Building Queensland Independent Peer Review Cross River Rail Business Case

Building Queensland

Independent Peer Review – Cross River Rail Business Case

11 August 2017



## Key findings

First proposed in 2010, the Cross River Rail (CRR) Project is the Queensland Government's highest priority infrastructure project. It has been nominated as a high priority initiative by Infrastructure Australia recognising the Project's capacity to improve public transport, supporting growth in the state's economy.

Building Queensland completed a Detailed Business Case for the CRR Project in June 2016 (CRR Detailed Business Case 2016). On 13 June 2017, Building Queensland received a Ministerial Direction to prepare a Business Case for the CRR Project for public release (CRR Business Case). The Ministerial Direction requires Building Queensland to make the business case available in a form that facilitates public awareness of, and accessibility to, information about the CRR Project.

The Ministerial Direction also requires that the CRR Business Case incorporates, where appropriate, the impact of government policy decisions taken since the completion of the CRR Detailed Business Case 2016 (for example, the Queensland Government's *Fairer Fares* policy, and investment decision regarding the European Train Control System).

PwC Consulting (Australia) Pty Ltd (PwC) was engaged by Building Queensland to conduct an Independent Peer Review that considers whether the CRR Business Case satisfies the requirements of the Ministerial Direction. Our review is not a legal review, and does not constitute legal advice.

In completing this Independent Peer Review, PwC has considered the specific terms of the Ministerial Direction as well as provisions within the *Building Queensland Act 2015* and *Right to Information Act 2009* which support the proactive release of certain information whilst permitting the omission of certain information from public documents.

The Independent Peer Review found that the CRR Business Case meets the requirements of the Ministerial Direction. The document provides appropriate access to information and assists public awareness of the CRR Project, and reasonably omits information that is confidential or commercially sensitive.

Where information has been summarised in the CRR Business Case, this has been done in a way that provides an appropriate level of awareness and access to information for a public audience and given the current stage of the project.

Various policy and other changes have occurred since completion of the CRR Detailed Business Case 2016. Based on the information we have reviewed, the impact of these changes are reflected appropriately in the CRR Business Case. Revised economic analysis and patronage demand forecasting, as reflected in the CRR Business Case, are subject to separate independent peer review processes.

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## 1 Background

## 1.1 The Cross River Rail project

Public transport is a key enabler of successful and liveable metropolitan regions. Over the past seven years, various studies and business cases have reached the common conclusion that the continued growth and development of Brisbane's inner city, and broader regional population, employment and economic growth, will be limited if transport constraints are not addressed. Capacity on the inner city rail network, in particular, is a key constraint to the broader transport network's expansion.

The Cross River Rail (CRR) Project is a proposed 10.2km rail link, including 5.9km of twin tunnels, from Dutton Park in the south to Bowen Hills in the north which aims to address transport system constraints by providing extra capacity across this key north/south corridor. The proposed project includes:

- northern surface works consisting of a new track from the portal around the Exhibition Loop and through Mayne Yard
- underground stations at Boggo Road, Woolloongabba, Albert Street and Roma Street
- upgraded Dutton Park and Exhibition stations
- provision for additional stabling at Mayne Yard (North)
- provision of European Train Control System Level 2 (ETCS L2) through the tunnel and northern surface connection
- enabling works including ETCS L2 signalling from Dutton Park to Salisbury and southern platform
- faces for stations from Salisbury to Fairfield.

First proposed in 2010, the CRR Project is the Queensland Government's highest priority infrastructure project. It has been nominated as a high priority initiative by Infrastructure Australia<sup>1</sup> recognising the CRR Project's capacity to improve public transport, supporting growth in the state's economy. The Australian Government committed to fund the core CRR project in the 2013-14 Federal Budget, however, final agreement on funding was not reached with the Queensland Government.

In June 2016, Building Queensland, an independent statutory authority established under the *Building Queensland Act 2015*, completed the CRR Detailed Business Case 2016. The business case recommended that the Queensland Government proceed with the CRR Project. The business case was subsequently endorsed by the Queensland Government, and submitted to Infrastructure Australia, whose mandate is to prioritise and progress nationally significant infrastructure.

The 2017–18 Queensland State Budget provided a commitment from the Queensland Government to fully-fund the CRR Project, including a funding allocation of \$2.8 billion over the forward estimates. Implementation and delivery responsibility for the CRR Project has now transitioned to the recently established Cross River Rail Delivery Authority (CRRDA), the statutory authority that will be responsible for the further development, and procurement of the project.

