

CHAPTER FOURTEEN

IMPLEMENTATION PLAN



CHAPTER 14

IMPLEMENTATION PLAN

CHAPTER SUMMARY AND CONCLUSIONS:

- A governance structure for the delivery of the CRR Project has been developed, which involves a new statutory body (the CRR Delivery Authority) leading the implementation of the CRR Project.
- Anticipated timeframes show procurement commencing in Q3 2017 and concluding in Q1 2019. Project delivery will be largely completed in 2023 with some elements of rail system testing and commissioning extending into 2024.
- Key operational readiness activities will need to be addressed prior to commissioning the CRR Project.
- A preliminary benefits management plan (BMP) has been developed in accordance with the Department of Transport and Main Road's Benefits Management Framework. The BMP articulates the key steps in defining, planning and reviewing project benefits throughout the project development lifecycle. It will be further developed during the procurement phase, with a focus on investigating potential opportunities to enhance the level of benefit derived from the CRR Project.

14.1 Purpose and Overview of this Chapter

The purpose of this chapter is to outline the implementation plan for the CRR Project. The CRRDA is primarily responsible for delivering the CRR Project.

This chapter outlines the:

- proposed governance framework for the implementation of the CRR Project
- key activities and milestones for the CRR Project across the various phases of the implementation schedule
- key operational readiness activities to be undertaken including managing the CRR Project's interface with Queensland Rail
- proposed benefits management plan (BMP) to ensure the expected benefits from the CRR Project are realised.

14.2 Governance

14.2.1 CRRDA – Overview

14.2.1.1 The Role of the CRRDA

The CRRDA was established under the *Cross River Rail Delivery Authority Act 2016* (Qld) (CRRDA Act) to lead the development, procurement and delivery of the CRR Project and associated prescribed 'transport-related projects'. The CRRDA will also support wider community outcomes by taking responsibility for economic and community development and other transport-related projects within CRR Priority Development Areas (CRR PDAs). The CRRDA operates outside the political framework with an independent board, while still being subject to the oversight of the Queensland Government.



14.2.1.2 Functions of the CRRDA

The fundamental purpose of the CRRDA is to:

- plan, carry out, promote or coordinate activities to facilitate economic development, and development for community purposes, within the CRR PDAs
- facilitate the effective delivery of the CRR Project and other transport-related projects.

The CRRDA Act lists other key functions of the CRRDA as being to:

- give advice to the Minister or other relevant entity in relation to these main functions and options for funding and delivering the project
- invite and evaluate proposals for the delivery of the CRR Project
- facilitate the procurement and supply of infrastructure and services for the CRR Project
- ensure that any approvals or authorities required for the CRR Project under other laws are obtained
- enter into and manage contractual and other arrangements for the delivery of the CRR Project
- consult with relevant entities about funding and delivery of the CRR Project
- provide or manage infrastructure and other services and facilities for or relating to the CRR Project.

14.2.2 Governance Structure

14.2.2.1 Statutory Body Under Special Purposes Legislation

The CRRDA is an independent statutory body, operating on a commercial basis, with the power to acquire land connected to the CRR Project and associated prescribed transport-related projects.

The CRRDA Act also amends section 169 (Delegations) of the *Economic Development Act 2012* (Qld) to facilitate the delegation of powers relating to value sharing and the declaration of PDAs from the Minister for Economic Development Queensland to the CRRDA.

14.2.2.2 Governance Structure

The governance structure of the CRRDA is set out in Figure 14.1. This structure is preliminary and subject to review and approval by the CRRDA CEO and Board.

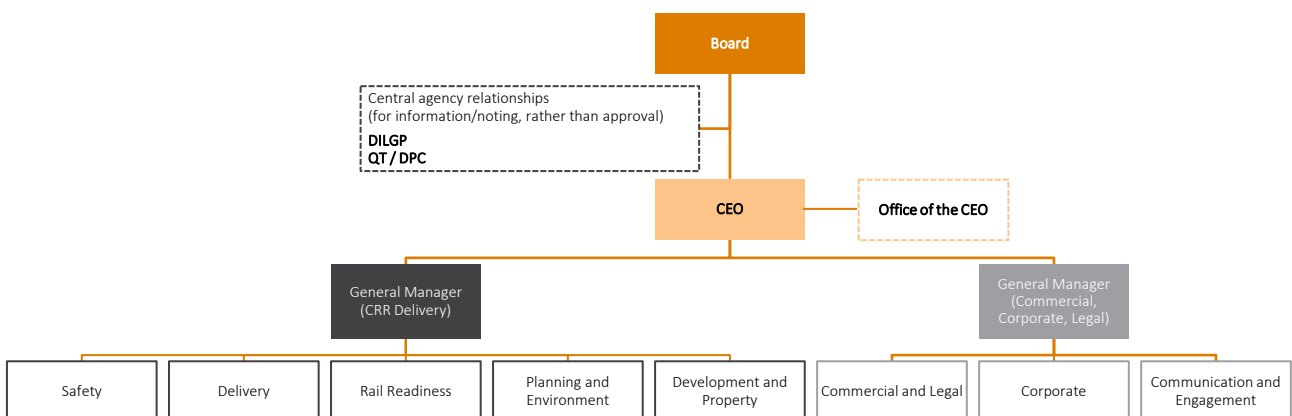


Figure 14.1: CRRDA Governance Structure



Deputy Premier

The Deputy Premier, Minister for Transport and Minister for Infrastructure and Planning (the Deputy Premier) has ultimate responsibility for the CRRDA.

