

CHAPTER

16

Social

INLAND
RAIL 

CALVERT TO KAGARU ENVIRONMENTAL IMPACT STATEMENT

**ARTC**

The Australian Government is delivering
Inland Rail through the Australian
Rail Track Corporation (ARTC), in
partnership with the private sector.

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16. Social

16.1 Scope of chapter

16.1.1 Purpose

This Social Impact Assessment (SIA) has been prepared for the Calvert to Kagaru Project (the Project). The purpose of the SIA is to identify how the Project may affect local and regional communities, and what Australian Rail Track Corporation (ARTC) will do to ensure negative social impacts are mitigated to the greatest extent possible and that Project benefits are enhanced.

16.1.2 Objectives

The objectives of the SIA are to:

- ▶ Identify potentially affected communities, considering all potential social impacts throughout the Project’s life (construction, operation and decommissioning)
- ▶ Enable stakeholders to provide inputs into the SIA, including the scope, social impacts and mitigation measures
- ▶ Develop a baseline of social characteristics against which potential changes can be assessed
- ▶ Provide a detailed assessment of likely social impacts and benefits
- ▶ Provide a Social Impact Management Plan (SIMP) that includes measures to avoid or reduce social impacts and enhance social benefits, and a monitoring strategy to support adaptive management of social impacts and benefits
- ▶ Evaluate the residual significance of social impacts and benefits.

16.2 Terms of reference

The Terms of References (ToR) describe the matters the proponent must address in the EIS and are detailed in Table 16.1 and Section 2.2 of Appendix R: Social Impact Assessment Technical Report. Appendix B: Terms of Reference Compliance Table also provides a cross-reference for each ToR against relevant sections in this EIS.

The SIA has addressed the Coordinator-General’s statutory requirements as provided by the ToR and the Social Impact Assessment Guideline (SIA Guideline).

TABLE 16.1: TERMS OF REFERENCE COMPLIANCE TABLE—SOCIAL

Terms of Reference requirements		Where addressed
Information requirements		
11.140	Conduct a Social Impact Assessment (SIA) in accordance with the Coordinator-General’s Social Impact Assessment guideline (July 2013) and the Coordinator-General’s Social Impact Assessment guideline (draft) (October 2016) or the guideline in place at the time of delivery of the SIA.	Section 16.3.1 Appendix R: Social Impact Assessment Technical Report Section 2.3
11.141	The SIA should be developed in consultation with the Coordinated Project Delivery Division in the Office of the Coordinator-General, Department of State Development, and describe the potential Social Impact Assessments (positive and negative) on affected communities. The proposed mitigation measures are to be discussed.	Sections 16.8, 16.9 and 16.10 Appendix R: Social Impact Assessment Technical Report, Sections 6.2, 7 and 8
11.142	The SIA is to include:	Refer to sub-sections below
	(a) A profile of key stakeholders	Section 16.8 Appendix R: Social Impact Assessment Technical Report, Sections 4.3.5 and 6
	(b) A social baseline study of potentially impacted communities within the SIA study area	Section 16.7 Appendix R: Social Impact Assessment Technical Report, Section 5.1 to 5.7

Terms of Reference requirements		Where addressed
11.142 (continued)	(c) An overview of state government legislation and policies and priorities which complement the mitigation measures for the project's Social Impact Assessments	Section 16.3 Appendix R: Social Impact Assessment Technical Report, Sections 2.4 and 8.1.6
	(d) An explanation of sources used to gather information and analysis methods used. Discuss rationale for both primary and secondary data	Section 16.7 Appendix R: Social Impact Assessment Technical Report, Section 3.4
	(e) A description of how the potentially impacted communities and affected stakeholders were engaged and consulted with during the development of the SIA	Section 16.4.2 Appendix R: Social Impact Assessment Technical Report, Sections 6.1, 6.2 and 6.3
	(f) Identification of potential social impacts and their likely significance, including duration	Sections 16.9 and 16.11 Appendix R: Social Impact Assessment Technical Report, Sections 7 and 9
	(g) The proponent's proposed enhancement and mitigation/management measures in relation to project impacts	Sections 16.10.1 to 16.10.6 Appendix R: Social Impact Assessment Technical Report, Section 8.1–8.6
	(h) Details of the proponent's proposed monitoring and reporting framework	Section 16.10.7 Appendix R: Social Impact Assessment Technical Report, Section 8.7
Existing environment (social impact assessment study area)		
11.143	Define the project's SIA study area (including the local, district, regional and state level as relevant), taking into account the:	Section 16.5 Appendix R: Social Impact Assessment Technical Report, Section 4.3
	(a) Potential for social impacts to occur	Sections 16.9 and 16.11 Appendix R: Social Impact Assessment Technical Report, Section 4.4
	(b) Location of other relevant projects (existing major projects and/or developments and those which are progressing through planning and approval processes and public information is available)	Section 16.12 Appendix R: Social Impact Assessment Technical Report, Sections 5.1.4 and 7.6
	(c) Location and types of physical and social infrastructure, settlements and land use patterns	Sections 16.5.2 and 16.7.6 Appendix R: Social Impact Assessment Technical Report, Sections 5.1 and 5.6
	(d) Social values that might be affected by the project including integrity of social conditions, liveability, social harmony and wellbeing and sense of community	Section 16.7.2 Appendix R: Social Impact Assessment Technical Report, Section 5.3
	(e) Indigenous social and cultural characteristics, such as native title rights and interests, and cultural heritage	Sections 16.7.1.4, 16.7.2.2, 16.7.7.1, and 16.8.2.6 Appendix R: Social Impact Assessment Technical Report, Sections 5.1.1 and 5.3.2
Existing environment (social baseline study)		
11.144	Undertake a targeted baseline study of the people residing within the project's SIA study area. This will provide a benchmark against which to identify the project's social issues, potential negative and positive Social Impact Assessments, and the mitigation measures and management plans to address these impacts.	Section 16.7 Appendix R: Social Impact Assessment Technical Report, Section 5
11.145	The social baseline study should be based on qualitative, quantitative and participatory methods. It should be supplemented by community engagement processes and primary data collection, and should reference relevant data contained in local and state government publications, reports, plans, guidelines and documentation, including regional and community plans.	Sections 16.7 and 16.8 Appendix R: Social Impact Assessment Technical Report, Section 5

Terms of Reference requirements

Where addressed

Existing environment (community engagement)

11.146	A consultative and inclusive community and stakeholder engagement process should inform the baseline study, assessment of potential Social Impact Assessments and development of appropriate mitigation measures and management plans. The engagement should commence at an early stage of the EIS process. It should include consultation with a broad range of stakeholder groups including affected landholders, local residents, community groups, traditional owners, state and local government agencies, and non-government organisations, local businesses and traditionally-underrepresented stakeholders (for example vulnerable groups, women, people with a disability, Indigenous people and persons from diverse ethnic or linguistic backgrounds).	Section 16.8 Appendix R: Social Impact Assessment Technical Report, Sections 6.1, 6.2 and 6.3
11.147	The community and stakeholder engagement process should be adequately described and documented in the EIS. This should include details such as stakeholders consulted and how and when they were consulted, principles and processes adopted, overview of the consultation program and key events, stakeholder feedback and issues raised (including the means by which these have been or will be addressed), and a statement of agreement/s reached, or to be negotiated, for impact mitigation and management.	Sections 16.4.2 and 16.8 Appendix R: Social Impact Assessment Technical Report, Sections 6.2, 6.3 and 8.2.3

Potential impacts and mitigation (impact assessment)

11.148	Assess and describe the type, level and significance of the project’s Social Impact Assessments (both negative and positive), based on the outcomes of the community engagement, social baseline study and impact analysis processes. This should include sufficient data to enable affected local and state authorities to make informed decisions about the project’s effects. The potential Social Impact Assessments will be identified by considering the potential changes to key aspects included in the social baseline study as a result of the project.	Section 16.11 Appendix R: Social Impact Assessment Technical Report, Sections 7 and 9
11.149	Impact assessment should include an assessment of the potential scope and significance of impacts at the local and regional level, considering factors such as:	Refer sub-sections below
	(a) Population and demographic changes	Section 16.7.1 Appendix R: Social Impact Assessment Technical Report, Section 7.1.8
	(b) Workforce	Sections 16.7.3 and 16.9.2 Appendix R: Social Impact Assessment Technical Report, Section 7.2
	(c) Lifestyles and amenity	Section 16.7.2.1 Appendix R: Social Impact Assessment Technical Report, Sections 7.1.4 and 7.4.4
	(d) Community values	Section 16.7.2 Appendix R: Social Impact Assessment Technical Report, Sections 7.1.4–7.1.7
	(e) Housing	Section 16.7.5 Appendix R: Social Impact Assessment Technical Report, Section 7.3
	(f) Local and regional planning outcomes	Section 16.3 Appendix R: Social Impact Assessment Technical Report, Section 2.4.6 and 8.1.6

Terms of Reference requirements		Where addressed
11.149 (continued)	(g) Social infrastructure	Sections 16.5.2 and 16.7.6 Appendix R: Social Impact Assessment Technical Report, Section 7.4.1
	(h) The health and social/cultural wellbeing of families and communities	Sections 16.7.7 Appendix R: Social Impact Assessment Technical Report, Sections 7.4
11.150	The impact assessment should evaluate and discuss the potential cumulative Social Impact Assessments resulting from the proposed project in combination with other existing major projects and/or developments and those which are progressing through planning and approval processes (where public information is available) within the SIA study area. Key issues assessed should include: (a) Population (b) Workforce (construction and operation) (c) Workforce accommodation (d) Local and regional housing markets (e) Use of an access to community infrastructure, services and facilities (including social and health services and facilities)	Section 16.12 Chapter 22: Cumulative Impacts, Section 22.5.9 Appendix R: Social Impact Assessment Technical Report, Sections 7.6 and 9
11.151	The impact assessment should include:	Refer sub-sections below
	(a) The impacts identified by the SIA process	Sections 16.9 and 16.11 Appendix R: Social Impact Assessment Technical Report, Sections 7.1 to 7.6, and 9
	(b) Impacted stakeholders	Sections 16.8 and 16.11 Appendix R: Social Impact Assessment Technical Report, Sections 4.3.5, 6 and 8.2
	(c) The timing or timeframes of impacts and the mitigation and management measures	Sections 16.9 to 16.11 Appendix R: Social Impact Assessment Technical Report, Sections 7.1–7.6 and 8.1–8.6
	(d) Description of the mitigation and management measures	Section 16.10 Appendix R: Social Impact Assessment Technical Report, Sections 8.1–8.6
	(e) Defined outcomes, and the performance indicators and targets to achieve the outcomes	Section 16.10 Appendix R: Social Impact Assessment Technical Report, Section 8.7
	(f) Monitoring and reporting framework	Section 16.10.7 Appendix R: Social Impact Assessment Technical Report, Section 8.7
	(g) Residual impacts (after mitigation and management measures) and how these will be addressed	Sections 16.11 and 16.13.2 Appendix R: Social Impact Assessment Technical Report, Sections 9 and 10
Potential impacts and mitigation (management plans)		
11.152	Management plans for the following are to be provided as part of the SIA:	Refer sub-sections below
	(a) Community and stakeholder engagement	Section 16.10.2 Appendix R: Social Impact Assessment Technical Report, Section 8.2
	(b) Workforce management	Section 16.10.3 Appendix R: Social Impact Assessment Technical Report, Section 8.3

Terms of Reference requirements	Where addressed
11.152 (c) Housing and accommodation (continued)	Section 16.10.4 Appendix R: Social Impact Assessment Technical Report, Section 8.4
(d) Local business and industry content	Section 16.10.6 Appendix R: Social Impact Assessment Technical Report, Section 8.6
(e) Health and community wellbeing	Section 16.10.5 Appendix R: Social Impact Assessment Technical Report, Section 8.5

16.3 Legislation, policy and guidelines

State legislation, policy and guidelines relevant to social impact management of the Project are summarised within Table 16.2.

Further guidance on legislation and corresponding potential approval requirements associated with the Project are provided in Chapter 3: Project Approvals and Appendix R: Social Impact Assessment Technical Report.

TABLE 16.2: SUMMARY OF REGULATORY CONTEXT

Legislation, policy or guideline	Relevance to the Project
<i>State Development and Public Works Organisation Act 1971</i> (Qld) (SDPWO Act)	The SDPWO Act aims to facilitate 'timely, coordinated and environmentally responsible infrastructure planning and development to support Queensland's (QLD) economic and social progress'. The Act provides for the appointment of a Coordinator-General representing the QLD Government, and gives the Coordinator-General powers to (among other things) declare a Project to be a 'coordinated project', evaluate an EIS for a coordinated project, and evaluate proposed changes to coordinated projects. As the Project was declared as a 'coordinated Project for which an environmental impact statement is required', ARTC must prepare a draft EIS that addresses the ToR to the satisfaction of the Coordinator-General.
<i>Social Impact Assessment Guideline</i> (Department of State Development, Manufacturing, Infrastructure and Planning, 2018)	The Coordinator-General's <i>SIA Guideline</i> provides detailed assessment requirements, which have been addressed throughout the SIA and in the development of a SIMP. The SIA also considers local and regional planning objectives. The SIA prepared for the Project has addressed the <i>SIA Guideline</i> requirements. The <i>SIA Guideline</i> is discussed further in Section 16.3.1.
State Planning Policy 2017 (Department of Infrastructure, Local Government and Planning, 2017b)	The State Planning Policy (SPP) identifies 17 State interests relating to land development with five key themes: <ul style="list-style-type: none"> ▶ Liveable communities and housing ▶ Economic growth ▶ Environment and heritage ▶ Safety and resilience to hazards ▶ Infrastructure. State interests for liveable communities that must be considered in making or amending a planning scheme and designating land for community infrastructure include (in summary): <ul style="list-style-type: none"> ▶ Providing for quality urban design that reflects and enhances local character and community identity ▶ Providing attractive and accessible natural environments and public open spaces that are functional, accessible and connected ▶ Facilitating vibrant places and spaces, diverse communities, and good neighbourhood planning and centres design ▶ Facilitating the provision of pedestrian, cycling and public transport infrastructure and connectivity within and between these networks ▶ Planning for cost-effective and well-located community facilities and utilities. The SIA has considered the relevant themes of interest contained within the SPP. A summary of the alignment with planning policies is included in Appendix: Social Impact Assessment Technical Report, Table 2.2.

Legislation, policy or guideline	Relevance to the Project
<p><i>South East Queensland Regional Plan 2017 (ShapingSEQ)</i> (Department of Infrastructure, Local Government and Planning, 2017a)</p>	<p><i>ShapingSEQ</i> sets out five goals for the region's development:</p> <ul style="list-style-type: none"> ▶ Goal 1: Grow ▶ Goal 2: Prosper ▶ Goal 3: Connect ▶ Goal 4: Sustain ▶ Goal 5: Live. <p>Outcomes for the Western sub-region, which includes the principal regional activity centres of Ipswich and Toowoomba, include a dispersed network of urban and rural centres, significant expansion areas, Regional Economic Clusters and infrastructure connections of national significance.</p> <p>Measures to maximise local employment and local business participation will support the goals of <i>ShapingSEQ</i> such as 'grow', 'prosper' and 'sustain' in the Project region.</p>
<p><i>Ipswich and West Moreton Regional Roadmap 2016–2020</i> (Regional Development Australia, 2016)</p>	<p>The Australian Government established Regional Development Australia (RDA) to help set up committees that seek to strengthen economic development in regional areas of Australia. RDA Ipswich and West Moreton focuses on five key economic development areas: food and agriculture, infrastructure, growth sectors, 'intelligent region' and tourism.</p> <p>The plan notes businesses relating to horticulture, agriculture, tourism and equine industries are important and prevalent to the Scenic Rim local government areas (LGA). Of particular relevance near the EIS investigation corridor is the Willowbank Industrial Park, Ebenezer Regional Industrial Area, the Bromelton State Development Area (SDA) and the Cunningham Highway Amberley Intersection.</p>
<p><i>City of Ipswich Transport Plan (iGo Plan)</i> (Ipswich City Council, 2016)</p>	<p>The <i>iGo Plan</i> was publicly released in 2015 to facilitate and guide the growth of transport in the city of Ipswich. Significant population growth in Ipswich means there needs to be considerable road, rail and bus transportation network growth. The <i>iGo Plan</i> aims to provide a long-term plan and key short-term actions to facilitate a variety of travel modes, a culture shift and strategic land use planning.</p> <p>The <i>iGo Plan</i> acknowledges the Inland Rail Program and identifies the need to support the planning, design and delivery of the program as a key short-term action.</p>
<p><i>Advance Ipswich</i> (Ipswich City Council, 2015)</p>	<p>Ipswich City Council's (ICC) Community Plan, <i>Advance Ipswich</i> (2015) builds on the programs and strategies in the previous i2020 and i2031 Community Plans and provides a renewed and contemporary focus for the future of the city.</p> <p><i>Advance Ipswich</i> is structured under five themes:</p> <ul style="list-style-type: none"> ▶ Strengthening our Local Economy and Building Prosperity (jobs) ▶ Managing Growth and Delivering Key Infrastructure ▶ Caring for Our Community ▶ Caring for Our Environment ▶ Listening, Leading and Financial Management. <p>Measures to maximise local employment and local business participation identified in the SIA process will support <i>Advance Ipswich's</i> goals of Strengthening our Local Economy and Building Prosperity.</p> <p>Measures to mitigate impacts on tourism as a highly valued industry are included in the SIMP.</p>
<p><i>Scenic Rim Community Plan 2011–2026</i> (Scenic Rim Regional Council, 2018c)</p>	<p>The Scenic Rim Community Plan considers the region's heritage and identity and sets a vision for the region's future. The vision includes the following:</p> <ul style="list-style-type: none"> ▶ Spectacular scenery and healthy environment ▶ Sustainable and prosperous economy ▶ Open and responsive government ▶ Relaxed living and rural lifestyle ▶ Vibrant towns and villages ▶ Accessible and serviced region ▶ Healthy, engaged and resourceful communities ▶ Making it happen. <p>Each of the vision statements set clear outcomes, priorities and the expected role of Council in the delivery process. While no specific projects are identified, a clear Council planning framework and monitoring and review framework are set out to achieve the identified vision statements.</p> <p>Measures addressing potential impacts on character and tourism recognise the importance of the Scenic Rim's environment and communities to lifestyle and to tourism are included in the SIMP. Measures that address potential impacts on mental health and community wellbeing are also included in the SIMP.</p>

16.3.1 Social Impact Assessment Guideline

The Coordinator-General published the *SIA Guideline* in March 2018, pursuant to the *Strong and Sustainable Resources Communities Act 2017* (Qld) (SSRC Act). The *SIA Guideline* has been developed for non-resource projects subject to an EIS under the SDPWO Act or *Environmental Protection Act 1994* (Qld) (EP Act).

The Project is a linear infrastructure project for which 'potentially affected communities' include towns and rural areas in and near the EIS investigation corridor rather than 'nearby regional communities' within a 125 kilometre (km) radius as defined by the SSRC Act. The SIA responds to the SIA Guideline and includes:

- ▶ Consideration of the SIA Guideline's key matters, for the full life cycle of the Project
- ▶ A description of how the potentially impacted communities and stakeholders were consulted during the development of the SIA as part of a meaningful, inclusive and transparent engagement process
- ▶ Analysis of the nature and scope of the Project, potentially affected communities and the sensitivity of the social environment
- ▶ Development of a social baseline that includes demographic indicators, community values and history, community health and wellbeing, key industries, the local and regional workforce, access to social facilities and services and housing and accommodation
- ▶ Consideration of factors that determine the likely scope and significance of the Project's social impacts
- ▶ Assessment of social impacts and opportunities across all relevant issue categories for each stage of the Project lifecycle, including cumulative impacts
- ▶ Integration with the EIS process, including consideration of the social consequences of technical matters assessed in other parts of the EIS
- ▶ Provision of a SIMP that documents the management measures that address potential negative impacts and capitalise on positive opportunities and includes a monitoring and reporting framework.

Local social impacts will depend primarily on the relationship of the Project corridor to towns, rural properties and other social land uses, while regional impacts and benefits will relate primarily to construction workforce demands and regional economic development.

The potential for flooding, property severance, changes to connectivity and impacts on amenity are prominent factors for consideration.

The Project is part of the Inland Rail Program, which has interregional, State and national social impacts and benefits that require a clear focus on the cumulative effects of each of the Inland Rail projects and other relevant major projects. This is discussed further in Section 16.4.7 and Chapter 22: Cumulative Impacts.

16.4 Methodology

This section describes how the SIA was undertaken.

16.4.1 Social impact assessment steps

The key steps in the SIA included:

- ▶ Engaging with stakeholders and communities to identify the scope of potential social impacts and benefits, and ensure community views and knowledge are considered in the SIA
- ▶ Defining the SIA study area and the scope of assessment
- ▶ Developing a social baseline that combines quantitative and qualitative data, to provide an overview of existing conditions in local and regional communities
- ▶ Assessing the likelihood, nature and distribution of potential social impacts and benefits, and evaluation of their significance for social conditions and stakeholders
- ▶ Considering the results of EIS technical studies with a bearing on social impacts and benefits
- ▶ Assessing the potential for cumulative social impacts of multiple projects
- ▶ Developing management measures that avoid, reduce or offset social impacts and maximise Project benefits
- ▶ Evaluating the significance of social impacts and benefits.

These steps are further discussed in the following sections.

16.4.2 Stakeholder engagement

The purpose of stakeholder engagement in SIA is to ensure that directly affected stakeholders and other community members have the opportunity to provide informed input to the social baseline, impact assessment and mitigation measures. The objectives of stakeholder engagement in SIA are shown in Table 16.3.

TABLE 16.3: SIA ENGAGEMENT OBJECTIVES

Objectives	How achieved
SIA is informed by the views of directly affected stakeholders	The views of community members who may be affected by the Project's impacts or benefit from Project opportunities are sought and represented in the SIA.
SIA engagement is inclusive of all interested stakeholders	Opportunity for SIA engagement was available and accessible through the community survey, community information sessions, drop-in sessions, Community Consultative Committee (CCC) meetings (members and observers), and ARTC's online Social PinPoint and CollabMap tools. The results of ARTC's engagement with traditional custodians, businesses and other key stakeholders are incorporated in the SIA.
Stakeholders are able to provide informed inputs to the SIA	Stakeholders have access to information about the Project through face-to-face and online options, and to EIS team members to discuss social and environmental implications as the basis for providing their inputs.

SIA engagement was integrated with ARTC engagement processes for the Project, as described in Section 16.8.1 including:

- ▶ Participation in community information sessions to speak with residents, farmers and business owners
- ▶ Attendance at CCC meetings, to provide information about the SIA scope, process and impacts being assessed
- ▶ Participation in drop-in sessions, to discuss residents' views on the Project's potential social impacts and benefits.

A profile of SIA stakeholders and their key issues is provided in Section 16.8. The SIA engagement process included:

- ▶ A community survey involving more than 400 residents in the Toowoomba, Lockyer Valley, Ipswich and Scenic Rim LGAs to seek their inputs on community values and identify their concerns about potential social impacts
- ▶ Meetings with Ipswich City Council (ICC) and Scenic Rim Regional Council (SRRC) managers to discuss community concerns, vulnerabilities, potential social impacts and benefits, and mitigation and management measures
- ▶ Workshops with community organisations and government agencies including the Liworaji Aboriginal Corporation, Uniting Care Community Ipswich, Salvation Army Employment Plus, Department of State Development, Manufacturing, Infrastructure and Planning (DSDMIP) (now the Department of State Development, Tourism and Innovation (DSDTI), Department of Transport and Main Roads (DTMR), Department of Employment Small Business and Training (DESBT), Department of Education and Training (DET), Department of Communities, Disability Services and Seniors (DCDSS), Department of Aboriginal and Torres Strait Islander Partnerships (DATSIP), Department of Housing and Public Works (DHPW), Queensland Health and the Queensland Police Service (QPS) to discuss social infrastructure access and community concerns about the Project
- ▶ Meetings with the Office of Coordinator-General (OCG)
- ▶ Meeting with Yuggera Ugarapul People.

The SIA also incorporates the results of ARTC's engagement with directly affected and nearby landholders, Traditional Owner representatives, businesses, and community, environmental and economic groups.

The results of stakeholder engagement are provided in Section 16.8 and have been incorporated throughout the SIA as referenced.

16.4.3 Scoping

Matters that were considered in defining the SIA scope included:

- ▶ Statutory requirements for the SIA
- ▶ The stakeholder profile and stakeholder inputs of relevance to the SIA
- ▶ The nature and scale of the Project, including associated infrastructure, and its interactions with stakeholders and communities as identified by:
 - ▶ Consultation with landholders and other residents living near the Project
 - ▶ Native Title rights and other interests held by Indigenous people
 - ▶ The Project's interactions with the settlement pattern, including urban/rural centres, land uses patterns and infrastructure
 - ▶ The nature and scale of potential social impacts and benefits throughout the Project lifecycle, based on research and experience with linear infrastructure projects
 - ▶ The location of other projects in the region that may contribute to cumulative social impacts over time.

The scoping process and outcomes are described in detail in Appendix R: Social Impact Assessment Technical Report.

16.4.4 Social baseline

The social baseline provides a detailed description of social conditions in the areas of social influence. Investigations undertaken to develop the social baseline included:

- ▶ Potentially affected communities' history, land use and settlement pattern
- ▶ Population size, composition and growth
- ▶ Housing and accommodation availability and affordability
- ▶ Community values
- ▶ Community health and safety
- ▶ Employment, labour force and skills
- ▶ Business and industry
- ▶ Infrastructure provision including physical infrastructure (e.g. roads and rail lines) and social infrastructure (community facilities, services networks).

At the time that the EIS was being drafted, uncertainties were emerging regarding changes to social and economic conditions as the result of the COVID-19 pandemic (refer Appendix R: Social Impact Assessment Technical Report, Section 3.9). Assuming the Project is approved and progresses to detailed design, ARTC will review the available data on key social indicators and engage with ICC and SRRC to discuss changes to social conditions in the SIA study area. Any need for a review of the significance of social impacts and benefits in light of social and economic changes resulting from the COVID-19 pandemic will be agreed with the OCG at that time.

16.4.5 Impact assessment

Impacts were assessed for the construction and operational phases of the Project, and an estimation was made of the potential impacts of decommissioning. The SIA includes assessment of potential cumulative impacts in relation to the Inland Rail's adjoining sections and other major projects in the Ipswich, Scenic Rim and Logan LGAs.

Further detail on impact assessment methods is provided in Appendix R: Social Impact Assessment Technical Report.

16.4.6 Integration with Environmental Impact Statement findings

The SIA has considered the outcomes of stakeholder engagement conducted by ARTC as part of the EIS. The SIA also integrates the relevant findings of EIS technical reports, including project-specific and cumulative impacts on environmental qualities, cultural heritage or traffic infrastructure, to identify any social impacts. The EIS has considered issues identified by stakeholders as part of the SIA engagement process. Appendix R: Social Impact Assessment Technical Report contains the SIA's links to EIS findings.

16.4.7 Cumulative impact assessment

Cumulative social impact assessment considers the potential for the combined impacts of a set of projects to affect a social environment over time. The SIA considers the potential cumulative social impacts of the adjacent Inland Rail projects, Helidon to Calvert (H2C) and Kagaru to Acacia Ridge and Bromelton (K2ARB), other major projects in the Project region that are planned or being constructed, and other rail projects planned or being constructed in South East Queensland (as at June 2020).

The impact assessment included development of:

- ▶ A list of applicable projects and operations for consideration in the cumulative social impact assessment
- ▶ A figure showing the areas that might be influenced both spatially and socially by the Project, and its overlap with relevant projects or operations (refer Chapter 22: Cumulative Impacts)
- ▶ A timeline of construction and operation to show the temporal relationship between the Project and other projects and operations
- ▶ A matrix listing potential cumulative social impacts and their potential significance.

A review of the EIS' and project descriptions for other projects enabled qualitative analysis of potential cumulative impacts at the local and regional levels. Finally, cumulative impacts were considered in evaluating the significance of social impacts and benefits, and strategies to address cumulative impacts included in the SIMP.

16.4.8 Significance assessment

At the conclusion of the impact assessment stage, a two-stage significance assessment was undertaken. This assessment considered:

- ▶ Input from stakeholders on how they expected the Project would affect their communities or households
- ▶ The likelihood and consequence of potential social impacts and benefits
- ▶ Application of ARTC's commitments and management measures that address social impacts and benefits identified in the SIA process
- ▶ Identification of residual impacts deemed to be of 'medium' or 'high' significance.

16.4.9 Social Impact Management Plan

The SIMP provides mitigation strategies and management measures for social impacts, and strategies designed to enhance Project benefits. The SIMP includes five action plans addressing community and stakeholder engagement, workforce management, housing and accommodation, local business and industry content and health and community wellbeing. The SIMP development process included:

- ▶ Stakeholder engagement to identify stakeholders' suggestions regarding mitigation measures
- ▶ Incorporation of mitigation, management and enhancement measures into the SIMP

- ▶ Designing additional mitigation, management and enhancement measures where impacts would be of medium or high significance
- ▶ Developing performance indicators and a monitoring and reporting framework to support adaptive management of social impacts.

16.5 Social Impact Assessment study area

The Project commences approximately 1.8 km west of the village of Calvert within the Ipswich LGA and ends in the rural locality of Kagaru in the Scenic Rim LGA.

Investigations for the purposes of the EIS and ongoing engineering design including field surveys were generally undertaken within the 2 km EIS investigation corridor (or as required by the individual technical assessments) to ensure a robust assessment and to allow for potential future design changes. Study areas for technical assessments are specific to the environmental aspect being assessed and are, therefore, defined based on the nature of the environmental aspect, and the scale, type and duration of project elements that may impact on that aspect.

For example, residents who live close to the disturbance footprint could experience impacts related to noise, while those who live in nearby communities could experience different impacts e.g. traffic disruptions or changes to service access. Impacts such as demand for accommodation and benefits related to employment may be experienced across a region.

The SIA study area includes:

- ▶ The disturbance footprint, which is contained within the EIS investigation corridor
- ▶ Potentially affected communities, which include the village of Calvert, the towns of Rosewood and Peak Crossing and the localities of Lanefield, Lower Mount Walker, Ebenezer, Willowbank, Mount Forbes, Purga, Washpool, Woolooman, Undullah, Mutdapilly, Goolman, Kagaru and Allenview
- ▶ The Project region, which refers to the Ipswich City and Scenic Rim LGAs.

The Project traverses the Logan City LGA for a distance of approximately 300 metres (m) in the unpopulated mountainous area of Undullah. No adverse social impacts are likely in Logan City as a result of the Project, and as such the Logan LGA is not considered in detail in the SIA. The Project is near the Greater Flagstone Priority Development Area (PDA), which is within the Logan LGA and has been considered in the SIA.

Appendix S: Economic Technical Report has defined the Ipswich, Scenic Rim and Logan LGAs as the study area for assessment of employment and other economic benefits, as the Logan LGA's labour force and businesses are well positioned to contribute to the Project's workforce and supply chain. Appendix S: Economic Technical Report has also provided data and analysis for the Greater Brisbane Statistical Area, recognising that economic benefits would extend beyond the economic impact assessment study area.

The SIA study area is shown in Figure 16.1.

16.5.1 Disturbance footprint

The disturbance footprint refers to:

- ▶ The rail corridor, which is the corridor in which the rail tracks and associated infrastructure are located, and includes signalling infrastructure, maintenance sidings, drainage infrastructure, tunnel access, road-rail interfaces, culverts and bridges, crossing loops and fencing
- ▶ Areas used temporarily for construction purposes, including laydown and construction areas, earthworks, utilities, access tracks and road works.

The disturbance footprint is located within the EIS investigation corridor, which extends approximately 1 km either side of the rail alignment. The SIA includes a focus on potential impacts for landholders and residents within the disturbance footprint and in areas within approximately 1 km of the disturbance footprint.

16.5.2 Potentially impacted communities

The Project's impacts on local towns and rural localities will depend primarily on the proximity of the Project to towns and other land uses.

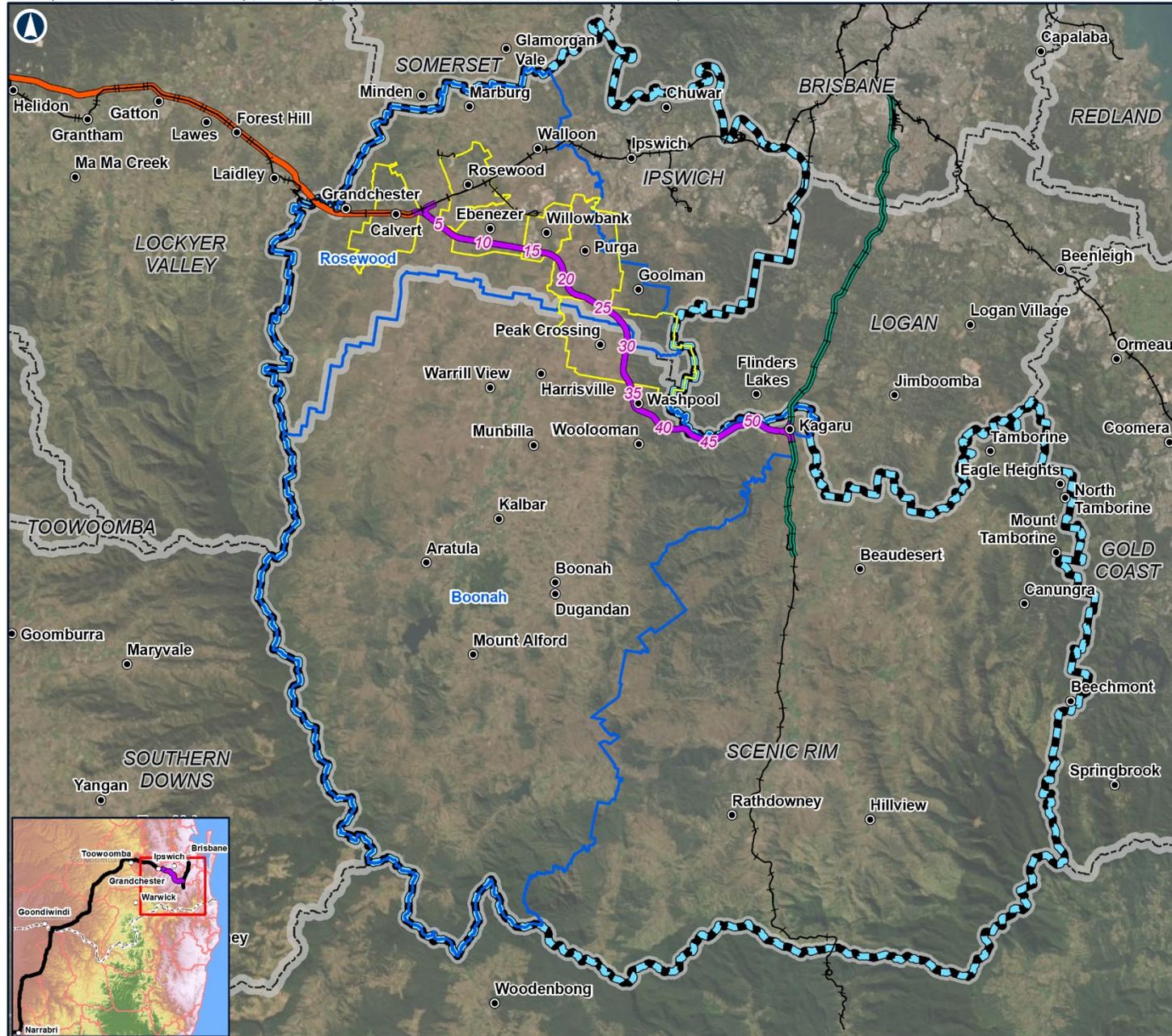
Potentially affected communities include:

- ▶ Rural and rural residential areas through which the Project would pass
- ▶ Communities affected by changes to the environment near the Project (e.g. changes to nearby land uses, road networks, noise levels, social infrastructure access, air quality or scenic character).

From west of Calvert the Project progresses in a generally south-easterly direction:

- ▶ Through large rural residential properties and grazing properties in Lanefield, Rosewood and Lower Mount Walker
- ▶ Through Ebenezer, crossing the Ebenezer Industrial Area, rural residential lots, grazing land, the disused Ebenezer Coal Mine and JNJ Resources (a bentonite product production business)
- ▶ Southwest of the Willowbank rural residential community, and 250 m south of the Ipswich Motorsport Precinct
- ▶ Though grazing, irrigated cropping and modified pastures land in Purga, Peak Crossing and Washpool
- ▶ Through rural Woollooman and Undullah (via a tunnel through the Teviot Mountain Range).

Towns and localities within and near the EIS investigation corridor are briefly described below. Australian Bureau of Statistics' (ABS) State Suburbs (SSC) are used to delineate the potentially impacted communities.



INLAND RAIL ARTC

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

CALVERT TO KAGARU Figure 16.1: SIA study area

LEGEND

- 5 Chainage (km)
- Localities
- H2C project alignment
- C2K project alignment
- K2ARB project alignment
- Existing rail
- SA2 boundary
- State Suburb (SSC) boundary
- SIA study area
- Local Government Areas

0 10 20 km

Coordinate System: GDA 1994 MGA Zone 56

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Date: 20/03/2020 Paper: A4
 Author: FFFJV GIS Scale: 1:550,000
 Data Sources: FFFJV

Map by: DMcP/IMF/RB/GN Z:GIS/GIS_3400_C2K/Task/340-EAP-201809031214_Social_Impact_Assessment_figures/340-EAP-201809031214_ARTC_Fig16.1_SocialInfluenceArea_v5.mxd Date: 23/03/2020 11:45

16.5.2.1 Calvert

Calvert is located in the Ipswich LGA, approximately 1.8 km south west of the Project's connection to the H2C project. The township is dissected by the existing QR West Moreton System railway line, Hidden Vale Road, Franklin Vale and Western Creek. Calvert is 25 km south-west of the Ipswich central business district. The EIS investigation corridor is within zones mapped as regional landscape and rural production area under the *ShapingSEQ* (Department of Infrastructure Local Government and Planning (DILGP), 2017a). In 2016, the Calvert SSC had a population of approximately 310 people within an area of 44.2 square kilometres (km²).

Ipswich Planning Scheme (ICC Plan) (ICC, 2006) zones the land that applies to the ICC Plan as Rural A and B, township residential with limited areas of special uses and special land management. The primary land use for this area is grazing with some areas of irrigated cropping and seasonal horticulture in the floodplain of Western and Franklin Vale Creeks. The areas surrounding Calvert are considered, under the ICC Plan, to be constrained by factors such as good quality agricultural land and flood-prone land, but include designated Future Investigation Areas with potential for development as an urban area within the township boundaries.

16.5.2.2 Lanefield and Lower Mount Walker

The rural localities of Lanefield and Lower Mount Walker are located to Calvert's south. In 2016, Lanefield had a population of 107 people and Lower Mount Walker had a population of 185 people. Land use in this area is typically of a rural nature, with most properties consisting of large-lot grazing areas. The primary land uses are grazing-modified pasture with some areas of irrigated cropping and seasonal horticulture in the floodplain of Western and Franklin Vale Creeks that coincide with the identified strategic cropping area. The majority of the remaining grazing use is over native vegetation. The ICC Plan zones the land as Rural A and B, township residential with limited areas of special uses and special land management (ICC, 2006).

16.5.2.3 Rosewood

Rosewood is located approximately 4 km east of the EIS investigation corridor and some 17 km west of Ipswich. At Rosewood, the QR West Moreton system connects to the QR South East Queensland Network. The town is dissected by the railway line and local roads connecting Laidley to the west and Marburg to the north. Rosewood is bounded to the south by the Bremer River. The township and surrounding locality are zoned as urban footprint and regional landscape and rural production respectively (DILGP, 2017a). In 2016, the Rosewood SSC had a population of 2,835 people within an area of 31.4 km².

The ICC Plan zones the land as Rural A and B, residential lots of low, medium, character mixed density and large lots, a town centre and limited areas of special use and special land management. Recreation areas, showgrounds and urban investigation area zonings fringe the township (ICC, 2006).

16.5.2.4 Ebenezer, Mount Forbes and Mutdapilly

Ebenezer is south of Rosewood and 16 km south-west of Ipswich. Ebenezer is dissected by the Bremer River to the west and Paynes Road to the south. The locality is a transition from the regional landscape and rural production to urban footprint and development zones of *ShapingSEQ* (DILGP, 2017b). In 2016, the Ebenezer SSC had a population of 317 people within an area of 31.8 km².

The ICC Plan denotes the area as rural pastoral and living (Rural B and C) and regional business and industry buffer surrounding the Ebenezer Coal Mine (ICC, 2006).

The Project passes approximately 1 km south of the Mount Forbes rural residential area, with the rural locality of Mutdapilly close by to the west of Mount Forbes. The rural living blocks in and around Mount Forbes Road represent a lifestyle development consistent with the ICC Plan providing housing close to rural or urban centres (ICC, 2006).

16.5.2.5 Willowbank

The Willowbank area, 14 km south-west of Ipswich City centre, is characterised by historic and current coal/bentonite mining and the Ipswich Motorsport Precinct development. *ShapingSEQ* zones the area as urban footprint and as a regional development area (DILGP, 2017b). In 2016, the SSC of Willowbank had a population of 1,316 people within an area of 20.6 km².

ICC Plan zoning for Willowbank is predominantly for regional business and an Industry Investigation Area, with some existing residential lots (ICC, 2006). The locality is bounded by the Cunningham Highway to the east and dissected by Ebenezer Creek. Land uses range from mining and transitional use, recreational, grazing native vegetation, residential, conservation and natural environments (DILGP, 2017a).

16.5.2.6 Purga

The Project traverses the south-western boundary of Purga locality. There is no consolidated township within the locality, the nearest being Yamanto to the north east. The locality is dissected by Warrill and Purga Creeks, Cunningham Highway and Ipswich Boonah Road. In 2016, the Purga SSC had a population of 576 people within an area of 56.6 km².

ICC Plan zones the area primarily for rural uses of agriculture, pastoral, conservation and special (rural) uses, which aim to maintain the agricultural use of the land and character of the nearby area (ICC, 2006). Land uses are predominantly production of irrigated or dryland agriculture, grazing and native or modified pastures, with limited intensive animal production or irrigated horticulture (vine fruits) and mining/extractive industries.

16.5.2.7 Peak Crossing and Washpool

The Project traverses rural land in Peak Crossing and Washpool. Peak Crossing is bounded by Teviot Range inclusive of Flinders Peak to the east and Warrill Creek (East Branch) to the west. The village is 20 km south of central Ipswich and is surrounded by rural lots. The Ipswich–Boonah Road dissects the village and surrounding area. In 2016, the Peak Crossing SSC had a population of 965 people within an area of 91.6 km². Washpool had a population of 95 people in 2016, in an area of 19.6 km².

The *Boonah Shire Plan* (superseded 20 March 2020 (SRRC, 2018b)) designates land in these localities as village (Peak Crossing), horticultural/dairying land and Scenic Rim Mountain Ranges. Land uses include residential, school/community services, manufacturing/industrial, production from irrigated agriculture and modified pastures, irrigated vine fruits, mining/quarries and grazing native vegetation, conservation and natural environments.

The Ipswich–Boonah Road dissects the village and surrounding area, and borders the rural locality of Washpool to the south, which is the nearest village to Peak Crossing. Washpool is characterised by predominantly vegetated mountainous areas in the east and rural land uses in the west.

16.5.2.8 Undullah and Woolooman

Undullah is a locality that lies across the Teviot Range with no distinct population centre but with a dispersed population of approximately 45 people in 2016. *ShapingSEQ* zones the area as regional landscape and rural production (DILGP, 2017a). In 2016 the Undullah SSC had a population of 45 people within an area of 119.8 km².

The locality is wholly contained within the Rural Zone of the *Boonah Shire Plan* (superseded 20 March 2020 (SRRC, 2018b)). The land uses are predominantly grazing of native vegetation (DILGP, 2017b). The area is dissected by Dugandan and Woollaman Creeks.

Throughout the Woolooman area (in the east of the EIS investigation corridor) and the Teviot Range (Flinders Peak Conversation Park), terrain is of a rugged nature and there is minimal development. Woolooman had a population of approximately 23 people in 2016 within an area of 16.9 km². Wyaralong Dam is located to the south.

16.5.2.9 Kagaru and Allenview

Kagaru is a locality on the eastern side of the Teviot Range with no population centre. The area is dissected by Teviot Brook and Woollaman Creek and is located within the Bromelton SDA. The western side is bounded by the Brisbane–Sydney Railway. In 2016, the Kagaru SSC had a population of approximately 20 people within an area of 29.1 km². The nearby rural locality of Allenview had a population of approximately 184 people.

The *Boonah Shire Plan* (superseded 20 March 2020 (SRRC, 2018b)) describes this area as Rural Zone. The land uses are predominantly grazing of native vegetation, production from irrigated agriculture (including sown pasture) and limited mining/quarry (DILGP, 2017a).

16.5.3 Regional communities

16.5.3.1 Ipswich Local Government Area

Ipswich City is located on the Bremer River and is QLD's oldest provincial city. The LGA covers some 1,089 km² and is surrounded by the LGAs of Brisbane to the east, Lockyer Valley to the west, Scenic Rim and Logan to the south and Somerset to the north.

The LGA is characterised by the Bremer River and its tributaries, the historic town centre and diverse suburban and semi-rural areas.

Analysis of key industries of employment in the Ipswich LGA indicates that industries such as Health Care and Social Assistance, Retail, Manufacturing and Construction are strong employers in the LGA. Agricultural production is located adjacent to the river and creek floodplains, some mining/extractive uses still exist and industrial uses are prevalent in the forming mining areas.

Current key industry sectors include energy generation, food and agribusiness, defence, advanced manufacturing and transport and logistics (ICC, 2018a).

16.5.3.2 Scenic Rim Local Government Area

Scenic Rim LGA lies between Ipswich and the NSW border, inland of the City of Gold Coast. The LGA was formed in 2008 following the amalgamation of Boonah Shire, most of Beaudesert Shire and some areas of Ipswich City. The total council area is 4,251 km² and in 2016 Scenic Rim LGA was home to 40,072 people (ABS, 2016c).