<sup>&</sup>lt;sup>1</sup> Infrastructure Priority List – 24 July 2017, Infrastructure Australia,

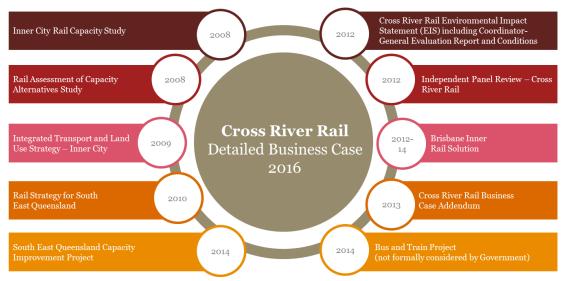
A summary of the project's development since June 2016 is summarised in the figure below. Policy and other changes that have occurred during this time, and their impacts are discussed in more detail in Chapter 2.



Source: CRR Business Case, adapted by PwC, 2017

In the seven years since the CRR Project was first proposed, a range of supporting and additional studies investigating solutions to South East Queensland's (SEQ) transport challenges have been completed, and ultimately informed the CRR Detailed Business Case 2016. These studies are outlined in the figure below.





Source: CRR Business Case, adapted by PwC, 2017

## 1.2 Cross River Rail Business Case

The CRR Business Case takes the CRR Detailed Business Case 2016 as its base. Financial and economic analysis has been updated to reflect the impact of a number of policy and other changes since June 2016. Information that is not necessary to facilitate public awareness and accessibility to information about the project, or not appropriate for public release for commercial or legal reasons, at this stage of the CRR Project's development, has been omitted.

### 1.3 Independent Peer Review report

#### 1.3.1 June 2017 Ministerial Direction

On 13 June 2017, Building Queensland received a Ministerial Direction from the Deputy Premier, Minister for Transport and Minister for Infrastructure and Planning to prepare a Business Case for the CRR Project for public release (CRR Business Case). A copy of the Ministerial Direction is included at Attachment A.

The Deputy Premier, Minister for Transport and Minister for Infrastructure and Planning directed Building Queensland that the document be made available in a form that facilitates public awareness of, and accessibility to information about the CRR project. The Ministerial Direction also notes the CRR Business Case should reflect the most up to date information on the project.

Specifically, this requires that key policy decisions since the completion of the CRR Detailed Business Case 2016 should be considered and incorporated in the CRR Business Case. This includes the impacts associated with:

- the European Train Control System (ETCS) Inner City project being part of the project Base Case
- the introduction of the Queensland Government's Fairer Fares policy
- updated demographic data
- revised economic and demand analysis.

#### 1.3.2 PwC Independent Peer Review

PwC was engaged by Building Queensland to conduct an Independent Peer Review to consider whether the CRR Business Case complies with the requirements of the Ministerial Direction and provides an appropriate level of transparency.

To conduct the review, PwC was given confidential access to the documents outlined below. We did not review any other business case documents, or the assumptions, costings and outcomes therein.

- Draft CRR Business Case
- CRR Detailed Business Case 2016
- CRR Patronage Modelling Peer Review Report
- Economics Peer Review Report.

Initial findings from this Independent Peer Review were provided to Building Queensland and incorporated in the development of the final CRR Business Case.

Our review is not a legal review, and does not constitute legal advice.

### 1.3.3 The Independent Peer Review in context

Accountability is fundamental to good governance in modern open societies. Accountability enhances public confidence in government and the public sector and helps to ensure that government is responsive to the public. In turn, transparency plays an important role building trust and accountability.

Modern, efficient infrastructure underpins the economic health of modern societies, supporting the economy, improving productivity, and providing access to opportunities to build stronger and safer communities. Improving infrastructure networks can be a hugely expensive task. At the same time, the impact of well-designed and well-delivered infrastructure can be significant: transforming neighbourhoods and cities; underpinning water security; and powering homes, factories and offices.

Stakeholders increasingly expect greater transparency and are placing additional scrutiny on infrastructure decisions. Improved transparency of infrastructure decisions is therefore important to build accountability for investment decisions, support public and stakeholder appreciation of complex infrastructure issues at sectoral and project levels, and enable better understanding of investment decisions planned by governments.

However, transparency must be balanced against a range of other factors, in particular the stage of a project in its overall lifecycle, and sensitive information that, for legal or other reasons, may not be appropriate for public release. The balance is between releasing sufficient information to inform an understanding of how decisions relating to the relevant proposal are being made, without compromising or confusing future project phases or legislative requirements.

#### 1.3.4 Legislative framework

In addition to the Ministerial Direction, when developing the CRR Business Case, Building Queensland must be mindful that the next major stage of the project will involve its procurement. Certain information may prejudice a future commercial outcome, and certain confidential information may not be appropriate for public release.

Provisions within the *Building Queensland Act 2015* (BQ Act 2015) and *Right to Information Act 2009* (RTI Act 2009) guide an understanding of information that may not be appropriate for public release. These provisions have also formed part of PwC's peer review framework.

In reviewing the CRR Business Case against the Minister's direction for it to be in a form that facilitates public awareness of, and accessibility to information, we also considered if the reason for omission of certain information is in line with the provisions of the BQ Act 2015 and/or RTI Act 2009.