The Deputy Premier has the power to provide written direction to the CRRDA for the exercise of its power, as well as ensuring the CRRDA retains an appropriate level of operational independence. The Deputy Premier also has responsibility for approving the annual budget and financial management policies.

The Board

The CRRDA has a decision-making governance board (the Board), composed of both permanent and appointed members. The CRRDA Act states that the membership of the Board must comprise the Chief Executive (or senior executive) of:

- the department in which the *Auditor-General Act 2009* is administered
- the department in which the *Financial Accountability Act 2009* (Qld) is administered
- the department in which the *Transport (Rail Safety) Act 2010* is administered
- the department in which the CRRDA Act is administered.

Additional members – no more than six other members – may be appointed on the recommendation of the Minister. An appointed Board member will hold office for a term no longer than three years (which will be stated in the member's instrument of appointment).

The Board is the key accountable body for the delivery of the CRR Project. Its primary functions are to:

- ensure the proper, efficient and effective performance of the CRRDA's functions
- decide the objectives, strategies and policies to be followed by the CRRDA
- ensure that the CRRDA complies with the strategic plan, and operational plan, under the *Financial Accountability Act 2009* (Qld) for a financial year
- report to the Minister about the performance of the CRRDA's functions
- in consultation with the Minister, appoint a chief executive officer (CEO) as an employee of the CRRDA.

The Board has broad decision-making powers under the CRRDA Act, including the power to direct the CEO and delegate any powers; however the Deputy Premier retains the power to provide written direction to the Board.

CEO and Executive Leadership Team

The CEO is appointed by the Board, in consultation with the Minister, and is accountable to the Board. Based on the preferred structural option, the CEO will be supported by a permanent executive leadership team.

14.2.3 External Stakeholder Engagement and Governance Arrangements

Given the size and breadth of the CRR Project, the CRRDA will have numerous interfaces and interactions with various external stakeholders in order to effectively perform its functions. These stakeholders include Queensland Treasury, Department of Premier and Cabinet, local governments, Infrastructure Australia, Australian Government Department of Infrastructure and Regional Development and the private sector.



14.3 Procurement and Delivery Program

The timeframe for the procurement and delivery of the Reference Project is described in Figure 14.2. These times are subject to change in response to development of the detailed procurement and delivery strategy and industry feedback provided during market sounding activities.

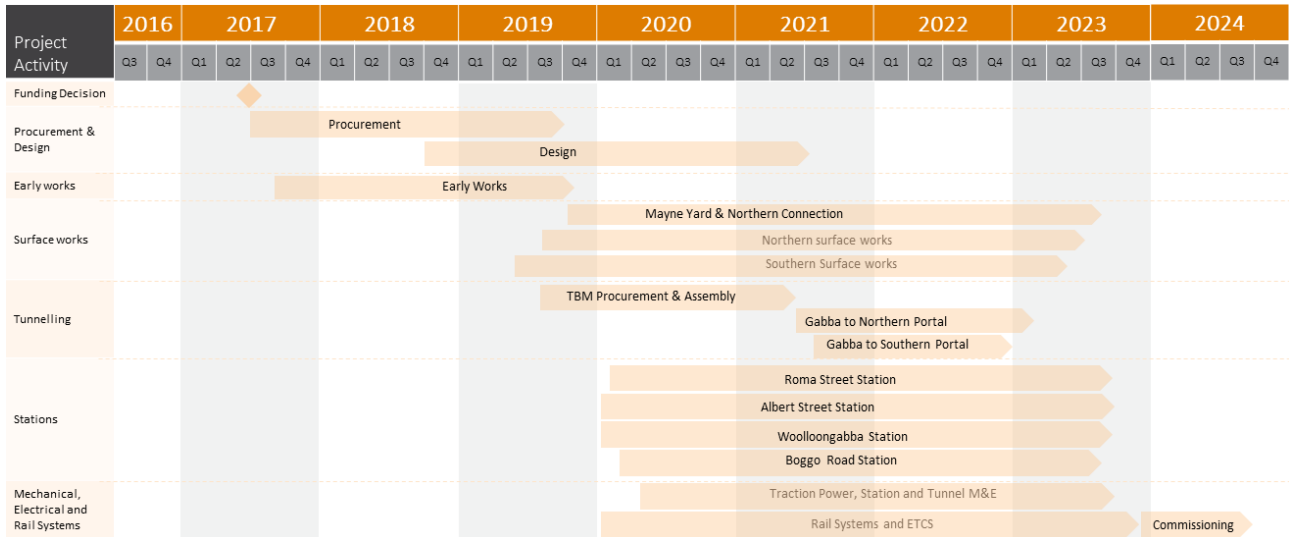


Figure 14.2: Timeframe for Procurement and Delivery of the CRR Project

14.4 Procurement Phase

The key objective of the procurement phase is the appointment of suitably experienced proponents for each package of work through processes that are transparent, accountable and drive value for money for the Queensland Government.

