local accessibility to secondary education services.

NEXT STEPS

Commence Preliminary Business Case

**An estimate will be provided once the proposal has been developed further.*

SECTOR OBSERVATIONS

The application of our Business Case Development Framework is evident in our assessment of proposals for the Pipeline. Building Queensland has observed an increase in the number of proposals addressing strategic alignment and presenting a clearly articulated service need.

Continued improvement in the development of social infrastructure proposals, particularly around more thorough options analysis and attempts to quantify and monetise benefits, is being demonstrated by agencies.

In the Health sector, we have observed a couple of proposals where morbidity and mortality are being monetised as well as the benefits of reduced patient travel. This monetising of benefits helps inform important decisions around the infrastructure solution and timing. Furthermore, in our last report, we encouraged greater consideration of the wider system when

developing infrastructure proposals. Queensland Health has been responsive in this area. This has resulted in a number of Health proposals now being recognised as priority proposals.

Almost a fifth of projects in the Pipeline are from the Water sector both in South East Queensland and across the regions. Dams are long-life assets and require continual assessment, monitoring and maintenance. Factors like development and population growth, and new ways of estimating extreme weather events have affected the way dams are managed.



Burdekin Falls Dam (Image courtesy of SunWater)

PART 2: INFORMED DECISION-MAKING

The development of infrastructure proposals, decisions to invest and the delivery of projects is a lengthy and complex process. This section outlines some of the topical issues from proposal development to delivery.





IN-PRINCIPLE GOVERNMENT COMMITMENTS

An in-principle infrastructure funding announcement does not mean the project is shovel-ready. In fact, almost all announcements have caveats. As should be the case, many are subject to detailed analysis confirming the viability of an infrastructure project before a final investment decision is made.

In these cases, the process from government commitment to investment involves the development of a Detailed Business Case. Robust Business Cases enable final investment decisions to be made based on evidence to determine if they represent the best opportunity to address the service need.

Importantly, the Business Case considers economic benefits and the financial costs as well as social, environmental and sustainability impacts both in the short and long term. Items such as demand, pricing, funding and financing models, delivery and operating models, and costs, risks and benefits associated with the proposed infrastructure are all considered.

Not only should detailed financial and economic analysis be undertaken but there must be conversations with the community. Whether broad public consultation or targeted reference groups, stakeholder input is crucial

NULLINGA DAM PRELIMINARY BUSINESS CASE

In 2017, Building Queensland completed a Preliminary Business Case for Nullinga Dam, in consultation with the Department of Energy and Water Supply and SunWater.

The Preliminary Business Case was developed to implement a Queensland Government election commitment with Australian Government funding from the National Water Infrastructure Development Fund.

Building Queensland investigated the following options in detail:

- » reform options, including improvements to rules under the Mareeba Dimbulah-Water Supply Scheme (MDWSS) to increase operational performance
- » better use of and improvements to existing infrastructure, including upgrades to the MDWSS distribution system via targeted infrastructure works to reduce system losses and convert nominated loss allocations to new water allocations for sale
- » Nullinga Dam (design and build).

The Preliminary Business Case is now with the Queensland Government for consideration.

LOWER FITZROY RIVER INFRASTRUCTURE PROJECT

Building Queensland is leading the development of the Detailed Business Case for the Lower Fitzroy River Infrastructure Project. This project was referred to Building Queensland following the Australian Government's election commitment to provide conditional capital funding of \$130 million toward the project. Funding is subject to the outcomes of the Detailed Business Case among other matters, including the approved Environmental Impact Statement and matching funding commitments from the state.

The Lower Fitzroy River Infrastructure Project represents a potentially significant investment in water infrastructure in the region and careful consideration is prudent given the financial contribution that would also be required outside of the Australian Government commitment of \$130 million.

To ensure a robust assessment of demand occurred as part of the development of the Lower Fitzroy River Infrastructure Project Business Case, a national public Request for Information process was undertaken in April 2017 to test agricultural and industrial demand.

The information obtained from this process is being used to inform the development of the Detailed Business Case.



Fitzroy River (Image courtesy of Department of Natural Resources and Mines)

to the development of the Business Case and to confirm the social licence to operate within a community. After all, the whole idea behind infrastructure is to provide services to people across the state.