#### 1.3.5 Summarising information

Finally, business cases, particularly those for complex major projects, are necessarily highly detailed, and often supported by detailed analytical and technical appendices. A very detailed level of technical information is required to support an investment decision, justify the investment, and ensure the delivering agency is appropriately prepared to deliver the project. However, very complex and technical detail can work against transparency, making it difficult for non-expert audiences to understand how different project characteristics have been assessed and project options compared.

To ensure that the CRR Business Case facilitates public awareness of, and accessibility to information, it is appropriate for Building Queensland to summarise certain information or analysis, which may be useful for the internal workings of government, and to support future potential audits of the project, but not necessary for the CRR Business Case.

In assessing the CRR Business Case against the Minister's Direction, we considered if information that has been summarised still provides an appropriate level of public awareness and access to information about the CRR project.

The Independent Peer Review did not assess the CRR Business Case against Building Queensland's *Detailed Business Case Framework*, as the context and purpose of the document is different to a Detailed Business Case.

#### 1.3.6 About this document

This report provides an outline of the approach to and outcomes of our Independent Peer Review.

Chapter 2 describes the policy and other changes that have occurred since June 2016 and how they have impacted the CRR Business Case.

Chapter 3 provides more details about the approach and assessment framework adopted for this Independent Peer Review as well as our findings on whether the CRR Business Case meets the requirements of the Ministerial Direction.

## 2 Updating the Cross River Rail Detailed Business Case 2016

### 2.1 Background

In June 2016, Building Queensland published a summary of the CRR Project on its website with information from the CRR Detailed Business Case 2016. This summary outlined a total project cost of \$5.4 billion (nominal) and included a cost and benefit summary, identifying a benefit-cost ratio (BCR), excluding wider economic benefits, of 1.21. Wider economic benefits were separately quantified at \$1,209 million.

Since the completion of the Detailed Business Case in June 2016, and following the transfer of responsibility for the project to the CRRDA, policy and other changes have occurred which impact the CRR Project business case. This is common for projects of this size and nature.

The Ministerial Direction requires that the CRR Business Case provides awareness and access to information about the project, and to the extent that policy and other changes impact the CRR Detailed Business Case 2016, these changes must be reflected in the document. A summary of each change, their impact on the business case, and how they have been addressed, is provided below.

#### 2.1.1 Other reviews

The following separate independent peer reviews have also been undertaken by other advisors:

- **Economics Peer Review (Douglas Economics)** augmenting the economic independent peer review report from the CRR Detailed Business Case 2016, the economics peer review provides independent and expert advice on an update to the economic appraisal completed in November 2016, which forms the basis for the CRR Business Case.
- **CRR Patronage Modelling Peer Review (Bitzios Consulting)** A peer review of the patronage modelling undertaken, including updates subsequent to the June 2016 *Fairer Fares* policy, to assess the suitability of the transport model.

### 2.2 Policy and other changes since 2016

#### 2.2.1 European Train Control System (ETCS)—Inner City

In June 2016, the Queensland Government approved the ETCS – Inner City Project to proceed to procurement. The economic appraisal conducted for the CRR Detailed Business Case 2016 did not include the ETCS – Inner City Project as part of the central (or 'most likely') case, given the project was unapproved at the time. However, the ETCS – Inner City Project was included in other economic scenarios to better understand its potential impact.

*Impact on business case and key metrics:* ETCS is now assumed as part of the central case and as such, impacts the results of project benefits assessed in Chapter 6 and cost benefit analysis outlined in Chapter 7 of the CRR Business Case.

#### 2.2.2 Fairer Fares

In June 2016, a SEQ Fare Review was completed and the Queensland Government announced its *Fairer Fares* policy. *Fairer Fares* includes a simplified public transport zoning structure and reduced fare levels to make fares more affordable for commuters. The CRR Detailed Business Case 2016 used the previous public transport zone system and fares as the basis for forecasting patronage numbers.

*Impact on business case and key metrics:* The updated transport zone system and fares now form the basis for forecasting patronage and as such, impacts the project benefits outlined in Chapter 6 and the cost benefit analysis outlined in Chapter 7 of the CRR Business Case.

#### 2.2.3 Updated Demographic Data

In April 2016, Queensland Treasury released revised demographics (population and employment) for the region (*Population growth highlights and trends, Queensland, 2016 edition*). Due to timing constraints, the previous set of demographics was used as the basis for analysis in the CRR Detailed Business Case 2016. This impacts quantification of the benefits of the project, as well as revenue estimates.

*Impact on business case and key metrics:* The updated demographic data now forms the basis of project benefits outlined in Chapter 6 and cost benefit analysis outlined in Chapter 7 of the CRR Business Case.