The area is characterised by the u-shaped mountain range and fertile valleys, which make it popular for rural living and tourism. The larger urban areas in the LGA include Beaudesert, Boonah, Kalbar, Aratula, Kooralbyn and Bromelton. The villages of Harrisville and Peak Crossing also have small, yet defined, residential zones.

The strongest industries of employment are Construction (10.8 per cent), followed by Health Care and Social Assistance (10.5 per cent), Education and Training (9.4 per cent) and Agriculture, Forestry and Fishing (8.8 per cent). Irrigated pastures and some more intensive agriculture dominate the floodplains of the region's major watercourses, Warrill Creek and Bremer River. Similar land use patterns occur around Purga Creek.

16.5.4 Traditional ownership

The disturbance footprint is primarily located on land within the Yuggera Ugarapul People's Native Title claim area, with a very small portion at the south-eastern extent of the EIS investigation corridor being in an area claimed by the Jagera People.

Native Title rights and interests may exist over land that is unallocated State land, Crown land, State forests, within national parks or public reserves and some other forms of tenure.

16.6 The Project

The Project is a 'greenfield' (new rail corridor) Project and is one of the 'missing links' within the Inland Rail Program. It will generally be located within the existing Southern Freight Rail Corridor (SFRC), which was identified as a major freight link connecting the Western Rail line near Rosewood to the interstate railway north of Beaudesert. The SFRC is 80 m to 100 m wide and extends approximately 53 km from Calvert at its northern extent to Kagaru at its south-eastern extent.

The DTMR undertook studies and stakeholder engagement to develop the SFRC. The SFRC was gazetted by DTMR in 2010. Where possible, the SFRC was placed along the boundary of properties to avoid severing grazing properties and croplands. The Project includes a southern fork at Kagaru to allow customers to use the Specialised Container Transport Logistics intermodal facilities in Bromelton; however, any planned works for intermodal facilities are not part of the Project.

The SFRC study report notes that, while the SFRC project was designed to avoid conflicting land use impacts as much as possible, it was likely to change sections of the quiet rural nature and character of parts of the SFRC study area by introducing freight rail traffic and potentially being a catalyst for the development of regional industry (AECOM, 2010b).

The report also notes that the SFRC complements the future planning intent for much of the SFRC Study Area, in particular the future industrial precincts of Ebenezer and Purga, with the possibility of an intermodal freight terminal along the corridor, which could generate significant employment.

The SIA study area is primarily characterised by rural and rural-residential land uses. Land tenure throughout the EIS investigation corridor is predominantly freehold, with exceptions including state land, leasehold land, reserve land and oil and electricity easements.

16.6.1 Key Project components

The Project commences approximately 1.8 km west of the village of Calvert within the Ipswich LGA and ends in the rural locality of Kagaru in the Scenic Rim LGA. The land requirement for the Project will comprise a corridor with minimum width of 40 m with wider areas to accommodate earthworks associated with large cut and fill locations, drainage works, rail infrastructure, access roads and fencing. An allowance of an additional 30 m has been included from the eastern end of the tunnel to the Undullah Road Crossing to maintain a tunnel access road to the eastern portal. The corridor will be of sufficient width to accommodate the infrastructure currently proposed for construction, as well as future expansion, including possible future requirement for 3,600 m trains after 2045, or when Inland Rail has reached capacity. Key components of the Project are summarised in Table 16.4.

TABLE 16.4: KEY COMPONENTS OF PROJECT

Key component	
Start and finish point	Calvert to Kagaru
Local government areas	Ipswich City Council Scenic Rim Regional Council Logan City Council
Length of alignment	53 km (new dual gauge track)
Track dimensions	A rail corridor with a minimum width of 40 m, containing a single track dual gauge railway line with up to four crossing loops
Train lengths	Initially up to 1,800 m with the potential to accommodate 3,600 m trains in the future not precluded by the design.
Expected completion	2026

16.6.2 Project elements and operations

Project elements with potential for social impacts and benefits are summarised in Table 16.5.

TABLE 16.5: PROJECT ELEMENTS OF RELEVANCE TO THE SOCIAL ENVIRONMENT

Key elements	Detail	Potential impact areas
Construction		
Disturbance footprint	<p>Creation a rail corridor with minimum width of 40 m, with wider areas to accommodate earthworks associated with large cut and fill locations, drainage works, rail infrastructure, access roads and fencing. An additional 30 m footprint width has been included for the eastern end of the tunnel to Kagaru due to the undulating terrain, multiple interfaces with Woollaman Creek and Wild Pig Creek, and the limited available geotechnical data for this area.</p> <p>Construction of an approximately 53 km rail line, including:</p> <ul style="list-style-type: none"> ▶ 17.7 km in cut ▶ 33.5 km of embankment ▶ A tunnel of approximately 1,015 m through the Teviot Range. <p>Project construction will require 29 laydown areas located approximately every 5 km, to accommodate storage and distribution of construction materials and facilitate construction activities.</p> <p>There will be 27 new bridge structures including:</p> <ul style="list-style-type: none"> ▶ 5 bridges over waterways and roads ▶ 16 rail bridges over waterways ▶ 3 rail bridges over road ▶ 3 road bridges over rail. 	<ul style="list-style-type: none"> ▶ Connectivity ▶ Community cohesion ▶ Agricultural operations ▶ Residential amenity and character ▶ Privacy and feelings of security ▶ Travel behaviour ▶ Health ▶ Concerns about property values ▶ Noise ▶ Water availability
Roadworks	The Project requires re-alignment of the Cunningham Highway, including construction of a road-over-rail bridge, and of the Ipswich-Boonah Road including a rail-over-road bridge, re-alignment of several local connector roads and minor modifications.	<ul style="list-style-type: none"> ▶ Road network access ▶ Property access ▶ Connectivity ▶ Traffic safety
Construction employment	<p>The construction workforce is expected to peak at approximately 620 personnel. The average workforce across the construction period would be approximately 271 personnel.</p> <p>The Project will engage businesses within the Project region in its supply chain, which will support indirect employment. Indirect employment is also likely (refer Section 16.9.2).</p>	<ul style="list-style-type: none"> ▶ Local employment and training opportunities ▶ Labour draw ▶ Workforce behaviour
Operations		
Freight rail operation	Double-stacked container freight trains of up to 1,800 m length, with potential for future accommodation of freight trains of 3,600 m length not precluded by the design. When Inland Rail starts operation, it is anticipated that the Project will be used by an average of 33 train services per day, increasing up to 47 train services per day in 2040.	<ul style="list-style-type: none"> ▶ Residential amenity ▶ Rural character ▶ Tourism values ▶ Community safety ▶ Regional development ▶ Health and wellbeing
Operational employment	Approximately 20 personnel.	<ul style="list-style-type: none"> ▶ Local employment and training opportunities
Corridor security	Standard rural fencing (post and wire) will generally be provided to the extent of the Project but is not generally required between the corridor and an adjacent railway or road corridor. Where superior fencing is required (near roads or to prevent trespass), a 1.8 m chain wire fence may be provided with gates at suitable corridor entry/exit locations and at private level crossings.	<ul style="list-style-type: none"> ▶ Connectivity ▶ Stock and agricultural equipment movements ▶ Pedestrian and cycle movements
Level crossing operation	Eight level crossings are proposed on public roads as part of the Project.	<ul style="list-style-type: none"> ▶ Connectivity ▶ Emergency services access ▶ Traffic safety ▶ Rural character ▶ Agricultural movements

Key elements	Detail	Potential impact areas
Crossing loop operation	Crossing loops would be located at: <ul style="list-style-type: none"> ▶ Ebenezer ▶ Purga Creek ▶ Washpool ▶ Undullah. 	<ul style="list-style-type: none"> ▶ Residential amenity—noise characteristics and air quality ▶ Connectivity
Track maintenance	Regular track maintenance would be performed.	<ul style="list-style-type: none"> ▶ Noise ▶ Employment.
Decommissioning		
Removal and rehabilitation	Track and infrastructure removal and corridor rehabilitation.	<ul style="list-style-type: none"> ▶ Employment and training opportunities ▶ Future use opportunities

16.6.2.1 Detailed design

Detailed design is the process of developing the Project design up to an 'Approved for Construction' stage.

Detailed design includes outputs such as 2-D and 3-D models, detailed engineering drawings, construction specifications, and detailed bill of quantities for estimates and procurement.

Environmental design considerations and design criteria are discussed in Chapter 6: Project Description.

16.6.2.2 Pre-construction activities

Pre-construction activities will be undertaken before construction commences. For the purpose of this assessment, pre-construction activities include ongoing activities, early works and preconstruction activities as described in Chapter 6: Project Description. Preconstruction activities include:

- ▶ Securing land access and undertaking land surveys
- ▶ Geological and geotechnical investigations
- ▶ Ecological investigations
- ▶ Cultural heritage surveys, which have already commenced as land access and Cultural Heritage Management Plans (CHMPs) have been agreed with the Yuggera Ugarapul People
- ▶ Securing access to borrow material (for construction of rail ballast and embankments)
- ▶ Establishment of site compounds, fencing and access tracks.

16.6.2.3 Construction

Project construction is planned to start in 2021 and is expected to be completed in 2026. Construction would include:

- ▶ Site preparation including site clearance and vegetation clearing in the rail corridor and for associated construction sites (disturbance footprint), and stockpiling of turf and topsoil where possible)
- ▶ Establishment of site compounds and facilities, installation of temporary and permanent fencing, installation of drainage and water management controls and construction of site access including temporary haul roads
- ▶ Relocation of impacted utilities and roads
- ▶ Establishment of hardstand areas for laydown, storage, material distribution, flash butt welding and administration facilities
- ▶ Civil works, including bulk earthworks, construction of cuts and embankments, installation of permanent drainage controls, bridge and watercourse crossing construction, and environmental management measures (e.g. fauna crossings)
- ▶ Construction of the tunnel use roadheaders or drill and blast techniques for excavation construction of tunnel portals and installation of a permanent concrete tunnel lining
- ▶ Track works including the installation of ballast, sleepers and rails
- ▶ Installation of rail systems infrastructure and wayside equipment including signals, turnouts and asset monitoring infrastructure.

Excess material resulting from excavation will be stockpiled along the rail corridor and will be formed into permanent spoil mounds, spread out to minimise height.

Construction work will be undertaken Monday to Friday from 6.30 am to 6.00 pm and Saturday from 6.30 am to 1.00 pm, with no work on Sundays or public holidays. Track possessions will generally be allocated over weekend periods, with extend track possession occurring over holiday periods. Non-standard construction hours may also be used, as discussed in Chapter 6: Project Description and Chapter 15: Noise and Vibration.

16.6.2.4 Operations

Following construction, the rail line and communication and signalling systems will be tested and commissioned (checked). Construction sites, compounds and access routes will be returned the same or better condition than prior to construction commencing.

The Inland Rail Program as a whole will be operational once all 13 sections are complete, which is estimated to be in 2026. The Project will form part of the rail network managed and maintained by ARTC and will involve operation of a single rail track with crossing loops. The Project will accommodate double-stacked freight trains up to 1,800 m long and 6.5 m high, with potential for future accommodation of freight trains of 3,600 m long not precluded by the design.

Train services will be provided by a variety of operators. Trains will be a mix of grain, bulk freight and other general transport trains. When Inland Rail starts operation, it is anticipated that the Project will be used by an average of 33 train services per day, increasing up to 47 train services per day in 2040. Train speeds will range from 80 to 115 km per hour.

Operational processes will include:

- ▶ The use of the railway for freight purposes
- ▶ Standard ARTC maintenance activities including:
 - ▶ Minor maintenance works, such as bridge and culvert inspections, sleeper replacement, rail welding rail grinding, ballast profile management and track tamping
 - ▶ Major periodic maintenance, such as ballast cleaning, reconditioning of track, and adjustment and correction of track level and line
- ▶ Operation and maintenance of tunnel ventilation, safety systems and signalling infrastructure.

Standard rural fencing (post and wire) will be required to the extent of the Project, but is not generally required between the corridor and an adjacent railway or road corridor. Where superior fencing is required (near roads or to prevent trespass) a 1.8 m chain wire fence may be provided with gates at corridor entry/exit locations and private level crossings. The design of fauna fencing will be managed during detailed design (refer Chapter 6: Project Description).

Tunnel operations will require power and water supplies for ventilation and fire safety. Electricity supply will also be needed for points, signalling and other infrastructure. It is anticipated that the supply of these services will be delivered by relevant providers under the terms of their respective approvals and/or assessment exemptions.

16.6.2.5 Decommissioning

The Project will form part of the rail network managed and maintained by ARTC and is planned to operate for 100 years. Decommissioning would involve removing and recycling the track and infrastructure that is not required for other future purposes, and rehabilitation according to a Rehabilitation Plan that will be developed in later phases of the Project. Access roads and tracks that will no longer be used will be decommissioned and restored to a condition generally consistent with the pre-existing characteristics of the area. The rail corridor would then be rehabilitated to enable future land uses to proceed.

As the Project has a design life of 100 years, to approximately 2125, the social impacts of Project decommissioning cannot be foreseen and are not discussed in the SIA.

16.6.3 Skills, services and materials required by the Project

Construction of the Project is proposed for 2021–2026. The workforce is expected to build during 2021 and peak in 2022 at approximately 620 personnel. The average workforce across the construction period would be approximately 271 personnel.

The core construction workforce will consist of professional staff, supervisors, trades workers and plant operators, with earthworks crews, bridge structure teams and capping and track-work crews working at different periods though the construction phase.

The construction workforce is expected to be drawn from within a safe daily (one-hour) driving radius including communities within the Ipswich, Scenic Rim, Brisbane, Gold Coast, Beaudesert, Logan and Toowoomba LGAs. It is likely that a portion of the construction workforce will be sourced from nearby communities. On this basis a workforce accommodation facility is not proposed.

Once operational, a workforce of approximately 20 personnel is expected for the Project's operation, to undertake monitoring and maintenance of the track and infrastructure, signalling, environmental monitoring and management of land and infrastructure in the railway corridor. This is likely to include a mix of personnel from the Project region and mobile crews moving between sections of Inland Rail, with little potential for change to population or housing demand.

The Project will require construction supplies, including borrow material, ballast material, pre-cast concrete, concrete sleepers and turnout panels, steel, fencing, electrical components, fuel and consumables. A range of services will also be required during construction and operations, many of which may be sourced locally. Ballast material will be sourced from local quarries.

Operational supplies may include ballast material and services and materials for maintenance of the rail corridor, bridges, fences, crossings, and rehabilitation services.

16.7 Social environment

This section describes the social characteristics of local communities and regions that may be affected by the Project. Additional data supporting this section are provided in Appendix R: Social Impact Assessment Technical Report.

16.7.1 Community profile

This section describes the demographic characteristics of the SIA study area.¹

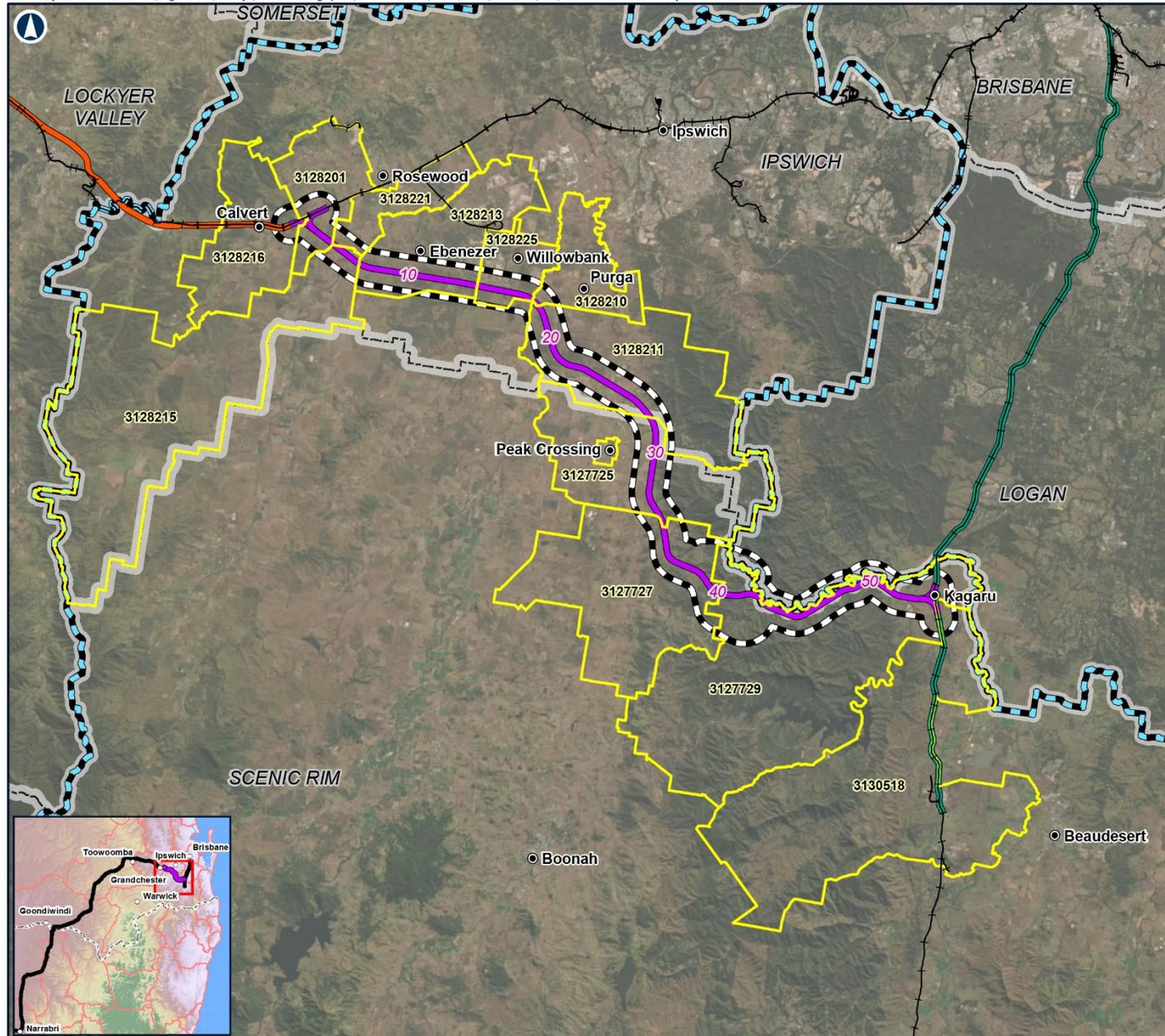
Detailed socio-economic data are not provided in the SIA for localities with less than 200 people, as the consistency of data is constrained by their small populations and ABS confidentiality protocols; however, their characteristics are reflected by SA1 level data.

16.7.1.1 Disturbance footprint

The disturbance footprint traverses 12 Statistical Area Level 1 (SA1s) in QLD (refer Figure 16.2). The SA1s represent a total area of 867.9 km², within which there were approximately 1,638 dwellings and a population of 3,421 people in 2016 (an increase of 147 people since 2011). Population density in all but one of the 12 SA1s was very low, with less than 10 people per km². Key characteristics of the SA1s are shown in Table 16.6, including Socio-Economic Indexes for Areas (SEIFA) Index of Relative Socio-Economic Advantage and Disadvantage (IRSAD) rankings. SEIFA rankings are developed by the ABS, based on data from the five-yearly Census, to rank areas according to relative socio-economic advantage and disadvantage (ABS, 2017). SEIFA scores are compared to the standardised baseline (State) score of 1,000 with a low score indicating relatively greater disadvantage.

The SA1 areas in context with the disturbance footprint are shown in Figure 16.2.

1. The ABS makes small random adjustments to all cell values to protect the confidentiality of data. These adjustments may cause the sum of rows or columns to differ by small amounts from table totals.



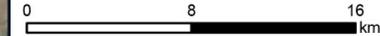
INLAND RAIL ARTC

The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

CALVERT TO KAGARU
Figure 16.2: SA1 areas within the EIS investigation corridor

LEGEND

- 5 Chainage (km)
- Localities
- H2C project alignment
- C2K project alignment
- K2ARB project alignment
- +— Existing rail
- SA1 boundary
- EIS investigation corridor
- SIA study area
- Local Government Areas



Coordinate System: GDA 1994 MGA Zone 56

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 Author: FFJV GIS Scale: 1:320,000
 Data Sources: FFJV

The SEIFA IRSAD indicates there is potential for disadvantage within the EIS investigation corridor—only three of the SA1s had scores higher than the QLD standardised score, while six SA1s had IRSAD scores within the 2nd to 4th deciles. The lowest scores were in SA1 3128221 (which corresponds to the area south of Rosewood), and SA1 3127729 (which corresponds to the Kagaru area).

TABLE 16.6: SA1 SEIFA SCORES 2011 AND 2016, SCORE AND RANKING (DECILE)

SA1 number	Area (km)	Population 2011	Population 2016	Population change (2011–16)	Population density 2016 (persons/km)	No. dwellings 2016	IRSAD score	IRSAD decile
3128216	44.2	281	313	11.4%	7.1	114	982	4
3128201	29.2	235	229	-2.6%	7.8	229	978	4
3128221	20.2	239	348	45.6%	17.2	348	885	2
3128215	149.3	264	253	-4.2%	1.7	108	1007	5
3128213	48.2	386	323	-16.3%	6.7	122	967	4
3128225	16.3	45	38	-15.6%	2.3	11	-	-
3128210	24.9	240	238	-0.8%	9.5	87	972	4
3128211	72.1	362	387	6.9%	5.4	146	990	5
3127725	63.6	369	383	3.8%	6.0	135	1006	5
3127727	88.3	485	503	3.7%	5.7	187	1005	5
3127729	154.5	61	67	9.8%	0.4	23	929	3
3130518	157.2	307	339	10.4%	2.2	128	996	5
Total	867.9	3,274	3,421	4.5%	-	1,638	-	-

Source: ABS Census of Population and Housing 2011 and 2016.

16.7.1.2 Local and regional populations

In 2016, the Scenic Rim LGA had a population of 40,078 people, which was an increase of 3,621 people or 9.9 per cent since 2011. The Ipswich LGA's population was almost five times larger (at 193,737 people) and had increased between 2011 and 2016 by approximately 26,386 people, or 16.1 per cent over the five years (refer Table 16.7).

The Rosewood SSC was the most populous at 2,835 people in 2016, followed by Willowbank with 1,316 people. Calvert, Ebenezer, Peak Crossing and Purga had populations ranging from 310 to 972 people (ABS, 2016a). Peak Crossing experienced the largest population growth over the five years at 203 people or 26.4 per cent. Ebenezer experienced the largest decrease at 69 people or 17.9 per cent, while the other suburbs had moderate rates of growth at 3.2 per cent to 9.5 per cent over the five years (ABS, 2016a).

TABLE 16.7: POPULATION CHANGE 2011 TO 2016

Community	2011 (persons)	2016 (persons)	Change 2011–2016 (no.)	Change 2011–2016 (%)
SSC				
Calvert	283	310	27	9.5
Rosewood	2,746	2,835	89	3.2
Ebenezer	386	317	-69	-17.9
Willowbank	1,254	1,316	62	4.9
Peak Crossing	769	972	203	26.4
Purga	601	574	-27	-4.5
SSC total	6,030	6,324	294	4.9
Region				
Ipswich LGA	166,903	193,737	26,834	16.1
Scenic Rim LGA	36,457	40,078	3,621	9.9
Project region total	481,409	537,199	55,790	11.6
State				
QLD	4,332,739	4,703,193	370,454	8.6

Source: ABS, 2016b

16.7.1.3 Population growth

Estimates and forecasts of population change at the Statistical Area Level 2 (SA2) and LGA levels between 2011–12 and 2026 are shown in Table 16.8.

The populations of the Ipswich and Scenic Rim LGAs grew steadily between 2011–12 and 2016–17, at annual rates of between 1 per cent and 3.5 per cent. Ipswich LGA experienced faster growth over this period and is expected to continue to grow more rapidly as the extensive Ripley PDA and other residential developments are completed. Growth of 30.2 per cent is expected in the Ipswich LGA between 2021 and 2026, compared to 11.8 per cent in the Scenic Rim LGA (Queensland Government Statistician Office (QGSO), 2018).

The Rosewood and Boonah SA2s experienced minimal to no population growth from 2011 to 2016–17; however, the Rosewood SA2 is forecast to grow strongly at 59.8 per cent between 2021 and 2026 (refer Table 16.8). The Boonah SA2 is forecast to increase its population slowly between 2016–17 and 2026.

TABLE 16.8: POPULATION 2011–12 TO 2021–26

Statistical area	2011–12 (%)	2012–13 (%)	2013–14 (%)	2014–15 (%)	2015–16 (%)	2016–17 (%)	2017–21 (%)	2021–26 (%)
Boonah SA2	0.5	1.1	2.9	0.0	1.0	3.6	5.2	7.6
Rosewood SA2	0.4	-2.6	0.1	1.6	3.2	-1.0	30.4	59.8
Total	1.0	0.9	2.4	1.0	1.8	1.6	12.7	21.3
Ipswich LGA	3.5	3.1	3.1	2.7	2.9	3.2	13.8	30.2
Scenic Rim LGA	1.4	2.0	3.0	1.1	1.6	1.9	9.8	11.8
Total	3.5	3.1	3.1	2.7	2.9	3.2	13.8	30.2

Source: QGSO, 2018

16.7.1.4 Indigenous population

The Ipswich LGA had a slightly higher percentage of Indigenous people (4.4 per cent) than the QLD average (4.0 per cent) in 2016, while Scenic Rim LGAs percentage was lower than the QLD average (3.1 per cent). Percentages of Indigenous people were higher than the QLD average of 4.0 per cent in Calvert (7.1 per cent), Rosewood (5.4 per cent) and Ebenezer (4.4 per cent) (refer Table 16.9).

TABLE 16.9: INDIGENOUS POPULATION PERCENTAGE 2016

Statistical area	Number	% of total population
SSC		
Calvert	22	7.1
Rosewood	154	5.4
Ebenezer	14	4.4
Willowbank	43	2.6
Purga	12	2.1
Peak Crossing	18	1.9
Region		
Ipswich LGA	8,429	4.4
Scenic Rim LGA	1,225	3.1
State		
QLD	186,482	4.0

Source: ABS, 2016a

16.7.1.5 Demographic characteristics

Age profile

The median age in the Ipswich LGA (32 years) did not change during 2011–2016, but increased by two years in the Scenic Rim LGA, to 44 years (compared to QLD's median age change of 36 years to 37 years). New residential development in the Ipswich LGA is likely to be contributing to the higher proportion of young people there when compared to the Scenic Rim LGA, where far less residential development is occurring (refer Appendix R: Social Impact Assessment Technical Report). Greater changes in median age occurred within the SSCs, with the largest change in Calvert (from 39 years to 45 years) and Ebenezer (from 41 to 45 years).

The Ipswich LGA recorded a high percentage of persons under the age of 16 years (23.7 per cent) compared to the Scenic Rim LGA (18.9 per cent) and QLD (19.4 per cent), while the Scenic Rim LGA recorded a higher proportion of people aged over 65 years (20.2 per cent) compared to QLD (15.4 per cent) and the Ipswich LGA (10.7 per cent).

Disability

The Scenic Rim LGA recorded a high percentage of people requiring assistance (6.2 per cent) due to its older age profile compared to Ipswich (5.7 per cent) and QLD (5.2 per cent). Within local communities, Calvert recorded the highest percentage of people requiring assistance (5.5 per cent), followed by Purga (4.7 per cent) and Peak Crossing (4 per cent) (refer Appendix R: Social Impact Assessment Technical Report).

Households

The Scenic Rim LGA recorded a high proportion of couple only households (44.7 per cent), which is indicative of the older age profile and likely drift of younger people to larger centres. A much lower 31.7 per cent were couple only families in Ipswich LGA.

Consequently, Ipswich recorded a higher percentage of couple with children families (45.7 per cent) than the Scenic Rim LGA (39.4 per cent). However, almost 21 per cent of families in the Ipswich LGA were sole parent families, compared to the Scenic Rim LGA at 14.8 per cent (ABS, 2016b).

The highest percentage of 'couples with children' families was recorded in Peak Crossing (50.9 per cent), reinforcing the importance of ensuring safety and good amenity in this area. More than 26 per cent of Rosewood's families were 'sole-parent' families in 2016, which indicates vulnerability to changes in social conditions such as housing access and living costs, while all other suburbs except Calvert (18 per cent) had lower percentages of sole parent families than the State average (ABS, 2016b).

Within QLD, 39.4 per cent of families identified as couple only, 42.5 per cent were couple with children and 16.5 per cent identified as sole parent families.

The Ipswich LGA had a higher percentage of family households (71.6 per cent) compared to the Scenic Rim LGA (69.5 per cent), which had a slightly higher percentage of lone person households (20.3 per cent) compared to the Ipswich LGA (19 per cent). This is indicative of its older population and indicates the potential for vulnerability with respect to changing social conditions, particularly access to services.

Peak Crossing recorded the highest percentage of family households (83.9 per cent), while Willowbank recorded the lowest (62.9 per cent), due to its high percentage of lone person households (28.5 per cent).

Within QLD 71.8 per cent of households were family, 23.5 per cent were lone person households and 4.7 per cent identified as group households (ABS, 2016b) (refer Appendix R: Social Impact Assessment Technical Report).

Gender

In 2016, within the Ipswich LGA, 49.4 per cent of the population identified as male, while 50.6 per cent identified as female. The distribution was similar in the Scenic Rim LGA, with 49.3 per cent of the population identified as male and 50.7 per cent as female. Local communities also recorded a reasonably even distribution of male and females, with the largest discrepancy recorded in Rosewood with 46.7 per cent of the population identifying as male and 53.3 per cent as female (refer Appendix R: Social Impact Assessment Technical Report).

Qualifications

The Scenic Rim and Ipswich LGAs recorded higher percentages of people who had not gone to school or attended to Year 8 or below, compared to QLD (7.4 per cent, 6.3 per cent and 5.4 per cent respectively). Year 11 or 12 (or equivalent) was the highest level of schooling completed for 49.5 per cent of the population within the Scenic Rim LGA, followed by 56 per cent in the Ipswich LGA and 58.9 per cent in QLD.

A lower proportion of educational attainment within the Scenic Rim LGA may be attributed to the rural nature of the area, the greater proportion of elderly persons (education is more accessible to the current generation) and the higher proportion of employment in farming and trades.

A relatively low proportion of the population in the Ipswich and Scenic Rim LGAs had obtained a bachelor's degree or higher, compared to QLD (12 per cent, 12.3 per cent and 18.3 per cent respectively). The percentages of those completing an advanced diploma/diploma or certificate were similar to QLD averages.

Within QLD 48.3 per cent of the population recorded having a qualification, compared with 43.6 per cent within the Scenic Rim LGA and 45.1 per cent within the Ipswich LGA. While less people within the Scenic Rim and Ipswich LGAs had attended university, a higher proportion had completed vocational training, compared to rest of QLD (refer Appendix R: Social Impact Assessment Technical Report).

Income

Median household incomes in the Ipswich LGA (\$1,410/week) were comparable to the QLD average (\$1,402/week) and higher than in the Scenic Rim LGA (\$1,222/week) in 2016.

Peak Crossing, Ebenezer, Purga and Calvert recorded higher median household incomes than QLD, while Willowbank and Rosewood recorded lower median incomes than the State average (ABS, 2016a).

The Ipswich LGA had a slightly larger average household size (2.8 people) compared to the Scenic Rim LGA and QLD (2.6 for both), due to the higher proportion of families within the Ipswich LGA.

Socioeconomic advantage and disadvantage

IRSAD and Index of Education and Occupation (IEO) scores for 2011 and 2016 for the Project region are shown in Table 16.10. The Ipswich LGA is neither particularly advantaged nor disadvantaged, being positioned mid-range in the 5th decile and ranked 49th of 80 QLD LGAs. The result is similar for the IEO index, with Ipswich LGA in the 6th decile and ranked 42nd of 80 LGAs. The IRSAD result for Rosewood SA2 suggests there may be some pockets of relative disadvantage, being in decile 3 and among the 30 per cent most disadvantaged SA2s in QLD. Boonah SA2 also appears less advantaged than is typical for Ipswich, being in the 4th decile and among the 40 per cent most disadvantaged SA2s in QLD. However, both SA2s have mid-level education and skills relative to other areas, with Rosewood in the 6th decile and Boonah in the 7th.

The Scenic Rim LGA enjoys relative advantage in decile 6 and ranked 57th of the 80 QLD LGAs. The Scenic Rim LGA has more education and skills relative to other areas, being in the 8th decile and ranked 62nd of 80 LGAs.

The extended drought has affected the financial resources of families and businesses throughout the Project region, as has COVID-19 restrictions and responses, and the 2021 Census may reveal negative changes in socio-economic indicators such as household incomes, SEIFA scores or workforce participation.

TABLE 16.10: SOCIO-ECONOMIC ADVANTAGE AND DISADVANTAGE

Statistical area	IRSAD			Index of education and occupation		
	Score	Decile	Rank in QLD	Score	Decile	Rank in QLD
			Position in 526 SA2s			Position in 526 SA2s
Boonah SA2	963	4	196	1,025	7	339
Rosewood SA2	952	3	173	1,014	6	305
			Position in 80 LGAs			Position in 80 LGAs
Ipswich LGA	948	5	49	932	6	43
Scenic Rim LGA	968	6	57	962	8	62

Source: ABS, 2016a

Internet access

In 2016 within the Ipswich LGA, 83.8 per cent of households noted at least one person accessing the internet, which is comparable to 83.7 per cent in QLD, whereas less people accessed the internet in the Scenic Rim LGA (80.6 per cent).

Within the SA2 of Boonah, 20.2 per cent of dwellings did not have access to the internet, while in Rosewood SA2 17.8 per cent of dwellings did not have access. This is greater than the QLD percentage of 13.6 per cent and likely attributed to an older median age in these localities.

16.7.1.6 Travel behaviour

Vehicle ownership

The Scenic Rim LGA recorded higher numbers of vehicles per dwelling (2.1) compared to the Ipswich LGA and QLD (1.9 and 1.8 respectively) in 2016. The rural nature of the Scenic Rim LGA, distance between essential services and less regularity of public transport are likely contributors to the higher percentage of vehicle ownership. Rosewood had the lowest rate of car ownership of all local communities (at 1.8 vehicles per dwelling).

Only 2.8 per cent of dwellings in the Scenic Rim LGA did not have a motor vehicle, compared to 5.4 per cent in the Ipswich LGA.

Key transport networks

The Cunningham Highway connects to the Ipswich Motorway to the north, and provides a link from Brisbane to the south-east, passing through the urban areas of Ipswich, Warwick and ending in Goondiwindi.

The Warrego Highway also connects to the Ipswich Motorway to the east, connecting Brisbane to Toowoomba, Dalby, Chinchilla, Miles, Roma and ending in Charleville.

Public transport

Ipswich is well serviced by passenger rail via the Rosewood to Brisbane train service and has a local public bus service. The Queensland Rail (QR) Rosewood/Ipswich train line provides passenger rail services seven days a week from Rosewood to Brisbane, passing through Ipswich. From Ipswich travelling west the train stations are Thomas Street, Wulkuraka, Karrabin, Walloon, Thagoona and Rosewood, where the train terminates.

The Scenic Rim LGA has limited public transport services. There are several bus companies that provide limited scheduled services and/or offer charter services in the region, including Road Runner Bus Line, Amberley Rosewood Bus Company, Southern Cross Transit, Fassifern Coaches and All-About Charter Services.

16.7.2 Community values

Each of the LGAs in the Project region has a community plan that was developed with extensive community input. The plans reflect shared community values including:

- ▶ Development of healthy, inclusive and caring communities
- ▶ Environmentally responsible and sustainable management of resources
- ▶ Economic diversification and growth
- ▶ Avoidance of land use conflicts
- ▶ Maintaining the character and vibrancy of town centres
- ▶ Management of flood risks
- ▶ Protection of places with cultural heritage significance
- ▶ Protection, conservation and enhancement of natural assets.

The following sections discuss specific values in potentially impacted communities. Further information is presented in Appendix R: Social Impact Assessment Technical Report.

16.7.2.1 Amenity and lifestyle

Amenity refers to the use and enjoyment of private and public properties. Residential amenity in potentially impacted communities is characterised by:

- ▶ Low population density, enabling privacy and enjoyment of homes and the outdoors
- ▶ Rural land uses (e.g. rural residential, farming and grazing activities, and land and water management)
- ▶ Access to basic local facilities, which support community interaction and healthy lifestyles
- ▶ Connections and mutual reliance between community members
- ▶ The rural landscape, characterised by hills, plains, vegetation and vistas across rural land.

Consultation with community members near the disturbance footprint indicates that they enjoy a rural lifestyle based on:

- ▶ A quiet environment
- ▶ Farming or grazing as a primary source of livelihood in the rural localities
- ▶ Active outdoor recreation (such as bike riding, horse riding and trail walking)
- ▶ Dependence on small towns such as Rosewood in the north and Peak Crossing in the south for daily needs and social activities
- ▶ Involvement in the growing nature and food-based tourism industry.

Other features of the social environment that support local quality of life include a clean and healthy environment, affordable housing, privacy, close community connections, access to local services and community events, and strong community networks.

16.7.2.2 Indigenous cultural values

An Indigenous cultural heritage investigation was undertaken as part of the EIS (refer Chapter 18: Cultural Heritage). The investigation included an initial desktop assessment and preliminary consultation, which identified a total of 45 Indigenous cultural heritage sites within a 1 km buffer of the disturbance footprint. Site types included artefact scatters, landscape features, resource areas, grinding grooves, scarred/culturally modified trees, waterholes and a rock shelter (refer Chapter 18: Cultural Heritage).

Indigenous cultural heritage studies undertaken as part of the approved Cultural Heritage Management Plans (CHMPs) (CLH017009) identified the potential for cultural heritage impacts and developed management measures to address these impacts.

16.7.2.3 Non-Indigenous cultural values

Historical heritage values and impacts on these values are detailed in Appendix T: Non-Indigenous Heritage Technical Report. Sites within the EIS investigation corridor that reflect the area's non-Indigenous heritage include a creamery and a dairy, stock yards, huts and houses and remains of the Kagaru Railway Station.

16.7.2.4 Cultural diversity

Cultural diversity in the SIA study area is represented by the proportions of households where a primary language other than English was spoken and residents who were born overseas (refer Appendix R: Social Impact Assessment Technical Report).

Ipswich LGA has a slightly higher percentage of people born in Australia (72.9 per cent) than the State average (71.1 per cent), while in the Scenic Rim LGA the percentage was even higher (76.9 per cent). Local communities also had a strong representation of Australian-born residents, with percentages ranging from 79.6 per cent to 85.3 per cent. It follows that most people are proficient in English, with only a low representation of people who are not.

The five most common non-English speaking countries of birth for Ipswich LGA residents were India (1.0 per cent), Philippines (0.9 per cent), Vietnam (0.6 per cent), Fiji (0.4 per cent) and the Netherlands (0.3 per cent). In the Scenic Rim LGA, the five most common non-English speaking countries of birth were Germany (0.6 per cent), Netherlands (0.5 per cent), Philippines (0.3 per cent) and South Korea (0.2 per cent) and Papua New Guinea (0.2 per cent).

16.7.2.5 Community identity

Community identity is derived from elements including community history, land uses, special features and community characteristics, and varies greatly between the Ipswich and Scenic Rim LGAs.

The identity of Ipswich LGA residents is informed by Ipswich's history as an administrative hub, and by economic strengths in manufacturing, the public service, railway servicing and mining. During the past few decades Ipswich has evolved as a self-contained city with a strong orientation towards economic growth and diversity, and a planning mandate for growth including extensive residential development in the Ripley Valley. Urban form is predominantly low rise throughout the Ipswich LGA, and green space and community facilities contribute to the identity of a well-serviced community with an active lifestyle.

The Scenic Rim LGA's identity is as a clean, green rural area close to Brisbane and other major centres, and with a growing role in tourism and residential options offering a rural lifestyle. The vision outlined in the Scenic Rim Community Plan defines community aspirations for the Peak Crossing, Washpool, Undullah and Kagaru as including spectacular scenery and healthy environment, relaxed living and a rural lifestyle, vibrant towns and villages, and healthy, engaged and resourceful communities.

Local communities near the SIA study area have a small-town, rural identity influenced by strong connections to agricultural heritage, and a high degree of community cohesion. Rosewood and Peak Crossing have distinct village identities, with Peak Crossing more strongly influenced by its expansive rural setting, while Rosewood is located between Ipswich's urban and rural areas.

A wide variety of residents in the Project region are involved in environmental management, farming and/or tourism initiatives that are strongly connected to the land, which in turn strongly influences community identity.

16.7.2.6 Community cohesion

Strong communities exhibit resilience and have well-developed social connections and supports, contributing to community health and wellbeing. The level of volunteering by residents is a measure of community cohesion. Levels of volunteering vary across the potentially affected communities, with slightly lower levels in the suburbs of Calvert, Rosewood and Purga than in QLD generally (16.1 per cent, 17.4 per cent and 17.7 per cent respectively compared with QLD's (18.8 per cent), while Willowbank, Peak Crossing and Ebenezer have similar or higher levels of volunteering (18 per cent, 23.4 per cent and 21.3 per cent respectively) (ABS, 2016a).

The ability to access support in times of crisis is a further indicator of the strength of social connections in a community. It is estimated that around 94 per cent of people in the SIA study area SA2s would be able to find support outside the home in times of crisis (slightly higher than the QLD estimate of 93 per cent). Modelled estimates indicate that most would also be able to raise \$2,000 within a week, a similar or higher rate to QLD (with estimates of 86.4 per cent in Greenbank, 82.8 per cent in Jimboomba and 79.7 per cent in Boonah/Rosewood, compared with 81.9 per cent in QLD) (Torrens University Public Health Information Development Unit (Torrens University PHIDU), 2018).

16.7.2.7 Sense of place

Sense of place in the SIA study area has a strong relationship to the land (through farming, and attachment to the landscape) environmental values and the pattern of rural localities and villages, as well as social elements such as relationships between community members and places.

Indigenous people have a particular relationship to land and their sense of community is strongly connected to natural elements of place. Yuggera Ugarapul People Elders are strongly attached to the SIA study area's cultural landscapes and noted that the entire Mount Flinders area is a sacred site, in particular for the frog people 'Goupong Ugarapul'. Elders identified that there are also sacred sites around Ebenezer and sensitivities regarding the former Purga mission site.

People who have lived in the area for a long time also have a strong sense of place, imbued by what the place has meant to them and their families, and their knowledge of the area's physical and environmental attributes.

16.7.2.8 Access to natural resources

Residents within and near the SIA study area have access to rural views (open grassland, forested areas, farms and homesteads), enhanced by the generally gentle topography. In the Scenic Rim LGA, residents and visitors have views to dramatic mountainous ranges as the backdrop to rural landscapes, which support both local character and the area's attraction as a tourism destination.

Many of the properties within the SIA study area are dependent on bore water, creeks and dam water to irrigate their farms or stock. Many homes in the area are also dependent on tank water for residential supplies and, as such, access to water is a critical resource that needs to be managed.

16.7.3 Employment and skills

This section provides an overview of labour force characteristics in the Project region. Of note, Census datasets differ slightly for different tables providing negligible variations in total workforce numbers.

16.7.3.1 Labour force profile

In March 2019, the total labour force of the Project region was estimated at 125,509 people, which included 21,058 people in the Scenic Rim LGA and 108,461 people in the Ipswich LGA.

Census 2016 data indicated that labour force participation rates were substantially lower than the QLD average in both LGAs (refer Table 16.11). The unemployment rate was also higher in the Ipswich LGA at 6.8 per cent than in the Scenic Rim LGA (5.3 per cent) and QLD (6.0 per cent).

However, over the 12 months to March 2019, labour market conditions had improved marginally with a decrease of 1.8 percentage points in the Ipswich LGA and a decrease of 0.3 percentage points in the Scenic Rim LGA.

TABLE 16.11: LABOUR FORCE AND UNEMPLOYMENT (NUMBER AND PERCENTAGES) 2016

Statistical area	Labour force	Participation rate*	Unemployed persons	Unemployment rate	12 month unemployment rate
Ipswich	108,461	71.20%	7,350	6.80%	-1.8
Scenic Rim	21,048	68.60%	1,154	5.50%	-0.3
QLD	2,685,932	78.20%	163,145	6.10%	-0.1

Source: ABS, 2016a; *Department of Employment, Skills, Small and Family Business, 2019a

In the Ipswich LGA, the largest proportions of workers are employed in service-based industries such as Health Care and Social Assistance (13.2 per cent) and Retail Trade (10.5 per cent). A significant proportion of the population are also employed in manufacturing (10.0 per cent) or construction (8.4 per cent).

In the Scenic Rim LGA, employment by industry is diverse across primary, secondary and service-based industries. This reflects the land uses of the LGA, primarily regional landscape and rural production. The strongest industries of employment are Construction (10.8 per cent), followed by Health Care and Social Assistance (10.5 per cent), Education and Training (9.4 per cent) and Agriculture, Forestry and Fishing (8.8 per cent).

The Project region includes large numbers of people employed in directly relevant industry sectors to support the construction of the Project. According to the 2016 Census, 1,822 people in the Scenic Rim LGA and 7,049 people in the Ipswich LGA were employed in the construction industry.

Of relevance to the Project's construction phase, within the Ipswich LGA, the largest proportion of workers are employed as Technicians and Trade Workers (15.1 per cent), with representation of Machinery Operators and Drivers (9.9 per cent) and labourers (12.6 per cent also above the QLD averages).

In the Scenic Rim LGA, Technicians and Trade Workers are also well represented (at 16.1 per cent compared the QLD average of 14.3 per cent), while the proportion of Machinery Operators and Drivers (7.7 per cent) and labourers (14.1 per cent) was also above the QLD averages.

The Defence sector is also important to local communities, with the RAAF Base Amberley providing an employment base, which may increase as the RAAF Base Amberley is further developed.

16.7.3.2 Unemployment trends

Census 2016 data shows that the percentage of unemployed people increased in the Project region during 2011–2016. Ipswich LGA's unemployment rate increased from 7.1 per cent at the 2011 Census to 8.9 per cent at the 2016 Census. The Scenic Rim LGA's unemployment rate increased slightly over this period, from 5.6 per cent to 6.0 per cent.