Like all capital purchases, infrastructure also requires ongoing funds for operation and maintenance. A new hospital not only costs a significant amount to build, but the operational costs of providing each bed is also substantial. These costs mean that it is important to get the size right; too small means the service needs are not being met and too large means that money is

being wasted on capacity that is not being fully utilised. A Detailed Business Case does this type of detailed analysis and recommends an approach with the best long-term value. Without this analysis, infrastructure solutions could be expensive to operate and maintain without providing enough value, such as social and environmental benefits, to justify the upfront and ongoing costs.

Government commitments were made in relation to the Cairns Shipping Development Project and Cairns Convention Centre Expansion in the 2017–18

Queensland Budget. Building Queensland will be involved in the development of Business Cases for these projects.

Business Case development takes time but infrastructure is a long-term investment and good proposal development ensures the forecasts of the future use of the asset are well scrutinised and the value of the investment is maximised.



Good proposal development ensures the forecasts of the future use of the asset are well scrutinised and the value of the investment is maximised.



SHARE OF INFRASTRUCTURE

Building Queensland's focus is on major infrastructure proposals with a minimum capital value of \$50 million.

In regional areas, infrastructure is tailored to cater for local demands, which are typically of a smaller scale and therefore may not reach the \$50 million

threshold to be assessed for inclusion in Building Queensland's Infrastructure Pipeline. Many of the infrastructure requirements in our regions are provided by local governments; again, these are not captured in our Pipeline.

It is important to understand that local services are also supported by regional centres with more specialised services, such as those offered by tertiary hospitals.

So, although a new health clinic is too small to appear in the Pipeline, rural residents benefit from larger hospitals which are assessed for the Infrastructure Pipeline. Take for example the Princess Alexandra Hospital Rehabilitation Facility. Although based in South East Queensland, if the project proceeds it will provide enhanced spinal cord and brain injury rehabilitation services for residents across the state.



Regions are getting a significant share of the infrastructure spend. All regional infrastructure may not be visible in the Pipeline; however, it is occurring as reported in the State Infrastructure Plan. With over 60 per cent of the population living outside of the greater Brisbane area, Queensland is Australia's most decentralised state. This is reflected in Queensland's Budgeted Capital expenditure in 2017–18, with 66 per cent allocated to areas outside of greater Brisbane (see Figure 3).

While this in part reflects the higher relative cost of providing these services in more remote areas, it does demonstrate a commitment to addressing the infrastructure requirements across the state.



Image courtesy of Tourism and Events Queensland

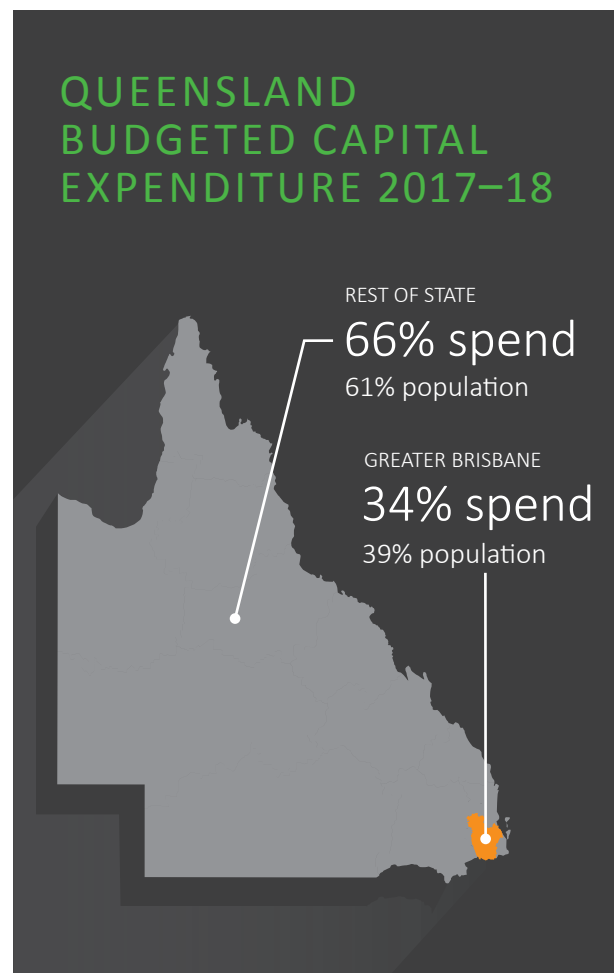


Figure 3. Queensland budgeted capital expenditure 2017–18. Population: Australian Bureau of Statistics, Estimated Resident Population, Statistical Areas Level 4, Queensland, 2006 to 2016. Expenditure: Queensland State Budget Capital Statement 2017–18, Capital Program.