#### 2.2.4 TMR Change Request

On 5 December 2016, TMR lodged a request for project change with the Coordinator-General. It outlined the key changes made to the CRR Project since 2011, the potential impacts of these changes on the natural environment and surrounding communities and how they would be managed.

The proposed changes included:

- reducing the total project length from 18 kilometres to 10.2 kilometres, including some alterations to the underground alignment of the tunnel
- reducing the extent of underground tunneling from 10 kilometres to 5.9 kilometres
- changing the location of the southern and northern portals
- slightly altering the location of the proposed Albert Street, Boggo Road, Woolloongabba, Roma Street and Exhibition stations
- pedestrianising sections of Albert Street between Charlotte Street and Elizabeth Street
- changing the tunnel construction method from bored to mined for some sections
- reducing the number of surface properties requiring acquisition from 108 to 29 (no residential properties are now required)
- demolishing the Brisbane Transit Centre (West) building due to the realignment of Roma Street Station
- increasing the number of spoil placement locations from one (Swanbank) to five potential sites (Brisbane Airport, Swanbank, Pine Mountain, Larapinta and Port of Brisbane).

In June 2017, the Coordinator-General published an evaluation of the proposed project changes. The *Cross River Rail Project: Coordinator-General's Change Report* (Change Report) concluded that the changes to the CRR Project, together with amended conditions imposed in the report, would result in acceptable overall outcomes. The Change Report,

including details of conditions and recommendations, can be found on the Department of State Development webpage<sup>2</sup>.

*Impact on business case and key metrics:* The change request is reflected in the reference project described throughout the CRR Business Case, and in particular Chapter 5.

#### 2.2.5 Summary of changes since the CRR Detailed Business Case 2016

Table 1 summarises policy or other changes since June 2016 and the impact of these changes on the CRR Business Case.

Based on our review of the CRR Detailed Business Case 2016 and other documentation provided to PwC by Building Queensland, these policy and other changes described above have been reflected appropriately in the document.

#### Table 1Policy and other changes since June 2016

Policy or other change	Summary of key chapters impacted in CRR Business Case	Change reflected in CRR Business Case
European Train Control System (ETCS) — Inner City	Chapter 6 - Project Benefits Chapter 7 – Economic Analysis	✓
Fairer Fares Policy	Chapter 6 - Project Benefits Chapter 7 – Economic Analysis	✓
Updated demographic data	Chapter 6 - Project Benefits Chapter 7 – Economic Analysis	$\checkmark$
TMR change request	Chapter 5 – Reference Project Chapter 7 – Economic Analysis Chapter 12 – Financial and Delivery Model Analysis	✓

Source: PwC, 2017

<sup>&</sup>lt;sup>2</sup> https://www.statedevelopment.qld.gov.au/

### 2.3 Previous reports

In late June 2012, a capital cost for the CRR Project of \$4.4 billion was announced publicly by the Queensland Government and reflected in Infrastructure Australia's publicly available assessment of the project. This represented a P90 estimate, in 2010 dollars. Infrastructure Australia's assessment reports a BCR of 1.34, excluding wider economic benefits.

Infrastructure Australia's assessment was based on the original scope of the CRR Project which included 10 kilometres of twin single track tunnels between Yeerongpilly and Victoria Park, and development of four new underground stations along the tunnel - in Woolloongabba, Boggo Road, Albert Street and Roma Street.

In addition to the core project, the full CRR solution at the time included:

- New surface stations at Yeerongpilly and Exhibition;
- Minor station upgrades at Moorooka and Rocklea; and
- 5 kilometres of additional corridor surface tracks from Yeerongpilly to south of Salisbury (including 4 kilometres of additional freight track, 3 kilometres of two additional passenger tracks and various track realignments).

The revised capital cost and BCR as presented in the CRR Business Case are based on a different scope of works (relative to the 2012 - CRR Business Case), and include the impacts of policy and other changes described above (relative to the CRR Detailed Business Case 2016).

#### Table 2 Changes to key project metrics

Document	P90 Capital Cost	BCR (excluding WEBs) <sup>3</sup>
2012 CRR Business Case	\$4.4 billion (2010 dollars)	1.34
CRR Detailed Business Case 2016	\$5.4 billion (nominal)	1.21
CRR Business Case	\$5.4 billion (nominal)	1.41

Source: Infrastructure Australia website, Building Queensland website, CRR Business Case, 2017.

<sup>&</sup>lt;sup>3</sup> Wider Economic Benefits, a particular type of economic benefits typically quantified separately in a transport costbenefit analysis.

## 3 Independent Peer Review of the Cross River Rail Business Case

### 3.1 Developing the CRR Business Case

Building Queensland was directed to develop a business case that *facilitates public awareness of, and accessibility to information about* the CRR project. This has formed the overarching framework for the Independent Peer Review of the CRR Business Case.