The Rosewood, Ebenezer and Purga SSCs all experienced an increase in unemployment during 2011–2016. However, Purga's unemployment rate remained reasonably low at 4.64 per cent, whereas Rosewood and Ebenezer recorded high rates of unemployment (11.27 per cent and 10.0 per cent respectively).

In 2016, youth unemployment in the Ipswich LGA was 19.3 per cent, higher than both QLD and the Scenic Rim LGA (15.8 per cent and 12.2 per cent respectively). The SA4s of Ipswich and Logan-Beaudesert also recorded higher percentages of youth unemployment compared to QLD (19.3 per cent and 19.1 per cent respectively compared with 15.8 per cent).

In 2016, Indigenous unemployment was recorded at 20.1 per cent in QLD, 19.9 per cent in the Ipswich LGA and significantly lower at 16.5 per cent in the Scenic Rim LGA.

Unemployment data provided by the Department of Education Skills and Employment (DESE) indicates that during the past five years, the unemployment rate in the Ipswich LGA increased from 7.5 per cent in March 2016 to 8.5 per cent in March 2018, decreasing during 2018 but increasing again during 2019 to reach 8.0 per cent in March 2020 (the most recent data available) (refer Appendix R: Social Impact Assessment Technical Report Section 5.4.1). The unemployment rate in the

Scenic Rim was more stable, commencing at 6.1 per cent in March 2016, with minor fluctuations over the ensuing three years and reaching 6.0 per cent in March 2020. At March 2019, the Project region's workforce included 8,504 people who were unemployed (1,154 people in the Scenic Rim LGA and 7,350 people in the Ipswich LGA). By March 2020, this number increased to 10,430 people, including 1,281 Scenic Rim LGA residents and 9,149 Ipswich LGA residents (DESE, 2020).

The number of Ipswich LGA residents receiving Jobseeker or Youth Allowance increased from 11,400 to 18,395 people (an increase of 61.3 per cent) between March 2020 and July 2020, while the number of Lockyer Valley residents receiving these benefits increasing from 1,739 people to 2,955 people (an increase of 70 per cent) over the same period (id.profile, 2020). This was largely due to decreased economic activity resulting from COVID-19 restrictions and indicates that in 2020, the availability of labour in both skilled and unskilled professions is likely to be significantly higher than in previous years.

COVID-19 consequences have increased the number of people in the Ipswich and Scenic Rim LGAs who are unemployed, as indicated by increases in Jobseeker recipients between March and July 2020. More detailed data are provided in Appendix R: Social Impact Assessment Technical Report (Section 5.4.1).

The SIA study area and regional economic catchment is shown on Figure 16.3.

16.7.3.3 Labour and skills availability

The Project's major requirement for labour and skills will be during the construction phase.

With approximately 8,871 construction industry personnel in the Project region at 2016, and with 10,430 people, including 1,281 Scenic Rim LGA residents and 9,149 Ipswich LGA resident people who were unemployed as at March 2020, the Project is likely to be able to draw on the availability of personnel within the Project region. The availability of both skilled and unskilled labour has also changed as a result of COVID-19 restrictions (refer Section 16.7.3.2). There is also the likelihood of attracting workers who are under-employed, including people who are working part time when they need or would prefer to work full time, and contracting and casual workers who would prefer permanent work arrangements.

Collectively, there were 2,594 construction businesses in the Project region in 2016–2017, ranging across the domestic, commercial and civil construction sectors, supporting the availability of suitably skilled and experienced personnel for Project construction.

At the national level, the Australian Industry Group Construction Outlook survey (conducted in March–April 2018) found that the construction industry is experiencing significant labour shortages and these shortages may worsen over the next year. Construction businesses were reporting widespread difficulties in recruiting skilled labour and sourcing materials for major projects. A total of 66.7 per cent of respondents, up from 63.6 per cent six months ago, reported either 'major' or 'moderate' difficulty in recruiting skilled labour in the six months to March 2018. Construction companies were forecasting strong growth in major Project work during 2018 and 2019, led by a strong pipeline of transport infrastructure projects.

The 2018 National Skills Needs List (showing shortages in trade workers) indicates that a very wide range of trades are experiencing skills shortages at the national level. Those of potential interest to the Project that are experiencing shortages include electrical equipment trades workers, metal fabricators and pressure welders.

ARTC has commenced a partnership with Construction Skills Queensland (CSQ) to identify skill shortages and develop training pathways, with other training partners, as part of the Inland Rail Skills Academy.

16.7.3.4 Business capacity

The Ipswich LGA had twice as many businesses as the Scenic Rim LGA, at 8,914 businesses compared with 4,351 in 2016–2017.

In 2016–2017 the largest industry sector (as indicated by numbers of businesses) within the Ipswich LGA was construction (21.0 per cent), followed by transport, postal and warehousing (11.5 per cent). Less prevalent businesses were present in mining, electricity, gas, water and waste services, and public administration and safety (representing 0.3 per cent of all businesses).

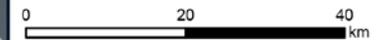


The Australian Government is delivering Inland Rail through the Australian Rail Track Corporation (ARTC), in partnership with the private sector.

CALVERT TO KAGARU
Figure 16.3: SIA study area and regional economic catchment

LEGEND

- 5 Chainage (km)
- Localities
- B2G project alignment
- G2H project alignment
- H2C project alignment
- C2K project alignment
- K2ARB project alignment
- Existing rail
- SA4 boundary
- SIA study area
- Local Government



Coordinate System: GDA 1994 MGA Zone 56

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Date: 20/03/2020

Author: FFJV GIS

Data Sources: FFJV

Paper: A4

Scale: 1:825,000

The Scenic Rim LGA's largest industry by number of businesses was agriculture, forestry and fishing (at 25.9 per cent of businesses), nearly three times more than their representation in QLD (at 9.5 per cent). Many of these businesses are small farming operations. In 2015–2016 the total value of agricultural output from the Scenic Rim was \$258 million. From this monetary output, livestock slaughtering was the largest commodity, accounting for 55.2 per cent of the total value.

Construction is also important to the local economy in both the Ipswich and Scenic Rim LGAs. The construction industry has the largest number of business within the Ipswich LGA (1,868 businesses) and the second largest within the Scenic Rim LGA (726 businesses). Being a significant regional growth area, housing development and associated infrastructure is strengthening growth in this business sector.

In 2016–2017, the majority of registered businesses were classified as small within the Scenic Rim LGA and the Ipswich LGA. In the Ipswich LGA, 61.5 per cent of businesses had no employees (e.g. sole operators, including farmers), while 27.4 per cent of business employed between just 1 to 4 employees. In the Scenic Rim LGA the percentage of non-employing businesses was even higher at 66.3 per cent, with 25.1 per cent of businesses employing 1 to 4 employees.

16.7.4 Tourism

Tourism is an important industry in the Scenic Rim LGA, which is promoted as 'a destination for tourism, art, food, outdoor adventure, walking, water sports and rural enterprise' (Scenic Rim Regional Council, 2018d). Ipswich has also developed strengths in tourism, based on its heritage and history, nature-based recreation, challenge-based adventure, and spectator and participation events (ICC, 2015).

Scenic Rim and Ipswich visitors have easy access to National Parks linked to the Flinders–Karawatha Corridor, which are integral to scenic amenity and significant generators of day trip tourism. Walking tracks, flora and fauna, extensive wooded and mountainous vistas and the area's natural beauty attract day trippers and overnight stayers, with a diverse range of bed and breakfasts, farm stays, and mountain lodges are also on offer.

Year-round tourism visitation is encouraged in the Scenic Rim where national parks, towns and villages, adventure parks, farm stays, wineries, community events and camping grounds support a wide range of experiences, with SRRC estimating that 80 per cent of tourists are day trippers. The *Scenic Rim Tourism Strategy 2017–2021* notes that visitation to the Scenic Rim generally peaks in July, with key off-peak months being December and March, reflecting seasonal weather patterns and key events such as Eat Local Week (held in July).

Ipswich LGA has extensive tourism offerings such as events, sporting carnivals, motor sports events, music festivals, trails (restaurants and producers), nature and adventure trails and heritage, which support tourism visitation throughout the year (ICC, 2018b). The City of Ipswich Destination Management Plan includes an objective to develop a seasonal campaign plan for Ipswich's tourism industry. On this basis, tourism will be an important year-round industry in the Project region into the future.

The Ipswich Motorsport Precinct (also known as Albert Theaker Park) is located approximately 230 m north of the Project at Ch 14.2 to Ch 16.0 km, adjacent to the Cunningham Highway. It consists of the Queensland Raceway, Ipswich Kart Club, Ipswich City Dirt Kart Club, Ipswich West Moreton Auto Club, Rally School and Willowbank Raceway drag strip (ICC, 2018b). The Ipswich Motorsport Precinct is activated year-round, with each of the lessees within the Precinct conducting a range of events.

Ivory's Rock Conventions and Events Centre is a major outdoor convention and events centre, encompassing more than 600 ha on both sides of Mt Flinders Road, Peak Crossing and is located approximately 1 km from the disturbance footprint. There are also vineyards and wineries in the nearby area that also function as small event venues. They include:

- ▶ Flinders Peak Winery (and accommodation units) near Peak Crossing
- ▶ Ironbark Ridge Vineyard in Purga (closed at the time of writing)
- ▶ Paradine Estate Wines in Harrisville.

16.7.5 Housing and accommodation

This section describes the type, cost and availability of housing in the Project region.

16.7.5.1 Dwelling type

The predominant dwelling type in 2016 within the Scenic Rim LGA was separate housing, making up 91.8 per cent of the available housing stock. Within the Ipswich LGA 88.3 per cent of housing stock was separate housing. The Ipswich LGA recorded a higher percentage of semi-detached, row or terrace housing (9 per cent) and flat or apartments (1.8 per cent) compared to the Scenic Rim LGA, which recorded 3.9 per cent and 1.5 per cent respectively.

The predominant dwelling structure within the SA2s of Boonah and Rosewood, was separate housing (94.6 per cent and 92.3 per cent respectively).

Within the SSCs of Calvert, Ebenezer, Peak Crossing and Purga, 100 per cent of housing stock was recorded as separate housing. Willowbank and Rosewood recorded 10.8 per cent and 0.4 per cent respectively of available housing stock as flat or apartments. Rosewood recorded 7.8 per cent of housing stock as detached row or terrace house, town house.

In QLD, a higher percentage of semi-detached, row or terrace house, townhouse and flat or apartment (10.6 per cent and 11.3 per cent respectively) was noted, compared to all other localities.

16.7.5.2 Housing tenure

In 2016, the Ipswich LGA recorded a high percentage of properties that were rented (37.5 per cent) while the Scenic Rim LGA recorded a much lower percentage of rental properties (22.8 per cent). The Scenic Rim LGA recorded a high percentage of properties owned outright (34 per cent) compared to the Ipswich LGA (20.3 per cent).

Among the SA2s, Boonah had the highest percentage of properties owned outright (40.7 per cent), which was lower in Rosewood SA2 at (31.7 per cent). Within the local communities, Ebenezer recorded the highest percentage of properties owned outright (41 per cent) compared to the lowest percentage (27.2 per cent) recorded in Willowbank.

A similar percentage of properties owned with a mortgage was recorded in both the Ipswich and Scenic Rim LGAs (34 per cent and 33.2 per cent respectively). The SSC of Peak Crossing recorded the highest percentage of properties owned with a mortgage, compared to the lowest percentage recorded in Rosewood (42.2 per cent and 25 per cent respectively).

Rental vacancy rates are available for postcode areas in the Project region. In June 2018, rental vacancy rates varied across the postcodes, with the highest rate was recorded in postcode 4306 in Ipswich LGA, with 3.9 per cent availability. The lowest rate was recorded in postcode 4310 in the Scenic Rim LGA with 1.1 per cent availability.

In 2016 within the Ipswich LGA, 3.8 per cent of housing was social housing, compared to 1.3 per cent within the Scenic Rim LGA. The SA2s of Rosewood and Boonah recorded low percentages of social housing stock (0.6 per cent and 0.3 per cent respectively). Rosewood was the only noted SSC with recorded social housing (1.9 per cent) (refer Appendix R: Social Impact Assessment Technical Report).

16.7.5.3 Housing trends

Housing trend data are provided for the postcodes closest to the Project, including:

- ▶ 4340 (Calvert, Lanefield, Rosewood, Lower Mount Walker, Ebenezer)
- ▶ 4306 (Willowbank, Peak Crossing, Purga, Washpool)
- ▶ 4310 (Boonah and surrounding localities)
- ▶ 4285 (Beaudesert, surrounding towns, Kagaru, Undullah).

Purchase prices

The highest median house price in the four postcodes closest to the Project was recorded in the Ipswich postcode of 4306, taking in the Willowbank-Peak Crossing, Purga and Washpool areas, at \$444,500. The lowest median house price (\$363,700) was noted in postcode 4340, which takes in the Calvert, Rosewood and Ebenezer areas. Boonah and surrounding localities (postcode 4310) had a median house price of \$396,900, and Beaudesert and surrounding localities (postcode 4285) had a median house price of \$428,200.

Over the twelve months to February 2020, postcode 4340 experienced a small decrease in the median house price (0.7 per cent) while the other postcodes saw increases of up to 6.5 per cent. The median price for units generally decreased, with the largest decrease of 45.4 per cent seen in postcode 4285; however, this volatility reflects the small number of units in this area.

Over the three year period to February 2020, the median price of houses increased by 10.1 per cent in postcode 4306, but decreased by up to 5.5 per cent in other postcodes.

At the LGA level, the Scenic Rim LGA recorded a higher median house price (\$410,000) than the Ipswich LGA (\$347,000) at June 2019. In the five years to 2019 the Scenic Rim LGA experienced an increase in median dwelling prices of 15.9 per cent, and the Ipswich LGA had experienced an increase of 12.7 per cent. At February 2020, the median unit price was similar in both LGAs, at \$320,000 in the LGA of Ipswich and \$310,000 in the Scenic Rim LGA, with no change in the year prior in the Ipswich LGA and a small price fall (0.2 per cent) in the Scenic Rim LGA.

Rental availability and cost

At February 2020, postcode 4306 recorded the highest median rent per week for a house (\$375) followed by postcode 4825 (\$364) and postcode 4340 (\$334). The lowest median weekly rent for a house was recorded in postcode 4310 (\$304).

The largest increases in median weekly rental costs were seen in postcode 4340 where house rental costs had increased by 15.3 per cent and unit rental costs had increased by 24.7 per cent over the past year; however less volatility is evident over the previous three year period (5.5 per cent and 3.4 per cent respectively).

Rental cost changes were more modest in the other postcodes over the twelve months, with small decreases in house rental costs in postcode 4306 and postcode 4310, and a small increase in postcode 4285. Over the three years to February 2020, house rental costs increased slightly in postcode 4306 (3.1 per cent) and postcode 4285 (5.4 per cent) and decreased by 6.6 per cent in postcode 4310.

Postcode 4285 recorded the highest median weekly rent for units (\$316) followed by postcode 4306 (\$300), while postcode 4310 recorded the lowest (\$220). With the exception of postcode 4340 as noted above, rental cost changes for units saw small changes over the one year and three year periods, with the largest one year change seen in postcode 4310 (a decrease of 9.9 per cent) and the largest three year change seen in postcode 4285 (an increase of 9.5 per cent).

The majority of rental dwellings available in the Ipswich LGA are located in Ipswich's central suburbs, so the data on housing availability are provided for the corresponding postcode (4305) as well as for the postcodes closest to the Project (refer Appendix R: Social Impact Assessment Technical Report).

Between June–December 2019, rental housing availability generally increased, with 275 dwellings available in postcode 4305 (an additional 15 dwellings since June 2019) and 119 dwellings available in postcode 4306 (an additional 30 dwellings). There was a decrease of one dwelling in postcode 4825 (to 82 dwellings). Small pools of rental housing remained available in the 4340 and 4310 postcodes with 17 dwellings each. Collectively, this represented 510 vacant rental dwellings at December 2019.

Rental vacancy rates had increased with the exception of postcode 4285 where the vacancy rate dropped 0.1 of a percentage point in the six month period to 3.2 per cent in the period June–December 2019. Rental vacancy rates in other postcodes ranged from to 2.4 per cent in postcode 4305 to 4.2 per cent in postcode 4306, with rates over 3 per cent indicating a healthy rental market) (Real Estate Institute of Queensland, 2019).

16.7.5.4 Building approvals

The Ipswich LGA recorded 3,475 residential housing approvals in 2016–2017, more than ten times the number recorded in the Scenic Rim LGA (311). Rosewood recorded the highest number of residential housing approvals in the SA2s (109), compared to Boonah (69) (refer Appendix R: Social Impact Assessment Technical Report).

16.7.5.5 Short-term accommodation

Hotels and motels throughout the Ipswich, Boonah and Beaudesert area offer short-term accommodation, increasingly accessible through online platforms. The following properties in close proximity to the EIS investigation corridor, were identified:

- ▶ Flinders Peak Winery (20 villas), approximately 1.1 km west of the of the disturbance footprint at Ch 31.6 km
- ▶ Ivory's Rock Conventions and Events Centre at Peak Crossing including campgrounds (accommodating more than 2,000 people), cabins and a lodge, with units planned, approximately 1 km east of the disturbance footprint at around Ch 29.0 to 30.0 km
- ▶ Willowbank Caravan Park, approximately 3.4 km north of the of the disturbance footprint at Ch 17.0 km, with approximately 100 cabin and caravan sites
- ▶ Palm Meadows Home Village approximately 3.3 km north of the disturbance footprint at Ch 17.0 km, with approximately 50 small dwellings accommodating seniors
- ▶ Amberley Caravan Park, approximately 3.7 km north of the of the disturbance footprint with approximately 65 cabin and caravan sites.

The latest tourism accommodation data provided by the ABS were produced for 2015–2016 (ABS, 2016a) and indicate that the Ipswich LGA had a total of 10 tourism accommodation establishments with more than 15 rooms in June 2016. This data included five establishments in the Ipswich city centre, providing a total of 280 rooms, and with a room occupancy rate of 66 per cent (occupancy rates for other areas within the Project region were not available). From an available stock of at least 280 rooms, this would see an average of approximately 95 available rooms.

A scan of various tourism accommodation search sites in November 2019 identified eight motels and two short-term unit rental establishments in the Ipswich LGA, with a total of approximately 300 rooms, plus various bed and breakfast options.

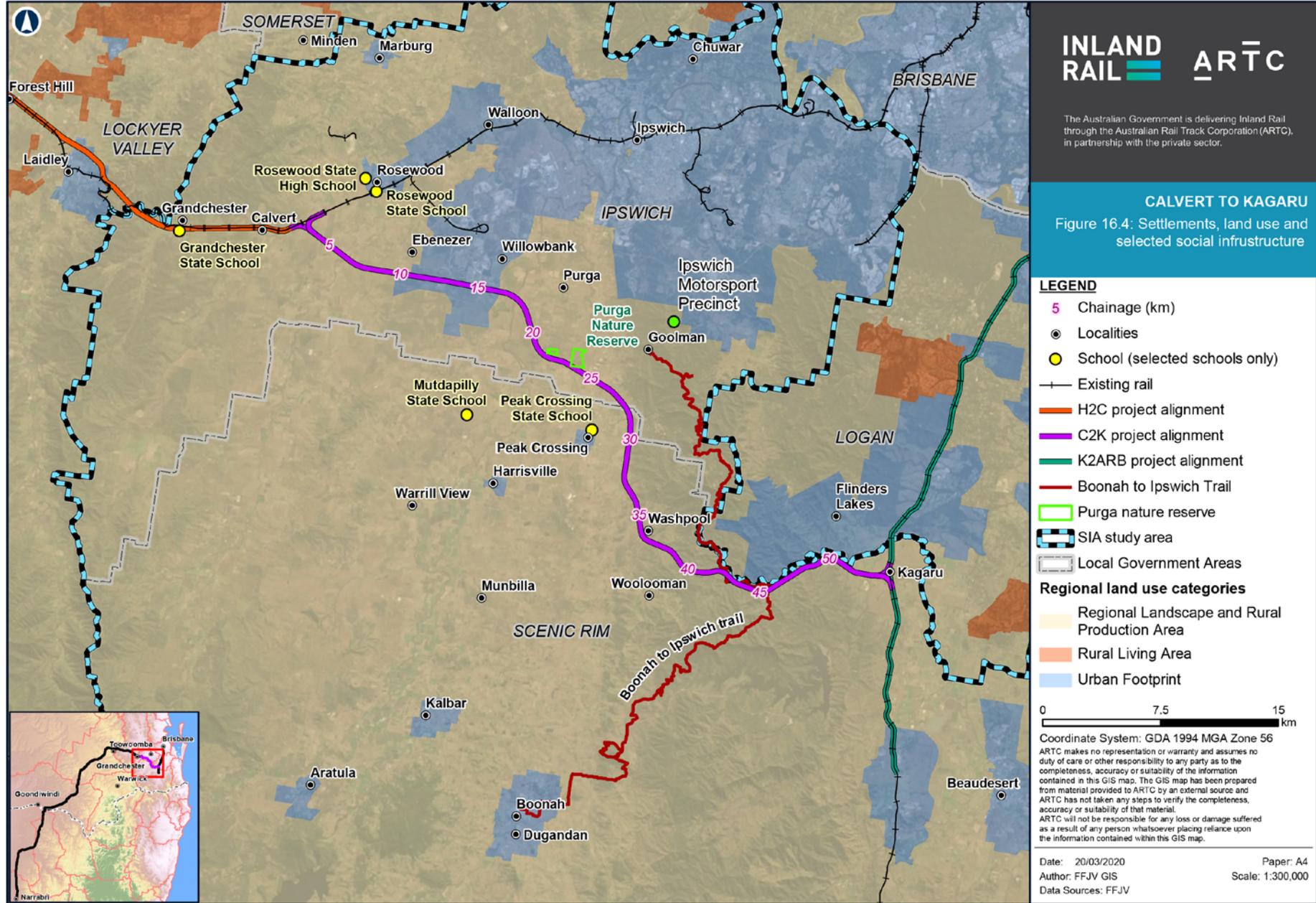
The ABS data indicate that Boonah and Beaudesert each had one tourism accommodation establishment with more than 15 rooms in 2016. Observation indicates that the motel in Beaudesert has approximately 25 rooms and the motel in Boonah had approximately 30 rooms.

Analysis of overnight visitor numbers provided by id Profile (using unpublished data provided by Tourism Research Australia) indicates that the number of visitor nights in Ipswich LGA in 2018/19 was approximately 22 per cent higher than in 2015/16 (id Profile, 2019a). Data for the Scenic Rim LGA indicate an increase in the number of visitor nights between 2015/2016 and 2018/2019 of 66 per cent, indicating substantial increases in demand for tourism accommodation over this period (id Profile, 2019b).

16.7.6 Social infrastructure

Appendix R: Social Impact Assessment Technical Report details the provision of social infrastructure as relevant to the Project and nearby communities.

The settlements, land use and selected social infrastructure relevant to the Project are shown in Figure 16.4.



16.7.6.1 Primary and secondary education

There are 12 primary and secondary education facilities whose school catchments are crossed by the disturbance footprint. The nearest schools to the disturbance footprint include:

- ▶ Peak Crossing State School, which is approximately 2.4 km to the west
- ▶ Rosewood State School and Rosewood State High School, which are approximately 4 km to the east.

There are 153 early childhood education and care services in the Ipswich LGA, 70 of which were long day-care services. Within the Scenic Rim LGA, 23 early childhood education and care services were noted, eight of which were long day-care services. The nearest childcare centres to the EIS investigation corridor are located:

- ▶ Approximately 4 km to the east in Rosewood—two childcare centres and one kindergarten
- ▶ Approximately 2 km to the west in Peak Crossing—one childcare centre.

16.7.6.2 Further education and training

Further education and training facilities in the Project region include the Bundamba TAFE Campus, Springfield TAFE Campus, University of Southern Queensland (USQ) campus (located close to the centre of Ipswich), USQ Springfield Campus, and The University of Queensland Gatton Campus, as shown in Appendix R: Social Impact Assessment Technical Report.

16.7.6.3 Hospital and health services

The Ipswich Hospital is the primary healthcare facility that services the SIA study area. The other major hospital in the Project region is the Beaudesert Hospital that services the Scenic Rim LGA. The SIA study area is serviced predominately by smaller General Practitioner (GP) clinics. The following health care services occur within the SIA study area:

- ▶ Lockyer Doctors Rosewood (Rosewood)
- ▶ Rosewood General Practice (Rosewood)
- ▶ Willowbank Surgery (Willowbank)
- ▶ Flinders Peak Medical Centre (Purga)
- ▶ Yamanto Family Practice (Yamanto)
- ▶ Boonah Medical Centre (Boonah)
- ▶ Fassifern Doctors (Boonah)
- ▶ Kalbar Medical Centre (Kalbar)
- ▶ Flagstone Pioneer Health Service (Jimboomba).

16.7.6.4 Police, Emergency Services and Justice

The nearest Police Stations to the EIS investigation corridor are located as follows:

- ▶ Rosewood Police Station—John Street, Rosewood
- ▶ Harrisville Police Station—Church Street, Harrisville
- ▶ Boonah Police Station—Highbury Street, Boonah.

The nearest Fire Stations are located as follows:

- ▶ Rosewood Fire Station—John Street, Rosewood
- ▶ Harrisville Fire Station—Queen Street, Harrisville
- ▶ Warrill View Rural Fire Brigade—Bath Street, Warrill View
- ▶ Flinders Peak Rural Fire Brigade—Flinders Dolomite Road, Peak Crossing
- ▶ Roadvale Rural Fire Brigade—Gray Street, Roadvale.

The nearest Ambulance Stations are located as follows:

- ▶ Rosewood Ambulance Station—John Street, Rosewood
- ▶ Boonah Ambulance Station—2A Coronation Drive, Boonah.

For larger-scale emergencies within the SIA study area, emergency services are provided from Ipswich. Further details are provided in Appendix R: Social Impact Assessment Technical Report.

16.7.6.5 Community services and facilities

Community services and facilities located in the potentially impacted communities include:

- ▶ Rosewood Community Centre/Rosewood and District Support Centre, Queensland Country Women's Association, and the Rosewood RSL Club in Rosewood
- ▶ Defence Community Organisation—Amberley (located in Willowbank)
- ▶ Purga Friends Association Inc.
- ▶ Peak Crossing Hall and Peak Crossing Hall Committee.

The nearest community centres to the Project are located at Rosewood (Rosewood Community Centre) and Peak Crossing (the Peak Crossing Hall).

A wide range of community organisations, church organisations, charitable foundations and government agencies provide services throughout the SIA study area. Key organisations providing community services in the Ipswich LGA include:

- ▶ Ipswich Community Youth Service
- ▶ Focal Community Service and Access Community Services (supporting people with disability)
- ▶ Ipswich Housing and Support Services Inc (supporting people experiencing housing security issues including homelessness)
- ▶ Uniting Care and BlueCare, which provide a range of services, particularly for seniors and people with disability
- ▶ Liworaji Aboriginal Corporation, which provides training and support services for Indigenous people and families
- ▶ Anglicare and Centacare, which provide a range of community services to families, young people, seniors and people with disability
- ▶ The Richmond Fellowship, which supports people experiencing mental health issues and social disadvantage.

Community service providers operating in the Scenic Rim LGA include:

- ▶ Beaucare, providing a range of community, family, disability and seniors' support programs and the Beaudesert Community Centre
- ▶ Jymbilung House, providing services for seniors and people with disability
- ▶ Bluecare offering residential and home based care for seniors and people with disability
- ▶ Rural Lifestyle Options, a disability service
- ▶ CentaCare St Mary's Community Services providing aged care, carer support services for people with disability
- ▶ Mununjali Housing and Development offering a range of support services for Indigenous people
- ▶ YFS based in Logan and partnering with local organisations to provide a range of youth, individual and family support services
- ▶ Beenleigh Community Neighbourhood Centre, offering family and individual support services
- ▶ Lives Lived Well, which offers support for people with drug, alcohol or mental health issues.

There is also a wide range of recreational and cultural facilities located in the surrounding communities. Facilities and recreational areas near the EIS investigation corridor include:

- ▶ Ipswich Motorsport Precinct located approximately 230 m north of the Project at Ch 14.2 to Ch 16.0 km
- ▶ Flinders Peak Conservation Park (located approximately 4.5 km east of the Project around Ch 34.0–36.0)
- ▶ Purga Nature Reserve approximately 240 m north of Ch 22.0 km. The Project will not impact on the land use of the Purga Nature Reserve as the disturbance footprint does not traverse land identified to be within the Reserve
- ▶ A model plane facility and a paintball recreation centre approximately 5 km west of Ch 3.0 km
- ▶ Bergmans Road nature walk 1.5 km north of Ch 12.2 km
- ▶ Rosewood Railway Museum and associated historical rail facility, 4.5 km northeast of Ch 6.4 km.

The Boonah to Ipswich Trail Plan identifies a planned but unconstructed route for a 74 km multi-use trail, which would be intersected by the Project at Wild Creek Road around Ch 42.8 km and Ch 47.8 km (Department of Local Government and Planning, 2011). The status of planned works to develop the trail is uncertain, as acquisition of private properties within the planned corridor did not occur, and plans were 'mothballed' in 2012.

There are a number of sport and recreations facilities and arts, culture and amenity facilities within Rosewood, Willowbank, Purga and Peak Crossing. Appendix R: Social Impact Assessment Technical Report provides further details.

16.7.7 Health and wellbeing

A complex interaction of social, economic, environmental, behavioural and genetic factors helps to shape a population's health and wellbeing. Further detail in relation to health, wellbeing and safety are discussed below and is provided in greater detail within Appendix R: Social Impact Assessment Technical Report.

16.7.7.1 Indigenous health and wellbeing

Indigenous status is an important indicator of health status as Aboriginal and Torres Strait Islander people experience a greater burden of disease and injury than non-Indigenous Queenslanders (Queensland Health, 2017). There is a clear relationship between the social inequalities experienced by Aboriginal people and their current health status (Macrae et al., 2013).

Unemployment is associated with poorer health and wellbeing. Like many areas in QLD, unemployment among Indigenous residents is high in the SIA study area, but lower than the state-wide unemployment rate of 20.1 per cent for Indigenous people. The level of unemployment in the SIA study area ranges between 16.5 per cent and 19.9 per cent compared with 7.6 per cent for the general population of QLD.

Indigenous residents in West Moreton Hospital and Health Service Region experienced almost twice the expected burden of disease and injury than the non-Indigenous population in QLD. They also have a shorter average life expectancy of 8.3 years. The six most prevalent contributors to the burden of disease were mental disorders (27 per cent of burden), cardiovascular disease (11 per cent of burden), chronic respiratory disease (9 per cent of burden), diabetes, cancers and neo-natal causes. Cardiovascular disease contributed 2.4 years to the gap in life expectancy (Queensland Health 2017).

16.7.7.2 General population health and wellbeing

The key indicators that reflect health determinants and health status in the regions surrounding the Project area include:

- ▶ Available information shows that the population of the SIA study area has a predisposition to a number of these illnesses, with higher rates of hospital admissions for circulatory and respiratory system diseases than the QLD rate
- ▶ The reported incidence of lung cancer for Boonah and Rosewood SA2s occurs at the rate of 47.7 people/per 100,000 people, lower than the QLD rate of 51.4/100,000 (referencing 2010 data) (Torrens University PHIDU, 2018)
- ▶ The Boonah/and Rosewood SA2s had slightly lower rates of suicide at 12.0 and 10.1 people/100,000 respectively compared to QLD's average rate of 14.1/100,000 (Torrens University PHIDU, 2018)
- ▶ The rate of people who assessed their health as being fair or poor in Boonah and Rosewood SA2s was similar to that of QLD (15.5 people/100) (Torrens University PHIDU, 2018)

- ▶ Boonah and Rosewood SA2s have a higher representation of school-age children who are developmentally delayed than is typical for QLD (18.2 per cent compared with 14 per cent) or elsewhere in the SIA study area (Torrens University PHIDU, 2018).

Community engagement conducted to date indicates that the SIA study area is well provided with health services; however, given the limited public transport services, most residents, particularly in the Scenic Rim LGA, are reliant on private transport to access health services.

16.7.7.3 Community safety

A measure of perceived safety, focusing on whether people feel safe to walk alone after dark in their local area, is provided by Torrens University PHIDU. These data are available at the SA2 level. The rural and urban fringe communities in Boonah and Greenbank SA2s are estimated to feel safer to walk alone after dark in the local area than is typical for QLD (55.9 and 53 people per 100 people respectively, compared with QLD's 50.9) (referencing 2014 data, Torrens University PHIDU, 2018).

The rate of criminal offences in Boonah SA2 was around 5,400 offences/100,000 people, lower than the QLD rate of 6,622 offences/100,000. However, Rosewood SA2 had a significantly higher crime rate of 9,155 offences/100,000 people (Queensland Police Service, 2017) (refer Appendix R: Social Impact Assessment Technical Report).

The SIA study area has a high number of deaths from road traffic injuries compared to the QLD average. In Boonah and Rosewood SA2s, 7.5 people/100,000 die from road traffic injuries, compared with QLD's 5.4 people/100,000 (Torrens University PHIDU, 2018).

16.8 Stakeholder engagement in SIA

16.8.1 Social Impact Assessment engagement process

ARTC's consultation approach is critical to the successful delivery of the Inland Rail Program. Between June 2017 and July 2020, consultation activities with Project stakeholders included face-to-face meetings, community information sessions, quarterly CCC meetings, and local, State and federal government briefings.

The consultation process included monthly Technical Working Groups and fortnightly Design Interface meetings with Logan City Council (LCC), SRRC and ICC during the EIS preparation process to develop an understanding of local issues and challenges, provide regular updates on design development and EIS progress, and identify potential Project impacts, benefits and mitigation measures.

ARTC's community and stakeholder engagement program and the outcomes of engagement to date are detailed in Appendix C: Consultation Report. Key themes raised throughout the EIS consultation process included:

- ▶ Project description
- ▶ Traffic, transport and access
- ▶ Land use and tenure
- ▶ Social impact
- ▶ Noise
- ▶ Surface water and hydrology
- ▶ Flora and fauna
- ▶ Vibration
- ▶ Environmental management plan.

As described in Section 16.4.2, SIA engagement was integrated with ARTC engagement processes for the Project. The SIA-specific engagement process is shown in Table 16.12 and included:

- ▶ A community survey involving more than 400 residents in the Toowoomba, Lockyer Valley, Ipswich and Scenic Rim LGAs
- ▶ Meetings with ICC and SRRC managers
- ▶ Workshops with social infrastructure providers, community organisations and government agencies
- ▶ Participation in community information sessions
- ▶ Meetings with the OCG
- ▶ Meetings with Yuggera Ugarapul People
- ▶ Meetings with the OCG and workshop involving councils and government departments to discuss preliminary findings and mitigation measures.

TABLE 16.12: SOCIAL IMPACT ASSESSMENT ENGAGEMENT

Stakeholder groups	Engagement purpose	Mechanism	Timing
Landholders and community members	<ul style="list-style-type: none"> ▶ Provide information about the EIS investigation corridor and EIS study process ▶ Enable community members to contribute their views on the scope of potential social impacts and benefits 	<ul style="list-style-type: none"> ▶ Participation in ARTC community information sessions (varying number of participants—refer Appendix C: Consultation Report) 	Late May–July 2018
		<ul style="list-style-type: none"> ▶ Briefing to and discussion with Scenic Rim CCC (approximately 32 members and observers) 	Late May 2018
	<ul style="list-style-type: none"> ▶ Collect information on social baseline values 	<ul style="list-style-type: none"> ▶ Community survey (approximately 200 participants) 	<ul style="list-style-type: none"> ▶ June–July 2018
		<ul style="list-style-type: none"> ▶ Participation in ARTC community information session 	<ul style="list-style-type: none"> ▶ September 2018
	<ul style="list-style-type: none"> ▶ Provide more detailed information about the Project alignment and obtain community input on potential impacts, benefits and mitigation measures 	<ul style="list-style-type: none"> ▶ Discussions with Scenic Rim CCC (approximately 32 members and observers) 	<ul style="list-style-type: none"> ▶ September 2018
		<ul style="list-style-type: none"> ▶ Interviews with landholders and community members at ARTC in information sessions —Yamanto and Beaudesert (approximately 10 interviews) 	<ul style="list-style-type: none"> ▶ November 2018
		<ul style="list-style-type: none"> ▶ Interviews with landholders and community members at ARTC in information sessions —Beaudesert, Rosewood, Peak Crossing (approximately 20 interviews) 	<ul style="list-style-type: none"> ▶ May 2019
Indigenous community	<ul style="list-style-type: none"> ▶ Identify Indigenous community values to be considered in the SIA ▶ Seek inputs on opportunities for Indigenous economic and community development 	<ul style="list-style-type: none"> ▶ Meeting with two Yuggera Ugarapul People as part of community information session 	<ul style="list-style-type: none"> ▶ May 2018
		<ul style="list-style-type: none"> ▶ Indigenous community organisation participation (Liworaji Aboriginal Corporation) in social infrastructure providers' workshops 	<ul style="list-style-type: none"> ▶ May 2018
	<ul style="list-style-type: none"> ▶ Meeting with Yuggera Ugarapul People 	<ul style="list-style-type: none"> ▶ November 2019 	
Local governments— Ipswich LGA and Scenic Rim LGAs	<ul style="list-style-type: none"> ▶ Brief Council and managers on the draft SIA scope and seek their inputs on potential impacts and draft mitigation measures 	<ul style="list-style-type: none"> ▶ Meetings with planning, health and community development directors (nine officers in total) 	<ul style="list-style-type: none"> ▶ October and November 2018
	<ul style="list-style-type: none"> ▶ Provide Council managers with a summary of draft findings and mitigation measures, and seek feedback 	<ul style="list-style-type: none"> ▶ Social Technical Advisory Group meeting coordinated by OCG (four officers) 	<ul style="list-style-type: none"> ▶ July 2019
	<ul style="list-style-type: none"> ▶ Provide opportunity for detailed discussion of social impacts and benefits, and feedback on mitigation measures 	<ul style="list-style-type: none"> ▶ Council workshop with Lockyer Valley Regional Council (LVRC), SRRC and ICC (seven officers) 	<ul style="list-style-type: none"> ▶ July 2019

Stakeholder groups	Engagement purpose	Mechanism	Timing
OCG	▶ Discuss the proposed SIA scope and assessment requirements	▶ Meeting with OCG	▶ June 2018
	▶ Advise the OCG on the results of stakeholder engagement and preliminary assessment findings	▶ Meeting with OCG officers	▶ January 2018
Community and government agencies	<ul style="list-style-type: none"> ▶ Identify social infrastructure capacity and gaps ▶ Seek input on social impacts and opportunities for social infrastructure providers and vulnerable groups ▶ Seek inputs on mitigation measures and enhancement measures 	▶ Two workshops with social infrastructure providers involving health, community, emergency, disability, and Indigenous services (total of 16 organisations)	▶ October 2018
Community and environmental organisations	▶ Seek community organisations views on potential social impacts and mitigation partnerships	▶ Community information sessions (as noted Appendix C: Consultation Report)	▶ October 2018
Businesses and business organisations	▶ Identify businesses' views on potential impacts and opportunities, and identify strategies to support local suppliers to participate	▶ ARTC consultation with Scenic Rim Chambers of Commerce (five chambers—approximately 15 people)	▶ June 2019
Government agencies <ul style="list-style-type: none"> ▶ DSDMIP ▶ DCDSS ▶ DTMR ▶ DESBT ▶ DET ▶ Department of Communities ▶ DATSIP ▶ DHPW ▶ Queensland Health ▶ QPS ▶ Department of Infrastructure, Transport, Regional Development and Cities [DITRDC] 	▶ Seek agency input on the preliminary SIA findings and agencies' specific interests with respect to mitigation strategies	▶ Social Technical Advisory Group meeting coordinated by OCG	▶ July 2018

16.8.2 Engagement outcomes

16.8.2.1 Community survey

The Inland Rail's Gowrie to Helidon (G2H), Helidon to Calvert (H2C) and Calvert to Kagaru (C2K) projects were the focus of a SIA community survey undertaken between 31 May and 31 July 2018, with a total of 403 responses received. The four LGAs affected by the three projects have a combined population of approximately 411,000 people. Accordingly, the SIA survey results have limited statistical validity when broken down by LGA, but provide good insights to community values and views about potential Project impacts.

The community survey data of most relevance to the Project includes inputs from 201 residents in the Project region. Of the 199 survey respondents who nominated their home address, 79 people were from the Ipswich LGA, 26 people were from the Scenic Rim LGA and 94 people were from communities on the LGA boundary, including 83 people from Peak Crossing.

Survey respondents were asked to provide inputs on community values, community wellbeing, potential social impacts and benefits, and potential mitigation measures for social impacts. Further information on survey responses is provided in Appendix R: Social Impact Assessment Technical Report Sections 5.3.1 and 5.7.1.

Not all respondents answered each survey question. A total of 315 respondents provided their views on potential social impacts and benefits, including 160 respondents from the Scenic Rim and Ipswich LGAs. Figure 16.5 provides a summary of these responses, rated from 1 (most negative response) to 5 (most positive response).

Respondents anticipated more negative than positive effects from the Project, with most scores averaging below 2 out of 5.

Lowest scores were provided consistently by Scenic Rim and Ipswich LGA respondents in relation to impacts on housing and property use, and in relation to amenity of towns or farms.

Response ratings with an average above 2 were generally provided by respondents in relation to changes to employment and training options, industry and economic development and local businesses; however, these ratings still rank at the neutral to negative end of the response spectrum.

Some survey respondents noted that more information about the Project (e.g. alignment, structure, commercial use arrangements, employment and supply arrangements) was needed for them to determine the social impacts and benefits for their community.

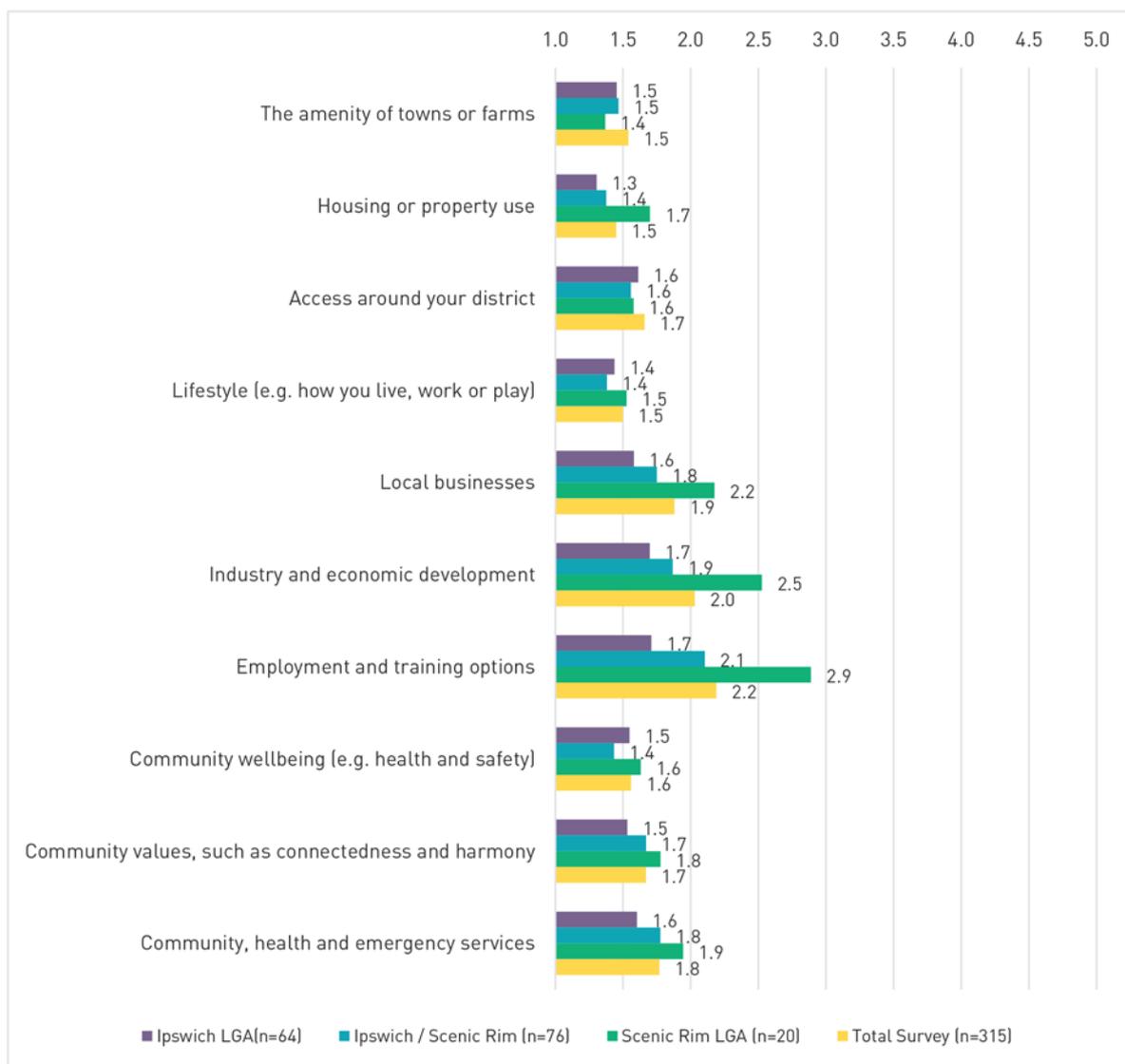


FIGURE 16.5: SURVEY RESPONDENTS' RATINGS OF PROJECT SOCIAL IMPACTS AND BENEFITS

The general tone of survey comments indicates mistrust, anger, fear and opposition to the Project. Some comments acknowledge the Project's national significance and broad-scale benefit, but many others did not expect Project benefits would be experienced at a local level.