14.4.1 Procurement Phase Objectives

Objectives for the procurement phase include:

- to procure the CRR Project in a way that encourages private sector participation and innovation
- to achieve a value-for-money outcome for the Queensland Government
- to procure the CRR Project in a way that encourages competition
- to secure timely delivery of the CRR Project within budget and agreed timeframes
- to ensure an equitable and transparent procurement process.

14.4.2 Delivery Model Considerations

When developing the delivery model for the CRR Project it is necessary to consider a range of factors, including:

- Project-specific circumstances - such as project objectives, project risks, market analysis, technical characteristics and precedent projects that may influence the structuring of the delivery solution.
- Potential packaging options - whether the project should be packaged, procured and delivered as a single package or whether the project’s key components should be split, and procured and delivered as a number of separate packages.



- Potential delivery model options – taking into account their suitability for each project package based on key considerations such as optimal risk transfer, potential for innovation, budget certainty and value for money, market appetite, complexity of implementation and whole-of-life design and maintenance.

Delivery model options considered range from relationship-based, risk-sharing contracting through to models that feature greater levels of risk transfer to the private sector and which may even include a financing component.

The bulk of the works included in the CRR Project are focused around the tunnel and new underground stations. For these works, it was found that the preferred delivery model should provide for the following:

- incentivisation to deliver the project on time and on budget
- effective management of whole-of-life risks
- promotion of innovative and efficient whole-of-life solutions
- a high degree of budget certainty for the Queensland Government
- market appeal.

This would indicate that a delivery model with a form of long-term contract (construction and maintenance) with significant and appropriate risk transfer to the private sector is recommended for the tunnel and station works.

A final decision on the appropriate level of private finance to be included in the delivery solution will be made based on further analysis and market input.

14.4.3 Procurement Phase Activities

The procurement phase will be informed by, and build upon, the activities developed during earlier phases, including the detailed procurement and packaging plan. Subject to the confirmed delivery model, it is expected to be a two stage EOI and RFP across relevant packages of work.

The CRRDA needs sufficient resources and decision-making autonomy to progress activities and ensure the procurement phase schedule and target dates for milestones are achieved. Resourcing and autonomy will also enable the CRRDA to professionally interact with bidders, which is critical to securing and maintaining the confidence of the market.

Activities to be undertaken during the procurement phase include the following:

- appoint specialist advisers for technical, commercial and financial, legal and probity advice
- undertake the expression of interest (EOI) process and evaluate EOI responses
- plan and prepare the request for proposal (RFP) phase including:
 - developing and refining RFP documents (including the technical output and service specifications, returnable schedules and evaluation criteria), ensuring that future network enhancements, and horizontal and vertical development outcomes, are not precluded by the preferred reference design
 - developing the commercial framework
 - developing the draft project agreements
- undertake effective interactive bidder workshops to facilitate effective two-way communication (while having appropriate regard to probity)



- establish a bid strategy and evaluation methodology
- respond to bidder requests for clarifications
- develop an evaluation framework, evaluate bidder proposals and prepare the RFP evaluation report
- undertake negotiations with selected proponents
- manage government/CRRDA approvals processes
- finalise commercial and contractual documentation for contractual close and financial close
- develop contract management processes (in conjunction with a review of the project agreements).

14.5 Construction and Contract Management Phase

During this phase, government will work with the CRR Project proponents to deliver the CRR Project effectively and efficiently. Government must also ensure its rights are protected during this phase.

The CRRDA will adopt an approach that is responsive to the unique requirements and risks associated with the delivery methods chosen for packages.

As such, a key responsibility for the CRRDA will be taking lead responsibility for contract management. To perform this responsibility, the CRRDA will need to develop robust contract management processes.