The scope of the CRR Business Case — to facilitate public awareness, and accessibility to information about the project — means Building Queensland may reasonably omit certain information that does not serve this purpose. However, it is important to be mindful that the public includes a range of stakeholders, from the general public to infrastructure delivery market participants. Different audiences will have different interests in the document.

The Ministerial Direction also requires that Building Queensland should, in preparing the CRR Business Case, incorporate where appropriate the impact of government policy decisions taken since the completion of the CRR Detailed Business Case 2016. Our assessment of this aspect of the Ministerial Direction is outlined in Chapter 2.

In developing the CRR Business Case, Building Queensland must be mindful that the next major stage of the project will involve its procurement. Certain information may prejudice a future commercial outcome, and certain confidential information may not be appropriate for public release.

Provisions within the BQ Act 2015 and RTI Act 2009 guide an understanding of information that may not be appropriate for public release and/or are not necessary to provide public awareness and accessibility to information. A number of chapters contain information of this nature and as such, the Independent Peer Review has included an assessment of the specific provisions within both Acts, and whether an appropriate level of information has been omitted in the CRR Business Case. Specific provisions are outlined below.

#### 3.1.1 Building Queensland Act 2015

Principles for omission of information from the CRR Business Case are provided within the BQ Act 2015 and summarised below.

Confidential information is defined as any information that

- could identify an individual
- is about a person's current financial position or financial background
- would be likely to damage the commercial activities of a person to whom the information relates
- could compromise the security of a public facility.

Confidential information does not include

• information that is publicly available

• statistical or other information that could not reasonably be expected to result in the identification of the individual to whom it relates.<sup>4</sup>

#### 3.1.2 Right to Information Act 2009

Principles for the omission of information from the CRR Business Case are also provided within the RTI Act 2009 and summarised below.

#### Table 3 RTI Act 2009 – summary of relevant provisions

Public Interest – information that may	<b>Commercial</b> – information that may
<ul> <li>impede the administration of justice generally, including procedural fairness</li> <li>impede the protection of the environment</li> <li>prejudice the economy of the State</li> <li>prejudice the conduct of investigations, audits or reviews by the ombudsman or auditor-general</li> <li>prejudice the management function of an agency or the conduct of industrial relations by an agency</li> <li>prejudice a deliberative process of government</li> <li>if disclosure of information is prohibited by</li> </ul>	<ul> <li>prejudice the collective responsibility of Cabinet or the individual responsibility of members to Parliament</li> <li>prejudice the private, business, professional, commercial or financial affairs of entities</li> <li>prejudice trade secrets, business affairs or research of an agency or person</li> <li>prejudice an Agency's ability to obtain confidential information</li> <li>prejudice the competitive commercial activities of an agency.</li> </ul>
an Act.	
Public safety – information that may	<b>Others</b> – information that may
<ul> <li>prejudice security, law enforcement or public safety</li> </ul>	• prejudice the protection of an individual's right to privacy
<ul> <li>prejudice the security or good order of a corrective services facility</li> <li>prejudice the flow of information to the police or another law enforcement or regulatory agency.</li> </ul>	<ul> <li>prejudice the fair treatment of individuals and the information is about unsubstantiated allegations of misconduct or unlawful, negligent or improper conduct</li> <li>impede the administration of justice for a person</li> <li>prejudice intergovernmental relations</li> <li>prejudice the effectiveness of testing or auditing procedures and the disclosure of the information could reasonably be expected to impact on the deceased person? privacy if the deceased person were alive</li> </ul>

Source: RTI Act 2009 Schedule 4, summarised by PwC

#### 3.1.3 Other public business cases

Across Australia, there has been a trend towards greater transparency and publication of business case summaries and information. To inform our review, we also considered the level of information disclosure provided in other comparable large public transport business cases, specifically:

- Melbourne Metro Business Case February 2016
- Sydney Metro City and Southwest Final Business Case Summary October 2016
- Brisbane Metro Business Cases May 2017

<sup>&</sup>lt;sup>4</sup> Building Queensland Act 2015 Schedule 1

# 3.2 Independent Peer Review detailed assessment

The Ministerial Direction formed the basis of the Independent Peer Review assessment. The RTI Act 2009 and BQ Act 2015 also formed part of the assessment framework. We reviewed the CRR Business Case in the context of the information provided in the CRR Detailed Business Case 2016, and policy and other decisions subsequent to that assessment.

The Independent Peer Review found that the CRR Business Case meets the requirements of the Ministerial Direction. The document provides appropriate access to information and public awareness of the CRR Project, and reasonably omits information that is confidential or commercially sensitive.

Where information has been summarised in the CRR Business Case, this has been done in a way that provides an appropriate level of awareness and access to information for a public audience and given the current stage of the project.