Overall, the survey results showed that respondents anticipated negative effects for their community in relation to:

- ▶ Impacts on local property values and on quiet enjoyment of private properties
- ▶ Severance of farming land and impacts to agricultural productivity and local business operations
- ▶ Impacts to the scenic amenity and character of townships
- ▶ Disruption of residents' quiet way of life and enjoyment of public spaces and townships, also affecting local visitor appeal
- ▶ Community wellbeing, including:
 - ▶ Fear of community fragmentation, harming cohesion
 - ▶ The potential for increased stress, anxiety and depression among affected landholders and also nearby residents who fear or oppose the Project
 - ▶ Noise impacts causing nuisance, affecting sleep and general health and wellbeing
 - ▶ Potential for pollution and coal dust to affect the drinking water of nearby residents that rely on rainwater tanks.

The least negative response ratings were recorded in relation to the Project's potential effect on employment and training options, industry and economic development and local businesses; however, generally respondents were lukewarm about employment and economic development opportunities.

While a general theme from respondents was opposition to the Project, many had given considerable thought to what actions the Project team could consider in order to mitigate adverse impacts or maximise benefits. Stakeholder inputs to suggested mitigation measures are detailed in Appendix R: Social Impact Assessment Technical Report within Section 8.1.3.

16.8.2.2 Landholders

ARTC is consulting with all directly affected landholders and has also consulted with landholders in potentially impacted communities as part of CCC meetings, community information sessions, static displays and community forums. More than 200 face-to-face meetings have been held, with ARTC consulting with over 380 landholders about the Project. Key issues identified as part of landholder consultation have included:

- ▶ The potential for impacts on the amenity of landholders whose properties are adjacent to the corridor

- ▶ Concern about the process of land acquisition and uncertainty about when acquisitions would occur, leading to anxiety and stress
- ▶ The potential for construction or operational noise to impacts on quality of life, and the availability of mitigation measures to reduce noise exposure
- ▶ Concern regarding the potential for the Project to exacerbate flooding
- ▶ Concerns for koala habitats and access across the corridor
- ▶ The desire for a grade separated crossing at Middle Road
- ▶ Opposition to the Paynes Road realignment
- ▶ Concerns regarding the location of the crossing loop near Peak Crossing and potential for noise from idling trains to affect the amenity of nearby residents.

Further information regarding issues by landholders' and ARTC response to these issues is provided in Appendix C: Consultation Report.

16.8.2.3 Community Consultative Committee inputs

The Scenic Rim CCC was established in December 2017 and has 13 members, plus the independent Chair, to represent a cross-section of potentially affected communities and provide input and feedback into the Calvert to Kagaru section of the Project.

Meetings were held in December 2017, February 2018, May 2018, September 2018, November 2018, February 2019, May 2019, September 2019, November 2019, April 2020 and July 2020. SIA team presentations and discussion with the Scenic Rim CCC were undertaken to inform the community about the SIA process (Peak Crossing, May 2018) and to seek feedback from community representatives on potential impacts (Rosewood, September 2018). ARTC also made presentations to the CCC on Inland Rail's Social Performance Program (November 2018) and the social performance program and mitigation measures for social impacts (July 2019).

CCC members raised the following concerns about social impacts:

- ▶ The need for timely communication about the Project's horizontal and vertical alignment and design
- ▶ Concerns about Project-related stress and anxiety affecting mental health, and how impacts on wellbeing will be monitored
- ▶ Impact on Native Title interests or cultural heritage impacts (e.g. severance and displacement)

- ▶ Changes to rural character through effects on visual amenity or cultural heritage places
- ▶ Noise and vibration, with specific mention made to the possible future inclusion of trains of 3,600 m length and potential for noise barriers to be part of Project
- ▶ Concern about the potential impacts of noise on the Ivory's Rock Conventions and Events Centre
- ▶ Waiting times at level crossings that could cause inconvenience or delays to emergency vehicles
- ▶ Increased traffic during construction leading to road safety issues
- ▶ Potential for passenger rail inclusion as part of the Project design
- ▶ Potential long-term community benefits of reduced freight truck movements on local and State road networks
- ▶ Potential for effects on unregistered bores
- ▶ Status of the Ebenezer intermodal terminal
- ▶ Road safety, in particular the safety of level crossings, and:
 - ▶ Washpool Road realignment
 - ▶ Proposed level crossing on Middle Road
 - ▶ Paynes Road realignment
- ▶ Safety of level crossing and a desire for all crossings of public roads to be grade separations
- ▶ Request for road closures to be publicly notified
- ▶ Concerns for the management of biosecurity risks (weed and pest control, and fire ants) by the Project
- ▶ Interest in employment opportunities
- ▶ Involvement of local businesses in the supply chain
- ▶ How Indigenous businesses are being engaged to participate
- ▶ Ensuring local employment targets specifically address the Project region.

16.8.2.4 Community information sessions

ARTC has held four rounds of community information sessions to involve directly impacted and nearby landholders, community members, CCC members, community groups and local business stakeholders in discussions about the Project (refer Appendix C: Consultation Report). Interest areas and issues were primarily in relation to:

- ▶ Flooding
- ▶ Property acquisition and the land valuation process
- ▶ EIS and approvals process
- ▶ Property acquisition
- ▶ Noise and vibration (operation phase)
- ▶ Aboriginal cultural heritage
- ▶ Field investigations and property access
- ▶ Traffic management on local roads, and potential impacts on traffic safety
- ▶ Groundwater quality and water contamination
- ▶ Level crossing safety.

Themes of particular relevance to the SIA included:

- ▶ Impacts of property severance on agricultural uses, farms and transport routes
- ▶ Potential noise impacts from the crossing loop at the Peak Crossing location
- ▶ Requests for early acquisition processes to avoid hardship
- ▶ Impacts of road severance/re-alignments on local connectivity
- ▶ Potential for noise and vibration impacts on residential amenity during operation, including the potential for cumulative noise impacts in relation to the Ipswich Motorsports Precinct
- ▶ Concerns about changes to current flooding patterns that would inundate more properties or extend the duration on inundation
- ▶ The need for more information to enable community members to understand impacts
- ▶ Impacts on rural character and environmental qualities.

Appendix C: Consultation Report summarises the key issues raised during the consultation process, and where these issues are addressed in the EIS.

Inputs from stakeholders who identified their home locations that have relevance to social impacts are summarised in Table 16.13.

TABLE 16.13: COMMUNITY INFORMATION SESSIONS INPUTS ON POTENTIAL SOCIAL IMPACTS AND BENEFITS, BY AREA

Community	Issues raised
Calvert/Lanefield	<ul style="list-style-type: none"> ▶ Freight rail noise and vibration ▶ Visual impacts ▶ Less ability to sell property due to noise impact ▶ Concerns about exacerbation of flooding
Willowbank	<ul style="list-style-type: none"> ▶ Lack of information on timing, affecting ability to plan for businesses ▶ Concern that coal dust will affect tank water and solar panels ▶ Exacerbation of current noise impacts from the raceway, planes and mining.
Rosewood	<ul style="list-style-type: none"> ▶ Potential to impact on existing flood conditions ▶ Potential for additional travel times/delays ▶ Concern about cumulative noise impacts, particularly near the Ipswich Motorsports precinct and in relation to RAAF Base Amberley ▶ Concerns around particulates in drinking rainwater tanks ▶ Impacts to visual amenity and tourism ▶ Potential to impact on school bus routes and safety of children ▶ Concerns for mental health and anxiety that the Project has generated
Peak Crossing	<ul style="list-style-type: none"> ▶ Noise as a key concern, noting many had moved to the local area because of how quiet it is ▶ Concern about tourism businesses and the effect of road disruptions, impacts on scenic amenity and noise ▶ Impacts of Washpool Road realignment, Middle Road traffic flow and Dwyers Road ▶ Impact on peaceful amenity and attractiveness of Ivory's Rock Conventions and Events Centre ▶ Impact on rural and natural views ▶ Water contamination from coal dust or other pollutants ▶ Degradation of local roads from construction traffic and traffic safety ▶ Cumulative impacts of train noise and road noise from Ipswich–Boonah Road ▶ Concern about land acquisition impacts on private properties ▶ Strong concern regarding potential for increased flood risk and local impacts ▶ Concern regarding potential impacts to water table supporting farming operations ▶ Potential to impact on koala habitat, which would be experienced as a loss of environmental qualities by local residents.
Purga/Mutdapilly	<ul style="list-style-type: none"> ▶ Concerns about land acquisition process ▶ Effects on fauna and amenity of Purga Nature Reserve ▶ Impacts on Middle Road as a district connector ▶ Level crossing safety ▶ Concerns about exacerbation of flooding ▶ Concern about exacerbation of existing noise ▶ Concerns around the impact of diesel engines and coal transportation on air quality, and potential for particulate dispersion in rainwater tanks used for drinking ▶ Concern about impact to local properties and interest in land swap arrangements ▶ Impact to community and desire to explore legacy projects that will ensure something positive comes out of the Project ▶ Indigenous cultural heritage values.
Washpool	<ul style="list-style-type: none"> ▶ Potential to improve Washpool Road access by providing a sealed road ▶ Effect of dust on solar panels ▶ Effects on property values ▶ Effects on firefighters' access and concern about the Project—causing fires especially during track maintenance on the tracks ▶ Vibration from trains affecting high set houses and peace and quiet ▶ Potential for new/re-aligned roads to service the community.

Community	Issues raised
Mutdapilly	<ul style="list-style-type: none"> ▶ Potential noise and vibration in context with current impacts of mining, raceway, highways, Willowbank, RAAF Base Amberley ▶ Disruption to access via Goebels Road/Mount Forbes Road/Ebenezer ▶ Flooding.
Undullah	<ul style="list-style-type: none"> ▶ Severance of access for properties at the end of Wild Pig Creek Road ▶ Impacts on cattle yards ▶ Consideration of maintaining access to properties, including cattle crossing the Project.
Kagaru	<ul style="list-style-type: none"> ▶ Effect of Project on cattle yards and therefore property function ▶ Effects on residential property amenity and value
Allenview	<ul style="list-style-type: none"> ▶ Impact on grazing operations including cattle crossings and cattle yards ▶ Property severance ▶ Potential to displace intergenerational families.

16.8.2.5 Council engagement

Scenic Rim Regional Council

Consultation with SRRC officers for the SIA identified baseline values including:

- ▶ A strong focus on the future sustainability of the LGA's environment, communities and economy, with the quality of the environment and sustainable employment options central to the region's growth
- ▶ The LGA has a strong tourism industry, with scenic amenity and environmental values central to the tourism brand
- ▶ The equine community has access to extensive horse trails including through the remote Undullah ranges
- ▶ Peak Crossing is experiencing some residential growth with new houses being built
- ▶ Major residential developments at Flagstone, Ripley and Yarrabilba will contribute to regional population growth, but need to be supported by local jobs
- ▶ There are existing pressures of population growth on the region's road networks
- ▶ Analysis for Council indicates that almost 50 per cent of local residents are travelling outside the Scenic Rim LGA to access employment
- ▶ NBN connectivity is an issue for the entire region
- ▶ Social infrastructure is generally sufficient to meet current community demands, but regional hospitals are small
- ▶ Beaudesert High School is the only provider/facilitator of training in the region and the community profile shows a significant gap in the 18–24 year cohort, as school leavers are leaving the region.

Issues raised by SRRC officers included:

- ▶ Community concern regarding the Project's impact on property values
- ▶ Community concern about Project's impacts on tourism
- ▶ Concerns that any transportation hubs may cause localised traffic impacts
- ▶ Existing poor road conditions and potential road safety impacts opportunities for improvement on Ipswich–Boonah Road and Boonah–Beaudesert Road
- ▶ Potential to affect viability of transport businesses, turf farms and poultry farms
- ▶ Concern for the impacts of constructing the Cunningham Highway crossing on road users (including major goods and service providers such as Woolworths and local quarries), and amenity for nearby residents (one dwelling is located 100 m southeast and one located 400 m southwest of construction area)
- ▶ Any temporary growth in accommodation demand may place pressure on affordable housing
- ▶ The need to avoid creation of small residential lots out of keeping with other nearby lot sizes
- ▶ Ensuring development supports the region's values, including maintaining public and scenic amenity, was identified as an important consideration for the Project.

Potential opportunities identified included:

- ▶ Project's potential to support the growth of jobs at Bromelton
- ▶ Support for local employment and Indigenous employment
- ▶ Training programs that would facilitate access to Project opportunities, involving Beaudesert High School to formalise links pathways

- ▶ Potential for the Project to support the LGA's sustainability in the context of transportation and road network management
- ▶ Potential supply opportunities for quarries
- ▶ Benefits for managing long haul driver safety.

At the technical workshops with government agencies and council in July 2019, council's inputs included:

- ▶ Questions regarding the basis for compensation for property acquisition, including the need for consideration of the value of properties prior to announcement of the Project
- ▶ Consideration of the effects of land acquisition on the viability of small farming lots
- ▶ The need to consider the effects of roadworks, construction noise and other impacts on the amenity of tourism facilities
- ▶ The need for construction planning to consider scenic values, which support amenity and tourism
- ▶ Concern regarding the effects of roadworks and traffic congestion on daytrip tourism, which comprises approximately 80 per cent of the Scenic Rim's tourism trade, with potential for long-term impacts on tourism
- ▶ Concern regarding the potential for the construction workforce to require accommodation and crowd out tourists, with consequential impacts on a range of local tourism businesses
- ▶ The opportunity to align with council's regional development initiatives, to build businesses' capacity to participate.

Ipswich City Council

Consultation with ICC officers for the SIA identified baseline values including:

- ▶ Currently a very high rate of mental health issues in Rosewood
- ▶ Existing disadvantage in rural communities
- ▶ In Grandchester (located within the H2C study area), a low-population mass, which is vulnerable to change
- ▶ The need for more diverse and sustainable employment opportunities
- ▶ Trauma and anxiety due to past floods
- ▶ Drought affecting the health and wellbeing of the farming community
- ▶ A current council focus on mental health and Indigenous business development with Aboriginal community partners
- ▶ Ebenezer intermodal freight facility as a key opportunity for regional development.

Key issues raised in relation to the Project included:

- ▶ The effects of land severance on the settlement pattern, and the need to avoid creation of additional lots that become small residential blocks in rural areas
- ▶ The potential to exacerbate flooding across the Ipswich region is a concern for residents following the 2011 floods
- ▶ Confirmation regarding the number of rail movements that would be experienced through towns such as Calvert and Grandchester
- ▶ Current difficulties in managing fire hazards within the Purga Nature Reserve
- ▶ Severance of north-south connectivity between facilities and homes
- ▶ Community concern about impacts of noise and/or dust on amenity
- ▶ Concerns with flat topography (e.g. in Calvert) that noise will carry and be heard for some distance
- ▶ Potential for construction or operation to impact on the Ipswich Motorsport Precinct at Willowbank.

At the technical workshops with government agencies and Council in July 2019, the SIA team presented the SIA's draft findings and an outline of the SIMP and sought council's inputs. Feedback included:

- ▶ The need for the Project's recruitment strategy to focus on residents in the Ipswich LGA
- ▶ A large number of new schools are planned to cater for growth in Ipswich's population, and may need to be considered in relation to the Project's potential impacts
- ▶ The potential for construction activities to impact on the amenity of the Willowbank Motorsports Precinct, particularly with respect to amenity and traffic access during major events such as CMC Rocks and Touring Car Championship, which attract thousands of people
- ▶ The need to consider the effects of roadworks, construction noise and other impacts on the amenity of tourism facilities
- ▶ The need for construction planning to consider both scenic values and large tourism events (e.g. noise impacts on events based on appreciation of the environment, and peak accommodation demands)
- ▶ Consideration required of whether caravan parks or mobile home parks near Willowbank would be affected
- ▶ Existing congestion on Middle Road that would need to be considered in traffic management planning
- ▶ Consideration of current planning by ICC, DTMR and Economic Development Queensland (EDQ) for the Ebenezer area
- ▶ Existing congestion on Middle Road that would need to be considered in traffic management planning.

16.8.2.6 Indigenous communities

ARTC has consulted with traditional custodians as part of the Project's cultural heritage assessment process, which involved cultural heritage surveys and consultation with endorsed parties. ARTC is also conducting engagement with Indigenous community members with respect to Indigenous employment and training opportunities. Aboriginal Elders are also represented on the CCC.

The SIA team participated in an interview with Yuggera Ugarapul People Elders (Grandchester Community Information Session, 26 May 2018), during which the Elders focused on the importance of landscape features with cultural importance, and opportunities for employment and training for Indigenous young people. An Elder representing the Liworaji Aboriginal Corporation (a community organisation offering community development and training services) who participated in the SIA workshop in Ipswich noted the potential for housing impacts to disproportionately affect Indigenous households, many of whom who have less housing security than the general community.

ARTC's Social Performance team met with Yuggera Ugarapul People in August 2019. Key issues included:

- ▶ Respect for the cultural landscape, and the Project's potential to change how it is experienced
- ▶ The need for ongoing consultation with Yuggera Ugarapul People as the detailed design progresses
- ▶ Keen interest in employment opportunities and Indigenous business participation in the Project
- ▶ The need for Yuggera Ugarapul People (not just Indigenous people generally) to be employed and to have business opportunities as part of the Project
- ▶ Barriers to employment will need to be addressed, e.g. job readiness and drivers' licences
- ▶ Potential for the Project to support cultural awareness, e.g. cultural appreciation tours.

A meeting with the Yuggera Ugarapul People was held in November 2019 to review the SIA's draft findings and mitigation and enhancement strategies. Key issues raised included:

- ▶ Effects of project construction on wildlife corridors
- ▶ Changes to the landscape and environmental impacts cause distress to Aboriginal people
- ▶ The need for cultural awareness training for contractors, in consultation with Yuggera Ugarapul people
- ▶ Need for cultural heritage assessment of the locations of any new quarries
- ▶ Interest in an opportunity to talk with Indigenous agencies that will be involved in Inland Rail projects

- ▶ Employment opportunities including the need for a dual focus on skills training and employment of young people and mature jobseekers who can then go onto other construction work, and potential for partnerships to support Yuggera Ugarapul people to get skills and work experience prior to Inland Rail construction commencing
- ▶ Need for advice to Yuggera Ugarapul people regarding business opportunities and skills that contractors require.

16.8.2.7 Social infrastructure providers

Consultation with social infrastructure providers identified the following issues:

- ▶ Potential Project impacts on community mental health, related to uncertainty, anxiety about Project impacts and disruption of social support networks
- ▶ Limited resources in rural hospitals to cope with increased demand, which could strain services if there was a significant population influx or change in community health
- ▶ Community tension about the Project location and land acquisition, as the SIA study area attracted people who want a quiet rural lifestyle and they are concerned that the Project will impact on amenity
- ▶ Early establishment of relationships with the Queensland Fire and Emergency Services (QFES) to discuss potential impacts and mitigation measures with regards to local community safety and traffic safety, demands for service
- ▶ Potential for protest activity, which could cause community division and is also a drain on Police resources
- ▶ Traffic safety issues with Project workforce commuters who aren't familiar with local roads, as even with small increases in traffic an increase in fatigue related incidents/animal strike is noticed locally
- ▶ The need for careful management of traffic disruptions particularly for works to the Cunningham Highway, which is an existing ongoing focus for traffic policing and road closures can cause safety issues
- ▶ Wide load escorts are likely to require considerable resources
- ▶ Potential for increased calls for QPS, Queensland Ambulance Service (QAS) and QFES calls for service as the result of traffic accidents
- ▶ Need to maintain access for QFES around the disturbance footprint and to nearby communities, which will require ongoing consultation.

16.8.2.8 Government agencies

Government stakeholders who participated in SIA workshops included representatives of:

- ▶ Ipswich Community Health Services Centre
- ▶ Rosewood, Laidley, Boonah and Harrisville Police Station
- ▶ Grandchester State School
- ▶ TAFE QLD
- ▶ UQ Gatton Campus.

The OCG coordinated a technical workshop with government agencies and councils in July 2019.

The participants included representatives of:

- ▶ Education Queensland
- ▶ DESBT
- ▶ DATSIP
- ▶ Queensland Health
- ▶ DCDSS
- ▶ QPS
- ▶ QAS
- ▶ QFES
- ▶ Department of Infrastructure, Transport, Regional Development and Communications (as renamed in February 2020)
- ▶ ICC
- ▶ SRRC.

ARTC also consulted directly with the Department of Education regarding the potential for noise to affect school's learning environments, and the process for ongoing consultation regarding the Department's Learning Environment Policy.

The workshop considered the SIA's draft key findings and proposed outcome for impact mitigation and enhancement of Project benefits. Feedback included:

- ▶ Consideration of whether there are Department of Housing and Public Works properties in the EIS investigation corridor
- ▶ Consideration of impacts on events at the Ipswich Motorsport Precinct and related tourism businesses
- ▶ Interest in ARTC's plans for training strategies and partnerships aimed at building capacity for local people to benefit from Project employment opportunities
- ▶ The need to consider perceived impacts as well as impacts established as part of the EIS or SIA

- ▶ Interest in the likelihood of impacts on health services as the result of workforce demands
- ▶ Endorsement of ongoing consultation with Education Queensland regarding the potential for noise impacts on schools
- ▶ Accommodation plan required for construction workforce to manage potential cumulative impacts on local short-term accommodation providers
- ▶ Address the potential impact on existing housing and rents and the consequential impact on lower income earners and potential displacement
- ▶ Consider social impacts associated with the Project's water use
- ▶ The importance of ongoing engagement with government agencies during the detailed design and construction processes
- ▶ Interest in management strategies used by rail operators to ensure compliance with air and noise criteria
- ▶ Support for proposed collaboration with QPS, QAS and QFES.

16.8.2.9 Businesses

ARTC undertook a total of 374 engagement interactions, including 11 meetings, with tourism businesses including the Ivory's Rock Conventions and Events Centre and Flinders Peak Winery undertaken during the EIS process. Key issues raised by tourism businesses and groups have included:

- ▶ Concerns about noise impacts on tourism facilities during the Project's operation
- ▶ Management of impacts on the environment, which may affect tourism businesses or tourists' enjoyment of the area
- ▶ Concerns about the impacts of roadworks or increased traffic on tourism visitation
- ▶ Supplier and contractor opportunities.

Farmers who participated in consultation noted the potential or land acquisition to impact on the productivity of their farms, impacts on farm infrastructure, and impacts on stock crossings and stock routes.

ARTC also met with the two councils' economic development teams. Key issues raised included:

- ▶ The Project region's attractiveness for families, with safe communities, strong town cultures and good schools
- ▶ Keen interest in employment opportunities being offered to young residents in the Scenic Rim, supporting population retention
- ▶ Potential for disruption of traffic access to local businesses
- ▶ Impacts on agricultural properties
- ▶ The need to increase access to information technology to encourage young people and businesses to stay, with 70 per cent of the geographic region serviced by satellite rather than the National Broadband Network
- ▶ Capacity for local businesses to participate in construction, with property development construction recently supporting growth in the sector
- ▶ The very large number of owner operator businesses and small businesses, which may have less capacity involvement, but could experience significant benefits from participation in the supply chain
- ▶ The prevalence of workers commuting outside the LGA for work (estimated at 40 per cent of workers)

- ▶ The region's accessibility and increasing popularity for day-trip tourism, with accompanying strong growth in food and accommodation services
- ▶ Facilitation of industrial development (e.g. Bromelton and surrounding areas)
- ▶ High traffic loads on major roads, with the Mount Lindesay Highway of particular concern.

16.8.2.10 Summary of issues

Table 16.14 summarises key issues raised by stakeholders of relevance to social impacts and benefits, and where issues are considered in this chapter.

The following issues raised in consultation are not addressed in the SIA:

- ▶ Potential for passenger rail inclusion, impacts associated with any transportation hubs and the status of the Ebenezer intermodal terminal, as these are not part of Project scope
- ▶ Management of biosecurity risks (as this is addressed in detail in Appendix J: Terrestrial and Aquatic Ecology Technical Report).

Stakeholders were also encouraged to provide feedback on actions that ARTC could take to mitigate potential impacts or enhance Project opportunities. Stakeholder inputs on mitigation and enhancement measures are addressed in Section 16.10.1.

TABLE 16.14: STAKEHOLDER ISSUES ADDRESSED IN THE SIA

Issues raised	SIA section
Impacts on Indigenous cultural landscapes/heritage values	16.9.1
Concern about the land acquisition process, compensation for acquisition and impacts of land acquisition on private properties	16.9.1
The impacts of freight rail noise and vibration including cumulative noise impacts	16.9.1
Impacts on rural character and rural amenity	16.9.1
Potential for construction noise to impact on quality of life	16.9.1
Potential effects of diesel emissions or coal dust on air quality or tank water	16.9.4
Impacts of constructing the Cunningham Highway crossing on road users and amenity for nearby residents	16.9.1
Impacts on property access	16.9.1
Potential for additional travel times/delays or degradation of local roads from construction traffic	16.9.1
Impacts of road re-alignments	16.9.1
Changes to ground water quality or availability	16.9.4
Potential for noise impacts on schools	16.9.4
Potential for changes to connectivity to fragment communities or disrupt access between homes and facilities	16.9.1
Impacts on connections between community members	16.9.1
Concerns about road safety in regard to level crossings	16.9.4

Issues raised	SIA section
Concerns about exacerbation of flooding	16.9.1
Impacts on property values	16.9.1
Potential to support employment growth in the Project region, including for local Indigenous people	16.9.2
Potential for partnerships in training opportunities	16.9.2
Potential for impacts on caravan park residents	16.9.3
Management of potential cumulative impacts on short-term accommodation	16.9.3
Potential impact on housing rents and consequential impacts on lower-income earners	16.9.3
Potential for impacts on health and wellbeing	16.9.4
Impacts on the amenity of the Purga Nature Reserve	16.9.4
Potential for commuter traffic or large vehicles to impact on traffic safety, including school bus routes	16.9.4
Impacts on events at Ipswich Motorsport Precinct and related tourism businesses	16.9.5
Potential to delay emergency services at level crossings	16.9.4
Concerns for mental health and anxiety that the Project has generated	16.9.4
Social impacts associated with the project's water use	16.9.4
Potential for accidents in relation to level crossings	16.9.4
Firefighting access	16.9.4
Potential to impact on koala habitat, impacting koala health and tourism	16.9.5
Positive legacies	16.9.2
Impacts on tourism businesses, tourist travel and scenic amenity	16.9.5
Impact on farming properties, including impacts on farm infrastructure and bores and the viability of small farming lots	16.9.5
Potential to affect viability of transport businesses and agricultural businesses	16.9.5
Impacts on stock and equipment movements	16.9.5
Potential supply opportunities, and the need to enable capacity for local businesses and Indigenous businesses	16.9.5
Opportunity to align with local governments' regional development initiatives to build businesses' capacity to participate	16.10.6
Demands on local health services	16.9.4
Cooperation with emergency services to mitigate Project risks and the potential for increased calls for service	16.9.4
Disruption of traffic access to businesses	16.9.5
Potential community benefits of reduced freight truck movements on local and state road networks	16.9.4
Potential to support the growth of jobs at Bromelton or Ebenezer	16.9.5

16.9 Potential impacts

This section summarises the potential social and economic impacts and benefits that may result from the Project during construction, operation and decommissioning. Further detail can be found in Appendix R: Social Impact Assessment Technical Report.

16.9.1 Communities and stakeholders

The Project was designed to use the existing gazetted SFRC where possible, to minimise the extent of 'new' properties to be acquired.

The disturbance footprint intersects one land parcel identified as Reserve tenure, which is located within the Yuggera Ugarapul People's claim area and may be subject to native title rights. The *Native Title Act 1993* (Qld) (NT Act) prescribes a statutory process to enable native title holders and parties seeking use of land to reach agreements about the use of that land. Members of the Yuggera Ugarapul People noted that the imposition of linear infrastructure such as roads and rail infrastructure can affect the ability to connect with landscapes, and the prospect of disturbance to the landscape and environmental qualities causes distress.

Where land is required outside of the gazetted SFRC corridor, the corridor will be amended in consultation with DTMR, which will require acquisition of private properties and road reserves. Any additional land required for the Project will mostly be acquired through a compulsory land acquisition process, also known as land resumption.

Land resumption processes in QLD are undertaken by acquiring government agencies (described here as the Constructing Authority) in accordance with the *Acquisition of Land Act 1967* (Qld) (AL Act), which sets out the process for acquisition and the assessment of compensation principles. The land resumption process will only commence once the Project is approved and all or part of a property is identified as directly affected by the proposed Project works.

If land is required only for the construction phase of the Project, and not for the ongoing operation of the Project, land may be occupied temporarily in accordance with the AL Act or may be leased or licensed from landholders.

ARTC has met with all directly impacted landholders to discuss the proposed Project design and to identify where properties would be impacted. Landholders within the SFRC were generally aware that their property was in the SFRC and may have anticipated acquisition or relocation as the result of a rail project for some time.

Private freehold lots will be acquired by the Constructing Authority, either in full or in part, where feasible, and as determined in consultation with affected landholders, considering factors such as land parcel size, the effect of the alignment on the property, land use and the property's operability following construction.

Currently, there are no property lots that have been identified as being entirely impacted (i.e. requiring full acquisition) by the permanent disturbance footprint. However, consultation with landholders indicates that 22 of them would like full acquisition totalling 34 lots of land. Three landholders have sold their properties to DTMR during the past twelve months as part of an early acquisition request and have moved to other properties.

Full acquisition of properties is likely to result in the relocation of affected landholders. Where partial acquisition of land may occur and the landholder wants to retain ownership, ARTC has worked with landholders to maintain access to their property and mitigate impacts on its operation e.g. adding a culvert to facilitate movement of cattle.

Of the 50 DTMR lots that will be impacted, approximately 31 of these properties are tenanted. These landholders would need to relocate.

Together, the removal of 31 tenanted dwellings on DTMR properties and an estimated 22 full acquisitions could lead to the relocation of approximately 53 households from the EIS investigation corridor, and potentially from local communities if they are unable to find a suitable property or chose to move to another area. There may also be potential for a small number of land acquisitions to mitigate unacceptable operational noise impacts; however, the need for these acquisitions has not yet been determined.

Changes to the environment near the Project have potential to affect community values such as community cohesion, connectivity and sense of place. Community members were also concerned about the potential for the Project to change flooding risks or affect property values.

The Project's potential impacts to community and stakeholder values are summarised in Table 16.15.

TABLE 16.15: POTENTIAL IMPACTS TO COMMUNITIES AND STAKEHOLDERS

Impact area	Delivery phase	Potential impacts
Population and demographic change	Construction	The Project may contribute to an increase in the daytime population of the Project region during construction, but is unlikely to result in a significant change to the Project region’s population or demographic profile during operations.
Native title	Construction and operation	The disturbance footprint intersects one land parcel within the Yuggera Ugarapul People’s claim area, which may be subject to native title rights.
Property acquisition	Construction and operation	<p>Freehold properties that will need to be partially or wholly acquired for the Project include 121 private lots of land held by 75 private landholders. Of these lots, 22 landholders have expressed a desire for full acquisition.</p> <p>The relocation of approximately 31 households who are currently renting properties from DTMR within the EIS investigation corridor is also required. Consequently, property acquisitions and the displacement of tenants may lead to the relocation of approximately 53 households, with potential for a small and as yet undetermined number of acquisitions due to unacceptable noise impacts. For the purpose of estimating impacts on populations and housing, the SIA has assumed that approximately 60 households will need to relocate from the EIS investigation corridor.</p> <p>Farming paddocks and infrastructure will be affected by the Project, with direct impacts on dams, fences, and paddocks, and potential for disruption of cross-corridor movements.</p> <p>Construction will require temporary use of land for construction purposes, including laydown areas, earthworks, access tracks and road works and may be occupied temporarily in accordance with the AL Act or may be leased or licensed from landholders.</p>
Disadvantage	Construction	The Project may affect the amenity and connectivity of properties within and near the disturbance footprint, and there is also potential for property acquisitions to displace households with limited socio-economic resources. Local households and businesses have been affected by the prolonged drought, which has reduced their financial and emotional resources to cope with change.
Amenity	Construction and operation	Potential impacts on amenity during construction may include construction noise, vibration impacts, dust and/or construction traffic and roadworks on local roads. Potential impacts during operation may include railway noise and changes to scenic character.
	Construction	<p>Impacts resulting from track construction will be temporary as works move along the corridor. The number of sensitive receptors potentially affected by construction noise at any one time will vary depending on the location of activities and progress of works along the alignment. For example, using the lower limit of 50 decibels (dB(A)) for standard hours, earthworks is the activity that will affect the highest number of receptors and could cause noise affecting up to 507 sensitive receptors, while rail civil works could affect up to 394 sensitive receptors, at different times. For works undertaken during non-standard hours, a Project noise criterion of 45 dB(A) would apply, which without mitigation, would see up to 871 sensitive receptors affected by noise from earthworks and 723 sensitive receptors affected by noise from rail civil works. Chapter 15: Noise and Vibration provides a detailed assessment of noise and vibration impacts.</p> <p>Particulate matter deposited as dust has the potential for nuisance impacts if not correctly managed, as detailed in Chapter 12: Air Quality.</p>
	Construction	While impacts resulting from track construction will be temporary, impacts from laydown areas and bridge construction sites have the potential to impact on amenity for extended periods, through increased traffic, noise, increased dust or temporary impacts on scenic character.

Impact area	Delivery phase	Potential impacts
Amenity (continued)	Construction (continued)	<p>Approximately 29 laydown areas will be required. Residents living on roads that laydown areas will be accessed from will experience increased heavy and commuter traffic between the laydown sites and the rail corridor. A number of these roads are in rural locations and the existing base traffic volumes are low. Mitigation measures will be applied to reduce the predicted impacts to sensitive receptors within proximity to the construction routes.</p> <p>The Project requires 27 new bridge structures and construction will involve earthworks, piling, formwork, cement pouring and track construction, which may result in noise impacts for nearby dwellings or businesses. Vibratory rollers and plant such as piling rigs and hydraulic hammers for bridge construction may also result in perceptible vibration impacts at some sensitive receptors. Assessment of potential vibration impacts is detailed in Chapter 15: Noise and Vibration.</p>
	Operation	<p>For a total of 59 sensitive receptors, the predicted noise levels are predicted to be above ARTC's noise assessment criteria at the Project opening (2026) without mitigation. For the design year 2040, an additional six sensitive receptors were above the assessment criteria, resulting in a total of 65 sensitive receptors triggering an investigation of noise mitigation.</p> <p>Dwellings where the assessment criteria are predicted to be exceeded are distributed throughout the EIS investigation corridor and are generally within 400 m of the rail alignment. Without mitigation, rail noise will affect the amenity of homes that have been predicted to be affected by noise exceedances. Appendix Q: Operational Railway Noise and Vibration Technical Report assessed potential noise impacts against the existing baseline, which includes various noise sources, but did not identify cumulative noise impacts as the result of the RAAF Base Amberley, Motorsport Precinct or Jeebropilly Mine.</p> <p>Based on the predicted noise levels and the remoteness of the sensitive receptors, feasible and reasonable measures to suitably reduce railway noise impacts are expected to be limited to property controls such as architectural property treatments and upgrades to property fencing.</p> <p>The operation of the Ipswich–Boonah Road section proposed to be upgraded is predicted to result in exceedance of the <i>DTMR Code of Practice Vol 1</i> criteria at one sensitive receptor.</p> <p>As discussed in Chapter 12: Air Quality, the air quality assessment for the operational phase predicts that cumulative background plus Project air quality pollutants will be below Project goals at sensitive receptors. Investigations into the deposition of emissions at sensitive receptor locations showed that predicted pollutant water concentrations would also be significantly lower than <i>Australian Drinking Water Guidelines</i>.</p> <p>The assessment concludes that with implementation of the proposed mitigation measures described in Appendix L: Air Quality Technical Report, the residual impacts will be 'not significant' in regard to dust soiling and human health impacts.</p>
Connectivity	Construction	<p>During construction, private access to individual properties may be temporarily disrupted where land is required temporarily for construction purposes, including road re-alignments. Access to all homes would be maintained but may be disrupted for short periods while road works interact with driveways and access roads.</p>
	Construction	<p>Where the Project crosses main roads and highways, grade separations (an overpass or underpass) have been proposed to ensure the Project will not result in a permanent disruption to traffic. Construction of bridges and level crossings on public roads will require detours and cause temporary traffic delays during the construction period.</p>

Impact area	Delivery phase	Potential impacts
Connectivity (continued)	Operation	<p>Active level crossings would be provided on:</p> <ul style="list-style-type: none"> ▶ Hayes Road, Glencairn Road and Middle Road in the Ipswich LGA ▶ Dwyers Road, Washpool Road and Wild Pig Creek road (two crossings) in the Scenic Rim LGA. <p>A passive level crossing will be provided at M Hines Road in the Ipswich LGA. During operations, level crossings will result in periodic disruptions to traffic, with delays of approximately two minutes anticipated. When Inland Rail starts operation, it is anticipated that the Project will be used by an average of 33 train services per day, increasing up to 47 train services per day in 2040.</p>
	Construction and operation	<p>Where it has been determined that a road–rail interface point is unable to provide for a grade separation, active level crossing or passive level crossing, an alternative access route has been proposed. The methodology to determine viable alternative access routes is dependent on the type of interface being consolidated, including existing formed public roads, private access tracks and farm tracks. The Project will require closure of some unformed private roads that interface with the disturbance footprint, which is likely to impact on connectivity across and between rural properties.</p>
	Construction	<p>Appendix U: Traffic Impact Assessment Technical Report provides a detailed profile of transport links in the Project region. This assessment notes that from a high-level review of public transport data, no existing public transport routes and no cycle paths under the Queensland Principal Cycle Network Plans (PCNP) will be affected by proposed road–rail interfaces. However, cycle routes including sections of Ripley Road and Edward Street in Flinders View may coincide with construction traffic routes. Appendix U: Traffic Impact Assessment Technical Report notes that the presence of pedestrian and cycle routes should be considered in the preparation of final construction routes during the design and construction phases of the Project, in agreement with the relevant local council.</p> <p>School bus services were not expected to be substantially impacted from an operational and service reliability perspective as a result of Project-generated traffic during construction; however, Chapter 23: Draft Outline Environmental Management Plan notes the need to consider limiting construction traffic on school bus routes during pick-up and set-down times on school days, and alternatively, appropriate school bus infrastructure could be installed.</p>
	Construction	<p>The Project’s construction will produce spoil from cuts and the tunnel. As part of the detailed design and construction phases, there will be opportunities to optimise the use and placement of spoil material between adjacent Inland Rail projects; however, excess spoil that cannot be re-used in this Project or adjoining projects will be transported to other sites using the local road network, with the intention to maximise use of the State-controlled road network.</p> <p>The transport of spoil may increase traffic volumes on key routes with potential to affect levels of service or traffic safety. At this stage it is not possible for an accurate assessment of traffic and transport impacts as the result of spoil transport. This would be undertaken during the detailed design phase, and will consider the potential for impacts on other road users. Further discussion of spoil management is provided in Appendix V: Spoil Management Strategy and Appendix U: Traffic Impact Assessment Technical Report.</p>
Community cohesion	Construction and operation	<p>Property acquisitions are likely to lead to the relocation of up to approximately 60 households from the EIS investigation corridor, and potentially from local communities if they are unable to find a suitable property or chose to move to another area, which may affect the cohesion of neighbourhood and community networks. There is also potential for conflict about the Project to harm community cohesion.</p>
	Construction and operation	<p>Severance between properties and changes to road networks as a result of the Project may cause at least short-term damage to community cohesion in rural localities where properties would be acquired.</p>

Impact area	Delivery phase	Potential impacts
Local character and sense of place	Construction	<p>Consultation with Yuggera Ugarapul People identified their concerns about the disturbance to the landscape and potential for wildlife to be affected, which would cause stress and may affect their sense of place.</p> <p>Assessment of the potential for impacts on visual amenity and landscapes is detailed in Appendix I: Landscape and Visual Impact Assessment Technical Report, which found that the Project is not considered likely to result in any significant visual impacts during construction. However, one significant impact on landscape character was identified relating to extensive cut and fill and tunnelling within the forested landscapes south of Flinders Peak.</p> <p>Notwithstanding, the removal of dwellings and vegetation from within the corridor and the presence of laydown areas, increased traffic, lighting near construction sites and construction noise are likely to affect enjoyment of and connection to local environments.</p>
	Operations	<p>During operations, significant visual impacts are anticipated on views from the Cunningham Highway looking south-east to Flinders Peak, and from Ipswich-Boonah Road looking northeast as the result of elevated bridge structures.</p>
	Construction and operation	<p>Noise impacts may also affect sense of place, which is strongly related to the peaceful rural and natural environments.</p>
Flooding	Construction and operation	<p>The potential for the Project to change flood behaviour has been assessed in Chapter 13: Surface Water and Hydrology. The assessment indicates localised changes in peak water levels and potential for isolated increases in the time of submergence (the period in which flood waters would affect land) will not affect areas where there are habitable dwellings or roadways.</p>
Property values	Construction and operation	<p>Some landholders are concerned that property values will be affected by amenity impacts, diminishment of carrying capacity or productivity, or disruption to water supplies. Compensation for directly affected landholders may include compensation for the loss of legal interest in land, costs related to purchase of replacement comparable land and removal and relocation of assets and infrastructure. Where only part of a land parcel is acquired, compensation for the severance of the resumed land and the impact upon the remaining land may also apply.</p> <p>Landholders near the disturbance footprint are concerned that property values could be affected by e.g. noise impacts, changes to views or perceived or actual increases in flooding risk when the Project is operational.</p> <p>Research on the relationship between property values and infrastructure indicates that property prices are determined by a combination of the properties' actual utility (i.e. use and amenity) and buyers' perceptions about the environmental impacts of infrastructure [Elliott, 2008], with responses to perceptions of risk varying. Research on the effects of freight rail lines on property values in Australia was not identified.</p> <p>Assessment of the likelihood and magnitude of change to property values is not possible given the individual circumstances of particular properties, other market drivers, the variability of Project impacts, and payment of compensation according to individual agreements with landholders.</p>

16.9.2 Workforce impacts and benefits

Commencing in 2021, the Project's workforce is expected to build to 175 full-time equivalent (FTE) by week 26, and to approximately 520 FTE by week 52. At around week 70, the workforce will peak at approximately 620 FTE, with an average of 271 FTE across the full construction period. The size and composition of the construction workforce will vary depending on the construction activities being undertaken and the staging strategy adopted. The core construction workforce will consist of professional staff, supervisors, trades workers and plant operators, with earthworks crews, bridge structure teams, capping and track works crews working at different periods through the construction phase. The Project will engage businesses within the Project region in its supply chain that will support indirect employment.

There were approximately 2,594 construction businesses in the Project region in 2016–2017, ranging across the domestic, commercial and civil construction sectors, supporting the availability of suitably skilled and experienced personnel for Project construction. As described in Section 16.7.3, in 2016 the Project region's labour force included 8,871 people working in the construction industry and at March 2020, there were 10,430 people living in the Project region who were unemployed. These two factors indicate the likely availability of construction personnel within the Project region. There is also the likelihood of attracting workers who are under-employed, including people that are working part time when they need or would prefer to work full time, and contracting and casual workers who would prefer permanent work arrangements.

As the construction workforce is expected to be drawn primarily from communities within the Project region and nearby LGAs, employment benefits would extend to construction industry workers across the broader region. However, there may be shortages in specific trades (such as specialist welders), which could be exacerbated by Project construction. The availability of long periods of employment in Project construction is likely to be a strong positive opportunity for those personnel and their families.

ARTC is establishing the Inland Rail Skills Academy to facilitate local training, employment and procurement opportunities. The Inland Rail Skills Academy will cooperate with stakeholders to develop and implement training and development partnerships, which will equip local jobseekers for jobs in Project construction, including:

- ▶ Consultation with ICC and SRRC, to align Project initiatives with Regional Skills Initiatives Strategy projects
- ▶ A Memorandum of Understanding with Construction Skills Queensland SQ to work with Registered Training Organisations to delivery construction skills training for Project region residents and Indigenous people
- ▶ Working with Indigenous communities, industry and government agencies to support the design and delivery of training and development programs to improve local capacity where this is needed
- ▶ Working closely with the Indigenous community to strengthen community members' capacity for employment, encourage applications and increase the number of Indigenous people applying for Project-related jobs
- ▶ Cooperation with DESBT, Department of Education, local high schools and training providers, to develop training pathways for employment in Project construction and operation
- ▶ Cooperation with DITRDC to develop program-wide training and development programs to equip Project region residents for construction and operational employment.

Training opportunities provided as part of the Inland Rail Skills Academy will strengthen workforce capacity for both Project construction and Project operation. The contractor will use the Inland Rail Skills Academy's programs to support meeting its training and skills development commitments.

Potential impacts and benefits relating to Project employment are summarised in Table 16.16.

TABLE 16.16: POTENTIAL IMPACTS AND BENEFITS TO WORKFORCE

Impact area	Delivery phase	Potential impacts
Employment opportunities	Construction	Employment opportunities would extend to up to 620 workers across the Project region and nearby LGAs, and would be available to both experienced construction industry workers and people who are currently unemployed. ARTC’s intention to advertise opportunities locally and engage with construction companies in the Project region will ensure that the maximum local benefit is derived from Project employment.
Training and development	Construction	The Project’s construction phase represents an important source of potential training and career pathway development for young people in the Project region. ARTC’s Inland Rail Skills Academy will help to ensure that young people and Indigenous people in the Project region have the opportunity for skills training, which will equip them for the construction industry and will be transferrable to future major projects. It will also result in the legacy of an increase in the skilled labour force in the Project region.
Workforce management	Construction	Construction personnel will be working in close proximity to homes and businesses, on 12-hour daily shifts. Worker activity may contribute to noise impacts where work is proceeding close to homes and may also cause concerns regarding safety or privacy.
Operations employment	Operations	Once operational, a workforce of approximately 20 personnel is expected for the Project’s operation. This is likely to include a mix of local personnel, mobile crews moving between sections of Inland Rail (e.g. for major track and ballast maintenance) some of whom may be from the Project region, and personnel based in operations centres.
Impacts on employment in other industries	Construction and operations	The Project is likely to acquire or sever grazing and cropping properties, which may impact on the availability of agricultural employment. Impacts on the amenity of tourism attractions may impact their visitation and trading levels, with potential for impacts on their capacity to offer employment.