CRITERIA FOR INCLUSION IN THE PIPELINE

For a proposal to be considered for inclusion in the Pipeline it must be:

- » estimated to have a minimum capital value of \$50 million
- » unfunded—proposals with a partial or full funding commitment for procurement or delivery are excluded
- » state government infrastructure proposal aligned to the sectors and asset classes in the State Infrastructure Plan—arts, culture and recreation, digital, education and training, energy, health, justice and public safety, social housing, transport and water.



DETAILED BUSINESS CASE TO DELIVERY

Once a Detailed Business Case has been finalised by Building Queensland, it is referred to the Queensland Government for investment consideration. At this point Building Queensland's role is complete. Once funded, the Responsible Agency is required to deliver the project.

The completed Detailed Business Case provides a recommendation on whether to proceed with a project, as well as the timing of when the investment is needed in line with forecast demand requirements.

Well-planned infrastructure projects have long lead times. Proposals that ultimately receive funding progress through several more stages after the completion of

the Detailed Business Case, which may include detailed design, legislative and regulatory approvals, land acquisitions, procurement and contract negotiations before construction begins.

It is often necessary to update and supplement previous analysis as a project moves into these stages. This means that the end solution may evolve from what was originally presented in the Detailed Business Case to mitigate risks and maximise benefits.

Once the contract has been awarded the project moves into the delivery stage—where the infrastructure solution is delivered. It is not until the project moves into operation that the community starts to experience the benefits of the investment—for example, health services from a new hospital.

A number of factors can influence the lead times associated with procurement and delivery. For example, when private sector financing is sought as part of the delivery model for a project, a more detailed approach may be required at the procurement stage to ensure value for money benefits are realised during the delivery, operations and maintenance stages of the project.

The realisation of social, economic and environmental benefits is a key reason investment in infrastructure is made. To enable effective planning for future infrastructure, it is important to measure how well current infrastructure is performing and whether new infrastructure delivers the intended benefits. This is commonly achieved through activities such as post-implementation evaluation.



Queensland State School



The realisation of social, economic and environmental benefits is a key reason investment in infrastructure is made.

Southern Queensland Correctional Centre (Image courtesy of Queensland Corrective Services)



BEERBURRUM TO NAMBOUR RAIL UPGRADE PROJECT

Building Queensland completed the Detailed Business Case for the Beerburrum to Nambour Rail Upgrade Project in December 2016. Rigorous demand analysis and modelling undertaken during the development of the Business Case indicated the freight train paths that meet supply needs are expected to reach capacity by 2023.

The indicative lead time for the project is five years including:

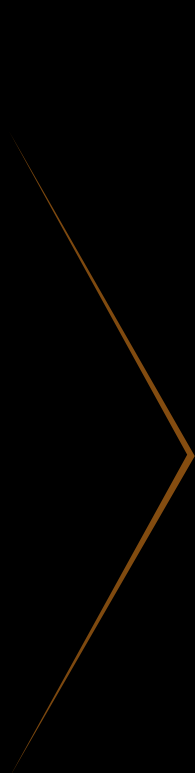
- » state and federal government deliberations and funding approvals—6 to 12 months
- » procurement, contract negotiations and award—12 to 18 months
- » detailed design, acquisitions and construction—36 months.

The project completion is anticipated to deliver requisite additional capacity which will provide freight operators with greater certainty to reliably meet logistic needs. It will also alleviate scheduling conflicts between passenger and freight services improving reliability for all services.

This proposal has been recommended to the Queensland Government as a priority given the lead times associated with project procurement and delivery.

< Spirit of Queensland on the Sunshine Coast (Image courtesy of Queensland Rail)







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