Various policy and other changes have occurred since completion of the CRR Detailed Business Case 2016. Based on the information we have reviewed, the impact of these changes are reflected appropriately in the CRR Business Case. We note that revised economic analysis and patronage demand forecasting, as reflected in the document, have been subject to separate independent peer review processes.

In general, the CRR Business Case provides a similar level of awareness and access to other comparable large public transport business cases or summaries, and in some cases provides more detailed information.

Chapter-specific findings of PwC's Independent Peer Review are summarised in the table below.

Table 4	Independent l	Peer Review assess	sment of the CRR Business Case
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CRR Business Case	Meets the requirements of the Ministerial Direction	Summary assessment commentary
Executive Summary		The Executive Summary provides a summary of key aspects of the CRR Project which are then discussed in detail throughout the remainder of the document. It provides summary information regarding the project and its benefits in an accessible format.
	$\checkmark$	The Executive Summary meets the requirements of the Ministerial Direction by providing appropriate awareness of, and access to information about the project. The content is accessible and outlines many of the key points which are discussed in detail in later chapters of the document.
		The analysis presented in the Executive Summary has been updated to reflect policy and other changes since June 2016.
		Public business cases for similar major rail projects provide a comparable level of information within an introductory or executive summary chapter.
Chapter 1 – Project Background	✓	The chapter provides a detailed overview of the history of the CRR Project including previous studies, reports and business cases completed that identified the CRR Project as the preferred infrastructure solution and confirmed the strategic need for the project, and related projects that may be impacted by, or have an impact on, the delivery of the CRR Project.
		The chapter meets the requirements of the Ministerial Direction by providing awareness of, and access to information about the project background, which largely reflects the CRR Detailed Business Case 2016.
		The background presented in the chapter has been updated to reflect and explain policy and other changes since June 2016.
		Public business cases for similar major rail projects include a similar level of detail to the CRR Business Case.

CRR Business Case	Meets the requirements of the Ministerial Direction	Summary assessment commentary
Chapter 2 - Strategic Context	✓	The chapter outlines a detailed strategic analysis of the strategic context within which the CRR Project is being developed, including an overview of the forecast economic drivers of demand impacting current and future transport service needs for the SEQ region. The chapter confirms a strategic need for transport infrastructure investment, and alignment with relevant government objectives and policies.
		The chapter meets the requirements of the Ministerial Direction by providing awareness of, and access to information about the strategic context for the project, which largely reflects the CRR Detailed Business Case 2016.
		The strategic and policy context presented in the chapter has been updated to reflect policy and other changes since June 2016.
		Public business cases for similar major rail projects include a similar level of detail to the CRR Business Case.
Chapter 3 – Problem	✓	The chapter outlines the problems to be addressed by the CRR Project. The problems to be addressed by the project have been investigated at three levels, being strategic problems facing SEQ, transport problems facing SEQ and rail problems facing the SEQ network. Clearly explaining the problem or opportunity is critical to the document as it provides the context for the proposed project, why investment is needed, and what problems it aims to solve.
		The chapter meets the requirements of the Ministerial Direction by identifying and articulating the problems to be addressed by the project including a discussion on the strategic context which is driving the need for change, lost opportunities from continuing with the status quo and current and future capacity constraints.
		Public business cases for similar major rail projects include discussion on the problem or opportunity, though some focus more on benefits of the project. The inclusion of a specific chapter in the CRR Business Case regarding the problem, in addition to a chapter on project benefits (Chapter 6) provides a broader understanding of the need for the investment.

CRR Business Case	Meets the requirements of the Ministerial Direction	Summary assessment commentary
Chapter 4 – Options Analysis	✓	The chapter summarises investment options analysed to address the problems defined in Chapter 3. The analysis draws on processes undertaken during the seven years that the project has been under development and brings this together within an options assessment.
		The assessment confirms an infrastructure investment focused on a rail public transport solution as the preferred option, with the CRR Project confirmed as the preferred approach.
		The chapter meets the requirements of the Ministerial Direction by outlining the approach taken to identify, assess and confirm options, the assessment of rail investment options, and the assessment of options regarding the key CRR Project characteristics including alignment and station locations. A relatively detailed explanation is provided for each of these processes.
		Public business cases for similar major rail projects provide varying degrees of information about options analysis. The CRR Business Case is at the upper end of the spectrum in terms of the level of detail included.
Chapter 5 – Reference Project	✓	The chapter provides a detailed technical description of what the project will and will not include (i.e. the scope of the Reference Project). The Reference Project is used as the base for further investment analysis throughout the document. The Reference Project reflects the most current project design.
		The chapter meets the requirements of the Ministerial Direction, providing awareness and access to information by explaining the individual project components in a relatively high level of detail.
		Public business cases for similar major rail projects provide varying degrees of information about the Reference Project. The CRR Business Case is at the upper end of the spectrum in terms of the level of detail included.