14.5.1 Construction and Contract Management Phase Objectives

Objectives for the construction and contract management phase include:

- Ensuring the private sector proponents for each project package are efficiently and effectively delivering and constructing the CRR Project in accordance with their contractual obligations so work is completed by the specified date.
- Ensuring the CRRDA is ready to begin constructing each works package and has appropriate resources (personnel and budget) to manage the construction contracts and to oversee construction.
- Ensuring that the CRR Project is constructed and satisfies all commissioning requirements so that it can commence operations by the specified date and meet specified service requirements over the operating period of the CRR Project.
- Ensuring the CRRDA actively manages construction contracts in accordance with contract management processes by:
 - monitoring the private sector proponents' performance and compliance with their contractual obligations
 - undertaking and performing the Queensland Government's contractual obligations.
- Engaging with the community and other key stakeholders to help ensure the CRR Project is accepted and supported by the public.
- Ensuring that the CRR Project meets all necessary approval conditions by undertaking required activities (i.e. where the condition is a government responsibility) and monitoring the private sector proponents' compliance with conditions (i.e. where the condition is the proponent's responsibility).
- Ensuring interface issues between each of the works packages and other projects such as the European Train Control System (ETCS) – Inner City Project are effectively managed by the CRRDA.



14.5.2 Construction and Contract Management Phase Activities

Table 14.1 summarises the key activities to be undertaken by the CRRDA (and Queensland Government) during the construction and contract management phase.

KEY ACTIVITY	KEY CONSIDERATIONS
Establish contract management processes.	Contract management will be one of the most significant areas of activity the CRRDA will be responsible for undertaking during this phase. As the project agreements (including construction agreements) are yet to be drafted and negotiated, it will be important to undertake a detailed review of these agreements during the procurement phase. These reviews should be done in conjunction with establishing contract management processes to consider and detail the: <ul style="list-style-type: none"> ▪ obligations of the CRRDA (and Queensland Government) ▪ obligations of the private sector proponents ▪ allocation of responsibility (within the CRRDA) for performance of these obligations ▪ CRRDA’s approval processes and authority for variations ▪ contract payment, review and approval processes ▪ skills required by CRRDA personnel during construction such as construction and engineering, commercial, legal, negotiation and financial management.



KEY ACTIVITY	KEY CONSIDERATIONS
<p>Undertake contract management (i.e. monitoring the project agreements).</p>	<p>Given the likely nature of project agreements, key elements of agreements that will be a focus for contract management include:</p> <ul style="list-style-type: none"> ▪ construction milestones (e.g. monitor progress and achievement of interim milestones by private sector proponents and consequences for failure to achieve milestones) ▪ practical completion (e.g. monitor progress towards achievement of practical completion by private sector proponents by the specified date, certification of practical completion by the independent certifier and consequences for failure to achieve practical completion by the specified date) ▪ commissioning (refer to key activity below) ▪ liquidated damages (e.g. monitor potential liability of private sector proponents to pay liquidated damages for delays to achieving critical milestones such as practical completion and commissioning) ▪ payments (e.g. payment of invoiced amounts to the private sector proponents, subject to satisfactory performance of the required services) ▪ interface risks (refer to key activities below) ▪ access and inspection (e.g. CRRDA exercising its rights to access the construction sites to inspect the construction works and assess whether the private sector proponents are complying with their contractual obligations) ▪ variations (refer to key activities below) ▪ reporting (refer to key activities below) ▪ security (e.g. ensure all required security (i.e. bank guarantees, corporate guarantees) from private sector proponents have been provided and maintained, monitoring the financing position of security providers) ▪ disputes (ensure the CRRDA provides, or responds to, dispute notices, identifies an appropriate representative to seek to resolve disputes, complies with its obligations (and exercises its rights) where a third party is required to resolve the dispute) ▪ default and termination (e.g. monitoring whether there have been any events of default or termination, exercising the Queensland Government’s rights (subject to approval processes and appropriate authority) in relation to such events). <p>These issues will be refined as the CRR Project progresses, for example, to reflect differences between contracting methods for each package, as well as differences with contracting approach and requirements for the property and development opportunities.</p>



KEY ACTIVITY	KEY CONSIDERATIONS
<p>Establish reporting processes.</p>	<p>The project agreements will define the KPIs and reporting obligations of the private sector proponents. This will help ensure the CRRDA is adequately informed of construction progress and other issues during this phase. These will be fine-tuned to reflect the requirements of each contracting method and where more direct involvement from the CRRDA may be required.</p> <p>The reporting obligations of the private sector proponents may include items such as construction progress (both cost and time), anticipated dates for practical completion and commissioning, provision of audited annual financial statements, provision of unaudited management accounts, provision of annual business plans and provision of annual budgets.</p> <p>However, it will also be important for the CRRDA to establish its own internal reporting procedures to ensure key Queensland Government stakeholders (e.g. the shareholding ministers and CRR Board) are appropriately informed during the construction and contract management phase (and throughout operations).</p> <p>These procedures should include:</p> <ul style="list-style-type: none"> ▪ details of the key Queensland Government stakeholders to receive reports ▪ reporting schedules and templates to be used ▪ details of the reporting frequency.
<p>Undertake project commissioning.</p>	<p>Commissioning will be of critical importance to both the CRRDA (including the Queensland Government) and the private sector proponents. From the government’s perspective, it will enable them to be satisfied that the CRR Project can commence operations, provide the required services and deliver identified benefits.</p> <p>Key areas of focus for the CRRDA, in relation to commissioning, are likely to include:</p> <ul style="list-style-type: none"> ▪ commissioning plan (e.g. monitor whether there have been any agreed variations to the plan following execution of the project agreements) ▪ commissioning tests (e.g. monitor whether proponents have undertaken all tests in accordance with the commissioning plan, noting these tests and the plan will likely be agreed up-front as part of the project agreements) ▪ certification (e.g. monitor whether the independent certifier has certified commissioning, consequences for failure to achieve commissioning by the specified dates). <p>Coordination and engagement with Queensland Rail</p> <p>It will be critical for the CRRDA to actively engage with Queensland Rail on commissioning issues (and other key operational issues). This will ensure that Queensland Rail’s requirements are appropriately incorporated and that the CRR Project meets the operational readiness requirements of Queensland Rail.</p>