16.9.3 Housing and accommodation

ARTC aims to maximise opportunities for workers in the Project region to access Project employment, and will also have access to a large workforce with relevant skills and experience within the Greater Brisbane region. The Project expects that construction personnel will largely be drawn from communities in the Project region and nearby LGAs and will return home at night. On this basis, a significant demand for rental accommodation for Project construction personnel is not anticipated, and a workforce accommodation facility is not proposed.

A total of approximately 510 rental dwellings were identified within potentially impacted communities and the nearby centres of Ipswich, Boonah and Beaudesert in December 2019. The small number of Project personnel who may choose to rent homes in the Project region during the construction phase is not expected to impact on housing availability. For example, if 20 personnel moved to the Project region and required housing, and required one dwelling each (as opposed to sharing housing with other workers), this would equate to a demand for 3.9 per cent of the rental housing currently available in these areas, while the requirement for 50 dwellings would require approximately 9.8 per cent of the rental dwellings. In the context of increasing supply in the Ripley Valley and Flagstone areas, this is unlikely to cause an increase in

rental costs or displace low income households. ARTC will require the contractor to provide an Accommodation Management Plan (AMP) as detailed in Appendix R: Social Impact Assessment Technical Report (Section 8.4)

However, significant cumulative demands on housing stocks as the result of multiple Projects being constructed at the same time, or as the result of cumulative labour draws requiring unanticipated numbers of non-local workers, could impact on the availability of affordable housing. This is further discussed in Appendix R: Social Impact Assessment Technical Report in Section 7.6.

There is a possibility that some specialist construction workers will be recruited from further afield and stay locally while they are on roster. Should a demand for short-term accommodation occur, it would most likely be experienced in Ipswich, Boonah or Beaudesert, but may also be met in the adjacent Brisbane or Logan LGAs. The number of personnel requiring short-term accommodation is expected to be small, and within the capacity of existing short-term accommodation facilities in the Logan, Brisbane, Scenic Rim and Ipswich LGAs. The Project’s AMP will include strategies to reduce any competition with tourists, while enabling local accommodation providers to benefit from any Project requirements for short-term accommodation.

The Palm Meadows Home Village, Willowbank Caravan Park and Amberley Caravan Park are located more than 3 km north of the Project, with no potential for direct impacts or noise impacts. These facilities accommodate people with low incomes, for whom affordable housing and access to support networks within the facility are crucial. Any Project demand for accommodation within caravan parks is likely to displace low-income households. ARTC will advise the contractor that use of caravan park accommodation within the Project region should not be considered as part of its AMP.

Up to approximately 60 households may need to relocate from within the disturbance footprint to other purchased housing or rental housing. There may be some temporary increases in housing demand as people relocate; however, this is likely to be dispersed across the Project region and is unlikely to cause a discernible increase in housing costs or a decrease in housing availability.

With an estimated requirement for approximately 20 personnel during operations, some of whom may be drawn from surrounding communities, no significant population change or housing demand is expected as a result of the Project's operational workforce.

Potential impacts relating to housing and accommodation are summarised in Table 16.17.

TABLE 16.17: POTENTIAL IMPACTS TO HOUSING AND ACCOMMODATION

Impact area	Delivery phase	Potential impacts
Settlement pattern	Construction and operation	The Project would intersect large-lot rural residential areas and rural lots, the majority of which were identified as part of the SFRC gazetted by the QLD Government under the <i>Transport Infrastructure Act 1994</i> in 2010. This has affected the settlement pattern in the SIA study area by acquiring (or advising of the intention to acquire) properties, and displacing residential uses in favour of rail transport uses. There are no direct interfaces between the disturbance footprint and towns or urban centres that would affect their settlement pattern.
Housing access	Construction and operation	<p>Up to 60 households, equating to approximately 168 people, may need to relocate from the EIS investigation corridor resulting in population loss at the local (neighbourhood) level. There may be some temporary impacts on housing demand as people relocate from within in the Project area; however, these impacts are likely to be dispersed across the Project region and are unlikely to cause a discernible increase in housing costs.</p> <p>Residents who need to relocate from within the disturbance footprint include 31 households who are renting DTMR properties. ARTC will provide information to DTMR and DHPW to enable their response to tenants' needs.</p> <p>In the event that 20 rental dwellings are required by Project personnel, this demand equates to just 3.9 per cent of the rental housing available in nearby communities and centres at December 2019, while a requirement for 50 dwellings equates to less than 10 per cent of the housing available. Cumulative impacts on housing and accommodation are possible.</p>
Short-term accommodation	Construction	<p>If the Project results in a demand for short-term accommodation, it would most likely be experienced within the Ipswich and Scenic Rim LGAs, but may also be met in the adjacent Brisbane or Logan LGAs. The Project's AMP will include strategies to reduce any competition with tourists, while enabling local accommodation providers to benefit from any Project requirements for short term accommodation.</p> <p>There is potential for construction noise to temporarily affect the amenity of accommodation provided at Ivory's Rock Conventions and Events Centre and Flinders Peak Winery (refer Chapter 15: Noise and Vibration).</p>

16.9.4 Health and wellbeing

A community's health and wellbeing are shaped by the complex interplay of personal, social, economic, and environmental influences.

The Project's EIS period has involved stress and anxiety for some stakeholders, due to concerns about property acquisitions, amenity impacts or environmental change. This is likely to be ongoing for some community members and may impact on their mental health. ARTC has initiated mental health partnerships with the Darling Downs and West Moreton Primary Health Network (PHN) and the Brisbane South PHN to support these residents and others who may experience stress and anxiety in relation to the Project and will regularly review the resources available and the adequacy of services in relation to Project-related demands on mental health services.

There is potential for an increased need for community support services for residents adjusting to stresses resulting from the Project. The Project's investments in local communities will focus on programs and services designed to strengthen local social networks and cohesion and ensure the potential benefits from the Project (such as access to jobs and training) are available to residents in potentially impacted communities. This would help local communities to adapt to Project-related changes and build their resilience to change.

The Project may increase demands for police and emergency services during construction as the result of increased traffic increasing the risk of road accidents and for police, the need for traffic control assistance and oversize vehicle escorts. Construction activities including roadworks also have potential to delay emergency response vehicles. Firefighting access around the disturbance footprint will also require ongoing consultation with the QFES and Rural Fire Brigades in potentially impacted communities.

Construction traffic may use roads that are school bus routes, or where schools in Rosewood are located, requiring cooperation with stakeholders to address any potential risks to traffic or pedestrian safety. Crossing construction, roadworks and bridge construction may affect ease of travel and travel times e.g. for Cunningham Highway as a major commuter and long-distance route, and Ipswich–Boonah Road as a major connector across the Project region.

The Project will introduce noise, vibration and dust sources during construction, which could impact on the amenity of homes or outdoor areas. The EIS includes assessment of potential environmental impacts and provides mitigation measures to avoid impacts on health. Notwithstanding, environmental impacts may detract from quality of life, e.g. comfortable use of outdoor areas, while construction activities are occurring near homes.

Employment opportunities in the Project region during the construction stage will have positive mental health benefits for the individuals employed, particularly if they are exiting a period of unemployment or commencing their career. This would be particularly important in communities with high levels of unemployment such as Rosewood, Ebenezer and Willowbank, and for particular population groups where unemployment rates are high (such as Indigenous people and young people).

Noise resulting from freight rail operations has the potential to disrupt sleep at private properties generally located within 300 m of the alignment. Engagement will occur with landholders where the property's noise levels trigger investigation of mitigation measures to agree property-specific mitigation measures to reduce noise levels.

Community concerns about dust emanating from the rail corridor during operation indicate the need to provide information to the community about how dust from the Project's construction and operation will be minimised. The potential for dust to affect homes or water tanks, and management measures to reduce dust are considered in Appendix L: Air Quality Technical Report. No impacts on the quality of water in rainwater tanks was predicted.

Safety risks associated with the Project's operation include derailments, level crossing accidents with road-based vehicles, accidents associated with pedestrian and cyclist crossings, and railway-based suicide. Chapter 19: Traffic, Transport and Access and Chapter 23: Draft Outline Environmental Management Plan includes strategies and actions addressing traffic management and application of safety design standards to mitigate safety risks. ARTC will apply best practice design and management measures to mitigate community safety impacts and will develop tailored rail safety awareness programs for nearby communities. During operations, the Project's infrastructure and rail operations may result in demands on emergency service and potential changes to emergency response times. Planning for ongoing cooperation with emergency services during the Project's operations will be initiated during the construction phase.

At the national level, the *Inland Rail Business Case* (ARTC, 2015a) anticipates that the Inland Rail Program as a whole will remove 200,000 truck movements from roads each year, resulting in improved road safety, a reduction in serious accidents and reduced truck volumes in regional towns.

ARTC has established the Inland Rail Community Sponsorships and Donations Program. The purpose of the program is to support non-profit organisations, community groups, Traditional Owner groups and local government entities with projects, events, and activities that will help achieve community and regional prosperity and sustainability. Examples of funded projects may include community resilience-building days, establishing a mentoring program for young entrepreneurs in the area, and community development projects.

Potential impacts to health and wellbeing are outlined in Table 16.18.

TABLE 16.18: POTENTIAL IMPACTS TO HEALTH AND WELLBEING

Impact area	Delivery phase	Potential impacts
Social infrastructure access	Construction	Temporary disruptions to school access routes and school bus scheduling are anticipated during construction and Project-related roadworks. An increase in traffic volumes as the result of Project construction traffic or delays at level crossing or bridge construction sites could result in increased travel times for school bus services. Construction traffic may also use routes that pass the Rosewood State School and Rosewood State High School, which will be managed as part of the Project's Traffic Management Plan (TMP).
	Construction	The main urban centres providing education, health, civic and recreational facilities to residents in the SIA study area are Ipswich, Rosewood and Boonah. Other smaller centres providing State schools and/or community halls to the west of the Project include Peak Crossing, Mutdapilly and Roadvale. Residents may experience disruption in accessing services at these centres during both the construction and operational phases of the Project. There were no non-residential sensitive receptors, such as schools, hospitals or places of worship identified within the noise and vibration study area.
	Construction and operations	Local roads that would be closed during the construction period (and remain closed during operations) include Brass Road and Lubes Road in Rosewood and Lincoln Lane and Castle Hill Lane in Peak Crossing. This will cause small increases in travel times for residents travelling to services, facilities and schools in Rosewood, Peak Crossing, Boonah and Ipswich.
	Construction	There is potential for an increased need for support services for residents adjusting to stresses resulting from the Project.
	Operation	Project operation is not expected to generate direct negative impacts on community facility or school sites. However, short traffic delays would be experienced at level crossings as trains are passing.
Health and emergency services	Construction	The workforce of up to 620 personnel may generate an increase in demand for health and ambulance services. It is likely that, for the most part, this would involve minor injuries and illness attended to by local GPs and health services, and that most of workers' healthcare needs would be taken care of by their local doctors or health service providers. Demands on regional hospitals are expected to be within their existing capacity.
	Construction	Consultation with QPS indicates that the Project's construction will result in substantial increased demand for policing services including traffic policing and site safety in regard to major construction sites such as bridges. Traffic control assistance is likely to be associated with construction sites, laydown areas, heavy haulage vehicles and escorting oversize vehicles or loads, placing increased demands on QPS service loads, traffic policing in regard to the commuting workforce, and the potential for community protests in regard to the Project.
	Construction	Accessibility for emergency services may be impeded during construction at level crossing or bridge construction sites and when encountering heavy haulage and large load vehicles on roads.
	Operation	An increased risk of road-rail accidents may create additional demand on health and emergency services (including QPS, QAS and QFES). Responses to any derailments, level-crossing accidents, load loss, hazardous goods spill or other major incident would place a significant demand on police and emergency resources.
	Operation	Accessibility and response times for emergency services may be impeded when the railway is operational due to route alterations and the likelihood of encountering passing trains at level crossings. ARTC will work with police and emergency services to mitigate this impact.
Health and environmental qualities	Construction	Assessment of the potential for dust and/or diesel emissions to affect air quality is detailed in Appendix L: Air Quality Technical Report. The Project goals for air quality are based on protecting health and wellbeing, health and biodiversity of ecosystems. As noted in Appendix L: Air Quality Technical Report, dust has the potential for nuisance impacts if not correctly managed; however, no potential health impacts were predicted. An Air Quality and Dust Management Sub-plan will be developed as part of the Construction Environmental Management Plan (CEMP), which complies with the conditions of approved, relevant regulatory requirements and industry guidelines.

Impact area	Delivery phase	Potential impacts
Health and environmental qualities (continued)	Construction (continued)	Assessment of the potential for construction noise or vibration levels that would disturb human comfort for residents near the EIS investigation corridor (Appendix P: Non-operational Noise and Vibration Technical Report) indicates that there is potential for construction noise to affect areas near the Project. Construction noise or vibration may affect enjoyment of daytime activities, or cause sleep disturbance.
	Construction	<p>Construction traffic noise is predicted to exceed the criteria for sections of roads including Middle Road, Allan Creek Road, Bromelton House Road, Brookland Road, Undullah Road and Washpool Road.</p> <p>A number of these roads are in rural locations and the existing base traffic volumes are low. As such the initial airborne road traffic noise levels are low before the addition of construction traffic. Mitigation measures would be applied were it is deemed feasible and reasonable to reduce the predicted impacts to sensitive receptors within proximity to the construction routes.</p> <p>Works that will create vibrations (e.g. piling and vibratory rolling) will be undertaken as part of construction. Minimum working distances have been recommended as part of the (Appendix P: Non-operational Noise and Vibration Technical Report) to avoid or minimise impacts on human comfort.</p>
	Operation	<p>Assessment of the potential for noise and vibration impacts during operation of the Project is presented in Appendix Q: Operational Railway Noise and Vibration Technical Report.</p> <p>The railway noise levels are below the assessment criteria, and do not trigger investigation of noise mitigation, where sensitive receptors are generally located 400 m or more from the rail alignment. The predicted railway noise levels achieve the assessment criteria at the majority of the sensitive receptors.</p> <p>At Project opening in the year 2026, there are 59 sensitive receptors where the predicted railway noise levels have triggered the investigation of feasible and reasonable noise mitigation measures. The majority of train movements are expected at the Project opening; however, the growth in forecast rail traffic has identified an additional six sensitive receptors triggered the noise mitigation review for the design year of 2040 (total 65 receptors triggering a review of mitigation). The investigation of noise mitigation was primarily triggered by the night-time operations because the number of trains per hour is greater during the night-time. The noise criteria are also 5 dBA more stringent for the night-time period than the daytime.</p> <p>Sensitive receptors located within 50 m of the alignment, or 160 m of the tunnel, may experience ground-borne vibration from railway operations.</p>
	Operation	<p>Forecast worst case air quality impacts are predicted to be below the Project goals at the nearest sensitive receptors.</p> <p>There will be proactive community consultation where undertaking operational works (such as major maintenance works) with potential for adverse air quality impacts.</p> <p>Investigation into the deposition of dust emissions at sensitive receptor locations showed that predicted pollutant water concentrations would be significantly lower than <i>Australian Drinking Water Guidelines</i>.</p>
Mental health	Construction	The Project will require property resumptions, commencing prior to the construction period. Uncertainty about the property resumption process and future living arrangement is a considerable source of stress and anxiety for some people whose homes would be acquired. Residents living adjacent to the disturbance footprint are also experiencing stress about the potential for construction or operational noise to affect the amenity or value of their properties. Other potential sources of frustration and anxiety within the community may include travel delays, or concern about particulate emissions.
	Construction	There is potential for noise and vibration disturbances to cause stress and anxiety for residents near construction sites, particularly if those sites require extended periods of activity.
	Operation	Long wait times at level crossings, particularly if under time pressure, with research indicating that traffic delays may increase blood pressure and heart rate and may have consequences for the long-term health of individuals (Morant, 2015).

Impact area	Delivery phase	Potential impacts
Access to natural resources and active recreation	Construction and operation	The main pedestrian and cyclist networks in the EIS investigation corridor are within towns and would not be directly impacted by the Project.
	Construction and operation	The proposed alignment for the Boonah to Ipswich Trail would intersect the Project in the Wild Pig Creek Road corridor, between Ch 43.0 km and Ch 45.2 km. If the trail was to be constructed in the future, this may require reconsideration of the location of the trail in this area.
	Construction and operation	<p>Many local landholders are reliant on tank water, groundwater (via bores) or allocations from surface water systems, and were concerned that the Project would affect their access to water or the quality of their water. Project construction is likely to damage or affect the accessibility of groundwater bores within the EIS investigation corridor. The project will work with affected landholders to mitigate any loss of access to water from groundwater bores. Landholders were concerned that interference with surface flows including creek systems would affect their access to water for farming purposes, or that bores could be affected by the Project's construction. In times of drought, concern about use of water is particularly high.</p> <p>During the construction phase, the mitigation measures relevant to surface water quality are expected to be sufficient to mitigate most potential conceivable impacts; however, further mitigation may be required to ensure temporary erosion and control for construction are operating to an appropriate degree.</p> <p>Water will be required during construction for earthworks, conditioning of material, haul road and laydown maintenance, concrete batching and dust suppression. Water is likely to be sourced from Seqwater bulk water supply points such as the Churchbank Weir (Warrill Creek) and Wyaralong Dam; however, water sources will be further confirmed during detailed design of the Project. Where private water sources are used for construction purposes, monitoring will be undertaken during extraction to ensure volumes and conditions stipulated by licence requirements and/or private landholder agreements are met.</p> <p>For the operational phase, the proposed mitigation measures were assessed to be sufficient for the purposes of mitigating impacts that could cause impacts to the receiving surface water environment.</p>
Operation	With the Project positioned to the south-west of the Purga Nature Reserve, the peacefulness and natural setting offered in the Purga Nature Reserve may be disturbed by the noise of trains while they are passing near the Reserve.	
Safety	Construction	The location of work sites and laydown areas near private homes might cause anxiety about personal and property safety for some residents living adjacent to the Project. ARTC will require the contractor to provide and implement a Workforce Code of Conduct. The Project's Draft Outline Environmental Management Plan (Draft Outline EMP) (refer Chapter 23: Draft Outline Environmental Management Plan) also includes strategies to mitigate noise resulting from construction activities.
Traffic safety	Construction	<p>Impacts on traffic during construction may include:</p> <ul style="list-style-type: none"> ▶ Deterioration of road surfaces due to truck weights (which is addressed as part of ARTC agreements with the relevant road authorities) ▶ Safety issues associated with fatigued or inattentive commuters ▶ Disruption of school bus and other public transportation.
	Operation	<p>Potential impacts on traffic safety during operations include:</p> <ul style="list-style-type: none"> ▶ Disruption to familiar travel routes due to road re-alignments and delays at level crossings ▶ An increased risk of road accidents (discussed in Chapter 19: Traffic, Transport and Access, which notes that increases in traffic associated with the Project is likely to increase vehicle exposure at rail crossings) ▶ Heightened risk exposure for young males, young drivers, school children, older pedestrians and people with disabilities in crossing the rail corridor.

16.9.5 Business and industry

The Project's alignment avoid directs impacts on local business centres. Businesses that are near the footprint where amenity could be affected or road access disrupted during construction include grazing and cropping, poultry farms, horse spelling and dog training facilities, the Ivory's Rock Conventions and Events Centre and Flinders Peak Winery. The Project will continue to consult with businesses and work with landholders to reduce the potential for impacts on the amenity and productivity of businesses during construction (via the CEMP), and via operational management standards and through community engagement during the operations phase.

The Project will require acquisition of agricultural land, which may affect the operation of grazing properties or cropping operations. The disturbance footprint traverses 168 land parcels where the predominate land use is grazing on native vegetation, the majority of which are freehold tenure. No properties where the predominate land use is cropping are directly affected, but some of the grazing properties also yield crops.

The agricultural properties where land would be acquired for the permanent disturbance footprint will range in size from 1 ha to 1,062 ha. Based on the current design, the approximate impacts to properties are (refer Appendix G: Impacted Properties):

- ▶ For 63 lots up to 5 per cent of the lot will be impacted
- ▶ For 20 lots between 5 per cent and 10 per cent of the lot will be impacted
- ▶ For 45 lots between 10 per cent and 20 per cent of the lot will be impacted
- ▶ For 32 lots between 20 per cent and 50 per cent of the lot will be impacted
- ▶ For eight lots between 50 per cent and 100 per cent of the lot will be impacted.

Details of impacted properties are presented in Appendix G: Impacted Properties.

The combined effects of disruption to fences or water access and severance of productive land may change the use or viability of some agricultural properties. Under the AL Act, compensation for the acquisition of land is based on the market value of the land, and additional reasonable compensation costs that are a direct consequence of the resumption of the land are also considered. ARTC is working with directly affected landholders to develop and implement property-specific measures to mitigate impacts on properties that could affect farming/grazing businesses and the livelihoods and employment they support. The Project is also consulting with landholders whose land is located adjacent to the Project footprint, to identify and address any impacts on property access, the potential for noise impacts or changes to cross-corridor

connectivity. The Project represents an important source of trade for transport businesses during construction. Over time during operations, long-haul transport trips are expected to reduce in number, but the Project is likely to facilitate an expansion of opportunities for transport from logistics centres.

The Ipswich Motorsport Precinct is a major contributor to the Ipswich LGA's events calendar and could be impacted by noise or traffic disruptions during construction. During the detailed design phase, the Project will consult with ICC (and if advised by ICC, other stakeholders) to forecast the Precinct's event schedule during the construction phase, and identify feasible measures such as scheduling of noisy works or works that would disrupt access to the Precinct to avoid conflicting with major events. Use of Champion's Way and the Cunningham Highway will also be discussed with ICC and DTMR, to inform the Project's TMP.

Appendix P: Non-operational Noise and Vibration Technical Report identified the potential for construction noise to affect the Ivory's Rock Conventions and Events Centre and the Flinders Peak Winery. Some of the Ivory's Rock Conventions and Events Centre's accommodation cabins closest to the alignment and the recreational grounds would be exposed to noise levels of up to 50 dbA while construction activities are nearby. The Flinders Peak Winery, including its accommodation units, would be affected by noise from bridge construction and roadworks, with noise levels of up to 70 dbA at times. Property-specific mitigation measures may be required to ensure that amenity impacts do not result in a decline in use of the accommodation, which could lead to effects on the viability of affected businesses.

There is potential for road works, bridge construction and the visual impact of laydown areas during construction to affect tourists' experience and travel times. This will be temporary while construction activities are undertaken in particular areas, but some tourists may be deterred from visiting during these periods. During operation, there is potential for waiting times at level crossings to diminish the quality of tourists' experience; however, traffic delays due to rail crossings and road intersection are a common occurrence and are unlikely to be a significant deterrent for visitors.

Landholders and the Ipswich Koala Protection Society are concerned about what would happen to the koalas when construction starts and about the health and future of koalas in the region, with potential for impacts on tourism. Appendix J: Terrestrial and Aquatic Ecology Technical Report recommends biodiversity offsets and other management strategies to mitigate impacts on koala habitat, finding that the significance of residual impacts on koala habitat would be up to a moderate impact following implementation of these measures.

During the detailed design phase, the Project will consult with tourism-related businesses located within 5 km of the Project to ensure there is a full understanding of the Project works may affect businesses, and will develop a strategy, working with any affected tourism landholders, Scenic Rim Tourism Association, Ipswich Tourism Operators Network, ICC and SRRC, to mitigate impacts on tourism values. This may include support for promotional and marketing campaigns during the construction period.

Local and regional businesses will benefit from the construction phase. Opportunities to supply the Project may include supply of fuels, equipment, borrow and quarried material, and services including fencing, electrical installation, rehabilitation, landscaping, maintenance and trades services. Local transport or logistics businesses may also have significant opportunities to service the construction phase. To help prepare local businesses for Project opportunities, ARTC held a series of industry briefings in October 2019 to update business and industry on the procurement and delivery strategy. The briefing sessions provided feedback from the 2018 Market Sounding, which informed the Inland Rail delivery strategy, and provided information to businesses on the Expression of Interest process. During December 2019, ARTC held three information sessions with local communities including businesses (in Peak Crossing, Gatton and Toowoomba) to inform and consult on Inland Rail delivery, with a focus on the public-private partnership model, the progress of the planning and approvals process, and the Project's timeline.

The Project would traverse the Ebenezer 'Regional Industrial Area', which will be an industrial area of regional, state and national significance, connected to Brisbane, Sydney and Melbourne via Inland Rail (Department of Infrastructure and Planning, 2010). The Ebenezer RIA will offer a large range of diverse employment opportunities, including those directly facilitated by Inland Rail.

The Project would link the rest of the Inland Rail Program to the K2ARB project, which will facilitate development of the Bromelton SDA and be a significant benefit for businesses to be established there. There is potential for significant business growth and diversification to result, with consequent benefits for the employment of residents in the Ipswich and Scenic Rim LGAs, and adjoining LGAs.

ARTC is committed to providing full, fair and reasonable opportunities for capable local businesses to compete and participate in the Project's supply chain. ARTC is also committed to ensuring that Indigenous businesses, including those located in the Project region, are identified and supported to participate in the Project's supply chain.

The Inland Rail Program is subject to the *Australian Jobs Act 2013* (Cth) requirement to develop an Australian Industry Participation Plan (AIPP). The contractor will be required to identify how they intend to comply with the Inland Rail AIPP and *Australian Jobs Act 2013* requirements. Contractors will also be required to prepare and submit to ARTC an AIPP Compliance Report every three months in the format prescribed by the AIPP Authority.

ARTC is also establishing the Inland Rail Skills Academy that is a collection of projects and partnerships with the aim to:

- ▶ Facilitate local employment and procurement opportunities regionally by 'priming the market' in each region rail will be constructed
- ▶ Make it easy for Inland Rail contractors to employ and procure trained and competent people locally
- ▶ Build Inland Rail's social licence to operate for Inland Rail projects.

The Project's local supply arrangements will provide an opportunity to develop and grow businesses in the Project region. The expansion in construction activity would support additional flow-on demand and additional spending by the construction workforce, and therefore business trading levels in the region.

Potential impacts on businesses and industries during construction are outlined in Table 16.19.

TABLE 16.19: POTENTIAL IMPACTS TO BUSINESS AND INDUSTRY

Impact area	Delivery phase	Potential impacts
Disruption of local businesses	Construction	During the construction phase, the amenity or access of agricultural businesses near the disturbance footprint could be directly affected by the Project. ARTC will consult with businesses to explain the land resumption process and/or the result of EIS studies in noise and dust, as relevant, and work with landholders to reduce the potential for impacts on the amenity and productivity of businesses during construction.
Tourism	Construction and operation	<p>Impacts on travel times due to traffic detours and a change to the local scenic character are expected in areas near the Project during construction. Noise may affect some accommodation cabins and recreational grounds within the Ivory’s Rock Conventions and Events Centre and accommodation units at the Flinders Peak Winery, while construction activities are nearby. Property-specific mitigation measures may be required to ensure that amenity impacts do not result in a decline in use of the accommodation.</p> <p>There is potential for diminished scenic amenity due to the Project’s location within the rural landscape, particularly where the rail line would be elevated and where views to features such as Ivory’s Rock, Flinders Peak, valleys and bushland would be interrupted.</p>
Agriculture	Construction and operation	<p>There is potential for the Project to directly affect high-value farming elements (cattle yards, dams, severance affecting cattle grazing movements or dam access) and general agricultural uses.</p> <p>Impacts on agricultural properties could include interruption of access to dams or bores, demolition of stock holding pens, dissection of large agricultural properties that could reduce effective yield, machinery movements, drainage or irrigation design.</p> <p>No formally designated stock routes are located on the Project; however, informal stock movement routes will be severed.</p>
Local supply opportunities	Construction and Operation	The Project is likely to provide significant opportunities for local and regional businesses to participate in its supply chain e.g. pre-cast concrete may be sourced from Ipswich, ballast material will be sourced from local quarries, and other major components such as fencing may be sourced within the Project region. Project construction will also require a range of services that may be sourced from within the Project region
Facilitation of industrial development	Operation	<p>The Project will facilitate access to proposed logistics hubs in Ebenezer and Bromelton. As such, the Ebenezer RIA will offer a large range of diverse employment opportunities, including those directly facilitated by Inland Rail.</p> <p>The Project would link the rest of the Inland Rail Program to the K2ARB project, which will facilitate development of the Bromelton SDA and be a significant benefit for businesses to be established there. There is potential for significant business growth and diversification to result, with consequent benefits for the employment of residents in the Ipswich and Scenic Rim LGAs, and adjoining LGAs.</p>

16.10 Social Impact Management Plan

This section provides the framework for mitigation of social impacts and enhancement of Project benefits and aims to:

- ▶ Provide guidance for the mitigation of negative impacts on stakeholders and communities
- ▶ Incorporate stakeholder inputs on mitigation and enhancement strategies
- ▶ Support adaptive management of social impacts, by enabling communication between stakeholders and the Project during the detailed design, pre-construction and construction process, to identify any need for improvements to management measures
- ▶ Describe ARTC's initiatives and partnership opportunities that will maximise local employment and business opportunities and bring about long-term benefits for local communities.

The SIMP includes five action plans:

- ▶ Community and Stakeholder Engagement (refer Section 16.10.2)
- ▶ Workforce Management (refer Section 16.10.3)
- ▶ Housing and Accommodation (refer Section 16.10.4)
- ▶ Health and Community Wellbeing (refer Section 16.10.5)
- ▶ Local Business and Industry (refer Section 16.10.6).

Each action plan includes:

- ▶ An overview of the key impacts and opportunities identified in the SIA
- ▶ Objectives and desired outcomes
- ▶ Measures to mitigate social impacts and enhance Project opportunities
- ▶ The timing for delivery of mitigation measures, i.e. detailed design, pre-construction and construction phases.

At the completion of the construction phase, ARTC will develop a SIMP for the operational phase, incorporating ARTC's operational procedures for Inland Rail and including community and stakeholder engagement as detailed in Section 16.10.2.

A monitoring program is provided in 16.10.7.

16.10.1 Stakeholder inputs to mitigation measures

Stakeholders made a range of suggestions and recommendations about actions that ARTC could consider to mitigate adverse Project impacts or maximise Project benefits. Key themes in relation to impact mitigation related to:

- ▶ Route selection and alignment
- ▶ Compensation for directly affected landholders and nearby residents
- ▶ Management of impacts on residential amenity and property use, including noise, vibration and dust control measures
- ▶ Minimising impacts on the road network and traffic safety
- ▶ Transparent and respectful engagement that informs and involves stakeholders in further stages of the Project
- ▶ Communication with and support for residents affected by Project-related stress
- ▶ Cooperation with Councils and Queensland Government agencies including Queensland Health, QPS, QFES, and QAS to confirm the detail of mitigation measures.

Key themes in relation to suggested enhancements largely related to:

- ▶ Public infrastructure upgrades such as better road connections
- ▶ Investment in long-term community amenity and specific local investment ideas
- ▶ Business and industry engagement and various partnership opportunities
- ▶ Ensuring local people benefit from Project employment opportunities.

Stakeholder suggestions about mitigation and enhancement strategies are provided in Table 16.20, which references how suggestions and recommendations have been addressed.

TABLE 16.20: STAKEHOLDER INPUTS ON SOCIAL IMPACT MITIGATION AND ENHANCEMENT

Issue	Suggested mitigation measures	How addressed
Route selection	Find an alternative route to the rail corridor that has been gazetted (SFRC)	The Project has been designed to be constructed within the gazetted corridor. The EIS team is required to assess the Project alignment as provided, including the Project's interactions with the gazetted SFRC.
	Avoid or reduce impacts on agricultural properties	ARTC is working with landholders to ensure that a satisfactory level of access between adjoining properties is maintained, and to identify actions, which will minimise or offset changes to connectivity or changes to water flows that affect their properties.
Indigenous values	Involvement of Yuggera Ugarapul People in cultural awareness training for contractors	Cultural awareness training is planned for Project personnel in consultation with Yuggera Ugarapul People.
	Interest in establishing an Indigenous Rangers program to be involved in environmental management and rehabilitation works	ARTC will encourage Yuggera Ugarapul People to meet with the Queensland Indigenous Land and Sea Ranger Program staff (funded by the Department of Environment and Science) to explore potential for an Indigenous Rangers program to be established in the Project region.
	Facilitate access to EIS, provide invitations to community information sessions and provide assistance with submissions to the EIS	ARTC will ensure advice on access to the EIS is provided to Traditional Owner groups, invite them to community information sessions and facilitate assistance with development of a submission to the EIS if requested.
	Need for cultural heritage assessment of the locations of any new quarries proposed by ARTC	A CHMP has been developed and signed with the Yuggera Ugarapul People. In addition, Yuggera Ugarapul People will be invited to be involved in any further assessment of cultural heritage values relating to additional quarry sites proposed by ARTC.
	Ongoing consultation with Traditional Owner groups to maximise opportunities for involvement	ARTC's Indigenous Participation Advisor is working with Traditional Owner groups and local communities to support their consideration of Project opportunities.
Amenity	Provide the highest standard of noise and vibration mitigation and air quality management, including noise barriers Install and pay for all residential properties to have double glazed windows	Appendices P: Non-operational Noise and Vibration Technical Report and Appendix Q: Operational Railway Noise and Vibration Technical Report consider the potential for noise impacts and proposed mitigation measures designed to avoid or reduce noise and vibration impacts.
	Identify and communicate Project benefits	The Project will manage environmental impacts in accordance with its approval conditions to minimise impacts on amenity.
	Build a public swimming pool in the area	Measures to support mitigation of environmental impacts on amenity are provided in the SIMP at Section 16.10.2. Project benefits are addressed e.g. 16.9.2 and 16.9.5. The Project will engage with local governments and communities about social investments in local amenity.
Property acquisition and values	Compensation for any loss of property values	ARTC has engaged with landholders whose properties would be transected or bordered by the Project to identify mitigation measures addressing impacts on farm management, access and residential amenity. Land acquisition agreements will address the need for compensation for direct effects on properties.
	Enable rezoning or change of use of properties to take advantage of the rail connection	The Project will employ a suite of environmental management measures as outlined in Chapter 23: Draft Outline Environmental Management Plan to reduce noise impacts and inconveniences such as traffic delays and dust, to reduce impacts on amenity and therefore the potential for impacts on property values.
	Compensate land holders next to the line for noise and inconvenience	The Project is unable to compensate adjacent landholders for noise and inconvenience.
	Early acquisitions requested	ARTC will advise the Constructing Authority of landholders' wishes in relation to early acquisitions. Impacts on affected landholders are addressed in Section 16.10.2 and Section 16.10.6.

Issue	Suggested mitigation measures	How addressed
Connectivity	<p>Minimise road closures</p> <p>Advise public of potential road closures</p> <p>Improve and upgrade road networks</p> <p>Refine proposed Washpool Road interface with Project</p> <p>Extend Washpool Road to the Beaudesert area to create a short-cut for the local community</p> <p>Ensure roads are safe and maintained</p> <p>Reduce potential for traffic delays</p>	<p>Where possible, the Project's design has minimised road closures. Proposed road closures are identified in the EIS. Following Project approval, agreement from the relevant road authority (i.e. DTMR or local governments), and the appointment of the contractor, confirmation of which roads will be closed will be known and notification will be provided.</p> <p>ARTC is working with SRRC on an acceptable realignment solution for Washpool Road. Extension of Washpool Road to the Beaudesert area was not considered as part of the Project.</p> <p>TMP will include measures to mitigate impacts on traffic volumes, traffic safety and travel times.</p>
Public transport	<p>Include provision for passenger rail inclusion as part of the Project design</p>	<p>Provision for passenger rail is outside the Project's scope.</p>
Road safety	<p>Provide grade separations for all crossings (avoid level crossings) of public roads including Middle Road, which is of particular concern</p> <p>Review proposed solution for Paynes Road</p>	<p>Road safety is considered in detail in Appendix U: Traffic Impact Assessment Technical Report. ARTC is using Australian Level Crossing Assessment Model, a nationally recognised methodology for safe design level crossings. Government funding will be used to build Inland Rail, so while grade separation may be favoured, where safe level crossings can be achieved, the financial feasibility needs to be considered.</p> <p>Discussions with ICC regarding a potential grade separation of Middle Road are ongoing.</p> <p>Paynes Road realignment is being reviewed in light of community concerns.</p>
Housing and accommodation	<p>Accommodation plan required for construction workforce to manage potential cumulative impacts on local short-term accommodation</p> <p>Consider impacts on caravan parks and their residents</p> <p>Consider the potential for impacts on the availability of affordable housing</p>	<p>This is addressed in Section 16.10.4.</p> <p>The Project alignment is more than 3 km from the nearest caravan parks.</p> <p>Project personnel will be prohibited from using caravan park accommodation in the Project region.</p> <p>Mitigation of impacts on short-term accommodation, caravan park access and housing are addressed in 16.10.4.</p>
Communications infrastructure	<p>Fund enhancements to internet and mobile phone infrastructure</p>	<p>Enhancements to internet and mobile phone infrastructure have not been considered as part of the Project.</p>
Health and wellbeing	<p>Prevent dust entering water tanks/settling on rooves/solar panels</p> <p>Listen to people's concerns and then mitigate them</p> <p>Keep people informed of changes as they happen</p> <p>Treat directly affected people well as they are very stressed</p> <p>Representation of directly affected landholders on CCC (CRG)</p>	<p>The potential for dust to affect homes or water tanks, and management measures to reduce dust are considered in Appendix L: Air Quality Technical Report.</p> <p>ARTC is undertaking a comprehensive engagement program as part of the EIS process (refer Appendix C: Consultation Report).</p> <p>ARTC has initiated a mental health partnership to assist community members who are feeling stress or anxiety related to the Project.</p> <p>ARTC is in regular consultation with Traditional Owner groups. This will continue during the detailed design phase, with a particular focus on business and employment opportunities.</p> <p>The contractor will initiate a community reference group (CRG) that will be maintained throughout construction, with future need for the CRG to be agreed with CRG members and DSDMIP following the conclusion of construction.</p> <p>Mitigation of impacts on community wellbeing is addressed in Section 16.10.5.</p>
Emergency services	<p>Early and regular engagement with QFES, QPS, QAS and SES to develop cooperative management measures</p>	<p>Cooperation and engagement with emergency services with is addressed in Section 16.10.5.</p>

Issue	Suggested mitigation measures	How addressed
School bus routes	Cooperation with schools regarding school bus routes	School bus routes are addressed in Section 16.10.5.
Employment and training	<p>Ensure local people can benefit from Project employment and training opportunities</p> <p>Ensure local employment targets specify Project region not just greater Brisbane region</p>	<p>The construction contract will include specification of contractor's goals for employment of people from within the Project region.</p> <p>ARTC is working with a range of stakeholders to maximise the involvement of local residents in Project employment and has established the Inland Rail Skills Academy to support workforce training and development, and business capacity building.</p>
Indigenous training and employment	<p>Ensure Yuggera Ugarapul people and other local Indigenous people have access to training and employment opportunities</p> <p>Include a focus on skills training and employment young people and mature jobseekers</p> <p>Employ an Indigenous mentor for construction personnel</p> <p>Requirement for involvement of Yuggera Ugarapul People in Project construction needs to be specified as part of contracts</p> <p>Yuggera Ugarapul People interest in meeting with contractor once awarded</p>	<p>ARTC is working with Traditional Owner groups to support their readiness for employment (refer Section 16.10.3).</p> <p>The Project will continue to engage with Traditional Owner groups to provide access to information about business and skills requirements.</p> <p>Project personnel will include Indigenous mentors.</p> <p>ARTC will require the contractor to specify and meet Indigenous employment goals. This will include consultation with Traditional Owner groups.</p>
	<p>Yuggera Ugarapul People meeting with ICC and Inland Rail to identify potential for early skills development/work experience for Yuggera Ugarapul People</p> <p>Interest in opportunity to talk with Government agencies that will be involved in Inland Rail projects</p>	<p>ARTC will encourage Yuggera Ugarapul People to meet with ICC discuss potential skills development partnership.</p> <p>ARTC has coordinated a meeting between Yuggera Ugarapul People and DATSIP to discuss the Project and assistance available for business capacity and training programs.</p>
Local business development	<p>Provide workshops to the business community promoting the opportunities for business growth, employment and training both during construction and operation</p> <p>Ensure local and regional businesses benefit from the Project</p> <p>Align with Council's regional development initiatives, to build businesses' capacity to participate</p>	<p>ARTC is working with DESBT to identify local and regional businesses with potential capacity to supply the Project, and to develop capacity-building initiatives.</p> <p>ARTC's Sustainable Procurement Policy will ensure Project supply opportunities are available to local and regional businesses.</p> <p>Local businesses are encouraged to register on the Inland Rail website and through Tenderlink.</p> <p>Measures addressing local business opportunities and impacts on businesses are provided in Section 16.10.6.</p>
Tourism	<p>The need for construction planning to consider scenic values that support amenity and tourism</p>	<p>Appendix I: Landscape and Visual Amenity Impact Assessment Technical Report and Chapter 23: Draft Outline Environmental Management Plan provide detailed mitigation measures for impacts on visual amenity and landscape values.</p> <p>Potential impacts on tourism are addressed in Section 16.10.6.</p>
	<p>Place Project in tunnel/cut to pass Ivory's Rock Conventions and Events Centre and Peak Crossing Winery, and erect noise mitigation walls</p>	<p>The Project's construction methodology considered the potential for construction noise impacts and includes mitigation measures to reduce noise impacts.</p> <p>The necessity of strategies such as placing the Project in tunnel or cuts near these locations to avoid noise impacts was not established in Appendix P: Non-operational Noise and Vibration Technical Report.</p>
Indigenous business participation	<p>Encourage Indigenous businesses to participate in Project supply</p> <p>Early advice to Traditional Owner groups on businesses/skills that contractors require, and on tender release</p>	<p>ARTC's Indigenous Participation Plan outlines ARTC's commitment to supporting Indigenous businesses to participate in the Project.</p> <p>ARTC will enable a meeting between Traditional Owner group representatives and the contractor, once appointed.</p>

16.10.2 Community and stakeholder engagement

ARTC recognises that ongoing engagement with landholders, traditional owners, communities and other stakeholders that will be impacted by or stand to benefit from Inland Rail, is central to the Project's success. Consultation has been undertaken to inform the EIS and development of the Project's design. Stakeholder engagement will continue to inform detailed design and further development of mitigation measures as the Project progresses.

16.10.2.1 Community and Stakeholder Engagement Plan

A Community and Stakeholder Engagement Plan is provided as part of the SIMP (refer Appendix R: Social Impact Assessment Technical Report Section 8.2). The purpose of the Community and Stakeholder Engagement Plan is to guide and monitor engagement activities during the detailed design, pre-construction and construction phases, and support mitigation and adaptive management of impacts including:

- ▶ Disruptions to the use, amenity or access of private properties during construction by providing guidance for engagement with directly affected landowners and nearby residents
- ▶ Stress and the potential to exacerbate disadvantage by enabling continuity of engagement between the EIS and land acquisition process, access to support if required, and ongoing engagement with affected landowners
- ▶ Impacts on amenity, connectivity and cohesion by ensuring that community members and other stakeholders have access to information and communication channels that help them understand the nature, duration and effect of Project works, and how to resolve issues as they arise
- ▶ Concerns about property values, by sharing information about environmental impacts and management measures.

Section 16.10.5 provides additional details on stakeholder engagement to support mitigation of impacts on community wellbeing, including engagement that will identify community and collaborative initiatives to offset social impacts.

The key stakeholders addressed by the engagement plan include:

- ▶ Landholders in and near the disturbance footprint
- ▶ Residents, community organisations and businesses in potentially impacted communities including towns and rural localities

- ▶ Traditional Owners and other Indigenous community members
- ▶ ICC and SRRC
- ▶ PHNs and community service organisations (currently including Lifeline, Lives Lived Better, Artius and the Richmond Fellowship)
- ▶ Government agencies including Queensland Health, QPS, QAS, QFES, Department of Education, DESBT, DSDTI, DATSIP, DCDSS, DHPW, DITRDC and DES.

Key elements of the Community and Stakeholder Engagement Plan are described below.

16.10.2.2 Pre-approval engagement

Inland Rail is committed to supporting stakeholder awareness of the draft EIS and encouraging community members to participate in the draft EIS submission process conducted by DSDTI. During the draft EIS display period, ARTC will communicate the findings of the draft EIS and support the submission process by undertaking the following activities:

- ▶ Providing information about the public submission period and submission requirements on ARTC's website and via social media posts, including a link to the Office of the Coordinator-General website where the EIS is available
- ▶ Producing and distributing a newsletter to publicise the release of the draft EIS, providing information on the public submission process and how to make submissions
- ▶ Emailing key stakeholders registered on the Project's database about the draft EIS and submission period
- ▶ Distributing the Office of Coordinator-General's 'Have your say' factsheets for public consultation
- ▶ Conducting agency briefings, CCC meetings and community information sessions to present findings of the draft EIS.

Inland Rail personnel will also meet with ICC and SRRC to discuss the draft EIS findings, including proposed management measures outlined in the draft SIMP and seek further input on community initiatives that should be considered as part of the Project's Community Wellbeing Plan (refer Section 16.10.5).

Following completion of the public display period, all stakeholder and community feedback will be reviewed and addressed in the final EIS documentation.

The decision by the Coordinator-General about whether to approve the Project will be made public via DSDTI and ARTC Inland Rail websites.

16.10.2.3 Post-approval engagement

During the detailed design, pre-construction and construction phases, the Project will use the following communication tools:

- ▶ Regular updates about the progress and status of the Project by ARTC through the Inland Rail website
- ▶ Letters and/or email updates e.g. prior to commencement of construction, piling, blasting, disruption of residential, business or public access, disruption of utility service, changes in traffic or transport network conditions, road closures and diversions, or modification of pedestrian routes, cycleways, train stations or bus stops
- ▶ Public notices regarding e.g. changes to traffic conditions and high impact work or work packages, based on predictive noise, dust and/or vibration modelling
- ▶ The availability of a Project representative by phone 24/7
- ▶ A free call telephone line
- ▶ Factsheets addressing specific works, impacts or changes to conditions
- ▶ Website and SMS updates
- ▶ Road/rail safety campaigns addressing the operations phase.