CRR Business Case	Meets the requirements of the Ministerial Direction	Summary assessment commentary
Chapter 6 – Project Benefits	$\checkmark$	This chapter details the benefits expected to be realised by the CRR, including city-building, transport and economic benefits.
		This chapter meets the requirements of the Ministerial Direction by outlining the range of benefits expected to accrue as a result of the CRR.
		The chapter does not include detailed projected residential dwellings and employment growth around CRR stations, and results of concept level development opportunities, both of which may prejudice future commercial negotiations. Some detail around the modelling methodology has been omitted as this level of detail is not necessary for public awareness.
		The analysis reflects the impacts of policy and other changes since June 2016, including approval of ETCS.
		Public business cases for similar major rail projects include a similar level of detail to the CRR Business Case.
Chapter 7 – Economic Analysis	$\checkmark$	This chapter presents an analysis of the economic benefits of the CRR. This includes a Cost Benefit Analysis (CBA) both with and without Wider Economic Benefits (WEBs) and an economic impact assessment.
		This chapter meets the requirements of the Ministerial Direction as it provides access to information and awareness about the results of the economic analysis. Detailed costs and some detailed analysis has been omitted. However, the public reader is still able to judge the robustness of the underlying analysis given it has been independently peer reviewed.
		The analysis reflects the impacts of policy and other changes since June 2016.
		The level of detail also is comparable to that provided in similar public rail project business cases.

CRR Business Case	Meets the requirements of the Ministerial Direction	Summary assessment commentary
Chapter 8 – Policy and Legislative Framework	~	The chapter identifies the state and federal government policies that may impact the procurement and operation of the CRR. The chapter also provides an outline of the legislative framework that applies to the CRR Project, including consideration of issues relating to planning approvals, environmental legislation, industrial relations, rail safety and accreditation, property, native title and cultural heritage.
		The chapter meets the requirements of the Ministerial Direction by indicating that project will be progressed in accordance with the relevant policies and legislative frameworks.
		In developing this chapter of the CRR Business Case, it is important to be mindful of information that might be considered sensitive from a legal perspective (i.e. privileged advice). Information of this nature has been appropriately omitted from the document. Note that this Independent Peer Review does not constitute a legal advice and where matters have been excluded for legal reasons, we have not undertaken a legal analysis of that decision.
		The analysis presented in the chapter has been updated to reflect policy and other changes since June 2016.
		Public business cases for similar major rail projects include varying degrees of discussion about policy interest and legislative considerations. The CRR Business Case is at the upper end of the spectrum in terms of the level of detail included.
Chapter 9 – Public Interest Considerations	✓	The chapter outlines stakeholders and potential impacts the CRR Project may have on them, as well as other public considerations such as public access and equity, accountability and transparency, consumer rights, safety and security, privacy. The overarching objective of the chapter is to assess whether the CRR Project, as defined in the business case, is in the public interest, and on balance, provides equitable outcomes for stakeholders.
		The chapter meets the requirements of the Ministerial Direction by outlining Building Queensland's assessment of the project against each of the public considerations mentioned above, supporting public awareness of this evaluation process and access to information.
		The chapter reflects relatively minor updates to reflect the completion of a further round of community consultation and the passage of the Co-ordinator General's Change Report which occurred after June 2016.
		Public business cases for similar major rail projects include varying degrees of discussion about public interest considerations, however none provide for a dedicated chapter.

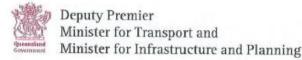
CRR Business Case	Meets the requirements of the Ministerial Direction	Summary assessment commentary
Chapter 10 – Sustainability Assessment	✓	The chapter discusses sustainability considerations relevant to the CRR Project. It includes an outline of the approach and outcomes of Building Queensland's detailed sustainability assessment which found that overall, the Reference Project will contribute to positive economic, environmental and social outcomes.
		The chapter meets the requirements of the Ministerial Direction by supporting awareness of and access to information about the sustainability assessment process and results. This chapter of the CRR Business Case is largely the same as the CRR Detailed Business Case 2016.
		The analysis presented in the chapter has been updated to reflect policy and other changes since June 2016.
		By comparison to other public business cases for major rail projects, the chapter provides substantially more information.
Chapter 11 – Risk Analysis	4	The chapter summarises the outcomes of the risk analysis undertaken for the CRR Project, which will inform the risk management strategy required to deliver the CRR Project. This includes a detailed outline of the process and results of Building Queensland's risk assessment, with the exception of the results of quantifying those risks.
		The chapter meets the requirements of the Ministerial Direction, providing a relatively high level of awareness and access to information. It does so by stepping the reader through the qualitative risk assessment undertaken, explaining the risks that have been identified, and their potential impact on the project.
		Omission of quantitative risk analysis is appropriate given this information may prejudice a future commercial outcome by indicating to the market the State's budgeted assumptions about risk and therefore impact the State's ability to achieve value for money. Risk quantification is reflected in the outturn cost for the project, discussed in Chapter 14 of the document.
		Public business cases for similar major rail projects provide varying degrees of information about risk analysis, but consistently remove quantitative analysis.