KEY ACTIVITY	KEY CONSIDERATIONS
<p>Manage interface risks.</p>	<p>Between project packages</p> <p>Interface risk between the works packages is considered to be a significant project risk and a critical success factor. However, these interface risks are considered to be manageable with clear demarcation between packages and natural points of potential separation and completion.</p> <p>To help ensure this risk is appropriately managed, as part of developing the detailed procurement and packaging plan, an interface risk management plan will also be developed which:</p> <ul style="list-style-type: none"> ▪ details the overall approach of the CRRDA to managing interface risk ▪ allocates primary and secondary responsibility for managing the risk to personnel within the CRRDA ▪ identifies key interdependencies between the works packages ▪ aligns with the reporting obligations of the private sector proponents to ensure that any interface issues or potential delays with an individual package (that may impact other works packages) are identified and reported quickly so the CRRDA is informed and can take action as required. <p>Between interdependent projects</p> <p>Interface risk between the CRR Project and other major projects being undertaken by the Queensland Government, such as the ETCS – Inner City and New Generation Rollingstock projects, is also considered a significant project risk.</p>
<p>Undertake community and stakeholder management.</p>	<p>Given the scale and potential impact of the CRR Project during the construction phase, maintaining an effective and proactive approach to stakeholder management throughout the phase will be crucial.</p> <p>The ‘commuting public’, in particular, will be a critical stakeholder given the potential for construction works to disrupt the public transport and road networks.</p> <p>During this phase, key issues to be addressed, and which should be considered as part of the stakeholder management plan, are likely to include the CRRDA’s approach (and that of the private sector) to the following:</p> <ul style="list-style-type: none"> ▪ engaging with the community and providing updates on construction progress and potential community impacts ▪ ensuring that community issues and needs are understood and addressed.
<p>Manage project variations.</p>	<p>The project agreements will include detailed processes for managing project variations requested by either the CRRDA or private sector proponents.</p> <p>It will also be important for the CRRDA to develop robust internal processes to manage variations. This will ensure that potential impacts on cost, risk, scope and delivery schedule are understood prior to the CRRDA seeking variations or agreeing to variations requested by proponents.</p>

Table 14.1: Construction and Contract Management Phase – Activities



14.6 Operational Readiness Activities

A number of operational readiness activities will need to be addressed by Queensland Rail prior to commissioning the CRR Project. This section identifies and describes these activities. Some of these activities, such as timetable changes, involve changes that Queensland Rail regularly implements and has business-as-usual processes for managing. Where suitable processes exist for managing change, these will be adopted by the CRR Project.

14.6.1 Related Projects

The CRR Project is one of a number of projects taking place that will impact upon the nature of Queensland Rail's passenger operations in SEQ. The projects are interrelated and will require coordination between the CRRDA and Queensland Rail to ensure a smooth transition in terms of procurement, project delivery, integration, commissioning, operational readiness and change management.

To address these challenges, CRRDA and Queensland Rail have commenced planning and a process of dialogue and engagement. This builds on collaboration to date and will ensure that Queensland Rail is fully and appropriately involved in developing and implementing all aspects of the procurement, project delivery, integration, commissioning, change management and operational readiness strategies for the project.

14.6.1.1 ETCS – Inner City

The ETCS – Inner City Project involves the rollout of ETCS Level 2 (ETCS L2) technology on railway lines from Milton to Northgate, as well as onboard fitment of new and existing rollingstock, and is presently in its procurement phase. The CRR Project will be delivered in a post-ETCS operating environment.

Undertaking the ETCS – Inner City Project ahead of the CRR Project creates opportunities and challenges in relation to:

- Rail systems: The ETCS – Inner City Project will impact the design and installation of CRR rail systems.
- Scheduling of works: Some CRR-related works will need to be coordinated with, and may be able to be undertaken in conjunction with, aspects of the ETCS – Inner City Project.
- Concept of operations: The ETCS – Inner City Project will enable an increased frequency of passenger rail operations and is a key enabling project for the CRR Project. The CRR Project, in turn, will facilitate a revised approach to timetabling and scheduling on other parts of the network. The concept of operations developed for the ETCS – Inner City Project will need to be reviewed once the CRR Project is delivered.
- Change management: The ETCS – Inner City Project has significant change management implications for Queensland Rail's business, and is already the subject of change management and operational readiness planning.