The community and stakeholder engagement actions outlined in Table 16.21 include details of the following engagement strategies to be employed during the Project's detailed design, pre-construction and construction phases:

- ▶ Engagement with directly affected landholders to confirm mitigation of property-specific impacts, and with residents living near the Project footprint to enable them to understand potential impacts on household amenity and how to resolve any emerging issues with the Project
- ▶ Establishment of a CRG for the construction phase, to meet regularly with the purpose of providing timely, open advice, representation of community issues and concerns arising from the works (and replacing the CCCs utilised for this purpose during the EIS process)
- ▶ Cooperation with Traditional Owners and Indigenous community members to support cultural heritage management and enable their access to Project employment and business supply opportunities
- ▶ Engagement and cooperation with SRRC and ICC in the adaptive management of environmental and social impacts including management measures for impacts on community facilities, amenity, sense of place and community cohesion

- ▶ Engagement with businesses that may be negatively affected to optimise and monitor impact management measures, and actions to increase local businesses' opportunities for involvement in Project supply arrangements
- ▶ Engagement with government agencies to develop protocols, confirm the detail of mitigation measures for impacts on social infrastructure and develop joint response arrangements with:
 - ▶ Department of Education e.g. school bus route safety measures
 - ▶ Queensland Health e.g. forecasting the workforce ramp-up and agreeing a schedule for communication with the Project
 - ▶ QPS, QAS and QFES e.g. progressing agreements for cooperation
 - ▶ DCSS e.g. monitoring of demands for community support services
 - ▶ DHPW to ensure that they are aware of any support needed by DTMR tenants.

Additional engagement strategies in other SIMP action plans include:

- ▶ Engagement with local high schools and training providers, to develop training pathways for Project construction and operation (refer Section 16.10.3)
- ▶ Engagement with accommodation providers and Councils regarding management of any workforce accommodation requirements (refer Section 16.10.4)
- ▶ Engagement with Council, Government agencies and community organisations regarding mitigation of impacts on community wellbeing and enhancement of Project benefits for local communities (refer Section 16.10.5)
- ▶ Engagement with local businesses regarding specific impacts and with tourism associations and operators regarding major event schedules and support for the promotion of local tourism (refer Section 16.10.6)
- ▶ Engagement with local businesses, local Chambers of Commerce and DSDTI to identify existing skills, gaps in local capacity to work with major projects, and capacity building programs (refer Section 16.10.6).

The Community and Stakeholder Engagement Plan will be reviewed annually in consultation with the CRGs during the construction phase and updated as required.

Community reference groups

The contractor will facilitate the operation of CRGs, which will be established during the detailed design phase. CRGs may be formed on a Project basis (e.g. one for each of the three G2K projects, being Gowrie to Helidon (G2H), H2C and C2K) or on a locality basis (e.g. one in the Ipswich LGA and one in the Scenic Rim LGA). Formation of the CRGs will be finalised once the contractor has been awarded. The CRGs will replace the CCCs, which operated during the EIS phase.

The CRGs will meet regularly until completion of construction to provide timely, open advice about the Project, enable representations of community issues to ARTC, and facilitate community review of the effectiveness of SIMP measures. The CRGs will:

- ▶ Provide a channel to inform communities about the construction and operational phases of the Project
- ▶ Provide feedback to ARTC about construction plans and programs
- ▶ Receive updates on SIMP implementation, and enable feedback on mitigation and enhancement measures that need to be reconsidered or refined
- ▶ Enable CRG members to participate in monitoring the effectiveness of social and environmental management measures (refer Section 16.10.7).

The contractor will be required to ensure community members and other stakeholders have access to CRG proceedings by providing endorsed copies of minutes and other meeting records for the public record and for display on the Project's webpage.

The need for a CRG for any part of the operational period will be reviewed in cooperation with the OCG at the completion of construction.

Community Liaison Officer

A Community Liaison Officer will be provided during the construction period, to:

- ▶ Support communication between the contractor and community members and other stakeholders
- ▶ Undertake engagement to support implementation of partnerships and community initiatives
- ▶ Provide information to the wider community in relation to construction programming, the nature of construction work, and impact mitigation measures
- ▶ Establish and maintain a process for receiving, recording and responding to complaints in relation to construction issues
- ▶ Support operation of the CRGs.

Depending on the contractor's community and stakeholder engagement plans, one or more community liaison officers may be provided, which will be determined by the contractor during the detailed design phase.

Community Relations Monitor

ARTC will engage an independent, appropriately skilled and experienced entity as the Community Relations Monitor. The Community Relations Monitor will be engaged for the duration of the construction phase to:

- ▶ Review and provide advice to the Environmental Monitor on the Stakeholder and Community Engagement Plan (including the Complaint Management Handling Procedure)
- ▶ Attend meetings between the proponent and a directly affected person to consult on mitigation measures
- ▶ Be available to members of the community.

The roles and responsibilities of the Community Relations Monitor are set out in Chapter 23: Draft Outline Environmental Management Plan.

Complaints management

The Inland Rail Complaint Management Handling Procedure applies to all employees of ARTC Inland Rail and to all contractors and site visitors. The aim of the procedure is to ensure that complaints are dealt with efficiently and effectively, and that stakeholders have confidence in the organisation's complaint system.

A complaint is an expression of dissatisfaction about the policies, operations, activities and projects of ARTC Inland Rail or its staff. Complaints can be lodged by any member of the public, landholder or another stakeholder. Information on where and how to lodge a complaint is readily available through established ARTC Inland Rail communication channels.

ARTC Inland Rail ensures the complaint process is flexible and no one is excluded from making a complaint. Where necessary, ARTC Inland Rail staff will assist those stakeholders requiring assistance to lodge a complaint.

The Complaint Management Handling Procedure includes the following steps:

- ▶ **Acknowledge:** Upon receiving a complaint, ARTC Inland Rail staff will take reasonable steps to ensure that the complaint is properly understood and seek clarification or additional information from the complainant where required. ARTC Inland Rail will report the complaint and forward it to the relevant area for appropriate action or information. Where sufficient stakeholder contact details have been provided all complaints will receive formal written acknowledgment of complaint receipt within two business days.
- ▶ **Assessment:** A preliminary assessment of the complaint will be conducted to determine whether ARTC can resolve the complaint, or if it needs to be referred to another appropriate agency or party (for example a local government or government agency).

- ▶ Planning: Complaints that are straightforward can often be resolved on first contact. If this is not the case and the complaint requires an investigation, a planning process will identify what is to be investigated, the steps involved in investigation, the remedy the complainant is seeking and other possible remedies.
- ▶ Investigation: ARTC will investigate the complaint, based on the principles of impartiality, confidentiality and transparency.
- ▶ Response: The progress of the complaint will be monitored and communicated to the complainant, until the outcome has been communicated to the complainant. Follow-up: Complainants will be offered the opportunity to seek review of how their complaint was handled and resolved. If a complainant is dissatisfied with an investigator's findings or decision, a review will be carried out by an ARTC officer who has not been involved in the matter. If the complainant is still dissatisfied with the outcome, they will be advised of independent review bodies or mediation mechanisms that are available.

ARTC Inland Rail will regularly monitor the quality and effectiveness of the complaints management system and revise relevant components where appropriate, based on feedback from internal and external sources.

ARTC's stakeholder management system will be used to record details of complaints and their resolution for issues analysis and reporting purposes.

16.10.2.4 Engagement during rail operations

Prior to the completion of the construction phase, a Community and Stakeholder Engagement Plan will be developed for the commissioning and operational phases, which will include:

- ▶ Mechanisms for communication and co-operation with landholders and residents who are adjacent to the Project or who may experience impacts such as noise or vibration or travel delays
- ▶ Promotion of operational employment and supply opportunities to local and regional residents, including provision of information about supply opportunities on the Inland Rail portal
- ▶ Measures to identify and remediate issues such as excessive noise or dust deposition
- ▶ Promotion of operational employment and supply opportunities to local and regional residents
- ▶ Community updates on maintenance and track works
- ▶ Emergency services' access to a timetable of train movements
- ▶ Complaints and feedback mechanisms.

The Community and Stakeholder Engagement Plan for operation will be reviewed in Year 3 of operations to determine any need for revision of the plan.

16.10.2.5 Action plan

Table 16.21 provides community and stakeholder measures to support mitigation of impacts on amenity, landholders' use of their properties, concerns about property values, local character or sense of place, and the potential to exacerbate disadvantage. Mitigation of these impacts is also supported by measures provided in Section 16.10.6 (Health and community wellbeing).

ARTC will deliver these actions and/or require its contractor to deliver the actions. Appendix R: Social Impact Assessment Technical Report provides details on responsibilities for implementation of engagement measures (refer Section 8.2.4 of Appendix R).

Engagement measures detailed in Table 16.21 encompass all community and stakeholder engagement actions provided in the SIMP. Engagement actions that support actions provided in other SIMP action plans address:

- ▶ Local high schools and training providers to develop training pathways for Project construction and operation (refer Section 16.10.3)
- ▶ Accommodation providers and councils about management of any workforce accommodation requirements (refer Section 16.10.4)
- ▶ Councils, government agencies and community organisations about mitigation of impacts on community wellbeing and enhancement of Project benefits for local communities (refer Section 16.10.5)
- ▶ Businesses about specific impacts and with tourism associations and operators regarding major event schedules and support for the promotion of local tourism and capacity building programs (refer Section 16.10.6).

Performance measures that will assist the Project to track the delivery and effectiveness of mitigation measures are provided in Table 16.26.

TABLE 16.21: COMMUNITY AND STAKEHOLDER ENGAGEMENT

Community engagement actions

Timing	Actions
Stakeholders	Landholders and tenants in and near Project footprint i.e. within 1 km
Strategy	Engage with directly affected landholders to confirm mitigation of property-specific impacts, and with residents living near the Project footprint, to enable them to understand potential impacts on household amenity and how to resolve any emerging issues with the Project
Impacts addressed	<ul style="list-style-type: none"> ▶ Disruption of property use and amenity ▶ Impacts on property access, access to water or connectivity ▶ Potential exacerbation of disadvantage ▶ Uncertainty and stress
Detailed design phase	<p>Maintain the availability of the EIS, information about EIS approval conditions, and information about ARTC’s compliance with conditions on the Project’s website, to reduce the likelihood of negative perceptions about the amenity of properties or near the disturbance footprint</p> <hr/> <p>Meet with the owners of directly affected and adjacent properties to confirm property-specific measures to be implemented during pre-construction or construction as relevant, including as relevant:</p> <ul style="list-style-type: none"> ▶ Property access arrangements ▶ Appropriate access and egress solutions incorporated into the detailed design to enable movements across the rail corridor ▶ Changes to road access ▶ Surface water diversion ▶ Any noise mitigation measures where these are triggered ▶ Impacts on agricultural uses including farm infrastructure ▶ Communication protocols <hr/> <p>In consultation with the Constructing Authority and affected landholders, confirm mitigation arrangements for direct impacts on groundwater bores</p> <hr/> <p>Provide a Community Liaison Officer to work closely with residents whose properties will be acquired and affected DTMR tenants to reduce stress related to uncertainty about impacts and the timing of acquisition</p> <hr/> <p>Provide appropriate information and assistance to landholders during the land resumption process to reduce uncertainties and support their adaptation to changes, including</p> <ul style="list-style-type: none"> ▶ Through consultation, identify households where property severance or other changes to amenity may cause distress to residents, ensure their access to communication and complaints mechanisms, and provide referral to support services where required ▶ In consultation with the PHNs, extend the mental health partnership to include provision of services to assist residents (landholders and tenants) whose homes would be removed from the corridor to access alternative accommodation and support services ▶ With due regard to privacy and confidentiality, provide consultation data regarding households who may require assistance to find affordable housing to DTMR and DHPW, to enable a collaborative response and reduce consultation fatigue ▶ Maintain quarterly communication with residents whose properties would be acquired (or as agreed) to keep them updated and ensure their concerns are considered in developing the CEMP <hr/> <p>Meet with people whose properties may experience noise exceedances, to ensure the potential for impacts on amenity is clearly explained, and where relevant, to obtain residents’ inputs to the development of property-specific mitigation strategies</p> <hr/> <p>Advise interested landholders of the solutions developed in consultation with DTMR and ICC and SRRC with respect to Middle Road, Paynes Road and Washpool Road by letter/factsheet, invite their feedback, and consider their feedback in finalising the detailed design for these roads</p> <hr/> <p>Provide information to communities about how noise, dust and traffic delays from the Project will be minimised, and consider community feedback about the effectiveness of measures in reviewing the CEMP</p>

Community engagement actions

Timing	Actions
Pre-construction phase	Implement (as relevant to the pre-construction phase) agreements with landholders affected by property acquisition, temporary or permanent use of land or noise exceedances regarding property-specific measures as outlined in the detailed design phase
	Establish and promote the complaints management handling procedure
	Consult via letter and through individual means as requested with all households adjacent to and within 250 m of laydown areas and bridge construction sites, and above the tunnel construction areas to: <ul style="list-style-type: none"> ▶ Advise the measures provided in the Draft Outline Environmental Management Plan ▶ Identify any specific household concerns (e.g. the presence of children or seniors) ▶ Provide advance warning of the construction schedule and sequence (e.g. how long specific activities will take), and any disruptions to access or services ▶ Describe the nature and causes of noise and vibration ▶ Advise on how long construction work will be heard or seen for each property ▶ Provide 24-hour contact details for construction managers
	Communicate the Project's land access protocols, construction hours, Code of Conduct and complaints mechanism to residents adjoining the temporary disturbance footprint
	In advance of the commencement of pre-construction works, provide information to landholders and local communities about: <ul style="list-style-type: none"> ▶ The construction program and activities ▶ The timing, duration and predicted impacts of the works with regard to homes, businesses and community facilities ▶ The predicted effects of construction works on road, rail and pedestrian and cycle network operations ▶ How to contact the Project ▶ The complaints management system
	Notify directly affected and adjacent landholders, residents, businesses, Councils and other stakeholders before pre-construction work starts in their vicinity and provide regular updates on construction activities and progress, through signage, the local media and other forms of communication such as emails and letters
Construction phase	Maintain regular engagement with landholders who are adjacent to the rail corridor and areas used for construction to share information and identify any issues arising during pre-construction activities, including access to email correspondence, a free-call line and meetings on request
	Provide advance notice e.g. email, letter, SMS or public notices of any significant dust generating activities
	Provide monthly advance notices and updates to directly affected landholders (where they remain in local communities) and adjacent landholders regarding construction activities, impacts and mitigation measures
	Implement (as relevant to the construction phase) agreements with landholders affected by property acquisition, temporary or permanent use of land or noise exceedances regarding property-specific measures
	Maintain regular engagement with directly affected and landholders who are adjacent to the temporary disturbance footprint to enable identification of any issues arising and enable adaptive management of impacts such as property access by Project personnel, disruptions to property accesses, construction noise or dust
	Initiate and maintain communication and co-operation with local landholders during flood alert and recovery periods to support readiness and cooperation
	Engage an independent, appropriately skilled and experienced entity as the Community Relations Monitor
	Provide access to the Community Relations Monitor and Community Liaison Officer and promote their availability through Project communications such as newsletters, websites, fact sheets and emails

Community engagement actions

Timing	Actions
Stakeholders	Other residents and businesses in potentially impacted communities
Strategy	Provision of community information and engagement opportunities (including one or more CRGs) for residents of potentially affected communities
Impacts addressed	<ul style="list-style-type: none"> ▶ Impacts on the amenity and character of rural areas due to construction works ▶ Disruptions to the traffic network ▶ Community safety ▶ Employment and business opportunities ▶ Impacts on community cohesion
Detailed design phase	<p>Establish the CRG (refer Section 16.10.2.3)</p> <p>Establish consultative arrangements (e.g. newsletters, project email, 24-hour contact details for construction representative) that are accessible and promoted to all residents within 1 km of the Project alignment and in all potentially impacted communities, including a complaints resolution procedure</p> <p>Ensure Project communications are accessible to people without internet access, people with low levels of education and people with limited skills in English (to continue until the end of construction)</p> <p>Provide information to the community about how noise and dust from the Project's construction and operation will be minimised e.g. via a fact sheet</p>
Pre-construction and construction phase	<p>A Community Liaison Officer will be provided, and contact details made available in all potentially impacted communities</p> <p>Provide and promote of a complaints and feedback mechanism accessible to all local stakeholders, including the ability to resolve complaints regarding construction works or workforce behaviour</p> <p>Develop an incident notification and reporting process, including providing information to the community if an environmental incident occurs</p> <p>Provide a clear and efficient process for local people to seek information about employment opportunities and register their interest including via employment portals and through local employment agencies</p> <p>Update the Project's webpage and other locally available communication materials to include the Project's CEMP and SIMP, quarterly construction updates, detailed explanations of upcoming activities, workforce ramp-up and stakeholder engagement mechanisms, and complaints and feedback mechanisms, and annual SIMP reports when available</p> <p>Provide information which is accessible to those without internet access regarding the construction timeframe and activities, employment opportunities and how to express interest in employment, contracting or supply opportunities</p> <p>Provide information to SRRRC and community organisations including Bushwalkers of SEQ, Beaudesert Trail Horse Riders, Ipswich and District Trail Riders Club and the Beaudesert Bushwalkers to enable trail users to re-plan their routes in areas where horse trails are affected</p>
Construction phase	<p>Provide regular (at least quarterly) updates to potentially impacted communities including detailed explanations of upcoming activities, workforce ramp-up and stakeholder engagement mechanisms</p> <p>Develop a travel demand management community information campaign to inform the public on the proposed construction works and potential effect on local road networks, to allow them to plan their travel</p> <p>Maintain publicly available information (via websites, fact sheets and project updates) and availability of feedback mechanisms including phone, email and web-based facilities regarding:</p> <ul style="list-style-type: none"> ▶ The construction schedule ▶ Impacts that may be experienced e.g. noise or traffic disruption, and how the Project is mitigating those impacts ▶ Road safety measures ▶ How to communicate with the Project and the contractor ▶ 24 hour/7-day contact details for Project representatives

Community engagement actions

Timing	Actions
Construction phase (continued)	<p>Maintain provision of the Community Relations Monitor</p> <hr/> <p>Implement communication strategies to ensure stakeholders know about construction traffic routes, peak construction periods, the Project's workforce conduct policies, and how to contact Project personnel in the event of any concerns regarding safety during construction</p> <hr/> <p>Ahead of the operational phase:</p> <ul style="list-style-type: none"> ▶ Provide timely and well-targeted information about potential traffic delays during Project operations, including an indicative schedule of freight train movements, and strategies that ARTC employs to reduce traffic delays ▶ Develop a traffic safety education program which has a clear focus on interactions between the rail corridor, roads and other access tracks, and interactions with rural roads and rural traffic ▶ Renew contact with schools in Peak Crossing and Rosewood prior to operations commencing, to identify any concerns regarding travel delays, and any strategies which could feasibly be applied to reduce inconvenience or other impacts of traffic delays at level crossings
Stakeholders	Traditional Owners and other Indigenous community members
Strategy	Cooperation with Traditional Owners and Indigenous community members to support cultural heritage management and enable their access to Project employment and business supply opportunities
Impacts addressed	<ul style="list-style-type: none"> ▶ Impacts on cultural landscapes ▶ Training and Employment opportunities ▶ Business opportunities
Detailed design phase	<p>ARTC's Indigenous Participation Advisor is working with Traditional Owner groups and local communities to support their consideration of Project opportunities, which will continue during the detailed design phase, with a particular focus on business and employment opportunities.</p> <hr/> <p>Plan with Yuggera Ugarapul People for cultural awareness tours for Project personnel (in progress during the EIS phase)</p> <hr/> <p>Consult with Yuggera Ugarapul People, Jagera Daran People, CSQ, DATSIP and training providers, ICC and SRRC to identify potential opportunities for early skilling programs for Indigenous worker (in progress during the EIS phase)</p> <hr/> <p>Encourage Yuggera Ugarapul People to express their interest in the Indigenous Ranger program to DES</p> <hr/> <p>Enable meetings between Traditional Owner group board representatives and the Contractor, once appointed, regarding cultural heritage management, cultural awareness, training, targeted training initiatives, mentorship for Indigenous workers, business supply opportunities, and any need for capacity building with Indigenous businesses</p> <hr/> <p>Communicate with Traditional Owner groups regarding the range of business opportunities which will be available during construction, the availability of Indigenous businesses to participate and the types of capacity building programs that Indigenous businesses may need to prepare for involvement in the Project supply chain</p> <hr/> <p>Work with Traditional Owner groups to identify existing business capacity within the Yuggera Ugarapul and Jagera Daran communities and help them to identify business capacity building programs to be supported by ARTC, DATSIP and/or DITRDC, to be continued during pre-construction and if required, construction phases</p>
Pre-construction phase	<p>Involve Yuggera Ugarapul People in cultural heritage surveys for any proposed new quarry sites</p> <hr/> <p>Indigenous cultural heritage values and Project impacts to these values will be managed under approved CHMP. ARTC will continue regular engagement with Yuggera Ugarapul People to enable opportunities to provide input regarding cultural values</p> <hr/> <p>Implement Indigenous business capacity building programs in cooperation with DATSIP, DSDTI and Traditional Owners</p> <hr/> <p>Implement Inland Rail Skills Academy programs (in cooperation with CSQ others as identified in future Project phases) targeting Indigenous training and development for construction works, cross-over skills (to other projects or industries) and business readiness to supply the Project</p>

Community engagement actions

Timing	Actions
Construction phase	<p>In cooperation with Yuggera Ugarapul People, provide cultural awareness training in relation to Yuggera Ugarapul people's values, workplace diversity and cultural heritage management requirements to Project personnel</p> <p>Continue to engage with Yuggera Ugarapul People to provide access to information about business and skills requirements and the availability of targeted programs for training and business development</p> <p>Maintain regular cooperation with Traditional Owners in accordance with the terms of the CHMPs</p> <p>Continue engagement and training programs with Indigenous community members to ensure operational roles are considered by Indigenous people</p> <p>Continue to cooperate with DESBT, DITRDC and local and Indigenous businesses to:</p> <ul style="list-style-type: none"> ▶ Build businesses' capacity to participate in the Project's supply chain through business development, mentoring and pre-qualification projects ▶ Support Indigenous businesses to ensure they are prepared for and provided with opportunities to participate
Stakeholders	ICC and SRRC
Strategy	Cooperation with SRRC and ICC in the adaptive management of environmental and social impacts including management measures for impacts on community facilities, amenity, sense of place and community cohesion
Impacts addressed	<ul style="list-style-type: none"> ▶ Impacts on amenity and local character, including noise ▶ Social opportunities ▶ Training opportunities ▶ Community wellbeing ▶ Connectivity ▶ Traffic safety
Detailed design phase	<p>Continue regular meetings with SRRC and ICC on the Project's schedule, EIS findings and mitigation measures and in particular:</p> <ul style="list-style-type: none"> ▶ Alignment of Project initiatives with Regional Skills Initiatives Strategy projects ▶ EIS findings regarding the Boonah to Ipswich Trail ▶ The construction schedule, potential impacts and mitigation measures for Council assets ▶ Identification of community projects or partnerships to maximise social interaction ▶ Shared initiatives which could offset impacts on local character and sense of place ▶ Emerging community needs (e.g. COVID-19 community recovery, activation of community organisations to support cohesion) which could be addressed through targeted funding to community organisations in each LGA <p>Communicate with ICC and SRRC about EIS results of relevance to rail operations (e.g. noise impacts and road network operation) to support their consideration of any development control measures required to protect the amenity and liveability of residents in areas which are planned for future urban growth</p> <p>Consult with ICC and SRRC to identify issues which should be addressed in the AMP</p> <p>In consultation with the two Councils, prepare a Community Wellbeing Plan to provide a framework for cooperation with key stakeholders to implement mitigation measures addressing impacts on quality of life as the result of Project impacts on amenity, character, cohesion or connectivity (refer Section 8.6.5)</p> <p>Consult with ICC (and if advised by ICC, other stakeholders) to forecast the Ipswich Motorsports Precinct's event schedule during the construction phase, and identify feasible measures such as scheduling of noisy works or works which would disrupt access to the Precinct during major events</p> <p>Discuss the use of Champion's Way and the Cunningham Highway with ICC and DTMR to inform the Project's TMP</p> <p>Consult with Ipswich City Council regarding any Council-planned works to upgrade facilities at the Purga Nature Reserve and the need for initiatives such as increased interpretive signage</p>

Community engagement actions

Timing	Actions
Pre-construction phase	<p>Provide advice to Councils about construction traffic routes, and seek their feedback in finalising the TMP</p> <hr/> <p>Meet with ICC and SRRC to advise the schedule and program for pre-construction, including:</p> <ul style="list-style-type: none"> ▶ When and where specific works would occur ▶ The timing for commencement of works in road reserves and utility corridors ▶ The schedule for implementation for traffic detours <hr/> <p>Consult with ICC (and if advised by ICC, other stakeholders) to forecast the Ipswich Motorsport Precinct's event schedule during the construction phase, and identify feasible measures such as scheduling of noisy works or works which would disrupt access to the Precinct to avoid conflicting with major events, for inclusion in the CEMP</p> <p>Consultation between the Project and ICC will be maintained throughout the period in which construction works are occurring within 500 m of the Ipswich Motorsport Precinct</p> <hr/> <p>Provide an update to ICC and SRRC on the implementation of the Community Wellbeing Plan and AMP, and seek their feedback</p>
Construction phase	<p>Meet with ICC and SRRC at least six monthly to:</p> <ul style="list-style-type: none"> ▶ Review progress with the Community Wellbeing Plan and seek their feedback on the progress of community initiatives ▶ Coordinate the implementation of initiatives shared between the Project and Councils e.g. place-making, training or tourism marketing initiatives ▶ Seek Council inputs into monitoring the effectiveness of the AMP ▶ Seek Council's feedback and inputs regarding the effectiveness of the Project's community and stakeholder engagement strategies ▶ Provide advance notice of the works schedule including the construction program, potential impacts of construction works, road closures and traffic diversions, disruption to pathway networks, and work in utility corridors ▶ Monitor the effectiveness of management measures addressing road safety and road network management issues ▶ Discuss other issues and any need for corrective actions as they arise <hr/> <p>Invite Council's review of annual SIMP reports and participation in annual SIMP reviews</p>
Stakeholders	Government and community service organisations
Strategy	Engagement with Government agencies and community organisations to confirm the detail of mitigation measures for impacts on social infrastructure and develop and implement cooperative arrangements.
Impacts and benefits addressed	<ul style="list-style-type: none"> ▶ Stress, anxiety and mental health ▶ Demands on social infrastructure ▶ Community safety (e.g. traffic safety and emergency service capacity) ▶ Contribution to quality of life and community wellbeing
Detailed design phase	<p>Meet with the Department of Education and all schools in Rosewood and Peak Crossing to:</p> <ul style="list-style-type: none"> ▶ Describe the construction schedule and the nature of road-rail interface treatments ▶ Identify any concerns regarding changes to road access which may affect students' routes to school or any impacts on road or pedestrian safety, and include relevant actions and accountabilities in the Construction Management TMP ▶ Seek a meeting with the School Principals and P&Cs to provide a Project update and explain how construction traffic will be managed ▶ Confirm all relevant school bus services and contact details for their operators, and consult school bus operators about measures to be included in the TMP, including consideration to limiting construction traffic on school bus routes during pick-up and set-down times on school days ▶ Identify any specific considerations (e.g. off-campus activities) which should be considered in the Project's TMP ▶ Confirm Project contact details for the contractor <hr/> <p>Provide an update on Project design, EIS findings and the construction program to Department of Education, Queensland Health, DHPW, QPS, QAS and QFES</p>

Community engagement actions

Timing	Actions
Detailed design phase (continued)	<p>Meet with Government agencies to confirm the detail of mitigation measures for impacts on social infrastructure and joint response arrangements with:</p> <ul style="list-style-type: none"> ▶ Department of Education e.g. with respect to safety measures for construction traffic routes (as above) using school access routes ▶ Queensland Health, e.g. forecasting the workforce ramp-up and agreeing the schedule for communication with the Project ▶ QPS, QAS and QFES, e.g. seeking input to the Emergency Response Plan and progressing agreements for cooperation on emergency responses ▶ DCDSS, e.g. in regard to emerging community needs (e.g. COVID-19 community recovery and monitoring of demands for community support services) ▶ DHPW, to ensure that they are aware of any support needed by DTMR tenants and have an opportunity to provide input to the AMP <p>When the detailed design including road network changes and construction traffic routes are confirmed with DTMR and the two Councils, undertake consultation with all relevant bus operators identified through consultation with Department of Education/DTMR to identify any concerns regarding changes to school bus routes or traffic management, and identify any issues which need to be considered as part of the Project's TMP, e.g. limiting construction traffic on school bus routes during pick-up and set-down times</p> <p>Cooperate with DESBT, Department of Education, local high schools and training providers, to:</p> <ul style="list-style-type: none"> ▶ Develop training pathways for employment in Project construction and operation ▶ Identify young people and groups of young people who could be supported to access training for potential employment in the Project's operations <p>Engage proactively with Queensland Health and QPS to ensure they are well informed about the Project and are aware of any additional resources that may be available through the Project to support mental health in affected communities</p> <p>Consult QFES in detailing the mitigation measures regarding fire trails, firefighting and a cooperative response to any fire risks affecting the EIS investigation corridor</p> <p>Confirm arrangements with QPS, QAS and QFES to ensure effective communication and cooperation throughout the construction phase, including measures to mitigate impacts on emergency service response times during construction and operation (e.g. direct communication with construction managers)</p> <p>Continue cooperation with DITRDC, DATSIP and CSQ to develop training programs to be delivered through the Inland Rail Skills Academy to equip local people for Project employment</p> <p>Maintain mental health partnerships with the Darling Downs and West Moreton PHN and the Brisbane South PHN to support these residents and others who may experience stress and anxiety in relation to the Project and regularly review the resources available and the adequacy of services in relation to Project-related demands on mental health services</p>
Pre-construction phase	<p>Communicate with Queensland Health to ensure hospital and health services are aware of the construction program and workforce ramp up to enable planning for any minor upgrades to services which may be required</p> <p>Ensure all Queensland Government agencies are registered as stakeholders to receive Project updates, fact sheets and newsletters</p> <p>Provide early advice to the QPS, QAS QFES and SES on the workforce ramp-up, schedule and location for construction activities and changes to the road network</p> <p>Meet with the QPS, QFES and QAS to update advice on the Project's workforce ramp-up, review co-operative arrangements and ensure any safety or service access issues are identified and addressed</p> <p>Through consultation with DCDSS prior to construction commencing, and annually during construction, identify any Project-related increase in demand for community services, and if stresses on services are identified, participate in a cooperative response to community needs between DCDSS, ARTC and community organisations</p> <p>Consult with Department of Education to confirm their comfort with TMP measures regarding schools in Rosewood and Peak Crossing</p>

Community engagement actions

Timing	Actions
Pre-construction phase (continued)	<p>Communicate with all schools, health facilities and community halls and centres in the potentially impacted communities regarding the construction program, and provide regular updates about road closures and roadworks</p> <p>Prior to the commencement of Project operations, engage with the PHNs and Queensland Health to gauge the need for any ongoing support for mental health services during the operational period.</p> <p>ARTC will establish arrangements with QPS, QAS and QFES to enable cooperative responses to any incidents e.g. rail accidents, road-rail or suicides during rail operation</p> <p>Provide information on train schedules which would help emergency services responders to navigate access arrangements during operations</p> <p>Develop tailored and targeted rail and road safety programs for delivery during construction to local schools and communities in the Project region</p>
Construction	<p>Meet with DCDSS prior to construction commencing, and annually during construction, to identify any Project-related increase in demand for community services, and if stresses on services are identified, participate in a cooperative response to community needs between DCDSS, ARTC and community organisations</p> <p>Meet with Department of Education, QPS, QFES, QAS, SES and Queensland Health to provide an update on the construction program, road network disruptions, the TMP, anticipated impacts and community engagement mechanisms, and confirm the schedule for meetings with agencies during for the construction phase</p> <p>Provide regular (at least six monthly) updates to the Department of Education, QPS, QAS, QFES, SES and Queensland Health on the workforce ramp-up, schedule and location for construction activities, and changes to the road network, and seek feedback on traffic management</p> <p>Develop a protocol between ARTC and emergency service providers, defining appropriate and coordinated responses and communication in the event of emergencies during operations</p> <p>Investigate the need for joint training and response exercises with QPS, QAS, and QFES to build capacity for Project- associated incident management during operation</p>
Stakeholders	Businesses
Strategy	Engagement with businesses that may be negatively affected to optimise and monitor impact management measures, and increase local businesses' opportunities for involvement in Project supply arrangements
Impacts addressed	<ul style="list-style-type: none"> ▶ Impacts on nearby event/tourism businesses ▶ Impacts on agricultural businesses ▶ Opportunities to supply the Project
Detailed design phase	<p>Hold a workshop or other forum with local Chambers of Commerce, DSDTI, DATSIP and DESBT to discuss gaps in local business' capacity to work with major projects, e.g. safety management, environmental compliance, working with construction management companies, or specific skills, and discuss and confirm responsibilities for capacity building programs, which may include business forums such as 'Meet the Buyer' or 'Procurement Opportunity updates, skills development workshops or training courses</p> <p>Liaise with the following stakeholders to locate specific business capacities of relevance to the Project's supply chain for inclusion in the Project's register of potential suppliers:</p> <ul style="list-style-type: none"> ▶ DITRDC ▶ RDA ▶ ICC ▶ SRRC ▶ Chambers of Commerce in the Ipswich and Scenic Rim LGAs

Community engagement actions

Timing	Actions
Detailed design phase (continued)	<p>Meet with the IRCEC and Flinders Peak Winery to:</p> <ul style="list-style-type: none"> ▶ Describe the construction schedule and the nature and location of works ▶ Communicate EIS findings on the potential for construction noise exceedances on accommodation whilst works are in the vicinity ▶ Describe measures to be considered in the detailed design, construction methodology or CEMP to minimise impacts on the properties and their surrounds ▶ Identify the need for any additional mitigation measures, if necessary and feasible, to mitigate noise or visual amenity impacts on these properties during construction could be considered as part of the CEMP or construction methodology ▶ Identify any impacts on road access to these properties and measures to ensure access to the properties ▶ Establish communication between them and the Contractor <hr/> <p>Communicate with agricultural landholders (including crop famers, graziers and poultry farmers) in and adjacent to the Project footprint, in writing, and via meetings on request, to:</p> <ul style="list-style-type: none"> ▶ Describe the construction schedule and the nature and location of works ▶ Explain the land resumption process to landholders whose properties would be acquired and provide contact details for the Constructing Authority ▶ Explain the result of EIS studies on noise and dust, as relevant to specific holdings or businesses ▶ Describe measures to be considered in the detailed design, construction methodology or CEMP to minimise impacts on the movement of stock and produce, water access, or infrastructure/equipment on agricultural properties and seek feedback ▶ Describe measures which ensure an appropriate level of access is maintained for agricultural businesses across and between properties directly affected by the Project ▶ Propose a schedule for meetings between directly affected landholders and the Project during the pre-construction and construction phases <hr/> <p>Consult (via a business forum or workshop) with tourism-related businesses (e.g. wineries, accommodation facilities, hotels, farm stays, restaurants, cafes and specialty shops) located within 5 km of the Project to:</p> <ul style="list-style-type: none"> ▶ Explain the Draft Outline Environmental Management Plan TMP and CEMP provisions and accept feedback on measures of relevance to tourism and related businesses ▶ Identify any additional, feasible strategies which would reduce or offset impacts on connectivity or businesses' amenity during construction and/or operation for inclusion in the CMP or TMP ▶ Discuss support for the promotion of local tourism ▶ Share information about opportunities for businesses to supply the Project <hr/> <p>Work with RDA, DSDTI, DATSIP, ICC, SRRC and the Ipswich and Scenic Rim Chambers of Commerce, to encourage relevant supply chain development, especially for Indigenous businesses, including the delivery of workshops and/or online training with businesses aimed at building their capacity for involvement in major project construction and associated services and projects, including communication of pre-qualification requirements</p> <hr/> <p>In developing the AMP, consult with the Scenic Rim Tourism Association and the Ipswich Tourism Operators Network to confirm peak demand periods (noting these may change from year to year in response to major event schedules) and seasonal demands on tourism accommodation, to minimise the potential for the impacts of Project works to affect major events major event and avoid Project use of accommodation that may displace tourists or events visitors</p> <hr/> <p>Establish consultative arrangements with Scenic Rim and Ipswich Chambers of Commerce to support monitoring of any issues identified in relation to labour draw</p>

Community engagement actions

Timing	Actions
Pre-construction phase	Cooperate with tourism business owners, Scenic Rim Tourism Association, Ipswich Tourism Operators Network, ICC and SRRC, to develop and implement a strategy to mitigate impacts on tourism values, which may include support for promotional and marketing campaigns during the construction period and/or support for placemaking projects
	Implement measures, working with Scenic Rim Tourism Association, the Ipswich Tourist Operators Network, ICC and SRRC, to mitigate any impacts on tourism during the pre-construction stage (e.g. changes to scenic amenity) through support for promotional and marketing campaigns
	Facilitate the delivery of workshops with businesses including Indigenous businesses aimed at building their capacity for involvement in major project construction and associated services, in Scenic Rim and Ipswich locations
	Provide regular updates via emails to local and regional businesses to ensure they have access to current information about the Project
	In consultation with landholders, ensure an appropriate level of access is maintained for agricultural businesses across and between properties affected by the Project, and to the roads which link them to markets during the pre-construction period
Construction phase	Maintain regular engagement with landholders and business owners adjacent to the temporary disturbance footprint (at least quarterly during the first year of construction or as agreed with landholders) to monitor the effectiveness of environmental and social impact mitigation measures
	Provide an update on the construction schedule, works, nature of impacts and mitigation measures to IRCEC and Flinders Peak Winery at least one month prior to the commencement of construction works which may result in impacts on these properties
	Implement business capacity building programs agreed with RDA, DSSTI, DATSIP, ICC, SRRC and the Ipswich and Scenic Rim Chambers of Commerce in the detailed design phase, as part of the Inland Rail Skills Academy
	Provide regular Project updates which forecast road works, road realignments and closures, and explain alternative routes, to businesses, agricultural landholders and potentially impacted communities (including residents of rural localities)
	Maintain consultation with ICC and any identified stakeholders within the Ipswich Motorsports Precinct throughout the period in which construction works are occurring within 500 m of the Ipswich Motorsports Precinct or affecting Champion's Way or the Cunningham Highway of this vicinity, to review the effectiveness of mitigation measure and if necessary, develop corrective measures
	Implement measures agreed with Scenic Rim Tourism Association, Ipswich Tourist Operators Network and the Ipswich and Scenic Rim Councils to mitigate impacts on tourism during the construction stage
	Through the Project's CRG, provide feedback to community members on the implementation of proposed measures to reduce the visual impact of rail infrastructure during operation, and seek their feedback
Promote Government services and programs which are available to businesses considering investment in projects related to Inland Rail	

16.10.3 Workforce management

One of ARTC's primary aim is to maximise employment opportunities for residents within the Project region, by:

- ▶ Facilitating skills development opportunities through the Inland Rail Skills Academy to build regional capacity in construction and rail operation
- ▶ Building partnerships with training providers to strengthen workforce skills in the Project region and reduce the potential for cumulative impacts to draw labour and skills from other businesses
- ▶ Requiring the contractor to employ locally, and to implement workforce training and diversity strategies.

The Project's construction phase offers the opportunity for employment of 620 personnel, with an average of 271 FTE personnel across the full construction period. The *Australian Jobs Act 2013* defines 'local' as including Australian entities. To maximise the Project's benefits in the Project region, ARTC has adopted the following hierarchy for workforce and industry participation strategies:

- ▶ Project Area: LGAs that the alignment directly passes through (Ipswich and Scenic Rim LGAs)
- ▶ Region: LGAs outside the Project Area, but within 125 km radius of the Project Area
- ▶ Rest of Queensland: All of the State of Queensland other than the Project Area and Region
- ▶ Rest of Australia: All of Australia other than Queensland.

ARTC's strategies to maximise local and Indigenous participation in the Project workforce include:

- ▶ Analysis: ARTC has a partnership with CSQ to identify skill shortages in the Project region and develop locally applicable training pathways, with other training partners, as part of the Inland Rail Skills Academy.
- ▶ Training and education: The Inland Rail Skills Academy provides the framework for access to relevant training for residents in the Project region, including access to 'Try a Trade' programs, scholarships and 'Skilling Queenslanders for Work' (SQW) programs, which provide training to people who are under-utilised or under-employed in the labour market, currently being developed in consultation with SRRC, with consultation with ICC on SQW opportunities pending.
- ▶ Business Capability Development: Based on assessment of local skills availability, delivery of capability development programs for local and Indigenous businesses through Inland Rail Skills Academy partnerships with DSSTI and DITRDC (noting that discussions with DSSTI and DITRDC are ongoing, and businesses are generally reluctant to invest in training and development before they have certainty about Project approval outcomes).
- ▶ Communication: Sharing information about Project opportunities with local businesses that employ local people through supplier registration portals and contractor webpages, industry and supplier briefings and supplier guides and factsheets.
- ▶ Contract requirements: Inclusion of local employment targets, activities and criteria in construction contracts, and requirements relating to local training and employment opportunities.

The construction contractors will be required to detail the following which will form a key part of the tender evaluation:

- ▶ Targets (numbers and percentages) for employment and workforce development by location (i.e. Project Area/LGA) and demographic (e.g. youth and Indigenous employment)
- ▶ Training strategies for the construction phase
- ▶ Strategies for recruitment and training of personnel from the Scenic Rim and Ipswich LGAs
- ▶ Workforce health and safety strategies
- ▶ Workforce Code of Conduct.

Table 16.22 summarises workforce management and development objectives, outcomes and actions that will maximise the employment of people from the Project region and Indigenous people in the Project's construction workforce, increase the skills profile of the Project region's labour force, manage workforce behaviour, and minimise impacts on other businesses.

Actions undertaken during the construction phase will also address development of capacity of the local and regional workforce for employment in the operational phase. Management of the Project's operational workforce will be in accordance with training and employment strategies established ARTC and/or the contractor.

TABLE 16.22: WORKFORCE MANAGEMENT—CONSTRUCTION

Workforce management measures

Objectives	<ul style="list-style-type: none"> ▶ Enable residents of nearby communities and the Project region to access the Project’s construction and operational employment opportunities ▶ Facilitate and support workforce training and development pathways to build labour force skills ▶ Minimise impacts on employment in other industries ▶ Provide a safe and healthy workplace for all personnel ▶ Manage workforce behaviour to avoid impacts on community safety and community values
Outcomes	<ul style="list-style-type: none"> ▶ Local contractors and job seekers (from within the Project region) are involved in the Project construction workforce ▶ Construction employment opportunities are available to Yuggera Ugarapul People and other local Indigenous people ▶ Training partnerships strengthen workforce capacity for Project employment and other industries ▶ Project personnel behave with respect and courtesy towards residents, landholders and motorists ▶ Workplace health and safety are supported through a strong safety culture ▶ Impacts on agricultural or tourism employment opportunities are minimised
ARTC Commitments	<ul style="list-style-type: none"> ▶ ARTC will develop strategies to promote engagement of local workers ▶ Minimum local employment targets will be negotiated and agreed between ARTC and the contractor ▶ Contractors will be required to seek workers from the Ipswich and Scenic Rim LGAs where possible ▶ Develop strategies to promote engagement of local workers from the Ipswich and Scenic Rim LGAs ▶ Require contractors to encourage employment, training and skills development opportunities by: <ul style="list-style-type: none"> ▶ Identifying the skills required in the building, construction, equipment and services fabrication and supply, maintenance, operation and support to the Inland Rail Program, for its design, construction, operational and maintenance phases ▶ Arranging timely training, and qualification arrangements to meet the needs of skills development to support all phases of the Inland Rail Program ▶ Ensuring that training and qualification systems meet the requirements of the National Standards Framework ▶ Establishment of the Inland Rail Skills Academy ▶ Implement ARTC’s Code of Conduct ▶ Provide a clear and efficient process for people to seek information about employment opportunities and register their interest ▶ Work closely with Indigenous communities to strengthen community members’ capacity for employment, support the design and delivery of training and development programs, encourage applications and increase the number of Indigenous people applying for Project-related jobs ▶ Work with key partners to link training and development programs with other projects and local industries to provide the greatest regional benefit ▶ Work with schools and local training providers to provide appropriate training ▶ Work with the Australian and Queensland Governments to provide long term outcomes through training, mentoring and other support programs ▶ Provide a workplace that is inclusive and values the contributions of Aboriginal and Torres Strait Islander employees
Measures—detailed design phase	<p>Local employment</p> <ul style="list-style-type: none"> ▶ Work with CSQ to identify the availability of skills in the Project region and potential shortages in trades and professions that will be required for construction of Inland Rail projects, to inform the development of training and development programs ▶ Include requirements in procurement and contracting processes relating to employment participation and initiatives for Indigenous people, women, people under 25 years and residents from the Project region. ▶ Establish partnerships as part of the Inland Rail Skills Academy to develop training pathways for employment of Project region residents in Project construction and operation

Workforce management measures

Measures—
detailed
design phase
(continued)

Training and development

- ▶ Consult with DESBT and Department of Education, including local high schools, to identify opportunities to align Inland Rail's workforce training and development initiatives with the Queensland Government's jobs, skills and workforce diversity programs
- ▶ Work with DITRDC, DATSIP and CSQ to develop training programs to be delivered through the Inland Rail Skills Academy to equip local people for Project employment
- ▶ Continue engagement with ICC and SRRC regarding alignment with Regional Skills Investment Scheme (RSIS) priorities (including cross-over skills between construction training and RSIS priorities) and use of the SQW program as part of Inland Rail training and development initiatives.