CRR Business Case	Meets the requirements of the Ministerial Direction	Summary assessment commentary
Chapter 12 – Financial and Delivery Options Analysis	$\checkmark$	The chapter combines information about the financial costs of the CRR Project and activities undertaken relating to packaging and delivery options.
		Discussion about financial aspects of the project have been appropriately summarised to provide the reader with an understanding of how the costs were built up, and the key elements that make up the capital cost. High level information is provided about the estimated ongoing costs including scheduled lifecycle replacement costs.
		Discussion about activities relating to packaging and delivery options includes an outline of the available packaging options and the criteria adopted to select a preferred option.
		The chapter meets the requirements of the Ministerial Direction by providing an appropriate level of awareness and access to information about financial costs, and packaging and delivery options, given the stage of the project (pre-procurement). We note that the final packaging and delivery model is subject to further work being undertaken by the CRRDA.
		In developing this chapter it is important to consider information may prejudice a future commercial outcome. The omission of detailed cost elements is appropriate as this allows the State to negotiate around these elements during the procurement phase, while working within the overall cost envelope on which the business case is based.
		Detailed analysis about packaging and delivery options was informed by a market sounding process where participants provided information on a commercial-in-confidence basis which is therefore not appropriate for public release.
		Public business cases for similar major rail projects provide a similar level of information about financial and delivery options analysis, though each presents the information in a different format.

CRR Business Case	Meets the requirements of the Ministerial Direction	Summary assessment commentary
Chapter 13 – Value Creation and Sharing Assessment	~	The chapter outlines the approach and outcomes of the value creation and sharing assessment which identified opportunities for value sharing (value capture) and alternate funding that could contribute to financing the up-front or ongoing costs of the CRR Project.
		The chapter meets the requirements of the Ministerial Direction by providing an appropriate level of awareness and access to information about value sharing investigations, summarising background information on value capture policy, providing general descriptions of mechanisms that could be available to capture value, and the principles that would be applied in determining their suitability. The CRR Detailed Business Case 2016 contained a more detailed analysis of potential revenue mechanisms. Subsequently, the Queensland Government has committed to fully fund the CRR project. The CRR Business Case notes the Government's position that no new value sharing mechanisms are required to be further assessed for the project to proceed to procurement and delivery, but that value uplift to government-owned land within the CRR Priority Development Areas around station precincts presents a potential opportunity to contribute to project funding. Public business cases for similar major rail projects provide a similar level of information about value creation and sharing.
Chapter 14 – Implementation Plan	~	This chapter provides an overview of the activities required to be undertaken to progress the CRR through procurement and construction phases and prepare for operations. It also provides an overview of the benefits management plan. The chapter meets the requirements of the Ministerial Direction by providing an overview of the
		implementation activities which will need to be undertaken to progress the project. Policy and other changes since the CRR Detailed Business Case 2016 are reflected in the chapter. Some information regarding key risks, considerations and delivery model and procurement strategy analysis has been omitted as it may prejudice a future commercial outcome.
		Public business cases for similar major rail projects provide varying degrees of information about implementation. The CRR Business Case is at the upper end of the spectrum in terms of the level of detail included.

Source: PwC, 2017

## Appendix A Copy of Ministerial Direction



Our ref: MBN17/863

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ABN 90 856 020 239

1 3 JUN 2017

Mr Alan Millhouse Chairperson Building Queensland Board Level 30 12 Creek Street BRISBANE QLD 4000

Dear Mr Millhouse Alam,

I consider it is important that the Cross River Rail Detailed Business Case endorsed by the Building Queensland Board in June 2016, be made publicly available in a form that facilitates public awareness of, and accessibility to information about, this key project.

Accordingly, I am exercising my power under section 19 of the Building Queensland Act 2015 and issue Building Queensland with a Ministerial Direction to:

- prepare a business case suitable for public release (Public Report). This Public Report
  should also incorporate, where appropriate, the impact of government policy decisions
  taken since the completion of the Detailed Business Case (for example, Fairer Fares and
  the European Train Control System)
- commission an independent peer review of the Public Report, similar to that previously undertaken for the Detailed Business Case
- provide the Public Report and Peer Review to the Director-General, Department of Infrastructure Local Government and Planning (DILGP) within two months of the date of this Ministerial Direction, in a form suitable for publication.

If you have any questions, please do not hesitate to contact Mr Frankie Carroll, Director-General, DILGP, on 3452 6766.

Yours sincerely

JACKIE TRAD MP DEPUTY PREMIER Minister for Transport and Minister for Infrastructure and Planning

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