14.6.1.2 New Generation Rollingstock

The Queensland Government's New Generation Rollingstock (NGR) Project will substantially increase the SEQ train fleet to meet the growing demand for rail services. The NGR Project includes:

- design, construction and maintenance of 75 new six-car passenger trains for SEQ
- design and construction of a purpose-built maintenance centre at Wulkuraka, west of Ipswich
- procurement of three NGR training simulators for train crews.



Only NGR trains will operate in the CRR tunnel and stations. Operational readiness considerations relating to the NGR Project include:

- The current technical solution for the CRR Project requires platform screen doors, which are typically associated with automatic train operation (ATO) fitment of rollingstock. The current rollout of NGR trains does not include fitment of ATO elements, therefore this will be implemented as part of the CRR Project.
- The operation of ATO in an ETCS L2 environment is not part of the current ETCS – Inner City Project, creating a requirement for project coordination and integration.
- Rollout of the NGR Project has highlighted the importance of driver training and operational readiness activities within Queensland Rail. A significant change management process is currently being undertaken within Queensland Rail to facilitate driver training and the operation of NGR trains on the network.

14.6.1.3 Redcliffe Peninsula Line (Moreton Bay Rail Link)

The Redcliffe Peninsula line is a 12.6km dual-track passenger rail line between Petrie and Kippa-Ring, including six rail stations at Kallangur, Murrumba Downs, Mango Hill, Mango Hill East, Rothwell and Kippa-Ring. The Redcliffe Peninsula line opened for services in October 2016 and two key operational readiness learnings for the CRR Project have emerged from this project:

- There must be an effective integration and commissioning plan to ensure that the CRR Project is able to be commissioned and operate seamlessly and safely as an integrated part of the broader passenger rail network.
- Queensland Rail, as the rail operator and infrastructure manager, must be able to demonstrate effective management control over all aspects of the rail infrastructure and that it is ready and able to accept the handover of the project for operation.

The CRR Project will present further significant changes for the Queensland Rail business in terms of driver training, train control and management, passenger experience and network operations. Implementing a comprehensive change management strategy across the organisation will therefore be required. This must be coordinated with other change management and operational readiness activities.

14.6.2 Training and Competency

Information for affected staff will be a key input into training plans developed for the new CRR infrastructure, equipment and processes. This will ensure that implementing the CRR Project does not negatively affect normal network operations. Information regarding existing Queensland Rail training systems and competency tracking systems used for these impacted groups will be prepared. This will allow training programs to be developed and rolled out.

The CRR tunnels will introduce new facets to train operations due to their length and steep grades. Specific training programs will be required to acquaint train crews with the acceleration and braking characteristics of the tunnel and emergency procedures.

New procedures and training programs will also be required for infrastructure maintenance personnel if Queensland Rail maintains the new tunnel infrastructure.



Queensland Rail will also need to consider its workforce requirements, including recruitment and training across all functions, given the CRR Project will result in new rail track, yards, stations and extra services. Emergency management procedures, maintenance and the security of the network and operations (relating to station, train and rail management) will all require consideration. Recruitment and training lead times vary according to the role and complexity of the task.

14.6.3 Tunnel Management

The tunnels and stations will incorporate a variety of new electrical and mechanical systems. Depending on the operating model, Queensland Rail may be responsible for managing these systems. Although they may be managed separately to existing rail systems, all systems must be integrated.

The train control systems for the tunnels and other CRR infrastructure will also need to integrate with existing systems on the SEQ rail network.

14.6.4 Station Management

The new underground stations will require new operational procedures. Depending on the operating model, Queensland Rail may need to develop specific operational procedures for these stations.

14.6.5 Emergency Management

Introducing an underground rail line brings with it obligations to develop emergency management procedures and guidelines. These plans will need to be coordinated and integrated with local and district disaster management groups. Prior to operating in these tunnels and associated stations, Queensland Rail would seek to ensure new emergency procedures are fit-for-purpose through tunnel evacuations exercises.

14.6.6 Timetable

Timetable modelling will be used to confirm the benefits of the CRR Project and understand the possible outcomes of capacity increases. These outcomes will feed into other operational readiness elements such as dwell initiatives, traction requirements and stakeholder engagement.

Queensland Rail has a well-established and documented process for developing timetables. This process incorporates all aspects of stakeholder management, including those concerning the travelling public.

The use of additional and alternate stabling yards as turnout locations is of particular relevance to the CRR Project. Timetable demands must also be in line with available units and traction power.

Given significant network change will be made through the CRR Project, a detailed customer awareness program will also need to be developed and implemented.