Indigenous employment

- ▶ Continue to consult with Yuggera Ugarapul People, Jagera Daran People, CSQ, DATSIP and training providers, ICC and SRRC to identify potential opportunities for early skilling programs for Indigenous workers
- ▶ Facilitate meetings between Traditional Owner groups and DATSIP to discuss the Project and assistance available for business capacity and training programs
- ▶ Encourage Yuggera Ugarapul People to express their interest in the Indigenous Ranger program to DES
- ▶ Enable meetings between Traditional Owner groups and the contractor to discuss employment, training and business strategies
- ▶ Require contractors to specify and meet Indigenous employment goals

Impacts on employment in other industries

- ▶ Implement agreements with directly affected and adjacent landholders (refer Section 16.10.2), to reduce potential impacts on farm productivity that may otherwise affect the availability of agricultural employment
- ▶ Through implementation of training partnerships and alignment with RSIS initiatives, strengthen workforce capacity for Project employment and other industries in the Project region to build a stronger regional skills base and reduce labour draw and skills shortages that could affect other businesses
- ▶ Work with tourism industry stakeholders to address potential impacts on tourism facilities or tourism visitation (refer Section 16.10.6)
- ▶ Establish consultative arrangements with Scenic Rim and Ipswich Chambers of Commerce to support monitoring of any issues identified in relation to labour draw

Measures—
pre-construction
phase

Local employment

- ▶ Provide information to Project region residents (including those without internet access) regarding the construction timeframe, employment opportunities and how to express interest in employment, contracting or supply opportunities
- ▶ Establish a Local Employment Register to track and monitor participation in construction employment by people from the Project region, including identification of Indigenous personnel with their agreement
- ▶ Implement training and development initiatives as part of the Inland Rail Skills Academy that will increase workforce skills that are also applicable to other industries in the region e.g. agriculture

Indigenous employment

- ▶ Facilitate meetings between Traditional Owner group representatives and the contractor to discuss targeted initiatives such as training and mentorship for Indigenous workers
 - ▶ Provide Indigenous mentors within the Project workforce
 - ▶ Implement Indigenous training and skills development programs agreed with Traditional Owner groups as part of the Inland Rail Skills Academy and/or as part of the contractor's delivery plans
 - ▶ Communicate with Traditional Owner groups regarding the range of business opportunities that will be available during construction, the availability of Indigenous businesses to participate and the types of capacity building programs that Indigenous businesses may need to prepare for involvement in the Project supply chain
-

Workforce management measures

Measures—
construction
phase

Impacts on other businesses/industry

- ▶ Monitor Inland Rail projects' workforce ramp-up and the proportion of Project personnel drawn from within the Project region
- ▶ Consult with local councils and Chambers of Commerce regarding any pressures they identify on local labour availability
- ▶ Maintain support for training programs that equip local people for construction employment
- ▶ Consult with high schools and training providers in the Project region to identify young people and groups of young people who could be supported to obtain employment in the Project's operations

Training and development

- ▶ Continue to implement training programs and partnerships to equip local and Indigenous people for construction employment, including programs agreed with councils that align with RSIS priorities and support SQW programs

Local and Indigenous employment

- ▶ Implement Indigenous training and skills development programs agreed with Traditional Owner groups as part of the Inland Rail Skills Academy and/or as part of the constructor contractor's delivery plans
- ▶ Monitor the contractor's progress towards local and Indigenous employment targets and require corrective actions (e.g. improved local training and recruitment strategies) if targets are not being met
- ▶ Consult with high schools and training providers in the Project region to identify young people and groups of young people who could be supported to access training for potential employment in the Project's operations
- ▶ Promote operational roles to Project region residents
- ▶ Continue engagement and training programs with Indigenous community members to ensure operational roles are considered by Indigenous people

Labour availability

- ▶ ARTC will monitor Inland Rail projects' workforce ramp-up and the proportions of local and non-local personnel, and consult with local Councils, DESBT and local Chamber of Commerce regarding any pressures they identify on local labour availability
- ▶ If the Project is contributing to cumulative pressures on labour availability, ARTC will engage with the contractor to refine the Project's recruitment and training strategies

Workforce behaviour

- ▶ Ensure that the contractor has an appropriate workforce Code of Conduct and procedures, complemented by complaints mechanisms that ensure fast and effective resolution to any issues experienced
 - ▶ Require the contractor to report on implementation of and compliance with the Code of Conduct
 - ▶ Implement authorisation procedures and means of identification for personnel accessing private property
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16.10.4 Housing and accommodation

ARTC has developed program-wide accommodation principles for use when developing, selecting and deploying accommodation solutions, to support three desired outcomes:

- ▶ Accommodation solutions minimise negative social and economic impacts to potentially impacted communities
- ▶ Potentially impacted communities are consulted on accommodation solutions prior to them being decided
- ▶ Accommodation solutions contribute social and economic value to potentially impacted communities.

The Project expects to primarily recruit its workforce from the Project region and nearby LGAs, so a significant increase in demand for housing or accommodation in the Project region during either construction or operation is not anticipated.

The construction period may result in a small increase in demand for rental housing or short-term accommodation within the Ipswich and Scenic Rim LGAs, but this demand may also be met in the nearby LGAs of Logan and Brisbane.

The contractor will be required to provide an AMP for the Project, which will reflect ARTC's accommodation management principles of minimising negative social and economic impacts in potentially impacted communities, consulting potentially impacted communities on accommodation solutions, and contributing social and economic value to potentially impacted communities.

The AMP will be developed during the detailed design phase when the construction schedule and workforce profile are confirmed. The process for developing the draft AMP will include:

- ▶ Consulting with CSQ on the results of their labour force analysis
- ▶ Identifying the likely number of Project personnel who would be drawn from outside a daily driving distance and would require accommodation, and the timing for that requirement
- ▶ Consulting with peak tourism associations in the Project region and accommodation providers in potentially impacted communities to identify the availability of short-term accommodation, including typical changes in demand throughout the year, and accommodation providers' interests in providing accommodation for Project personnel
- ▶ Researching the availability of rental housing, vacancy rates and rental costs in potentially impacted communities to avoid selecting accommodation solutions which would put pressure on access to rental housing
- ▶ Developing an accommodation register identifying acceptable accommodation solutions, which may include:
 - ▶ Accommodation providers in potentially impacted communities, noting seasonal and event-related peak demands in each LGA
 - ▶ Accommodation providers in other Ipswich and Scenic Rim centres who are interested in providing accommodation
 - ▶ Accommodation options in LGAs outside the Project region
 - ▶ Documenting rental vacancy rates and the number of rental homes available for postcodes within the Project region
- ▶ Identifying potential accommodation solutions based on the availability of short-term accommodation and rental housing in the Project region, with outcomes to include:
 - ▶ Avoiding use of caravan parks and mobile home parks in the Project region (e.g. requiring sub-contractors to avoid use of these facilities)
 - ▶ Avoiding use of rental housing in Project region postcodes where the rental vacancy rate is less than 3.0 per cent, which signifies a tight rental market (e.g. choosing rental arrangements in regional centres with greater housing availability)
 - ▶ Use of local accommodation providers, where this would not displace tourists or event visitors
 - ▶ Provision of a monitoring framework that will track accommodation use by Project personnel and accommodation availability in the Project region
- ▶ Consulting with ICC, SRRC and peak tourism associations on the draft AMP
- ▶ Finalising the AMP for implementation from the pre-construction period and throughout the construction phase.

The contractor will be required to monitor the number of personnel using accommodation in the Project region, the type and location of accommodation used, the potential for conflict with tourism or event-related demands and rental housing availability in Project region. ARTC will review the monitoring data and may require the contractor to refine their accommodation solutions if adverse impacts on housing and accommodation availability are identified.

Objectives, outcomes, commitments and measures that will support achievement of ARTC's accommodation principles are outlined in Table 16.23.

TABLE 16.23: HOUSING AND ACCOMMODATION

Housing and accommodation measures

Objective	▶ Avoid adverse impacts on the availability of local housing and short-term accommodation
Outcomes	<ul style="list-style-type: none"> ▶ Project workforce demands for accommodation do not result in displacement of local residents from rental housing ▶ Any workforce accommodation demands are managed to avoid displacement of tourists from accommodation in the Ipswich and Scenic Rim LGAs ▶ Accommodation providers in the Project region benefit from any Project requirements for workforce accommodation
ARTC Commitments	<ul style="list-style-type: none"> ▶ ARTC will require the contractor to provide an AMP that addresses Inland Rail’s program-wide accommodation principles including: <ul style="list-style-type: none"> ▶ Accommodation solutions minimise negative social and economic impacts ▶ Potentially impacted communities are consulted on accommodation solutions prior to the solutions being decided ▶ Accommodation solutions contribute social and economic value to potentially impacted communities ▶ If monitoring data indicates a decrease in rental vacancy rates or the availability of short-term accommodation in the Project region (from a baseline established prior to construction commencing) to which the Project is contributing, ARTC will require refinement of the AMP to minimise negative social impacts to potentially impacted communities ▶ ARTC will not seek to register new vacant residential lots as part of the Project, and will communicate councils’ views on this to the Constructing Authority
Measures— detailed design phase	<p>Affordable housing</p> <ul style="list-style-type: none"> ▶ Having regard to privacy and confidentiality responsibilities, and with tenants’ agreement, ARTC will provide relevant consultation data regarding DTMR tenants that are experiencing hardship or may require assistance to find affordable housing to DTMR and DHPW, to enable a collaborative response to support for these households <p>Impacts on access to housing or short-term accommodation</p> <ul style="list-style-type: none"> ▶ The contractor will provide an AMP that will address: <ul style="list-style-type: none"> ▶ Alignment with ARTC’s program-wide accommodation principles ▶ Identification of the number of personnel who could require short term accommodation or temporary housing and the duration of need ▶ Identification of accommodation solutions in consultation with ICC, SRRC and tourism networks e.g. a use of a mix of local and broader regional short-term accommodation options ▶ Measures to avoid impacts on the availability of rental housing and short-term accommodation in potentially impacted communities to include a short-term accommodation register that identifies accommodation options with sufficient capacity (e.g. options in the Ipswich and Brisbane LGAs) and peak occupancy periods (i.e. high tourist periods) and would be developed in consultation with relevant local councils and accommodation providers ▶ Measures to avoid impacts on low income households including avoiding use of caravan parks and mobile home parks in the Project region ▶ Measures to enable local accommodation providers to benefit from Project accommodation arrangements ▶ The results of consultation with councils and peak tourism associations in the Project region regarding: <ul style="list-style-type: none"> – The likely availability of accommodation at the time construction is planned to commence, average occupancy rates – Seasonal and event-related peaks where demands on local short-term accommodation should be minimised to avoid displacing visitors – Accommodation providers’ capacity to service Project needs while avoiding impacts on tourist trade ▶ Identification of accommodation solutions in consultation with ICC, SRRC and tourism networks e.g. a use of a mix of local and broader regional short term accommodation options

Housing and accommodation measures

Measures— detailed design phase (continued)	<ul style="list-style-type: none">▶ Mechanisms to monitor:<ul style="list-style-type: none">– The number and percentage of the Project’s workforce requiring accommodation– The type of accommodation being used– The number of people being accommodated in the Project region each month– Rental vacancy rates in potentially impacted communities– Any strains on local rental housing stock or short term accommodation providers’ capacity to service tourists▶ As part of reviewing the contractors’ draft AMP, ARTC will consult with ICC, SRRC and the QPS (Ipswich and Boonah district offices) to identify any concerns that should be addressed in the AMP
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Construction impacts on tourism accommodation

- ▶ Consult with Ivory’s Rock Conventions and Events Centre and Flinders Peak Winery regarding the potential for construction noise exceedances on accommodation while works are in the vicinity of these facilities and identify the need for any additional mitigation measures to reduce noise exposure

Further measures addressing impacts on tourism businesses, which include tourist accommodation are provided in Section 16.10.6

Measures— pre- construction phase	Impacts on rental housing access or short-term accommodation <ul style="list-style-type: none">▶ Contractors will be required to estimate and report on the number of personnel (outside a safe daily driving distance) that are expected to be required over the duration of the pre-construction and construction phases▶ The contractor will commence implementation of the AMP and monitoring of AMP outcomes
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Measures - construction phase	Impacts on rental housing access or short-term accommodation <ul style="list-style-type: none">▶ Contractors will review and amend or confirm estimates of the number of personnel (outside a safe daily driving distance) that are expected to be required over the duration of the construction phase▶ The contractor will implement the AMP, and report on the outcomes of monitoring to ARTC quarterly▶ ARTC will monitor the outcomes of AMP to identify any strains on:<ul style="list-style-type: none">▶ Local rental housing stock (as indicated by trends in rental vacancy rates in the relevant postcodes)▶ Short-term accommodation providers’ capacity to service tourists, as indicated by consultation with local tourism associations▶ If any strains on housing or accommodation as a result of the Project are identified, ARTC will work with the contractor to refine the AMP that may include alternative training, recruitment or accommodation strategies▶ The delivery and outcomes of the AMP will be reported as part of the Project’s SIMP reports.
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16.10.5 Health and community wellbeing

The Project’s EIS period has involved stress and anxiety for some stakeholders, and there is potential for property acquisitions, concerns about amenity and environmental changes to affect community wellbeing in areas near the Project.

The Project will contribute to the Inland Rail Program’s social and economic benefits, which will be experienced at local, regional and national levels. The benefits of employment and local business participation in the supply chain are also likely to be experienced by some residents of nearby communities.

Inland Rail has developed mental health partnerships with the Darling Downs and West Moreton PHN and the Brisbane South PHN to:

- ▶ Promote local, independent mental health services which are accessible to stakeholders at no cost
- ▶ Ensure local mental health services, including general practitioners, are aware of Inland Rail progress in local areas
- ▶ Provide resources and services to mitigate any increased demand caused by Inland Rail.

ARTC has also established the Inland Rail Community Sponsorships and Donations Program. The purpose of the funding program is to support non-profit organisations, community groups, Aboriginal Land Councils, Traditional Owner groups, and local government entities with projects, events, and activities that will help achieve community and regional prosperity and sustainability. Eligible groups can apply for amounts between \$1,000 and \$4,000 for one-off, short-term projects or activities with a focus on the priority areas of culture, safety, environment, recreation and entrepreneurship.

ARTC's investments in local communities will focus on programs and services designed to strengthen local social networks and cohesion, and ensure the potential benefits from the Project are shared (such as access to jobs and training). This would help potentially affected communities to adapt to Project-related changes and build their resilience to change.

ARTC will continue to engage with local stakeholders including ICC, SRRC, Queensland Health, landholders, community groups and local service providers during the EIS phase, to identify cooperative actions to manage and enhance community health and wellbeing, and enable stakeholders to participate in tracking the SIMP's outcomes and developing adaptive management measures required to address emerging or changing needs.

During the pre-approval and post-approval periods, ARTC will continue to engage with local stakeholders including ICC, SRRC, Queensland Health, landholders, community groups and local service providers, to identify cooperative actions to be implemented during the construction phase to address emerging or changing community needs and manage and enhance community health and wellbeing (refer Appendix R: Social Impact Assessment Technical Report).

During the detailed design phase, the Project will prepare a Community Wellbeing Plan to provide a framework for cooperation with key stakeholders to implement mitigation measures addressing impacts on quality of life as the result of Project impacts on amenity, character, cohesion or connectivity. The plan will include:

- ▶ Initiatives to upgrade community facilities, which could be delivered via ARTC's Community Donations and Sponsorship program (for minor works), direct Project funding to community facilities to implement mitigation or enhancement measures, and/or partnerships with councils or government agencies
- ▶ Placemaking initiatives to offset impacts on local character e.g. interpretive signage, treatment of temporary hoardings, park or streetscape upgrades, and/or supporting rural localities and towns to upgrade their entrance statements
- ▶ Providing funding through partnerships with SSRC and ICC for initiatives that strengthen sense of place e.g. park development or streetscape improvements
- ▶ Projects that support community cohesion and resilience, e.g. community events, arts and cultural programs, or skills training for volunteers and community organisations
- ▶ Supplementation of local services to address any increase in demand for individual and community support services as a result of the Project
- ▶ Cooperation with QAS, QPS, QFES, SES and Local Disaster Management Groups with respect to day-to-day demands on police and emergency services, and emergency response and recovery arrangements
- ▶ Consultative arrangements with key stakeholders to support implementation and monitoring
- ▶ Responsibilities for implementation.

Implementation of the Community Wellbeing Plan will commence during the pre-construction phase and be maintained during the construction phase. Progress on the implementation of the Community Wellbeing Plan will be reported to the CRG at each meeting, and annual monitoring of the Plan's outcomes will be included as part of the annual review of the SIMP.

Table 16.24 provides management measures that are designed to mitigate impacts on community health and wellbeing.

TABLE 16.24: HEALTH AND WELLBEING

Health and wellbeing measures

Objective	<ul style="list-style-type: none"> ▶ Avoid and minimise impacts that may affect community wellbeing including mental health ▶ Provide a framework for communication with social infrastructure providers and Government agencies to minimise Project impacts on social infrastructure ▶ Maximise communication and co-operation with local stakeholders to address impacts on quality of life or community wellbeing ▶ Include a focus on vulnerable community members in Project engagement and social investment
Outcomes	<ul style="list-style-type: none"> ▶ Changes in the amenity of residential properties and the potential for noise to disturb sleep are minimised in accordance with the Project’s approval conditions and agreements with affected landholders ▶ Vulnerable residents who need to relocate or are affected by Project-related stressors are supported to adapt to changes ▶ Mental health and community support services are accessible to people in potentially impacted communities and are adequate to any increased demand resulting from the Project ▶ Government agencies providing health, police and emergency services have adequate information and cooperation from the Project to enable planning for increased/changing demands ▶ Loss of access to groundwater bores in the disturbance footprint or Project-related groundwater water drawdown affecting bores are mitigated and managed in consultation with the relevant bore owner ▶ The wellbeing of residents in the Project region is supported by access to Project employment, participation the Project’s supply chain and Project cooperation in initiatives to support community wellbeing
ARTC Commitments	<ul style="list-style-type: none"> ▶ Maintain a focus on creating a safe environment for all and supporting community wellbeing during the changes that Inland Rail will bring ▶ Implementation of ARTC’s Sponsorship and Donation Program ▶ Identify impacts and opportunities that have the potential to impact community wellbeing and, in consultation with the local community, develop appropriate programs or initiatives to address these impacts and opportunities ▶ Identify opportunities and develop programs to improve safety outcomes for local communities ▶ Continue to implement the mental health partnership with an appropriate provider at a program level, which will include a tailored focus on potentially impacted communities ▶ Ongoing engagement with Indigenous communities, families and Elders to support Indigenous employees, underpinned by coordination between contributing programs and agencies
Measures— detailed design phase	<p>Social infrastructure</p> <ul style="list-style-type: none"> ▶ In consultation with the PHNs, extend the mental health partnership to include provision of services to assist landholders whose homes would be removed from the corridor to access alternative accommodation and support services, if consultation with these residents indicates that support is required ▶ Provide an update on Project design, EIS findings and the construction program to Department of Education, Queensland Health, DHPW, QPS, QAS and QFES ▶ Develop arrangements with QPS, QAS and QFES to ensure effective communication throughout the construction phase, agree on cooperation procedures, and plan measures to mitigate impacts on emergency service response times during construction and operation (e.g. direct communication with construction managers) ▶ Meet with the QFES and rural fire brigades during the detailed design phase to enable a cooperative response to any fire risks affecting the EIS investigation corridor <p>Health</p> <ul style="list-style-type: none"> ▶ Disseminate accurate, transparent and accessible information about the Project to the community, including information about the EIS outcomes ▶ Establish consultative arrangements that are accessible to all residents in the EIS investigation corridor and potentially impacted communities, including implementation of ARTC’s Complaints Handling Management Procedure (refer Section 16.10.2.5) ▶ Provide information to communities about how noise, dust and traffic delays from the Project will be minimised, and consider community feedback about the effectiveness of measures in reviewing the CEMP

Health and wellbeing measures

Measures—
detailed
design phase
(continued)

Mental health

- ▶ Communicate with residents whose properties would be acquired to keep them updated, ensure their concerns are considered, and provide referral to support services where required
- ▶ Through consultation, identify households where property severance or other changes to amenity may cause distress to residents, ensure their access to communication and complaints mechanisms, and provide referral to support services where required
- ▶ Maintain the mental health partnership with an independent specialist service to support the mental wellbeing of community members in impacted communities
- ▶ Engage proactively with Queensland Health and QPS to ensure they are well informed about the Project and are aware of any additional resources that may be available through the Project to support mental health in the affected communities
- ▶ Monitor the uptake of services provide as part of the partnership with PHNs

Safety

- ▶ Develop a TMP with a clear focus on road safety, fatigue management and safe interactions with rural roads and rural traffic
- ▶ Meet with the QFES and rural fire brigades to ensure a cooperative response to any fire risks affecting the EIS investigation corridor
- ▶ Meet with the Department of Education and all schools in Rosewood and Peak Crossing to:
 - ▶ Describe the construction schedule and the nature of road–rail interface treatments
 - ▶ Schedule consultation with schools in Rosewood to confirm the need for mitigation measures in the TMP, such as avoiding or minimising construction traffic in the Rosewood town centre, provision of traffic controllers near schools, speed restrictions, and avoidance of peak school traffic periods, and include relevant actions and accountabilities in the TMP
 - ▶ Seek a meeting with school principals and P&Cs to provide a Project update and explain how construction traffic will be managed
 - ▶ Confirm all relevant school bus services and contact details for their operators
 - ▶ Identify any specific considerations (e.g. off-campus activities) that should be considered in the Project's TMP
 - ▶ Confirm Project contact details for the contractor

Access to natural resources

- ▶ In consultation with DTMR and affected landholders, confirm mitigation measure arrangements for direct impacts on groundwater bores
- ▶ Draw SRRC and DTMR attention to EIS findings regarding the Boonah to Ipswich Trail
- ▶ Consult with ICC regarding any Council-planned works to upgrade facilities at the Purga Nature Reserve and the need for initiatives such as increased interpretive signage

Measures—
pre-construction
phase

Social Infrastructure

- ▶ Through consultation with DCDSS prior to construction commencing, and annually during construction, identify any Project-related increase in demand for community services, and if stresses on services are identified, participate in a cooperative response to community needs between DCDSS, ARTC and community organisations
 - ▶ Provide funding through the Community Donations and Sponsorship Program to community organisations in potentially impacted communities that want to facilitate activities, events and networks that support community cohesion
 - ▶ In implementing the Community Wellbeing Plan and/or through the Community Donations and Sponsorship Program, fund provision of locally based community development projects (e.g. by hall committees, sports committees and Parents and Citizens' Associations) for residents in and near the EIS investigation corridor and in potentially impacted communities to:
 - ▶ Build their capacity to cope with Project-related changes to connectivity, sense of place or community cohesion
 - ▶ Support the growth of social networks
 - ▶ Position local businesses to participate in the Project's supply chain
 - ▶ Identify and implement community events, activities, networks and services
 - ▶ Consult with Department of Education to confirm their comfort with TMP measures regarding schools in Rosewood and Peak Crossing
 - ▶ Provide early advice to the QPS, Ambulance and Fire and Rescue on the Project's workforce ramp-up and offer site orientation for local police
-

Health and wellbeing measures

Measures—
pre-construction
phase
(continued)

- ▶ Require contractors to have adequately trained first-aid staff to promote workplace health, wellness and safety, and treat personnel's minor injuries and health issues
- ▶ Environmental qualities
- ▶ Maintain consultative arrangements that are accessible to all residents in the EIS investigation corridor and potentially impacted communities
- ▶ Provide regular updates to landholders and communities about how noise, dust and traffic delays from the Project will be minimised, and how to contact the Project
- ▶ Implement communication strategies to ensure stakeholders know about construction traffic routes, peak construction periods, the Project's workforce conduct policies, and how to contact the Project personnel in the event of any concerns during construction.

Access to natural resources

- ▶ Establish groundwater monitoring mechanisms (refer Chapter 23: Draft Outline Environmental Management Plan) to enable a corrective response or mitigation to any drawdown affecting landholder's access to groundwater
- ▶ Provide information to SRRC and community organisations including Bushwalkers of SEQ, Beaudesert Trail Horse Riders, Ipswich and District Trail Riders Club and the Beaudesert Bushwalkers to enable trail users to re-plan their routes in areas where horse trails are affected

Safety

- ▶ Develop tailored and targeted rail and road safety programs for delivery during construction to local schools and communities in the Project region
- ▶ Implement communication strategies to advise stakeholders about construction traffic routes, peak construction periods, the Project's workforce conduct policies, and how to contact the Project
- ▶ Consult QFES in detailing the mitigation measures regarding fire trails, firefighting and a cooperative response to any fire risks affecting the EIS investigation corridor

Measures—
construction
phase

Social infrastructure

- ▶ Communicate with all schools, health facilities and community halls and centres in the potentially impacted communities regarding the construction program, and provide regular updates about road closures and roadworks
- ▶ With DCDSS, monitor the adequacy of community support services to meet Project-related demands, and enable cooperative responses if required e.g. increased funding support for affected services by ARTC or the relevant government agencies
- ▶ Hold regular meetings with the QPS, QFES and QAS to update advice on the Project's workforce ramp-up, review co-operative arrangements and ensure any safety or service access issues are identified and addressed
- ▶ Develop a protocol between ARTC and emergency service providers, defining appropriate and coordinated responses and communication in the event of emergencies during operations
- ▶ Investigate the need for joint training and response exercises with QPS, Ambulance, and Fire and Rescue Services to build capacity for Project-associated incident management during operation

Mental health

- ▶ With the PHNs, monitor mental health service uptake in potentially impacted communities
- ▶ Adjust the quantum or nature of services provided by the mental health partnership with PHNs in response to monitoring data, if required
- ▶ Prior to the commencement of Project operations, engage with the PHNs and Queensland Health to gauge the need for any ongoing support for mental health services during the operational period.
- ▶ ARTC will establishing arrangements with QPS, QAS and QFES to enable cooperative responses to any incidents e.g. rail accidents, road-rail or suicides during rail operation

Environmental qualities

- ▶ Maintain consultative arrangements that are accessible to all residents in the EIS investigation corridor and potentially impacted communities
- ▶ Provide regular updates to communities about how noise, dust and traffic delays from the Project are being managed and how to contact the Project

Access to natural resources

- ▶ Implement groundwater monitoring mechanisms (refer Chapter 23: Draft Outline Environmental Management Plan) and any required actions to minimise drawdown and/or implement mitigation measures on landholders' loss of access to groundwater
-

Health and wellbeing measures

Measures— construction phase (continued)	Safety <ul style="list-style-type: none">▶ Implement fatigue management procedures including in relation to travel▶ Maintain communication strategies to advise stakeholders about construction traffic routes, construction activities, the Project's workforce conduct policies, and how to contact the Project▶ Require the contractor to implement mitigation measures with respect to managing impacts on amenity, privacy and community values (e.g. Code of Conduct and management of noise)▶ Provide information on train schedules that would help emergency services responders to navigate access arrangements during operations.
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16.10.6 Local business and industry

This section addresses impacts on nearby businesses, grazing properties and tourism, and describes ARTC's commitments to ensuring that local and regional businesses benefit from the Project.

The Project's alignment avoids direct impacts on local business centres. Businesses that are near the footprint where amenity could be affected or road access disrupted during construction include agricultural and tourism businesses.

ARTC is working with directly affected landholders to develop and implement property-specific measures to mitigate impacts on properties, and will also work with stakeholders to develop strategies to address any potential impacts on tourism visitation during construction.

ARTC is committed to providing full, fair and reasonable opportunities for capable local and Indigenous businesses to compete and participate in the Project's supply chain.

As noted in Section 16.10.3, to maximise the Project's benefits in the Project region, ARTC has adopted the following hierarchy for workforce and industry participation strategies:

- ▶ Project Area: LGAs that the alignment directly passes through (local)
- ▶ Region: LGAs outside the Project Area, but within 125 km radius of the Project Area (regional)
- ▶ Rest of Queensland: All of the State of Queensland other than the Project Area and Region
- ▶ Rest of Australia: All of Australia other than Queensland.

The Inland Rail Program is subject to the Australian Jobs Act 2013 (Cth) requirement to develop an Australian Industry Participation (AIP) Plan. This plan identifies how ARTC and its supply chain will provide Australian entities with full, fair and reasonable opportunity to bid for the supply of key goods or services and is discussed further in Appendix R: Social Impact Assessment Technical Report.

ARTC is working with government agencies and local business groups to develop partnerships and programs for local business capacity building, and is committed to ensuring that local and Indigenous businesses, including those located in the Project region, are identified and supported to engage in the Project's supply chain. Inland Rail will include local and Indigenous content criteria and clauses in Project procurement processes and contract documents. The Project will report on supplier participation including for businesses within the Ipswich and Scenic Rim LGAs and businesses located within 125 km of the Project. Indigenous business participation will also be tracked and reported as part of the SIMP annual review report.

Inland Rail will also implement its Sustainable Procurement Policy for the Project, providing details on opportunities, outcomes and strategies for local and Indigenous business participation in the Project's construction and operations phases.

Table 16.25 provides the objectives, outcomes, ARTC commitments and management measures for mitigation of impacts on businesses, and measures for ensuring local and Indigenous business participation in the Project.

TABLE 16.25: LOCAL BUSINESS AND INDUSTRY

Local business and industry participation measures

Objective	<ul style="list-style-type: none"> ▶ Minimise impacts on farming, agribusiness, tourism businesses and businesses in towns ▶ Create local business awareness about supply opportunities and registration and contracting processes for the Project and build relationships with local businesses to support their involvement in the Project ▶ Provide the framework for full, fair, and reasonable opportunity for local, regional and Indigenous businesses to participate in the supply chain and integrate this framework in construction tender requirements and contracts
Outcomes	<ul style="list-style-type: none"> ▶ Impacts on businesses including farms and grazing operations are minimised through the implementation of measures outlined in the Project’s Draft Outline EMP in cooperation with landholders and business owners ▶ Businesses in the SIA study area benefit from supply opportunities ▶ The Project engages Indigenous businesses in its construction phase and supports Indigenous businesses to develop capacities for supply to the Project’s operation and/or other construction projects ▶ Any cumulative labour draw impacts on local business are identified to enable refinements to recruitment or training strategies
ARTC Commitments	<ul style="list-style-type: none"> ▶ Inland Rail’s AIPP and Sustainable Procurement Policy will be implemented for the Project ▶ Access to services and businesses during construction will be maintained. Where alternative access arrangements are required, these will be developed in consultation with relevant landholders ▶ Indigenous participation and local participation will be included as key elements of construction tender assessments and ARTC work closely with contractors to achieve agreed outcomes. ▶ A clear and efficient process for businesses to seek information about opportunities and register their interest in Project supply is provided ▶ ARTC will work with DESBT, DITRDC and local and Indigenous businesses to: <ul style="list-style-type: none"> ▶ Build businesses’ capacity to participate in the Project’s supply chain through business development, mentoring and pre-qualification projects ▶ Support Indigenous businesses to ensure they are prepared for and provided with opportunities to participate
Measures—detailed design phase	<p>Impacts on nearby businesses</p> <ul style="list-style-type: none"> ▶ Continue to consult with businesses in and near the EIS investigation corridor, including poultry farms, horse spelling and dog training facilities, the Ivory’s Rock Conventions and Events Centre and Flinders Peak Winery, to identify any measures required to reduce impacts on their amenity or on road access that could be considered as part of the CEMP or construction methodology <p>Impacts on agricultural businesses</p> <ul style="list-style-type: none"> ▶ Communicate with affected agricultural landholders to explain the land resumption process and/or the result of EIS studies on noise and dust, as relevant ▶ Consult with agricultural landholders within the EIS investigation corridor and ensure an appropriate level of access is maintained for agricultural businesses across and between properties directly affected by the Project, to minimise impacts on the movement of stock, water, produce and equipment ▶ Work with directly affected landholders to develop cooperative strategies that will reduce impacts on grazing, cropping businesses or other agribusinesses, which may include, as relevant: <ul style="list-style-type: none"> ▶ property access and communication protocols ▶ design measures to mitigate impacts on groundwater bores, fences, stock/product movements or water access ▶ surface and/or groundwater management ▶ erosion control ▶ noise and vibration mitigation ▶ weed and pest management

Local business and industry participation measures

Measures—detailed design phase (continued)	<p>Impacts on tourism</p> <ul style="list-style-type: none"> ▶ Engage with the Ivory’s Rock Conventions and Events Centre and Flinders Peak Winery to communicate EIS findings, and if necessary and feasible, refine strategies to mitigate noise or visual amenity impacts on these properties during construction ▶ Consult with tourism-related businesses (wineries, accommodation facilities, farm stays, restaurants, cafes and specialty shops) located within 5 km of the Project to: <ul style="list-style-type: none"> ▶ Explain the Draft Outline EMP, TMP and CEMP provisions and accept feedback on measures of relevance to tourism and related businesses ▶ Identify any additional, feasible strategies that would reduce or offset impacts on connectivity or businesses’ amenity during construction and/or operation ▶ Discuss local marketing and/or business development initiatives that ARTC could support to offset impacts on tourism during construction ▶ Consult with ICC (and if advised by ICC, other stakeholders) to forecast the Ipswich Motorsports Precinct’s event schedule during the construction phase, and identify feasible measures such as scheduling of noisy works or works that would disrupt access to the Precinct during major events ▶ Consult ICC and DTMR regarding use of Champion’s Way and the Cunningham Highway to inform the Project’s TMP <p>Local and Indigenous supply opportunities</p> <ul style="list-style-type: none"> ▶ Work with Traditional Owner groups to identify existing business capacity within the Yuggera Ugarapul and Jagera Daran communities and help them to identify business capacity building programs to be supported by ARTC, DATSIP and/or DITRDC ▶ Communicate pre-qualification requirements to businesses in the Ipswich and Scenic Rim LGAs contracts to allow local and regional businesses to achieve the relevant requirements ▶ Continue consultation including Project briefings with businesses and business groups, to identify local businesses, their capacity and how they can be supported to prepare for involvement in the Project ▶ Facilitate the delivery of workshops with businesses aimed at building their capacity for involvement in major project construction, associated services and Bromelton SDA ▶ Liaise with the following stakeholders to locate specific business capacities of relevance to the Project’s supply chain: <ul style="list-style-type: none"> ▶ DITRDC ▶ RDA ▶ Chambers of Commerce in the Ipswich and Scenic Rim LGAs ▶ Include specific details on opportunities and outcomes for local and Indigenous business participation in the Project’s implementation plan for the AIPP ▶ Complete a scan of Indigenous businesses in South East Queensland that could service the Project and develop an Indigenous business register to be used by the contractor and Project operators
Measures—pre-construction phase	<p>Impacts on nearby businesses</p> <ul style="list-style-type: none"> ▶ Implement measures identified in consultation with businesses in and near the disturbance footprint to reduce impacts on their amenity or road access, as relevant to the pre-construction period <p>Impacts on agricultural businesses</p> <ul style="list-style-type: none"> ▶ Complete and, where relevant to pre-construction, implement property-specific measures to mitigate impacts on agricultural land use, property access, water infrastructure or access, other farm infrastructure or farm management ▶ Where drawdown impacts are anticipated in bores that would not otherwise be decommissioned by the Project, the contractor will engage with each licensed user to determine and agree an appropriate mitigation approach <p>Impacts on tourism</p> <ul style="list-style-type: none"> ▶ Develop measures, working with Scenic Rim Tourism Association, the Ipswich Tourist Operators Network and the Ipswich and Scenic Rim Councils, to mitigate any impacts on tourism during the construction stage (e.g. changes to scenic amenity or travel times), through programs such as, support for promotional and marketing campaigns during the construction period

Local business and industry participation measures

Measures—
pre-construction
phase
(continued)

Local and Indigenous supply opportunities

- ▶ Provide updates to local and regional businesses to ensure they have access to current information about the Project
- ▶ Communicate pre-qualification requirements to businesses in the Project region to allow local and regional businesses to achieve the relevant requirements
- ▶ Facilitate the delivery of workshops with businesses aimed at building their capacity for involvement in major project construction and associated services
- ▶ Encourage tenderers for construction contracts to set appropriate targets and/or incentives to utilise local and Indigenous businesses
- ▶ Work with RDA and the Ipswich and Scenic Rim Chambers of Commerce, to encourage relevant supply chain development, especially for Indigenous businesses
- ▶ In consultation with landholders, ensure an appropriate level of access is maintained for agricultural businesses across and between properties affected by the Project, and to the roads that link them to markets

Measures—
construction phase

Impacts on nearby businesses

- ▶ Implement any measures identified in consultation with businesses in and near the disturbance footprint to reduce impacts on their amenity or road access, as relevant to the construction period

Impacts on agricultural businesses

- ▶ Maintain regular engagement with landholders and business owners adjacent to the temporary disturbance footprint (at least quarterly during the first year of construction or as agreed with landholders) to monitor the effectiveness of environmental and social impact mitigation measures
- ▶ Provide regular Project updates that forecast road works, road realignments and closures, and explain alternative routes, to landholders and potentially impacted communities (including residents of rural localities)

Impacts on tourism

- ▶ Maintain consultation with ICC and any identified stakeholders within the Ipswich Motorsports Precinct throughout the period in which construction works are occurring within 500 m of the Ipswich Motorsports Precinct or affecting Champion's Way or the Cunningham Highway of this vicinity, to review the effectiveness of mitigation measure and if necessary, develop corrective measures
- ▶ Implement measures agreed with Scenic Rim Tourism Association, Ipswich Tourist Operators Network and the Ipswich and Scenic Rim Councils to mitigate impacts on tourism during the construction stage
- ▶ Through the Project's CRG, provide feedback to community members on the implementation of proposed measures to reduce the visual impact of rail infrastructure during operation, and seek their feedback

Local and Indigenous supply opportunities

- ▶ Implement the Project's AIPP to maximise local industry opportunities during the construction phase
 - ▶ Implement capacity building strategies identified in cooperation with stakeholders during the detailed design and pre-construction stages
 - ▶ Promote government services and programs that are available to businesses considering investment in projects related to Inland Rail
-

16.10.7 Social Impact Management Plan monitoring, reporting and review

The purpose of SIMP monitoring is to:

- ▶ Track and enable reporting on delivery of measures that mitigate social impacts or increase community benefits
- ▶ Ensure that mitigation and benefit enhancement measures are effective
- ▶ Support identification of corrective actions to improve the effectiveness of mitigation and benefit enhancement measures.

The monitoring framework provided in Table 16.26 outlines for each SIMP sub-plan:

- ▶ Impacts addressed
- ▶ Desired outcomes
- ▶ Performance measures
- ▶ Monitoring mechanisms and data sources, including stakeholder engagement in monitoring
- ▶ Monitoring frequency during construction.

ARTC will track the SIMP's implementation and review performance measures quarterly (where information is available), to facilitate continual improvement of strategies and practices.

SIMP implementation will be reported to the CRG at each meeting and a report against performance measures will be presented to the CRG, ICC and SRRC annually during construction.

The SIMP will be reviewed annually during the construction phase, and where necessary updated based on monitoring results, including stakeholder feedback. This will include a process for reviewing social impact management and benefit enhancement measures to assess whether they are still appropriate, and whether any new issues or initiatives have emerged that should be included in ongoing mitigation measures or monitoring.

A review of the SIMP and its implementation will be undertaken by an independent third party by the end of Year 1 of construction and prior to commissioning the Project. These reviews will include consultation with ICC, SRRC, community members (through the CRG during construction) and QLD Government agencies. The independent SIMP reviews will identify the effectiveness of SIMP strategies, and any changes that need to be made to the SIMP to ensure ongoing effectiveness.

The monitoring program will be reviewed prior to operations, revised to recognise the completion of construction, and implemented as relevant for the operations phase.

Prior to completion of the construction phase, ARTC will develop a SIMP for the operational phase in accordance with ARTC's established management frameworks for rail operation.

The SIMP for operations will be implemented during the first three years of operation. The SIMP will be independently reviewed in Year 3 of operations to support consideration by ARTC and the OCG regarding any future need for the SIMP.

Proposed roles for councils in SIMP implementation and monitoring include:

- ▶ Involvement in the development of the Community Wellbeing Plan and the draft AMP
- ▶ Cooperation in joint initiatives with ARTC
- ▶ Requests for provision of feedback six monthly during construction on:
 - ▶ The results of initiatives to offset impacts on amenity, character and cohesion
 - ▶ Any Project use of housing or short term accommodation
 - ▶ Local procurement outcomes
- ▶ Review of annual SIMP reports
- ▶ Participation in annual SIMP reviews
- ▶ Participation in independent review of the SIMP at the end of Year 1, prior to commissioning and during Year 3 of operations.

Proposed roles for CRG members in monitoring include:

- ▶ Receiving reports on SIMP implementation at each CRG meeting and on AMP implementation on a six-monthly basis for their feedback
- ▶ Providing feedback on the effectiveness of community and stakeholder engagement measures at each CRG meeting
- ▶ Receiving and providing feedback on annual SIMP reports
- ▶ Participation in annual SIMP reviews.