14.6.7 Mayne Yard Management

A new yard management plan will be required due to the provision of a main line through Mayne Yard, which will cut off the Eastern and Western stabling yards, and the removal of the Balloon Loop. Whether or not to retain Mayne Yard as a shunting and maintenance yard or just a stabling yard will need to be considered.

A stabling plan should be developed in conjunction with the new timetable to ensure units are available and in the right position for their next scheduled activity, be it maintenance or revenue service.



14.6.8 Management of Other New Stabling Facilities

Operation of new stabling yards will require new operational and yard management procedures. These will need to be developed prior to project implementation. These yards may also require the presence of staff at some stage during the day.

14.6.9 Maintenance Activities

14.6.9.1 Rollingstock Maintenance Activities

Given the changes to operations at Mayne Yard, and the separation of the yard, the following issues require further consideration:

- how and where maintenance will be conducted on the Queensland Rail fleet
- how Queensland Rail will 'feed' the maintenance facilities
- the operation of light maintenance and the use and access of all units through the wash shed at Normanby.

14.6.9.2 Tunnel Infrastructure

The tunnel maintenance and access regime requires consideration. Closure and maintenance windows should be developed in conjunction with timetables, ensuring the safe provision of preventative maintenance in what is effectively a new asset type for Queensland Rail.

14.6.9.3 Other Supporting Infrastructure

Any new train management systems, data radio systems and operational systems – and associated maintenance process – will need to be developed in conjunction with defined operating parameters.

14.6.10 Safety Case

Queensland Rail has an existing safety change management standard for managing infrastructure changes with the potential to 'impact on the safety of rail operations' (requiring notification to the Rail Safety Regulator). A safety change management plan (SCMP) demonstrating compliance with the relevant elements of the *Transport (Rail Safety) Act 2010*, *Work Health and Safety Act 2011* and the *Electrical Safety Act 2002* will be prepared and provided to regulatory bodies. Queensland Rail will prepare the SCMP, with inputs from subject matter experts from within Queensland Rail's regulation and network safety units. Queensland Rail's discipline head for safe working is accountable for ensuring rail safety accreditation is obtained and retained and will therefore lead the early and ongoing engagement with the Rail Safety Regulator.

Evidence produced through assurance activities undertaken for project delivery will be a key input into the safety case. (Safety cases are used to demonstrate that safety risks have been adequately identified and mitigated.)

14.6.11 Commercial Considerations

Queensland Rail must be remunerated for operating additional services and rail stations under the Rail Transport Services Contract (Rail TSC). Queensland Rail, together with TransLink, has well-established and documented processes encompassing management of the Rail TSC.



Other commercial arrangements that may be encountered – depending on the model of operation adopted – must also be considered.

14.7 Benefits Management Plan

The development of the BMP is an important step in articulating, monitoring and realising the benefits of the CRR Project during delivery and post-construction. The BMP was developed at the business case stage of project development and is therefore representative of the anticipated project benefits. The BMP is designed to assist the project owner in tracking and delivering on these benefits throughout construction and operation.

The BMP has been developed in accordance with the Department of Transport and Main Road’s Benefits Management Framework. This framework articulates the key steps in defining, planning and reviewing project benefits throughout the project development lifecycle. The approach was used to further identify, define and confirm the potential benefits of the CRR Project and to allow the CRRDA to conduct post-project assessments as per Queensland and Australian Government requirements.

The BMP will be further developed during the procurement phase. A focus of this work will be to investigate potential opportunities to enhance the level of benefit derived from the project.

14.7.1 Project Benefits

Chapter 6: Project Benefits provides a comprehensive analysis of the potential benefits to be derived from the CRR Project.

Further explanation of these benefits is provided in Table 14.2.

BENEFIT CATEGORY	BENEFIT	DESCRIPTION
Rail benefits	Higher service frequencies	Improves the attractiveness of rail services through improved service levels and quality on the entire rail network.
	Reduced journey times	Improves the attractiveness of rail services through improved travel times.
	Reduced crowding	Addresses many of the negative perceptions of public transport such as limited service frequency and overcrowding by providing new services.
	Increased service reliability	Improves on-time rail reliability (measured by a reduction in lateness) due to the additional capacity provided.
Transport benefits	Higher public transport use	Unlocks public transport capacity making rail and public transport more attractive.
	Road network de-congestion	Increases the number of commuters forecast to use the train as their preferred mode of travel to the city, resulting in a reduction in cars trying to access the CBD. This will see a reduction in congestion in the busiest part of the road network with substantial savings in costs associated with urban road congestion.
	Improvements to supply chains	Attributable to improvements in road-based freight, particularly on the motorway network, enabled by increased numbers of commuters forecast to use the rail network.