TABLE 16.26: SOCIAL MONITORING FRAMEWORK

Impacts/benefits addressed	Outcomes	Performance measures	Mechanisms	Monitoring frequency (during construction)
Community and stakeholder engagement				
<ul style="list-style-type: none"> ▶ Disruption of households as the result of land acquisition ▶ Potential to exacerbate disadvantage ▶ Impacts on residential amenity ▶ Impacts on local character, connectivity and community cohesion 	<ul style="list-style-type: none"> ▶ Co-operative and respectful relationships exist between ARTC, the contractor, construction personnel and community members, and facilitate adaptive management of social impacts, including impacts on residential amenity 	<ul style="list-style-type: none"> ▶ Consultation with residents in and near the disturbance footprint supports management of Project impacts in accordance with Chapter 23: Draft Outline Environmental Management Plan ▶ Mitigation measures are refined where necessary in response to stakeholder feedback ▶ CRG feedback confirms ARTC has engendered positive relationships ▶ Number of complaints about Project impacts 	<ul style="list-style-type: none"> ▶ The contractor will document stakeholder interactions, monitor the effectiveness of engagement programs, report on the complaints register, and identify and report on issues to be addressed as part of environmental management ▶ The contractor will request feedback about stakeholder engagement and relationships as a regular item at CRG meetings ▶ Community Relations Monitor will review and provide advice on the Stakeholder and Community Engagement Plan, and be available to community members 	<p>Monthly monitoring, quarterly reporting to CRG, during construction phase</p>
<ul style="list-style-type: none"> ▶ Potential for impacts on amenity to affect property values ▶ Community benefits e.g. employment and business participation 	<ul style="list-style-type: none"> ▶ Initiatives identified through stakeholder engagement have benefits for local communities and offset impacts on amenity, character and cohesion 	<ul style="list-style-type: none"> ▶ Number of initiatives supported and outcome measures (to be determined with partners/funding recipients) for community partnerships and programs in potentially impacted communities ▶ CRG will receive reports on SIMP implementation and AMP implementation for their feedback 	<ul style="list-style-type: none"> ▶ ARTC and/or the contractor will agree outcome metrics with funded projects and partners ▶ Information on Project-supported initiatives will be provided to the CRG for feedback ▶ Feedback from Council/ community/ government partners 	<p>Annually during construction Reports on SIMP implementation at each CRG meeting, and on AMP implementation on a six monthly basis</p>
	<ul style="list-style-type: none"> ▶ Community members have access to information and support to assist adaptation to changes resulting from the Project 	<ul style="list-style-type: none"> ▶ Project communication and engagement strategies are available to residents in the Project region, including those without intent access or with limited English language skills ▶ Relevant performance measures are also provided under Community health and wellbeing 	<ul style="list-style-type: none"> ▶ Feedback on the effectiveness of community and stakeholder engagement measures at each CRG meeting ▶ Community Relations Monitor ▶ ARTC and PHNs will monitor service uptake (mental health and relocation support) from potentially impacted communities 	<p>Quarterly during first construction year, then as agreed with Community Relations Monitor</p>
	<ul style="list-style-type: none"> ▶ Stakeholder issues and grievances are identified, evaluated, addressed and recorded 	<ul style="list-style-type: none"> ▶ The Project responds to all complaints from community members and other stakeholders in accordance with the ARTC Complaints Management System 	<ul style="list-style-type: none"> ▶ Complaints register ▶ The contractor will monitor complaints and the status of their resolution, and provide a report on complaints at each CRG meeting ▶ ARTC Inland Rail will regularly monitor the quality and effectiveness of the complaints management system and require the contractor to revise implementation where appropriate, based on stakeholder feedback 	<p>Monthly monitoring of complaints, quarterly reporting to CRG</p>

Impacts/benefits addressed	Outcomes	Performance measures	Mechanisms	Monitoring frequency (during construction)
Workforce				
<ul style="list-style-type: none"> ▶ Local and Indigenous employment opportunities ▶ Training and development opportunities ▶ Workforce behaviour/community safety ▶ Employment in other industries ▶ Skills shortages 	▶ Local contractors and job seekers (from within the Project region) are involved in the Project construction workforce	▶ Number of people from the Project region that are employed in construction, in line with targets agreed between ARTC and the contractor	▶ The contractor's construction employment register will enable identification of the percentage of personnel living in the Project region	Quarterly
	▶ Training partnerships strengthen workforce capacity for Project employment and other industries	<ul style="list-style-type: none"> ▶ Number of trainees and apprentices involved in construction work ▶ Number of people from the Project region involved in training opportunities facilitated by the Project ▶ Traineeship completion/retention rate 	<ul style="list-style-type: none"> ▶ The contractor's trainee and apprenticeship register ▶ ARTC's Inland Rail Skills Academy monitoring process in cooperation with training partners 	Annually
	▶ Construction employment opportunities are available to Yuggera Ugarapul People and other local Indigenous people	▶ Number of Indigenous people involved in construction employment, in line with targets agreed between ARTC and the contractor	▶ The contractor's construction employment register, identifying employees and contractor's Indigenous identification, by agreement with personnel	Quarterly
	▶ Project personnel behave with respect and courtesy towards residents, landholders and motorists	▶ Number of substantiated complaints regarding workforce behaviour	<ul style="list-style-type: none"> ▶ Contractor monitoring of Code of Conduct implementation and compliance ▶ Complaints register ▶ CRG feedback 	Monthly—complaints register Quarterly—CRG
	▶ Workplace health and safety are supported through a strong workforce safety culture	<ul style="list-style-type: none"> ▶ Implementation of the contractor's Work Health and Safety Plan ▶ Lost Time Incident rate in comparison to relevant national standard 	▶ Project Work Health and Safety Records	Monthly
	▶ Impacts on agricultural and tourism employment opportunities are minimised	<ul style="list-style-type: none"> ▶ Management measures for agricultural properties are implemented in accordance with agreements with landholders, to minimise impacts ▶ Major community events' attendance rates ▶ Tourism industry feedback does not identify displacement of tourists from short-term accommodation 	<ul style="list-style-type: none"> ▶ Contractor engagement with landholders in the EIS investigation corridor to monitor the effectiveness of management measures ▶ Community Relations Monitor ▶ Contractor engagement with Scenic Rim Tourism Association and Ipswich Tourism Operators Network to monitor any changes to event attendance or demands on tourism accommodation 	Six monthly

Impacts/benefits addressed	Outcomes	Performance measures	Mechanisms	Monitoring frequency (during construction)
Housing and accommodation				
<ul style="list-style-type: none"> ▶ Potential for cumulative demands to impact on housing access and affordability ▶ Potential to displace tourists or community event visitors from tourist accommodation ▶ Concern about property values 	<ul style="list-style-type: none"> ▶ Project workforce demands for accommodation do not result in displacement of local residents from rental housing ▶ Any workforce accommodation demands are managed to avoid displacement of tourists from accommodation in the Ipswich and Scenic Rim LGAs <hr/> <ul style="list-style-type: none"> ▶ Any workforce accommodation demands are managed to avoid displacement of tourists from accommodation providers in the Ipswich and Scenic Rim LGAs 	<ul style="list-style-type: none"> ▶ Changes in the availability or cost of rental housing in the Project region are not attributable to Project demand <hr/> <ul style="list-style-type: none"> ▶ Hotel/motel operators report adequate capacity for tourist trade in the Project region 	<ul style="list-style-type: none"> ▶ Contractor will monitor Project workforce accommodation use, rental vacancy rates and price trends in the Ipswich and Scenic Rim LGAs (Pricerfinder/SQMResearch data) ▶ ARTC will monitor the effectiveness of the AMP, in consultation with DHPW, ICC and SRRC, including requests for provision of councils' feedback regarding any housing/accommodation use <hr/> <ul style="list-style-type: none"> ▶ Contractor will consult with Ipswich Tourism Operators Network and Scenic Rim Tourism Association to identify occupancy baseline at commencement of construction, and to monitor and enable management of any potential to displace tourists 	<p>Quarterly during first two years of construction (during which workforce numbers will peak)</p> <p>Six monthly during ensuing construction period</p> <hr/> <p>Six monthly during first two years of construction</p>
	<ul style="list-style-type: none"> ▶ Accommodation providers in the Project region benefit from any Project requirements for workforce accommodation 	<ul style="list-style-type: none"> ▶ Workforce accommodation solutions include accommodation providers in the Project region 	<ul style="list-style-type: none"> ▶ Accommodation register ▶ Consultation with providers of accommodation used by Project personnel to identify effects on occupancy rates 	<p>Quarterly during first two years of construction</p> <p>Six monthly during ensuing construction period</p>

Impacts/benefits addressed	Outcomes	Performance measures	Mechanisms	Monitoring frequency (during construction)
Community health and wellbeing				
<ul style="list-style-type: none"> ▶ Impacts of noise on lifestyles/sleep ▶ Increased demands for health, community support and/or emergency services 	<ul style="list-style-type: none"> ▶ Changes in the amenity of residential properties and the potential for noise to disturb sleep are minimised in accordance with the Project's approval conditions and measures agreed with affected landholders 	<ul style="list-style-type: none"> ▶ Noise and air quality impacts are managed in accordance with Project approval conditions and the CEMP approved by ARTC ▶ Complaints regarding noise or dust are resolved in cooperation with the affected landholders 	<ul style="list-style-type: none"> ▶ Complaints register ▶ CRG feedback ▶ Community Relations Monitor 	Quarterly
<ul style="list-style-type: none"> ▶ Impacts on mental health through stress and anxiety related to the Project ▶ Impacts on community/traffic safety, or emergency vehicle responses 	<ul style="list-style-type: none"> ▶ Vulnerable residents who need to relocate or are affected by Project-related stressors are supported to adapt to changes 	<ul style="list-style-type: none"> ▶ Landholders and adjacent to the EIS investigation corridor have access to timely Project information and an established Project contact ▶ Residents experiencing stress or distress in relation to Project-related changes have access to support services 	<ul style="list-style-type: none"> ▶ Community Relations Monitor ▶ CRG feedback ▶ With DCDSS, ARTC or the contractor monitor the adequacy of community support services to meet Project-related and cumulative demands on support services, and enable cooperative responses if required e.g. funding support for affected services by the ARTC, the Project or the relevant Government agencies 	Six monthly
<ul style="list-style-type: none"> ▶ Community benefits for participation in Project employment, supply chain or community initiatives supported by the Project 	<ul style="list-style-type: none"> ▶ Mental health and community support services are accessible to people in potentially impacted communities and are adequate to any increased demand resulting from the Project 	<ul style="list-style-type: none"> ▶ Increased ARTC support for mental health/community support services if consultation with the PHNs or Queensland Health identifies the need to supplement existing services provided through the mental health partnership with PHNs ▶ Community Donations and Sponsorship-funded projects have desirable benefits for local community members 	<ul style="list-style-type: none"> ▶ With the PHNs, ARTC will monitor mental health service uptake in potentially impacted communities ▶ ARTC or the contractor will consult with DCDSS in identifying any Project-related stress on community services and organisations in the Project region, to enable cooperative responses if required e.g. increased funding support ▶ CRG feedback on the benefits of community projects funded 	Quarterly—with PHNs Annually—with DCDSS and CRG
	<ul style="list-style-type: none"> ▶ Government agencies providing health, police and emergency services have adequate information and cooperation from the Project to enable planning for increased/changing demands 	<ul style="list-style-type: none"> ▶ Queensland Health, QPS, QAS and QFES confirm that ARTC's advice on workforce ramp-up and cooperative arrangements are adequate to support planned responses, including measures to manage any changes to emergency vehicle response rates 	<ul style="list-style-type: none"> ▶ ARTC or the contractor will consult regularly, to a schedule agreed with Queensland Health, QPS, QAS and QFES ▶ Requests for provision of councils' feedback regarding community needs six monthly during construction 	Quarterly during the first two years of construction

Impacts/benefits addressed	Outcomes	Performance measures	Mechanisms	Monitoring frequency (during construction)
<ul style="list-style-type: none"> ▶ Impacts of noise on lifestyles/sleep ▶ Increased demands for health, community support and/or emergency services 	<ul style="list-style-type: none"> ▶ Project has a strong focus on traffic safety, including specific measures for school bus routes 	<ul style="list-style-type: none"> ▶ School bus operators confirm suitability of Draft Outline EMP/CEMP measures relevant to school bus routes ▶ Number of traffic accidents involving Project sites/vehicles/personnel 	<ul style="list-style-type: none"> ▶ The contractor or ARTC will engage with Department of Education and school bus operators to review measures, annually ▶ QPS feedback ▶ Project Work Health and Safety records 	<p>Annually— Department of Education and QPS</p> <p>Monthly—traffic accidents</p>
<ul style="list-style-type: none"> ▶ Impacts on mental health through stress and anxiety related to the Project ▶ Impacts on community/traffic safety, or emergency vehicle responses 	<ul style="list-style-type: none"> ▶ The wellbeing of residents in the Project region is supported by access to Project employment, workforce skills development and/or participation the Project's supply chain and Project cooperation in initiatives to support community wellbeing 	<ul style="list-style-type: none"> ▶ Workforce monitoring data confirm that Project region residents are participating in training, the construction workforce (refer measures above for Workforce management) and the supply chain 	<ul style="list-style-type: none"> ▶ The contractor's construction employment and training register recording employees and contractor's postcodes ▶ AIPP records ▶ Requests for provision of councils' feedback six monthly during construction on the results of initiatives to offset impacts on amenity, character and cohesion 	<p>Quarterly</p> <p>Six monthly</p>
<ul style="list-style-type: none"> ▶ Community benefits for participation in Project employment, supply chain or community initiatives supported by the Project 	<ul style="list-style-type: none"> ▶ Loss of access as groundwater bores in the disturbance footprint or any Project-related groundwater water drawdown affecting bores are managed appropriately ▶ The wellbeing of residents in the Project region is supported by access to Project employment and participation the Project's supply chain 	<ul style="list-style-type: none"> ▶ Landholders' access to water is equivalent to pre-Project levels ▶ Refer Sections 16.10.3 and 16.10.6 	<ul style="list-style-type: none"> ▶ The contractor will undertake groundwater monitoring and implement any required mitigation measures in accordance with Groundwater Management Plan 	<p>In accordance with Groundwater Management Plan, when developed</p>

Impacts/benefits addressed	Outcomes	Performance measures	Mechanisms	Monitoring frequency (during construction)
Local business and industry				
<ul style="list-style-type: none"> ▶ Impacts on agricultural properties ▶ Potential deterrence of tourists ▶ Local and Indigenous business opportunities ▶ Draw of labour from local businesses 	<ul style="list-style-type: none"> ▶ Impacts on businesses including farms and grazing operations are minimised through the implementation of measures outlined in the Project's Draft Outline EMP in cooperation with landholders and business owners 	<ul style="list-style-type: none"> ▶ Ongoing engagement with directly affected landholders and business owners supports adaptive management of impacts on farms, businesses and grazing operations ▶ Tourism visitation rates are monitored and promotional strategies supported if Project impacts on visitation are confirmed 	<ul style="list-style-type: none"> ▶ The contractor will engage with landholders (to schedules agreed with landholders) to monitor the effectiveness of management measures relevant to on-property or road access impacts ▶ The contractor will consult with Ipswich Tourism Operators Network and Scenic Rim Tourism Association to identify any decreases in visitation established as attributable to the Project 	Annually during construction
	<ul style="list-style-type: none"> ▶ Businesses in the SIA study area benefit from supply opportunities 	<ul style="list-style-type: none"> ▶ Demonstrated alignment of major contracts and contractors to the Project's AIPP ▶ Number and value of contracts with businesses located in the Ipswich and Scenic Rim LGAs as a percentage of all supply contracts for the Project ▶ Number and value of contracts with Indigenous businesses in the Ipswich and Scenic Rim LGAs, as a percentage of all supply contracts for the Project ▶ Percentage of expenditure in the Project region compared to overall annual Project expenditure for construction 	<ul style="list-style-type: none"> ▶ The contractor's supplier register will identify involvement of businesses located in the Project region to enable reporting ▶ The contractor's procurement records will be maintained to enable reporting of contract value ▶ Requests for provision of council feedback on local procurement outcomes 	<ul style="list-style-type: none"> ▶ Quarterly ▶ Six monthly during construction
	<ul style="list-style-type: none"> ▶ The Project engages Indigenous businesses in its construction phase and supports Indigenous businesses to develop capacities for supply to the Project's operation and/or other construction projects 	<ul style="list-style-type: none"> ▶ Number and value of contracts with Indigenous businesses in the Scenic Rim and Ipswich LGAs, as a percentage of all supply contracts for the Project 	<ul style="list-style-type: none"> ▶ The contractor's supplier register and procurement records will identify involvement of Indigenous businesses to enable reporting 	Quarterly
	<ul style="list-style-type: none"> ▶ Any cumulative labour draw impacts on local business are identified to enable refinements to recruitment or training strategies 	<ul style="list-style-type: none"> ▶ ARTC monitors labour draw from local business and initiates corrective actions to recruitment and training strategies if labour draw is identified as affecting local businesses 	<ul style="list-style-type: none"> ▶ The Project will consult with ICC, SRRC, DESBT and Chambers of Commerce in the Project region regarding any pressures they identify on local labour/skills availability, to enable refinement of recruitment and training strategies if local labour shortages are identified 	Six monthly

16.11 Impact assessment

This section summarises the significance of social impacts and benefits for local communities and stakeholders in the SIA study area. It considers:

- ▶ The likelihood that social impacts and benefits will occur
- ▶ The consequence of social impacts and benefits for those affected
- ▶ The potential risk of impacts to social conditions (such as residential amenity or access to services) and the significance of community benefits, prior to the application of management measures as detailed in Section 16.10
- ▶ The risk of residual impacts after mitigation measures are applied (further discussed in Section 16.13.2).

Table 16.27 provides the social risk assessment ratings, which consider the likelihood and consequence of impacts and benefits.

The likelihood of social impacts and opportunities occurring has been assessed with reference to the social baseline (e.g. findings regarding community vulnerabilities), stakeholder inputs and EIS technical findings.

'Consequence', as defined in Table 16.28, has been assessed based on how the social impact may be experienced by the relevant stakeholders, considering:

- ▶ The duration of impacts and benefits, being either short term (during construction) or long term (during operation)
- ▶ Sensitivity, including specific vulnerabilities and resilience to impacts
- ▶ The severity of potential effects on stakeholders and magnitude of potential benefits.

TABLE 16.27: RISK ASSESSMENT RATINGS

Likelihood		Consequence level				
		1 Minimal	2 Minor	3 Moderate	4 Major	5 Catastrophic
A	Almost certain	A1	A2	A3	A4	A5
B	Likely	B1	B2	B3	B4	B5
C	Possible	C1	C2	C3	C4	C5
D	Unlikely	D1	D2	D3	D4	D5
E	Rare	E1	E2	E3	E4	E5

Significance of Social Impact Ratings

Low	Moderate	High	Extreme	Project benefits and opportunities
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Source: NSW DP&E, 2017

The likelihood of social impacts and opportunities occurring has been assessed with reference to the social baseline (e.g. findings regarding community vulnerabilities), EIS technical findings and stakeholder inputs.

'Consequence', as defined in Table 16.28, has been assessed based on how the social impact may be experienced by the relevant stakeholders, and considers the duration of impacts and benefits, sensitivity, including stakeholders' specific vulnerabilities and resilience to impacts, the severity of potential effects on stakeholders, and the magnitude of potential benefits.

TABLE 16.28: CONSEQUENCE CRITERIA

Rating	Impact (negative) (-)	Benefit (positive) (+)
Minimal	Local, small-scale, easily reversible change on social characteristics, or the values of the community, or communities/stakeholders can easily adapt or cope with change	Local small-scale opportunities emanating from the Project that the community can readily pursue and capitalise on
Minor	Short-term (1–3 years) recoverable changes to social characteristics and values of the community or stakeholders, or the communities/stakeholders has substantial capacity to adapt and cope with change	Short-term opportunities emanating from the Project
Moderate	Medium-term (4–10 years) recoverable changes to social characteristics and values of the of the community or stakeholders, or the communities/stakeholders has some capacity to adapt and cope with change	Medium-term opportunities emanating from the Project
Major	Long-term (more than 10 years) recoverable changes to social characteristics and values of the of the community or stakeholders, or the communities/stakeholders has limited capacity to adapt and cope with change	Long-term opportunities emanating from the Project
Catastrophic	Irreversible changes to social characteristics and values of the community or stakeholders, or the communities/stakeholders have no capacity to adapt and cope with change	N/A

Source: Adapted from Department State Development, Infrastructure and Planning (Qld), *Social impact assessment guideline*, July 2013.

Table 16.29 summarises:

- ▶ Potential social impacts and benefits as a result of the Project
- ▶ Potentially affected or benefitted stakeholders
- ▶ Preliminary evaluation of the significance of potential impacts and benefits, after considering ARTC’s existing commitments
- ▶ Project-specific management measures (noting further detail is provided in Section 16.10)
- ▶ An evaluation of residual significance, in consideration of Project-specific management measures.

The significance of the social impact or benefit has been viewed from the perspective of those expected to be affected, based on stakeholder input provided during consultation, and in consideration of the outcomes of impact assessment for this SIA and other EIS studies.

Community adaptation to social impacts such as changes to connectivity, community cohesion or amenity may take some time. Evaluation of residual significance (after Project-specific mitigation measures are applied) has assumed:

- ▶ A timeframe of up to five years from commencement of construction during which community members and networks will generally adapt to environmental and social changes
- ▶ That the Project-specific mitigation measures (as refined with stakeholders and in response to social monitoring data) will be effective in reducing the level of impacts experienced.

Symbols used include:

- ▶ ‘+’, denoting positive impact
- ▶ ‘-’, denoting negative impact

Project phases are shown as:

- ▶ Construction (C), which includes pre-construction, and represents a period of up to four years
- ▶ Operation (O), which represents a period of up to 100 years
- ▶ C/O, denoting impacts that commence in construction and continue for the Project’s life.

TABLE 16.29: IMPACT ASSESSMENT SUMMARY

Impact area	Impact description	Phase	Nature	Stakeholders affected	Prelim risk	Project-specific strategies	Residual risk
Communities and stakeholders							
Indigenous values	The Project will introduce additional linear infrastructure to the landscape, contributing to cumulative impacts on Indigenous peoples' feeling of connection with Country. The disturbance footprint may impact on one Reserve property requiring agreement on native title.	C/O	-	Yuggera Ugarapul People, other Indigenous people	B4	Cultural tours for the Project team to increase awareness of cultural sites and landscapes CHMP implementation Cooperation with Yuggera Ugarapul People with respect to any further cultural heritage surveys required	B3
Property ownership	Freehold land would be acquired to accommodate the Project, and tenanted DTMR-owned dwellings in the SFRC would be removed, resulting in the potential for relocation of an estimated 60 households. Acquisition discussions have caused stress and anxiety for some landholders and the need to relocate will disrupt family circumstances and community networks.	C/O	-	Directly affected landholders	A3	Compensation under the AL Act Information about the timing and process for land acquisition to affected landholders, to assist their planning Facilitation of assistance to residents who need to relocate, to support their adjustment Property-specific management measures for properties with partial acquisitions	A2
Disadvantage	The removal of dwellings on DTMR-owned properties in the SFRC may displace tenants who will require affordable housing. Noise and changes to rural character near the disturbance footprint may affect the amenity of people who are experiencing disadvantage.	C	-	Directly affected landholders	B3	Information to Constructing Authority regarding household circumstances and wishes identified in EIS consultation Partnerships with organisations that can provide services for directly affected households if required, to support their relocation and adjustment to new circumstances Funding through the Community Donations and Sponsorship Program for projects that will support community cohesion	B2
Amenity	Noise and dust from track construction may be intrusive on the quiet rural amenity of homes near the temporary and permanent disturbance footprint but would be transitory as works move along the alignment.	C	-	Nearby landholders and residents	A2	Management measures as outlined in Chapter 23: Draft Outline Environmental Management Plan and as detailed in the CEMP Engagement with residents in and near the EIS investigation corridor to monitor and if necessary, refine the effectiveness of mitigation measures	A1
	Noise, dust and/or increased traffic related to laydown areas and construction of bridges may disturb residential amenity for longer periods.	C	-	Nearby landholders and residents	A3	Management measures as outlined in Chapter 23: Draft Outline Environmental Management Plan and as detailed in the CEMP and Noise and Vibration Sub-plan Consult with nearby landholders to identify sensitivities and potential mitigation measures for consideration in CEMP	A2

Impact area	Impact description	Phase	Nature	Stakeholders affected	Prelim risk	Project-specific strategies	Residual risk
Amenity (continued)	Construction of the Teviot Range tunnel would involve blasting may cause noise or vibration, which frightens people or stock.	C	-	Nearby landholders	A2	Meet with landholders within 2 km of tunnel to discuss tunnel construction schedule particularly in relation to any blasting	A1
	The railway noise levels are below the assessment criteria, and do not trigger investigation of noise mitigation, where sensitive receptors are generally located 400 m or more from the rail alignment. The predicted railway noise levels achieve the assessment criteria at the majority of the sensitive receptors. At Project opening in the year 2026, there are 59 sensitive receptors where the predicted railway noise levels have triggered the investigation of feasible and reasonable noise mitigation measures. The majority of train movements are expected at the Project opening; however, the growth in forecast rail traffic has identified an additional six sensitive receptors triggered the noise mitigation review for the design year of 2040 (total 65 receptors) triggering a review of mitigation.	0	-	Nearby landholders	A4	Property-specific noise mitigation measures agreed with landholders where exceedances trigger mitigation measures Complaints mechanism	A3
Connectivity and travel behaviour	Crossing construction, roadworks and bridge construction may affect ease of travel and travel times e.g. for Cunningham Highway as a major commuter and long-distance route, and Ipswich-Boonah Road as a major connector across the Project region. Road re-alignments and temporary road closures may result in increased travel times.	C	-	Residents, businesses, service providers and visitors QPS, QFES, QAS, SRRC, ICC, DTMR	A3	Community information regarding construction schedule and roadworks Travel safety communication strategy Management measures as outlined in Chapter 23: Draft Outline Environmental Management Plan and as detailed in the TMP	A2
	Cumulative increases in traffic volumes if construction or spoil management traffic routes are shared by more than one Project, which could affect traffic safety and ease of travel.	C	-	Residents, businesses, service providers and visitors QPS, QFES, QAS, SRRC, ICC, DTMR	C3	TMP Travel safety communication strategy	C2
	There is potential for the cumulative impacts of construction works and traffic to affect travel or amenity in the Waters Road area in Calvert/Lanefield and Undullah/Kylmoylar Road in the Kagaru area, as the result of cumulative impacts with H2C and K2ARB respectively.	C	-	Residents, ICC, QPS	C3	Community information regarding construction schedule and roadworks about H2C/K2ARB as relevant to residents in affected areas	C2

Impact area	Impact description	Phase	Nature	Stakeholders affected	Prelim risk	Project-specific strategies	Residual risk
Connectivity and travel behaviour (continued)	Level crossings will result in periodic traffic delays of an estimated two minutes at each crossing, which may inconvenience and frustrate motorists. Trains of 3,600 m may operate in the Inland Rail corridor from 2040, which could result in longer traffic delays.	0	-	Residents, businesses service providers, QPS, QFES, QAS,	A3	Community information regarding average wait times and road safety in relation to rail operations Targeted and tailored traffic safety information campaigns	A2
Community cohesion	Community cohesion may be reduced through displacement of residents, physical severance of or between properties, disruption to the road network and potentially community conflict.	C/O	-	Residents and community organisations, SRRC, ICC	B3	Social investment in community projects that strengthen cohesion and funding for community development projects	B2
Sense of place	The Project will introduce a new element to the landscape (including the corridor and elevated structures) that some residents would see as detracting from rural character. Removal of places that show local heritage (e.g. farm buildings) may have localised effects on character.	C/O	-	Residents whose views would be affected	B3	Management measures to reduce construction noise and visual amenity impacts, and manage impacts on heritage, as outlined in Chapter 23: Draft Outline Environmental Management Plan Funding for community projects that support local character and cohesion	B2
Property values and plans	Concerns about property values will cause stress and anxiety for some residents near the disturbance footprint. As multiple factors are involved, the Project's potential impacts on property values cannot be conclusively assessed.	C/O	-	Nearby landholders	A3	Management measures to reduce construction noise, vibration, dust, traffic, and visual amenity impacts, as outlined in Chapter 23: Draft Outline Environmental Management Plan Communication of ARTC commitments and EIS approval conditions	B3
Population change	Acquisition of properties is likely to displace an estimated 60 households, equivalent to a loss of approximately 168 people collectively from affected communities. Some may relocate locally. Changes to the Project region's population would be negligible.	C/O	-	Residents of properties to be acquired	A2	No mitigation of population loss possible. Support provided for people who will need to relocate.	A2
Workforce							
Project employment	Project construction will provide employment for up to 620 personnel during 2021–2026, including people within the Project region, with substantial benefits to workers. Indirect employment is also likely as the result of Project expenditure with businesses in the supply chain.	C	+	Local and regional construction industry personnel and businesses	A3	Locally targeted training and recruitment strategies and targets Inland Rail Skills Academy	A4
Indirect employment	The Project is likely to stimulate the development of the Ebenezer Regional Industrial Area, increasing employment opportunities in the Ipswich LGA.	0	+	Local residents including those experiencing unemployment, businesses	B3	Inland Rail Skills Academy	B3
Workforce behaviour	Workforce behaviour may contribute to concerns about privacy or safety, or to amenity impacts (e.g. noise).	C	-	Residents in/near the disturbance footprint	C3	ARTC Code of Conduct	C2

Impact area	Impact description	Phase	Nature	Stakeholders affected	Prelim risk	Project-specific strategies	Residual risk
Employment equity	Training and employment opportunities will be provided for people who are disadvantaged in the labour market, including young people and Indigenous people, increasing the regional labour force capacity and leaving a positive legacy for the Project region.	C/O	+	Local residents including those experiencing unemployment	A2	Inland Rail Skills Academy	A3
Labour availability	The Project may contribute to shortages in specific trades, particularly in the cumulative context, affecting residents' and businesses' access to tradespeople.	C/O	-	Local residents and businesses	B3	Inland Rail Skills Academy Promotion of Project supply opportunities to local businesses Corrective action to recruitment or training strategies if labour draw is identified as impacting local businesses	B2
Agricultural employment	Acquisition or severance of farms and/or impacts on connectivity to markets may affect farm productivity and the availability of farm employment.	C/O	-	Local workers in the agriculture sector and their families	C3	Property-specific agreements to reduce or avoid impacts Compensation for loss of legal interest in land, and disturbance costs where relevant Ensure property access is maintained Continued engagement with directly affected landholders to ensure agreed mitigation measures remain effective Inland Rail Skills Academy training programs applicable to agricultural industry workers	C2
Tourism employment	Impacts on the amenity of or connectivity to tourism attractions may reduce their visitation levels, and related employment rates.	C/O	-	Business owners and local workers in the tourism sector, ICC, SRRC, Scenic Rim Tourism Association, Ipswich Tourist Operators Network	C3	Engagement with tourism associations and tourism operators within 5 km of EIS investigation corridor to discuss project and management measures Identify any additional, feasible strategies such as tourism marketing campaigns Consult with event managers to identify measures to minimise any impacts on major event visitation	C2
Cumulative employment opportunities	Combined with development of the Ripley Valley and Flagstone PDAs, and expansion of the RAAF Base Amberley, there is potential for the Project to contribute to significant cumulative employment opportunities.	C/O	+	Local residents including those experiencing unemployment, businesses	C3	Nil required	C3
	There is potential to contribute to cumulative labour and skills shortages in the Project region.	C	-	Various businesses and service providers	C3	Monitoring and any adaptive management measures required Training strategies as previously referenced.	C2

Impact area	Impact description	Phase	Nature	Stakeholders affected	Prelim risk	Project-specific strategies	Residual risk
Housing and accommodation							
Affordable housing	Tenants of DTMR-owned dwellings in the EIS investigation corridor and SFRC will need to find alternative affordable accommodation that would be stressful and disruptive for some tenants.	C	-	DTMR tenants, DTMR, DHPW	A3	Sharing of information (as approved by tenants) to enable DTMR/DHPW to support affected households	A2
	There is potential for cumulative labour force demands to require Project personnel from beyond the Project region to stay locally while on shift, with potential for demands on housing and/or short-term accommodation that would affect low-income households' access to housing.	C	-	Local residents, especially low income households DHPW ICC, SRRC	C3	AMP Monitoring of baseline housing conditions and any project-related changes	C2
Short term accommodation	Noise impacts may affect the amenity of accommodation provided at Ivory's Rock Convention and Events Centre and Flinders Peak Winery while construction works are active in their vicinities.	C	-	Ivory's Rock Convention and Events Centre and Flinders Peak Winery	C3	Property-specific mitigation measures developed with affected landholders	C2
	Use of Willowbank Motel or caravan parks in the Project region has potential to displace Ipswich Motorsport Precinct visitors and low income households respectively	C	-	ICC, Ipswich Motorsport Precinct, low income households	C3	Avoid workforce use caravan parks in the Project region AMP includes measures to minimise impacts on tourists using the Willowbank Motel	C2
	There is potential for small number of Project personnel to require short term accommodation, which could contribute to cumulative demands that would displace tourists and event visitors.	C	-	Ipswich and Scenic Rim tourism operators and associations	C4	AMP Establish and monitor baseline of tourism accommodation availability including seasonal and event related variations	C2
Health and wellbeing							
Social infrastructure	Road closures increased heavy traffic, roadworks or re-alignments may result in travel time increases to schools and halls in Rosewood and Peak Crossing resulting in inconvenience to families. There is also potential for Project traffic to use roads that are used for school bus routes.	C/O	-	Residents, school bus services and school students (walking/cycling) and school employees	A3	Consultation with Department of Education, local schools and school bus operators as part of TMP to identify and mitigate any areas of concern regarding school bus routes	A2
	Construction personnel may require occasional access to hospital services, which is likely to be within the capacity of existing health services.	C	-	Queensland Health and local doctors, local residents	A2	Paramedic/nursing staff employed by Project to supplement local health service providers	A1
	The Project would increase demand on ambulance and police services for traffic policing, oversize load escorts and general policing, which may require additional resourcing to avoid impacts on residents' service access.	C	-	QPS, QAS, QFES	A3	Advice on workforce ramp-up, protocol development, response strategies to QPS Regular engagement with QPS, QAS and QFES to support management of increased/changed demands	A2

Impact area	Impact description	Phase	Nature	Stakeholders affected	Prelim risk	Project-specific strategies	Residual risk
Social infrastructure (continued)	Community support services may experience increased demand for support for people to cope with Project-related changes.	C	-	Local community members, health and community support services, Queensland Health, QPS	B3	Funding and/or cooperative responses with DCDSS and PHNS to augment community support services, if monitoring indicates Project-related impacts on service capacity	B2
	The Project may contribute to a cumulative demand for increased health, emergency and community support services in the Project region, resulting in reduced access for residents.	C	-	Residents, community organisations, Councils and Government agencies	C3	TMP Communicate with Queensland Health regarding construction program and workforce ramp up Participate in monitoring of demands on health and community services	C2
Safety	Increased traffic on local roads and highways and changes to road conditions would increase the risk of traffic accidents.	C	-	Residents, businesses, PS, QFES, QAS	B4	Targeted and tailored traffic safety information campaigns	C3
	Construction traffic including heavy haulage vehicles may pass Rosewood State School on Lanefield Road, increasing road safety risks for school students walking or cycling to school.	C	-	Rosewood State School and Rosewood State High School, Rosewood community	C3	Consultation with Rosewood schools and Department of Education to review Draft Outline EMP measures TMP	D2
	Emergency services may be delayed by level crossings, potentially increasing response times by approximately two minutes for trains of 1,800 m with longer delays for 3,600 m trains, which may affect their response times.	0	-	QPS, QAS, QFES, residents	B4	Protocol development, provision of information about freight rail schedules and access to alternate crossing points	C3
	Level crossings present a risk of road/rail accidents, resulting in social impacts including injury or fatality, impacts on families, communities and rail staff, and additional demand on health and emergency services.	0	-	Motorists, cyclists and pedestrians, QPS, QFES, QAS, SRRRC, ICC, DTMR	C5	Tailored delivery of ARTC Rail Safety program to local schools, motorists and communities	C4
Health	The need for land acquisition and concerns about potential Project impacts has caused stress and anxiety for residents in local communities. Stress and anxiety are likely to persist for some residents during the detailed design and construction phases and may affect residents' mental health.	C/O	-	Residents and business owners in potentially impacted towns and rural residential areas, rural and agricultural landholders	A3	Communication of EIS findings (refer Appendix C: Consultation Report) Delivery of ARTC's mental health partnership program in the Project region Monitor mental health service uptake with PHN and adjust resources as required	B3
	Exposure to construction noise or vibration may affect the wellbeing and/or lifestyle of households near the Project footprint, particularly if noise inhibits daily activities or causes sleep disturbance. The impacts of track construction would be transitory, but laydown areas or bridge construction sites have potential for longer lasting impacts.	C	-	Nearby residents	C4	Implementation of Draft Outline EMP, CEMP and Noise and Vibration sub-plan measures Communicate with potentially impacted households where construction noise could cause sleep disturbance to monitor the effectiveness of noise mitigation strategies Complaints Handling Management Procedure	C3

Impact area	Impact description	Phase	Nature	Stakeholders affected	Prelim risk	Project-specific strategies	Residual risk
Health (continued)	Noise resulting from freight rail operation may affect quality of life, lifestyles (e.g. outdoor activities) and/or sleep at private properties generally located within 300 m of the alignment, as identified in Appendix Q: Operational Railway Noise and Vibration Technical Report	0	-	Nearby residents	B4	Consultation with landholders to identify and implement noise mitigation measures Establish communication mechanisms including implementation of Complaints Handling Management Procedure	B3
	Dust from construction activities, or during rail line operation, could settle in rainwater tanks on properties in close proximity to the rail corridor.	C/O	-	Nearby residents	C3	Advance notice of construction activities that may cause dust Investigation of any complaints and if necessary, dust monitoring to enable corrective actions if required	C2
	Employment opportunities are likely to result in positive mental health benefits for the individuals employed, particularly if unemployed or irregularly employed.	C/O	+	Local and regional residents, especially jobseekers	A2	Local training partnerships that support employment pathways	A3
	The Project would provide increased opportunity for rail-based suicide for vulnerable people.	0	-	Community members, particularly those with mental health issues, emergency responders	C5	Prior to operations, engage with the PHNs and Queensland Health to gauge the need for any ongoing support for mental health services during the operational period. Arrangements with QPS, QAS and QFES to enable cooperative responses to any incidents e.g. rail accidents, road-rail or suicides	D5
Access to natural resources and active recreation	The Project may impact on horse riding trails in the Undullah area. If the Boonah to Ipswich Trail is implemented in future, planning would need to consider the location of the Project alignment in relation to Wild Pig Creek Road.	C/O	-	Trail and park users	A3	Communication with SRRRC and horse trail user groups to enable them to plan alternative routes where Project crosses horse trails in Undullah	A2
	Roadworks or traffic on Middle Road may interrupt access to the Purga Nature Reserve during construction. During operations, the amenity of Purga Nature Reserve may be periodically disturbed by railway noise.	C/	-	Nature Reserve users, ICC users	B3	Project communications and awareness raising of roadworks and construction schedule	B2
	Groundwater bores may be destroyed or access prevented as the result of direct Project impacts. There is also potential for groundwater drawdown to affect bores.	C	-	Landholders in and near the Project footprint, businesses or community members that access bores	A3	Property-specific agreements regarding mitigation measure provisions for impacts on groundwater bores	A2

Impact area	Impact description	Phase	Nature	Stakeholders affected	Prelim risk	Project-specific strategies	Residual risk
Transport and accessibility	Construction works, road re-alignments and closures, and delays at level crossings are likely to disrupt traffic on roads directly impacted by the Project. This may cause travel time delays for access to education, health, emergency, civic and recreational facilities and/or community halls	C	-	Local and regional residents, services	A3	Provision of community development funding to support community cohesion and funding for community development projects	A2
Business and industry							
Impacts on agricultural properties	The Project will result in direct impacts on agricultural land uses, including severance of landholdings, relocation of on-farm infrastructure, and temporary disruptions to property access. Roadworks may also increase travel times to markets.	C	-	Directly affected landholders and farm/property employees	A3	Property-specific measures to reduce impacts on agricultural land and farm infrastructure	A2
	The Project would constrain stock and equipment movements across and between properties separated by the rail line. There is also potential for impacts on access to markets/travel times for poultry farms, other farmers, graziers and feedlots.	C/O	-	Landholders	C3	Provide advance notice of timing and location of unformed road closures and construction works affecting informal stock crossings	C2
Tourism	Visitation rates for tourism businesses near the EIS investigation corridor may be affected by travel time delays or amenity impacts (noise and visual), affecting tourism businesses' trading levels.	C/O	-	Ivory's Rock Convention and Events Centre, Flinders Peak Winery, employees and associated businesses	C4	Support for local tourism marketing and promotion	C3
	There is potential for construction noise or disruption to traffic on Champions Way and Cunningham Highway to affect Ipswich Motorsport Precinct event patronage	C	-	ICC, Ipswich Motorsport Precinct lessees and patrons	C3	Engagement with ICC and other Ipswich Motorsport Precinct stakeholders to share information and agree any cooperative action required e.g. as part of the TMP or Noise and Vibration Sub-plan	C2
Local supply opportunities	The Project will provide significant opportunities for local and regional businesses, including Indigenous businesses, to participate in its supply chain. This will develop business capacity and leaving a positive legacy for the Project region.	C	+	Local and regional businesses	A4	Nil required – comprehensive local supply plan, policy and strategy committed	A4
Facilitation of industrial development	Potential to facilitate access for businesses in the Ebenezer Regional Industrial Area to rail transport, and stimulate establishment of businesses or industry precincts that will generate employment	O	+	Local and regional businesses, job seekers	B3	Nil required	B3

16.12 Cumulative impacts

Cumulative impacts for social aspects of the project are presented in Chapter 22: Cumulative Impacts and split into local, regional and state and national impacts.

16.12.1 Local impacts

The local area of influence (AOI) for the assessment of cumulative social impacts is defined as an approximately 5 km buffer around the alignment. Social impacts may occur where the effects of the Project combine with those of other major projects to affect:

- ▶ Connectivity of the local road network, traffic volumes and amenity in the Calvert/Lanefield area in relation to H2C, and in the Kagaru area in relation to K2ARB
- ▶ Perceptions of community safety, due to large numbers of personnel in and around local communities
- ▶ Demands for health or emergency services as the result of increased daytime populations, or increased stress resulting in the need for additional support services
- ▶ Access to skilled labour, in relation to the combined impacts of all considered projects (Chapter 22: Cumulative Impacts) on construction labour availability principally during Years 1–2 of construction
- ▶ Employment availability, with the coincidence of construction projects in and near local communities likely to provide significant employment and business opportunities for local residents during 2021–2026.

16.12.2 Regional impacts

The Project and many of the projects listed in Chapter 22: Cumulative Impacts would draw construction labour from SEQ. If the five Inland Rail projects located in Queensland were to be constructed simultaneously and all workforce peaks coincided, they may require a total labour force of some 2,700 people. In the context of SEQ's construction and trades labour force, this is unlikely to cause a significant adverse impact on other industries' access to labour. There is also potential for cumulative impacts on labour availability with respect to other rail projects being constructed in SEQ (Cross River Rail, Brisbane Metro and Gold Coast Light Rail 3A). Consideration of the regional cumulative impacts of particularly construction activities of the considered projects are presented in Chapter 22: Cumulative Impacts.

The Project is part of the larger Inland Rail Program. The Business Case for Inland Rail identifies an anticipated additional 16,000 jobs will be required Program-wide at the peak of construction, with an average of 800 jobs per annum over the 10-year construction period. An average of 700 additional jobs per annum, program wide, is anticipated over 100 years of operation. The 10-year delivery schedule for Inland Rail would support economic activity in the regions and create regional jobs in QLD, NSW and VIC during both construction and operations.

Further information on the potential cumulative impact of the Project along with significance ratings relating to social aspects is presented in Chapter 22: Cumulative Impacts. The potential for negative cumulative social impacts with regard to local amenity and construction traffic volumes, short-term accommodation and skilled labour availability was identified. Potential positive cumulative impacts include an increase in employment opportunities and benefits for businesses in the Ipswich and Scenic Rim LGAs.

16.13 Conclusions

This section discusses distributional equity (the effect of differing impacts across groups, areas and time), and summarises residual social impacts and Project benefits.

16.13.1 Distributional equity

As for all major projects located near human settlements, negative impacts are more likely to be experienced by those living closest, while Project benefits usually accrue at a broader regional level. This has been noted by residents in the SIA study area who anticipate negative impacts but are uncertain that significant benefits in the form of employment or business opportunities will result during construction, and of the potential for local communities to benefit during the Project's operation.

Distributional equity considerations for the Project include:

- ▶ An estimated 60 households within the EIS investigation corridor will need to relocate to enable the Project's construction
- ▶ The Project travels through areas with high potential for social disadvantage, where particular care will be needed to support residents through the changes resulting from the Project
- ▶ The operations and management of farms and agribusinesses could be affected while landholders adjust to land acquisition impacts
- ▶ Residents living near the EIS investigation corridor would experience noise, travel delays and changes to local character during construction
- ▶ The Project will introduce a significant freight route through rural areas with potential for rail noise to affect amenity in proximity to the rail corridor.

Current residents will experience the most significant impacts during the construction phase; however, there is potential for rail operational noise to have long term effects on the amenity of areas closest to the rail corridor.

Communities in the SIA study area have experienced a long period of severe drought, with effects on mental health and financial wellbeing, community resilience and business vitality. It is therefore particularly important that the Project's impacts are minimised and benefits for local communities are maximised.

Potential Project benefits and opportunities include:

- ▶ Employment for up to 620 personnel in Project construction, including people within the Project region and nearby LGAs, with indirect employment also likely to be stimulated
- ▶ Training and career pathway development for young people, Indigenous people and unemployed people, who are disadvantaged in the labour market
- ▶ Opportunities for local, regional and Indigenous businesses to participate in the Project's construction supply chain
- ▶ Development of labour force skills and business capacity that will enable future employment and business opportunities for Project region residents
- ▶ Potential to catalyse improved employment and business opportunities in the SIA study area through stimulating the establishment of businesses or industry precincts such as the Ebenezer Industrial Area.

The Project is part of the Inland Rail Program, which will make a strong contribution to regional, state and national development. Inland Rail will slow the increase in road freight on regional roads, which will lead to broader benefits for people living near road freight corridors or using roads and highways that are currently dominated by trucks, with potential for traffic safety benefits.

16.13.2 Residual risks

Residual risks to social values were identified in Table 16.28. In applying the consequence criteria shown in Table 16.27, assessment of residual risks acknowledged that some construction impacts may occur throughout the duration of the construction period of approximately four years, and that it may take time for residents to adjust to changes resulting from the Project. With a design life of 100 years, the Project's operational impacts and benefits may be experienced for the long term.

Residual risks of moderate or major consequence are summarised in Table 16.30, along with measures to address the residual risks.

As for other rail lines in Australia, the increased risk of road-rail accidents and potential to enable rail suicide are long-term risks with possible catastrophic consequences (i.e. fatalities).

TABLE 16.30: RESIDUAL IMPACTS OF MODERATE OR MAJOR CONSEQUENCE

Project phase	Residual impact	Measures to address residual impacts
Construction	The Project will introduce additional linear infrastructure to the landscape, contributing to cumulative impacts on Indigenous people’s feeling of connection with Country	<ul style="list-style-type: none"> ▶ ARTC will maintain engagement with the Yuggera Ugarapul People as the Traditional Owners of Country in which the Project is located, to ensure their awareness of Project works and operations, and the Project’s awareness of cultural values and community aspirations ▶ Engagement with the Yuggera Ugarapul People may identify projects or initiatives to strengthen their connection to country and/or community recognition of Yuggera Ugarapul People’s connection to Country
	Concerns about property values will cause stress and anxiety for some residents near the EIS investigation corridor, likely during construction, with potential for concerns to persist during Project operations	<ul style="list-style-type: none"> ▶ The Project’s CEMP and associated Sub-plans will detail management measures to avoid or reduce environmental impacts, which if not mitigated, could affect the amenity or use of properties, and consequently perceptions of property values ▶ ARTC will provide access to the EIS, information about the Project’s environmental management measures and EIS approval conditions, and the Project’s compliance with approval conditions, via the Inland Rail webpage to enable informed decisions about property purchase
	The need for land acquisition and concerns about potential Project impacts has caused stress and anxiety for residents in local communities. Stress and anxiety are likely to persist for some residents during the detailed design and construction phases and may affect residents’ mental health	<ul style="list-style-type: none"> ▶ ARTC will ensure the availability of regular, timely and accessible information to enable local residents to understand and where necessary adjust to changes resulting from the Project ▶ ARTC will monitor the delivery and uptake of mental health services and any other services provided as part of the mental health partnership program in cooperation with the PHNs, and increase the resources available to support mental health or community support services if this is required to maintain service
	Exposure to construction noise or vibration from laydown areas or bridge construction sites may affect the wellbeing and/or lifestyles of households near the Project footprint	<ul style="list-style-type: none"> ▶ The Project will communicate with landholders within 250 m of laydown and bridge construction sites and monitor complaints from residents in these areas ▶ If complaints indicate that impacts are affecting households’ wellbeing, corrective actions will be implemented as part of the CEMP
	Increased traffic on local roads and highways and changes to road conditions could increase the risk of traffic accidents	<ul style="list-style-type: none"> ▶ The contractor will monitor the occurrence of traffic accidents related to construction activities or construction traffic in cooperation with QPS ▶ If monitoring data indicate that traffic safety is declining as a result of the Project, the TMP will be revised to include corrective actions
	Visitation rates for tourism businesses near the EIS investigation corridor may be affected by travel time delays or amenity impacts (noise and visual), affecting tourism businesses’ trade	<ul style="list-style-type: none"> ▶ The Project will establish engagement mechanisms with tourism business and networks to enable any specific impacts on tourism visitation to be identified, to enable any corrective actions required as part of communication strategies (e.g. regarding road travel and the construction schedule) ▶ Engagement planned as part of the detailed design phase may identify additional initiatives to support tourism in the Project region

Project phase	Residual impact	Measures to address residual impacts
Operations	During operations, emergency services may be delayed by level crossings, potentially increasing response times by approximately two minutes for trains of 1,800 m with longer delays for 3,600 m trains, which may affect their response times	<ul style="list-style-type: none"> ▶ ARTC will engage with QFS, QPS and QAS to facilitate access to information about train schedules and access to alternate crossing points to reduce the potential for and/or duration of delays to emergency vehicles
	Level crossings present a risk of road/rail accidents	<ul style="list-style-type: none"> ▶ ARTC will monitor the occurrence of Project-related road/rail accidents and incidents, in cooperation with QPS ▶ If monitoring data identify specific safety issues with respect to level crossings, ARTC will engage with QPS to determine the need for any further preventative/corrective measures
	Noise resulting from freight rail operation may affect quality of life, lifestyles and/or sleep at private properties generally located within 300 m of the alignment, as identified in Appendix Q: Operational Railway Noise and Vibration Technical Report	<ul style="list-style-type: none"> ▶ If complaints about rail noise indicate that the Project is causing unacceptable noise levels, ARTC will investigate and implement measures to address the cause of concern
	The Project would provide increased opportunity for rail-based suicide for vulnerable people	<ul style="list-style-type: none"> ▶ Prior to operations, engage with the PHNs and Queensland Health to gauge the need for any ongoing support for mental health services during the operational period ▶ Arrangements with QPS, QAS and QFES will enable cooperative responses to any incidents and monitoring of any specific safety risks to enable corrective action