BENEFIT CATEGORY	BENEFIT	DESCRIPTION
Strategic benefits	Managing growth of the region	Enables the rail network to connect principal regional activity centres to Brisbane’s CBD. This will allow these centres to become vital nodes in the city’s economic framework.
	Infill dwelling targets	Enables infill development in areas close to transport corridors to facilitate a more sustainable and compact settlement pattern with reduced reliance on private car use.
	Inner-city employment expansion	Provides transport capacity to facilitate and support inner-city growth projections.
	Connecting new cities and regional centres	Enable connection with strategic regional development areas to the CBD, in particular Caloundra South, Flagstone, Fitzgibbon, Coomera and Yarrabilba.
	Improving inner-city connectivity	Establishes rapid, high-frequency connections between some of the primary destinations and activity areas in Brisbane’s inner city.
Other benefits	Enabled investments and opportunities	Provides an opportunity to facilitate future investment to unlock network capacity, for example, through longer trains, new generation signalling, network augmentation and expansion opportunities.

Table 14.2: Detailed Benefits Summary

14.7.2 Benefit Measures and Targets

A benefits mapping process was undertaken to demonstrate the investment logic of the CRR Project by aligning strategic needs, project outcomes and benefits. The aim of this process was to group benefits to restrict the total number of benefits to be measured and reported to a manageable number.

This process identified ways to ensure potential measures of success align with core benefits management principles, including:

- Measures should be ‘SMART’ – Specific Measurable Attainable Realistic and Time-bound.
- Where possible, measures of successful outcomes identified in the business case should be preferred to new measures.
- The number of measured benefits should be limited to a manageable number, with preferred measures aligning with the most significant categories of benefit.
- The availability, cost and feasibility of attaining benefit measures and their ongoing reliability and accuracy should be considered in determining which measures are adopted.

The business case benefits have been integrated for the purposes of the BMP as summarised in Figure 14.3.



CRR DETAILED BUSINESS CASE NEEDS	CRR DETAILED BUSINESS CASE OUTCOMES			CRR BENEFITS MANAGEMENT PLAN TREATMENT
<p>Rail problems</p> <ul style="list-style-type: none"> ▪ Rail not performing its desired role in the transport system ▪ Limits on service frequency ▪ Uncompetitive journey times and costs ▪ Network reliability and resilience ▪ Insufficient rail capacity ▪ Overcrowding on trains 	Higher public transport use	Increase service frequencies	Expand the role of the rail system	Greater capacity and service frequency
<p>Strategic problems</p> <ul style="list-style-type: none"> ▪ Declining accessibility and connectivity between employment and population centres ▪ Inability to maintain desired rates of economic growth and productivity 		Reduce journey times	Reduce crowding	Reduced journey times
<p>Transport problems</p> <ul style="list-style-type: none"> ▪ Car dependency and road congestion ▪ Inability to cater for future public transport demand ▪ Inefficient supply chains 		Increase network reliability	Facilitate city building and urban growth	Reduced crowding
<p>Legend:</p>		Identified benefits for measurement and reporting in this BMP	Identified benefits proposed for inclusion in other (program-level) BMPs	Urban growth and city building
		Improve population and employment linkages	Improve SEQ's economic potential	Improved population and employment centre connectivity
		Road de-congestion	Supply chain improvements	Improved economic potential of SEQ
		Supply chain improvements	Road de-congestion	Road de-congestion
		Road de-congestion	Supply chain improvements	Supply chain improvements

Figure 14.3: Benefits for Measurement and Reporting



14.7.3 Benefits Governance

This section outlines indicative roles and responsibilities in delivering the project benefits. Roles and responsibilities presented in Table 14.3 will be further developed during future project phases.

ROLE	RESPONSIBILITIES
Deputy Director-General TransLink Transport Benefits Owner	The Transport Benefits Owner is responsible for the project realising the rail outcomes and benefit measures.
CRRDA Chief Executive Officer Strategic Benefits Owner	The Strategic Benefits Owner is responsible for the project realising the strategic outcomes and benefit measures.
CRRDA Project Manager	<p>The Project Manager is responsible for:</p> <ul style="list-style-type: none"> ▪ coordinating with the Project Owner and Strategic Benefits Owner and their stakeholders to align project activities and outputs with realising agreed benefits ▪ actively managing project benefits to identify ways of ensuring success against the agreed measures ▪ organising reports on progress against the BMP’s targets to the Board ▪ handing over the ongoing management of project benefits to the Portfolio Management Office if the CRRDA is dissolved or re-purposed.
CRRDA Board	<p>The Board is expected to have the general responsibilities of:</p> <ul style="list-style-type: none"> ▪ ensuring the efficient and effective performance of the CRRDA’s functions, which are expected to include: <ul style="list-style-type: none"> – facilitating the efficient delivery of the CRR Project and transport-related projects – carrying out activities to facilitate economic development and development for community purposes in a CRR PDA – deciding the objectives, strategies and policies to be followed by the CRRDA. <p>With respect to this BMP, the role of the Board is to oversee progress towards realising the intended benefits of the CRR Project.</p>

Table 14.3: Roles and Responsibilities of Key Agencies

Reporting against benefit measures should be provided at least every twelve months, or as otherwise determined to be appropriate by the CRRDA Board.

